Appendix IV
Environmental Assessment

Prepared for

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S16 PLANNING APPLICATION FOR PROPOSED COMPOSITE REDEVELOPMENT AT 152-164 WELLINGTON STREET, CENTRAL

ENVIRONMENTAL ASSESSMENT

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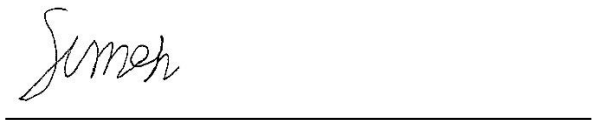
Signed	
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1. INTRODUCTION

1.1 Project Background

1.1.1 The purpose of this Section 16 application is to propose a composite redevelopment at 152-164 Wellington Street, Central. The Application Site is currently zoned as "Commercial" under the Approved Sai Ying Pun and Sheung Wan Outline Zoning Plan (OZP) No. S/H3/34.

1.1.2 Ramboll Hong Kong Limited is commissioned by the applicant to prepare an Environmental Assessment (EA) in support of the planning application. The EA report will assess the major environmental issues (i.e. environmental noise, air quality, construction phase environmental impact) of the Application Site and the surrounding area.

1.2 Application Site and its Environ

1.2.1 The Application Site has site area of about 612 m^2. The Application Site is located at Central, bounded by Wellington Street on the northeast and Aberdeen Street on the northwest. Queen's Road Central is located further away to the northeast of the Application Site. The immediate surrounding developments are predominantly mixed-used, with commercial, residential, open space, and land uses for Government, Institution or Community (G/IC). **Figure 1.1** shows the location of the Application Site.

1.3 Proposed Development

1.3.1 The Proposed Development includes 1 residential tower with 25 residential storeys erected on a podium with 2 storeys of retail use and two storeys of clubhouse.

1.3.2 Under the Proposed Scheme, the plot ratio of residential use is proposed as 9.10 and with the total domestic GFA of about 5,569.2 m^2. The building height of the residential tower is +119.9 mPD. A podium (with retail use and clubhouse) with +30.15 mPD is located underneath the proposed residential tower within the Application Site.

1.3.3 The Proposed Composite Redevelopment is tentatively completed in 2030.

1.4 Appraisal of Environmental Impact

Noise

1.4.1 The Application Site is bounded by roads on two sides. The potential road traffic noise impact has been assessed in this study. Direct noise mitigation measures have been recommended to minimise the potential road traffic noise impact.

1.4.2 The Application Site is located at the centre of Central and Sheung Wan commercial area. No active industrial operation can be observed. Major industrial noise impact would be due to fixed noisy facilities. Onsite survey has been conducted to understand the noise environment. Noisy facilities have been identified. Quantitative fixed noise impact assessment has been conducted to evaluate the potential fixed noise impact.

1.4.3 The development is not environmentally polluting in nature. Should there be any fixed noisy facilities (e.g. fan system, HVAC for retail, clubhouse) provided in future, it will be designed to follow the HKPSG requirement (i.e. acceptable noise level minus 5 decibels) to ensure that there is no adverse impact on any noise sensitive use in the surrounding.

Air Quality

1.4.4 With respect to the potential vehicular emission impact, the Application Site is affected by open road emissions from nearby carriageways such as Wellington Street, Aberdeen Street, and carriageways further away.

1.4.5 Man Cheung Street portal and Connaught Road Central Underpass portal within 500m from the Application Site have been identified and corresponding emission should be accounted.

1.4.6 There is absence of chimney emission observed in the surrounding. However, several covered or open-area public transport interchanges (PTIs) within 500m from the Application Site have been identified. As observed, mechanical ventilation is provided at the covered PTIs. Moreover, the emission from buses from open-area PTI can escape from the top opening to atmosphere.

1.4.7 A quantitative air quality impact assessment is prepared to address the potential air quality impact that would be generated from the aforementioned emissions.

1.5 Organisations of the Report

1.5.1 This Environmental Assessment report contains the following chapters: -

- Chapter 2 to evaluate and assess potential road traffic noise impact on the Proposed Development at the Application Site, and propose practicable noise mitigation measures to attenuate the impact;
- Chapter 3 to evaluate and assess potential fixed noise impact on the Proposed Development at the Application Site, and propose practicable noise mitigation measures to attenuate the impact;
- Chapter 4 to evaluate the potential air quality impact on the Proposed Development at the Application Site, and propose practicable mitigation measures to attenuate the impact.

2. TRAFFIC NOISE IMPACT ASSESSMENT

2.1 Introduction

2.1.1 This road traffic noise impact assessment is prepared to address potential road traffic noise impact on the noise sensitive uses of the Proposed Development and to recommend mitigation measures where practicable to attenuate the impact.

2.1.2 The Proposed Development consists of residential, retail, , and other ancillary facilities such as clubhouse, transformer room and E&M rooms. The residential dwelling is noise sensitive in nature and will rely on opened window for ventilation purpose. All other uses are either non-noise sensitive in nature or do not rely on opened window for ventilation purpose.

2.2 Assessment Criteria

2.2.1 Noise standards are recommended in the Hong Kong Planning Standards and Guidelines (HKPSG) for planning against noise impact from sources such as road traffic, railway and aircraft.

2.2.2 Under the HKPSG, the criterion for road traffic noise impact for dwellings, is $L_{10(1\text{-hour})}$ 70 dB(A). The criteria apply to habitable rooms which rely on openable windows for ventilation.

2.3 Assessment Methodology

2.3.1 In this assessment, the potential noise impact arising from nearby existing and future road carriageways on the Proposed Development has been assessed based on the proposed master layout plan (MLP)**.**

2.3.2 It involved the prediction of future noise impacts on Noise Sensitive Receivers (NSRs) arising from traffic flows along existing and future road carriageways situated within or in the vicinity of the Application Site. Calculation of predicted road traffic noise were based on the worst case peak hour traffic flows projected within a 15-year period from the target completion and occupation date (Year 2030) of the proposed development.

2.3.3 For worst-case scenario evaluation, the assessment year was chosen to be year 2045, which has the maximum forecasted traffic flow within the 15-year period. The year 2045 traffic forecast data is prepared by project traffic consultant and attached in **Appendix 2-1**. Confirmation from the Transport Department (TD) is being sought by the Project Traffic Consultant.

2.3.4 The U.K. Department of Transport's procedure "Calculation of Road Traffic Noise" (CRTN) was used to predict the hourly $L_{10(1\text{-hour})}$ noise levels generated from road traffic at selected representative NSRs. Practicable environmental mitigation measures have been recommended, where necessary. The predicted noise levels were compared with the relevant HKPSG noise standards.

2.3.5 The road surfacing type of all carriageways within 300m assessment area of the Application Site is assumed impervious. Speed limit of 50 km/hr is assumed for all roads generally, except Central-Wanchai Bypass and Rumsey Street Flyover (Connaught Road Central Flyover) (80 km/hr).

2.4 Noise Sensitive Receivers

2.4.1 A number of Noise Sensitive Receivers (NSRs), which are likely to be subject to worst road traffic noise impact of the corresponding habitable rooms, were selected for the assessment. All assessment points were taken at 1.2 m above the floor and 1 m away from the façade of openable windows of rooms of sensitive use (living room, bedroom).

2.4.2 **Figure 2.1** illustrates the locations of the selected representative NSRs for road traffic noise impact assessment.

2.5 Assessment Result without Noise Mitigation Measures (Base Scenario)

2.5.1 The predicted road traffic noise levels on the selected representative NSRs based on the development scheme with no further direct noise mitigation measures has been assessed. **Appendix 2-2** shows the predicted road traffic noise level under peak traffic flow condition representing worst case scenario within 15 years from the completion of the proposed development.

2.5.2 According to the assessment result, the maximum noise level for both scenarios is 69dB(A). There is no exceedance of road traffic noise standards under AM and PM peak scenario. Therefore, no mitigation measure is required.

2.6 Conclusion

2.6.1 Road traffic noise impact assessment has been carried out for the proposed development. According to the Assessment result, no adverse road traffic noise impact on the Proposed Development is anticipated. No noise mitigation measure is required.

3. FIXED NOISE IMPACT ASSESSMENT

3.1 Introduction

3.1.1 This fixed noise impact assessment is prepared to address potential fixed noise impact on the noise sensitive uses of the Proposed Development and to recommend mitigation measures where practicable to attenuate the impact.

3.1.2 The Proposed Development consists of residential, retail, and other ancillary facilities such as clubhouse, transformer room and E&M rooms. The residential dwelling is noise sensitive in nature and will rely on opened window for ventilation purpose. All other uses are either non-noise sensitive in nature or do not rely on opened window for ventilation purpose.

3.2 Assessment Criteria

3.2.1 According to the Technical Memorandum for the Assessment of Noise from Places other than Domestics Premises, Public Places or Construction Sites ("IND-TM") issued under the Noise Control Ordinance, the Proposed Development is situated in urban area. Connaught Road Central Flyover acts as an Influencing Factor (with daily flow over 30,000 veh according to the latest annual traffic census 2022). However, the Connaught Road Central Flyover is about 250m away from the development and blocked by the high-rise buildings.

3.2.2 Therefore, Area Sensitivity Rating "B" is adopted accordingly, which is not affected by the IF. Respectively standards during day & evening time and night time are Leq(30min) 65dB(A) and 55 dB(A).

3.3 Assessment Methodology

3.3.1 Assessment of noise impact arising from fixed noise sources has been based on standard acoustic principles and procedures given in the IND-TM. Noise impacts due to individual noise sources are calculated and logarithmically summed at each NSR to represent the overall impacts:

$$\sum PNL_i = \sum \left[SWL_i + C_{distance} + C_{barrier} + C_{impulse} + C_{tonality} + C_{barrier} + C_{facade}\right]$$

where

PNL_i	=	Predicted noise level, i.e. the overall sound pressure level arising from individual noise sources after various corrections
SWL_i	=	Derived sound power level of individual noise sources from measured noise levels
$C_{distance}$	=	Correction for distance attenuation
$C_{barrier}$	=	Correction (-10 dB(A)) for substantial shielding by building structure
$C_{impulse}$	=	According to the nature of the identified noise sources in the surrounding, noise of impulsive nature is not expected. No correction is recommended
$C_{tonality}$	=	Correction for tonality as in IND-TM, if applicable
C_{facade}	=	Correction (+3 dB(A)) for façade reflection at receiver

3.4 Identification of Fixed Noise Sources

3.4.1 Based on onsite survey along the periphery of the Application Site, no noticeable noise from any fixed noise sources can be identified. According to further review including referencing to aerial photos and photos taken in the surrounding with study area of 300m from site noise sources have been identified in the surrounding as tabulated below and shown in **Figure 3.1.**

Table 3.1 Identified Fixed Noise Sources within the 300m Study Area

Building	Type of Noise Sources	Height	Separation from Nearest Site Boundary
On Building^	Chiller (1 nos.) Cooling tower (1 nos.)	~120mPD	~10m
Queen's Road Centre^	Chiller (2 nos.)	~130mPD	~10m
Stag Building^	Chiller (2 nos.)	~59mPD	~10m
V Heun Building^	Chiller (3 nos.)	~87mPD	~45m
The L.place^	Chiller (4 nos.)	~50mPD	~50m
OCBC Wing Hang Tower^	Chiller (4 nos.)	~71mPD	~50m
The Wellington^	Cooling tower (2 nos.)	~131mPD	~50m
Yin Serviced Apartments	Chiller (2 nos.)	~96mPD	~60m
Butterfly on Wellington	Chiller (2 nos.)	~90mPD	~60m
Shing Lee Commercial Building^	Chiller (1 nos.)	~72mPD	~70m
Wing Hang Insurance Building^	Chiller (2 nos.)	~72mPD	~80m
ICBC Asia Building^	Chiller (2 nos.)	~65mPD	~90m
BOC Group Life Assurance Tower^	Chiller (2 nos.)	~73mPD	~130m
Amtel Building^	Chiller (2 nos.)	~71mPD	~150m
100QRC^	Chiller (3 nos.)	~130mPD	~150m
Tai Sang Bank Building^	Chiller (2 nos.)	~55mPD	~150m
Public Bank Centre^	Chiller (2 nos.)	~75mPD	~150m
Jade Centre^	Chiller (1 nos.)	~98mPD	~150m
Soho Square^	Chiller (2 nos.)	~106mPD	~170m
The Pemberton^	Cooling tower (3 nos.)	~82mPD	~170m
Golden Centre^	Chiller (3 nos.)	~110mPD	~170m
Hong Kong Trade Centre^	Chiller (3 nos.)	~77mPD	~180m
Regent Centre^	Chiller (2 nos.)	~92mPD	~180m
Pearl Oriental House^	Chiller (1 nos.)	~98mPD	~180m
Nan Fung Tower^	Chiller (6 nos.)	~30mPD	~180m
Nanyang Commercial Bank Building^	Chiller (3 nos.)	~56mPD	~190m
World Trust Tower^	Chiller (2 nos.)	~85mPD	~200m
H Queen's^	Cooling tower (3 nos.)	~120mPD	~200m
1 Lyndhurst Tower^	Chiller (2 nos.)	~101mPD	~200m
Infinitus Plaza^	Chiller (7 nos.) Cooling tower (2 nos.)	~34mPD (5 chillers) ~123mPD (2 chillers & 2 cooling tower)	~200m
CTG House^	Chiller (4 nos.)	~93mPD	~210m
Car Po Commercial Building^	Chiller (1 nos.)	~115mPD	~210m
H Code^	Chiller (8 nos.)	~120mPD	~210m
Kinwick Centre^	Chiller (3 nos.)	~131mPD	~210m

Beautiful Group Tower^	Chiller (2 nos.)	~83mPD	~220m
The Pottinger	Cooling tower (2 nos.)	~83mPD	~230m
Asia Standard Tower^	Cooling tower (4 nos.)	~78mPD	~240m
Hang Sang Bank Headquarters^	Chiller (3 nos.) Cooling tower (4 nos.)	~135mPD	~240m
Crawford House^	Cooling tower (2 nos.)	~83mPD	~250m
Bonham Circus^	Cooling tower (2 nos.)	~107mPD	~250m
299 QRC^	Chiller (3 nos.)	~79mPD	~270m
Strand 50^	Chiller (3 nos.)	~96mPD	~270m
Harbour Building^	Chiller (1 nos.)	~96mPD	~290m

^No night time operation

3.4.2 Most identified noise sources are to the north to east of the Application Site, such as the L.place on the north side, V Huen Building on the northeast side and Butterfly on Wellington on the east side.

3.4.3 According to the site survey, most of the identified fixed noise sources are located at roof or unaccessible location. Direct noise measurement is not possible and relevant details of the identified noise sources are not available at this stage despite that request has been made to the operators of these potential noisy facilities (**Appendix 3-4**), while no reply is received yet. Besides, the respective owner or estate management have been approached to request for access for direct noise measurement or provision of noise data during the site survey. No access consent can be obtained from any of the parties. Since direct measurement is not practicable possible, the noise strength of the identified noise sources has been assumed based on equipment catalogue (if equipment model information is provided) or reference equipment catalogue model of similar scale. The reference equipment catalogue is shown in **Appendix 3-3**.

3.5 Noise Sensitive Receivers

3.5.1 A number of representative Noise Sensitive Receivers (NSRs), corresponding to habitable rooms which are likely to be subject to worst noise impact were selected for the assessment. All assessment points were taken at 1 m away from the façade of openable windows of rooms of sensitive use (living room, bedroom).

Figure 3.2 illustrates the locations of the selected representative NSRs for road traffic noise impact assessment.

3.6 Assessment Result without Noise Mitigation Measures (Base Scenario)

3.6.1 **Appendix 3-1** shows the noise strength of identified noise sources and predicted noise level at the selected NSRs. **Appendix 3-2** illustrates the view of some selected NSRs to justify the shielding correction adopted. According to the assessment results, the predicted noise levels at all selected NSRs would comply with relevant standards without noise mitigation. No adverse fixed noise impact on the Proposed Development is anticipated.

3.7 Impact due to Future Fixed Noise Sources of the Proposed Development

3.7.1 The Proposed Development will inevitably contain noisy facilities such as ventilation system, fan system and HVAC (for clubhouse andretail uses). However, in this early planning stage, building services consultant/contractor has not been engaged and there is absence of any detail regarding potential noisy facilities. In all circumstances, the requirement under HKPSG is fully observed (i.e. acceptable noise level minus 5 decibels). In future detailed design of the project, same requirement will be imposed

so that the relevant noise standard will be met by various means such as selection of quiet equipment, use of shielding device, acoustic louvers, silencers, semi/full-enclosure. Upon availability of details of fixed noise sources, the assessment of fixed noise impact can be conducted with respect to the said planning approval condition. With abundance of direct noise mitigation measures to control and suppressed the generated noise level, no adverse noise impact due to operation of potentially noisy facilities of the Proposed Development is anticipated.

3.8 Conclusion

3.8.1 According to the result of fixed noise impact assessment, no adverse fixed noise impact due to surrounding fixed noise sources on the Proposed Development is anticipated with the recommended noise mitigation is considered necessary.

3.8.2 This is in early planning stage of the study so that there is no detail of future fixed noise sources onsite available. With abundance of direct noise mitigation measures to control and suppressed the generated fixed noise level, no adverse noise impact due to operation of potentially noisy facilities of the Proposed Development is anticipated.

4. AIR QUALITY IMPACT ASSESSMENT

4.1 Introduction

4.1.1 This section predicts air quality pollutant concentration at the Proposed Development, informing the provision of air quality mitigation measures to ensure future residents are not exposed to adverse air quality impact. The assessment considers surrounding emissions from the traffic emissions from road networks, portal emissions, helicopter emission and marine emission within 500m of the site boundary. The air pollutants assessed are Nitrogen Dioxide (NO_2), sulphur dioxide (SO_2), Respirable Suspended Particulate (RSP) and Fine Suspended Particulate (FSP). Concentrations of these pollutants are predicted at air sensitive receivers (ASRs) within the Proposed Development through the use of quantitative computer modelling, and are compared with the relevant Air Quality Objectives (AQOs).

4.1.2 The assessment area of 500m from the Application Site is shown in **Figure 4.1**.

4.2 Assessment Criteria

4.2.1 The Hong Kong AQOs enacted on 1/1/2022 are listed in **Table 4.1** below.

Table 4.1 Hong Kong Air Quality Objectives

Pollutants	Average Time	Standard [i] (µg/m³)	No. of exceedances allowed
SO_2	10-min	500	3
	24-Hour	50	3
RSP (PM_{10}) [ii]	24-Hour	100	9
	Annual	50	NA
FSP ($PM_{2.5}$) [iii]	24-Hour	50	35
	Annual	25	NA
NO_2	1-Hour	200	18
	Annual	40	NA
Ozone (O_3)	8-Hour	160	9
Carbon Monoxide (CO)	1-Hour	30,000	0
	8-Hour	10,000	0
Lead (Pb)	Annual	0.5	NA

Notes:

[i] All measurements of the concentration of gaseous air pollutants, i.e. sulphur dioxide, nitrogen dioxide, ozone and carbon monoxide, are to be adjusted to a reference temperature of 293 Kelvin and a reference pressure of 101.325 kilopascal.

[ii] Respirable suspended particulates means suspended particles in air with a nominal aerodynamic diameter of 10 µm or less.

[iii] Fine suspended particulates means suspended particles in air with a nominal aerodynamic diameter of 2.5 µm or less.

4.3 Existing Air Quality

4.3.1 The tentative year of completion of the Proposed Development is 2030. The year of 2030 hourly background concentrations of NO_2, SO_2, RSP and FSP from the PATH v2.1 model has been adopted for the purpose of this assessment, which is considered as a more conservative approach. The data for Year 2030 was extracted from the *Pollutants in the Atmosphere and the Transport over Hong Kong*-model version 2.1 (PATH v2.1) developed and released by EPD in July 2021 (Grid 38, 29).

4.3.2 Based on the information provided by EPD, the below adjustment of RSP levels and FSP levels should be applied in order to compare with AQOs.

- 10th highest daily RSP concentration: add 11.0 μg/m^3
- Annual RSP concentration: add 10.3 μg/m^3
- 36th highest daily FSP concentration: add 0 μg/m^3
- Annual FSP concentration: add 3.5 μg/m^3

4.3.3 The five most recent years of air quality monitoring data, 2018 to 2022, from the Central/Western General Air Quality Monitoring Station (AQMS) are summarized in **Table 4.2**.

Table 4.2 EPD Air Quality Monitoring Data in Central/Western AQMS and Latest Version of PATH v2.1 (Grid 38, 29) (Year 2030)

Pollutant	Averaging time	Parameter	AQO (μg/m^3)	Concentration [1] (μg/m^3)					
				2018	2019	2020	2021	2022	PATH in Year 2030 (38, 29)
RSP (PM_{10})	24-hour	10th highest	100	70	69	60	65	52	66
	Annual	Maximum	50	34	30	25	26	22	28
FSP ($PM_{2.5}$)	24-hour	36th highest	50	34	33	29	27	28	25
	Annual	Maximum	25	21	20	16	16	14	15
NO_2	1-hour	19th highest	200	159	153	128	149	142	106
	Annual	Maximum	40	39	37	32	33	30	17
SO_2	10-minute	4th highest	500	135	62	31	51	62	32
	24-hour	4th highest	50	22	12	9	10	7	9
O_3	8-hour	10th highest	160	**164**	**191**	140	155	**197**	**195**

Notes:
[1] Bolded and underlined values exceed the relevant AQO.

4.4 Construction Phase

Representative Air Sensitive Receivers

4.4.1 The major air quality impact of concern during the construction phase will be the potential fugitive dust emission. As the Project is at the early planning stage, the construction works of the proposed development will be commenced in Year 2030. The major dust emission sources during the construction phase of the Proposed Development are expected to arise from construction activities during site formation stage such as:

- Demolition of the existing building blocks;
- Excavation resulting in exposed ground vulnerable to air erosion;
- Earth moving, loading and unloading of excavated material;
- Wind effect on material stockpiling; and
- Vehicle movements on haul roads and over the construction site.

4.4.2 There will be potential impacts from the criteria pollutants (e.g. nitrogen oxides (NO_x), sulphur dioxide (SO_2), and carbon monoxide (CO)). Emission from diesel trucks for the haulage of materials and construction plants will contain high percentage of smoke particulate and unburned hydrocarbons in comparison with petrol driven vehicles. The Application Site is of ~0.06 ha so that development scale is very low. The anticipated

number of construction plants that result from the construction works will not be excessive due to the site constraint of the site area. Therefore, significant impact on the existing air quality is not envisaged. Under Air Pollution Control (Non-road Mobile Machinery) Emission Regulation and Air Pollution Control (Fuel Restriction) Regulation, there is also adequate control for emission from on-site machinery and non-road vehicles. In all circumstances, the contractor will be required to observe all relevant regulations and maintain all equipment in good condition to avoid any excessive emission.

4.4.3 There are ASRs located within 500m from the Proposed Development and considered as Air Sensitive Receivers (ASRs). **Figure 4.2** shows the separation distance between the Application Site and the nearby ASRs which are expected to be worst affected and also listed in **Table 4.3**. No concurrent project has been identified.

Table 4.3 Representative Air Sensitive Receivers for Construction Phase

ASR ID	ASR	Horizontal Distance to Subject Site
C01	166 Wellington Street	8m
C02	On Building	9m
C03	152 Queen's Road Central	12m
C04	99F Wellington Street	22m
C05	Kimley Commercial Building	26m
C06	150 Wellington Street	0m
C07	Wa On Lane Sitting-out Area	0m
C08	Tung Tze Terrace	5m
C09	Man Lee Building	12m
C10	Lan Kwai Fong Hotel	9m

Mitigation Measures for Fugitive Dust Emission

4.4.4 In all circumstances, fugitive dust emission arising from construction activities can be effectively suppressed by incorporating proper mitigation measures into work procedures through contractual clauses with reference to EPD's Recommended Pollution Control Clauses for Construction Contracts, where applicable, good site management, and close monitoring by the resident engineers. The contractor shall be required to follow the requirements of the Air Pollution Control (Construction Dust) Regulations. With the adaptation of good practices, it is expected that emission of construction dust can be kept at an acceptable level. Mitigation measures including but not limited to the followings with respect to superstructure construction of a building and hoarding should be implemented as appropriate:

- Plan site layout so that machinery and dust causing activities (e.g. haul roads and stockpiling areas) are located away from receptors (especially Pok Oi Hospital RCHE and Small Traders New Village) as far as possible
- Electric power supply shall be provided to on-site machinery during the construction stage as far as possible to minimize the gaseous emissions. Construction plant and equipment will be connected to mains electricity supply use of diesel generators and diesel-powered equipment should be avoided as far as practicable to minimize air quality impact arising from the equipment
- In the case of the superstructure construction of a building
  - Where a scaffolding is erected around the perimeter of a building under construction, effective dust screens, sheeting or netting shall be provided to

enclose the scaffolding from the ground floor level of the building, or if a canopy is provided at the first floor level, from the first floor level, up to the highest level of the scaffolding;

- Any skip hoist for material transport shall be totally enclosed by impervious sheeting; and
- Any relevant requirements set outs in Parts III and IV of Air Pollution Control (Construction Dust) Regulations shall be met.

- Except for road opening or resurfacing work, or for construction work carried out in a construction site that is completely paved or completely covered with hardcore
  - Vehicle washing facilities including a high pressure water jet shall be provided at every discernible or designated vehicle exit point;
  - The area where vehicle washing takes place and the section of the road between the washing facilities and the exit point shall be paved with concrete, bituminous materials or hardcores;
  - Where a site boundary adjoins a road, street, service lane or other area accessible to the public and nearby ASR such as Small Traders New Village, hoarding of not less than 2.4 m high from ground level shall be provided along the entire length of that portion of the site boundary except for a site entrance or exit.

4.4.5 Other recommended dust mitigation measures are described below.

General Site Management

4.4.6 Appropriate working methods should be devised and arranged to minimise dust emissions and to ensure any installed control system and/or measures are operated and/or implemented in accordance with their design merits. No free falling of construction debris should be allowed, which should be let down by hoist or enclosed tunnel to the ground.

4.4.7 A high standard of housekeeping shall be maintained. Any piles of materials accumulated on or around the work areas shall be cleaned up regularly. Cleaning, repair and maintenance of all plant facilities within the work areas shall be carried out in a manner that does not generate fugitive dust emissions. Prior to cleaning, the materials should be handled properly to prevent fugitive dust emission. Any exposed earth shall be properly treated by compacting or hydro seeding, within 6 months after the last construction activity.

4.4.8 Frequent mist/ water spraying should be applied on dusty areas. The frequency of spraying will depend upon local conditions such as rainfall, temperature, wind speed and humidity. The amount of water spraying should be just enough to dampen the material without over-watering which could result in surface water runoff.

Vehicles and Unpaved Site Roads

4.4.9 Dust emission from unpaved roads comes predominantly from travelling of vehicles. Areas within the site where there are regular vehicle movements should have an approved hard surface. Speed controls at an upper limit of 10km/hr should be imposed and their movements should be confined to designed roadways within the site. All dusty vehicle loads should have side and tail boards covered by tarpaulin extending at least 300mm over the edges of the side and tail boards. Wheel-wash troughs and hoses should be provided at exit points of the site.

Material Stockpiling and Handling

4.4.10 The amount of stockpiling should be minimised where possible. Construction material or debris should be covered and stored inside enclosed areas. Other control measures such as enclosed or semi-enclosed windboard should be used, where applicable, to minimise dust emission. Regular watering is needed at areas such as storage piles, where there could be potential dust emission.

4.4.11 With best management practice and mitigation measures properly implemented, potential air quality impact during construction of the project is not considered adverse.

4.5 Operational Phase

Representative Air Sensitive Receivers

4.5.1 Representative ASRs of the Proposed Development within the Project Area would be selected for the assessment of the air quality impacts arising from the surrounding air pollution sources during the operational phase.

4.5.2 The locations of the representative ASRs during operational phase are shown in **Figure 4.3** and summarized in **Table 4.4**.

Table 4.4 Representative ASRs for Operational Phase

ASR ID	Local Ground mPD	Flagpole Height, mAG	Assessment Height, mPD
A01 – A10	13.90	1.5 – 106.00	15.40 – 119.90

4.6 Air Quality Impact Assessment Methodology

Latest Version of PATH

4.6.1 Hourly meteorology data for a full year is extracted from PATH v2.1 provided by EPD (meteorological data year 2015, Grid 38, 29). Hourly mixing heights lower than 131m or higher 1941m are corrected to 131m or 1941m respectively to align with the real meteorological data recorded by the Hong Kong Observatory (HKO) in 2015. Hourly wind speeds lower than 1 m/s (i.e. calm wind condition) are corrected to 1m/s.

4.6.2 The hourly background concentrations of NO_2, RSP and FSP in Year 2030 are extracted from PATH v2.1 provided by EPD (Grid 38, 29) to predict the total air quality concentrations at ASRs and adjusted appropriately as discussed in **Section 4.3.2**.

4.6.3 Within the 4km radius area of the Application Site, one major point source, the Ocean Terminal with marine vessels, has been identified and would be included for the air modelling regarded as background emissions.

Computer Modelling for Industrial Air Quality

4.6.4 The dispersion of NO_2, SO_2, RSP and FSP were modelled using AERMOD software released by Lakes Environmental Software. The model is based on the principle of Gaussian dispersion and is widely accepted by EPD and is used in this assessment to predict both concentration and deposition of pollutants from point and area sources

4.6.5 Landuse types surrounding the Application Site have to be identified to determine albedo, bowen ratio and surface roughness for AERMET setup. According to "AERMOD Implementation Guide" (revised in August 2015) released by USEPA, albedo and Bowen ratio is determined with the use of 10km by 10km region while surface roughness is determined by a circle in 1km radius. The circle is further divided by 12 sectors. The centroid of the region and circle are located at the Application Site and details of determination of albedo, Bowen ratio and surface roughness are shown in

Appendix 4-1. These data together with the meteorological data (discussed in **Section 4.6.1**) were processed using Lakes Environmental' s AERMET to generate the Surface File and Profile File for use in AERMOD.

Source Description and Emission Inventory

4.6.6 Emissions from chimneys, marine emissions, open roads, portal and Public Transport Interchange/Bus Depot have been assessed. **Table 4.5** shows a summary of the sources and the associated air pollutants of concern.

Table 4.5 Summary of Emission Sources

Sources		SO_2	NO_x	RSP	FSP
(i)	Marine Vessels	✓	✓	✓	✓
(ii)	Helicopter	✓	✓	✓	✓
(iii)	Open Roads	x	✓	✓	✓
(iv)	Public Transport Interchange/Bus Terminus	x	✓	✓	✓
(v)	Portals	x	✓	✓	✓

(i) Marine Vessels Emissions

Sources within 500m area from Application Site

4.6.7 On-site survey was conducted in August 2023 to verify the presence of marine vessels. There are two existing marine activities within the 500m Assessment Area, including fast ferry services at the Hong Kong - Macau Ferry Terminal (HKMFT) and fire boat traffic movement at the Central Government Pier. Since the emission points of the fire boats while they are hotelling at the Central Government Pier and the manoeuvring of fire boats are out of the 500m Assessment Area, it would not be included in the modelling. The identified sources are shown in **Figure 4.4**.

4.6.8 With reference to "*Study on Marine Vessels Emission Inventory – Final Report*" by HKUST in February 2012, the total emissions from vessels can be calculated using the following equations:

$$\text{Total Emission}_{(\text{pollutant})} = \sum \text{Emission}_{(\text{pollutant, activity mode, equipment})}$$

$$\text{Emission}_{(\text{pollutant, activity mode, equipment})} = P \times FL \times T \times EF$$

where P is the installed power of equipment;

FL is fractional load of equipment in a specific mode;

T is operation time-in-mode; and

EF is fractional load emission factor of equipment.

4.6.9 Emissions from ferries during sailing will be modelled as evenly distributed point sources representing the segment they travel to and from the berths within the 500m assessment area. The routes are shown in **Figure 4.4**. All point sources will be modelled as slow cruising mode except the one nearest to the berth was modelled as maneuvering mode for the route travelling to the berth.

4.6.10 Emissions during staying at the berths will be modelled as single point source using hoteling mode.

4.6.11 No information on the engine powers, engine load factors and time-in-modes are provided by the operators, therefore, the references will be made to "*Study on Marine Vessels Emission Inventory – Final Report*".

4.6.12 According to the ferry schedule at the HKMFT available at Marine Department's website, the visiting frequencies of different modes at each hour are studied. Since only the routes for the departure of the fast ferry would be within the 500m Assessment Area, the review of the visiting frequencies has been focused on the information of departure and presented in **Appendix 4-2**. According to the information of the departure, the maximum numbers of fast ferry departed in each hour between 0700 – 1900 and 1900 – 0100 are 4 and 2 for Berth No. 1 to Berth No. 4 respectively. Therefore, for a conservative approach, the numbers of fast ferry departed for each hour at 0700 – 1900 and 1900 – 0100 for Berth No. 1 to Berth No. 4 and Berth No. 5 to Berth No. 8 are assumed as 4 and 2 respectively. For the idling emissions of the fast ferry, 1 ferry is assumed at each berth for each hour at 0700 – 1900 and 1900 – 0100 (the approach of 1 ferry assumed for 1900 – 0100 is considered as a more conservative approach, as maximum of 2 ferries is assumed for departure). The details of model inputs and the detailed information of the calculation of the emission rates of the fast ferry services are shown in **Appendix 4-3** and **Appendix 4-8**.

Sources within 4km area from Application Site – Ocean Terminal

4.6.13 As mentioned in **Section 4.6.3**, the marine vessels emission of Ocean Terminal would be regarded as a background emission as it is identified as a major point source. Locations of the emission sources are shown in **Figure 4.5**.

4.6.14 The information of Appendix 3.6 of the Approved EIA Report for Proposed Road Improvement Works in West Kowloon Reclamation Development Phase 1 has been referred. The details of model inputs and the detailed information of the emission rates of cruise vessels are shown in **Appendix 4-4** and **Appendix 4-9**

(ii) Helicopter Emissions

4.6.15 On-site survey was conducted in August 2023 to verify the presence of heliport facilities. There is a helipad of Hong Kong Macau Ferry Terminal within the 500m Assessment Area. Locations of the emission sources are shown in **Figure 4.6**. The frequency of the operation of the helicopter is made reference to the approved EIA report for Expansion of Heliport Facilities at Macau Ferry Terminal (Register No: AEIAR-095/2006). The details of model inputs and the detailed information of the emission rates of cruise vessels are shown in **Appendix 4-5** and **Appendix 4-10**.

(iii) Open Roads Emissions

4.6.16 Air pollutant concentration at the Project Site due to the emission from the nearby road networks (vehicular tailpipe emissions) will be assessed. The emission factor of each road within 500m Assessment Area from the Project Site was calculated with the latest EMFAC-HK issued by EPD. Based on the emission factor of each road, the air pollutant concentration at the Project Site will be modelled with CALINE4.

(iv) Public Transport Interchange/Bus Terminus

4.6.17 There is no heavy good vehicle (HGV)/coach parking identified nearby. Therefore, no air quality impact arisen from HGV/coach parking is anticipated.

4.6.18 Three Public Transport Interchanges (PTIs) are found within 500m Assessment Area of the Application Site – Central Exchange Square Terminus, Central (Rumsey Street) Terminus, and Hong Kong Station Public Transport Interchange. All of these PTIs are enclosed PTI equipped with mechanical ventilation. The location of the ventilation exhausts and openings/egress/ingress would be identified during the site visits, and

the emission information would be provided by traffic consultant based on 24-hour site survey on a normal working day. The air pollutant concentration from the ventilation exhausts and openings/egress/ingress would be modelled with AERMOD.

4.6.19 Precise approach has been adopted to estimate the PTI and Bus Terminus emission. Apart from the emission from the exhaust, start emissions induced and running exhaust emission by identified PLBs/buses leaving the PTI and Bus Terminus were further simulated to avoid any underestimation of air quality impact on the Proposed Development Scheme. The start emissions, running exhaust emission and idling emissions associated with the PLBs/buses at the PTI and Bus Terminus within the assessment area (initial NO, initial NO_2 and RSP) were calculated based on the start emission and running exhaust emission factors predicted by EMFAC-HK model, cold idling emission factors from Calculation of Start Emissions in Air Quality Impact Assessment published by EPD, warm idling emission factors from Road Tunnels: Vehicle Emissions and Air Demand for Ventilation published by World Road Association and traffic data provided by the traffic consultant.

4.6.20 Calculations of emissions associated with the PTI and Bus Terminus were made reference to the Calculation of Start Emissions in Air Quality Impact Assessment published by EPD. Start emissions for diesel vehicles fitted with selective catalytic reduction (SCR) devices (i.e. FBSD, FBDD, and/or NFB vehicles) and LPG vehicles were adjusted based on the idling emission and would be released over a total spread distance of 700m and 150m from where the start takes place, while running exhaust and idling emissions would be released on the spot. The locations of emission sources and the detailed calculation of the emissions are presented in **Appendix 4-6** and **Appendix 4-11**. The emission of the spread distance was modelled with AERMOD.

4.6.21 Emission from the PLBs/buses within Central Exchange Square Terminus and Hong Kong Station Public Transport Interchange would be exhausted via mechanical ventilation system of which the exhaust air louvres is located and ingress / egress / openings.

4.6.22 Central (Rumsey Street) Terminus is a Open Area PTI. The emission from the buses within KMB Kowloon Bay Bus Depot would be exhausted via the open area.

(v) Portals Emissions

4.6.23 Based on a desktop study, all portals within the study area have been identified. These include Man Cheung Street portal emission and Connaught Road Central Underpass portal emission. Locations of all portals are shown in **Figure 4.7**.

4.6.24 According to the Permanent International Association of Road Congress Report (PIARC, 1991), the pollutants were assumed to eject from the portal as a portal jet such that 2/3 of the total emissions was dispersed within the first 50m of the portal and the other 1/3 of the total emission within the second 50m.

4.6.25 The 24-hour emission factor for each tunnel in 2030 has been adopted in compiling the emission inventory of portals. The input parameters and the calculation of emission factors for portals and 24-hour emission factors for every quarter of different tunnel sections are given in **Appendix 4-7** and **Appendix 4-12**.

4.7 Methodology of EMFAC-HK Modelling

Objective

4.7.1 The aim of conducting EMFAC Model is to calculate project-specific vehicle emission factor of criteria air pollutants (e.g. NO, NO_2, FSP and RSP) arising from vehicular tailpipe emission on the road carriageways within 500m study area of the Proposed Development.

EMFAC-HK Model

4.7.2 The latest available EMFAC-HK Model version 4.3 dated 13 January 2021 (the EMFAC-HK Model) has been adopted.

Guideline and Document

4.7.3 Several guidelines and documents published by the EPD, which are available from the following EPD EMFAC-HK website (the EPD website), are referred for EMFAC-HK Model input:

- http://www.epd.gov.hk/epd/english/environmentinhk/air/guide_ref/emfac-hk.html (the EPD website)
- Guideline on Modelling Vehicle Emissions (Released in January 2021) (the EPD Guideline)
- 2018 Licensed Vehicle by Age and Technology Group Fractions (the EPD Document)

Traffic Data

4.7.4 Three sets traffic data predicted by the project traffic consultant, MVA Hong-Kong Limited, includes hourly traffic flows with a composition of 18 vehicle classes according to "Guideline on Modelling Vehicle Emissions" as shown in **Table 4.6** below. Traffic forecast is included in **Appendix 4-13**, which shows the hourly Vehicle Kilometer Travelled (VKT), and the hourly average speed (kph) of road carriageways respectively.

Table 4.6 EMFAC-HK Vehicle Classes

Vehicle Class Description	Fuel Type	Gross Vehicle Weight (tonnes)	Symbol 1 (in csv output file)	Symbol 2 (in bcd output file & traffic data)
Private Cars (PC)	ALL	ALL	PC	PC
Taxi	ALL	ALL	Taxi	Taxi
Light Goods Vehicles (<=2.5t)	ALL	<=2.5t	LGV<=2.5t	LGV3
Light Goods Vehicles (2.5-3.5t)	ALL	>2.5-3.5t	LGV2.5-3.5t	LGV4
Light Goods Vehicles (3.5-5.5t)	ALL	>3.5-5.5t	LGV>3.5t	LGV6
Medium & Heavy Goods Vehicles (5.5-15t)	ALL	>5.5-15t	HGV<=15t	HGV7
Medium & Heavy Goods Vehicles (15-24t)	ALL	>15-24t	HGV15-24t	HGV8
Public Light Buses	ALL	ALL	PLB	PLB
Private Light Buses (<=3.5t)	ALL	<=3.5t	PrLB<=3.5t	PV4
Private Light Buses (>3.5t)	ALL	>3.5t	PrLB>3.5t	PV5
Non-franchised Buses (<6.4t)	ALL	<=6.36t	NFB<=6.4t	NFB6
Non-franchised Buses (6.4-15t)	ALL	>6.36-15t	NFB6.4-15t	NFB7

Vehicle Class Description	Fuel Type	Gross Vehicle Weight (tonnes)	Symbol 1 (in csv output file)	Symbol 2 (in bcd output file & traffic data)
Non-franchised Buses (15-24t)	ALL	>15-24t	NFB15-24t	NFB8
Single Deck Franchised Buses	ALL	ALL	FBSD	FBSD
Double Deck Franchised Buses	ALL	ALL	FBDD	FBDD
Motor Cycles	ALL	ALL	MC	MC
Heavy Goods Vehicles (>24t)	ALL	>24t	HGV>24t	HGV9
Non-franchised Buses (>24t)	ALL	>24t	NFB>24t	NFB9

4.7.5 The estimated 18-class distribution as defined in EMFAC-HK was derived by sectoring the relevant classes in the Transport Department's Annual Traffic Census record or vehicle distribution obtained from manual traffic count surveys, in proportion to the recorded distribution in EPD document: "2018 Vehicle Licensed Number by Age and Technology Group Fractions".

4.7.6 All concerned roadways shall be characterized with speed limits. Average speeds of 24 hours were prepared for each road.

4.7.7 The established road traffic data, including traffic flow, 24-hour vehicle mix and 24-hour average speed was provided by the Project Traffic Consultant. Confirmation from the Transport Department (TD) is being sought and the reply from TD on the methodology adopted for the traffic forecast will be provided when available. It should be noted that the traffic forecasts for the assessment have been produced strictly in accordance with the methodology of the traffic forecast.

EMFAC-HK Input

Geographical Area

4.7.8 "Hong Kong" is selected as the Geographical Area.

Calendar Year

4.7.9 2030 are chosen as the Calendar Year in the EMFAC-HK Model to represent the worst case scenario emissions (because the vehicle fleet will become cleaner over time as the fleet incorporates newer vehicles adhering to more stringent emission standards) for the Proposed.

Season or Month

4.7.10 Per the EPD Guideline, "Annual" is selected in this study to evaluate the highest vehicle emission within the Model Year.

Mode and Output

4.7.11 EMFAC-HK Model is run in Emfac mode for calculating area fleet average emissions.

Temperature and Humidity

4.7.12 The information of Wong Chuk Hang Automatic Weather Station from the Hong Kong Observatory was used in this assessment. The hourly values over the entire year were selected.

4.7.13 In accordance with a *Guideline of Use of Temperature and Relative Humidity Data for Vehicular Emission Factor Prediction* published by EPD in March 2021, the minimum

quarterly temperatures and relative humidity (RH) were applied for both short-term (i.e. hourly or daily average) and long-term (i.e. annual average) air quality impact.

4.7.14 Referring to the said information, the minimum monthly temperatures for every month of a year are ranging from 8°C – 25°C; and minimum monthly RH for every month of a year are ranging from 21% – 66% (see **Table 1** of **Appendix 4-14**).

Speeds

4.7.15 The average speed data provided by the project traffic consultant for every hour of each road was used for the subsequent calculation. As mentioned in **Section 4.7.7**, the relevant correspondence of the endorsement by the TD will be provided.

Exhaust / Evaporation Technology Fractions

4.7.16 Vehicle classes are grouped with different exhaust and evaporation technology group indexes and technology fractions. Each technology group represents a distinct emission control technologies. Default exhaust and evaporation technology fractions are adopted in this assessment.

Population and Accrual Rate

4.7.17 Default vehicle populations forecast and accrual rate in EMFAC-HK Model is adopted.

Trips and VKT

4.7.18 Default trips and VKT for HK total is adopted. Detailed emission factors were generated with respect to the combination of temperature, RH and speed for running exhaust emission, and combination of temperature and duration for start emission.

Calculation of Emission Factors by EMFAC-HK Model Output

Running Exhaust Emission Factor

4.7.19 To represent the worst-case scenario, a maximum running exhaust fleet average emission factor (g/km) arising from all combinations of minimum temperature and relative humidity with respect to each combination of speed and vehicle class will be adopted for NO_2, NO, RSP and FSP for every quarter of a year.

4.7.20 For each road, hourly composite running exhaust emission rate (NO_2/NO/RSP/FSP) is determined by:

Hourly composite running exhaust emission factor (NO_2/NO/RSP/FSP) (g/veh-km)

= ∑ [hourly running exhaust fleet average emission factor for each vehicle class (determined for the corresponding road group) x % composition of corresponding vehicle class]

Starting Emission Factor

4.7.21 In general, no start emission will be applied if the roads with double yellow line and the road classified as District Distributor, Primary Distributor, Trunk Road & Expressway. The roads with on-street parking, no line or single yellow line are considered as with start emission. As the information of the durations is not available, the maximum starting emission (g/trip) among different durations (from 5min to 720min) is adopted, which is considered as a more conservative approach. Starting emissions of all 18 vehicle classes are included in the calculation.

4.7.22 The trip in EMFAC-HK Model is referred to the cold start trip. The number of trip is dependent on vehicle population. The default value of trip in the EMFAC-HK Model is the number of trips within HK given a defined vehicle population. Since there is no project-specific vehicle population data, it is proposed to estimate the number of trips within the study area with respect to the project-specific Vehicle Miles Travelled (VMT) given the assumption that the VMT is related to vehicle population.

4.7.23 It is assumed that there is no start emission on Expressways (EX), Primary Distributor (PD) and District Distributor (DD) roads. The number of trips of these roads is zero for all vehicle classes for all hour of the day. For the local and rural roads within the study area, the number of trips is estimated by scaling the number of trips for vehicle class within the entire HK using the ratio of VMT for local and rural roads within the study area to VKT for local and rural roads within the entire HK.

$$Trip\ for\ local\ and\ rural\ roads\ within\ the\ study\ area$$
$$= Trip\ for\ local\ and\ rural\ roads\ within\ HKSAR * \frac{VMT\ for\ local\ and\ rural\ roads\ within\ the\ study\ area}{VMT\ for\ local\ and\ rural\ roads\ within\ HKSAR}$$

Note: For particular vehicle class and particular hour

4.7.24 The same method was also adopted in the approved Liantang EIA. The estimation of % VMT for local and rural roads within HK is shown in **Appendix 4-14**.

4.7.25 In this assessment, the estimated VMT/ VKT for local and rural roads with possible start emission amounts to ~14.34% of total VMT/ VKT according to the 2021 2022 Traffic Census Data. Trip per VKT for local and rural road for each class is determined by:

Trip/VKT (1/veh-km) for each vehicle class = HK total number of trips for each vehicle class ÷ (HK total VKT travelled for each vehicle class x % of daily vehicle-km for local and rural roads in Hong Kong).

4.7.26 Based on the hourly VKT travelled data from the project traffic consultant, the hourly total cold start emission (gram) for each vehicle class along each road is determined by:

Hourly total cold start emission (g) for each vehicle class = starting emission rate for each vehicle class x Trip/VKT for each vehicle class x VKT travelled for each vehicle class along each road

4.7.27 The hourly total cold start emission rate for each road is the sum of hourly total cold start emission (gram) for each vehicle class along the same road. The hourly composite cold start emission factor is calculated by dividing the value using the hourly traffic flow:

Hourly total cold start emission (g) = Σ [hourly total cold start emission for each vehicle class]

Hourly composite cold start emission factor (g/veh-km) = hourly total cold start emission ÷ hourly total VKT travelled

Meteorological Data

4.7.28 Hourly meteorological data of Grid (38,29) for a full year is extracted from the PATH v2.1 released by EPD in July 2021. Hourly wind speeds lower than 1m/s (i.e. calm wind condition) are corrected to 1m/s. Hourly Pasquill stability classes are generated by PCRAMMET. Hourly mixing heights are interpolated by PCRAMMET and capped between the minimum and maximum values measured at King's Park AWS (2015), i.e. 131m and 1941m. Horizontal wind direction fluctuations at 22.5°, 17.5°, 12.5°, 7.5° and 3.8° are selected based on PCRAMMET generated stability classes matching A, B, C, D, E and F respectively and with surface roughness factor of $(z_0/15\ cm)^{0.2}$ was adopted where z_0 is the surface roughness in cm.

Noise Barrier

4.7.29 Neither vertical nor cantilevered noise barriers are found within 500m from the Application Site. Therefore, no noise barriers are considered in the model assessment.

Surface Roughness Height

4.7.30 This parameter is closely related to the land use characteristics of a study area and associated with the roughness element height. As a first approximation, the surface roughness can be estimated as 3 to 10 percent of the average height of physical structures. Typical values used for urban and new development areas are 370cm and 100cm, respectively. The surface roughness adopted for CALINE4 is shown in **Appendix 4-16**.

Road Elevation/Height of ASRs

4.7.31 Owing to the inherent limitation in the CALINE4 model, road elevation for elevated roads (i.e. categorized as "Bridge" in CALINE4 model) is limited to 10 meters which may underestimate the pollutant concentrations at ASRs. There are no elevated roads with road heights higher than 10mAG within 500m assessment area. Since the road heights for some underpass roads (i.e. categorized as "Depressed" in CALINE4 model) are slightly lower than -10mAG within 500m assessment area, the height for these underpass roads would be capped at -10mAG as a conservative approach. As a conservative approach, the ASRs with the heights equal to or lower than 10mAG are set to the lowest assessment level in the CALINE4 model. And for the at-grade roads, elevations of roads have been defined as 0mAG to circumvent the model limit.

Assessment Year

4.7.32 The air quality impact of the vehicular emissions are typically calculated based on the highest emission strength from the traffic forecast data within the first 15 years after the completion of the Proposed Development (i.e. between 2030 and 2045). The assessment year is selected to represent the highest emission scenario given the combination of vehicular emission factors and traffic flow for the same year. The worst assessment year has been determined based on the highest NO_x, RSP and FSP emission scenario using the EMFAC-HK model. Sensitivity tests have been conducted to determine the worst-case scenario given the combination of vehicular emission factors and the projected traffic flow for the following selected years within 15 years after the completion of the Proposed Development. The representative years are 2030 (i.e. completion year), 2037 (i.e. seven years after completion year) and 2045 (fifteen years after completion year). Details of sensitivity analysis of the emission inventories of the vehicular emission from open roads is shown in **Appendix 4-14** and **Appendix 4-15**. Based on the results, the greatest total emission for NO_x, RSP and FSP is in Year 2030, therefore, Year 2030 has been selected as the worst-case model year for the air quality.

4.8 Post-processing of Modelling Results and Background Pollutant Contribution

4.8.1 Pollutant dispersion from vehicular, marine and industrial emissions have been simulated using the CALINE4 and AERMOD models. Dispersion results and background pollutant contributions have been combined and post-processed for the different averaging periods required for comparison with the relevant AQOs.

NO_x to NO_2 Conversion

4.8.2 The conversion of NO_x to NO_2 is a result of a series of complex photochemical reactions and determines the prediction of near field impact of NO_x emissions. To determine vehicular emission impacts, the emission factors of NO_2 are extracted from the results of the EMFAC-HK Model version 4.3 and the emission factors of NO are calculated from

the emission factors of NO_x and NO_2 for all motor vehicle types. For the marine and industrial emissions, initial NO_2 to NO_x ratio for cruises and chimneys is assumed as 10% with reference to the Heathrow Airport EIA report.

4.8.3 For NO_x in particularly, an algorithm has been built-in to convert a portion of NO_x predicted at ASRs into NO_2 using the Ozone Limiting Method (OLM) when they mix with the ambient O_3. The OLM assumes a conversion process that is stoichiometrically limited by the ambient O_3 levels, and hence the latter can be used to predict the maximum convertible NO_2 from NO_x for superimposing onto the initial "out-of-tailpipe / in-stack" NO_2 levels as the base level. OLM has been applied for the sum of the vehicular and industrial sources to compare with the available ozone for conversion to NO_2.

$$[NO_2]_{Predicted} = [NO_2]_{initial} + Min([NO]_{Predicted}\ or\ \frac{46}{48}[O_3]_{PATH})$$

Jenkin Method for Long-term Cumulative NO_2 Assessment

4.8.4 For the long-term cumulative NO_2 assessment (i.e. predictions of annual average NO_2 concentration), Jenkin Method was adopted for the conversion of cumulative annual average NO_x to cumulative annual average NO_2 by using the functional form with reference to "*Review of Methods for NO to NO2 Conversion in Plumes at Short Ranges*" published by Environment Agency of UK in 2007. The mentioned functional form is shown as below:

$$[NO_2] = \frac{\left([NO_x] + [O_x] + \frac{J}{k}\right) - \sqrt{\left([NO_x] + [O_x] + \frac{J}{k}\right)^2 - 4 \times [NO_x] \times [O_x]}}{2}$$

where
$[NO_2]$ is Annual Average NO_2 Concentration;
$[NO_x]$ is Annual Average NO_x Concentration;
$[O_x]$ is the Sum of Annual Average NO_2 Concentration and Annual Average O_3 Concentration (i.e. $[O_x] = [NO_2] + [O_3]$;
J is the Photolysis Rate of NO_2;
k is the Rate Coefficient for the Reaction between NO and O_3.

4.8.5 The above functional form was used to analyse the annual average data obtained from EPD's air quality monitoring stations. The details for the data analysis and derivation of cumulative annual average NO_x to NO_2 conversion equation using Jenkin Method for this assessment are shown in **Appendix 4-17**. The cumulative annual average NO_x to NO_2 conversion equation for this assessment was calculated as below:

$$[NO_2]_p = \frac{\left([NO_x]_p + 106.2 + 17.3\right) - \sqrt{\left([NO_x]_p + 106.2 + 17.3\right)^2 - 4 \times [NO_x]_p \times 106.2}}{2}$$

Background Pollutant Contribution

4.8.6 The latest Pollutants in the Atmosphere and their Transport over Hong Kong model (PATH v2.1) released by EPD is used to estimate the background air quality. Since year 2030 has been selected as the assessment year, PATH v2.1 for year 2030 of Grid (38,29) has been adopted as the background concentration. The PATH v2.1's output RSP and FSP concentrations have been adjusted according to the methodology mentioned in **Section 4.3.2**.

4.9 Assessment Results

4.9.1 The predicted air pollutant concentrations from the surrounding vehicular and marine emissions have been quantitatively assessed separately for NO_2, RSP, FSP and SO_2.

4.9.2 The predicted results of NO_2, RSP, FSP and SO_2 at all predetermined ASRs are summarized in **Appendix 4-18**. Contour plots at G/F of the Application Site (assessment height: 13.9mPD) for NO_2, RSP, FSP and SO_2 are shown in **Appendix 4-19**.

NO_2

4.9.3 The predicted results of the 19th highest 1-hour average and annual average NO_2 concentration at all identified ASR at selected levels are summarized in **Appendix 4-18**. The predicted results and the contour plots indicate that NO_2 concentrations at the Application Site would comply with the relevant AQOs. Therefore, no adverse air quality impact on the Application Site would be anticipated.

RSP

4.9.4 The predicted results of the 10th highest 24-hours and annual average RSP concentrations at ASR levels are summarized in **Appendix 4-18**. The predicted results and the contour plots indicate that RSP concentrations at the Application Site would comply with the relevant AQOs. Therefore, no adverse air quality impact on the Application Site would be anticipated.

FSP

4.9.5 The predicted results of the 36th highest 24-hours and annual average FSP concentrations at ASR levels are summarized in **Appendix 4-18**. The predicted results and the contour plots indicate that FSP concentrations at the Application Site would comply with the relevant AQOs. Therefore, no adverse air quality impact on the Application Site would be anticipated.

SO_2

4.9.6 The predicted results of the 4th highest 10-minute average and 24-hour average SO_2 concentrations for all identified ASRs at selected levels are summarized in **Appendix 4-18**. The predicted results and the contour plots indicate that SO_2 concentrations at the Application Site would comply with the relevant AQOs. Therefore, no adverse air quality impact on the Application Site would be anticipated.

4.10 Odour Impact Assessment

4.10.1 Only the Gage Street Refuse Collection Point has been identified within 200m study area from the Application Site during the on-site survey conducted in Aug and Nov 2023, which is located at a distance of ~55m from the Application Site. According to the observation during the on-site survey, no odour impact was observed near the Gage Street Refuse Collection Point. Moreover, there are also other existing air sensitive receivers located near the Gage Street Refuse Collection Point. Therefore, the Gage Street Refuse Collection Point is not considered as an odour source and it is anticipated that no adverse odour impact would be arisen from the Gage Street Refuse Collection Point on the air sensitive receivers of the Application Site.

4.11 Conclusion

4.11.1 Although the Gage Street Refuse Collection Point has been identified within 200m study area from the Application Site during the on-site survey, the Gage Street Refuse Collection Point is not considered as an odour source. Therefore, it is anticipated that no adverse odour impact would be arisen from the Gage Street Refuse Collection Point on the air sensitive receivers of the Application Site.

4.11.2 The predicted concentrations of assessment parameters (NO_2, RSP and FSP and SO_2) at all ASRs at the Application Site would comply with the relevant AQOs. Therefore, no adverse air quality impact on the Application Site would be anticipated.

Figure 4.1 **Assessment Area of 500m from the Application Site**

Figure 4.2 **Air Sensitive Receivers nearby the Application Site for Construction Phase**

Figure 4.3 **Location of Representative Air Sensitive Receivers for Operation Phase**

Figure 4.4 **Locations of Emissions from Marine Vessels at Hong Kong - Macau Ferry Terminal**

Figure 4.5 **Locations of Emissions from Marine Vessels at Ocean Terminal**

Figure 4.6 **Locations of Emissions from Helicopters**

Figure 4.7 **Location of Emission Sources of Portals**

Appendix 4-1 **Detailed Calculation Characterizing Landuse for AEARMET**

Appendix 4-2 **Ferry Schedule at HKMFT Available at Marine Department's Website**

Appendix 4-3 **Input Parameters of Fast Ferry Services at HKMFT in AERMOD**

Appendix 4-4 **Input Parameters of Cruise Vessels at Ocean Terminal in AERMOD**

Appendix 4-5 **Input Parameters of Helicopter Emission Sources in AERMOD**

Appendix 4-6 **Input Parameters of Public Transport Interchanges and Bus Terminus in AERMOD**

Appendix 4-7 **Input Parameters of Portals in AERMOD**

Appendix 4-8 **Derivation of Emission Rate of Fast Ferry Services at HKMFT**

Appendix 4-9 **Derivation of Emission Rate of Cruise Vessels at Ocean Terminal**

Appendix 4-10 **Derivation of Emission Rate of Helicopter**

Appendix 4-11 **Derivation of Emission Rates of Public Transport Interchanges and Bus Depot**

Appendix 4-12 **Derivation of Emission Rates of Portals**

Appendix 4-13 **Traffic Forecast for Air Quality Impact Assessment (Traffic Forecast for Years 2030, 2037 and 2045) (provided in CD)**

Appendix 4-14 **EMFAC-HK Information (EMFAC-HK Information for Years 2030, 2037 and 2045) (provided in CD)**

5. CONCLUSION

5.1.1 The environmental noise, air quality, construction phase environmental impacts including risk of land contamination have been assessed in this report with respect to the Proposed Development at Application Site.

Noise

5.1.2 According to the result of road traffic noise impact assessment, no adverse road traffic noise impact due to surrounding roads on the Proposed Development is anticipated. No noise mitigation is considered necessary for the proposed development.

5.1.3 According to the result of fixed noise impact assessment, no adverse fixed noise impact due to surrounding fixed noise sources on the Proposed Development is anticipated. No noise mitigation is considered necessary.

5.1.4 This is in early planning stage of the study so that there is no detail of future fixed noise sources onsite available. Any fixed noisy facilities (e.g. fan system, HVAC for clubhouse) provided onsite in future will be designed to follow the HKPSG requirement (i.e. acceptable noise level minus 5 decibels) to ensure that there is no adverse impact on any noise sensitive use in the surrounding. Fixed noise impact assessment will be conducted with respect to noisy equipment onsite in later stage when relevant design information is available and will be submitted for the purpose to discharge relevant planning condition if this application is approved.

Air Quality

5.1.5 The predicted concentrations of assessment parameters (NO_2, RSP and FSP) at all ASRs of the Application Site are expected to be within the relevant AQOs. Therefore, no adverse vehicular emission impact on the Proposed Development is anticipated

Figures

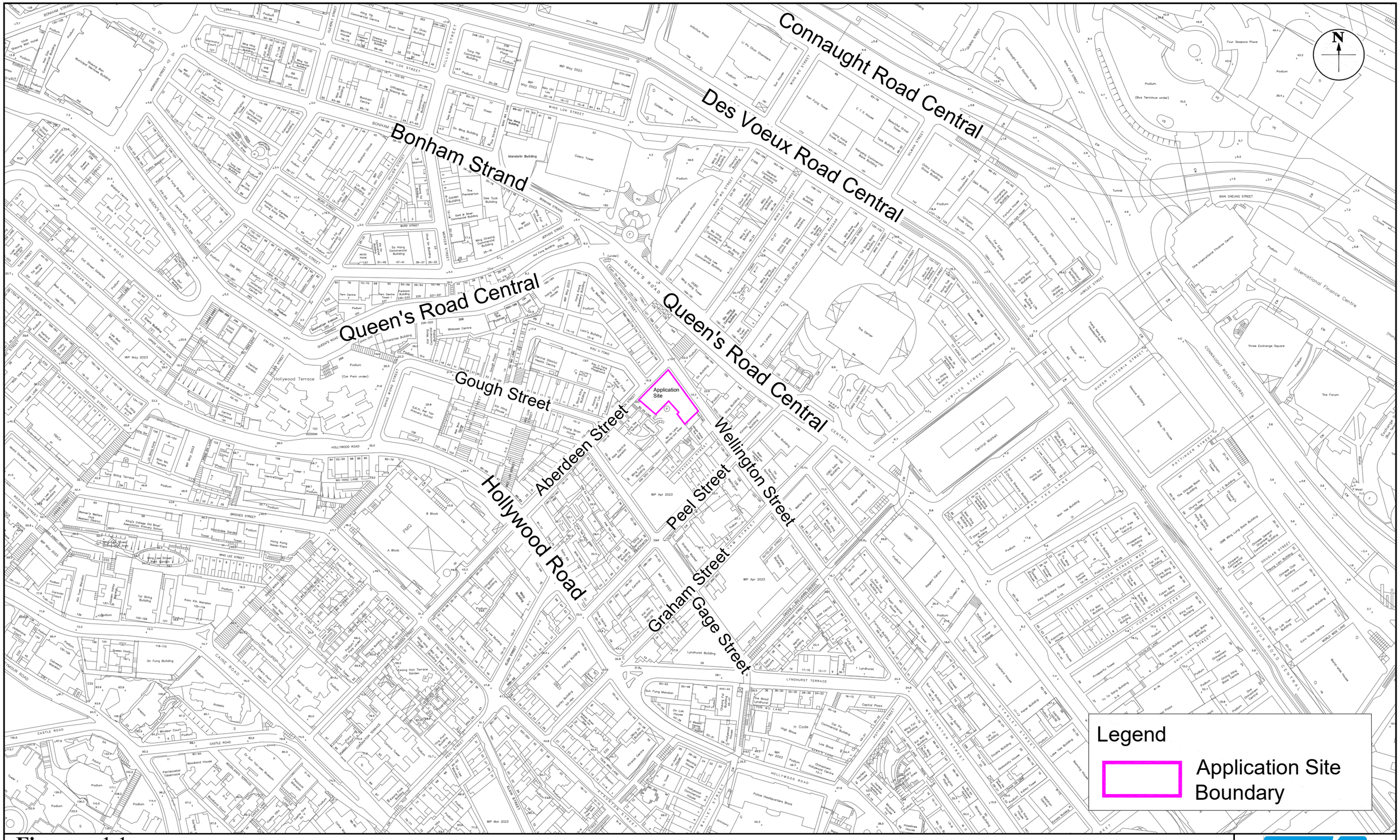

Figure: 1.1	RAMBOLL
Title: Locations of the Site and Its Environs	Drawn by: AW Checked by: SL
Project: S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central	Rev.: 1.0 Date: Dec 2023

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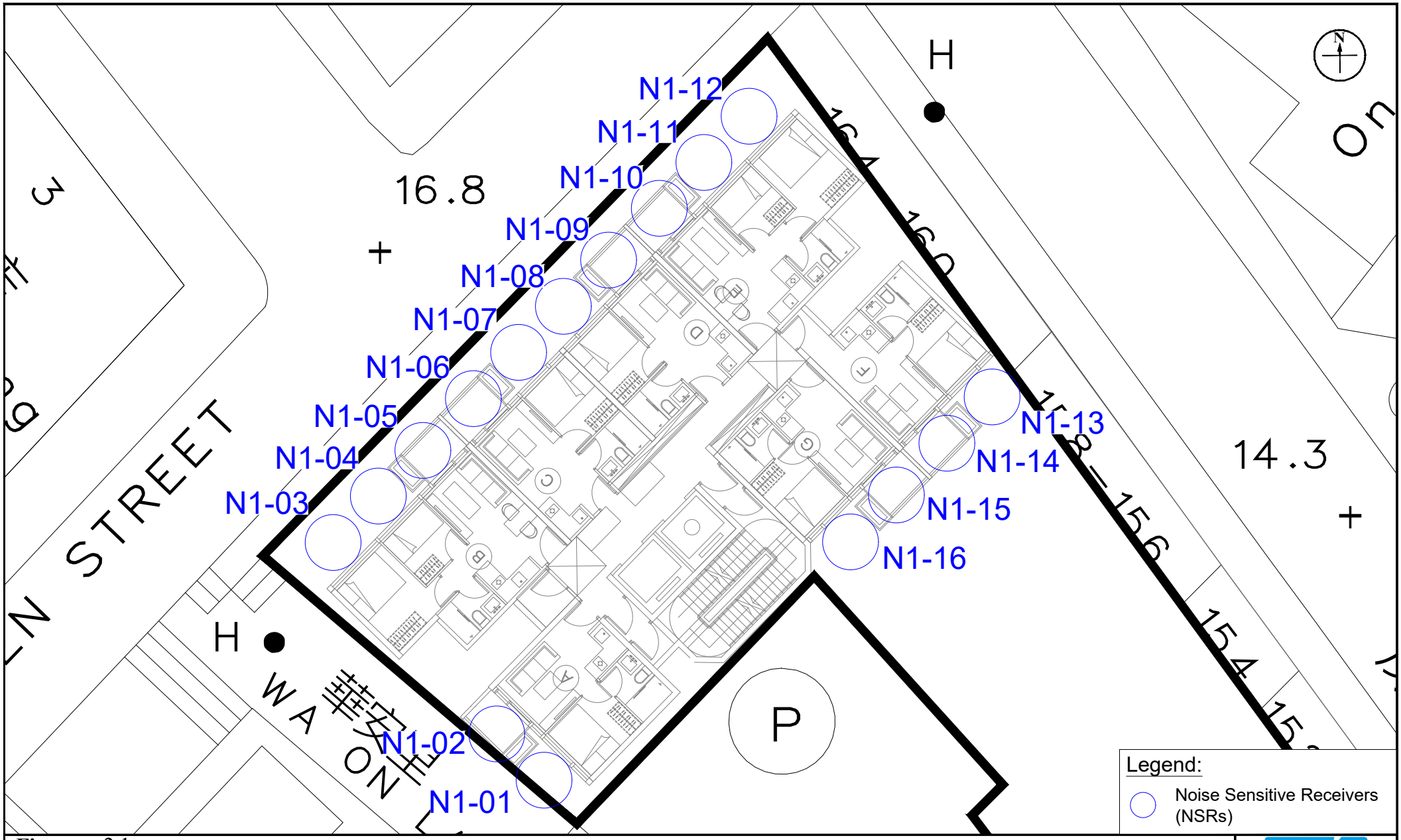

Figure: 2.1	RAMBOLL
Title: Location of Representative Noise Sensitive Receivers for Road Traffic Noise Impact Assessment	Drawn by: CM Checked by: CC
Project: S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central	Rev.: 1.0 Date: Nov 2023

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Figure: 3.1

Title: Locations of Identified Fixed Noise Sources for Fixed Noise Impact Assessment

Project: S16 Planning Application For Proposed Composite Redevelopment at 152-164 Wellington Street, Central

RAMBOLL

Drawn by:	DC
Checked by:	CC
Rev.:	1.0
Date:	Dec 2023

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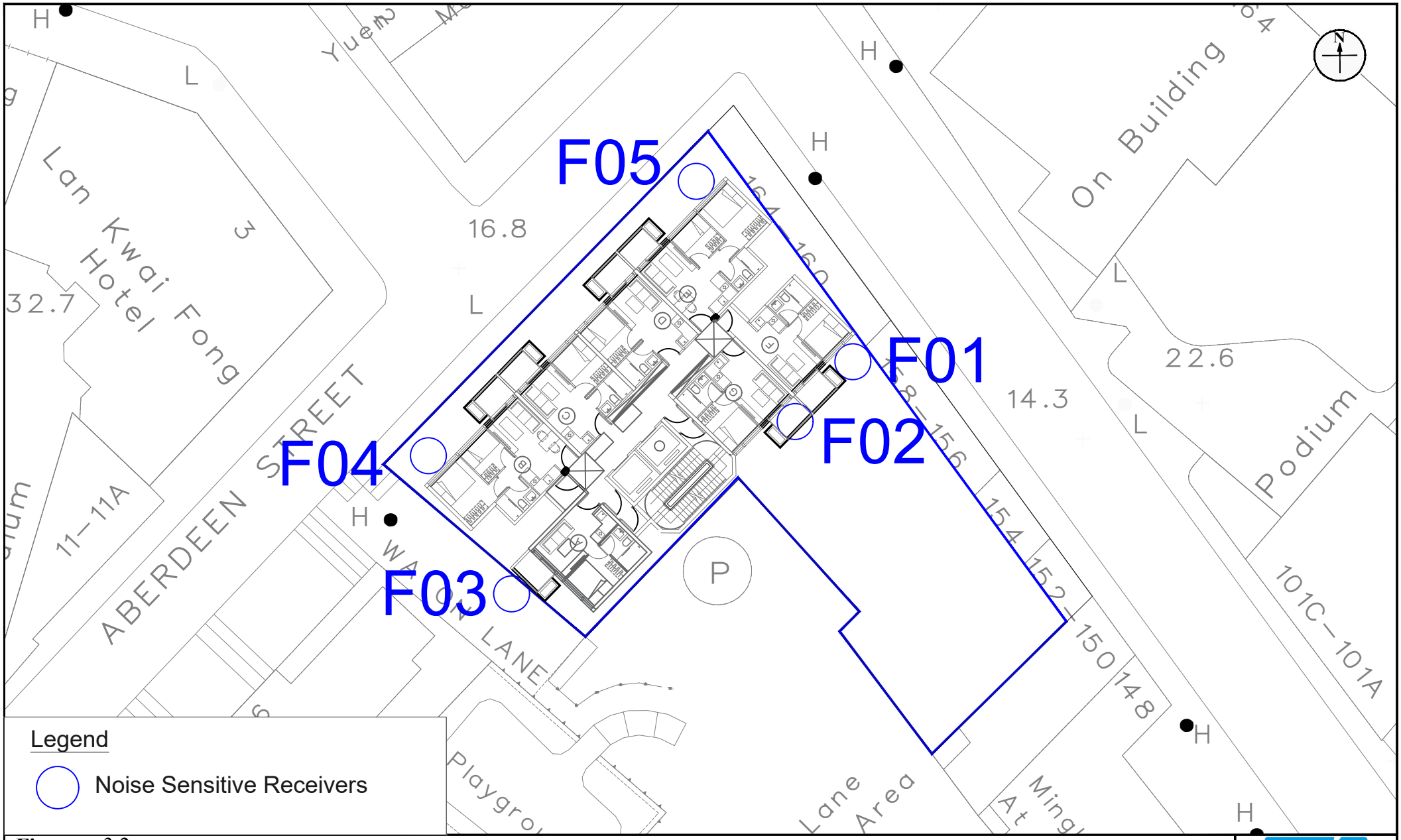

Figure: 3.2

Title: Locations of Representative Noise Sensitive Receivers for Fixed Noise Impact Assessment

Project: S16 Planning Application For Proposed Composite Redevelopment at 152-164 Wellington Street, Central

RAMBOLL

Drawn by:	DC
Checked by:	CC
Rev.:	1.0
Date:	Dec 2023

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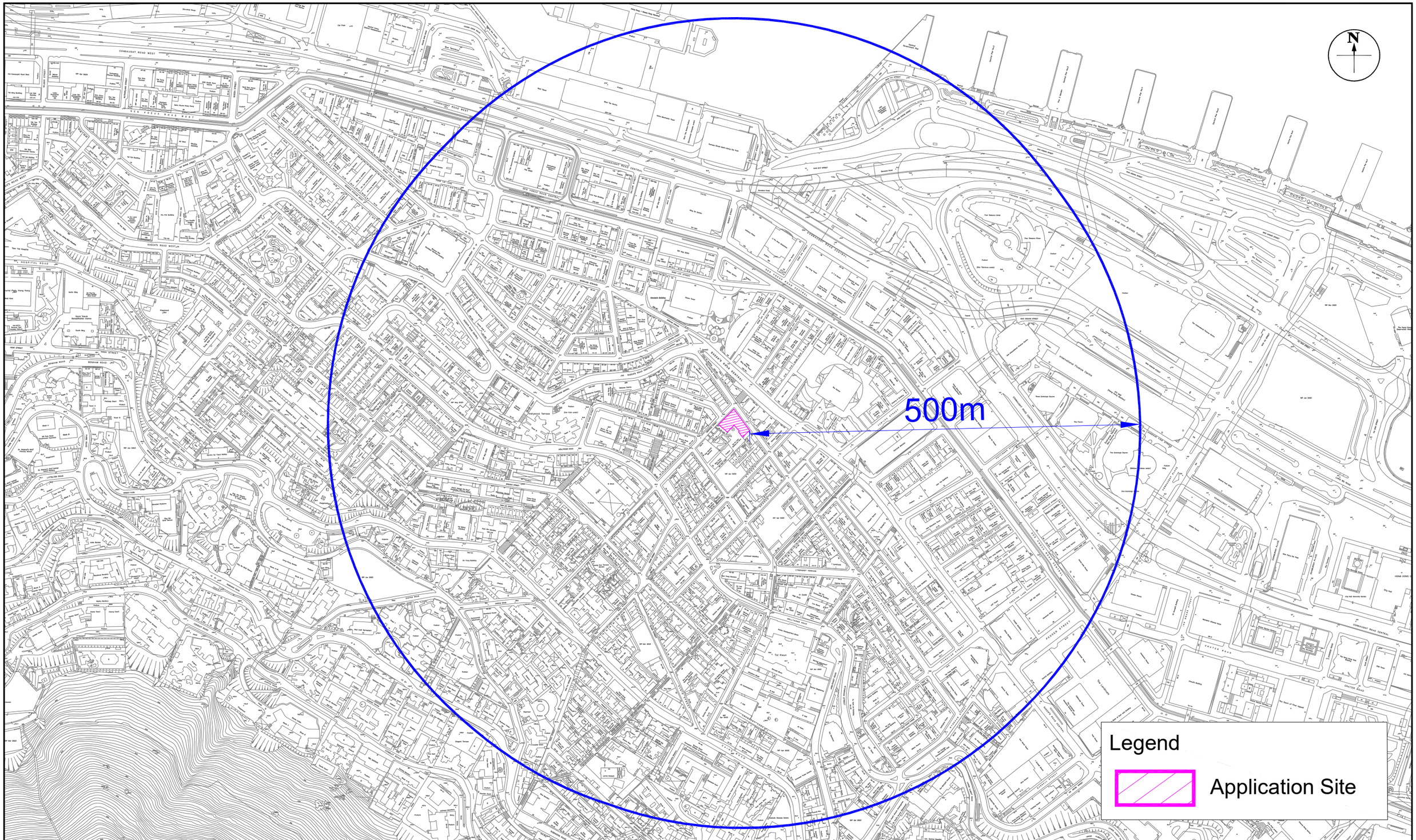

Figure: 4.1	RAMBOLL
Title: Locations of the Site and Its Environs	Drawn by: AW
	Checked by: SL
Project: S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central	Rev.: 1.0
	Date: Dec 2023

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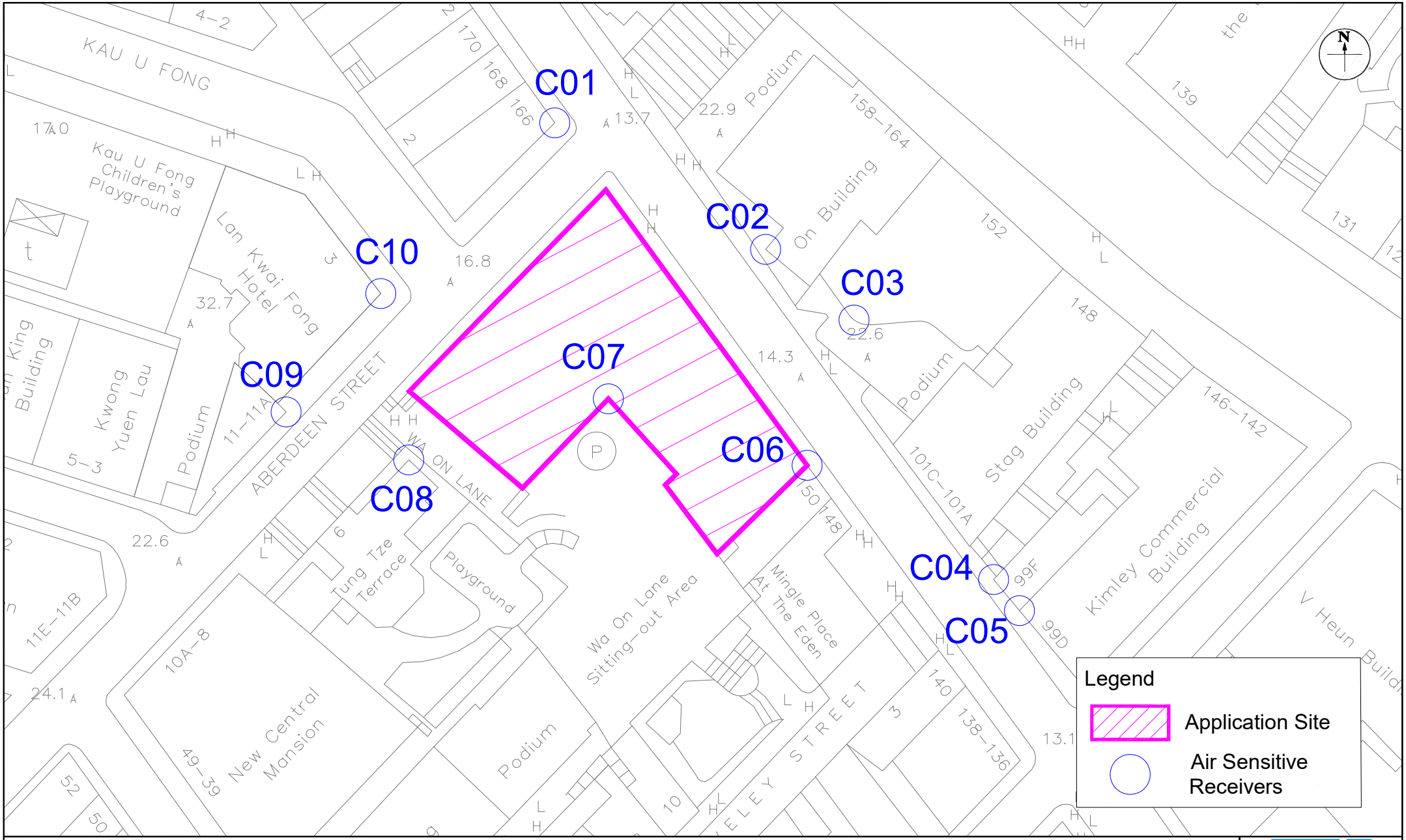

Figure: 4.2

Title: Locations of Representative Air Sensitive Receivers during Construction Phase

Project: S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central

RAMBOLL

Drawn by:	AW
Checked by:	SL
Rev.:	1.0
Date:	Dec 2023

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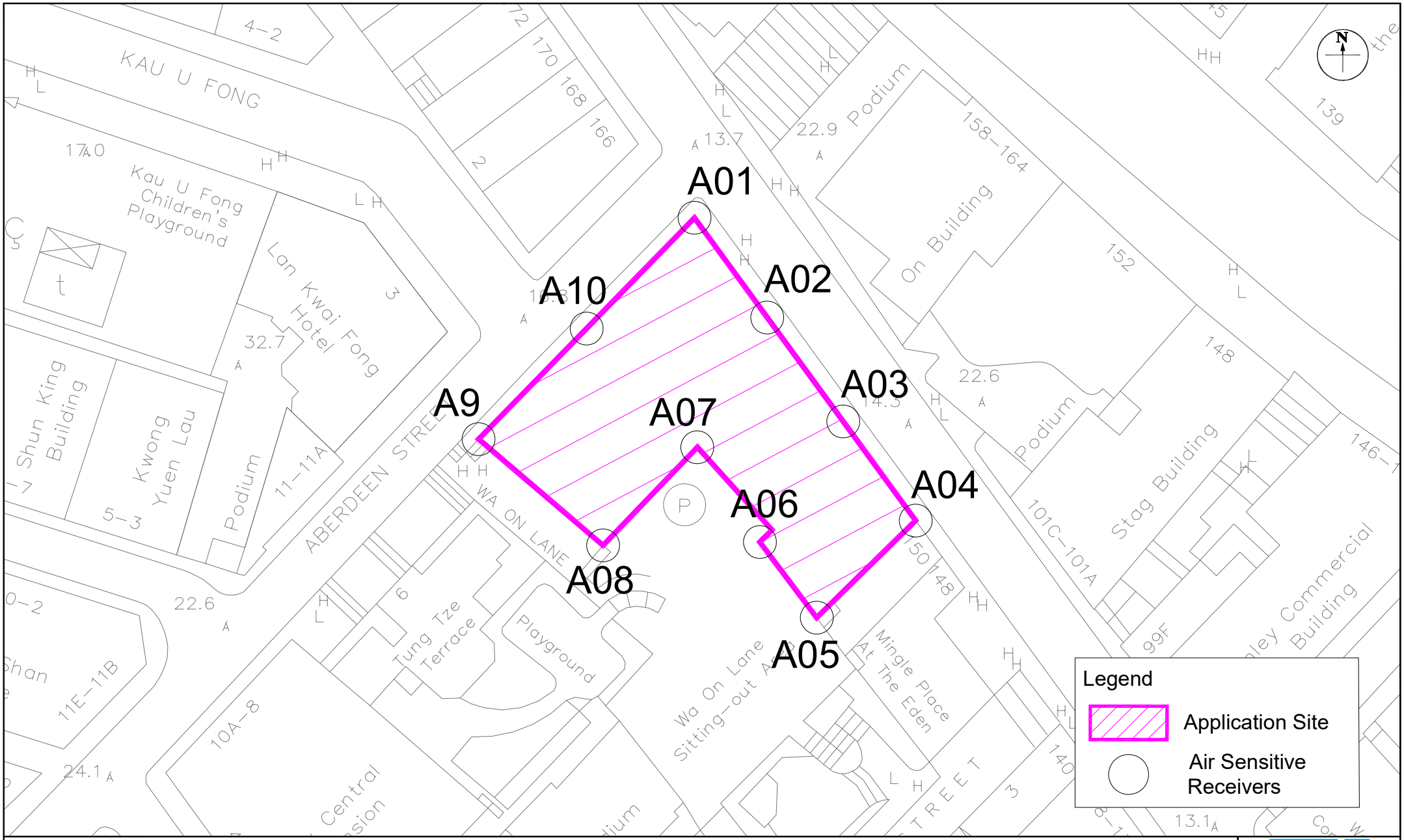

Figure: 4.3	RAMBOLL
Title: Locations of Representative Air Sensitive Receivers during Operational Phase	Drawn by: AW Checked by: SL
Project: S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central	Rev.: 1.0 Date: Dec 2023

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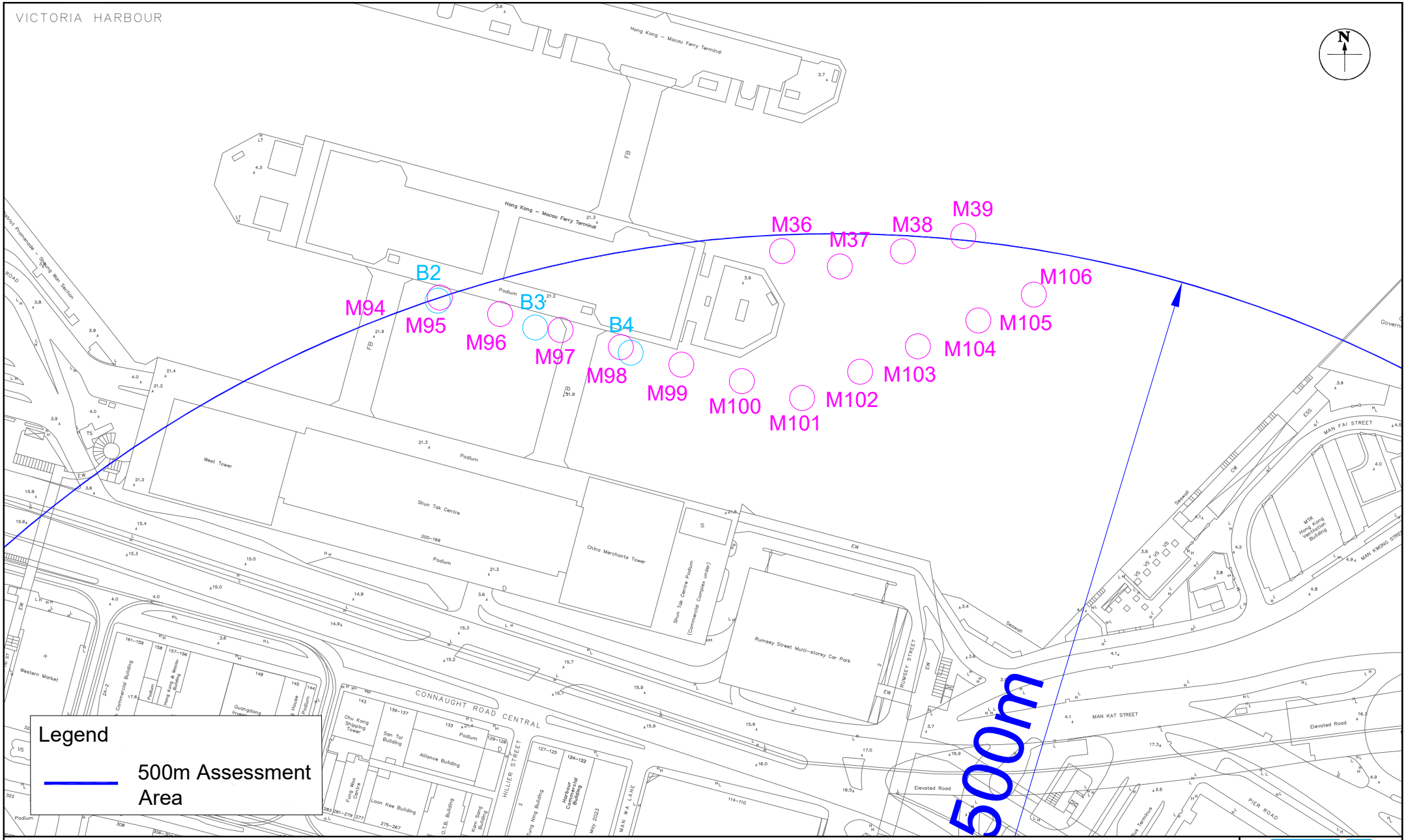

Figure: 4.4

Title: Locations of Emissions from Marine Vessels at Hong Kong - Macau Ferry Terminal

Project: S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central

RAMBOLL

Drawn by:	AW
Checked by:	BF
Rev.:	1.0
Date:	Sep 2023

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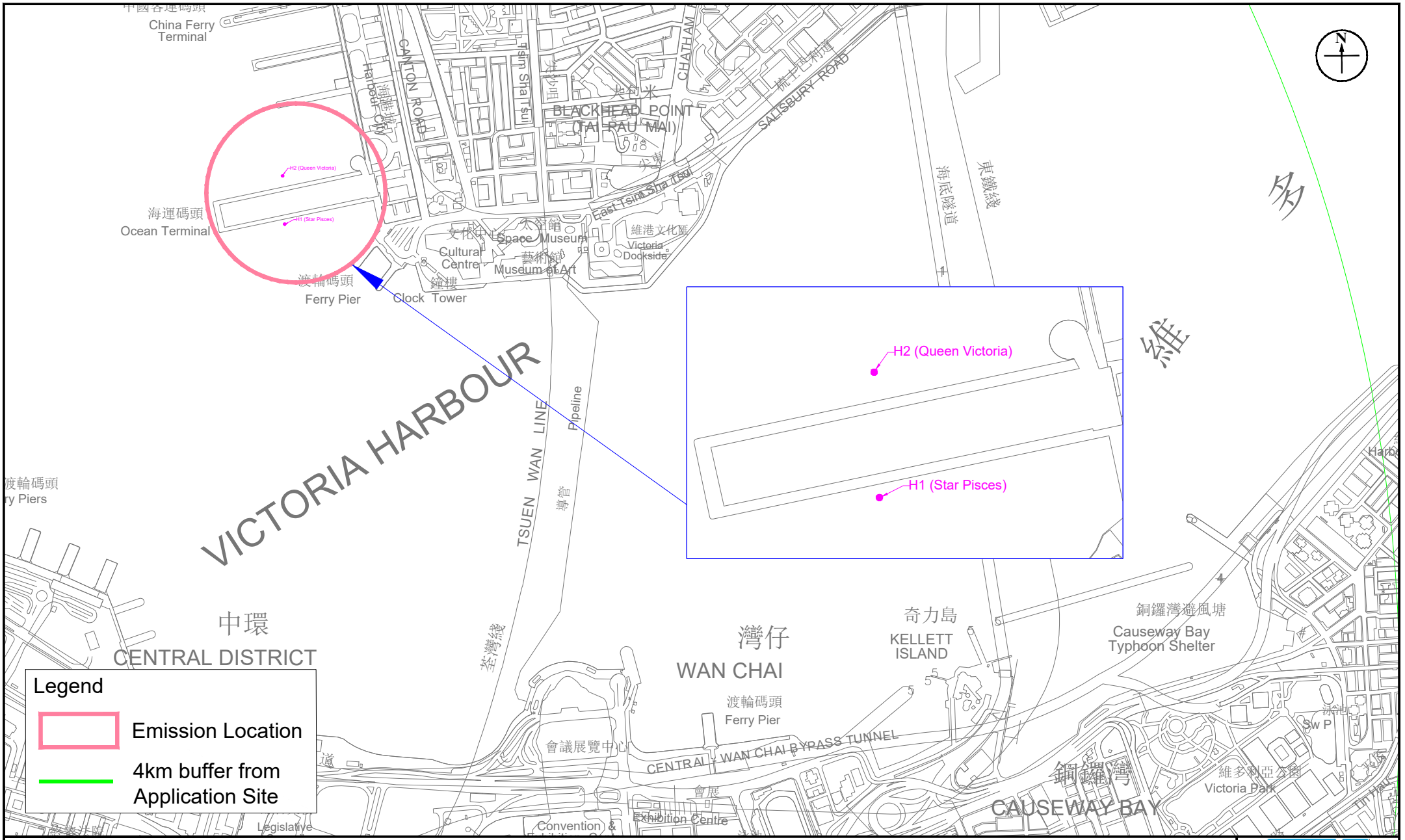

Figure: 4.5

Title: Locations of Emissions from Marine Vessels at Ocean Terminal

Project: S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central

RAMBOLL

Drawn by:	AW
Checked by:	BF
Rev.:	1.0
Date:	Sep 2023

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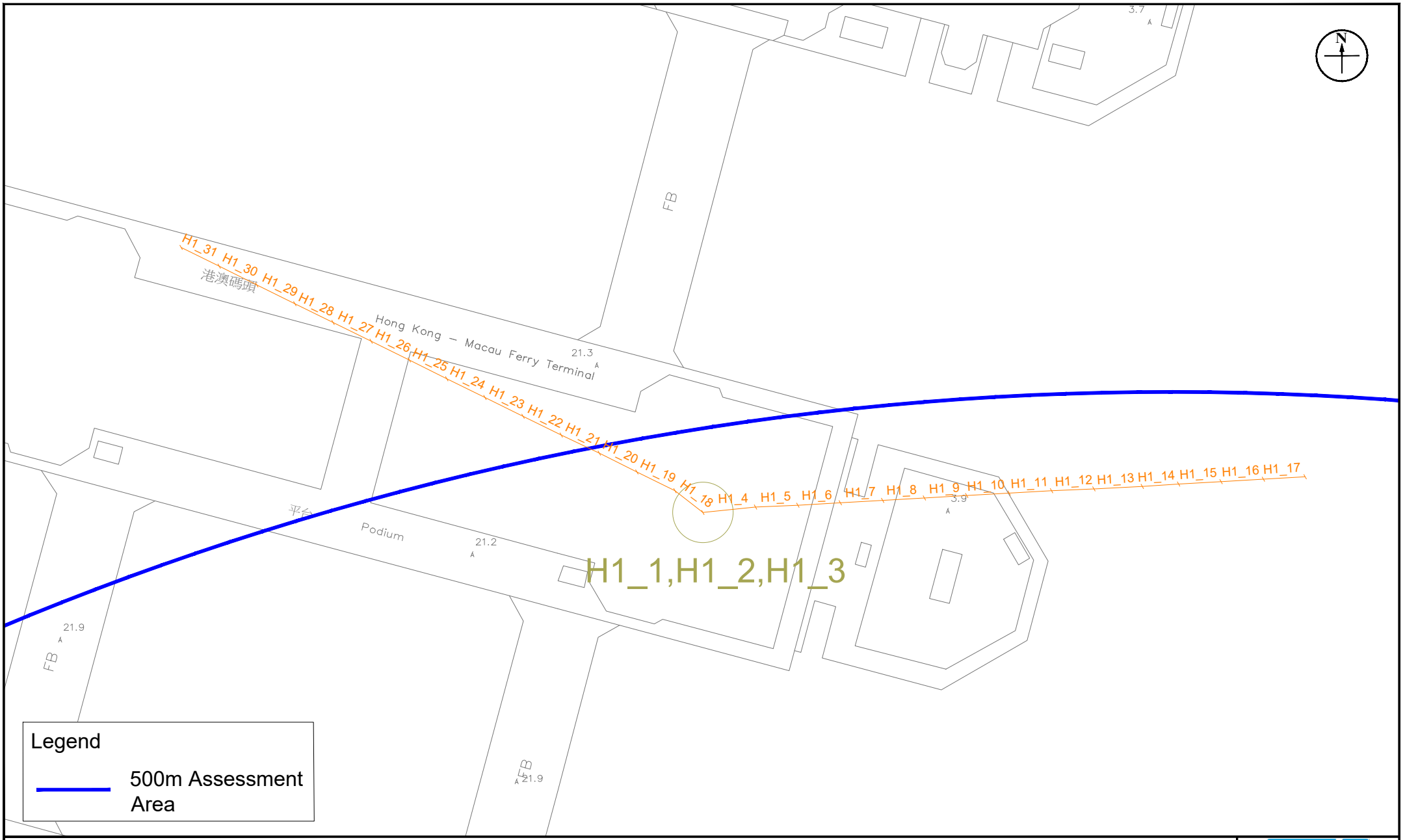

Figure: 4.6

Title: Locations of Emissions from Helicopters

Project: S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central

RAMBOLL

Drawn by:	AW
Checked by:	BF
Rev.:	1.0
Date:	Sep 2023

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Figure: 4.7	RAMBOLL
Title: Locations of Emission Sources of Portals	Drawn by: AW Checked by: BF
Project: S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central	Rev.: 1.0 Date: Sep 2023

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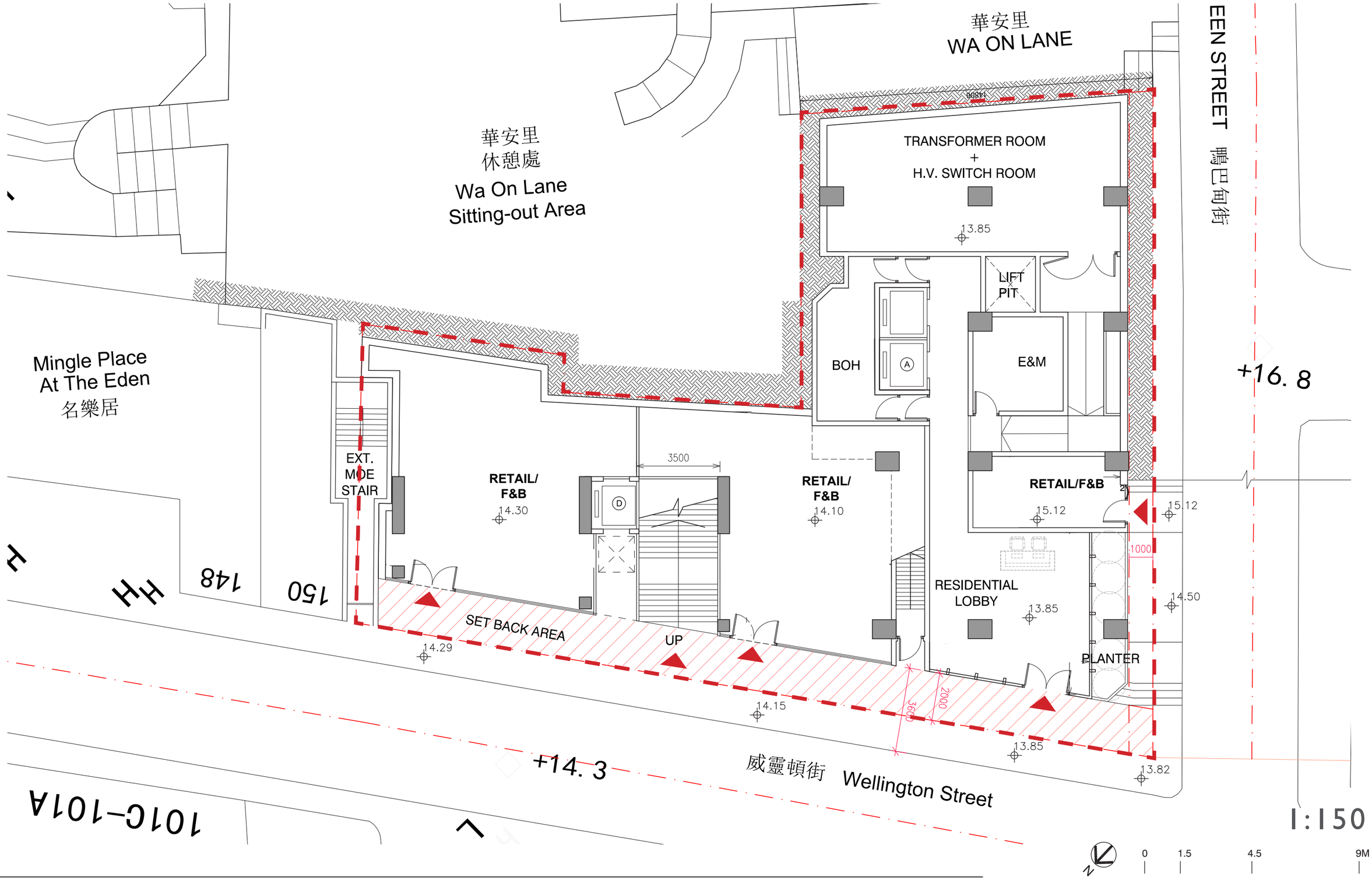
Appendix 1-1 Layout and Floor Plans of the Proposed Development

PODIUM PLANS

GF



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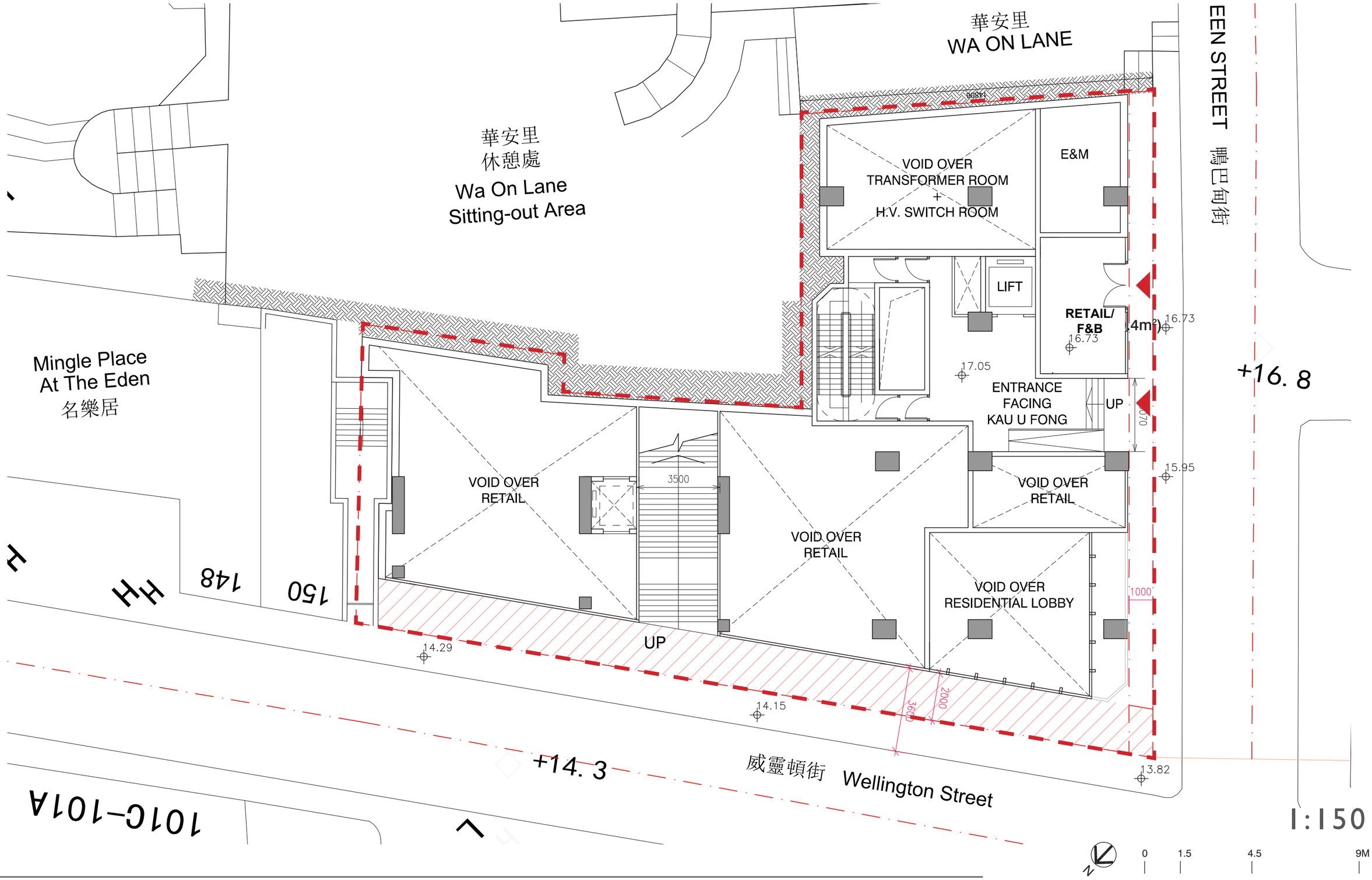
PODIUM PLANS

MF



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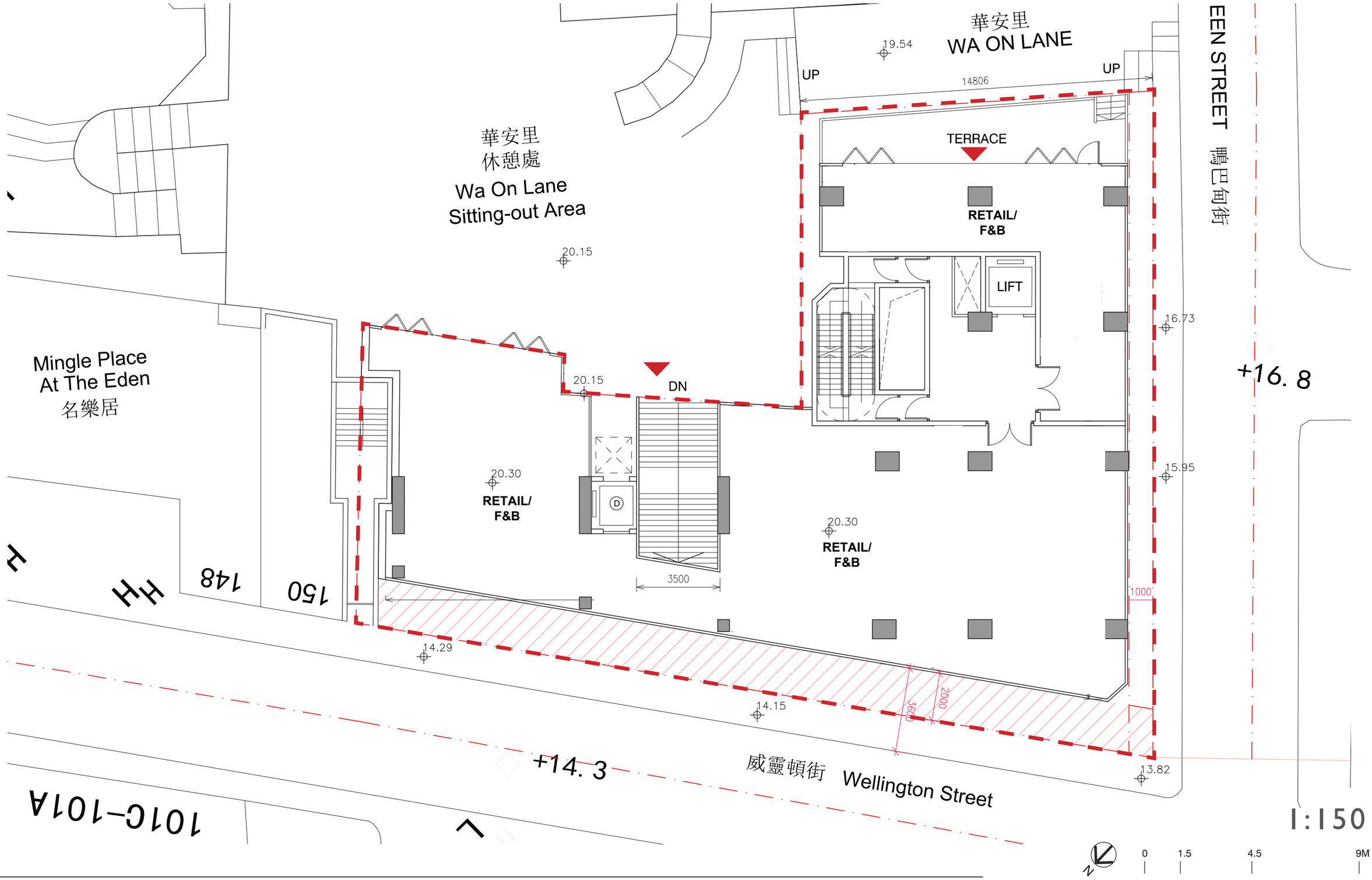
PODIUM PLANS

1F



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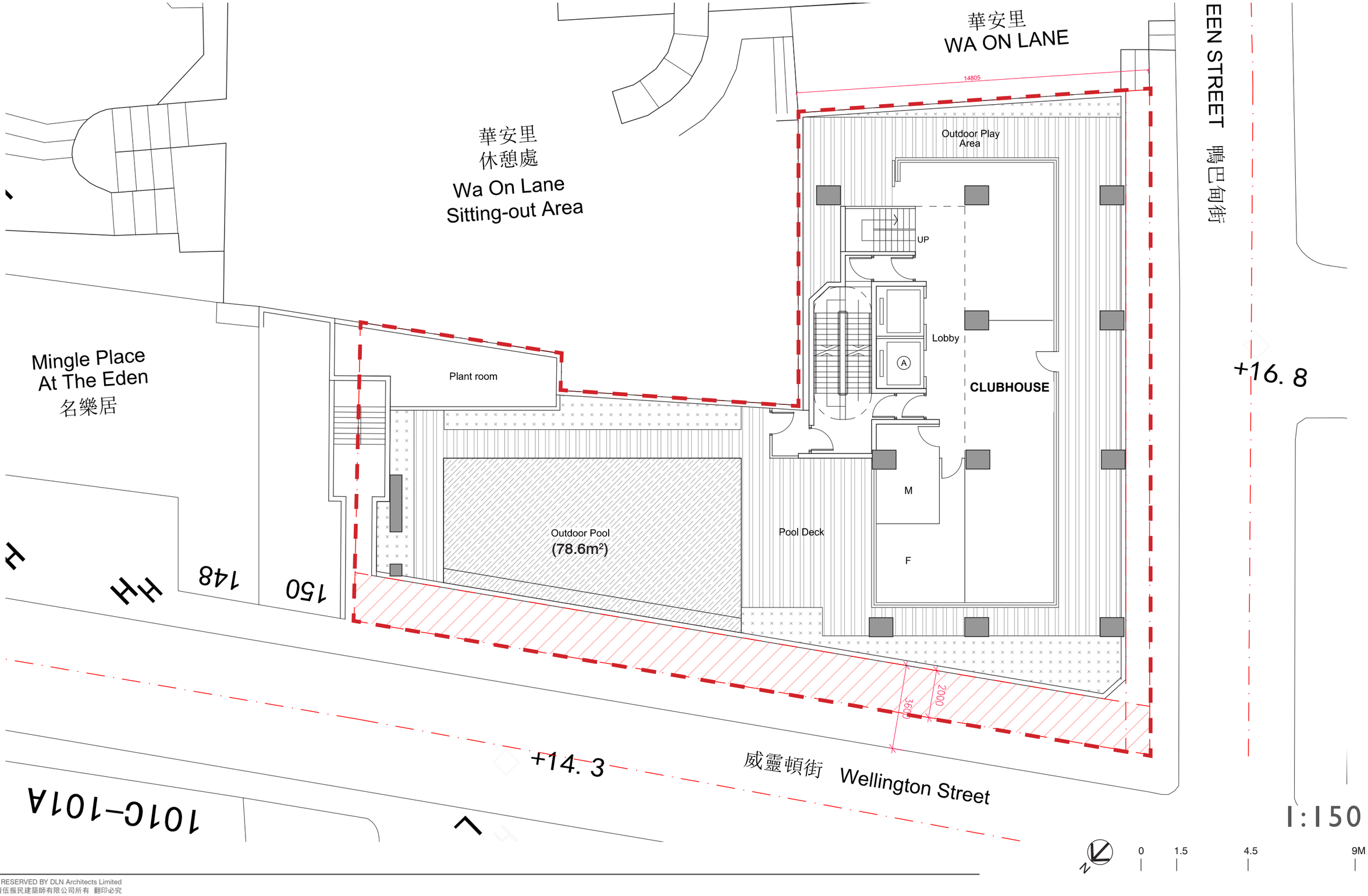
PODIUM PLANS

2F (CLUBHOUSE)



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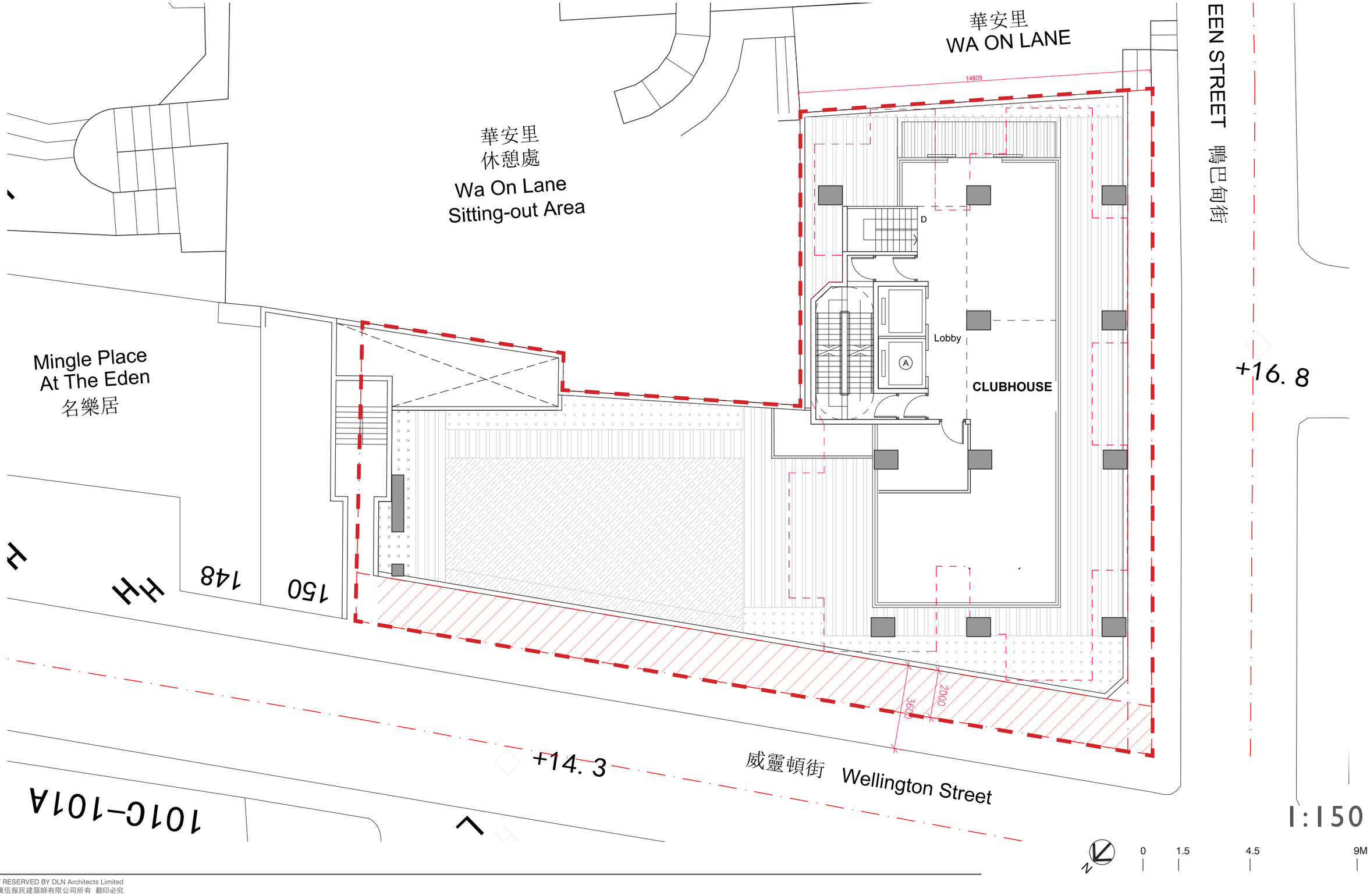
PODIUM PLANS

3F (CLUBHOUSE)



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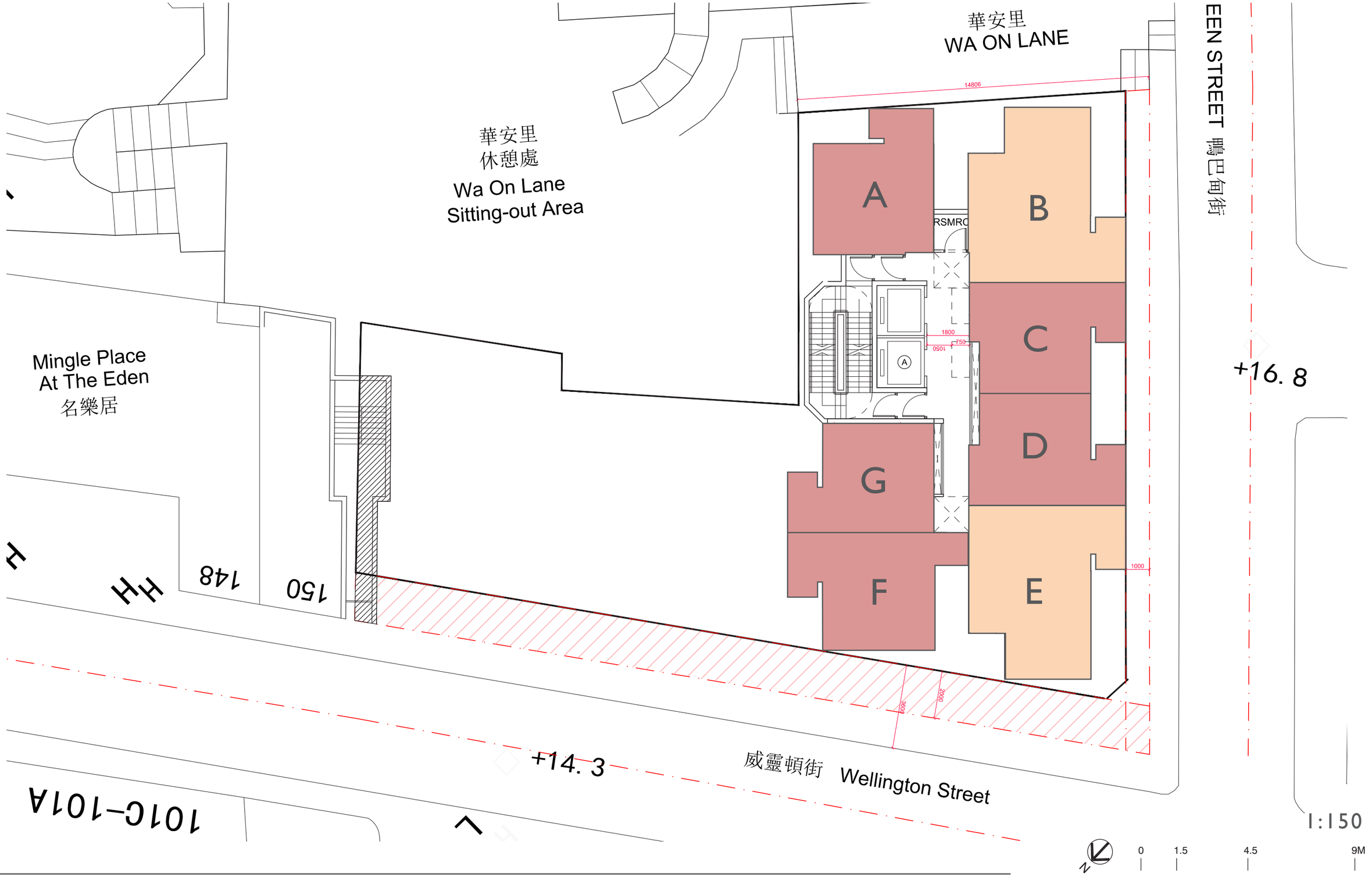
TOWER SIMPLIFIED PLAN

1 Bedroom (Open Kitchen)

2 Bedroom (Open Kitchen)



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SECTION

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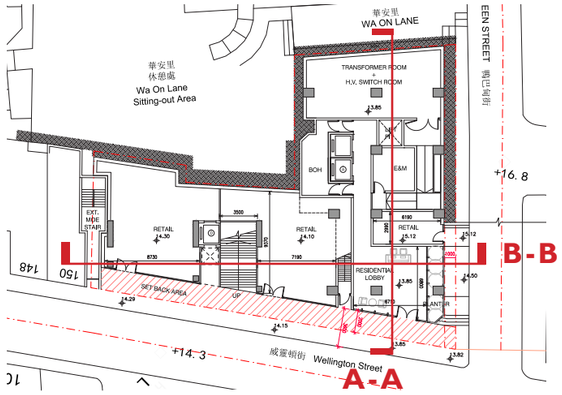
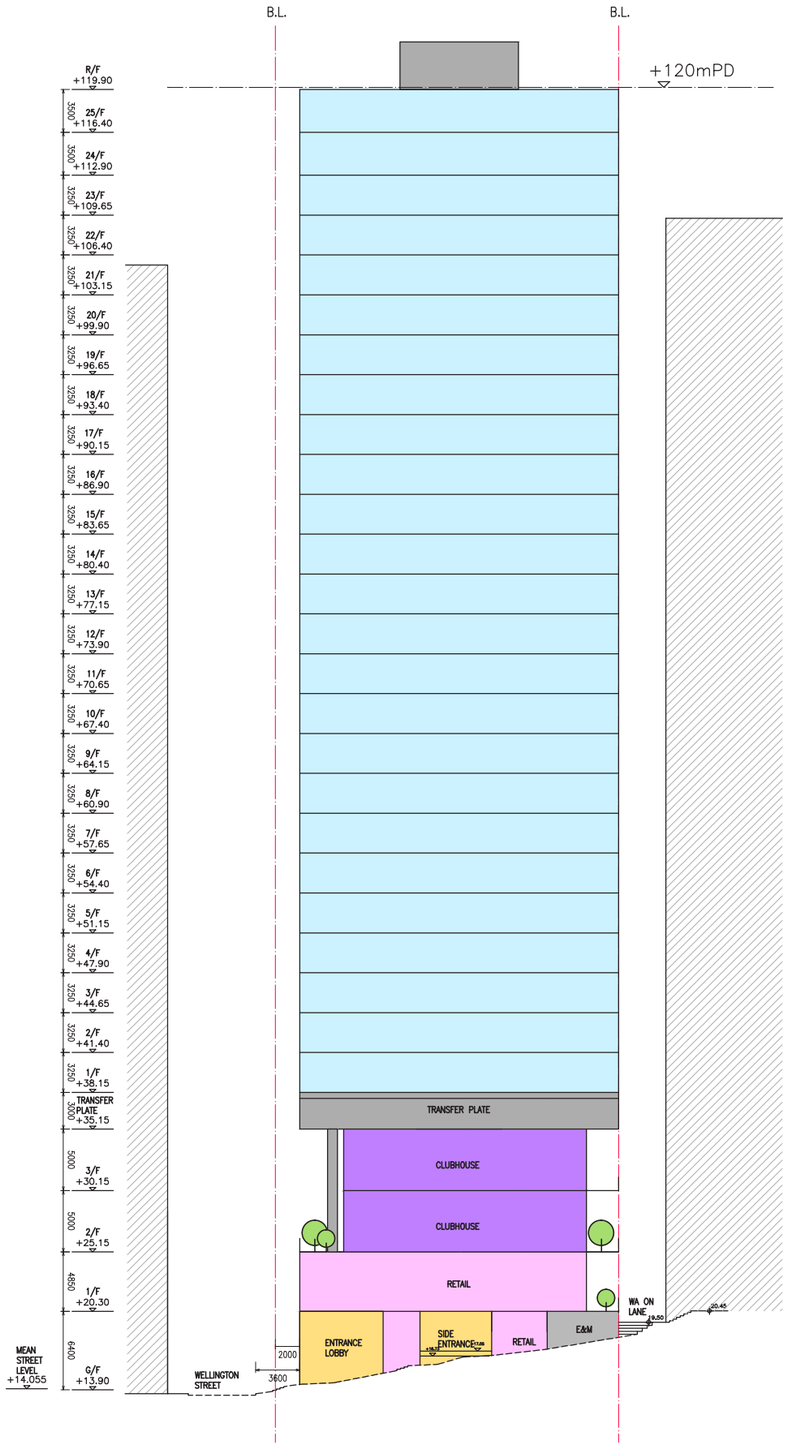
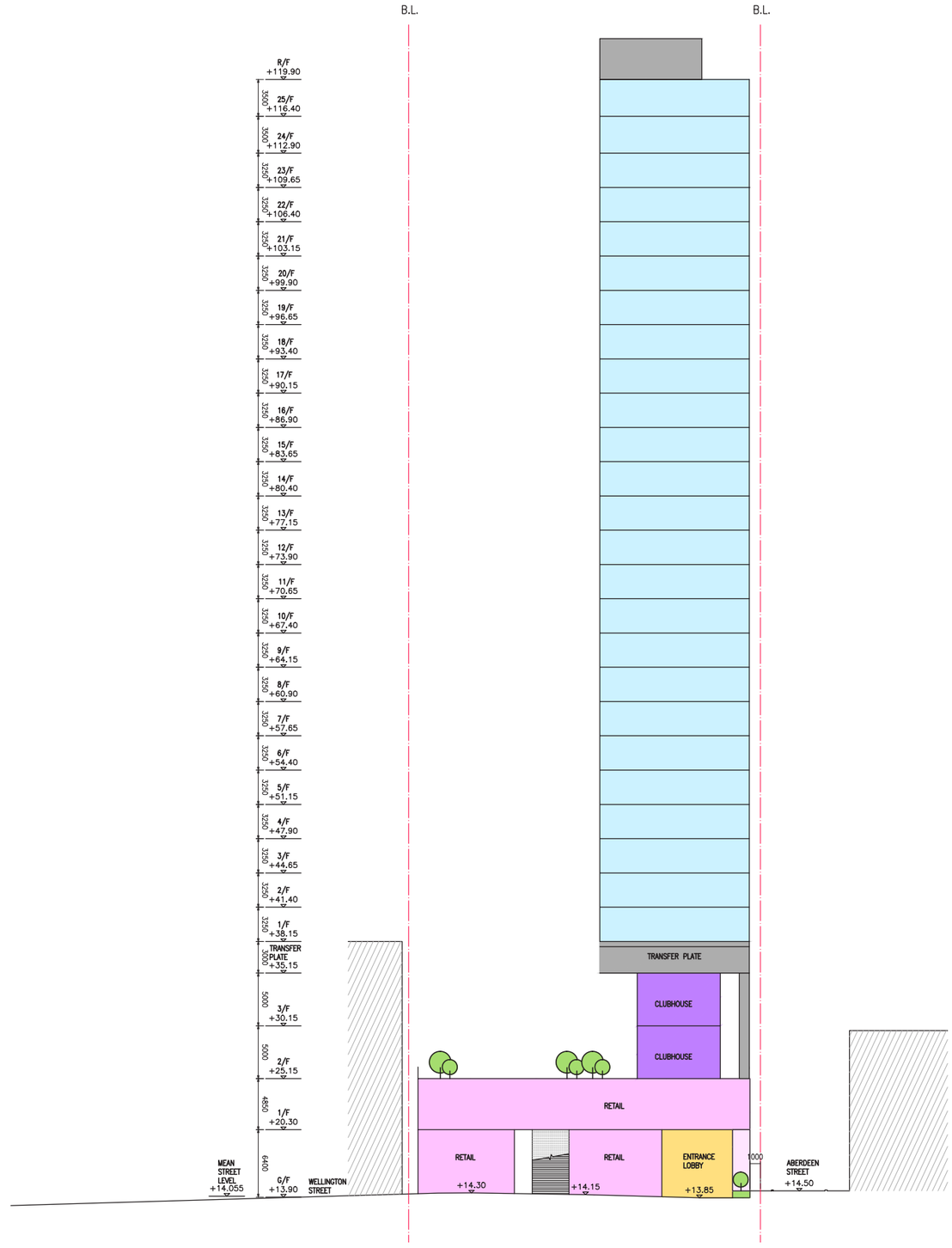




SECTION A-A



SECTION B-B

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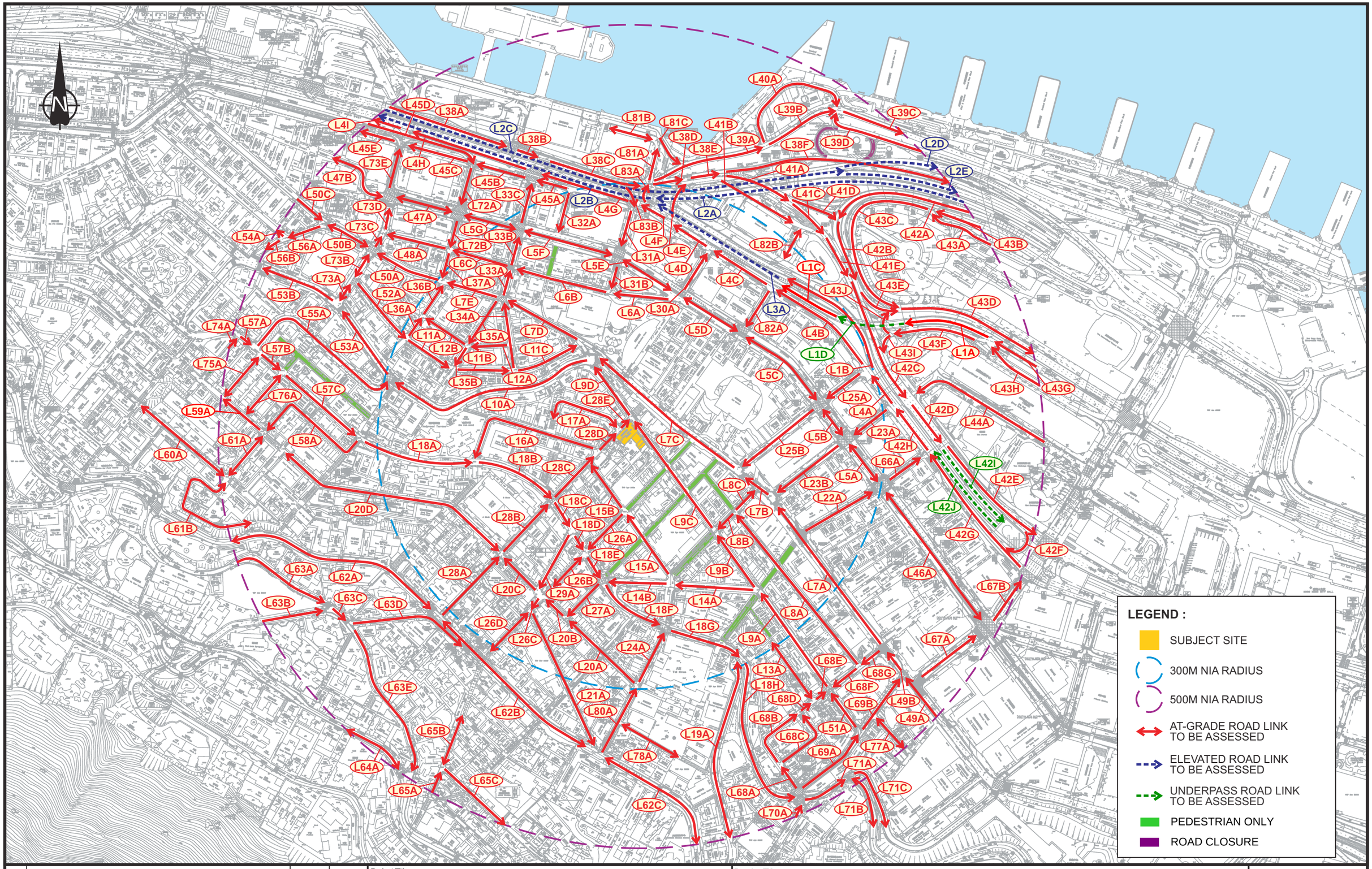
Appendix 2-1 Year 2045 Traffic Forecast



LEGEND :

- SUBJECT SITE
- 300M NIA RADIUS
- 500M NIA RADIUS
- AT-GRADE ROAD LINK TO BE ASSESSED
- ELEVATED ROAD LINK TO BE ASSESSED
- UNDERPASS ROAD LINK TO BE ASSESSED
- PEDESTRIAN ONLY
- ROAD CLOSURE

Rev.	Description	Checked	Date
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

Project Title

S16 PLANNING APPLICATION FOR
PROPOSED RESIDENTIAL / COMMERCIAL DEVELOPMENT
AT 152-164 WELLINGTON STREET, CENTRAL

Drawing Title

INDEX PLAN OF IDENTIFIED ROAD LINK FOR NIA AND AQIA

Designed	Checked	Scale	Date	Drawing No.	Rev.
YAM	KFM	NTS	NOV 2023	6.1	-

SYSTRA MVA

CHK50751911/TIA/F1.CDR/LLH/1NOV23

Original Size : A3

S16 Planning Application for Proposed Residential / Commercial Development at 152-164 Wellington Street - Year 2045 Traffic Forecast for NIA

Index[1]	Road Section	Direction	2045 AM Peak		2045 PM Peak	
			Peak Hour Traffic Flow - Round up to nearest 10 (veh/hr)	HV%[2]	Peak Hour Traffic Flow - Round up to nearest 10 (veh/hr)	HV%[2]
L1A	Man Cheung Street	One-way	730	11%	1040	11%
L1B	Rumsey Street Flyover	One-way	2310	11%	2610	8%
L1C	Man Cheung Street	One-way	730	11%	1040	11%
L1D	Man Cheung Street	One-way	730	11%	1040	11%
L2A	Central-Wanchai Bypass	One-way	1330	9%	1380	6%
L2B	Rumsey Street Flyover	One-way	4070	10%	4670	8%
L2C	Rumsey Street Flyover	One-way	3810	13%	2850	7%
L3A	Rumsey Street Flyover	One-way	2750	11%	3300	8%
L4A	Connaught Road Central	One-way	3690	11%	3920	10%
L4B	Connaught Road Central	One-way	1210	14%	1040	13%
L4C	Connaught Road Central	One-way	1430	13%	1320	13%
L4D	Connaught Road Central	One-way	1680	18%	1650	14%
L4E	Man Kat Street	One-way	220	19%	220	6%
L4F	Connaught Road Central	One-way	1460	18%	1450	16%
L4G	Connaught Road Central	One-way	840	22%	760	20%
L5A	Des Voeux Road Central	Two-way	770	20%	790	14%
L5B	Des Voeux Road Central	Two-way	570	18%	620	18%
L5C	Des Voeux Road Central	Two-way	650	16%	690	18%
L5D	Des Voeux Road Central	Two-way	590	18%	640	19%
L5E	Des Voeux Road Central	Two-way	720	33%	760	27%
L5F	Des Voeux Road Central	Two-way	360	33%	460	19%
L5G	Des Voeux Road Central	Two-way	590	22%	640	18%
L6A	Wing Lok Street	One-way	50	0%	40	0%
L6B	Wing Lok Street	One-way	420	23%	330	6%
L6C	Wing Lok Street	One-way	310	6%	170	1%
L7A	Queen's Road Central	One-way	540	6%	550	5%
L7B	Queen's Road Central	One-way	550	13%	580	8%
L7C	Queen's Road Central	One-way	780	12%	850	9%
L7D	Bonham Strand	One-way	740	8%	840	3%
L7E	Bonham Strand	One-way	180	10%	150	6%
L8A	Stanley Street	One-way	70	22%	110	3%
L8B	Cochrane Street	One-way	20	19%	20	0%
L8C	Cochrane Street	One-way	60	22%	100	3%
L9A	Wellington Street	One-way	730	10%	1050	4%
L9B	Wellington Street	One-way	200	9%	360	4%
L9C	Wellington Street	One-way	220	9%	370	4%
L9D	Wellington Street	One-way	540	10%	790	4%
L10A	Queen's Road Central	One-way	570	16%	800	8%
L11A	Jervois Street	One-way	120	3%	90	4%
L11B	Jervois Street	One-way	180	3%	150	3%
L11C	Jervois Street	One-way	70	5%	60	4%
L12A	Burd Street	One-way	20	0%	30	0%
L12B	Burd Street	One-way	20	0%	30	0%
L13A	Wo On Lane	Two-way	20	29%	40	13%
L14A	Lyndhurst Terrace	One-way	430	10%	620	4%
L14B	Lyndhurst Terrace	One-way	340	12%	500	4%
L15A	Gage Street	One-way	220	8%	280	5%
L15B	Gage Street	One-way	130	9%	160	6%
L16A	Gough Street and Shing Wong Street	One-way	40	27%	80	6%
L17A	Kau U Fong	Two-way	40	26%	40	5%
L18A	Hollywood Road	One-way	420	12%	410	6%
L18B	Hollywood Road	One-way	450	13%	480	5%
L18C	Hollywood Road	One-way	450	10%	550	5%
L18D	Hollywood Road	One-way	450	10%	550	5%
L18E	Hollywood Road	One-way	460	10%	560	5%
L18F	Hollywood Road	One-way	630	11%	790	5%
L18G	Hollywood Road	One-way	740	11%	930	6%

L18H	Wyndham Street	One-way	720	11%	850	5%
L19A	Arbuthnot Road	Two-way	150	5%	210	5%
L20A	Staunton Street	One-way	90	18%	100	5%
L20B	Staunton Street	One-way	260	11%	330	3%
L20C	Staunton Street	One-way	170	13%	200	5%
L20D	Staunton Street and Bridges Street	Two-way	130	16%	140	1%
L21A	Elgin Street	One-way	100	8%	140	2%
L22A	Pottinger Street	One-way	310	13%	310	5%
L23A	Queen Victoria Street	One-way	340	20%	300	5%
L23B	Queen Victoria Street	One-way	180	8%	170	5%
L24A	Old Bailey Street	One-way	120	14%	150	11%
L25A	Jubilee Street	One-way	360	10%	440	11%
L25B	Jubilee Street	One-way	280	12%	370	9%
L26A	Peel Street	One-way	20	18%	20	0%
L26B	Peel Street	Two-way	20	0%	20	13%
L26C	Peel Street	One-way	100	8%	140	2%
L26D	Peel Street	Two-way	30	0%	20	27%
L27A	Graham Street	One-way	170	8%	270	3%
L28A	Aberdeen Street	One-way	130	4%	160	1%
L28B	Aberdeen Street	One-way	290	7%	370	2%
L28C	Aberdeen Street	One-way	360	13%	530	4%
L28D	Aberdeen Street	One-way	330	12%	460	4%
L28E	Aberdeen Street	One-way	340	12%	470	3%
L29A	Elgin Street	One-way	10	0%	10	33%
L30A	Wing Wo Street	One-way	120	5%	200	5%
L31A	Rumsey Street	One-way	630	23%	450	27%
L31B	Rumsey Street	One-way	260	8%	140	1%
L32A	Man Wa Lane	One-way	30	0%	80	3%
L33A	Hillier Street	One-way	170	7%	160	5%
L33B	Hillier Street	One-way	170	7%	160	5%
L33C	Hillier Street	One-way	850	10%	1000	8%
L34A	Mercer Street	One-way	120	5%	110	3%
L35A	Hillier Street	One-way	70	8%	70	0%
L35B	Hillier Street	One-way	140	6%	120	0%
L36A	Cleverly Street	One-way	40	22%	50	0%
L36B	Cleverly Street	One-way	50	15%	80	3%
L37A	Cleverly Street	One-way	280	7%	250	2%
L50A	Bonham Strand	One-way	490	8%	460	3%
L52A	Jervois Street	One-way	120	12%	140	9%
L53A	Queen's Road Central	One-way	760	15%	970	8%
L55A	Lok Ku Road	One-way	170	18%	180	4%
L80A	Old Bailey Street	One-way	200	15%	240	8%
L82A	Gilman Street	One-way	70	6%	70	8%
L82B	Gilman Street	Two-way	30	0%	30	0%
L83A	Connaught Road Central	One-way	460	14%	490	9%
L83B	Connaught Road Central	One-way	430	30%	240	35%

Notes:

1. Please refer to Figure 6.1 for index plan of assessed road sections.
2. Vehicles with an unladen weight of 1,525 kg or more are categorized as heavy vehicles (HV), which includes light/medium/heavy goods vehicles (LGV/MGV/HGV), container trucks, public light bus (PLB), non-franchised buses (NB), and franchised buses (FB)
3. Motorized Vehicle is prohibited from 0700 to 1900 in Elgin Street (L29A)

Appendix 2-2 Results of Road Traffic Noise Impact Assessment (Base Case Scenario)

Predicted Road Traffic Noise (L10, dB(A)) at Selected Sensitive Receivers
Base Case-AM Peak Flow

Tower 1

Floor	*mPD	N1-01	N1-02	N1-03	N1-04	N1-05	N1-06	N1-07	N1-08	N1-09	N1-10	N1-11	N1-12	N1-13	N1-14	N1-15	N1-16
1/F	39.4	61	62	69	69	69	69	69	69	69	69	69	69	65	63	61	58
2/F	42.6	61	62	69	68	68	68	68	68	69	69	69	69	65	63	62	59
3/F	45.9	61	61	68	68	68	68	68	68	68	68	68	69	64	63	62	60
4/F	49.1	60	61	68	68	68	68	68	68	68	68	68	68	64	63	62	61
5/F	52.4	60	61	67	67	67	67	67	67	68	68	68	68	64	62	61	61
6/F	55.6	60	60	67	67	67	67	67	67	67	67	68	68	64	62	61	61
7/F	58.9	59	60	67	67	67	67	67	67	67	67	67	68	63	62	61	61
8/F	62.1	59	60	66	66	66	66	67	67	67	67	67	68	63	62	61	60
9/F	65.4	59	60	66	66	66	66	66	66	67	67	67	67	63	61	61	60
10/F	68.6	59	59	66	66	66	66	66	66	66	67	67	67	63	61	61	60
11/F	71.9	58	59	66	66	66	66	66	66	66	66	67	67	62	61	60	60
12/F	75.1	58	59	66	66	66	66	66	66	66	66	66	67	62	61	60	60
13/F	78.4	58	59	65	65	65	65	65	66	66	66	66	67	62	60	60	60
14/F	81.6	58	59	65	65	65	65	65	65	66	66	66	66	62	60	60	60
15/F	84.9	58	58	65	65	65	65	65	65	66	66	66	66	62	60	60	59
16/F	88.1	58	58	65	65	65	65	65	65	65	66	66	66	61	60	60	59
17/F	91.4	58	58	65	65	65	65	65	65	65	66	66	66	61	60	59	59
18/F	94.6	58	58	65	64	64	64	65	65	65	65	66	66	61	60	59	59
19/F	97.9	58	58	64	64	64	64	65	65	65	65	66	66	61	59	59	59
20/F	101.1	57	58	64	64	64	64	64	65	65	65	65	66	61	59	59	59
21/F	104.4	57	58	64	64	64	64	64	65	65	65	65	66	61	59	59	59
22/F	107.6	57	58	64	64	64	64	64	64	65	65	65	65	61	59	59	59
23/F	110.9	58	58	64	64	64	64	64	64	65	65	65	65	61	59	59	58
24/F	114.1	58	58	64	64	64	64	64	64	65	65	65	65	60	59	58	58
25/F	117.6	58	58	64	64	64	64	64	64	65	65	65	65	60	59	58	58
Max Noise Level		61	62	69	69	69	69	69	69	69	69	69	69	65	63	62	61
Exceedance		0		0			0		0		0			0		0	

Total no. of Flats:	175
Total no. of Exceedance:	0
Compliance Level:	100%
Max. Noise Level:	69

Notes:

71 Noise level exceed stardand of 70 dB(A)

Predicted Road Traffic Noise (L10, dB(A)) at Selected Sensitive Receivers
Base Case-PM Peak Flow

Tower 1

Floor	*mPD	N1-01	N1-02	N1-03	N1-04	N1-05	N1-06	N1-07	N1-08	N1-09	N1-10	N1-11	N1-12	N1-13	N1-14	N1-15	N1-16
1/F	39.4	61	62	68	68	68	68	68	68	68	68	69	69	66	64	62	59
2/F	42.6	60	61	68	68	68	68	68	68	68	68	68	69	65	64	62	60
3/F	45.9	60	61	68	68	67	67	67	67	68	68	68	68	65	64	63	61
4/F	49.1	60	61	67	67	67	67	67	67	67	68	68	68	65	63	63	62
5/F	52.4	60	60	67	67	67	67	67	67	67	67	67	68	65	63	62	62
6/F	55.6	59	60	67	67	66	66	66	67	67	67	67	68	64	63	62	62
7/F	58.9	59	60	66	66	66	66	66	66	66	67	67	67	64	63	62	61
8/F	62.1	59	59	66	66	66	66	66	66	66	66	67	67	64	62	62	61
9/F	65.4	59	59	66	66	66	66	66	66	66	66	67	67	64	62	62	61
10/F	68.6	58	59	65	65	65	65	65	66	66	66	66	67	63	62	61	61
11/F	71.9	58	59	65	65	65	65	65	65	66	66	66	67	63	62	61	61
12/F	75.1	58	59	65	65	65	65	65	65	65	66	66	66	63	62	61	61
13/F	78.4	58	58	65	65	65	65	65	65	65	66	66	66	63	61	61	61
14/F	81.6	58	58	65	65	65	65	65	65	65	65	66	66	63	61	61	60
15/F	84.9	58	58	64	64	64	64	65	65	65	65	66	66	62	61	61	60
16/F	88.1	58	58	64	64	64	64	64	65	65	65	65	66	62	61	60	60
17/F	91.4	57	58	64	64	64	64	64	64	65	65	65	66	62	61	60	60
18/F	94.6	57	58	64	64	64	64	64	64	65	65	65	66	62	60	60	60
19/F	97.9	57	58	64	64	64	64	64	64	65	65	65	65	62	60	60	60
20/F	101.1	57	57	64	64	64	64	64	64	64	65	65	65	62	60	60	60
21/F	104.4	57	57	64	64	64	64	64	64	64	65	65	65	61	60	60	59
22/F	107.6	57	57	63	63	64	64	64	64	64	65	65	65	61	60	60	59
23/F	110.9	57	57	63	63	63	63	64	64	64	64	65	65	61	60	59	59
24/F	114.1	57	57	63	63	63	63	64	64	64	64	65	65	61	60	59	59
25/F	117.6	57	57	63	63	63	63	64	64	64	64	65	65	61	60	59	59
Max Noise Level		61	62	68	68	68	68	68	68	68	68	69	69	66	64	63	62
Exceedance		0		0			0		0		0			0		0	

Total no. of Flats:	175
Total no. of Exceedance:	0
Compliance Level:	100%
Max. Noise Level:	69

Notes:

71	Noise level exceed stardand of 70 dB(A)

Appendix 3-1 Detailed Fixed Noise Impact Assessment

Predicted Noise Level for Fixed Noise Impact Assessment - Base Case Scenario
Day/Evening Time

F01 NSR Coordinate: x = 833858.0 y = 816151.2 z = 59.0

Source ID	Description	Industrial Noise Source Coordinate: x	y	z	SPL	Ref dist.	SWL	Slant distance from source to NSR (m)	Distance Corr.	Façade Corr.	Barrier Corr.	Tonality Corr.	Impulsive Corr.	ANL
OB-1	Chiller (Ref - Daikin: EWAD-D-SX 490)	833870.8	816166.0	121.8	--	--	86.0	65.8	-44.4	3.0	-10.0	3.0	0.0	37.6
OB-2	Cooling Tower (Ref - ryowo: FC/LN 200)	833874.7	816169.8	121.8	64.0	3.8	83.6	67.6	-44.6	3.0	-10.0	3.0	0.0	35.0
CRC-1	Chiller (Ref - Daikin: EWAD-CFXR 740)	833881.0	816161.9	131.1	--	--	92.0	76.4	-45.7	3.0	-10.0	3.0	0.0	42.3
CRC-2	Chiller (Ref - Daikin: EWAD-CFXR 740)	833884.0	816158.8	131.1	--	--	92.0	77.0	-45.7	3.0	-10.0	3.0	0.0	42.3
SB-1	Chiller (Ref - Daikin: EWAD-F-XR 500)	833886.6	816144.1	60.0	--	--	89.0	29.5	-37.4	3.0	0.0	3.0	0.0	57.6
SB-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833887.3	816138.6	60.0	--	--	85.0	31.9	-38.1	3.0	0.0	3.0	0.0	52.9
VHB-1	Chiller (Ref - Daikin: EWAD-D-SX 490)	833928.3	816124.3	88.4	--	--	86.0	80.8	-46.1	3.0	0.0	3.0	0.0	45.9
VHB-2	Chiller (Ref - Daikin: EWAD-D-SX 490)	833932.2	816119.2	88.4	--	--	86.0	86.0	-46.7	3.0	0.0	3.0	0.0	45.3
VHB-3	Chiller (Ref - Daikin: EWAD-D-SX 490)	833929.6	816114.1	88.4	--	--	86.0	85.8	-46.7	3.0	0.0	3.0	0.0	45.3
YSA-1	Chiller (Ref - Daikin: EWAD-D-SX 210)	833920.2	816100.0	96.8	--	--	84.0	89.0	-47.0	3.0	0.0	3.0	0.0	43.0
YSA-2	Chiller (Ref - Daikin: EWAD-D-SX 210)	833923.0	816097.1	96.8	--	--	84.0	92.6	-47.3	3.0	0.0	3.0	0.0	42.7
TLP-1	Chiller (Ref - Daikin: EWAD-C-SR C14)	833913.6	816181.9	51.8	--	--	95.0	63.9	-44.1	3.0	0.0	3.0	0.0	56.9
TLP-2	Chiller (Ref - Daikin: EWAQ-F-XR 330)	833918.0	816188.6	51.8	--	--	87.0	71.1	-45.0	3.0	0.0	3.0	0.0	48.0
TLP-3	Chiller (Ref - Daikin: EWAD-C-SR C14)	833920.3	816184.2	51.8	--	--	95.0	70.9	-45.0	3.0	0.0	3.0	0.0	56.0
TLP-4	Chiller (Ref - Daikin: EWAQ-F-XR 330)	833913.2	816176.1	51.8	--	--	87.0	61.0	-43.7	3.0	0.0	3.0	0.0	49.3
BOW-1	Chiller (Ref - Daikin: EWAD-D-SX 410)	833909.9	816077.7	91.4	--	--	85.0	95.6	-47.6	3.0	0.0	3.0	0.0	43.4
BOW-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833912.2	816075.5	91.4	--	--	85.0	98.6	-47.9	3.0	0.0	3.0	0.0	43.1
WHIB-1	Chiller (Ref - Daikin: EWAD-CFXR 870)	833911.1	816220.6	73.0	--	--	92.0	88.5	-46.9	3.0	0.0	3.0	0.0	51.1
WHIB-2	Chiller (Ref - Daikin: EWAD-CFXR 870)	833918.3	816235.3	73.0	--	--	92.0	104.4	-48.4	3.0	0.0	3.0	0.0	49.6
OCBC-1	Chiller (Ref - Daikin: EWAQ-G-XR 080)	833876.3	816229.0	72.2	--	--	80.0	81.0	-46.2	3.0	0.0	3.0	0.0	39.8
OCBC-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833875.0	816224.7	72.2	--	--	85.0	76.6	-45.7	3.0	0.0	3.0	0.0	45.3
OCBC-3	Chiller (Ref - Daikin: EWAD-D-SX 410)	833880.2	816225.5	72.2	--	--	85.0	78.7	-45.9	3.0	0.0	3.0	0.0	45.1
OCBC-4	Chiller (Ref - Daikin: EWAD-D-SX 410)	833880.2	816220.3	72.2	--	--	85.0	73.8	-45.4	3.0	0.0	3.0	0.0	45.6
SLCB-1	Chiller (Ref - Daikin: EWAD-CFXR 600)	833884.3	816242.7	73.1	--	--	92.0	96.2	-47.7	3.0	0.0	3.0	0.0	50.3
AB-1	Chiller (Ref - Daikin: EWAD-D-SX 410)	833947.6	816283.2	72.3	--	--	85.0	160.1	-52.1	3.0	0.0	3.0	0.0	38.9
AB-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833949.1	816285.4	72.3	--	--	85.0	162.7	-52.2	3.0	0.0	3.0	0.0	38.8
HKTC-1	Chiller (Ref - Daikin: EWAD-D-SX 410)	833959.3	816314.2	78.4	--	--	85.0	192.9	-53.7	3.0	0.0	3.0	0.0	37.3
HKTC-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833963.4	816311.4	78.4	--	--	85.0	192.7	-53.7	3.0	0.0	3.0	0.0	37.3
HKTC-3	Chiller (Ref - Daikin: EWAD-D-SX 410)	833967.6	816308.9	78.4	--	--	85.0	193.0	-53.7	3.0	0.0	3.0	0.0	37.3
NCBB-1	Chiller (Ref - Daikin: EWAD-CFXR 600)	833980.6	816305.2	57.4	--	--	92.0	196.8	-53.9	3.0	0.0	3.0	0.0	44.1
NCBB-2	Chiller (Ref - Daikin: EWAD-CFXR 600)	833984.4	816302.9	57.4	--	--	92.0	197.5	-53.9	3.0	0.0	3.0	0.0	44.1
NCBB-3	Chiller (Ref - Daikin: EWAD-CFXR 600)	833988.8	816300.1	57.4	--	--	92.0	198.2	-53.9	3.0	0.0	3.0	0.0	44.1
CTGH-1	Chiller (Ref - Daikin: EWAD-CFXR 600)	833982.3	816343.5	94.0	--	--	92.0	231.6	-55.3	3.0	0.0	3.0	0.0	42.7
CTGH-2	Chiller (Ref - Daikin: EWAD-CFXR 600)	833991.6	816340.8	94.0	--	--	92.0	234.6	-55.4	3.0	0.0	3.0	0.0	42.6
CTGH-3	Chiller (Ref - Daikin: EWAD-CFXR 600)	833986.4	816336.9	94.0	--	--	92.0	228.5	-55.2	3.0	0.0	3.0	0.0	42.8
CTGH-4	Chiller (Ref - Daikin: EWAD-D-SX 410)	833980.3	816333.3	94.0	--	--	85.0	222.1	-54.9	3.0	0.0	3.0	0.0	36.1
TB-1	Chiller (Ref - Daikin: EWAD-CFXR 820)	834003.4	816335.1	84.3	--	--	92.0	235.8	-55.5	3.0	0.0	3.0	0.0	42.5
TB-2	Chiller (Ref - Daikin: EWAD-CFXR 820)	834007.2	816324.2	84.3	--	--	92.0	229.8	-55.2	3.0	0.0	3.0	0.0	42.8
IAB-1	Chiller (Ref - Daikin: EWAD-D-SX 490)	833958.7	816104.1	66.6	--	--	86.0	111.4	-48.9	3.0	0.0	3.0	0.0	43.1
IAB-2	Chiller (Ref - Daikin: EWAD-D-SX 490)	833964.8	816100.4	66.6	--	--	86.0	118.5	-49.5	3.0	0.0	3.0	0.0	42.5
100QRC-1	Chiller (Ref - Daikin: EWAD-CFXR C15)	834011.1	816060.8	129.5	--	--	95.0	191.3	-53.6	3.0	-10.0	3.0	0.0	37.4
100QRC-2	Chiller (Ref - Daikin: EWAD-CFXR C15)	834008.1	816058.1	129.5	--	--	95.0	190.2	-53.6	3.0	-10.0	3.0	0.0	37.4
100QRC-3	Chiller (Ref - Daikin: EWAD-CFXR 600)	834001.8	816055.5	129.5	--	--	92.0	186.6	-53.4	3.0	-10.0	3.0	0.0	34.6
RC-1	Chiller (Ref - Daikin: EWAD-CFXR C15)	834028.6	816025.5	91.7	--	--	95.0	214.4	-54.6	3.0	0.0	3.0	0.0	46.4
RC-2	Chiller (Ref - Daikin: EWAD-CFXR C15)	834028.3	816032.4	91.7	--	--	95.0	210.2	-54.5	3.0	0.0	3.0	0.0	46.5
HQ-1	Cooling Tower (Ref - ryowo: FC/LN 200)	834037.9	816016.4	120.2	64.0	3.8	83.6	233.0	-55.3	3.0	-10.0	3.0	0.0	24.3
HQ-2	Cooling Tower (Ref - ryowo: FC/LN 200)	834039.9	816019.3	120.2	64.0	3.8	83.6	232.9	-55.3	3.0	-10.0	3.0	0.0	24.3
HQ-3	Cooling Tower (Ref - ryowo: FC/LN 200)	834042.0	816022.2	120.2	64.0	3.8	83.6	232.9	-55.3	3.0	-10.0	3.0	0.0	24.3
CH-1	Cooling Tower (Ref - ryowo: FC/LN 400)	834076.4	815970.1	75.6	66.0	5.4	88.7	284.2	-57.1	3.0	0.0	3.0	0.0	37.6
CH-2	Cooling Tower (Ref - ryowo: FC/LN 400)	834081.3	815963.7	75.6	66.0	5.4	88.7	292.1	-57.3	3.0	0.0	3.0	0.0	37.3
POH-1	Chiller (Ref - Daikin: EWAD-D-SX 210)	834009.7	816003.1	97.7	--	--	84.0	215.5	-54.7	3.0	0.0	3.0	0.0	35.3
WTT-1	Chiller (Ref - Daikin: EWAD-CFXR 870)	834016.5	815992.1	85.4	--	--	92.0	226.1	-55.1	3.0	0.0	3.0	0.0	42.9
WTT-2	Chiller (Ref - Daikin: EWAD-CFXR 870)	834024.3	815984.9	85.4	--	--	92.0	236.7	-55.5	3.0	0.0	3.0	0.0	42.5
AST-1	Chiller (Ref - Daikin: EWAD-CFXR C10)	834102.6	816020.6	78.0	--	--	94.0	277.9	-56.9	3.0	0.0	3.0	0.0	43.1
AST-2	Chiller (Ref - Daikin: EWAD-CFXR C10)	834104.5	816017.0	78.0	--	--	94.0	281.3	-57.0	3.0	0.0	3.0	0.0	43.0
AST-3	Chiller (Ref - Daikin: EWAD-D-SX 410)	834095.0	816014.2	78.0	--	--	85.0	274.4	-56.8	3.0	0.0	3.0	0.0	34.2
AST-4	Chiller (Ref - Daikin: EWAD-D-SX 410)	834096.8	816010.9	78.0	--	--	85.0	277.6	-56.9	3.0	0.0	3.0	0.0	34.1
BGLAT-1	Chiller (Ref - Daikin: EWAD-CFXR 740)	833959.9	816246.5	16.5	--	--	92.0	145.8	-51.3	3.0	0.0	3.0	0.0	46.7
BGLAT-2	Chiller (Ref - Daikin: EWAD-CFXR 740)	833964.4	816243.1	16.5	--	--	92.0	146.9	-51.3	3.0	0.0	3.0	0.0	46.7
TSBB-1	Chiller (Ref - Daikin: EWAD-D-SX 490)	833986.9	816259.8	56.3	--	--	86.0	168.6	-52.5	3.0	0.0	3.0	0.0	39.5
TSBB-2	Chiller (Ref - Daikin: EWAD-D-SX 490)	833991.5	816257.1	56.3	--	--	86.0	170.4	-52.6	3.0	0.0	3.0	0.0	39.4
PBC-1	Chiller (Ref - Daikin: EWAD-D-SX 410)	833994.6	816244.2	76.6	--	--	85.0	166.2	-52.4	3.0	0.0	3.0	0.0	38.6
PBC-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	834001.4	816248.4	76.6	--	--	85.0	174.1	-52.8	3.0	0.0	3.0	0.0	38.2
JC-1	Chiller (Ref - Daikin: EWAD-CFXR 740)	833950.9	816005.0	99.6	--	--	92.0	177.9	-53.0	3.0	0.0	3.0	0.0	45.0
1LT-1	Chiller (Ref - Daikin: EWAD-CFXR 600)	833980.8	815970.5	102.3	--	--	92.0	222.7	-55.0	3.0	0.0	3.0	0.0	43.0
1LT-2	Chiller (Ref - Daikin: EWAD-CFXR 600)	833979.5	815966.3	102.3	--	--	92.0	225.4	-55.1	3.0	0.0	3.0	0.0	42.9
SS-1	Chiller (Ref - Daikin: EWAQ-G-XR 090)	833918.4	815974.4	107.3	--	--	82.0	193.0	-53.7	3.0	-10.0	3.0	0.0	24.3
SS-2	Chiller (Ref - Daikin: EWAQ-G-XR 090)	833919.8	815972.9	107.3	--	--	82.0	194.8	-53.8	3.0	-10.0	3.0	0.0	24.2
CPCB-1	Chiller (Ref - Daikin: EWAD-D-SX 410)	833977.2	815919.4	116.3	--	--	85.0	266.9	-56.5	3.0	0.0	3.0	0.0	34.5
HC-1	Chiller (Ref - Daikin: EWAD-D-SX 490)	833930.1	815929.6	121.7	--	--	86.0	241.3	-55.7	3.0	-10.0	3.0	0.0	26.3
HC-2	Chiller (Ref - Daikin: EWAD-D-SX 490)	833933.6	815929.3	121.7	--	--	86.0	242.7	-55.7	3.0	-10.0	3.0	0.0	26.3
HC-3	Chiller (Ref - Daikin: EWAD-D-SX 490)	833936.6	815929.1	121.7	--	--	86.0	243.8	-55.7	3.0	-10.0	3.0	0.0	26.3
HC-4	Chiller (Ref - Daikin: EWAD-D-SX 490)	833942.4	815934.1	121.7	--	--	86.0	241.2	-55.6	3.0	-10.0	3.0	0.0	26.4
HC-5	Chiller (Ref - Daikin: EWAD-D-SX 490)	833945.5	815933.8	121.7	--	--	86.0	242.6	-55.7	3.0	-10.0	3.0	0.0	26.3
HC-6	Chiller (Ref - Daikin: EWAD-D-SX 490)	833942.8	815925.3	121.7	--	--	86.0	249.3	-55.9	3.0	-10.0	3.0	0.0	26.1
HC-7	Chiller (Ref - Daikin: EWAD-D-SX 490)	833938.2	815920.5	121.7	--	--	86.0	252.2	-56.0	3.0	-10.0	3.0	0.0	26.0
HC-8	Chiller (Ref - Daikin: EWAD-D-SX 490)	833941.3	815919.5	121.7	--	--	86.0	254.1	-56.1	3.0	-10.0	3.0	0.0	25.9
KC-1	Chiller (Ref - Daikin: EWAD-C-XR C16)	833838.9	815913.7	132.0	--	--	95.0	249.2	-55.9	3.0	-10.0	3.0	0.0	35.1
KC-2	Chiller (Ref - Daikin: EWAD-C-XR C16)	833828.9	815902.1	132.0	--	--	95.0	261.2	-56.3	3.0	-10.0	3.0	0.0	34.7
KC-3	Chiller (Ref - Daikin: EWAD-D-SX 490)	833820.6	815901.4	132.0	--	--	86.0	262.9	-56.4	3.0	-10.0	3.0	0.0	25.6
TW-1	Cooling Tower (Ref - ryowo: FC/LN 200)	833804.8	816218.3	132.1	64.0	3.8	83.6	112.6	-49.0	3.0	-10.0	3.0	0.0	30.6
TW-2	Cooling Tower (Ref - ryowo: FC/LN 200)	833809.5	816213.8	132.1	64.0	3.8	83.6	107.8	-48.7	3.0	-10.0	3.0	0.0	31.0

299Q-1	Chiller (Ref - Daikin: EWAD-CFXR 600)	833564.5	816227.4	80.9	--	--	92.0	304.0	-57.7	3.0	-10.0	3.0	0.0	30.3
299Q-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833559.6	816230.8	80.9	--	--	85.0	309.6	-57.8	3.0	-10.0	3.0	0.0	23.2
299Q-3	Chiller (Ref - Daikin: EWAD-CFXR 600)	833556.5	816237.1	80.9	--	--	92.0	314.3	-57.9	3.0	-10.0	3.0	0.0	30.1
PBT-1	Chiller (Ref - Daikin: EWAD-CFXR 600)	833715.7	816289.5	83.6	--	--	92.0	200.0	-54.0	3.0	-10.0	3.0	0.0	34.0
PBT-2	Chiller (Ref - Daikin: EWAD-CFXR 600)	833716.2	816284.4	83.6	--	--	92.0	196.1	-53.8	3.0	-10.0	3.0	0.0	34.2
PBT-3	Chiller (Ref - Daikin: EWAD-D-SX 410)	833724.7	816288.4	83.6	--	--	85.0	192.9	-53.7	3.0	-10.0	3.0	0.0	27.3
BC-1	Chiller (Ref - Daikin: EWAD-D-SX 490)	833646.5	816307.1	108.3	--	--	86.0	267.3	-56.5	3.0	-10.0	3.0	0.0	25.5
BC-2	Chiller (Ref - Daikin: EWAD-D-SX 490)	833651.7	816304.6	108.3	--	--	86.0	261.8	-56.4	3.0	-10.0	3.0	0.0	25.6
S50-1	Chiller (Ref - Daikin: EWAD-CFXR 740)	833628.2	816325.3	98.0	--	--	92.0	290.9	-57.3	3.0	-10.0	3.0	0.0	30.7
S50-2	Chiller (Ref - Daikin: EWAD-CFXR 740)	833635.2	816325.0	98.0	--	--	92.0	285.2	-57.1	3.0	-10.0	3.0	0.0	30.9
S50-3	Chiller (Ref - Daikin: EWAD-CFXR 740)	833632.9	816321.3	98.0	--	--	92.0	284.8	-57.1	3.0	-10.0	3.0	0.0	30.9
HSBH-1	Cooling Tower (Ref - ryowo: FC/LN 200)	834145.9	816199.3	136.2	64.0	3.8	83.6	301.9	-57.6	3.0	-10.0	3.0	0.0	22.0
HSBH-2	Cooling Tower (Ref - ryowo: FC/LN 200)	834149.0	816195.3	136.2	64.0	3.8	83.6	304.3	-57.7	3.0	-10.0	3.0	0.0	22.0
HSBH-3	Cooling Tower (Ref - ryowo: FC/LN 200)	834138.9	816194.1	136.2	64.0	3.8	83.6	294.5	-57.4	3.0	-10.0	3.0	0.0	22.3
HSBH-4	Cooling Tower (Ref - ryowo: FC/LN 200)	834142.1	816190.0	136.2	64.0	3.8	83.6	296.9	-57.5	3.0	-10.0	3.0	0.0	22.2
HSBH-5	Chiller (Ref - Daikin: EWAD-CFXR 600)	834130.7	816195.9	136.2	--	--	92.0	286.9	-57.2	3.0	-10.0	3.0	0.0	30.8
HSBH-6	Chiller (Ref - Daikin: EWAD-CFXR C15)	834129.8	816191.8	136.2	--	--	95.0	285.5	-57.1	3.0	-10.0	3.0	0.0	33.9
HSBH-7	Chiller (Ref - Daikin: EWAD-CFXR C15)	834137.8	816179.8	136.2	--	--	95.0	291.7	-57.3	3.0	-10.0	3.0	0.0	33.7
NFT-1	Chiller (Ref - Daikin: EWAD-CFXR 740)	833967.2	816341.7	30.0	--	--	92.0	221.5	-54.9	3.0	-10.0	3.0	0.0	33.1
NFT-2	Chiller (Ref - Daikin: EWAD-CFXR 740)	833959.3	816329.1	30.0	--	--	92.0	206.8	-54.3	3.0	-10.0	3.0	0.0	33.7
NFT-3	Chiller (Ref - Daikin: EWAD-CFXR 740)	833940.5	816326.2	30.0	--	--	92.0	195.6	-53.8	3.0	-10.0	3.0	0.0	34.2
NFT-4	Chiller (Ref - Daikin: EWAD-CFXR 740)	833930.9	816334.6	30.0	--	--	92.0	199.5	-54.0	3.0	-10.0	3.0	0.0	34.0
NFT-5	Chiller (Ref - Daikin: EWAD-CFXR 740)	833940.2	816350.2	30.0	--	--	92.0	217.3	-54.7	3.0	-10.0	3.0	0.0	33.3
NFT-6	Chiller (Ref - Daikin: EWAD-CFXR 740)	833945.5	816358.6	30.0	--	--	92.0	227.0	-55.1	3.0	-10.0	3.0	0.0	32.9
IP-1	Chiller (Ref - Daikin: EWAD-CFXR C15)	833865.3	816416.7	34.0	--	--	95.0	266.8	-56.5	3.0	-10.0	3.0	0.0	34.5
IP-2	Chiller (Ref - Daikin: EWAD-CFXR C15)	833868.3	816414.0	34.0	--	--	95.0	264.2	-56.4	3.0	-10.0	3.0	0.0	34.6
IP-3	Chiller (Ref - Daikin: EWAD-CFXR C15)	833858.1	816402.3	34.0	--	--	95.0	252.3	-56.0	3.0	-10.0	3.0	0.0	35.0
IP-4	Chiller (Ref - Daikin: EWAD-CFXR C15)	833867.9	816406.9	34.0	--	--	95.0	257.1	-56.2	3.0	-10.0	3.0	0.0	34.8
IP-5	Chiller (Ref - Daikin: EWAD-CFXR C15)	833873.5	816404.4	34.0	--	--	95.0	254.9	-56.1	3.0	-10.0	3.0	0.0	34.9
IP-6	Chiller (Ref - Daikin: EWAD-C-XR C16)	833869.2	816389.1	123.3	--	--	95.0	246.7	-55.8	3.0	-10.0	3.0	0.0	35.2
IP-7	Chiller (Ref - Daikin: EWAD-C-XR C16)	833887.8	816392.4	123.3	--	--	95.0	251.4	-56.0	3.0	-10.0	3.0	0.0	35.0
IP-8	Cooling Tower (Ref - ryowo: FC/LN 400)	833881.7	816397.4	123.3	66.0	5.4	88.7	255.6	-56.1	3.0	-10.0	3.0	0.0	28.5
IP-9	Cooling Tower (Ref - ryowo: FC/LN 400)	833887.6	816401.9	123.3	66.0	5.4	88.7	260.5	-56.3	3.0	-10.0	3.0	0.0	28.3
GC-1	Chiller (Ref - Daikin: EWAD-C-XR C16)	833851.1	816339.2	111.8	--	--	95.0	195.4	-53.8	3.0	-10.0	3.0	0.0	37.2
GC-2	Chiller (Ref - Daikin: EWAD-C-XR C16)	833855.6	816337.5	111.8	--	--	95.0	193.7	-53.7	3.0	-10.0	3.0	0.0	37.3
GC-3	Chiller (Ref - Daikin: EWAD-CFXR 740)	833859.7	816335.7	111.8	--	--	92.0	191.9	-53.7	3.0	-10.0	3.0	0.0	34.3
HB-1	Chiller (Ref - Daikin: EWAD-CFXR 740)	834015.0	816407.1	97.5	--	--	92.0	302.7	-57.6	3.0	0.0	3.0	0.0	40.4
PTG-1	Cooling Tower (Ref - ryowo: FC/LN 200)	834056.3	815996.1	87.1	64.0	3.8	83.6	253.3	-56.1	3.0	0.0	3.0	0.0	33.6
PTG-2	Cooling Tower (Ref - ryowo: FC/LN 200)	834053.2	815993.6	87.1	64.0	3.8	83.6	252.4	-56.0	3.0	0.0	3.0	0.0	33.6
										Noise standard:		**65**	**Overall**	**65**

Predicted Noise Level for Fixed Noise Impact Assessment - Base Case Scenario

Night Time

F01 NSR Coordinate: x = 833858.0 y = 816151.2 z = 59.0

Source ID	Description	Industrial Noise x	Industrial Noise y		SPL	Ref dist.	SWL	Slant distance from source	Distance Corr.	Façade Corr.	Barrier Corr.	Tonality Corr.	Impulsive Corr.	ANL
YSA-1	Chiller (Ref - Daikin: EWAD-D-SX 210)	833920.2	816100.0	96.8	--	--	84.0	89.0	-47.0	3.0	0.0	3.0	0.0	43.0
YSA-2	Chiller (Ref - Daikin: EWAD-D-SX 210)	833923.0	816097.1	96.8	--	--	84.0	92.6	-47.3	3.0	0.0	3.0	0.0	42.7
BOW-1	Chiller (Ref - Daikin: EWAD-D-SX 410)	833909.9	816077.7	91.4	--	--	85.0	95.6	-47.6	3.0	0.0	3.0	0.0	43.4
BOW-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833912.2	816075.5	91.4	--	--	85.0	98.6	-47.9	3.0	0.0	3.0	0.0	43.1
PTG-1	Cooling Tower (Ref - ryowo: FC/LN 200)	834056.3	815996.1	87.1	64.0	3.8	83.6	253.3	-56.1	3.0	0.0	3.0	0.0	33.6
PTG-2	Cooling Tower (Ref - ryowo: FC/LN 200)	834053.2	815993.6	87.1	64.0	3.8	83.6	252.4	-56.0	3.0	0.0	3.0	0.0	33.6
										Noise standard:		**55**	**Overall**	**49**

Predicted Noise Level for Fixed Noise Impact Assessment - Base Case Scenario
Day/Evening Time

F01 NSR Coordinate: x = 833858.0 y = 816151.2 z = 88.1

Source ID	Description	Industrial Noise Source Coordinate: x	y	z	SPL	Ref dist.	SWL	Slant distance from source to NSR (m)	Distance Corr.	Façade Corr.	Barrier Corr.	Tonality Corr.	Impulsive Corr.	ANL
OB-1	Chiller (Ref - Daikin: EWAD-D-SX 490)	833870.8	816166.0	121.8	--	--	86.0	39.0	-39.8	3.0	-10.0	3.0	0.0	42.2
OB-2	Cooling Tower (Ref - ryowo: FC/LN 200)	833874.7	816169.8	121.8	64.0	3.8	83.6	42.0	-40.5	3.0	-10.0	3.0	0.0	39.2
CRC-1	Chiller (Ref - Daikin: EWAD-CFXR 740)	833881.0	816161.9	131.1	--	--	92.0	49.9	-42.0	3.0	-10.0	3.0	0.0	46.0
CRC-2	Chiller (Ref - Daikin: EWAD-CFXR 740)	833884.0	816158.8	131.1	--	--	92.0	50.8	-42.1	3.0	-10.0	3.0	0.0	45.9
SB-1	Chiller (Ref - Daikin: EWAD-F-XR 500)	833886.6	816144.1	60.0	--	--	89.0	40.7	-40.2	3.0	0.0	3.0	0.0	54.8
SB-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833887.3	816138.6	60.0	--	--	85.0	42.5	-40.6	3.0	0.0	3.0	0.0	50.4
VHB-1	Chiller (Ref - Daikin: EWAD-D-SX 490)	833928.3	816124.3	88.4	--	--	86.0	75.3	-45.5	3.0	0.0	3.0	0.0	46.5
VHB-2	Chiller (Ref - Daikin: EWAD-D-SX 490)	833932.2	816119.2	88.4	--	--	86.0	80.8	-46.1	3.0	0.0	3.0	0.0	45.9
VHB-3	Chiller (Ref - Daikin: EWAD-D-SX 490)	833929.6	816114.1	88.4	--	--	86.0	80.6	-46.1	3.0	0.0	3.0	0.0	45.9
YSA-1	Chiller (Ref - Daikin: EWAD-D-SX 210)	833920.2	816100.0	96.8	--	--	84.0	81.0	-46.2	3.0	0.0	3.0	0.0	43.8
YSA-2	Chiller (Ref - Daikin: EWAD-D-SX 210)	833923.0	816097.1	96.8	--	--	84.0	85.0	-46.6	3.0	0.0	3.0	0.0	43.4
TLP-1	Chiller (Ref - Daikin: EWAD-C-SR C14)	833913.6	816181.9	51.8	--	--	95.0	73.2	-45.3	3.0	0.0	3.0	0.0	55.7
TLP-2	Chiller (Ref - Daikin: EWAQ-F-XR 330)	833918.0	816188.6	51.8	--	--	87.0	79.5	-46.0	3.0	0.0	3.0	0.0	47.0
TLP-3	Chiller (Ref - Daikin: EWAD-C-SR C14)	833920.3	816184.2	51.8	--	--	95.0	79.3	-46.0	3.0	0.0	3.0	0.0	55.0
TLP-4	Chiller (Ref - Daikin: EWAQ-F-XR 330)	833913.2	816176.1	51.8	--	--	87.0	70.6	-45.0	3.0	0.0	3.0	0.0	48.0
BOW-1	Chiller (Ref - Daikin: EWAD-D-SX 410)	833909.9	816077.7	91.4	--	--	85.0	90.0	-47.1	3.0	0.0	3.0	0.0	43.9
BOW-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833912.2	816075.5	91.4	--	--	85.0	93.2	-47.4	3.0	0.0	3.0	0.0	43.6
WHIB-1	Chiller (Ref - Daikin: EWAD-CFXR 870)	833911.1	816220.6	73.0	--	--	92.0	88.7	-47.0	3.0	0.0	3.0	0.0	51.0
WHIB-2	Chiller (Ref - Daikin: EWAD-CFXR 870)	833918.3	816235.3	73.0	--	--	92.0	104.6	-48.4	3.0	0.0	3.0	0.0	49.6
OCBC-1	Chiller (Ref - Daikin: EWAQ-G-XR 080)	833876.3	816229.0	72.2	--	--	80.0	81.5	-46.2	3.0	0.0	3.0	0.0	39.8
OCBC-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833875.0	816224.7	72.2	--	--	85.0	77.1	-45.7	3.0	0.0	3.0	0.0	45.3
OCBC-3	Chiller (Ref - Daikin: EWAD-D-SX 410)	833880.2	816225.5	72.2	--	--	85.0	79.2	-46.0	3.0	0.0	3.0	0.0	45.0
OCBC-4	Chiller (Ref - Daikin: EWAD-D-SX 410)	833880.2	816220.3	72.2	--	--	85.0	74.3	-45.4	3.0	0.0	3.0	0.0	45.6
SLCB-1	Chiller (Ref - Daikin: EWAD-CFXR 600)	833884.3	816242.7	73.1	--	--	92.0	96.4	-47.7	3.0	0.0	3.0	0.0	50.3
AB-1	Chiller (Ref - Daikin: EWAD-D-SX 410)	833947.6	816283.2	72.3	--	--	85.0	160.3	-52.1	3.0	0.0	3.0	0.0	38.9
AB-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833949.1	816285.4	72.3	--	--	85.0	163.0	-52.2	3.0	0.0	3.0	0.0	38.8
HKTC-1	Chiller (Ref - Daikin: EWAD-D-SX 410)	833959.3	816314.2	78.4	--	--	85.0	192.2	-53.7	3.0	0.0	3.0	0.0	37.3
HKTC-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833963.4	816311.4	78.4	--	--	85.0	192.0	-53.7	3.0	0.0	3.0	0.0	37.3
HKTC-3	Chiller (Ref - Daikin: EWAD-D-SX 410)	833967.6	816308.9	78.4	--	--	85.0	192.3	-53.7	3.0	0.0	3.0	0.0	37.3
NCBB-1	Chiller (Ref - Daikin: EWAD-CFXR 600)	833980.6	816305.2	57.4	--	--	92.0	199.2	-54.0	3.0	0.0	3.0	0.0	44.0
NCBB-2	Chiller (Ref - Daikin: EWAD-CFXR 600)	833984.4	816302.9	57.4	--	--	92.0	199.8	-54.0	3.0	0.0	3.0	0.0	44.0
NCBB-3	Chiller (Ref - Daikin: EWAD-CFXR 600)	833988.8	816300.1	57.4	--	--	92.0	200.6	-54.0	3.0	0.0	3.0	0.0	44.0
CTGH-1	Chiller (Ref - Daikin: EWAD-CFXR 600)	833982.3	816343.5	94.0	--	--	92.0	229.1	-55.2	3.0	0.0	3.0	0.0	42.8
CTGH-2	Chiller (Ref - Daikin: EWAD-CFXR 600)	833991.6	816340.8	94.0	--	--	92.0	232.0	-55.3	3.0	0.0	3.0	0.0	42.7
CTGH-3	Chiller (Ref - Daikin: EWAD-CFXR 600)	833986.4	816336.9	94.0	--	--	92.0	225.8	-55.1	3.0	0.0	3.0	0.0	42.9
CTGH-4	Chiller (Ref - Daikin: EWAD-D-SX 410)	833980.3	816333.3	94.0	--	--	85.0	219.4	-54.8	3.0	0.0	3.0	0.0	36.2
TB-1	Chiller (Ref - Daikin: EWAD-CFXR 820)	834003.4	816335.1	84.3	--	--	92.0	234.5	-55.4	3.0	0.0	3.0	0.0	42.6
TB-2	Chiller (Ref - Daikin: EWAD-CFXR 820)	834007.2	816324.2	84.3	--	--	92.0	228.5	-55.2	3.0	0.0	3.0	0.0	42.8
IAB-1	Chiller (Ref - Daikin: EWAD-D-SX 490)	833958.7	816104.1	66.6	--	--	86.0	113.2	-49.1	3.0	0.0	3.0	0.0	42.9
IAB-2	Chiller (Ref - Daikin: EWAD-D-SX 490)	833964.8	816100.4	66.6	--	--	86.0	120.2	-49.6	3.0	0.0	3.0	0.0	42.4
100QRC-1	Chiller (Ref - Daikin: EWAD-CFXR C15)	834011.1	816060.8	129.5	--	--	95.0	182.6	-53.2	3.0	-10.0	3.0	0.0	37.8
100QRC-2	Chiller (Ref - Daikin: EWAD-CFXR C15)	834008.1	816058.1	129.5	--	--	95.0	181.4	-53.2	3.0	-10.0	3.0	0.0	37.8
100QRC-3	Chiller (Ref - Daikin: EWAD-CFXR 600)	834001.8	816055.5	129.5	--	--	92.0	177.6	-53.0	3.0	-10.0	3.0	0.0	35.0
RC-1	Chiller (Ref - Daikin: EWAD-CFXR C15)	834028.6	816025.5	91.7	--	--	95.0	211.9	-54.5	3.0	0.0	3.0	0.0	46.5
RC-2	Chiller (Ref - Daikin: EWAD-CFXR C15)	834028.3	816032.4	91.7	--	--	95.0	207.7	-54.3	3.0	0.0	3.0	0.0	46.7
HQ-1	Cooling Tower (Ref - ryowo: FC/LN 200)	834037.9	816016.4	120.2	64.0	3.8	83.6	227.1	-55.1	3.0	-10.0	3.0	0.0	24.5
HQ-2	Cooling Tower (Ref - ryowo: FC/LN 200)	834039.9	816019.3	120.2	64.0	3.8	83.6	227.0	-55.1	3.0	-10.0	3.0	0.0	24.5
HQ-3	Cooling Tower (Ref - ryowo: FC/LN 200)	834042.0	816022.2	120.2	64.0	3.8	83.6	227.0	-55.1	3.0	-10.0	3.0	0.0	24.5
CH-1	Cooling Tower (Ref - ryowo: FC/LN 400)	834076.4	815970.1	75.6	66.0	5.4	88.7	284.0	-57.1	3.0	0.0	3.0	0.0	37.6
CH-2	Cooling Tower (Ref - ryowo: FC/LN 400)	834081.3	815963.7	75.6	66.0	5.4	88.7	291.8	-57.3	3.0	0.0	3.0	0.0	37.4
POH-1	Chiller (Ref - Daikin: EWAD-D-SX 210)	834009.7	816003.1	97.7	--	--	84.0	212.2	-54.5	3.0	0.0	3.0	0.0	35.5
WTT-1	Chiller (Ref - Daikin: EWAD-CFXR 870)	834016.5	815992.1	85.4	--	--	92.0	224.6	-55.0	3.0	0.0	3.0	0.0	43.0
WTT-2	Chiller (Ref - Daikin: EWAD-CFXR 870)	834024.3	815984.9	85.4	--	--	92.0	235.2	-55.4	3.0	0.0	3.0	0.0	42.6
AST-1	Chiller (Ref - Daikin: EWAD-CFXR C10)	834102.6	816020.6	78.0	--	--	94.0	277.5	-56.9	3.0	0.0	3.0	0.0	43.1
AST-2	Chiller (Ref - Daikin: EWAD-CFXR C10)	834104.5	816017.0	78.0	--	--	94.0	280.8	-57.0	3.0	0.0	3.0	0.0	43.0
AST-3	Chiller (Ref - Daikin: EWAD-D-SX 410)	834095.0	816014.2	78.0	--	--	85.0	273.9	-56.8	3.0	0.0	3.0	0.0	34.2
AST-4	Chiller (Ref - Daikin: EWAD-D-SX 410)	834096.8	816010.9	78.0	--	--	85.0	277.1	-56.9	3.0	0.0	3.0	0.0	34.1
BGLAT-1	Chiller (Ref - Daikin: EWAD-CFXR 740)	833959.9	816246.5	16.5	--	--	92.0	156.8	-51.9	3.0	0.0	3.0	0.0	46.1
BGLAT-2	Chiller (Ref - Daikin: EWAD-CFXR 740)	833964.4	816243.1	16.5	--	--	92.0	157.8	-52.0	3.0	0.0	3.0	0.0	46.0
TSBB-1	Chiller (Ref - Daikin: EWAD-D-SX 490)	833986.9	816259.8	56.3	--	--	86.0	171.5	-52.7	3.0	0.0	3.0	0.0	39.3
TSBB-2	Chiller (Ref - Daikin: EWAD-D-SX 490)	833991.5	816257.1	56.3	--	--	86.0	173.3	-52.8	3.0	0.0	3.0	0.0	39.2
PBC-1	Chiller (Ref - Daikin: EWAD-D-SX 410)	833994.6	816244.2	76.6	--	--	85.0	165.7	-52.4	3.0	0.0	3.0	0.0	38.6
PBC-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	834001.4	816248.4	76.6	--	--	85.0	173.6	-52.8	3.0	0.0	3.0	0.0	38.2
JC-1	Chiller (Ref - Daikin: EWAD-CFXR 740)	833950.9	816005.0	99.6	--	--	92.0	173.6	-52.8	3.0	0.0	3.0	0.0	45.2
1LT-1	Chiller (Ref - Daikin: EWAD-CFXR 600)	833980.8	815970.5	102.3	--	--	92.0	218.9	-54.8	3.0	0.0	3.0	0.0	43.2
1LT-2	Chiller (Ref - Daikin: EWAD-CFXR 600)	833979.5	815966.3	102.3	--	--	92.0	221.7	-54.9	3.0	0.0	3.0	0.0	43.1
SS-1	Chiller (Ref - Daikin: EWAQ-G-XR 090)	833918.4	815974.4	107.3	--	--	82.0	187.8	-53.5	3.0	-10.0	3.0	0.0	24.5
SS-2	Chiller (Ref - Daikin: EWAQ-G-XR 090)	833919.8	815972.9	107.3	--	--	82.0	189.7	-53.6	3.0	-10.0	3.0	0.0	24.4
CPCB-1	Chiller (Ref - Daikin: EWAD-D-SX 410)	833977.2	815919.4	116.3	--	--	85.0	262.2	-56.4	3.0	0.0	3.0	0.0	34.6
HC-1	Chiller (Ref - Daikin: EWAD-D-SX 490)	833930.1	815929.6	121.7	--	--	86.0	235.4	-55.4	3.0	-10.0	3.0	0.0	26.6
HC-2	Chiller (Ref - Daikin: EWAD-D-SX 490)	833933.6	815929.3	121.7	--	--	86.0	236.8	-55.5	3.0	-10.0	3.0	0.0	26.5
HC-3	Chiller (Ref - Daikin: EWAD-D-SX 490)	833936.6	815929.1	121.7	--	--	86.0	238.0	-55.5	3.0	-10.0	3.0	0.0	26.5
HC-4	Chiller (Ref - Daikin: EWAD-D-SX 490)	833942.4	815934.1	121.7	--	--	86.0	235.3	-55.4	3.0	-10.0	3.0	0.0	26.6
HC-5	Chiller (Ref - Daikin: EWAD-D-SX 490)	833945.5	815933.8	121.7	--	--	86.0	236.7	-55.5	3.0	-10.0	3.0	0.0	26.5
HC-6	Chiller (Ref - Daikin: EWAD-D-SX 490)	833942.8	815925.3	121.7	--	--	86.0	243.6	-55.7	3.0	-10.0	3.0	0.0	26.3
HC-7	Chiller (Ref - Daikin: EWAD-D-SX 490)	833938.2	815920.5	121.7	--	--	86.0	246.5	-55.8	3.0	-10.0	3.0	0.0	26.2
HC-8	Chiller (Ref - Daikin: EWAD-D-SX 490)	833941.3	815919.5	121.7	--	--	86.0	248.5	-55.9	3.0	-10.0	3.0	0.0	26.1
KC-1	Chiller (Ref - Daikin: EWAD-C-XR C16)	833838.9	815913.7	132.0	--	--	95.0	242.3	-55.7	3.0	-10.0	3.0	0.0	35.3
KC-2	Chiller (Ref - Daikin: EWAD-C-XR C16)	833828.9	815902.1	132.0	--	--	95.0	254.6	-56.1	3.0	-10.0	3.0	0.0	34.9
KC-3	Chiller (Ref - Daikin: EWAD-D-SX 490)	833820.6	815901.4	132.0	--	--	86.0	256.4	-56.2	3.0	-10.0	3.0	0.0	25.8
TW-1	Cooling Tower (Ref - ryowo: FC/LN 200)	833804.8	816218.3	132.1	64.0	3.8	83.6	96.3	-47.7	3.0	-10.0	3.0	0.0	32.0
TW-2	Cooling Tower (Ref - ryowo: FC/LN 200)	833809.5	816213.8	132.1	64.0	3.8	83.6	90.6	-47.1	3.0	-10.0	3.0	0.0	32.5

299Q-1	Chiller (Ref - Daikin: EWAD-CFXR 600)	833564.5	816227.4	80.9	--	--	92.0	303.3	-57.6	3.0	-10.0	3.0	0.0	30.4
299Q-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833559.6	816230.8	80.9	--	--	85.0	308.9	-57.8	3.0	-10.0	3.0	0.0	23.2
299Q-3	Chiller (Ref - Daikin: EWAD-CFXR 600)	833556.5	816237.1	80.9	--	--	92.0	313.6	-57.9	3.0	-10.0	3.0	0.0	30.1
PBT-1	Chiller (Ref - Daikin: EWAD-CFXR 600)	833715.7	816289.5	83.6	--	--	92.0	198.5	-54.0	3.0	-10.0	3.0	0.0	34.0
PBT-2	Chiller (Ref - Daikin: EWAD-CFXR 600)	833716.2	816284.4	83.6	--	--	92.0	194.6	-53.8	3.0	-10.0	3.0	0.0	34.2
PBT-3	Chiller (Ref - Daikin: EWAD-D-SX 410)	833724.7	816288.4	83.6	--	--	85.0	191.3	-53.6	3.0	-10.0	3.0	0.0	27.4
BC-1	Chiller (Ref - Daikin: EWAD-D-SX 490)	833646.5	816307.1	108.3	--	--	86.0	263.5	-56.4	3.0	-10.0	3.0	0.0	25.6
BC-2	Chiller (Ref - Daikin: EWAD-D-SX 490)	833651.7	816304.6	108.3	--	--	86.0	257.9	-56.2	3.0	-10.0	3.0	0.0	25.8
S50-1	Chiller (Ref - Daikin: EWAD-CFXR 740)	833628.2	816325.3	98.0	--	--	92.0	288.5	-57.2	3.0	-10.0	3.0	0.0	30.8
S50-2	Chiller (Ref - Daikin: EWAD-CFXR 740)	833635.2	816325.0	98.0	--	--	92.0	282.7	-57.0	3.0	-10.0	3.0	0.0	31.0
S50-3	Chiller (Ref - Daikin: EWAD-CFXR 740)	833632.9	816321.3	98.0	--	--	92.0	282.3	-57.0	3.0	-10.0	3.0	0.0	31.0
HSBH-1	Cooling Tower (Ref - ryowo: FC/LN 200)	834145.9	816199.3	136.2	64.0	3.8	83.6	295.8	-57.4	3.0	-10.0	3.0	0.0	22.2
HSBH-2	Cooling Tower (Ref - ryowo: FC/LN 200)	834149.0	816195.3	136.2	64.0	3.8	83.6	298.2	-57.5	3.0	-10.0	3.0	0.0	22.2
HSBH-3	Cooling Tower (Ref - ryowo: FC/LN 200)	834138.9	816194.1	136.2	64.0	3.8	83.6	288.2	-57.2	3.0	-10.0	3.0	0.0	22.5
HSBH-4	Cooling Tower (Ref - ryowo: FC/LN 200)	834142.1	816190.0	136.2	64.0	3.8	83.6	290.7	-57.3	3.0	-10.0	3.0	0.0	22.4
HSBH-5	Chiller (Ref - Daikin: EWAD-CFXR 600)	834130.7	816195.9	136.2	--	--	92.0	280.5	-57.0	3.0	-10.0	3.0	0.0	31.0
HSBH-6	Chiller (Ref - Daikin: EWAD-CFXR C15)	834129.8	816191.8	136.2	--	--	95.0	279.0	-56.9	3.0	-10.0	3.0	0.0	34.1
HSBH-7	Chiller (Ref - Daikin: EWAD-CFXR C15)	834137.8	816179.8	136.2	--	--	95.0	285.3	-57.1	3.0	-10.0	3.0	0.0	33.9
NFT-1	Chiller (Ref - Daikin: EWAD-CFXR 740)	833967.2	816341.7	30.0	--	--	92.0	227.1	-55.1	3.0	-10.0	3.0	0.0	32.9
NFT-2	Chiller (Ref - Daikin: EWAD-CFXR 740)	833959.3	816329.1	30.0	--	--	92.0	212.8	-54.6	3.0	-10.0	3.0	0.0	33.4
NFT-3	Chiller (Ref - Daikin: EWAD-CFXR 740)	833940.5	816326.2	30.0	--	--	92.0	202.0	-54.1	3.0	-10.0	3.0	0.0	33.9
NFT-4	Chiller (Ref - Daikin: EWAD-CFXR 740)	833930.9	816334.6	30.0	--	--	92.0	205.7	-54.3	3.0	-10.0	3.0	0.0	33.7
NFT-5	Chiller (Ref - Daikin: EWAD-CFXR 740)	833940.2	816350.2	30.0	--	--	92.0	223.0	-55.0	3.0	-10.0	3.0	0.0	33.0
NFT-6	Chiller (Ref - Daikin: EWAD-CFXR 740)	833945.5	816358.6	30.0	--	--	92.0	232.5	-55.3	3.0	-10.0	3.0	0.0	32.7
IP-1	Chiller (Ref - Daikin: EWAD-CFXR C15)	833865.3	816416.7	34.0	--	--	95.0	271.1	-56.7	3.0	-10.0	3.0	0.0	34.3
IP-2	Chiller (Ref - Daikin: EWAD-CFXR C15)	833868.3	816414.0	34.0	--	--	95.0	268.5	-56.6	3.0	-10.0	3.0	0.0	34.4
IP-3	Chiller (Ref - Daikin: EWAD-CFXR C15)	833858.1	816402.3	34.0	--	--	95.0	256.9	-56.2	3.0	-10.0	3.0	0.0	34.8
IP-4	Chiller (Ref - Daikin: EWAD-CFXR C15)	833867.9	816406.9	34.0	--	--	95.0	261.5	-56.4	3.0	-10.0	3.0	0.0	34.6
IP-5	Chiller (Ref - Daikin: EWAD-CFXR C15)	833873.5	816404.4	34.0	--	--	95.0	259.4	-56.3	3.0	-10.0	3.0	0.0	34.7
IP-6	Chiller (Ref - Daikin: EWAD-C-XR C16)	833869.2	816389.1	123.3	--	--	95.0	240.8	-55.6	3.0	-10.0	3.0	0.0	35.4
IP-7	Chiller (Ref - Daikin: EWAD-C-XR C16)	833887.8	816392.4	123.3	--	--	95.0	245.6	-55.8	3.0	-10.0	3.0	0.0	35.2
IP-8	Cooling Tower (Ref - ryowo: FC/LN 400)	833881.7	816397.4	123.3	66.0	5.4	88.7	249.8	-56.0	3.0	-10.0	3.0	0.0	28.7
IP-9	Cooling Tower (Ref - ryowo: FC/LN 400)	833887.6	816401.9	123.3	66.0	5.4	88.7	254.9	-56.1	3.0	-10.0	3.0	0.0	28.5
GC-1	Chiller (Ref - Daikin: EWAD-C-XR C16)	833851.1	816339.2	111.8	--	--	95.0	189.6	-53.6	3.0	-10.0	3.0	0.0	37.4
GC-2	Chiller (Ref - Daikin: EWAD-C-XR C16)	833855.6	816337.5	111.8	--	--	95.0	187.8	-53.5	3.0	-10.0	3.0	0.0	37.5
GC-3	Chiller (Ref - Daikin: EWAD-CFXR 740)	833859.7	816335.7	111.8	--	--	92.0	186.0	-53.4	3.0	-10.0	3.0	0.0	34.6
HB-1	Chiller (Ref - Daikin: EWAD-CFXR 740)	834015.0	816407.1	97.5	--	--	92.0	300.4	-57.6	3.0	0.0	3.0	0.0	40.4
PTG-1	Cooling Tower (Ref - ryowo: FC/LN 200)	834056.3	815996.1	87.1	64.0	3.8	83.6	251.8	-56.0	3.0	0.0	3.0	0.0	33.6
PTG-2	Cooling Tower (Ref - ryowo: FC/LN 200)	834053.2	815993.6	87.1	64.0	3.8	83.6	250.9	-56.0	3.0	0.0	3.0	0.0	33.7
										Noise standard:		**65**	**Overall**	**64**

Predicted Noise Level for Fixed Noise Impact Assessment - Base Case Scenario

Night Time

F01 NSR Coordinate: x = 833858.0 y = 816151.2 z = 88.1

Source ID	Description	Industrial Noise x	Industrial Noise y		SPL	Ref dist.	SWL	Slant distance from source	Distance Corr.	Façade Corr.	Barrier Corr.	Tonality Corr.	Impulsive Corr.	ANL
YSA-1	Chiller (Ref - Daikin: EWAD-D-SX 210)	833920.2	816100.0	96.8	--	--	84.0	81.0	-46.2	3.0	0.0	3.0	0.0	43.8
YSA-2	Chiller (Ref - Daikin: EWAD-D-SX 210)	833923.0	816097.1	96.8	--	--	84.0	85.0	-46.6	3.0	0.0	3.0	0.0	43.4
BOW-1	Chiller (Ref - Daikin: EWAD-D-SX 410)	833909.9	816077.7	91.4	--	--	85.0	90.0	-47.1	3.0	0.0	3.0	0.0	43.9
BOW-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833912.2	816075.5	91.4	--	--	85.0	93.2	-47.4	3.0	0.0	3.0	0.0	43.6
PTG-1	Cooling Tower (Ref - ryowo: FC/LN 200)	834056.3	815996.1	87.1	64.0	3.8	83.6	251.8	-56.0	3.0	0.0	3.0	0.0	33.6
PTG-2	Cooling Tower (Ref - ryowo: FC/LN 200)	834053.2	815993.6	87.1	64.0	3.8	83.6	250.9	-56.0	3.0	0.0	3.0	0.0	33.7
										Noise standard:		**55**	**Overall**	**50**

Predicted Noise Level for Fixed Noise Impact Assessment - Base Case Scenario
Day/Evening Time

F01 NSR Coordinate: x = 833858.0 y = 816151.2 z = 117.6

Source ID	Description	Industrial Noise Source Coordinate: x	y	z	SPL	Ref dist.	SWL	Slant distance from source to NSR (m)	Distance Corr.	Façade Corr.	Barrier Corr.	Tonality Corr.	Impulsive Corr.	ANL
OB-1	Chiller (Ref - Daikin: EWAD-D-SX 490)	833870.8	816166.0	121.8	--	--	86.0	20.0	-34.0	3.0	-10.0	3.0	0.0	48.0
OB-2	Cooling Tower (Ref - ryowo: FC/LN 200)	833874.7	816169.8	121.8	64.0	3.8	83.6	25.3	-36.1	3.0	-10.0	3.0	0.0	43.6
CRC-1	Chiller (Ref - Daikin: EWAD-CFXR 740)	833881.0	816161.9	131.1	--	--	92.0	28.7	-37.2	3.0	-10.0	3.0	0.0	50.8
CRC-2	Chiller (Ref - Daikin: EWAD-CFXR 740)	833884.0	816158.8	131.1	--	--	92.0	30.3	-37.6	3.0	-10.0	3.0	0.0	50.4
SB-1	Chiller (Ref - Daikin: EWAD-F-XR 500)	833886.6	816144.1	60.0	--	--	89.0	64.7	-44.2	3.0	0.0	3.0	0.0	50.8
SB-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833887.3	816138.6	60.0	--	--	85.0	65.8	-44.4	3.0	0.0	3.0	0.0	46.6
VHB-1	Chiller (Ref - Daikin: EWAD-D-SX 490)	833928.3	816124.3	88.4	--	--	86.0	80.7	-46.1	3.0	0.0	3.0	0.0	45.9
VHB-2	Chiller (Ref - Daikin: EWAD-D-SX 490)	833932.2	816119.2	88.4	--	--	86.0	85.9	-46.7	3.0	0.0	3.0	0.0	45.3
VHB-3	Chiller (Ref - Daikin: EWAD-D-SX 490)	833929.6	816114.1	88.4	--	--	86.0	85.8	-46.7	3.0	0.0	3.0	0.0	45.3
YSA-1	Chiller (Ref - Daikin: EWAD-D-SX 210)	833920.2	816100.0	96.8	--	--	84.0	83.2	-46.4	3.0	0.0	3.0	0.0	43.6
YSA-2	Chiller (Ref - Daikin: EWAD-D-SX 210)	833923.0	816097.1	96.8	--	--	84.0	87.1	-46.8	3.0	0.0	3.0	0.0	43.2
TLP-1	Chiller (Ref - Daikin: EWAD-C-SR C14)	833913.6	816181.9	51.8	--	--	95.0	91.5	-47.2	3.0	0.0	3.0	0.0	53.8
TLP-2	Chiller (Ref - Daikin: EWAQ-F-XR 330)	833918.0	816188.6	51.8	--	--	87.0	96.6	-47.7	3.0	0.0	3.0	0.0	45.3
TLP-3	Chiller (Ref - Daikin: EWAD-C-SR C14)	833920.3	816184.2	51.8	--	--	95.0	96.4	-47.7	3.0	0.0	3.0	0.0	53.3
TLP-4	Chiller (Ref - Daikin: EWAQ-F-XR 330)	833913.2	816176.1	51.8	--	--	87.0	89.4	-47.0	3.0	0.0	3.0	0.0	46.0
BOW-1	Chiller (Ref - Daikin: EWAD-D-SX 410)	833909.9	816077.7	91.4	--	--	85.0	93.7	-47.4	3.0	0.0	3.0	0.0	43.6
BOW-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833912.2	816075.5	91.4	--	--	85.0	96.7	-47.7	3.0	0.0	3.0	0.0	43.3
WHIB-1	Chiller (Ref - Daikin: EWAD-CFXR 870)	833911.1	816220.6	73.0	--	--	92.0	98.1	-47.8	3.0	0.0	3.0	0.0	50.2
WHIB-2	Chiller (Ref - Daikin: EWAD-CFXR 870)	833918.3	816235.3	73.0	--	--	92.0	112.7	-49.0	3.0	0.0	3.0	0.0	49.0
OCBC-1	Chiller (Ref - Daikin: EWAQ-G-XR 080)	833876.3	816229.0	72.2	--	--	80.0	91.9	-47.3	3.0	0.0	3.0	0.0	38.7
OCBC-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833875.0	816224.7	72.2	--	--	85.0	88.0	-46.9	3.0	0.0	3.0	0.0	44.1
OCBC-3	Chiller (Ref - Daikin: EWAD-D-SX 410)	833880.2	816225.5	72.2	--	--	85.0	89.9	-47.1	3.0	0.0	3.0	0.0	43.9
OCBC-4	Chiller (Ref - Daikin: EWAD-D-SX 410)	833880.2	816220.3	72.2	--	--	85.0	85.6	-46.7	3.0	0.0	3.0	0.0	44.3
SLCB-1	Chiller (Ref - Daikin: EWAD-CFXR 600)	833884.3	816242.7	73.1	--	--	92.0	105.1	-48.4	3.0	0.0	3.0	0.0	49.6
AB-1	Chiller (Ref - Daikin: EWAD-D-SX 410)	833947.6	816283.2	72.3	--	--	85.0	165.8	-52.4	3.0	0.0	3.0	0.0	38.6
AB-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833949.1	816285.4	72.3	--	--	85.0	168.4	-52.5	3.0	0.0	3.0	0.0	38.5
HKTC-1	Chiller (Ref - Daikin: EWAD-D-SX 410)	833959.3	816314.2	78.4	--	--	85.0	195.9	-53.8	3.0	0.0	3.0	0.0	37.2
HKTC-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833963.4	816311.4	78.4	--	--	85.0	195.7	-53.8	3.0	0.0	3.0	0.0	37.2
HKTC-3	Chiller (Ref - Daikin: EWAD-D-SX 410)	833967.6	816308.9	78.4	--	--	85.0	196.0	-53.8	3.0	0.0	3.0	0.0	37.2
NCBB-1	Chiller (Ref - Daikin: EWAD-CFXR 600)	833980.6	816305.2	57.4	--	--	92.0	205.8	-54.3	3.0	0.0	3.0	0.0	43.7
NCBB-2	Chiller (Ref - Daikin: EWAD-CFXR 600)	833984.4	816302.9	57.4	--	--	92.0	206.4	-54.3	3.0	0.0	3.0	0.0	43.7
NCBB-3	Chiller (Ref - Daikin: EWAD-CFXR 600)	833988.8	816300.1	57.4	--	--	92.0	207.1	-54.3	3.0	0.0	3.0	0.0	43.7
CTGH-1	Chiller (Ref - Daikin: EWAD-CFXR 600)	833982.3	816343.5	94.0	--	--	92.0	230.2	-55.2	3.0	0.0	3.0	0.0	42.8
CTGH-2	Chiller (Ref - Daikin: EWAD-CFXR 600)	833991.6	816340.8	94.0	--	--	92.0	233.1	-55.4	3.0	0.0	3.0	0.0	42.6
CTGH-3	Chiller (Ref - Daikin: EWAD-CFXR 600)	833986.4	816336.9	94.0	--	--	92.0	227.0	-55.1	3.0	0.0	3.0	0.0	42.9
CTGH-4	Chiller (Ref - Daikin: EWAD-D-SX 410)	833980.3	816333.3	94.0	--	--	85.0	220.6	-54.9	3.0	0.0	3.0	0.0	36.1
TB-1	Chiller (Ref - Daikin: EWAD-CFXR 820)	834003.4	816335.1	84.3	--	--	92.0	236.8	-55.5	3.0	0.0	3.0	0.0	42.5
TB-2	Chiller (Ref - Daikin: EWAD-CFXR 820)	834007.2	816324.2	84.3	--	--	92.0	230.9	-55.3	3.0	0.0	3.0	0.0	42.7
IAB-1	Chiller (Ref - Daikin: EWAD-D-SX 490)	833958.7	816104.1	66.6	--	--	86.0	122.3	-49.7	3.0	0.0	3.0	0.0	42.3
IAB-2	Chiller (Ref - Daikin: EWAD-D-SX 490)	833964.8	816100.4	66.6	--	--	86.0	128.8	-50.2	3.0	0.0	3.0	0.0	41.8
100QRC-1	Chiller (Ref - Daikin: EWAD-CFXR C15)	834011.1	816060.8	129.5	--	--	95.0	178.2	-53.0	3.0	-10.0	3.0	0.0	38.0
100QRC-2	Chiller (Ref - Daikin: EWAD-CFXR C15)	834008.1	816058.1	129.5	--	--	95.0	177.0	-53.0	3.0	-10.0	3.0	0.0	38.0
100QRC-3	Chiller (Ref - Daikin: EWAD-CFXR 600)	834001.8	816055.5	129.5	--	--	92.0	173.1	-52.8	3.0	-10.0	3.0	0.0	35.2
RC-1	Chiller (Ref - Daikin: EWAD-CFXR C15)	834028.6	816025.5	91.7	--	--	95.0	213.5	-54.6	3.0	0.0	3.0	0.0	46.4
RC-2	Chiller (Ref - Daikin: EWAD-CFXR C15)	834028.3	816032.4	91.7	--	--	95.0	209.3	-54.4	3.0	0.0	3.0	0.0	46.6
HQ-1	Cooling Tower (Ref - ryowo: FC/LN 200)	834037.9	816016.4	120.2	64.0	3.8	83.6	224.8	-55.0	3.0	-10.0	3.0	0.0	24.6
HQ-2	Cooling Tower (Ref - ryowo: FC/LN 200)	834039.9	816019.3	120.2	64.0	3.8	83.6	224.7	-55.0	3.0	-10.0	3.0	0.0	24.6
HQ-3	Cooling Tower (Ref - ryowo: FC/LN 200)	834042.0	816022.2	120.2	64.0	3.8	83.6	224.7	-55.0	3.0	-10.0	3.0	0.0	24.6
CH-1	Cooling Tower (Ref - ryowo: FC/LN 400)	834076.4	815970.1	75.6	66.0	5.4	88.7	286.8	-57.2	3.0	0.0	3.0	0.0	37.5
CH-2	Cooling Tower (Ref - ryowo: FC/LN 400)	834081.3	815963.7	75.6	66.0	5.4	88.7	294.6	-57.4	3.0	0.0	3.0	0.0	37.3
POH-1	Chiller (Ref - Daikin: EWAD-D-SX 210)	834009.7	816003.1	97.7	--	--	84.0	212.9	-54.6	3.0	0.0	3.0	0.0	35.4
WTT-1	Chiller (Ref - Daikin: EWAD-CFXR 870)	834016.5	815992.1	85.4	--	--	92.0	226.9	-55.1	3.0	0.0	3.0	0.0	42.9
WTT-2	Chiller (Ref - Daikin: EWAD-CFXR 870)	834024.3	815984.9	85.4	--	--	92.0	237.4	-55.5	3.0	0.0	3.0	0.0	42.5
AST-1	Chiller (Ref - Daikin: EWAD-CFXR C10)	834102.6	816020.6	78.0	--	--	94.0	280.1	-56.9	3.0	0.0	3.0	0.0	43.1
AST-2	Chiller (Ref - Daikin: EWAD-CFXR C10)	834104.5	816017.0	78.0	--	--	94.0	283.4	-57.0	3.0	0.0	3.0	0.0	43.0
AST-3	Chiller (Ref - Daikin: EWAD-D-SX 410)	834095.0	816014.2	78.0	--	--	85.0	276.6	-56.8	3.0	0.0	3.0	0.0	34.2
AST-4	Chiller (Ref - Daikin: EWAD-D-SX 410)	834096.8	816010.9	78.0	--	--	85.0	279.8	-56.9	3.0	0.0	3.0	0.0	34.1
BGLAT-1	Chiller (Ref - Daikin: EWAD-CFXR 740)	833959.9	816246.5	16.5	--	--	92.0	172.3	-52.7	3.0	0.0	3.0	0.0	45.3
BGLAT-2	Chiller (Ref - Daikin: EWAD-CFXR 740)	833964.4	816243.1	16.5	--	--	92.0	173.2	-52.8	3.0	0.0	3.0	0.0	45.2
TSBB-1	Chiller (Ref - Daikin: EWAD-D-SX 490)	833986.9	816259.8	56.3	--	--	86.0	179.4	-53.1	3.0	0.0	3.0	0.0	38.9
TSBB-2	Chiller (Ref - Daikin: EWAD-D-SX 490)	833991.5	816257.1	56.3	--	--	86.0	181.1	-53.2	3.0	0.0	3.0	0.0	38.8
PBC-1	Chiller (Ref - Daikin: EWAD-D-SX 410)	833994.6	816244.2	76.6	--	--	85.0	170.3	-52.6	3.0	0.0	3.0	0.0	38.4
PBC-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	834001.4	816248.4	76.6	--	--	85.0	178.0	-53.0	3.0	0.0	3.0	0.0	38.0
JC-1	Chiller (Ref - Daikin: EWAD-CFXR 740)	833950.9	816005.0	99.6	--	--	92.0	174.2	-52.8	3.0	0.0	3.0	0.0	45.2
1LT-1	Chiller (Ref - Daikin: EWAD-CFXR 600)	833980.8	815970.5	102.3	--	--	92.0	219.0	-54.8	3.0	0.0	3.0	0.0	43.2
1LT-2	Chiller (Ref - Daikin: EWAD-CFXR 600)	833979.5	815966.3	102.3	--	--	92.0	221.8	-54.9	3.0	0.0	3.0	0.0	43.1
SS-1	Chiller (Ref - Daikin: EWAQ-G-XR 090)	833918.4	815974.4	107.3	--	--	82.0	187.1	-53.4	3.0	-10.0	3.0	0.0	24.6
SS-2	Chiller (Ref - Daikin: EWAQ-G-XR 090)	833919.8	815972.9	107.3	--	--	82.0	189.0	-53.5	3.0	-10.0	3.0	0.0	24.5
CPCB-1	Chiller (Ref - Daikin: EWAD-D-SX 410)	833977.2	815919.4	116.3	--	--	85.0	260.7	-56.3	3.0	0.0	3.0	0.0	34.7
HC-1	Chiller (Ref - Daikin: EWAD-D-SX 490)	833930.1	815929.6	121.7	--	--	86.0	233.1	-55.3	3.0	-10.0	3.0	0.0	26.7
HC-2	Chiller (Ref - Daikin: EWAD-D-SX 490)	833933.6	815929.3	121.7	--	--	86.0	234.5	-55.4	3.0	-10.0	3.0	0.0	26.6
HC-3	Chiller (Ref - Daikin: EWAD-D-SX 490)	833936.6	815929.1	121.7	--	--	86.0	235.6	-55.4	3.0	-10.0	3.0	0.0	26.6
HC-4	Chiller (Ref - Daikin: EWAD-D-SX 490)	833942.4	815934.1	121.7	--	--	86.0	233.0	-55.3	3.0	-10.0	3.0	0.0	26.7
HC-5	Chiller (Ref - Daikin: EWAD-D-SX 490)	833945.5	815933.8	121.7	--	--	86.0	234.4	-55.4	3.0	-10.0	3.0	0.0	26.6
HC-6	Chiller (Ref - Daikin: EWAD-D-SX 490)	833942.8	815925.3	121.7	--	--	86.0	241.3	-55.7	3.0	-10.0	3.0	0.0	26.3
HC-7	Chiller (Ref - Daikin: EWAD-D-SX 490)	833938.2	815920.5	121.7	--	--	86.0	244.3	-55.8	3.0	-10.0	3.0	0.0	26.2
HC-8	Chiller (Ref - Daikin: EWAD-D-SX 490)	833941.3	815919.5	121.7	--	--	86.0	246.3	-55.8	3.0	-10.0	3.0	0.0	26.2
KC-1	Chiller (Ref - Daikin: EWAD-C-XR C16)	833838.9	815913.7	132.0	--	--	95.0	238.7	-55.6	3.0	-10.0	3.0	0.0	35.4
KC-2	Chiller (Ref - Daikin: EWAD-C-XR C16)	833828.9	815902.1	132.0	--	--	95.0	251.2	-56.0	3.0	-10.0	3.0	0.0	35.0
KC-3	Chiller (Ref - Daikin: EWAD-D-SX 490)	833820.6	815901.4	132.0	--	--	86.0	253.0	-56.1	3.0	-10.0	3.0	0.0	25.9
TW-1	Cooling Tower (Ref - ryowo: FC/LN 200)	833804.8	816218.3	132.1	64.0	3.8	83.6	86.8	-46.8	3.0	-10.0	3.0	0.0	32.9
TW-2	Cooling Tower (Ref - ryowo: FC/LN 200)	833809.5	816213.8	132.1	64.0	3.8	83.6	80.5	-46.1	3.0	-10.0	3.0	0.0	33.5

299Q-1	Chiller (Ref - Daikin: EWAD-CFXR 600)	833564.5	816227.4	80.9	--	--	92.0	305.4	-57.7	3.0	-10.0	3.0	0.0	30.3
299Q-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833559.6	816230.8	80.9	--	--	85.0	311.0	-57.9	3.0	-10.0	3.0	0.0	23.1
299Q-3	Chiller (Ref - Daikin: EWAD-CFXR 600)	833556.5	816237.1	80.9	--	--	92.0	315.6	-58.0	3.0	-10.0	3.0	0.0	30.0
PBT-1	Chiller (Ref - Daikin: EWAD-CFXR 600)	833715.7	816289.5	83.6	--	--	92.0	201.3	-54.1	3.0	-10.0	3.0	0.0	33.9
PBT-2	Chiller (Ref - Daikin: EWAD-CFXR 600)	833716.2	816284.4	83.6	--	--	92.0	197.5	-53.9	3.0	-10.0	3.0	0.0	34.1
PBT-3	Chiller (Ref - Daikin: EWAD-D-SX 410)	833724.7	816288.4	83.6	--	--	85.0	194.3	-53.8	3.0	-10.0	3.0	0.0	27.2
BC-1	Chiller (Ref - Daikin: EWAD-D-SX 490)	833646.5	816307.1	108.3	--	--	86.0	262.9	-56.4	3.0	-10.0	3.0	0.0	25.6
BC-2	Chiller (Ref - Daikin: EWAD-D-SX 490)	833651.7	816304.6	108.3	--	--	86.0	257.3	-56.2	3.0	-10.0	3.0	0.0	25.8
S50-1	Chiller (Ref - Daikin: EWAD-CFXR 740)	833628.2	816325.3	98.0	--	--	92.0	289.0	-57.2	3.0	-10.0	3.0	0.0	30.8
S50-2	Chiller (Ref - Daikin: EWAD-CFXR 740)	833635.2	816325.0	98.0	--	--	92.0	283.2	-57.0	3.0	-10.0	3.0	0.0	31.0
S50-3	Chiller (Ref - Daikin: EWAD-CFXR 740)	833632.9	816321.3	98.0	--	--	92.0	282.8	-57.0	3.0	-10.0	3.0	0.0	31.0
HSBH-1	Cooling Tower (Ref - ryowo: FC/LN 200)	834145.9	816199.3	136.2	64.0	3.8	83.6	292.5	-57.3	3.0	-10.0	3.0	0.0	22.3
HSBH-2	Cooling Tower (Ref - ryowo: FC/LN 200)	834149.0	816195.3	136.2	64.0	3.8	83.6	294.9	-57.4	3.0	-10.0	3.0	0.0	22.3
HSBH-3	Cooling Tower (Ref - ryowo: FC/LN 200)	834138.9	816194.1	136.2	64.0	3.8	83.6	284.8	-57.1	3.0	-10.0	3.0	0.0	22.6
HSBH-4	Cooling Tower (Ref - ryowo: FC/LN 200)	834142.1	816190.0	136.2	64.0	3.8	83.6	287.3	-57.2	3.0	-10.0	3.0	0.0	22.5
HSBH-5	Chiller (Ref - Daikin: EWAD-CFXR 600)	834130.7	816195.9	136.2	--	--	92.0	277.0	-56.8	3.0	-10.0	3.0	0.0	31.2
HSBH-6	Chiller (Ref - Daikin: EWAD-CFXR C15)	834129.8	816191.8	136.2	--	--	95.0	275.4	-56.8	3.0	-10.0	3.0	0.0	34.2
HSBH-7	Chiller (Ref - Daikin: EWAD-CFXR C15)	834137.8	816179.8	136.2	--	--	95.0	281.9	-57.0	3.0	-10.0	3.0	0.0	34.0
NFT-1	Chiller (Ref - Daikin: EWAD-CFXR 740)	833967.2	816341.7	30.0	--	--	92.0	236.4	-55.5	3.0	-10.0	3.0	0.0	32.5
NFT-2	Chiller (Ref - Daikin: EWAD-CFXR 740)	833959.3	816329.1	30.0	--	--	92.0	222.7	-55.0	3.0	-10.0	3.0	0.0	33.0
NFT-3	Chiller (Ref - Daikin: EWAD-CFXR 740)	833940.5	816326.2	30.0	--	--	92.0	212.4	-54.5	3.0	-10.0	3.0	0.0	33.5
NFT-4	Chiller (Ref - Daikin: EWAD-CFXR 740)	833930.9	816334.6	30.0	--	--	92.0	215.9	-54.7	3.0	-10.0	3.0	0.0	33.3
NFT-5	Chiller (Ref - Daikin: EWAD-CFXR 740)	833940.2	816350.2	30.0	--	--	92.0	232.4	-55.3	3.0	-10.0	3.0	0.0	32.7
NFT-6	Chiller (Ref - Daikin: EWAD-CFXR 740)	833945.5	816358.6	30.0	--	--	92.0	241.5	-55.7	3.0	-10.0	3.0	0.0	32.3
IP-1	Chiller (Ref - Daikin: EWAD-CFXR C15)	833865.3	816416.7	34.0	--	--	95.0	278.4	-56.9	3.0	-10.0	3.0	0.0	34.1
IP-2	Chiller (Ref - Daikin: EWAD-CFXR C15)	833868.3	816414.0	34.0	--	--	95.0	276.0	-56.8	3.0	-10.0	3.0	0.0	34.2
IP-3	Chiller (Ref - Daikin: EWAD-CFXR C15)	833858.1	816402.3	34.0	--	--	95.0	264.7	-56.5	3.0	-10.0	3.0	0.0	34.5
IP-4	Chiller (Ref - Daikin: EWAD-CFXR C15)	833867.9	816406.9	34.0	--	--	95.0	269.2	-56.6	3.0	-10.0	3.0	0.0	34.4
IP-5	Chiller (Ref - Daikin: EWAD-CFXR C15)	833873.5	816404.4	34.0	--	--	95.0	267.1	-56.5	3.0	-10.0	3.0	0.0	34.5
IP-6	Chiller (Ref - Daikin: EWAD-C-XR C16)	833869.2	816389.1	123.3	--	--	95.0	238.2	-55.5	3.0	-10.0	3.0	0.0	35.5
IP-7	Chiller (Ref - Daikin: EWAD-C-XR C16)	833887.8	816392.4	123.3	--	--	95.0	243.1	-55.7	3.0	-10.0	3.0	0.0	35.3
IP-8	Cooling Tower (Ref - ryowo: FC/LN 400)	833881.7	816397.4	123.3	66.0	5.4	88.7	247.4	-55.9	3.0	-10.0	3.0	0.0	28.8
IP-9	Cooling Tower (Ref - ryowo: FC/LN 400)	833887.6	816401.9	123.3	66.0	5.4	88.7	252.5	-56.0	3.0	-10.0	3.0	0.0	28.6
GC-1	Chiller (Ref - Daikin: EWAD-C-XR C16)	833851.1	816339.2	111.8	--	--	95.0	188.2	-53.5	3.0	-10.0	3.0	0.0	37.5
GC-2	Chiller (Ref - Daikin: EWAD-C-XR C16)	833855.6	816337.5	111.8	--	--	95.0	186.4	-53.4	3.0	-10.0	3.0	0.0	37.6
GC-3	Chiller (Ref - Daikin: EWAD-CFXR 740)	833859.7	816335.7	111.8	--	--	92.0	184.6	-53.3	3.0	-10.0	3.0	0.0	34.7
HB-1	Chiller (Ref - Daikin: EWAD-CFXR 740)	834015.0	816407.1	97.5	--	--	92.0	300.9	-57.6	3.0	0.0	3.0	0.0	40.4
PTG-1	Cooling Tower (Ref - ryowo: FC/LN 200)	834056.3	815996.1	87.1	64.0	3.8	83.6	253.6	-56.1	3.0	0.0	3.0	0.0	33.6
PTG-2	Cooling Tower (Ref - ryowo: FC/LN 200)	834053.2	815993.6	87.1	64.0	3.8	83.6	252.7	-56.1	3.0	0.0	3.0	0.0	33.6
										Noise standard:		**65**	**Overall**	**64**

Predicted Noise Level for Fixed Noise Impact Assessment - Base Case Scenario

Night Time

F01 NSR Coordinate: x = 833858.0 y = 816151.2 z = 117.6

Source ID	Description	Industrial Noise x	Industrial Noise y		SPL	Ref dist.	SWL	Slant distance from source	Distance Corr.	Façade Corr.	Barrier Corr.	Tonality Corr.	Impulsive Corr.	ANL
YSA-1	Chiller (Ref - Daikin: EWAD-D-SX 210)	833920.2	816100.0	96.8	--	--	84.0	83.2	-46.4	3.0	0.0	3.0	0.0	43.6
YSA-2	Chiller (Ref - Daikin: EWAD-D-SX 210)	833923.0	816097.1	96.8	--	--	84.0	87.1	-46.8	3.0	0.0	3.0	0.0	43.2
BOW-1	Chiller (Ref - Daikin: EWAD-D-SX 410)	833909.9	816077.7	91.4	--	--	85.0	93.7	-47.4	3.0	0.0	3.0	0.0	43.6
BOW-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833912.2	816075.5	91.4	--	--	85.0	96.7	-47.7	3.0	0.0	3.0	0.0	43.3
PTG-1	Cooling Tower (Ref - ryowo: FC/LN 200)	834056.3	815996.1	87.1	64.0	3.8	83.6	253.6	-56.1	3.0	0.0	3.0	0.0	33.6
PTG-2	Cooling Tower (Ref - ryowo: FC/LN 200)	834053.2	815993.6	87.1	64.0	3.8	83.6	252.7	-56.1	3.0	0.0	3.0	0.0	33.6
										Noise standard:		**55**	**Overall**	**50**

Predicted Noise Level for Fixed Noise Impact Assessment - Base Case Scenario
Day/Evening Time

F02 NSR Coordinate: x = 833854.7 y = 816147.9 z = 59.0

Source ID	Description	Industrial Noise Source Coordinate: x	y	z	SPL	Ref dist.	SWL	Slant distance from source to NSR (m)	Distance Corr.	Façade Corr.	Barrier Corr.	Tonality Corr.	Impulsive Corr.	ANL
OB-1	Chiller (Ref - Daikin: EWAD-D-SX 490)	833870.8	816166.0	121.8	--	--	86.0	67.3	-44.6	3.0	-10.0	3.0	0.0	37.4
OB-2	Cooling Tower (Ref - ryowo: FC/LN 200)	833874.7	816169.8	121.8	64.0	3.8	83.6	69.5	-44.8	3.0	-10.0	3.0	0.0	34.8
CRC-1	Chiller (Ref - Daikin: EWAD-CFXR 740)	833881.0	816161.9	131.1	--	--	92.0	78.0	-45.8	3.0	-10.0	3.0	0.0	42.2
CRC-2	Chiller (Ref - Daikin: EWAD-CFXR 740)	833884.0	816158.8	131.1	--	--	92.0	78.6	-45.9	3.0	-10.0	3.0	0.0	42.1
SB-1	Chiller (Ref - Daikin: EWAD-F-XR 500)	833886.6	816144.1	60.0	--	--	89.0	32.1	-38.1	3.0	0.0	3.0	0.0	56.9
SB-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833887.3	816138.6	60.0	--	--	85.0	33.9	-38.6	3.0	0.0	3.0	0.0	52.4
VHB-1	Chiller (Ref - Daikin: EWAD-D-SX 490)	833928.3	816124.3	88.4	--	--	86.0	82.7	-46.3	3.0	0.0	3.0	0.0	45.7
VHB-2	Chiller (Ref - Daikin: EWAD-D-SX 490)	833932.2	816119.2	88.4	--	--	86.0	87.7	-46.9	3.0	0.0	3.0	0.0	45.1
VHB-3	Chiller (Ref - Daikin: EWAD-D-SX 490)	833929.6	816114.1	88.4	--	--	86.0	87.3	-46.8	3.0	0.0	3.0	0.0	45.2
YSA-1	Chiller (Ref - Daikin: EWAD-D-SX 210)	833920.2	816100.0	96.8	--	--	84.0	89.5	-47.0	3.0	0.0	3.0	0.0	43.0
YSA-2	Chiller (Ref - Daikin: EWAD-D-SX 210)	833923.0	816097.1	96.8	--	--	84.0	93.1	-47.4	3.0	0.0	3.0	0.0	42.6
TLP-1	Chiller (Ref - Daikin: EWAD-C-SR C14)	833913.6	816181.9	51.8	--	--	95.0	68.4	-44.7	3.0	0.0	3.0	0.0	56.3
TLP-2	Chiller (Ref - Daikin: EWAQ-F-XR 330)	833918.0	816188.6	51.8	--	--	87.0	75.6	-45.6	3.0	0.0	3.0	0.0	47.4
TLP-3	Chiller (Ref - Daikin: EWAD-C-SR C14)	833920.3	816184.2	51.8	--	--	95.0	75.3	-45.5	3.0	0.0	3.0	0.0	55.5
TLP-4	Chiller (Ref - Daikin: EWAQ-F-XR 330)	833913.2	816176.1	51.8	--	--	87.0	65.3	-44.3	3.0	0.0	3.0	0.0	48.7
BOW-1	Chiller (Ref - Daikin: EWAD-D-SX 410)	833909.9	816077.7	91.4	--	--	85.0	95.0	-47.6	3.0	0.0	3.0	0.0	43.4
BOW-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833912.2	816075.5	91.4	--	--	85.0	98.0	-47.8	3.0	0.0	3.0	0.0	43.2
WHIB-1	Chiller (Ref - Daikin: EWAD-CFXR 870)	833911.1	816220.6	73.0	--	--	92.0	93.1	-47.4	3.0	0.0	3.0	0.0	50.6
WHIB-2	Chiller (Ref - Daikin: EWAD-CFXR 870)	833918.3	816235.3	73.0	--	--	92.0	109.0	-48.7	3.0	0.0	3.0	0.0	49.3
OCBC-1	Chiller (Ref - Daikin: EWAQ-G-XR 080)	833876.3	816229.0	72.2	--	--	80.0	85.0	-46.6	3.0	-10.0	3.0	0.0	29.4
OCBC-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833875.0	816224.7	72.2	--	--	85.0	80.5	-46.1	3.0	-10.0	3.0	0.0	34.9
OCBC-3	Chiller (Ref - Daikin: EWAD-D-SX 410)	833880.2	816225.5	72.2	--	--	85.0	82.7	-46.4	3.0	-10.0	3.0	0.0	34.6
OCBC-4	Chiller (Ref - Daikin: EWAD-D-SX 410)	833880.2	816220.3	72.2	--	--	85.0	77.9	-45.8	3.0	-10.0	3.0	0.0	35.2
SLCB-1	Chiller (Ref - Daikin: EWAD-CFXR 600)	833884.3	816242.7	73.1	--	--	92.0	100.3	-48.0	3.0	-10.0	3.0	0.0	40.0
AB-1	Chiller (Ref - Daikin: EWAD-D-SX 410)	833947.6	816283.2	72.3	--	--	85.0	164.7	-52.3	3.0	0.0	3.0	0.0	38.7
AB-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833949.1	816285.4	72.3	--	--	85.0	167.3	-52.5	3.0	0.0	3.0	0.0	38.5
HKTC-1	Chiller (Ref - Daikin: EWAD-D-SX 410)	833959.3	816314.2	78.4	--	--	85.0	197.4	-53.9	3.0	0.0	3.0	0.0	37.1
HKTC-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833963.4	816311.4	78.4	--	--	85.0	197.3	-53.9	3.0	0.0	3.0	0.0	37.1
HKTC-3	Chiller (Ref - Daikin: EWAD-D-SX 410)	833967.6	816308.9	78.4	--	--	85.0	197.6	-53.9	3.0	0.0	3.0	0.0	37.1
NCBB-1	Chiller (Ref - Daikin: EWAD-CFXR 600)	833980.6	816305.2	57.4	--	--	92.0	201.5	-54.1	3.0	0.0	3.0	0.0	43.9
NCBB-2	Chiller (Ref - Daikin: EWAD-CFXR 600)	833984.4	816302.9	57.4	--	--	92.0	202.1	-54.1	3.0	0.0	3.0	0.0	43.9
NCBB-3	Chiller (Ref - Daikin: EWAD-CFXR 600)	833988.8	816300.1	57.4	--	--	92.0	202.9	-54.1	3.0	0.0	3.0	0.0	43.9
CTGH-1	Chiller (Ref - Daikin: EWAD-CFXR 600)	833982.3	816343.5	94.0	--	--	92.0	236.1	-55.5	3.0	0.0	3.0	0.0	42.5
CTGH-2	Chiller (Ref - Daikin: EWAD-CFXR 600)	833991.6	816340.8	94.0	--	--	92.0	239.1	-55.6	3.0	0.0	3.0	0.0	42.4
CTGH-3	Chiller (Ref - Daikin: EWAD-CFXR 600)	833986.4	816336.9	94.0	--	--	92.0	233.0	-55.3	3.0	0.0	3.0	0.0	42.7
CTGH-4	Chiller (Ref - Daikin: EWAD-D-SX 410)	833980.3	816333.3	94.0	--	--	85.0	226.7	-55.1	3.0	0.0	3.0	0.0	35.9
TB-1	Chiller (Ref - Daikin: EWAD-CFXR 820)	834003.4	816335.1	84.3	--	--	92.0	240.4	-55.6	3.0	0.0	3.0	0.0	42.4
TB-2	Chiller (Ref - Daikin: EWAD-CFXR 820)	834007.2	816324.2	84.3	--	--	92.0	234.5	-55.4	3.0	0.0	3.0	0.0	42.6
IAB-1	Chiller (Ref - Daikin: EWAD-D-SX 490)	833958.7	816104.1	66.6	--	--	86.0	113.1	-49.1	3.0	0.0	3.0	0.0	42.9
IAB-2	Chiller (Ref - Daikin: EWAD-D-SX 490)	833964.8	816100.4	66.6	--	--	86.0	120.1	-49.6	3.0	0.0	3.0	0.0	42.4
100QRC-1	Chiller (Ref - Daikin: EWAD-CFXR C15)	834011.1	816060.8	129.5	--	--	95.0	192.4	-53.7	3.0	-10.0	3.0	0.0	37.3
100QRC-2	Chiller (Ref - Daikin: EWAD-CFXR C15)	834008.1	816058.1	129.5	--	--	95.0	191.2	-53.6	3.0	-10.0	3.0	0.0	37.4
100QRC-3	Chiller (Ref - Daikin: EWAD-CFXR 600)	834001.8	816055.5	129.5	--	--	92.0	187.5	-53.5	3.0	-10.0	3.0	0.0	34.5
RC-1	Chiller (Ref - Daikin: EWAD-CFXR C15)	834028.6	816025.5	91.7	--	--	95.0	215.2	-54.7	3.0	0.0	3.0	0.0	46.3
RC-2	Chiller (Ref - Daikin: EWAD-CFXR C15)	834028.3	816032.4	91.7	--	--	95.0	211.1	-54.5	3.0	0.0	3.0	0.0	46.5
HQ-1	Cooling Tower (Ref - ryowo: FC/LN 200)	834037.9	816016.4	120.2	64.0	3.8	83.6	233.7	-55.4	3.0	-10.0	3.0	0.0	24.3
HQ-2	Cooling Tower (Ref - ryowo: FC/LN 200)	834039.9	816019.3	120.2	64.0	3.8	83.6	233.6	-55.4	3.0	-10.0	3.0	0.0	24.3
HQ-3	Cooling Tower (Ref - ryowo: FC/LN 200)	834042.0	816022.2	120.2	64.0	3.8	83.6	233.7	-55.4	3.0	-10.0	3.0	0.0	24.3
CH-1	Cooling Tower (Ref - ryowo: FC/LN 400)	834076.4	815970.1	75.6	66.0	5.4	88.7	284.7	-57.1	3.0	0.0	3.0	0.0	37.6
CH-2	Cooling Tower (Ref - ryowo: FC/LN 400)	834081.3	815963.7	75.6	66.0	5.4	88.7	292.5	-57.3	3.0	0.0	3.0	0.0	37.3
POH-1	Chiller (Ref - Daikin: EWAD-D-SX 210)	834009.7	816003.1	97.7	--	--	84.0	215.6	-54.7	3.0	0.0	3.0	0.0	35.3
WTT-1	Chiller (Ref - Daikin: EWAD-CFXR 870)	834016.5	815992.1	85.4	--	--	92.0	226.2	-55.1	3.0	0.0	3.0	0.0	42.9
WTT-2	Chiller (Ref - Daikin: EWAD-CFXR 870)	834024.3	815984.9	85.4	--	--	92.0	236.7	-55.5	3.0	0.0	3.0	0.0	42.5
AST-1	Chiller (Ref - Daikin: EWAD-CFXR C10)	834102.6	816020.6	78.0	--	--	94.0	279.3	-56.9	3.0	0.0	3.0	0.0	43.1
AST-2	Chiller (Ref - Daikin: EWAD-CFXR C10)	834104.5	816017.0	78.0	--	--	94.0	282.7	-57.0	3.0	0.0	3.0	0.0	43.0
AST-3	Chiller (Ref - Daikin: EWAD-D-SX 410)	834095.0	816014.2	78.0	--	--	85.0	275.6	-56.8	3.0	0.0	3.0	0.0	34.2
AST-4	Chiller (Ref - Daikin: EWAD-D-SX 410)	834096.8	816010.9	78.0	--	--	85.0	278.8	-56.9	3.0	0.0	3.0	0.0	34.1
BGLAT-1	Chiller (Ref - Daikin: EWAD-CFXR 740)	833959.9	816246.5	16.5	--	--	92.0	150.3	-51.5	3.0	0.0	3.0	0.0	46.5
BGLAT-2	Chiller (Ref - Daikin: EWAD-CFXR 740)	833964.4	816243.1	16.5	--	--	92.0	151.3	-51.6	3.0	0.0	3.0	0.0	46.4
TSBB-1	Chiller (Ref - Daikin: EWAD-D-SX 490)	833986.9	816259.8	56.3	--	--	86.0	173.2	-52.8	3.0	0.0	3.0	0.0	39.2
TSBB-2	Chiller (Ref - Daikin: EWAD-D-SX 490)	833991.5	816257.1	56.3	--	--	86.0	175.1	-52.9	3.0	0.0	3.0	0.0	39.1
PBC-1	Chiller (Ref - Daikin: EWAD-D-SX 410)	833994.6	816244.2	76.6	--	--	85.0	170.7	-52.6	3.0	0.0	3.0	0.0	38.4
PBC-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	834001.4	816248.4	76.6	--	--	85.0	178.7	-53.0	3.0	0.0	3.0	0.0	38.0
JC-1	Chiller (Ref - Daikin: EWAD-CFXR 740)	833950.9	816005.0	99.6	--	--	92.0	177.0	-53.0	3.0	0.0	3.0	0.0	45.0
1LT-1	Chiller (Ref - Daikin: EWAD-CFXR 600)	833980.8	815970.5	102.3	--	--	92.0	221.9	-54.9	3.0	0.0	3.0	0.0	43.1
1LT-2	Chiller (Ref - Daikin: EWAD-CFXR 600)	833979.5	815966.3	102.3	--	--	92.0	224.6	-55.0	3.0	0.0	3.0	0.0	43.0
SS-1	Chiller (Ref - Daikin: EWAQ-G-XR 090)	833918.4	815974.4	107.3	--	--	82.0	191.0	-53.6	3.0	-10.0	3.0	0.0	24.4
SS-2	Chiller (Ref - Daikin: EWAQ-G-XR 090)	833919.8	815972.9	107.3	--	--	82.0	192.9	-53.7	3.0	-10.0	3.0	0.0	24.3
CPCB-1	Chiller (Ref - Daikin: EWAD-D-SX 410)	833977.2	815919.4	116.3	--	--	85.0	265.5	-56.5	3.0	-10.0	3.0	0.0	24.5
HC-1	Chiller (Ref - Daikin: EWAD-D-SX 490)	833930.1	815929.6	121.7	--	--	86.0	239.3	-55.6	3.0	-10.0	3.0	0.0	26.4
HC-2	Chiller (Ref - Daikin: EWAD-D-SX 490)	833933.6	815929.3	121.7	--	--	86.0	240.7	-55.6	3.0	-10.0	3.0	0.0	26.4
HC-3	Chiller (Ref - Daikin: EWAD-D-SX 490)	833936.6	815929.1	121.7	--	--	86.0	241.9	-55.7	3.0	-10.0	3.0	0.0	26.3
HC-4	Chiller (Ref - Daikin: EWAD-D-SX 490)	833942.4	815934.1	121.7	--	--	86.0	239.4	-55.6	3.0	-10.0	3.0	0.0	26.4
HC-5	Chiller (Ref - Daikin: EWAD-D-SX 490)	833945.5	815933.8	121.7	--	--	86.0	240.9	-55.6	3.0	-10.0	3.0	0.0	26.4
HC-6	Chiller (Ref - Daikin: EWAD-D-SX 490)	833942.8	815925.3	121.7	--	--	86.0	247.5	-55.9	3.0	-10.0	3.0	0.0	26.1
HC-7	Chiller (Ref - Daikin: EWAD-D-SX 490)	833938.2	815920.5	121.7	--	--	86.0	250.2	-56.0	3.0	-10.0	3.0	0.0	26.0
HC-8	Chiller (Ref - Daikin: EWAD-D-SX 490)	833941.3	815919.5	121.7	--	--	86.0	252.2	-56.0	3.0	-10.0	3.0	0.0	26.0
KC-1	Chiller (Ref - Daikin: EWAD-C-XR C16)	833838.9	815913.7	132.0	--	--	95.0	245.8	-55.8	3.0	-10.0	3.0	0.0	35.2
KC-2	Chiller (Ref - Daikin: EWAD-C-XR C16)	833828.9	815902.1	132.0	--	--	95.0	257.7	-56.2	3.0	-10.0	3.0	0.0	34.8
KC-3	Chiller (Ref - Daikin: EWAD-D-SX 490)	833820.6	815901.4	132.0	--	--	86.0	259.3	-56.3	3.0	-10.0	3.0	0.0	25.7
TW-1	Cooling Tower (Ref - ryowo: FC/LN 200)	833804.8	816218.3	132.1	64.0	3.8	83.6	113.1	-49.1	3.0	-10.0	3.0	0.0	30.6
TW-2	Cooling Tower (Ref - ryowo: FC/LN 200)	833809.5	816213.8	132.1	64.0	3.8	83.6	108.3	-48.7	3.0	-10.0	3.0	0.0	31.0

299Q-1	Chiller (Ref - Daikin: EWAD-CFXR 600)	833564.5	816227.4	80.9	--	--	92.0	301.7	-57.6	3.0	-10.0	3.0	0.0	30.4
299Q-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833559.6	816230.8	80.9	--	--	85.0	307.3	-57.8	3.0	-10.0	3.0	0.0	23.2
299Q-3	Chiller (Ref - Daikin: EWAD-CFXR 600)	833556.5	816237.1	80.9	--	--	92.0	312.0	-57.9	3.0	-10.0	3.0	0.0	30.1
PBT-1	Chiller (Ref - Daikin: EWAD-CFXR 600)	833715.7	816289.5	83.6	--	--	92.0	199.9	-54.0	3.0	-10.0	3.0	0.0	34.0
PBT-2	Chiller (Ref - Daikin: EWAD-CFXR 600)	833716.2	816284.4	83.6	--	--	92.0	196.0	-53.8	3.0	-10.0	3.0	0.0	34.2
PBT-3	Chiller (Ref - Daikin: EWAD-D-SX 410)	833724.7	816288.4	83.6	--	--	85.0	193.0	-53.7	3.0	-10.0	3.0	0.0	27.3
BC-1	Chiller (Ref - Daikin: EWAD-D-SX 490)	833646.5	816307.1	108.3	--	--	86.0	266.7	-56.5	3.0	-10.0	3.0	0.0	25.5
BC-2	Chiller (Ref - Daikin: EWAD-D-SX 490)	833651.7	816304.6	108.3	--	--	86.0	261.1	-56.3	3.0	-10.0	3.0	0.0	25.7
S50-1	Chiller (Ref - Daikin: EWAD-CFXR 740)	833628.2	816325.3	98.0	--	--	92.0	290.3	-57.3	3.0	-10.0	3.0	0.0	30.7
S50-2	Chiller (Ref - Daikin: EWAD-CFXR 740)	833635.2	816325.0	98.0	--	--	92.0	284.7	-57.1	3.0	-10.0	3.0	0.0	30.9
S50-3	Chiller (Ref - Daikin: EWAD-CFXR 740)	833632.9	816321.3	98.0	--	--	92.0	284.2	-57.1	3.0	-10.0	3.0	0.0	30.9
HSBH-1	Cooling Tower (Ref - ryowo: FC/LN 200)	834145.9	816199.3	136.2	64.0	3.8	83.6	305.6	-57.7	3.0	-10.0	3.0	0.0	21.9
HSBH-2	Cooling Tower (Ref - ryowo: FC/LN 200)	834149.0	816195.3	136.2	64.0	3.8	83.6	307.9	-57.8	3.0	-10.0	3.0	0.0	21.9
HSBH-3	Cooling Tower (Ref - ryowo: FC/LN 200)	834138.9	816194.1	136.2	64.0	3.8	83.6	298.1	-57.5	3.0	-10.0	3.0	0.0	22.2
HSBH-4	Cooling Tower (Ref - ryowo: FC/LN 200)	834142.1	816190.0	136.2	64.0	3.8	83.6	300.6	-57.6	3.0	-10.0	3.0	0.0	22.1
HSBH-5	Chiller (Ref - Daikin: EWAD-CFXR 600)	834130.7	816195.9	136.2	--	--	92.0	290.6	-57.3	3.0	-10.0	3.0	0.0	30.7
HSBH-6	Chiller (Ref - Daikin: EWAD-CFXR C15)	834129.8	816191.8	136.2	--	--	95.0	289.1	-57.2	3.0	-10.0	3.0	0.0	33.8
HSBH-7	Chiller (Ref - Daikin: EWAD-CFXR C15)	834137.8	816179.8	136.2	--	--	95.0	295.2	-57.4	3.0	-10.0	3.0	0.0	33.6
NFT-1	Chiller (Ref - Daikin: EWAD-CFXR 740)	833967.2	816341.7	30.0	--	--	92.0	226.0	-55.1	3.0	-10.0	3.0	0.0	32.9
NFT-2	Chiller (Ref - Daikin: EWAD-CFXR 740)	833959.3	816329.1	30.0	--	--	92.0	211.2	-54.5	3.0	-10.0	3.0	0.0	33.5
NFT-3	Chiller (Ref - Daikin: EWAD-CFXR 740)	833940.5	816326.2	30.0	--	--	92.0	200.0	-54.0	3.0	-10.0	3.0	0.0	34.0
NFT-4	Chiller (Ref - Daikin: EWAD-CFXR 740)	833930.9	816334.6	30.0	--	--	92.0	203.7	-54.2	3.0	-10.0	3.0	0.0	33.8
NFT-5	Chiller (Ref - Daikin: EWAD-CFXR 740)	833940.2	816350.2	30.0	--	--	92.0	221.5	-54.9	3.0	-10.0	3.0	0.0	33.1
NFT-6	Chiller (Ref - Daikin: EWAD-CFXR 740)	833945.5	816358.6	30.0	--	--	92.0	231.3	-55.3	3.0	-10.0	3.0	0.0	32.7
IP-1	Chiller (Ref - Daikin: EWAD-CFXR C15)	833865.3	816416.7	34.0	--	--	95.0	270.2	-56.6	3.0	-10.0	3.0	0.0	34.4
IP-2	Chiller (Ref - Daikin: EWAD-CFXR C15)	833868.3	816414.0	34.0	--	--	95.0	267.6	-56.6	3.0	-10.0	3.0	0.0	34.4
IP-3	Chiller (Ref - Daikin: EWAD-CFXR C15)	833858.1	816402.3	34.0	--	--	95.0	255.6	-56.2	3.0	-10.0	3.0	0.0	34.8
IP-4	Chiller (Ref - Daikin: EWAD-CFXR C15)	833867.9	816406.9	34.0	--	--	95.0	260.5	-56.3	3.0	-10.0	3.0	0.0	34.7
IP-5	Chiller (Ref - Daikin: EWAD-CFXR C15)	833873.5	816404.4	34.0	--	--	95.0	258.4	-56.2	3.0	-10.0	3.0	0.0	34.8
IP-6	Chiller (Ref - Daikin: EWAD-C-XR C16)	833869.2	816389.1	123.3	--	--	95.0	250.0	-56.0	3.0	-10.0	3.0	0.0	35.0
IP-7	Chiller (Ref - Daikin: EWAD-C-XR C16)	833887.8	816392.4	123.3	--	--	95.0	255.0	-56.1	3.0	-10.0	3.0	0.0	34.9
IP-8	Cooling Tower (Ref - ryowo: FC/LN 400)	833881.7	816397.4	123.3	66.0	5.4	88.7	259.1	-56.3	3.0	-10.0	3.0	0.0	28.4
IP-9	Cooling Tower (Ref - ryowo: FC/LN 400)	833887.6	816401.9	123.3	66.0	5.4	88.7	264.1	-56.4	3.0	-10.0	3.0	0.0	28.2
GC-1	Chiller (Ref - Daikin: EWAD-C-XR C16)	833851.1	816339.2	111.8	--	--	95.0	198.5	-54.0	3.0	-10.0	3.0	0.0	37.0
GC-2	Chiller (Ref - Daikin: EWAD-C-XR C16)	833855.6	816337.5	111.8	--	--	95.0	196.8	-53.9	3.0	-10.0	3.0	0.0	37.1
GC-3	Chiller (Ref - Daikin: EWAD-CFXR 740)	833859.7	816335.7	111.8	--	--	92.0	195.1	-53.8	3.0	-10.0	3.0	0.0	34.2
HB-1	Chiller (Ref - Daikin: EWAD-CFXR 740)	834015.0	816407.1	97.5	--	--	92.0	307.2	-57.7	3.0	0.0	3.0	0.0	40.3
PTG-1	Cooling Tower (Ref - ryowo: FC/LN 200)	834056.3	815996.1	87.1	64.0	3.8	83.6	253.9	-56.1	3.0	0.0	3.0	0.0	33.6
PTG-2	Cooling Tower (Ref - ryowo: FC/LN 200)	834053.2	815993.6	87.1	64.0	3.8	83.6	253.0	-56.1	3.0	0.0	3.0	0.0	33.6
										Noise standard:		**65**	**Overall**	**64**

Predicted Noise Level for Fixed Noise Impact Assessment - Base Case Scenario

Night Time

F02 NSR Coordinate: x = 833854.7 y = 816147.9 z = 59.0

Source ID	Description	Industrial Noise x	Industrial Noise y		SPL	Ref dist.	SWL	Slant distance from source	Distance Corr.	Façade Corr.	Barrier Corr.	Tonality Corr.	Impulsive Corr.	ANL
YSA-1	Chiller (Ref - Daikin: EWAD-D-SX 210)	833920.2	816100.0	96.8	--	--	84.0	89.5	-47.0	3.0	0.0	3.0	0.0	43.0
YSA-2	Chiller (Ref - Daikin: EWAD-D-SX 210)	833923.0	816097.1	96.8	--	--	84.0	93.1	-47.4	3.0	0.0	3.0	0.0	42.6
BOW-1	Chiller (Ref - Daikin: EWAD-D-SX 410)	833909.9	816077.7	91.4	--	--	85.0	95.0	-47.6	3.0	0.0	3.0	0.0	43.4
BOW-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833912.2	816075.5	91.4	--	--	85.0	98.0	-47.8	3.0	0.0	3.0	0.0	43.2
PTG-1	Cooling Tower (Ref - ryowo: FC/LN 200)	834056.3	815996.1	87.1	64.0	3.8	83.6	253.9	-56.1	3.0	0.0	3.0	0.0	33.6
PTG-2	Cooling Tower (Ref - ryowo: FC/LN 200)	834053.2	815993.6	87.1	64.0	3.8	83.6	253.0	-56.1	3.0	0.0	3.0	0.0	33.6
										Noise standard:		**55**	**Overall**	**49**

Predicted Noise Level for Fixed Noise Impact Assessment - Base Case Scenario
Day/Evening Time
F02 NSR Coordinate: x = 833854.7 y = 816147.9 z = 88.1

Source ID	Description	Industrial Noise Source Coordinate: x	y	z	SPL	Ref dist.	SWL	Slant distance from source to NSR (m)	Distance Corr.	Façade Corr.	Barrier Corr.	Tonality Corr.	Impulsive Corr.	ANL
OB-1	Chiller (Ref - Daikin: EWAD-D-SX 490)	833870.8	816166.0	121.8	--	--	86.0	41.5	-40.4	3.0	-10.0	3.0	0.0	41.6
OB-2	Cooling Tower (Ref - ryowo: FC/LN 200)	833874.7	816169.8	121.8	64.0	3.8	83.6	44.9	-41.0	3.0	-10.0	3.0	0.0	38.6
CRC-1	Chiller (Ref - Daikin: EWAD-CFXR 740)	833881.0	816161.9	131.1	--	--	92.0	52.3	-42.4	3.0	-10.0	3.0	0.0	45.6
CRC-2	Chiller (Ref - Daikin: EWAD-CFXR 740)	833884.0	816158.8	131.1	--	--	92.0	53.2	-42.5	3.0	-10.0	3.0	0.0	45.5
SB-1	Chiller (Ref - Daikin: EWAD-F-XR 500)	833886.6	816144.1	60.0	--	--	89.0	42.7	-40.6	3.0	0.0	3.0	0.0	54.4
SB-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833887.3	816138.6	60.0	--	--	85.0	44.0	-40.9	3.0	0.0	3.0	0.0	50.1
VHB-1	Chiller (Ref - Daikin: EWAD-D-SX 490)	833928.3	816124.3	88.4	--	--	86.0	77.3	-45.8	3.0	0.0	3.0	0.0	46.2
VHB-2	Chiller (Ref - Daikin: EWAD-D-SX 490)	833932.2	816119.2	88.4	--	--	86.0	82.6	-46.3	3.0	0.0	3.0	0.0	45.7
VHB-3	Chiller (Ref - Daikin: EWAD-D-SX 490)	833929.6	816114.1	88.4	--	--	86.0	82.2	-46.3	3.0	0.0	3.0	0.0	45.7
YSA-1	Chiller (Ref - Daikin: EWAD-D-SX 210)	833920.2	816100.0	96.8	--	--	84.0	81.6	-46.2	3.0	0.0	3.0	0.0	43.8
YSA-2	Chiller (Ref - Daikin: EWAD-D-SX 210)	833923.0	816097.1	96.8	--	--	84.0	85.6	-46.6	3.0	0.0	3.0	0.0	43.4
TLP-1	Chiller (Ref - Daikin: EWAD-C-SR C14)	833913.6	816181.9	51.8	--	--	95.0	77.1	-45.7	3.0	0.0	3.0	0.0	55.3
TLP-2	Chiller (Ref - Daikin: EWAQ-F-XR 330)	833918.0	816188.6	51.8	--	--	87.0	83.6	-46.4	3.0	0.0	3.0	0.0	46.6
TLP-3	Chiller (Ref - Daikin: EWAD-C-SR C14)	833920.3	816184.2	51.8	--	--	95.0	83.3	-46.4	3.0	0.0	3.0	0.0	54.6
TLP-4	Chiller (Ref - Daikin: EWAQ-F-XR 330)	833913.2	816176.1	51.8	--	--	87.0	74.4	-45.4	3.0	0.0	3.0	0.0	47.6
BOW-1	Chiller (Ref - Daikin: EWAD-D-SX 410)	833909.9	816077.7	91.4	--	--	85.0	89.4	-47.0	3.0	0.0	3.0	0.0	44.0
BOW-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833912.2	816075.5	91.4	--	--	85.0	92.5	-47.3	3.0	0.0	3.0	0.0	43.7
WHIB-1	Chiller (Ref - Daikin: EWAD-CFXR 870)	833911.1	816220.6	73.0	--	--	92.0	93.2	-47.4	3.0	0.0	3.0	0.0	50.6
WHIB-2	Chiller (Ref - Daikin: EWAD-CFXR 870)	833918.3	816235.3	73.0	--	--	92.0	109.1	-48.8	3.0	0.0	3.0	0.0	49.2
OCBC-1	Chiller (Ref - Daikin: EWAQ-G-XR 080)	833876.3	816229.0	72.2	--	--	80.0	85.4	-46.6	3.0	-10.0	3.0	0.0	29.4
OCBC-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833875.0	816224.7	72.2	--	--	85.0	81.0	-46.2	3.0	-10.0	3.0	0.0	34.8
OCBC-3	Chiller (Ref - Daikin: EWAD-D-SX 410)	833880.2	816225.5	72.2	--	--	85.0	83.2	-46.4	3.0	-10.0	3.0	0.0	34.6
OCBC-4	Chiller (Ref - Daikin: EWAD-D-SX 410)	833880.2	816220.3	72.2	--	--	85.0	78.4	-45.9	3.0	-10.0	3.0	0.0	35.1
SLCB-1	Chiller (Ref - Daikin: EWAD-CFXR 600)	833884.3	816242.7	73.1	--	--	92.0	100.4	-48.0	3.0	-10.0	3.0	0.0	40.0
AB-1	Chiller (Ref - Daikin: EWAD-D-SX 410)	833947.6	816283.2	72.3	--	--	85.0	164.9	-52.3	3.0	0.0	3.0	0.0	38.7
AB-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833949.1	816285.4	72.3	--	--	85.0	167.5	-52.5	3.0	0.0	3.0	0.0	38.5
HKTC-1	Chiller (Ref - Daikin: EWAD-D-SX 410)	833959.3	816314.2	78.4	--	--	85.0	196.7	-53.9	3.0	0.0	3.0	0.0	37.1
HKTC-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833963.4	816311.4	78.4	--	--	85.0	196.6	-53.9	3.0	0.0	3.0	0.0	37.1
HKTC-3	Chiller (Ref - Daikin: EWAD-D-SX 410)	833967.6	816308.9	78.4	--	--	85.0	196.9	-53.9	3.0	0.0	3.0	0.0	37.1
NCBB-1	Chiller (Ref - Daikin: EWAD-CFXR 600)	833980.6	816305.2	57.4	--	--	92.0	203.8	-54.2	3.0	0.0	3.0	0.0	43.8
NCBB-2	Chiller (Ref - Daikin: EWAD-CFXR 600)	833984.4	816302.9	57.4	--	--	92.0	204.4	-54.2	3.0	0.0	3.0	0.0	43.8
NCBB-3	Chiller (Ref - Daikin: EWAD-CFXR 600)	833988.8	816300.1	57.4	--	--	92.0	205.2	-54.2	3.0	0.0	3.0	0.0	43.8
CTGH-1	Chiller (Ref - Daikin: EWAD-CFXR 600)	833982.3	816343.5	94.0	--	--	92.0	233.6	-55.4	3.0	0.0	3.0	0.0	42.6
CTGH-2	Chiller (Ref - Daikin: EWAD-CFXR 600)	833991.6	816340.8	94.0	--	--	92.0	236.6	-55.5	3.0	0.0	3.0	0.0	42.5
CTGH-3	Chiller (Ref - Daikin: EWAD-CFXR 600)	833986.4	816336.9	94.0	--	--	92.0	230.4	-55.3	3.0	0.0	3.0	0.0	42.7
CTGH-4	Chiller (Ref - Daikin: EWAD-D-SX 410)	833980.3	816333.3	94.0	--	--	85.0	224.0	-55.0	3.0	0.0	3.0	0.0	36.0
TB-1	Chiller (Ref - Daikin: EWAD-CFXR 820)	834003.4	816335.1	84.3	--	--	92.0	239.1	-55.6	3.0	0.0	3.0	0.0	42.4
TB-2	Chiller (Ref - Daikin: EWAD-CFXR 820)	834007.2	816324.2	84.3	--	--	92.0	233.1	-55.4	3.0	0.0	3.0	0.0	42.6
IAB-1	Chiller (Ref - Daikin: EWAD-D-SX 490)	833958.7	816104.1	66.6	--	--	86.0	114.9	-49.2	3.0	0.0	3.0	0.0	42.8
IAB-2	Chiller (Ref - Daikin: EWAD-D-SX 490)	833964.8	816100.4	66.6	--	--	86.0	121.8	-49.7	3.0	0.0	3.0	0.0	42.3
100QRC-1	Chiller (Ref - Daikin: EWAD-CFXR C15)	834011.1	816060.8	129.5	--	--	95.0	183.7	-53.3	3.0	-10.0	3.0	0.0	37.7
100QRC-2	Chiller (Ref - Daikin: EWAD-CFXR C15)	834008.1	816058.1	129.5	--	--	95.0	182.5	-53.2	3.0	-10.0	3.0	0.0	37.8
100QRC-3	Chiller (Ref - Daikin: EWAD-CFXR 600)	834001.8	816055.5	129.5	--	--	92.0	178.6	-53.0	3.0	-10.0	3.0	0.0	35.0
RC-1	Chiller (Ref - Daikin: EWAD-CFXR C15)	834028.6	816025.5	91.7	--	--	95.0	212.7	-54.6	3.0	0.0	3.0	0.0	46.4
RC-2	Chiller (Ref - Daikin: EWAD-CFXR C15)	834028.3	816032.4	91.7	--	--	95.0	208.5	-54.4	3.0	0.0	3.0	0.0	46.6
HQ-1	Cooling Tower (Ref - ryowo: FC/LN 200)	834037.9	816016.4	120.2	64.0	3.8	83.6	227.8	-55.2	3.0	-10.0	3.0	0.0	24.5
HQ-2	Cooling Tower (Ref - ryowo: FC/LN 200)	834039.9	816019.3	120.2	64.0	3.8	83.6	227.7	-55.1	3.0	-10.0	3.0	0.0	24.5
HQ-3	Cooling Tower (Ref - ryowo: FC/LN 200)	834042.0	816022.2	120.2	64.0	3.8	83.6	227.8	-55.2	3.0	-10.0	3.0	0.0	24.5
CH-1	Cooling Tower (Ref - ryowo: FC/LN 400)	834076.4	815970.1	75.6	66.0	5.4	88.7	284.5	-57.1	3.0	0.0	3.0	0.0	37.6
CH-2	Cooling Tower (Ref - ryowo: FC/LN 400)	834081.3	815963.7	75.6	66.0	5.4	88.7	292.3	-57.3	3.0	0.0	3.0	0.0	37.3
POH-1	Chiller (Ref - Daikin: EWAD-D-SX 210)	834009.7	816003.1	97.7	--	--	84.0	212.3	-54.5	3.0	0.0	3.0	0.0	35.5
WTT-1	Chiller (Ref - Daikin: EWAD-CFXR 870)	834016.5	815992.1	85.4	--	--	92.0	224.6	-55.0	3.0	0.0	3.0	0.0	43.0
WTT-2	Chiller (Ref - Daikin: EWAD-CFXR 870)	834024.3	815984.9	85.4	--	--	92.0	235.2	-55.4	3.0	0.0	3.0	0.0	42.6
AST-1	Chiller (Ref - Daikin: EWAD-CFXR C10)	834102.6	816020.6	78.0	--	--	94.0	278.9	-56.9	3.0	0.0	3.0	0.0	43.1
AST-2	Chiller (Ref - Daikin: EWAD-CFXR C10)	834104.5	816017.0	78.0	--	--	94.0	282.2	-57.0	3.0	0.0	3.0	0.0	43.0
AST-3	Chiller (Ref - Daikin: EWAD-D-SX 410)	834095.0	816014.2	78.0	--	--	85.0	275.2	-56.8	3.0	0.0	3.0	0.0	34.2
AST-4	Chiller (Ref - Daikin: EWAD-D-SX 410)	834096.8	816010.9	78.0	--	--	85.0	278.4	-56.9	3.0	0.0	3.0	0.0	34.1
BGLAT-1	Chiller (Ref - Daikin: EWAD-CFXR 740)	833959.9	816246.5	16.5	--	--	92.0	161.0	-52.1	3.0	0.0	3.0	0.0	45.9
BGLAT-2	Chiller (Ref - Daikin: EWAD-CFXR 740)	833964.4	816243.1	16.5	--	--	92.0	161.9	-52.2	3.0	0.0	3.0	0.0	45.8
TSBB-1	Chiller (Ref - Daikin: EWAD-D-SX 490)	833986.9	816259.8	56.3	--	--	86.0	176.1	-52.9	3.0	0.0	3.0	0.0	39.1
TSBB-2	Chiller (Ref - Daikin: EWAD-D-SX 490)	833991.5	816257.1	56.3	--	--	86.0	177.9	-53.0	3.0	0.0	3.0	0.0	39.0
PBC-1	Chiller (Ref - Daikin: EWAD-D-SX 410)	833994.6	816244.2	76.6	--	--	85.0	170.2	-52.6	3.0	0.0	3.0	0.0	38.4
PBC-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	834001.4	816248.4	76.6	--	--	85.0	178.2	-53.0	3.0	0.0	3.0	0.0	38.0
JC-1	Chiller (Ref - Daikin: EWAD-CFXR 740)	833950.9	816005.0	99.6	--	--	92.0	172.6	-52.7	3.0	0.0	3.0	0.0	45.3
1LT-1	Chiller (Ref - Daikin: EWAD-CFXR 600)	833980.8	815970.5	102.3	--	--	92.0	218.1	-54.8	3.0	0.0	3.0	0.0	43.2
1LT-2	Chiller (Ref - Daikin: EWAD-CFXR 600)	833979.5	815966.3	102.3	--	--	92.0	220.8	-54.9	3.0	0.0	3.0	0.0	43.1
SS-1	Chiller (Ref - Daikin: EWAQ-G-XR 090)	833918.4	815974.4	107.3	--	--	82.0	185.8	-53.4	3.0	-10.0	3.0	0.0	24.6
SS-2	Chiller (Ref - Daikin: EWAQ-G-XR 090)	833919.8	815972.9	107.3	--	--	82.0	187.7	-53.5	3.0	-10.0	3.0	0.0	24.5
CPCB-1	Chiller (Ref - Daikin: EWAD-D-SX 410)	833977.2	815919.4	116.3	--	--	85.0	260.8	-56.3	3.0	-10.0	3.0	0.0	24.7
HC-1	Chiller (Ref - Daikin: EWAD-D-SX 490)	833930.1	815929.6	121.7	--	--	86.0	233.4	-55.4	3.0	-10.0	3.0	0.0	26.6
HC-2	Chiller (Ref - Daikin: EWAD-D-SX 490)	833933.6	815929.3	121.7	--	--	86.0	234.8	-55.4	3.0	-10.0	3.0	0.0	26.6
HC-3	Chiller (Ref - Daikin: EWAD-D-SX 490)	833936.6	815929.1	121.7	--	--	86.0	236.0	-55.5	3.0	-10.0	3.0	0.0	26.5
HC-4	Chiller (Ref - Daikin: EWAD-D-SX 490)	833942.4	815934.1	121.7	--	--	86.0	233.5	-55.4	3.0	-10.0	3.0	0.0	26.6
HC-5	Chiller (Ref - Daikin: EWAD-D-SX 490)	833945.5	815933.8	121.7	--	--	86.0	235.0	-55.4	3.0	-10.0	3.0	0.0	26.6
HC-6	Chiller (Ref - Daikin: EWAD-D-SX 490)	833942.8	815925.3	121.7	--	--	86.0	241.7	-55.7	3.0	-10.0	3.0	0.0	26.3
HC-7	Chiller (Ref - Daikin: EWAD-D-SX 490)	833938.2	815920.5	121.7	--	--	86.0	244.6	-55.8	3.0	-10.0	3.0	0.0	26.2
HC-8	Chiller (Ref - Daikin: EWAD-D-SX 490)	833941.3	815919.5	121.7	--	--	86.0	246.6	-55.8	3.0	-10.0	3.0	0.0	26.2
KC-1	Chiller (Ref - Daikin: EWAD-C-XR C16)	833838.9	815913.7	132.0	--	--	95.0	238.8	-55.6	3.0	-10.0	3.0	0.0	35.4
KC-2	Chiller (Ref - Daikin: EWAD-C-XR C16)	833828.9	815902.1	132.0	--	--	95.0	251.0	-56.0	3.0	-10.0	3.0	0.0	35.0
KC-3	Chiller (Ref - Daikin: EWAD-D-SX 490)	833820.6	815901.4	132.0	--	--	86.0	252.7	-56.1	3.0	-10.0	3.0	0.0	25.9
TW-1	Cooling Tower (Ref - ryowo: FC/LN 200)	833804.8	816218.3	132.1	64.0	3.8	83.6	96.9	-47.7	3.0	-10.0	3.0	0.0	31.9
TW-2	Cooling Tower (Ref - ryowo: FC/LN 200)	833809.5	816213.8	132.1	64.0	3.8	83.6	91.2	-47.2	3.0	-10.0	3.0	0.0	32.4

299Q-1	Chiller (Ref - Daikin: EWAD-CFXR 600)	833564.5	816227.4	80.9	--	--	92.0	301.0	-57.6	3.0	-10.0	3.0	0.0	30.4
299Q-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833559.6	816230.8	80.9	--	--	85.0	306.6	-57.7	3.0	-10.0	3.0	0.0	23.3
299Q-3	Chiller (Ref - Daikin: EWAD-CFXR 600)	833556.5	816237.1	80.9	--	--	92.0	311.3	-57.9	3.0	-10.0	3.0	0.0	30.1
PBT-1	Chiller (Ref - Daikin: EWAD-CFXR 600)	833715.7	816289.5	83.6	--	--	92.0	198.5	-54.0	3.0	-10.0	3.0	0.0	34.0
PBT-2	Chiller (Ref - Daikin: EWAD-CFXR 600)	833716.2	816284.4	83.6	--	--	92.0	194.5	-53.8	3.0	-10.0	3.0	0.0	34.2
PBT-3	Chiller (Ref - Daikin: EWAD-D-SX 410)	833724.7	816288.4	83.6	--	--	85.0	191.5	-53.6	3.0	-10.0	3.0	0.0	27.4
BC-1	Chiller (Ref - Daikin: EWAD-D-SX 490)	833646.5	816307.1	108.3	--	--	86.0	262.9	-56.4	3.0	-10.0	3.0	0.0	25.6
BC-2	Chiller (Ref - Daikin: EWAD-D-SX 490)	833651.7	816304.6	108.3	--	--	86.0	257.2	-56.2	3.0	-10.0	3.0	0.0	25.8
S50-1	Chiller (Ref - Daikin: EWAD-CFXR 740)	833628.2	816325.3	98.0	--	--	92.0	287.9	-57.2	3.0	-10.0	3.0	0.0	30.8
S50-2	Chiller (Ref - Daikin: EWAD-CFXR 740)	833635.2	816325.0	98.0	--	--	92.0	282.2	-57.0	3.0	-10.0	3.0	0.0	31.0
S50-3	Chiller (Ref - Daikin: EWAD-CFXR 740)	833632.9	816321.3	98.0	--	--	92.0	281.7	-57.0	3.0	-10.0	3.0	0.0	31.0
HSBH-1	Cooling Tower (Ref - ryowo: FC/LN 200)	834145.9	816199.3	136.2	64.0	3.8	83.6	299.6	-57.5	3.0	-10.0	3.0	0.0	22.1
HSBH-2	Cooling Tower (Ref - ryowo: FC/LN 200)	834149.0	816195.3	136.2	64.0	3.8	83.6	301.9	-57.6	3.0	-10.0	3.0	0.0	22.0
HSBH-3	Cooling Tower (Ref - ryowo: FC/LN 200)	834138.9	816194.1	136.2	64.0	3.8	83.6	291.9	-57.3	3.0	-10.0	3.0	0.0	22.3
HSBH-4	Cooling Tower (Ref - ryowo: FC/LN 200)	834142.1	816190.0	136.2	64.0	3.8	83.6	294.4	-57.4	3.0	-10.0	3.0	0.0	22.3
HSBH-5	Chiller (Ref - Daikin: EWAD-CFXR 600)	834130.7	816195.9	136.2	--	--	92.0	284.2	-57.1	3.0	-10.0	3.0	0.0	30.9
HSBH-6	Chiller (Ref - Daikin: EWAD-CFXR C15)	834129.8	816191.8	136.2	--	--	95.0	282.7	-57.0	3.0	-10.0	3.0	0.0	34.0
HSBH-7	Chiller (Ref - Daikin: EWAD-CFXR C15)	834137.8	816179.8	136.2	--	--	95.0	288.9	-57.2	3.0	-10.0	3.0	0.0	33.8
NFT-1	Chiller (Ref - Daikin: EWAD-CFXR 740)	833967.2	816341.7	30.0	--	--	92.0	231.5	-55.3	3.0	-10.0	3.0	0.0	32.7
NFT-2	Chiller (Ref - Daikin: EWAD-CFXR 740)	833959.3	816329.1	30.0	--	--	92.0	217.1	-54.7	3.0	-10.0	3.0	0.0	33.3
NFT-3	Chiller (Ref - Daikin: EWAD-CFXR 740)	833940.5	816326.2	30.0	--	--	92.0	206.2	-54.3	3.0	-10.0	3.0	0.0	33.7
NFT-4	Chiller (Ref - Daikin: EWAD-CFXR 740)	833930.9	816334.6	30.0	--	--	92.0	209.9	-54.4	3.0	-10.0	3.0	0.0	33.6
NFT-5	Chiller (Ref - Daikin: EWAD-CFXR 740)	833940.2	816350.2	30.0	--	--	92.0	227.2	-55.1	3.0	-10.0	3.0	0.0	32.9
NFT-6	Chiller (Ref - Daikin: EWAD-CFXR 740)	833945.5	816358.6	30.0	--	--	92.0	236.7	-55.5	3.0	-10.0	3.0	0.0	32.5
IP-1	Chiller (Ref - Daikin: EWAD-CFXR C15)	833865.3	816416.7	34.0	--	--	95.0	274.4	-56.8	3.0	-10.0	3.0	0.0	34.2
IP-2	Chiller (Ref - Daikin: EWAD-CFXR C15)	833868.3	816414.0	34.0	--	--	95.0	271.9	-56.7	3.0	-10.0	3.0	0.0	34.3
IP-3	Chiller (Ref - Daikin: EWAD-CFXR C15)	833858.1	816402.3	34.0	--	--	95.0	260.1	-56.3	3.0	-10.0	3.0	0.0	34.7
IP-4	Chiller (Ref - Daikin: EWAD-CFXR C15)	833867.9	816406.9	34.0	--	--	95.0	264.9	-56.5	3.0	-10.0	3.0	0.0	34.5
IP-5	Chiller (Ref - Daikin: EWAD-CFXR C15)	833873.5	816404.4	34.0	--	--	95.0	262.8	-56.4	3.0	-10.0	3.0	0.0	34.6
IP-6	Chiller (Ref - Daikin: EWAD-C-XR C16)	833869.2	816389.1	123.3	--	--	95.0	244.2	-55.8	3.0	-10.0	3.0	0.0	35.2
IP-7	Chiller (Ref - Daikin: EWAD-C-XR C16)	833887.8	816392.4	123.3	--	--	95.0	249.2	-55.9	3.0	-10.0	3.0	0.0	35.1
IP-8	Cooling Tower (Ref - ryowo: FC/LN 400)	833881.7	816397.4	123.3	66.0	5.4	88.7	253.4	-56.1	3.0	-10.0	3.0	0.0	28.6
IP-9	Cooling Tower (Ref - ryowo: FC/LN 400)	833887.6	816401.9	123.3	66.0	5.4	88.7	258.5	-56.3	3.0	-10.0	3.0	0.0	28.4
GC-1	Chiller (Ref - Daikin: EWAD-C-XR C16)	833851.1	816339.2	111.8	--	--	95.0	192.8	-53.7	3.0	-10.0	3.0	0.0	37.3
GC-2	Chiller (Ref - Daikin: EWAD-C-XR C16)	833855.6	816337.5	111.8	--	--	95.0	191.1	-53.6	3.0	-10.0	3.0	0.0	37.4
GC-3	Chiller (Ref - Daikin: EWAD-CFXR 740)	833859.7	816335.7	111.8	--	--	92.0	189.4	-53.5	3.0	-10.0	3.0	0.0	34.5
HB-1	Chiller (Ref - Daikin: EWAD-CFXR 740)	834015.0	816407.1	97.5	--	--	92.0	304.9	-57.7	3.0	0.0	3.0	0.0	40.3
PTG-1	Cooling Tower (Ref - ryowo: FC/LN 200)	834056.3	815996.1	87.1	64.0	3.8	83.6	252.4	-56.0	3.0	0.0	3.0	0.0	33.6
PTG-2	Cooling Tower (Ref - ryowo: FC/LN 200)	834053.2	815993.6	87.1	64.0	3.8	83.6	251.4	-56.0	3.0	0.0	3.0	0.0	33.6
										Noise standard:		**65**	**Overall**	**64**

Predicted Noise Level for Fixed Noise Impact Assessment - Base Case Scenario
Night Time
F02 NSR Coordinate: x = 833854.7 y = 816147.9 z = 88.1

Source ID	Description	Industrial Noise x	Industrial Noise y		SPL	Ref dist.	SWL	Slant distance from source	Distance Corr.	Façade Corr.	Barrier Corr.	Tonality Corr.	Impulsive Corr.	ANL
YSA-1	Chiller (Ref - Daikin: EWAD-D-SX 210)	833920.2	816100.0	96.8	--	--	84.0	81.6	-46.2	3.0	0.0	3.0	0.0	43.8
YSA-2	Chiller (Ref - Daikin: EWAD-D-SX 210)	833923.0	816097.1	96.8	--	--	84.0	85.6	-46.6	3.0	0.0	3.0	0.0	43.4
BOW-1	Chiller (Ref - Daikin: EWAD-D-SX 410)	833909.9	816077.7	91.4	--	--	85.0	89.4	-47.0	3.0	0.0	3.0	0.0	44.0
BOW-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833912.2	816075.5	91.4	--	--	85.0	92.5	-47.3	3.0	0.0	3.0	0.0	43.7
PTG-1	Cooling Tower (Ref - ryowo: FC/LN 200)	834056.3	815996.1	87.1	64.0	3.8	83.6	252.4	-56.0	3.0	0.0	3.0	0.0	33.6
PTG-2	Cooling Tower (Ref - ryowo: FC/LN 200)	834053.2	815993.6	87.1	64.0	3.8	83.6	251.4	-56.0	3.0	0.0	3.0	0.0	33.6
										Noise standard:		**55**	**Overall**	**50**

Predicted Noise Level for Fixed Noise Impact Assessment - Base Case Scenario
Day/Evening Time

F02 NSR Coordinate: x = 833854.7 y = 816147.9 z = 117.6

Source ID	Description	Industrial Noise Source Coordinate: x	y	z	SPL	Ref dist.	SWL	Slant distance from source to NSR (m)	Distance Corr.	Façade Corr.	Barrier Corr.	Tonality Corr.	Impulsive Corr.	ANL
OB-1	Chiller (Ref - Daikin: EWAD-D-SX 490)	833870.8	816166.0	121.8	--	--	86.0	24.6	-35.8	3.0	-10.0	3.0	0.0	46.2
OB-2	Cooling Tower (Ref - ryowo: FC/LN 200)	833874.7	816169.8	121.8	64.0	3.8	83.6	30.0	-37.5	3.0	-10.0	3.0	0.0	42.1
CRC-1	Chiller (Ref - Daikin: EWAD-CFXR 740)	833881.0	816161.9	131.1	--	--	92.0	32.7	-38.3	3.0	-10.0	3.0	0.0	49.7
CRC-2	Chiller (Ref - Daikin: EWAD-CFXR 740)	833884.0	816158.8	131.1	--	--	92.0	34.1	-38.6	3.0	-10.0	3.0	0.0	49.4
SB-1	Chiller (Ref - Daikin: EWAD-F-XR 500)	833886.6	816144.1	60.0	--	--	89.0	66.0	-44.4	3.0	0.0	3.0	0.0	50.6
SB-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833887.3	816138.6	60.0	--	--	85.0	66.8	-44.5	3.0	0.0	3.0	0.0	46.5
VHB-1	Chiller (Ref - Daikin: EWAD-D-SX 490)	833928.3	816124.3	88.4	--	--	86.0	82.6	-46.3	3.0	0.0	3.0	0.0	45.7
VHB-2	Chiller (Ref - Daikin: EWAD-D-SX 490)	833932.2	816119.2	88.4	--	--	86.0	87.7	-46.9	3.0	0.0	3.0	0.0	45.1
VHB-3	Chiller (Ref - Daikin: EWAD-D-SX 490)	833929.6	816114.1	88.4	--	--	86.0	87.2	-46.8	3.0	0.0	3.0	0.0	45.2
YSA-1	Chiller (Ref - Daikin: EWAD-D-SX 210)	833920.2	816100.0	96.8	--	--	84.0	83.8	-46.5	3.0	0.0	3.0	0.0	43.5
YSA-2	Chiller (Ref - Daikin: EWAD-D-SX 210)	833923.0	816097.1	96.8	--	--	84.0	87.6	-46.9	3.0	0.0	3.0	0.0	43.1
TLP-1	Chiller (Ref - Daikin: EWAD-C-SR C14)	833913.6	816181.9	51.8	--	--	95.0	94.6	-47.5	3.0	0.0	3.0	0.0	53.5
TLP-2	Chiller (Ref - Daikin: EWAQ-F-XR 330)	833918.0	816188.6	51.8	--	--	87.0	100.0	-48.0	3.0	0.0	3.0	0.0	45.0
TLP-3	Chiller (Ref - Daikin: EWAD-C-SR C14)	833920.3	816184.2	51.8	--	--	95.0	99.8	-48.0	3.0	0.0	3.0	0.0	53.0
TLP-4	Chiller (Ref - Daikin: EWAQ-F-XR 330)	833913.2	816176.1	51.8	--	--	87.0	92.5	-47.3	3.0	0.0	3.0	0.0	45.7
BOW-1	Chiller (Ref - Daikin: EWAD-D-SX 410)	833909.9	816077.7	91.4	--	--	85.0	93.1	-47.4	3.0	0.0	3.0	0.0	43.6
BOW-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833912.2	816075.5	91.4	--	--	85.0	96.1	-47.7	3.0	0.0	3.0	0.0	43.3
WHIB-1	Chiller (Ref - Daikin: EWAD-CFXR 870)	833911.1	816220.6	73.0	--	--	92.0	102.3	-48.2	3.0	0.0	3.0	0.0	49.8
WHIB-2	Chiller (Ref - Daikin: EWAD-CFXR 870)	833918.3	816235.3	73.0	--	--	92.0	116.9	-49.4	3.0	0.0	3.0	0.0	48.6
OCBC-1	Chiller (Ref - Daikin: EWAQ-G-XR 080)	833876.3	816229.0	72.2	--	--	80.0	95.4	-47.6	3.0	-10.0	3.0	0.0	28.4
OCBC-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833875.0	816224.7	72.2	--	--	85.0	91.5	-47.2	3.0	-10.0	3.0	0.0	33.8
OCBC-3	Chiller (Ref - Daikin: EWAD-D-SX 410)	833880.2	816225.5	72.2	--	--	85.0	93.5	-47.4	3.0	-10.0	3.0	0.0	33.6
OCBC-4	Chiller (Ref - Daikin: EWAD-D-SX 410)	833880.2	816220.3	72.2	--	--	85.0	89.2	-47.0	3.0	-10.0	3.0	0.0	34.0
SLCB-1	Chiller (Ref - Daikin: EWAD-CFXR 600)	833884.3	816242.7	73.1	--	--	92.0	108.8	-48.7	3.0	-10.0	3.0	0.0	39.3
AB-1	Chiller (Ref - Daikin: EWAD-D-SX 410)	833947.6	816283.2	72.3	--	--	85.0	170.3	-52.6	3.0	0.0	3.0	0.0	38.4
AB-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833949.1	816285.4	72.3	--	--	85.0	172.8	-52.8	3.0	0.0	3.0	0.0	38.2
HKTC-1	Chiller (Ref - Daikin: EWAD-D-SX 410)	833959.3	816314.2	78.4	--	--	85.0	200.3	-54.0	3.0	0.0	3.0	0.0	37.0
HKTC-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833963.4	816311.4	78.4	--	--	85.0	200.2	-54.0	3.0	0.0	3.0	0.0	37.0
HKTC-3	Chiller (Ref - Daikin: EWAD-D-SX 410)	833967.6	816308.9	78.4	--	--	85.0	200.5	-54.0	3.0	0.0	3.0	0.0	37.0
NCBB-1	Chiller (Ref - Daikin: EWAD-CFXR 600)	833980.6	816305.2	57.4	--	--	92.0	210.3	-54.5	3.0	0.0	3.0	0.0	43.5
NCBB-2	Chiller (Ref - Daikin: EWAD-CFXR 600)	833984.4	816302.9	57.4	--	--	92.0	210.9	-54.5	3.0	0.0	3.0	0.0	43.5
NCBB-3	Chiller (Ref - Daikin: EWAD-CFXR 600)	833988.8	816300.1	57.4	--	--	92.0	211.6	-54.5	3.0	0.0	3.0	0.0	43.5
CTGH-1	Chiller (Ref - Daikin: EWAD-CFXR 600)	833982.3	816343.5	94.0	--	--	92.0	234.7	-55.4	3.0	0.0	3.0	0.0	42.6
CTGH-2	Chiller (Ref - Daikin: EWAD-CFXR 600)	833991.6	816340.8	94.0	--	--	92.0	237.7	-55.5	3.0	0.0	3.0	0.0	42.5
CTGH-3	Chiller (Ref - Daikin: EWAD-CFXR 600)	833986.4	816336.9	94.0	--	--	92.0	231.6	-55.3	3.0	0.0	3.0	0.0	42.7
CTGH-4	Chiller (Ref - Daikin: EWAD-D-SX 410)	833980.3	816333.3	94.0	--	--	85.0	225.2	-55.1	3.0	0.0	3.0	0.0	35.9
TB-1	Chiller (Ref - Daikin: EWAD-CFXR 820)	834003.4	816335.1	84.3	--	--	92.0	241.4	-55.7	3.0	0.0	3.0	0.0	42.3
TB-2	Chiller (Ref - Daikin: EWAD-CFXR 820)	834007.2	816324.2	84.3	--	--	92.0	235.5	-55.4	3.0	0.0	3.0	0.0	42.6
IAB-1	Chiller (Ref - Daikin: EWAD-D-SX 490)	833958.7	816104.1	66.6	--	--	86.0	123.8	-49.9	3.0	0.0	3.0	0.0	42.1
IAB-2	Chiller (Ref - Daikin: EWAD-D-SX 490)	833964.8	816100.4	66.6	--	--	86.0	130.3	-50.3	3.0	0.0	3.0	0.0	41.7
100QRC-1	Chiller (Ref - Daikin: EWAD-CFXR C15)	834011.1	816060.8	129.5	--	--	95.0	179.4	-53.1	3.0	-10.0	3.0	0.0	37.9
100QRC-2	Chiller (Ref - Daikin: EWAD-CFXR C15)	834008.1	816058.1	129.5	--	--	95.0	178.1	-53.0	3.0	-10.0	3.0	0.0	38.0
100QRC-3	Chiller (Ref - Daikin: EWAD-CFXR 600)	834001.8	816055.5	129.5	--	--	92.0	174.1	-52.8	3.0	-10.0	3.0	0.0	35.2
RC-1	Chiller (Ref - Daikin: EWAD-CFXR C15)	834028.6	816025.5	91.7	--	--	95.0	214.2	-54.6	3.0	0.0	3.0	0.0	46.4
RC-2	Chiller (Ref - Daikin: EWAD-CFXR C15)	834028.3	816032.4	91.7	--	--	95.0	210.1	-54.4	3.0	0.0	3.0	0.0	46.6
HQ-1	Cooling Tower (Ref - ryowo: FC/LN 200)	834037.9	816016.4	120.2	64.0	3.8	83.6	225.5	-55.1	3.0	-10.0	3.0	0.0	24.6
HQ-2	Cooling Tower (Ref - ryowo: FC/LN 200)	834039.9	816019.3	120.2	64.0	3.8	83.6	225.5	-55.1	3.0	-10.0	3.0	0.0	24.6
HQ-3	Cooling Tower (Ref - ryowo: FC/LN 200)	834042.0	816022.2	120.2	64.0	3.8	83.6	225.6	-55.1	3.0	-10.0	3.0	0.0	24.6
CH-1	Cooling Tower (Ref - ryowo: FC/LN 400)	834076.4	815970.1	75.6	66.0	5.4	88.7	287.3	-57.2	3.0	0.0	3.0	0.0	37.5
CH-2	Cooling Tower (Ref - ryowo: FC/LN 400)	834081.3	815963.7	75.6	66.0	5.4	88.7	295.0	-57.4	3.0	0.0	3.0	0.0	37.3
POH-1	Chiller (Ref - Daikin: EWAD-D-SX 210)	834009.7	816003.1	97.7	--	--	84.0	213.0	-54.6	3.0	0.0	3.0	0.0	35.4
WTT-1	Chiller (Ref - Daikin: EWAD-CFXR 870)	834016.5	815992.1	85.4	--	--	92.0	226.9	-55.1	3.0	0.0	3.0	0.0	42.9
WTT-2	Chiller (Ref - Daikin: EWAD-CFXR 870)	834024.3	815984.9	85.4	--	--	92.0	237.4	-55.5	3.0	0.0	3.0	0.0	42.5
AST-1	Chiller (Ref - Daikin: EWAD-CFXR C10)	834102.6	816020.6	78.0	--	--	94.0	281.5	-57.0	3.0	0.0	3.0	0.0	43.0
AST-2	Chiller (Ref - Daikin: EWAD-CFXR C10)	834104.5	816017.0	78.0	--	--	94.0	284.8	-57.1	3.0	0.0	3.0	0.0	42.9
AST-3	Chiller (Ref - Daikin: EWAD-D-SX 410)	834095.0	816014.2	78.0	--	--	85.0	277.8	-56.9	3.0	0.0	3.0	0.0	34.1
AST-4	Chiller (Ref - Daikin: EWAD-D-SX 410)	834096.8	816010.9	78.0	--	--	85.0	281.0	-57.0	3.0	0.0	3.0	0.0	34.0
BGLAT-1	Chiller (Ref - Daikin: EWAD-CFXR 740)	833959.9	816246.5	16.5	--	--	92.0	176.1	-52.9	3.0	0.0	3.0	0.0	45.1
BGLAT-2	Chiller (Ref - Daikin: EWAD-CFXR 740)	833964.4	816243.1	16.5	--	--	92.0	177.0	-53.0	3.0	0.0	3.0	0.0	45.0
TSBB-1	Chiller (Ref - Daikin: EWAD-D-SX 490)	833986.9	816259.8	56.3	--	--	86.0	183.7	-53.3	3.0	0.0	3.0	0.0	38.7
TSBB-2	Chiller (Ref - Daikin: EWAD-D-SX 490)	833991.5	816257.1	56.3	--	--	86.0	185.5	-53.4	3.0	0.0	3.0	0.0	38.6
PBC-1	Chiller (Ref - Daikin: EWAD-D-SX 410)	833994.6	816244.2	76.6	--	--	85.0	174.7	-52.8	3.0	0.0	3.0	0.0	38.2
PBC-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	834001.4	816248.4	76.6	--	--	85.0	182.5	-53.2	3.0	0.0	3.0	0.0	37.8
JC-1	Chiller (Ref - Daikin: EWAD-CFXR 740)	833950.9	816005.0	99.6	--	--	92.0	173.2	-52.8	3.0	0.0	3.0	0.0	45.2
1LT-1	Chiller (Ref - Daikin: EWAD-CFXR 600)	833980.8	815970.5	102.3	--	--	92.0	218.2	-54.8	3.0	0.0	3.0	0.0	43.2
1LT-2	Chiller (Ref - Daikin: EWAD-CFXR 600)	833979.5	815966.3	102.3	--	--	92.0	220.9	-54.9	3.0	0.0	3.0	0.0	43.1
SS-1	Chiller (Ref - Daikin: EWAQ-G-XR 090)	833918.4	815974.4	107.3	--	--	82.0	185.1	-53.3	3.0	-10.0	3.0	0.0	24.7
SS-2	Chiller (Ref - Daikin: EWAQ-G-XR 090)	833919.8	815972.9	107.3	--	--	82.0	187.0	-53.4	3.0	-10.0	3.0	0.0	24.6
CPCB-1	Chiller (Ref - Daikin: EWAD-D-SX 410)	833977.2	815919.4	116.3	--	--	85.0	259.3	-56.3	3.0	-10.0	3.0	0.0	24.7
HC-1	Chiller (Ref - Daikin: EWAD-D-SX 490)	833930.1	815929.6	121.7	--	--	86.0	231.0	-55.3	3.0	-10.0	3.0	0.0	26.7
HC-2	Chiller (Ref - Daikin: EWAD-D-SX 490)	833933.6	815929.3	121.7	--	--	86.0	232.4	-55.3	3.0	-10.0	3.0	0.0	26.7
HC-3	Chiller (Ref - Daikin: EWAD-D-SX 490)	833936.6	815929.1	121.7	--	--	86.0	233.7	-55.4	3.0	-10.0	3.0	0.0	26.6
HC-4	Chiller (Ref - Daikin: EWAD-D-SX 490)	833942.4	815934.1	121.7	--	--	86.0	231.1	-55.3	3.0	-10.0	3.0	0.0	26.7
HC-5	Chiller (Ref - Daikin: EWAD-D-SX 490)	833945.5	815933.8	121.7	--	--	86.0	232.6	-55.3	3.0	-10.0	3.0	0.0	26.7
HC-6	Chiller (Ref - Daikin: EWAD-D-SX 490)	833942.8	815925.3	121.7	--	--	86.0	239.4	-55.6	3.0	-10.0	3.0	0.0	26.4
HC-7	Chiller (Ref - Daikin: EWAD-D-SX 490)	833938.2	815920.5	121.7	--	--	86.0	242.3	-55.7	3.0	-10.0	3.0	0.0	26.3
HC-8	Chiller (Ref - Daikin: EWAD-D-SX 490)	833941.3	815919.5	121.7	--	--	86.0	244.3	-55.8	3.0	-10.0	3.0	0.0	26.2
KC-1	Chiller (Ref - Daikin: EWAD-C-XR C16)	833838.9	815913.7	132.0	--	--	95.0	235.2	-55.4	3.0	-10.0	3.0	0.0	35.6
KC-2	Chiller (Ref - Daikin: EWAD-C-XR C16)	833828.9	815902.1	132.0	--	--	95.0	247.6	-55.9	3.0	-10.0	3.0	0.0	35.1
KC-3	Chiller (Ref - Daikin: EWAD-D-SX 490)	833820.6	815901.4	132.0	--	--	86.0	249.3	-55.9	3.0	-10.0	3.0	0.0	26.1
TW-1	Cooling Tower (Ref - ryowo: FC/LN 200)	833804.8	816218.3	132.1	64.0	3.8	83.6	87.5	-46.8	3.0	-10.0	3.0	0.0	32.8
TW-2	Cooling Tower (Ref - ryowo: FC/LN 200)	833809.5	816213.8	132.1	64.0	3.8	83.6	81.2	-46.2	3.0	-10.0	3.0	0.0	33.5

299Q-1	Chiller (Ref - Daikin: EWAD-CFXR 600)	833564.5	816227.4	80.9	--	--	92.0	303.1	-57.6	3.0	-10.0	3.0	0.0	30.4
299Q-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833559.6	816230.8	80.9	--	--	85.0	308.7	-57.8	3.0	-10.0	3.0	0.0	23.2
299Q-3	Chiller (Ref - Daikin: EWAD-CFXR 600)	833556.5	816237.1	80.9	--	--	92.0	313.4	-57.9	3.0	-10.0	3.0	0.0	30.1
PBT-1	Chiller (Ref - Daikin: EWAD-CFXR 600)	833715.7	816289.5	83.6	--	--	92.0	201.3	-54.1	3.0	-10.0	3.0	0.0	33.9
PBT-2	Chiller (Ref - Daikin: EWAD-CFXR 600)	833716.2	816284.4	83.6	--	--	92.0	197.4	-53.9	3.0	-10.0	3.0	0.0	34.1
PBT-3	Chiller (Ref - Daikin: EWAD-D-SX 410)	833724.7	816288.4	83.6	--	--	85.0	194.4	-53.8	3.0	-10.0	3.0	0.0	27.2
BC-1	Chiller (Ref - Daikin: EWAD-D-SX 490)	833646.5	816307.1	108.3	--	--	86.0	262.3	-56.4	3.0	-10.0	3.0	0.0	25.6
BC-2	Chiller (Ref - Daikin: EWAD-D-SX 490)	833651.7	816304.6	108.3	--	--	86.0	256.6	-56.2	3.0	-10.0	3.0	0.0	25.8
S50-1	Chiller (Ref - Daikin: EWAD-CFXR 740)	833628.2	816325.3	98.0	--	--	92.0	288.4	-57.2	3.0	-10.0	3.0	0.0	30.8
S50-2	Chiller (Ref - Daikin: EWAD-CFXR 740)	833635.2	816325.0	98.0	--	--	92.0	282.7	-57.0	3.0	-10.0	3.0	0.0	31.0
S50-3	Chiller (Ref - Daikin: EWAD-CFXR 740)	833632.9	816321.3	98.0	--	--	92.0	282.2	-57.0	3.0	-10.0	3.0	0.0	31.0
HSBH-1	Cooling Tower (Ref - ryowo: FC/LN 200)	834145.9	816199.3	136.2	64.0	3.8	83.6	296.3	-57.4	3.0	-10.0	3.0	0.0	22.2
HSBH-2	Cooling Tower (Ref - ryowo: FC/LN 200)	834149.0	816195.3	136.2	64.0	3.8	83.6	298.7	-57.5	3.0	-10.0	3.0	0.0	22.1
HSBH-3	Cooling Tower (Ref - ryowo: FC/LN 200)	834138.9	816194.1	136.2	64.0	3.8	83.6	288.5	-57.2	3.0	-10.0	3.0	0.0	22.4
HSBH-4	Cooling Tower (Ref - ryowo: FC/LN 200)	834142.1	816190.0	136.2	64.0	3.8	83.6	291.1	-57.3	3.0	-10.0	3.0	0.0	22.4
HSBH-5	Chiller (Ref - Daikin: EWAD-CFXR 600)	834130.7	816195.9	136.2	--	--	92.0	280.8	-57.0	3.0	-10.0	3.0	0.0	31.0
HSBH-6	Chiller (Ref - Daikin: EWAD-CFXR C15)	834129.8	816191.8	136.2	--	--	95.0	279.2	-56.9	3.0	-10.0	3.0	0.0	34.1
HSBH-7	Chiller (Ref - Daikin: EWAD-CFXR C15)	834137.8	816179.8	136.2	--	--	95.0	285.5	-57.1	3.0	-10.0	3.0	0.0	33.9
NFT-1	Chiller (Ref - Daikin: EWAD-CFXR 740)	833967.2	816341.7	30.0	--	--	92.0	240.6	-55.6	3.0	-10.0	3.0	0.0	32.4
NFT-2	Chiller (Ref - Daikin: EWAD-CFXR 740)	833959.3	816329.1	30.0	--	--	92.0	226.8	-55.1	3.0	-10.0	3.0	0.0	32.9
NFT-3	Chiller (Ref - Daikin: EWAD-CFXR 740)	833940.5	816326.2	30.0	--	--	92.0	216.4	-54.7	3.0	-10.0	3.0	0.0	33.3
NFT-4	Chiller (Ref - Daikin: EWAD-CFXR 740)	833930.9	816334.6	30.0	--	--	92.0	219.9	-54.8	3.0	-10.0	3.0	0.0	33.2
NFT-5	Chiller (Ref - Daikin: EWAD-CFXR 740)	833940.2	816350.2	30.0	--	--	92.0	236.5	-55.5	3.0	-10.0	3.0	0.0	32.5
NFT-6	Chiller (Ref - Daikin: EWAD-CFXR 740)	833945.5	816358.6	30.0	--	--	92.0	245.6	-55.8	3.0	-10.0	3.0	0.0	32.2
IP-1	Chiller (Ref - Daikin: EWAD-CFXR C15)	833865.3	816416.7	34.0	--	--	95.0	281.7	-57.0	3.0	-10.0	3.0	0.0	34.0
IP-2	Chiller (Ref - Daikin: EWAD-CFXR C15)	833868.3	816414.0	34.0	--	--	95.0	279.3	-56.9	3.0	-10.0	3.0	0.0	34.1
IP-3	Chiller (Ref - Daikin: EWAD-CFXR C15)	833858.1	816402.3	34.0	--	--	95.0	267.8	-56.6	3.0	-10.0	3.0	0.0	34.4
IP-4	Chiller (Ref - Daikin: EWAD-CFXR C15)	833867.9	816406.9	34.0	--	--	95.0	272.5	-56.7	3.0	-10.0	3.0	0.0	34.3
IP-5	Chiller (Ref - Daikin: EWAD-CFXR C15)	833873.5	816404.4	34.0	--	--	95.0	270.4	-56.6	3.0	-10.0	3.0	0.0	34.4
IP-6	Chiller (Ref - Daikin: EWAD-C-XR C16)	833869.2	816389.1	123.3	--	--	95.0	241.7	-55.7	3.0	-10.0	3.0	0.0	35.3
IP-7	Chiller (Ref - Daikin: EWAD-C-XR C16)	833887.8	816392.4	123.3	--	--	95.0	246.8	-55.8	3.0	-10.0	3.0	0.0	35.2
IP-8	Cooling Tower (Ref - ryowo: FC/LN 400)	833881.7	816397.4	123.3	66.0	5.4	88.7	251.0	-56.0	3.0	-10.0	3.0	0.0	28.7
IP-9	Cooling Tower (Ref - ryowo: FC/LN 400)	833887.6	816401.9	123.3	66.0	5.4	88.7	256.2	-56.2	3.0	-10.0	3.0	0.0	28.5
GC-1	Chiller (Ref - Daikin: EWAD-C-XR C16)	833851.1	816339.2	111.8	--	--	95.0	191.4	-53.6	3.0	-10.0	3.0	0.0	37.4
GC-2	Chiller (Ref - Daikin: EWAD-C-XR C16)	833855.6	816337.5	111.8	--	--	95.0	189.7	-53.6	3.0	-10.0	3.0	0.0	37.4
GC-3	Chiller (Ref - Daikin: EWAD-CFXR 740)	833859.7	816335.7	111.8	--	--	92.0	188.0	-53.5	3.0	-10.0	3.0	0.0	34.5
HB-1	Chiller (Ref - Daikin: EWAD-CFXR 740)	834015.0	816407.1	97.5	--	--	92.0	305.4	-57.7	3.0	0.0	3.0	0.0	40.3
PTG-1	Cooling Tower (Ref - ryowo: FC/LN 200)	834056.3	815996.1	87.1	64.0	3.8	83.6	254.2	-56.1	3.0	0.0	3.0	0.0	33.5
PTG-2	Cooling Tower (Ref - ryowo: FC/LN 200)	834053.2	815993.6	87.1	64.0	3.8	83.6	253.3	-56.1	3.0	0.0	3.0	0.0	33.6
										Noise standard:		**65**	**Overall**	**63**

Predicted Noise Level for Fixed Noise Impact Assessment - Base Case Scenario
Night Time
F02 NSR Coordinate: x = 833854.7 y = 816147.9 z = 117.6

Source ID	Description	Industrial Noise x	Industrial Noise y		SPL	Ref dist.	SWL	Slant distance from source	Distance Corr.	Façade Corr.	Barrier Corr.	Tonality Corr.	Impulsive Corr.	ANL
YSA-1	Chiller (Ref - Daikin: EWAD-D-SX 210)	833920.2	816100.0	96.8	--	--	84.0	83.8	-46.5	3.0	0.0	3.0	0.0	43.5
YSA-2	Chiller (Ref - Daikin: EWAD-D-SX 210)	833923.0	816097.1	96.8	--	--	84.0	87.6	-46.9	3.0	0.0	3.0	0.0	43.1
BOW-1	Chiller (Ref - Daikin: EWAD-D-SX 410)	833909.9	816077.7	91.4	--	--	85.0	93.1	-47.4	3.0	0.0	3.0	0.0	43.6
BOW-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833912.2	816075.5	91.4	--	--	85.0	96.1	-47.7	3.0	0.0	3.0	0.0	43.3
PTG-1	Cooling Tower (Ref - ryowo: FC/LN 200)	834056.3	815996.1	87.1	64.0	3.8	83.6	254.2	-56.1	3.0	0.0	3.0	0.0	33.5
PTG-2	Cooling Tower (Ref - ryowo: FC/LN 200)	834053.2	815993.6	87.1	64.0	3.8	83.6	253.3	-56.1	3.0	0.0	3.0	0.0	33.6
										Noise standard:		**55**	**Overall**	**50**

Predicted Noise Level for Fixed Noise Impact Assessment - Base Case Scenario
Day/Evening Time
F03 NSR Coordinate: x = 833838.9 y = 816138.3 z = 59.0

Source ID	Description	Industrial Noise Source Coordinate: x	y	z	SPL	Ref dist.	SWL	Slant distance from source to NSR (m)	Distance Corr.	Façade Corr.	Barrier Corr.	Tonality Corr.	Impulsive Corr.	ANL
OB-1	Chiller (Ref - Daikin: EWAD-D-SX 490)	833870.8	816166.0	121.8	--	--	86.0	75.7	-45.6	3.0	-10.0	3.0	0.0	36.4
OB-2	Cooling Tower (Ref - ryowo: FC/LN 200)	833874.7	816169.8	121.8	64.0	3.8	83.6	78.9	-45.9	3.0	-10.0	3.0	0.0	33.7
CRC-1	Chiller (Ref - Daikin: EWAD-CFXR 740)	833881.0	816161.9	131.1	--	--	92.0	86.8	-46.8	3.0	-10.0	3.0	0.0	41.2
CRC-2	Chiller (Ref - Daikin: EWAD-CFXR 740)	833884.0	816158.8	131.1	--	--	92.0	87.5	-46.8	3.0	-10.0	3.0	0.0	41.2
SB-1	Chiller (Ref - Daikin: EWAD-F-XR 500)	833886.6	816144.1	60.0	--	--	89.0	48.1	-41.6	3.0	-10.0	3.0	0.0	43.4
SB-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833887.3	816138.6	60.0	--	--	85.0	48.4	-41.7	3.0	-10.0	3.0	0.0	39.3
VHB-1	Chiller (Ref - Daikin: EWAD-D-SX 490)	833928.3	816124.3	88.4	--	--	86.0	95.1	-47.6	3.0	0.0	3.0	0.0	44.4
VHB-2	Chiller (Ref - Daikin: EWAD-D-SX 490)	833932.2	816119.2	88.4	--	--	86.0	99.7	-48.0	3.0	0.0	3.0	0.0	44.0
VHB-3	Chiller (Ref - Daikin: EWAD-D-SX 490)	833929.6	816114.1	88.4	--	--	86.0	98.4	-47.9	3.0	0.0	3.0	0.0	44.1
YSA-1	Chiller (Ref - Daikin: EWAD-D-SX 210)	833920.2	816100.0	96.8	--	--	84.0	97.5	-47.8	3.0	0.0	3.0	0.0	42.2
YSA-2	Chiller (Ref - Daikin: EWAD-D-SX 210)	833923.0	816097.1	96.8	--	--	84.0	101.0	-48.1	3.0	0.0	3.0	0.0	41.9
TLP-1	Chiller (Ref - Daikin: EWAD-C-SR C14)	833913.6	816181.9	51.8	--	--	95.0	86.8	-46.8	3.0	-10.0	3.0	0.0	44.2
TLP-2	Chiller (Ref - Daikin: EWAQ-F-XR 330)	833918.0	816188.6	51.8	--	--	87.0	94.0	-47.5	3.0	-10.0	3.0	0.0	35.5
TLP-3	Chiller (Ref - Daikin: EWAD-C-SR C14)	833920.3	816184.2	51.8	--	--	95.0	93.7	-47.4	3.0	-10.0	3.0	0.0	43.6
TLP-4	Chiller (Ref - Daikin: EWAQ-F-XR 330)	833913.2	816176.1	51.8	--	--	87.0	83.7	-46.5	3.0	-10.0	3.0	0.0	36.5
BOW-1	Chiller (Ref - Daikin: EWAD-D-SX 410)	833909.9	816077.7	91.4	--	--	85.0	98.8	-47.9	3.0	0.0	3.0	0.0	43.1
BOW-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833912.2	816075.5	91.4	--	--	85.0	101.8	-48.2	3.0	0.0	3.0	0.0	42.8
WHIB-1	Chiller (Ref - Daikin: EWAD-CFXR 870)	833911.1	816220.6	73.0	--	--	92.0	110.4	-48.9	3.0	-10.0	3.0	0.0	39.1
WHIB-2	Chiller (Ref - Daikin: EWAD-CFXR 870)	833918.3	816235.3	73.0	--	--	92.0	126.1	-50.0	3.0	-10.0	3.0	0.0	38.0
OCBC-1	Chiller (Ref - Daikin: EWAQ-G-XR 080)	833876.3	816229.0	72.2	--	--	80.0	99.0	-47.9	3.0	-10.0	3.0	0.0	28.1
OCBC-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833875.0	816224.7	72.2	--	--	85.0	94.6	-47.5	3.0	-10.0	3.0	0.0	33.5
OCBC-3	Chiller (Ref - Daikin: EWAD-D-SX 410)	833880.2	816225.5	72.2	--	--	85.0	97.4	-47.8	3.0	-10.0	3.0	0.0	33.2
OCBC-4	Chiller (Ref - Daikin: EWAD-D-SX 410)	833880.2	816220.3	72.2	--	--	85.0	92.8	-47.3	3.0	-10.0	3.0	0.0	33.7
SLCB-1	Chiller (Ref - Daikin: EWAD-CFXR 600)	833884.3	816242.7	73.1	--	--	92.0	114.7	-49.2	3.0	-10.0	3.0	0.0	38.8
AB-1	Chiller (Ref - Daikin: EWAD-D-SX 410)	833947.6	816283.2	72.3	--	--	85.0	181.6	-53.2	3.0	-10.0	3.0	0.0	27.8
AB-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833949.1	816285.4	72.3	--	--	85.0	184.3	-53.3	3.0	-10.0	3.0	0.0	27.7
HKTC-1	Chiller (Ref - Daikin: EWAD-D-SX 410)	833959.3	816314.2	78.4	--	--	85.0	214.0	-54.6	3.0	-10.0	3.0	0.0	26.4
HKTC-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833963.4	816311.4	78.4	--	--	85.0	214.1	-54.6	3.0	-10.0	3.0	0.0	26.4
HKTC-3	Chiller (Ref - Daikin: EWAD-D-SX 410)	833967.6	816308.9	78.4	--	--	85.0	214.6	-54.6	3.0	-10.0	3.0	0.0	26.4
NCBB-1	Chiller (Ref - Daikin: EWAD-CFXR 600)	833980.6	816305.2	57.4	--	--	92.0	218.9	-54.8	3.0	-10.0	3.0	0.0	33.2
NCBB-2	Chiller (Ref - Daikin: EWAD-CFXR 600)	833984.4	816302.9	57.4	--	--	92.0	219.7	-54.8	3.0	-10.0	3.0	0.0	33.2
NCBB-3	Chiller (Ref - Daikin: EWAD-CFXR 600)	833988.8	816300.1	57.4	--	--	92.0	220.6	-54.9	3.0	-10.0	3.0	0.0	33.1
CTGH-1	Chiller (Ref - Daikin: EWAD-CFXR 600)	833982.3	816343.5	94.0	--	--	92.0	252.8	-56.1	3.0	-10.0	3.0	0.0	31.9
CTGH-2	Chiller (Ref - Daikin: EWAD-CFXR 600)	833991.6	816340.8	94.0	--	--	92.0	256.0	-56.2	3.0	-10.0	3.0	0.0	31.8
CTGH-3	Chiller (Ref - Daikin: EWAD-CFXR 600)	833986.4	816336.9	94.0	--	--	92.0	249.8	-56.0	3.0	-10.0	3.0	0.0	32.0
CTGH-4	Chiller (Ref - Daikin: EWAD-D-SX 410)	833980.3	816333.3	94.0	--	--	85.0	243.4	-55.7	3.0	-10.0	3.0	0.0	25.3
TB-1	Chiller (Ref - Daikin: EWAD-CFXR 820)	834003.4	816335.1	84.3	--	--	92.0	257.7	-56.2	3.0	-10.0	3.0	0.0	31.8
TB-2	Chiller (Ref - Daikin: EWAD-CFXR 820)	834007.2	816324.2	84.3	--	--	92.0	252.0	-56.0	3.0	-10.0	3.0	0.0	32.0
IAB-1	Chiller (Ref - Daikin: EWAD-D-SX 490)	833958.7	816104.1	66.6	--	--	86.0	124.8	-49.9	3.0	0.0	3.0	0.0	42.1
IAB-2	Chiller (Ref - Daikin: EWAD-D-SX 490)	833964.8	816100.4	66.6	--	--	86.0	131.7	-50.4	3.0	0.0	3.0	0.0	41.6
100QRC-1	Chiller (Ref - Daikin: EWAD-CFXR C15)	834011.1	816060.8	129.5	--	--	95.0	201.6	-54.1	3.0	-10.0	3.0	0.0	36.9
100QRC-2	Chiller (Ref - Daikin: EWAD-CFXR C15)	834008.1	816058.1	129.5	--	--	95.0	200.1	-54.0	3.0	-10.0	3.0	0.0	37.0
100QRC-3	Chiller (Ref - Daikin: EWAD-CFXR 600)	834001.8	816055.5	129.5	--	--	92.0	195.9	-53.8	3.0	-10.0	3.0	0.0	34.2
RC-1	Chiller (Ref - Daikin: EWAD-CFXR C15)	834028.6	816025.5	91.7	--	--	95.0	223.1	-55.0	3.0	0.0	3.0	0.0	46.0
RC-2	Chiller (Ref - Daikin: EWAD-CFXR C15)	834028.3	816032.4	91.7	--	--	95.0	219.4	-54.8	3.0	0.0	3.0	0.0	46.2
HQ-1	Cooling Tower (Ref - ryowo: FC/LN 200)	834037.9	816016.4	120.2	64.0	3.8	83.6	241.3	-55.6	3.0	-10.0	3.0	0.0	24.0
HQ-2	Cooling Tower (Ref - ryowo: FC/LN 200)	834039.9	816019.3	120.2	64.0	3.8	83.6	241.5	-55.7	3.0	-10.0	3.0	0.0	24.0
HQ-3	Cooling Tower (Ref - ryowo: FC/LN 200)	834042.0	816022.2	120.2	64.0	3.8	83.6	241.8	-55.7	3.0	-10.0	3.0	0.0	24.0
CH-1	Cooling Tower (Ref - ryowo: FC/LN 400)	834076.4	815970.1	75.6	66.0	5.4	88.7	291.5	-57.3	3.0	0.0	3.0	0.0	37.4
CH-2	Cooling Tower (Ref - ryowo: FC/LN 400)	834081.3	815963.7	75.6	66.0	5.4	88.7	299.2	-57.5	3.0	0.0	3.0	0.0	37.1
POH-1	Chiller (Ref - Daikin: EWAD-D-SX 210)	834009.7	816003.1	97.7	--	--	84.0	221.2	-54.9	3.0	0.0	3.0	0.0	35.1
WTT-1	Chiller (Ref - Daikin: EWAD-CFXR 870)	834016.5	815992.1	85.4	--	--	92.0	231.5	-55.3	3.0	0.0	3.0	0.0	42.7
WTT-2	Chiller (Ref - Daikin: EWAD-CFXR 870)	834024.3	815984.9	85.4	--	--	92.0	242.1	-55.7	3.0	0.0	3.0	0.0	42.3
AST-1	Chiller (Ref - Daikin: EWAD-CFXR C10)	834102.6	816020.6	78.0	--	--	94.0	289.4	-57.2	3.0	-10.0	3.0	0.0	32.8
AST-2	Chiller (Ref - Daikin: EWAD-CFXR C10)	834104.5	816017.0	78.0	--	--	94.0	292.6	-57.3	3.0	-10.0	3.0	0.0	32.7
AST-3	Chiller (Ref - Daikin: EWAD-D-SX 410)	834095.0	816014.2	78.0	--	--	85.0	285.2	-57.1	3.0	-10.0	3.0	0.0	23.9
AST-4	Chiller (Ref - Daikin: EWAD-D-SX 410)	834096.8	816010.9	78.0	--	--	85.0	288.3	-57.2	3.0	-10.0	3.0	0.0	23.8
BGLAT-1	Chiller (Ref - Daikin: EWAD-CFXR 740)	833959.9	816246.5	16.5	--	--	92.0	167.8	-52.5	3.0	-10.0	3.0	0.0	35.5
BGLAT-2	Chiller (Ref - Daikin: EWAD-CFXR 740)	833964.4	816243.1	16.5	--	--	92.0	168.9	-52.6	3.0	-10.0	3.0	0.0	35.4
TSBB-1	Chiller (Ref - Daikin: EWAD-D-SX 490)	833986.9	816259.8	56.3	--	--	86.0	191.5	-53.6	3.0	-10.0	3.0	0.0	28.4
TSBB-2	Chiller (Ref - Daikin: EWAD-D-SX 490)	833991.5	816257.1	56.3	--	--	86.0	193.4	-53.7	3.0	-10.0	3.0	0.0	28.3
PBC-1	Chiller (Ref - Daikin: EWAD-D-SX 410)	833994.6	816244.2	76.6	--	--	85.0	189.1	-53.5	3.0	-10.0	3.0	0.0	27.5
PBC-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	834001.4	816248.4	76.6	--	--	85.0	197.1	-53.9	3.0	-10.0	3.0	0.0	27.1
JC-1	Chiller (Ref - Daikin: EWAD-CFXR 740)	833950.9	816005.0	99.6	--	--	92.0	178.8	-53.0	3.0	-10.0	3.0	0.0	35.0
1LT-1	Chiller (Ref - Daikin: EWAD-CFXR 600)	833980.8	815970.5	102.3	--	--	92.0	224.0	-55.0	3.0	-10.0	3.0	0.0	33.0
1LT-2	Chiller (Ref - Daikin: EWAD-CFXR 600)	833979.5	815966.3	102.3	--	--	92.0	226.3	-55.1	3.0	-10.0	3.0	0.0	32.9
SS-1	Chiller (Ref - Daikin: EWAQ-G-XR 090)	833918.4	815974.4	107.3	--	--	82.0	188.5	-53.5	3.0	-10.0	3.0	0.0	24.5
SS-2	Chiller (Ref - Daikin: EWAQ-G-XR 090)	833919.8	815972.9	107.3	--	--	82.0	190.4	-53.6	3.0	-10.0	3.0	0.0	24.4
CPCB-1	Chiller (Ref - Daikin: EWAD-D-SX 410)	833977.2	815919.4	116.3	--	--	85.0	265.2	-56.5	3.0	-10.0	3.0	0.0	24.5
HC-1	Chiller (Ref - Daikin: EWAD-D-SX 490)	833930.1	815929.6	121.7	--	--	86.0	236.2	-55.5	3.0	-10.0	3.0	0.0	26.5
HC-2	Chiller (Ref - Daikin: EWAD-D-SX 490)	833933.6	815929.3	121.7	--	--	86.0	237.9	-55.5	3.0	-10.0	3.0	0.0	26.5
HC-3	Chiller (Ref - Daikin: EWAD-D-SX 490)	833936.6	815929.1	121.7	--	--	86.0	239.3	-55.6	3.0	-10.0	3.0	0.0	26.4
HC-4	Chiller (Ref - Daikin: EWAD-D-SX 490)	833942.4	815934.1	121.7	--	--	86.0	237.4	-55.5	3.0	-10.0	3.0	0.0	26.5
HC-5	Chiller (Ref - Daikin: EWAD-D-SX 490)	833945.5	815933.8	121.7	--	--	86.0	239.0	-55.6	3.0	-10.0	3.0	0.0	26.4
HC-6	Chiller (Ref - Daikin: EWAD-D-SX 490)	833942.8	815925.3	121.7	--	--	86.0	245.1	-55.8	3.0	-10.0	3.0	0.0	26.2
HC-7	Chiller (Ref - Daikin: EWAD-D-SX 490)	833938.2	815920.5	121.7	--	--	86.0	247.4	-55.9	3.0	-10.0	3.0	0.0	26.1
HC-8	Chiller (Ref - Daikin: EWAD-D-SX 490)	833941.3	815919.5	121.7	--	--	86.0	249.6	-55.9	3.0	-10.0	3.0	0.0	26.1
KC-1	Chiller (Ref - Daikin: EWAD-C-XR C16)	833838.9	815913.7	132.0	--	--	95.0	236.2	-55.5	3.0	0.0	3.0	0.0	45.5
KC-2	Chiller (Ref - Daikin: EWAD-C-XR C16)	833828.9	815902.1	132.0	--	--	95.0	247.4	-55.9	3.0	0.0	3.0	0.0	45.1
KC-3	Chiller (Ref - Daikin: EWAD-D-SX 490)	833820.6	815901.4	132.0	--	--	86.0	248.6	-55.9	3.0	0.0	3.0	0.0	36.1
TW-1	Cooling Tower (Ref - ryowo: FC/LN 200)	833804.8	816218.3	132.1	64.0	3.8	83.6	113.6	-49.1	3.0	-10.0	3.0	0.0	30.5
TW-2	Cooling Tower (Ref - ryowo: FC/LN 200)	833809.5	816213.8	132.1	64.0	3.8	83.6	109.1	-48.8	3.0	-10.0	3.0	0.0	30.9

299Q-1	Chiller (Ref - Daikin: EWAD-CFXR 600)	833564.5	816227.4	80.9	--	--	92.0	289.3	-57.2	3.0	0.0	3.0	0.0	40.8
299Q-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833559.6	816230.8	80.9	--	--	85.0	295.0	-57.4	3.0	0.0	3.0	0.0	33.6
299Q-3	Chiller (Ref - Daikin: EWAD-CFXR 600)	833556.5	816237.1	80.9	--	--	92.0	300.0	-57.5	3.0	0.0	3.0	0.0	40.5
PBT-1	Chiller (Ref - Daikin: EWAD-CFXR 600)	833715.7	816289.5	83.6	--	--	92.0	196.6	-53.9	3.0	0.0	3.0	0.0	44.1
PBT-2	Chiller (Ref - Daikin: EWAD-CFXR 600)	833716.2	816284.4	83.6	--	--	92.0	192.4	-53.7	3.0	0.0	3.0	0.0	44.3
PBT-3	Chiller (Ref - Daikin: EWAD-D-SX 410)	833724.7	816288.4	83.6	--	--	85.0	190.2	-53.6	3.0	0.0	3.0	0.0	37.4
BC-1	Chiller (Ref - Daikin: EWAD-D-SX 490)	833646.5	816307.1	108.3	--	--	86.0	260.7	-56.3	3.0	0.0	3.0	0.0	35.7
BC-2	Chiller (Ref - Daikin: EWAD-D-SX 490)	833651.7	816304.6	108.3	--	--	86.0	255.2	-56.1	3.0	0.0	3.0	0.0	35.9
S50-1	Chiller (Ref - Daikin: EWAD-CFXR 740)	833628.2	816325.3	98.0	--	--	92.0	284.4	-57.1	3.0	0.0	3.0	0.0	40.9
S50-2	Chiller (Ref - Daikin: EWAD-CFXR 740)	833635.2	816325.0	98.0	--	--	92.0	279.1	-56.9	3.0	0.0	3.0	0.0	41.1
S50-3	Chiller (Ref - Daikin: EWAD-CFXR 740)	833632.9	816321.3	98.0	--	--	92.0	278.3	-56.9	3.0	0.0	3.0	0.0	41.1
HSBH-1	Cooling Tower (Ref - ryowo: FC/LN 200)	834145.9	816199.3	136.2	64.0	3.8	83.6	322.4	-58.2	3.0	-10.0	3.0	0.0	21.5
HSBH-2	Cooling Tower (Ref - ryowo: FC/LN 200)	834149.0	816195.3	136.2	64.0	3.8	83.6	324.6	-58.2	3.0	-10.0	3.0	0.0	21.4
HSBH-3	Cooling Tower (Ref - ryowo: FC/LN 200)	834138.9	816194.1	136.2	64.0	3.8	83.6	314.8	-58.0	3.0	-10.0	3.0	0.0	21.7
HSBH-4	Cooling Tower (Ref - ryowo: FC/LN 200)	834142.1	816190.0	136.2	64.0	3.8	83.6	317.1	-58.0	3.0	-10.0	3.0	0.0	21.6
HSBH-5	Chiller (Ref - Daikin: EWAD-CFXR 600)	834130.7	816195.9	136.2	--	--	92.0	307.3	-57.8	3.0	-10.0	3.0	0.0	30.2
HSBH-6	Chiller (Ref - Daikin: EWAD-CFXR C15)	834129.8	816191.8	136.2	--	--	95.0	305.7	-57.7	3.0	-10.0	3.0	0.0	33.3
HSBH-7	Chiller (Ref - Daikin: EWAD-CFXR C15)	834137.8	816179.8	136.2	--	--	95.0	311.5	-57.9	3.0	-10.0	3.0	0.0	33.1
NFT-1	Chiller (Ref - Daikin: EWAD-CFXR 740)	833967.2	816341.7	30.0	--	--	92.0	242.2	-55.7	3.0	-10.0	3.0	0.0	32.3
NFT-2	Chiller (Ref - Daikin: EWAD-CFXR 740)	833959.3	816329.1	30.0	--	--	92.0	227.5	-55.1	3.0	-10.0	3.0	0.0	32.9
NFT-3	Chiller (Ref - Daikin: EWAD-CFXR 740)	833940.5	816326.2	30.0	--	--	92.0	215.6	-54.7	3.0	-10.0	3.0	0.0	33.3
NFT-4	Chiller (Ref - Daikin: EWAD-CFXR 740)	833930.9	816334.6	30.0	--	--	92.0	218.7	-54.8	3.0	-10.0	3.0	0.0	33.2
NFT-5	Chiller (Ref - Daikin: EWAD-CFXR 740)	833940.2	816350.2	30.0	--	--	92.0	236.7	-55.5	3.0	-10.0	3.0	0.0	32.5
NFT-6	Chiller (Ref - Daikin: EWAD-CFXR 740)	833945.5	816358.6	30.0	--	--	92.0	246.4	-55.8	3.0	-10.0	3.0	0.0	32.2
IP-1	Chiller (Ref - Daikin: EWAD-CFXR C15)	833865.3	816416.7	34.0	--	--	95.0	280.8	-57.0	3.0	-10.0	3.0	0.0	34.0
IP-2	Chiller (Ref - Daikin: EWAD-CFXR C15)	833868.3	816414.0	34.0	--	--	95.0	278.4	-56.9	3.0	-10.0	3.0	0.0	34.1
IP-3	Chiller (Ref - Daikin: EWAD-CFXR C15)	833858.1	816402.3	34.0	--	--	95.0	265.9	-56.5	3.0	-10.0	3.0	0.0	34.5
IP-4	Chiller (Ref - Daikin: EWAD-CFXR C15)	833867.9	816406.9	34.0	--	--	95.0	271.3	-56.7	3.0	-10.0	3.0	0.0	34.3
IP-5	Chiller (Ref - Daikin: EWAD-CFXR C15)	833873.5	816404.4	34.0	--	--	95.0	269.5	-56.6	3.0	-10.0	3.0	0.0	34.4
IP-6	Chiller (Ref - Daikin: EWAD-C-XR C16)	833869.2	816389.1	123.3	--	--	95.0	260.7	-56.3	3.0	-10.0	3.0	0.0	34.7
IP-7	Chiller (Ref - Daikin: EWAD-C-XR C16)	833887.8	816392.4	123.3	--	--	95.0	266.6	-56.5	3.0	-10.0	3.0	0.0	34.5
IP-8	Cooling Tower (Ref - ryowo: FC/LN 400)	833881.7	816397.4	123.3	66.0	5.4	88.7	270.4	-56.6	3.0	-10.0	3.0	0.0	28.0
IP-9	Cooling Tower (Ref - ryowo: FC/LN 400)	833887.6	816401.9	123.3	66.0	5.4	88.7	275.7	-56.8	3.0	-10.0	3.0	0.0	27.8
GC-1	Chiller (Ref - Daikin: EWAD-C-XR C16)	833851.1	816339.2	111.8	--	--	95.0	208.1	-54.4	3.0	-10.0	3.0	0.0	36.6
GC-2	Chiller (Ref - Daikin: EWAD-C-XR C16)	833855.6	816337.5	111.8	--	--	95.0	206.8	-54.3	3.0	-10.0	3.0	0.0	36.7
GC-3	Chiller (Ref - Daikin: EWAD-CFXR 740)	833859.7	816335.7	111.8	--	--	92.0	205.4	-54.3	3.0	-10.0	3.0	0.0	33.7
HB-1	Chiller (Ref - Daikin: EWAD-CFXR 740)	834015.0	816407.1	97.5	--	--	92.0	323.6	-58.2	3.0	-10.0	3.0	0.0	29.8
PTG-1	Cooling Tower (Ref - ryowo: FC/LN 200)	834056.3	815996.1	87.1	64.0	3.8	83.6	261.3	-56.3	3.0	-10.0	3.0	0.0	23.3
PTG-2	Cooling Tower (Ref - ryowo: FC/LN 200)	834053.2	815993.6	87.1	64.0	3.8	83.6	260.1	-56.3	3.0	-10.0	3.0	0.0	23.3
										Noise standard:		**65**	**Overall**	**59**

Predicted Noise Level for Fixed Noise Impact Assessment - Base Case Scenario

Night Time

F03 NSR Coordinate: x = 833838.9 y = 816138.3 z = 59.0

Source ID	Description	Industrial Noise x	Industrial Noise y		SPL	Ref dist.	SWL	Slant distance from source	Distance Corr.	Façade Corr.	Barrier Corr.	Tonality Corr.	Impulsive Corr.	ANL
YSA-1	Chiller (Ref - Daikin: EWAD-D-SX 210)	833920.2	816100.0	96.8	--	--	84.0	97.5	-47.8	3.0	0.0	3.0	0.0	42.2
YSA-2	Chiller (Ref - Daikin: EWAD-D-SX 210)	833923.0	816097.1	96.8	--	--	84.0	101.0	-48.1	3.0	0.0	3.0	0.0	41.9
BOW-1	Chiller (Ref - Daikin: EWAD-D-SX 410)	833909.9	816077.7	91.4	--	--	85.0	98.8	-47.9	3.0	0.0	3.0	0.0	43.1
BOW-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833912.2	816075.5	91.4	--	--	85.0	101.8	-48.2	3.0	0.0	3.0	0.0	42.8
PTG-1	Cooling Tower (Ref - ryowo: FC/LN 200)	834056.3	815996.1	87.1	64.0	3.8	83.6	261.3	-56.3	3.0	-10.0	3.0	0.0	23.3
PTG-2	Cooling Tower (Ref - ryowo: FC/LN 200)	834053.2	815993.6	87.1	64.0	3.8	83.6	260.1	-56.3	3.0	-10.0	3.0	0.0	23.3
										Noise standard:		**55**	**Overall**	**49**

Predicted Noise Level for Fixed Noise Impact Assessment - Base Case Scenario
Day/Evening Time
F03 NSR Coordinate: x = 833838.9 y = 816138.3 z = 88.1

Source ID	Description	Industrial Noise Source Coordinate: x	y	z	SPL	Ref dist.	SWL	Slant distance from source to NSR (m)	Distance Corr.	Façade Corr.	Barrier Corr.	Tonality Corr.	Impulsive Corr.	ANL
OB-1	Chiller (Ref - Daikin: EWAD-D-SX 490)	833870.8	816166.0	121.8	--	--	86.0	54.0	-42.7	3.0	-10.0	3.0	0.0	39.3
OB-2	Cooling Tower (Ref - ryowo: FC/LN 200)	833874.7	816169.8	121.8	64.0	3.8	83.6	58.4	-43.3	3.0	-10.0	3.0	0.0	36.3
CRC-1	Chiller (Ref - Daikin: EWAD-CFXR 740)	833881.0	816161.9	131.1	--	--	92.0	64.6	-44.2	3.0	-10.0	3.0	0.0	43.8
CRC-2	Chiller (Ref - Daikin: EWAD-CFXR 740)	833884.0	816158.8	131.1	--	--	92.0	65.6	-44.3	3.0	-10.0	3.0	0.0	43.7
SB-1	Chiller (Ref - Daikin: EWAD-F-XR 500)	833886.6	816144.1	60.0	--	--	89.0	55.7	-42.9	3.0	-10.0	3.0	0.0	42.1
SB-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833887.3	816138.6	60.0	--	--	85.0	56.0	-43.0	3.0	-10.0	3.0	0.0	38.0
VHB-1	Chiller (Ref - Daikin: EWAD-D-SX 490)	833928.3	816124.3	88.4	--	--	86.0	90.5	-47.1	3.0	0.0	3.0	0.0	44.9
VHB-2	Chiller (Ref - Daikin: EWAD-D-SX 490)	833932.2	816119.2	88.4	--	--	86.0	95.2	-47.6	3.0	0.0	3.0	0.0	44.4
VHB-3	Chiller (Ref - Daikin: EWAD-D-SX 490)	833929.6	816114.1	88.4	--	--	86.0	93.9	-47.5	3.0	0.0	3.0	0.0	44.5
YSA-1	Chiller (Ref - Daikin: EWAD-D-SX 210)	833920.2	816100.0	96.8	--	--	84.0	90.3	-47.1	3.0	0.0	3.0	0.0	42.9
YSA-2	Chiller (Ref - Daikin: EWAD-D-SX 210)	833923.0	816097.1	96.8	--	--	84.0	94.1	-47.5	3.0	0.0	3.0	0.0	42.5
TLP-1	Chiller (Ref - Daikin: EWAD-C-SR C14)	833913.6	816181.9	51.8	--	--	95.0	93.8	-47.4	3.0	-10.0	3.0	0.0	43.6
TLP-2	Chiller (Ref - Daikin: EWAQ-F-XR 330)	833918.0	816188.6	51.8	--	--	87.0	100.5	-48.0	3.0	-10.0	3.0	0.0	35.0
TLP-3	Chiller (Ref - Daikin: EWAD-C-SR C14)	833920.3	816184.2	51.8	--	--	95.0	100.3	-48.0	3.0	-10.0	3.0	0.0	43.0
TLP-4	Chiller (Ref - Daikin: EWAQ-F-XR 330)	833913.2	816176.1	51.8	--	--	87.0	90.9	-47.2	3.0	-10.0	3.0	0.0	35.8
BOW-1	Chiller (Ref - Daikin: EWAD-D-SX 410)	833909.9	816077.7	91.4	--	--	85.0	93.4	-47.4	3.0	0.0	3.0	0.0	43.6
BOW-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833912.2	816075.5	91.4	--	--	85.0	96.6	-47.7	3.0	0.0	3.0	0.0	43.3
WHIB-1	Chiller (Ref - Daikin: EWAD-CFXR 870)	833911.1	816220.6	73.0	--	--	92.0	110.5	-48.9	3.0	-10.0	3.0	0.0	39.1
WHIB-2	Chiller (Ref - Daikin: EWAD-CFXR 870)	833918.3	816235.3	73.0	--	--	92.0	126.3	-50.0	3.0	-10.0	3.0	0.0	38.0
OCBC-1	Chiller (Ref - Daikin: EWAQ-G-XR 080)	833876.3	816229.0	72.2	--	--	80.0	99.4	-47.9	3.0	-10.0	3.0	0.0	28.1
OCBC-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833875.0	816224.7	72.2	--	--	85.0	95.0	-47.6	3.0	-10.0	3.0	0.0	33.4
OCBC-3	Chiller (Ref - Daikin: EWAD-D-SX 410)	833880.2	816225.5	72.2	--	--	85.0	97.8	-47.8	3.0	-10.0	3.0	0.0	33.2
OCBC-4	Chiller (Ref - Daikin: EWAD-D-SX 410)	833880.2	816220.3	72.2	--	--	85.0	93.2	-47.4	3.0	-10.0	3.0	0.0	33.6
SLCB-1	Chiller (Ref - Daikin: EWAD-CFXR 600)	833884.3	816242.7	73.1	--	--	92.0	114.8	-49.2	3.0	-10.0	3.0	0.0	38.8
AB-1	Chiller (Ref - Daikin: EWAD-D-SX 410)	833947.6	816283.2	72.3	--	--	85.0	181.8	-53.2	3.0	-10.0	3.0	0.0	27.8
AB-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833949.1	816285.4	72.3	--	--	85.0	184.5	-53.3	3.0	-10.0	3.0	0.0	27.7
HKTC-1	Chiller (Ref - Daikin: EWAD-D-SX 410)	833959.3	816314.2	78.4	--	--	85.0	213.4	-54.6	3.0	-10.0	3.0	0.0	26.4
HKTC-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833963.4	816311.4	78.4	--	--	85.0	213.4	-54.6	3.0	-10.0	3.0	0.0	26.4
HKTC-3	Chiller (Ref - Daikin: EWAD-D-SX 410)	833967.6	816308.9	78.4	--	--	85.0	213.9	-54.6	3.0	-10.0	3.0	0.0	26.4
NCBB-1	Chiller (Ref - Daikin: EWAD-CFXR 600)	833980.6	816305.2	57.4	--	--	92.0	221.1	-54.9	3.0	-10.0	3.0	0.0	33.1
NCBB-2	Chiller (Ref - Daikin: EWAD-CFXR 600)	833984.4	816302.9	57.4	--	--	92.0	221.8	-54.9	3.0	-10.0	3.0	0.0	33.1
NCBB-3	Chiller (Ref - Daikin: EWAD-CFXR 600)	833988.8	816300.1	57.4	--	--	92.0	222.7	-55.0	3.0	-10.0	3.0	0.0	33.0
CTGH-1	Chiller (Ref - Daikin: EWAD-CFXR 600)	833982.3	816343.5	94.0	--	--	92.0	250.4	-56.0	3.0	-10.0	3.0	0.0	32.0
CTGH-2	Chiller (Ref - Daikin: EWAD-CFXR 600)	833991.6	816340.8	94.0	--	--	92.0	253.7	-56.1	3.0	-10.0	3.0	0.0	31.9
CTGH-3	Chiller (Ref - Daikin: EWAD-CFXR 600)	833986.4	816336.9	94.0	--	--	92.0	247.5	-55.9	3.0	-10.0	3.0	0.0	32.1
CTGH-4	Chiller (Ref - Daikin: EWAD-D-SX 410)	833980.3	816333.3	94.0	--	--	85.0	240.9	-55.6	3.0	-10.0	3.0	0.0	25.4
TB-1	Chiller (Ref - Daikin: EWAD-CFXR 820)	834003.4	816335.1	84.3	--	--	92.0	256.5	-56.2	3.0	-10.0	3.0	0.0	31.8
TB-2	Chiller (Ref - Daikin: EWAD-CFXR 820)	834007.2	816324.2	84.3	--	--	92.0	250.8	-56.0	3.0	-10.0	3.0	0.0	32.0
IAB-1	Chiller (Ref - Daikin: EWAD-D-SX 490)	833958.7	816104.1	66.6	--	--	86.0	126.4	-50.0	3.0	0.0	3.0	0.0	42.0
IAB-2	Chiller (Ref - Daikin: EWAD-D-SX 490)	833964.8	816100.4	66.6	--	--	86.0	133.2	-50.5	3.0	0.0	3.0	0.0	41.5
100QRC-1	Chiller (Ref - Daikin: EWAD-CFXR C15)	834011.1	816060.8	129.5	--	--	95.0	193.3	-53.7	3.0	-10.0	3.0	0.0	37.3
100QRC-2	Chiller (Ref - Daikin: EWAD-CFXR C15)	834008.1	816058.1	129.5	--	--	95.0	191.8	-53.7	3.0	-10.0	3.0	0.0	37.3
100QRC-3	Chiller (Ref - Daikin: EWAD-CFXR 600)	834001.8	816055.5	129.5	--	--	92.0	187.4	-53.5	3.0	-10.0	3.0	0.0	34.5
RC-1	Chiller (Ref - Daikin: EWAD-CFXR C15)	834028.6	816025.5	91.7	--	--	95.0	220.7	-54.9	3.0	0.0	3.0	0.0	46.1
RC-2	Chiller (Ref - Daikin: EWAD-CFXR C15)	834028.3	816032.4	91.7	--	--	95.0	217.0	-54.7	3.0	0.0	3.0	0.0	46.3
HQ-1	Cooling Tower (Ref - ryowo: FC/LN 200)	834037.9	816016.4	120.2	64.0	3.8	83.6	235.6	-55.4	3.0	-10.0	3.0	0.0	24.2
HQ-2	Cooling Tower (Ref - ryowo: FC/LN 200)	834039.9	816019.3	120.2	64.0	3.8	83.6	235.8	-55.5	3.0	-10.0	3.0	0.0	24.2
HQ-3	Cooling Tower (Ref - ryowo: FC/LN 200)	834042.0	816022.2	120.2	64.0	3.8	83.6	236.1	-55.5	3.0	-10.0	3.0	0.0	24.2
CH-1	Cooling Tower (Ref - ryowo: FC/LN 400)	834076.4	815970.1	75.6	66.0	5.4	88.7	291.3	-57.3	3.0	0.0	3.0	0.0	37.4
CH-2	Cooling Tower (Ref - ryowo: FC/LN 400)	834081.3	815963.7	75.6	66.0	5.4	88.7	299.0	-57.5	3.0	0.0	3.0	0.0	37.1
POH-1	Chiller (Ref - Daikin: EWAD-D-SX 210)	834009.7	816003.1	97.7	--	--	84.0	218.0	-54.8	3.0	0.0	3.0	0.0	35.2
WTT-1	Chiller (Ref - Daikin: EWAD-CFXR 870)	834016.5	815992.1	85.4	--	--	92.0	230.1	-55.2	3.0	0.0	3.0	0.0	42.8
WTT-2	Chiller (Ref - Daikin: EWAD-CFXR 870)	834024.3	815984.9	85.4	--	--	92.0	240.6	-55.6	3.0	0.0	3.0	0.0	42.4
AST-1	Chiller (Ref - Daikin: EWAD-CFXR C10)	834102.6	816020.6	78.0	--	--	94.0	289.0	-57.2	3.0	-10.0	3.0	0.0	32.8
AST-2	Chiller (Ref - Daikin: EWAD-CFXR C10)	834104.5	816017.0	78.0	--	--	94.0	292.2	-57.3	3.0	-10.0	3.0	0.0	32.7
AST-3	Chiller (Ref - Daikin: EWAD-D-SX 410)	834095.0	816014.2	78.0	--	--	85.0	284.8	-57.1	3.0	-10.0	3.0	0.0	23.9
AST-4	Chiller (Ref - Daikin: EWAD-D-SX 410)	834096.8	816010.9	78.0	--	--	85.0	287.8	-57.2	3.0	-10.0	3.0	0.0	23.8
BGLAT-1	Chiller (Ref - Daikin: EWAD-CFXR 740)	833959.9	816246.5	16.5	--	--	92.0	177.4	-53.0	3.0	-10.0	3.0	0.0	35.0
BGLAT-2	Chiller (Ref - Daikin: EWAD-CFXR 740)	833964.4	816243.1	16.5	--	--	92.0	178.5	-53.0	3.0	-10.0	3.0	0.0	35.0
TSBB-1	Chiller (Ref - Daikin: EWAD-D-SX 490)	833986.9	816259.8	56.3	--	--	86.0	194.1	-53.8	3.0	-10.0	3.0	0.0	28.2
TSBB-2	Chiller (Ref - Daikin: EWAD-D-SX 490)	833991.5	816257.1	56.3	--	--	86.0	196.0	-53.8	3.0	-10.0	3.0	0.0	28.2
PBC-1	Chiller (Ref - Daikin: EWAD-D-SX 410)	833994.6	816244.2	76.6	--	--	85.0	188.7	-53.5	3.0	-10.0	3.0	0.0	27.5
PBC-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	834001.4	816248.4	76.6	--	--	85.0	196.6	-53.9	3.0	-10.0	3.0	0.0	27.1
JC-1	Chiller (Ref - Daikin: EWAD-CFXR 740)	833950.9	816005.0	99.6	--	--	92.0	174.5	-52.8	3.0	-10.0	3.0	0.0	35.2
1LT-1	Chiller (Ref - Daikin: EWAD-CFXR 600)	833980.8	815970.5	102.3	--	--	92.0	220.2	-54.9	3.0	-10.0	3.0	0.0	33.1
1LT-2	Chiller (Ref - Daikin: EWAD-CFXR 600)	833979.5	815966.3	102.3	--	--	92.0	222.6	-55.0	3.0	-10.0	3.0	0.0	33.0
SS-1	Chiller (Ref - Daikin: EWAQ-G-XR 090)	833918.4	815974.4	107.3	--	--	82.0	183.2	-53.3	3.0	-10.0	3.0	0.0	24.7
SS-2	Chiller (Ref - Daikin: EWAQ-G-XR 090)	833919.8	815972.9	107.3	--	--	82.0	185.1	-53.3	3.0	-10.0	3.0	0.0	24.7
CPCB-1	Chiller (Ref - Daikin: EWAD-D-SX 410)	833977.2	815919.4	116.3	--	--	85.0	260.5	-56.3	3.0	-10.0	3.0	0.0	24.7
HC-1	Chiller (Ref - Daikin: EWAD-D-SX 490)	833930.1	815929.6	121.7	--	--	86.0	230.2	-55.2	3.0	-10.0	3.0	0.0	26.8
HC-2	Chiller (Ref - Daikin: EWAD-D-SX 490)	833933.6	815929.3	121.7	--	--	86.0	231.9	-55.3	3.0	-10.0	3.0	0.0	26.7
HC-3	Chiller (Ref - Daikin: EWAD-D-SX 490)	833936.6	815929.1	121.7	--	--	86.0	233.3	-55.4	3.0	-10.0	3.0	0.0	26.6
HC-4	Chiller (Ref - Daikin: EWAD-D-SX 490)	833942.4	815934.1	121.7	--	--	86.0	231.4	-55.3	3.0	-10.0	3.0	0.0	26.7
HC-5	Chiller (Ref - Daikin: EWAD-D-SX 490)	833945.5	815933.8	121.7	--	--	86.0	233.1	-55.3	3.0	-10.0	3.0	0.0	26.7
HC-6	Chiller (Ref - Daikin: EWAD-D-SX 490)	833942.8	815925.3	121.7	--	--	86.0	239.4	-55.6	3.0	-10.0	3.0	0.0	26.4
HC-7	Chiller (Ref - Daikin: EWAD-D-SX 490)	833938.2	815920.5	121.7	--	--	86.0	241.7	-55.7	3.0	-10.0	3.0	0.0	26.3
HC-8	Chiller (Ref - Daikin: EWAD-D-SX 490)	833941.3	815919.5	121.7	--	--	86.0	243.9	-55.7	3.0	-10.0	3.0	0.0	26.3
KC-1	Chiller (Ref - Daikin: EWAD-C-XR C16)	833838.9	815913.7	132.0	--	--	95.0	228.9	-55.2	3.0	0.0	3.0	0.0	45.8
KC-2	Chiller (Ref - Daikin: EWAD-C-XR C16)	833828.9	815902.1	132.0	--	--	95.0	240.5	-55.6	3.0	0.0	3.0	0.0	45.4
KC-3	Chiller (Ref - Daikin: EWAD-D-SX 490)	833820.6	815901.4	132.0	--	--	86.0	241.6	-55.7	3.0	0.0	3.0	0.0	36.3
TW-1	Cooling Tower (Ref - ryowo: FC/LN 200)	833804.8	816218.3	132.1	64.0	3.8	83.6	97.5	-47.8	3.0	-10.0	3.0	0.0	31.9
TW-2	Cooling Tower (Ref - ryowo: FC/LN 200)	833809.5	816213.8	132.1	64.0	3.8	83.6	92.2	-47.3	3.0	-10.0	3.0	0.0	32.4

299Q-1	Chiller (Ref - Daikin: EWAD-CFXR 600)	833564.5	816227.4	80.9	--	--	92.0	288.6	-57.2	3.0	0.0	3.0	0.0	40.8
299Q-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833559.6	816230.8	80.9	--	--	85.0	294.3	-57.4	3.0	0.0	3.0	0.0	33.6
299Q-3	Chiller (Ref - Daikin: EWAD-CFXR 600)	833556.5	816237.1	80.9	--	--	92.0	299.3	-57.5	3.0	0.0	3.0	0.0	40.5
PBT-1	Chiller (Ref - Daikin: EWAD-CFXR 600)	833715.7	816289.5	83.6	--	--	92.0	195.1	-53.8	3.0	0.0	3.0	0.0	44.2
PBT-2	Chiller (Ref - Daikin: EWAD-CFXR 600)	833716.2	816284.4	83.6	--	--	92.0	190.8	-53.6	3.0	0.0	3.0	0.0	44.4
PBT-3	Chiller (Ref - Daikin: EWAD-D-SX 410)	833724.7	816288.4	83.6	--	--	85.0	188.7	-53.5	3.0	0.0	3.0	0.0	37.5
BC-1	Chiller (Ref - Daikin: EWAD-D-SX 490)	833646.5	816307.1	108.3	--	--	86.0	256.7	-56.2	3.0	0.0	3.0	0.0	35.8
BC-2	Chiller (Ref - Daikin: EWAD-D-SX 490)	833651.7	816304.6	108.3	--	--	86.0	251.2	-56.0	3.0	0.0	3.0	0.0	36.0
S50-1	Chiller (Ref - Daikin: EWAD-CFXR 740)	833628.2	816325.3	98.0	--	--	92.0	281.9	-57.0	3.0	0.0	3.0	0.0	41.0
S50-2	Chiller (Ref - Daikin: EWAD-CFXR 740)	833635.2	816325.0	98.0	--	--	92.0	276.5	-56.8	3.0	0.0	3.0	0.0	41.2
S50-3	Chiller (Ref - Daikin: EWAD-CFXR 740)	833632.9	816321.3	98.0	--	--	92.0	275.7	-56.8	3.0	0.0	3.0	0.0	41.2
HSBH-1	Cooling Tower (Ref - ryowo: FC/LN 200)	834145.9	816199.3	136.2	64.0	3.8	83.6	316.7	-58.0	3.0	-10.0	3.0	0.0	21.6
HSBH-2	Cooling Tower (Ref - ryowo: FC/LN 200)	834149.0	816195.3	136.2	64.0	3.8	83.6	318.9	-58.1	3.0	-10.0	3.0	0.0	21.6
HSBH-3	Cooling Tower (Ref - ryowo: FC/LN 200)	834138.9	816194.1	136.2	64.0	3.8	83.6	308.9	-57.8	3.0	-10.0	3.0	0.0	21.8
HSBH-4	Cooling Tower (Ref - ryowo: FC/LN 200)	834142.1	816190.0	136.2	64.0	3.8	83.6	311.3	-57.9	3.0	-10.0	3.0	0.0	21.8
HSBH-5	Chiller (Ref - Daikin: EWAD-CFXR 600)	834130.7	816195.9	136.2	--	--	92.0	301.3	-57.6	3.0	-10.0	3.0	0.0	30.4
HSBH-6	Chiller (Ref - Daikin: EWAD-CFXR C15)	834129.8	816191.8	136.2	--	--	95.0	299.7	-57.5	3.0	-10.0	3.0	0.0	33.5
HSBH-7	Chiller (Ref - Daikin: EWAD-CFXR C15)	834137.8	816179.8	136.2	--	--	95.0	305.6	-57.7	3.0	-10.0	3.0	0.0	33.3
NFT-1	Chiller (Ref - Daikin: EWAD-CFXR 740)	833967.2	816341.7	30.0	--	--	92.0	247.4	-55.9	3.0	-10.0	3.0	0.0	32.1
NFT-2	Chiller (Ref - Daikin: EWAD-CFXR 740)	833959.3	816329.1	30.0	--	--	92.0	233.0	-55.3	3.0	-10.0	3.0	0.0	32.7
NFT-3	Chiller (Ref - Daikin: EWAD-CFXR 740)	833940.5	816326.2	30.0	--	--	92.0	221.4	-54.9	3.0	-10.0	3.0	0.0	33.1
NFT-4	Chiller (Ref - Daikin: EWAD-CFXR 740)	833930.9	816334.6	30.0	--	--	92.0	224.4	-55.0	3.0	-10.0	3.0	0.0	33.0
NFT-5	Chiller (Ref - Daikin: EWAD-CFXR 740)	833940.2	816350.2	30.0	--	--	92.0	241.9	-55.7	3.0	-10.0	3.0	0.0	32.3
NFT-6	Chiller (Ref - Daikin: EWAD-CFXR 740)	833945.5	816358.6	30.0	--	--	92.0	251.5	-56.0	3.0	-10.0	3.0	0.0	32.0
IP-1	Chiller (Ref - Daikin: EWAD-CFXR C15)	833865.3	816416.7	34.0	--	--	95.0	284.8	-57.1	3.0	-10.0	3.0	0.0	33.9
IP-2	Chiller (Ref - Daikin: EWAD-CFXR C15)	833868.3	816414.0	34.0	--	--	95.0	282.5	-57.0	3.0	-10.0	3.0	0.0	34.0
IP-3	Chiller (Ref - Daikin: EWAD-CFXR C15)	833858.1	816402.3	34.0	--	--	95.0	270.2	-56.6	3.0	-10.0	3.0	0.0	34.4
IP-4	Chiller (Ref - Daikin: EWAD-CFXR C15)	833867.9	816406.9	34.0	--	--	95.0	275.5	-56.8	3.0	-10.0	3.0	0.0	34.2
IP-5	Chiller (Ref - Daikin: EWAD-CFXR C15)	833873.5	816404.4	34.0	--	--	95.0	273.7	-56.7	3.0	-10.0	3.0	0.0	34.3
IP-6	Chiller (Ref - Daikin: EWAD-C-XR C16)	833869.2	816389.1	123.3	--	--	95.0	255.1	-56.1	3.0	-10.0	3.0	0.0	34.9
IP-7	Chiller (Ref - Daikin: EWAD-C-XR C16)	833887.8	816392.4	123.3	--	--	95.0	261.1	-56.3	3.0	-10.0	3.0	0.0	34.7
IP-8	Cooling Tower (Ref - ryowo: FC/LN 400)	833881.7	816397.4	123.3	66.0	5.4	88.7	265.0	-56.5	3.0	-10.0	3.0	0.0	28.2
IP-9	Cooling Tower (Ref - ryowo: FC/LN 400)	833887.6	816401.9	123.3	66.0	5.4	88.7	270.4	-56.6	3.0	-10.0	3.0	0.0	28.0
GC-1	Chiller (Ref - Daikin: EWAD-C-XR C16)	833851.1	816339.2	111.8	--	--	95.0	202.7	-54.1	3.0	-10.0	3.0	0.0	36.9
GC-2	Chiller (Ref - Daikin: EWAD-C-XR C16)	833855.6	816337.5	111.8	--	--	95.0	201.3	-54.1	3.0	-10.0	3.0	0.0	36.9
GC-3	Chiller (Ref - Daikin: EWAD-CFXR 740)	833859.7	816335.7	111.8	--	--	92.0	199.9	-54.0	3.0	-10.0	3.0	0.0	34.0
HB-1	Chiller (Ref - Daikin: EWAD-CFXR 740)	834015.0	816407.1	97.5	--	--	92.0	321.5	-58.1	3.0	-10.0	3.0	0.0	29.9
PTG-1	Cooling Tower (Ref - ryowo: FC/LN 200)	834056.3	815996.1	87.1	64.0	3.8	83.6	259.8	-56.3	3.0	-10.0	3.0	0.0	23.4
PTG-2	Cooling Tower (Ref - ryowo: FC/LN 200)	834053.2	815993.6	87.1	64.0	3.8	83.6	258.6	-56.3	3.0	-10.0	3.0	0.0	23.4
										Noise standard:		**65**	**Overall**	**59**

Predicted Noise Level for Fixed Noise Impact Assessment - Base Case Scenario

Night Time

F03 NSR Coordinate: x = 833838.9 y = 816138.3 z = 88.1

Source ID	Description	Industrial Noise x	Industrial Noise y		SPL	Ref dist.	SWL	Slant distance from source	Distance Corr.	Façade Corr.	Barrier Corr.	Tonality Corr.	Impulsive Corr.	ANL
YSA-1	Chiller (Ref - Daikin: EWAD-D-SX 210)	833920.2	816100.0	96.8	--	--	84.0	90.3	-47.1	3.0	0.0	3.0	0.0	42.9
YSA-2	Chiller (Ref - Daikin: EWAD-D-SX 210)	833923.0	816097.1	96.8	--	--	84.0	94.1	-47.5	3.0	0.0	3.0	0.0	42.5
BOW-1	Chiller (Ref - Daikin: EWAD-D-SX 410)	833909.9	816077.7	91.4	--	--	85.0	93.4	-47.4	3.0	0.0	3.0	0.0	43.6
BOW-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833912.2	816075.5	91.4	--	--	85.0	96.6	-47.7	3.0	0.0	3.0	0.0	43.3
PTG-1	Cooling Tower (Ref - ryowo: FC/LN 200)	834056.3	815996.1	87.1	64.0	3.8	83.6	259.8	-56.3	3.0	-10.0	3.0	0.0	23.4
PTG-2	Cooling Tower (Ref - ryowo: FC/LN 200)	834053.2	815993.6	87.1	64.0	3.8	83.6	258.6	-56.3	3.0	-10.0	3.0	0.0	23.4
										Noise standard:		**55**	**Overall**	**49**

Predicted Noise Level for Fixed Noise Impact Assessment - Base Case Scenario
Day/Evening Time
F03 NSR Coordinate: x = 833838.9 y = 816138.3 z = 117.6

Source ID	Description	Industrial Noise Source Coordinate: x	y	z	SPL	Ref dist.	SWL	Slant distance from source to NSR (m)	Distance Corr.	Façade Corr.	Barrier Corr.	Tonality Corr.	Impulsive Corr.	ANL
OB-1	Chiller (Ref - Daikin: EWAD-D-SX 490)	833870.8	816166.0	121.8	--	--	86.0	42.5	-40.6	3.0	-10.0	3.0	0.0	41.4
OB-2	Cooling Tower (Ref - ryowo: FC/LN 200)	833874.7	816169.8	121.8	64.0	3.8	83.6	47.9	-41.6	3.0	-10.0	3.0	0.0	38.0
CRC-1	Chiller (Ref - Daikin: EWAD-CFXR 740)	833881.0	816161.9	131.1	--	--	92.0	50.1	-42.0	3.0	-10.0	3.0	0.0	46.0
CRC-2	Chiller (Ref - Daikin: EWAD-CFXR 740)	833884.0	816158.8	131.1	--	--	92.0	51.3	-42.2	3.0	-10.0	3.0	0.0	45.8
SB-1	Chiller (Ref - Daikin: EWAD-F-XR 500)	833886.6	816144.1	60.0	--	--	89.0	75.0	-45.5	3.0	-10.0	3.0	0.0	39.5
SB-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833887.3	816138.6	60.0	--	--	85.0	75.2	-45.5	3.0	-10.0	3.0	0.0	35.5
VHB-1	Chiller (Ref - Daikin: EWAD-D-SX 490)	833928.3	816124.3	88.4	--	--	86.0	95.1	-47.6	3.0	0.0	3.0	0.0	44.4
VHB-2	Chiller (Ref - Daikin: EWAD-D-SX 490)	833932.2	816119.2	88.4	--	--	86.0	99.6	-48.0	3.0	0.0	3.0	0.0	44.0
VHB-3	Chiller (Ref - Daikin: EWAD-D-SX 490)	833929.6	816114.1	88.4	--	--	86.0	98.3	-47.9	3.0	0.0	3.0	0.0	44.1
YSA-1	Chiller (Ref - Daikin: EWAD-D-SX 210)	833920.2	816100.0	96.8	--	--	84.0	92.2	-47.3	3.0	0.0	3.0	0.0	42.7
YSA-2	Chiller (Ref - Daikin: EWAD-D-SX 210)	833923.0	816097.1	96.8	--	--	84.0	95.9	-47.6	3.0	0.0	3.0	0.0	42.4
TLP-1	Chiller (Ref - Daikin: EWAD-C-SR C14)	833913.6	816181.9	51.8	--	--	95.0	108.7	-48.7	3.0	-10.0	3.0	0.0	42.3
TLP-2	Chiller (Ref - Daikin: EWAQ-F-XR 330)	833918.0	816188.6	51.8	--	--	87.0	114.5	-49.2	3.0	-10.0	3.0	0.0	33.8
TLP-3	Chiller (Ref - Daikin: EWAD-C-SR C14)	833920.3	816184.2	51.8	--	--	95.0	114.3	-49.2	3.0	-10.0	3.0	0.0	41.8
TLP-4	Chiller (Ref - Daikin: EWAQ-F-XR 330)	833913.2	816176.1	51.8	--	--	87.0	106.2	-48.5	3.0	-10.0	3.0	0.0	34.5
BOW-1	Chiller (Ref - Daikin: EWAD-D-SX 410)	833909.9	816077.7	91.4	--	--	85.0	97.0	-47.7	3.0	0.0	3.0	0.0	43.3
BOW-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833912.2	816075.5	91.4	--	--	85.0	100.0	-48.0	3.0	0.0	3.0	0.0	43.0
WHIB-1	Chiller (Ref - Daikin: EWAD-CFXR 870)	833911.1	816220.6	73.0	--	--	92.0	118.2	-49.5	3.0	-10.0	3.0	0.0	38.5
WHIB-2	Chiller (Ref - Daikin: EWAD-CFXR 870)	833918.3	816235.3	73.0	--	--	92.0	133.1	-50.5	3.0	-10.0	3.0	0.0	37.5
OCBC-1	Chiller (Ref - Daikin: EWAQ-G-XR 080)	833876.3	816229.0	72.2	--	--	80.0	108.1	-48.7	3.0	-10.0	3.0	0.0	27.3
OCBC-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833875.0	816224.7	72.2	--	--	85.0	104.1	-48.3	3.0	-10.0	3.0	0.0	32.7
OCBC-3	Chiller (Ref - Daikin: EWAD-D-SX 410)	833880.2	816225.5	72.2	--	--	85.0	106.6	-48.6	3.0	-10.0	3.0	0.0	32.4
OCBC-4	Chiller (Ref - Daikin: EWAD-D-SX 410)	833880.2	816220.3	72.2	--	--	85.0	102.4	-48.2	3.0	-10.0	3.0	0.0	32.8
SLCB-1	Chiller (Ref - Daikin: EWAD-CFXR 600)	833884.3	816242.7	73.1	--	--	92.0	122.2	-49.7	3.0	-10.0	3.0	0.0	38.3
AB-1	Chiller (Ref - Daikin: EWAD-D-SX 410)	833947.6	816283.2	72.3	--	--	85.0	186.7	-53.4	3.0	-10.0	3.0	0.0	27.6
AB-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833949.1	816285.4	72.3	--	--	85.0	189.3	-53.5	3.0	-10.0	3.0	0.0	27.5
HKTC-1	Chiller (Ref - Daikin: EWAD-D-SX 410)	833959.3	816314.2	78.4	--	--	85.0	216.7	-54.7	3.0	-10.0	3.0	0.0	26.3
HKTC-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833963.4	816311.4	78.4	--	--	85.0	216.8	-54.7	3.0	-10.0	3.0	0.0	26.3
HKTC-3	Chiller (Ref - Daikin: EWAD-D-SX 410)	833967.6	816308.9	78.4	--	--	85.0	217.3	-54.7	3.0	-10.0	3.0	0.0	26.3
NCBB-1	Chiller (Ref - Daikin: EWAD-CFXR 600)	833980.6	816305.2	57.4	--	--	92.0	227.1	-55.1	3.0	-10.0	3.0	0.0	32.9
NCBB-2	Chiller (Ref - Daikin: EWAD-CFXR 600)	833984.4	816302.9	57.4	--	--	92.0	227.8	-55.2	3.0	-10.0	3.0	0.0	32.8
NCBB-3	Chiller (Ref - Daikin: EWAD-CFXR 600)	833988.8	816300.1	57.4	--	--	92.0	228.6	-55.2	3.0	-10.0	3.0	0.0	32.8
CTGH-1	Chiller (Ref - Daikin: EWAD-CFXR 600)	833982.3	816343.5	94.0	--	--	92.0	251.5	-56.0	3.0	-10.0	3.0	0.0	32.0
CTGH-2	Chiller (Ref - Daikin: EWAD-CFXR 600)	833991.6	816340.8	94.0	--	--	92.0	254.7	-56.1	3.0	-10.0	3.0	0.0	31.9
CTGH-3	Chiller (Ref - Daikin: EWAD-CFXR 600)	833986.4	816336.9	94.0	--	--	92.0	248.5	-55.9	3.0	-10.0	3.0	0.0	32.1
CTGH-4	Chiller (Ref - Daikin: EWAD-D-SX 410)	833980.3	816333.3	94.0	--	--	85.0	242.0	-55.7	3.0	-10.0	3.0	0.0	25.3
TB-1	Chiller (Ref - Daikin: EWAD-CFXR 820)	834003.4	816335.1	84.3	--	--	92.0	258.6	-56.3	3.0	-10.0	3.0	0.0	31.7
TB-2	Chiller (Ref - Daikin: EWAD-CFXR 820)	834007.2	816324.2	84.3	--	--	92.0	253.0	-56.1	3.0	-10.0	3.0	0.0	31.9
IAB-1	Chiller (Ref - Daikin: EWAD-D-SX 490)	833958.7	816104.1	66.6	--	--	86.0	134.6	-50.6	3.0	0.0	3.0	0.0	41.4
IAB-2	Chiller (Ref - Daikin: EWAD-D-SX 490)	833964.8	816100.4	66.6	--	--	86.0	141.0	-51.0	3.0	0.0	3.0	0.0	41.0
100QRC-1	Chiller (Ref - Daikin: EWAD-CFXR C15)	834011.1	816060.8	129.5	--	--	95.0	189.2	-53.5	3.0	-10.0	3.0	0.0	37.5
100QRC-2	Chiller (Ref - Daikin: EWAD-CFXR C15)	834008.1	816058.1	129.5	--	--	95.0	187.6	-53.5	3.0	-10.0	3.0	0.0	37.5
100QRC-3	Chiller (Ref - Daikin: EWAD-CFXR 600)	834001.8	816055.5	129.5	--	--	92.0	183.1	-53.3	3.0	-10.0	3.0	0.0	34.7
RC-1	Chiller (Ref - Daikin: EWAD-CFXR C15)	834028.6	816025.5	91.7	--	--	95.0	222.2	-54.9	3.0	0.0	3.0	0.0	46.1
RC-2	Chiller (Ref - Daikin: EWAD-CFXR C15)	834028.3	816032.4	91.7	--	--	95.0	218.5	-54.8	3.0	0.0	3.0	0.0	46.2
HQ-1	Cooling Tower (Ref - ryowo: FC/LN 200)	834037.9	816016.4	120.2	64.0	3.8	83.6	233.4	-55.4	3.0	-10.0	3.0	0.0	24.3
HQ-2	Cooling Tower (Ref - ryowo: FC/LN 200)	834039.9	816019.3	120.2	64.0	3.8	83.6	233.6	-55.4	3.0	-10.0	3.0	0.0	24.3
HQ-3	Cooling Tower (Ref - ryowo: FC/LN 200)	834042.0	816022.2	120.2	64.0	3.8	83.6	234.0	-55.4	3.0	-10.0	3.0	0.0	24.3
CH-1	Cooling Tower (Ref - ryowo: FC/LN 400)	834076.4	815970.1	75.6	66.0	5.4	88.7	294.0	-57.4	3.0	0.0	3.0	0.0	37.3
CH-2	Cooling Tower (Ref - ryowo: FC/LN 400)	834081.3	815963.7	75.6	66.0	5.4	88.7	301.7	-57.6	3.0	0.0	3.0	0.0	37.1
POH-1	Chiller (Ref - Daikin: EWAD-D-SX 210)	834009.7	816003.1	97.7	--	--	84.0	218.7	-54.8	3.0	0.0	3.0	0.0	35.2
WTT-1	Chiller (Ref - Daikin: EWAD-CFXR 870)	834016.5	815992.1	85.4	--	--	92.0	232.3	-55.3	3.0	0.0	3.0	0.0	42.7
WTT-2	Chiller (Ref - Daikin: EWAD-CFXR 870)	834024.3	815984.9	85.4	--	--	92.0	242.8	-55.7	3.0	0.0	3.0	0.0	42.3
AST-1	Chiller (Ref - Daikin: EWAD-CFXR C10)	834102.6	816020.6	78.0	--	--	94.0	291.5	-57.3	3.0	-10.0	3.0	0.0	32.7
AST-2	Chiller (Ref - Daikin: EWAD-CFXR C10)	834104.5	816017.0	78.0	--	--	94.0	294.7	-57.4	3.0	-10.0	3.0	0.0	32.6
AST-3	Chiller (Ref - Daikin: EWAD-D-SX 410)	834095.0	816014.2	78.0	--	--	85.0	287.3	-57.2	3.0	-10.0	3.0	0.0	23.8
AST-4	Chiller (Ref - Daikin: EWAD-D-SX 410)	834096.8	816010.9	78.0	--	--	85.0	290.4	-57.3	3.0	-10.0	3.0	0.0	23.7
BGLAT-1	Chiller (Ref - Daikin: EWAD-CFXR 740)	833959.9	816246.5	16.5	--	--	92.0	191.2	-53.6	3.0	-10.0	3.0	0.0	34.4
BGLAT-2	Chiller (Ref - Daikin: EWAD-CFXR 740)	833964.4	816243.1	16.5	--	--	92.0	192.2	-53.7	3.0	-10.0	3.0	0.0	34.3
TSBB-1	Chiller (Ref - Daikin: EWAD-D-SX 490)	833986.9	816259.8	56.3	--	--	86.0	201.1	-54.1	3.0	-10.0	3.0	0.0	27.9
TSBB-2	Chiller (Ref - Daikin: EWAD-D-SX 490)	833991.5	816257.1	56.3	--	--	86.0	202.9	-54.1	3.0	-10.0	3.0	0.0	27.9
PBC-1	Chiller (Ref - Daikin: EWAD-D-SX 410)	833994.6	816244.2	76.6	--	--	85.0	192.7	-53.7	3.0	-10.0	3.0	0.0	27.3
PBC-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	834001.4	816248.4	76.6	--	--	85.0	200.5	-54.0	3.0	-10.0	3.0	0.0	27.0
JC-1	Chiller (Ref - Daikin: EWAD-CFXR 740)	833950.9	816005.0	99.6	--	--	92.0	175.0	-52.9	3.0	-10.0	3.0	0.0	35.1
1LT-1	Chiller (Ref - Daikin: EWAD-CFXR 600)	833980.8	815970.5	102.3	--	--	92.0	220.3	-54.9	3.0	-10.0	3.0	0.0	33.1
1LT-2	Chiller (Ref - Daikin: EWAD-CFXR 600)	833979.5	815966.3	102.3	--	--	92.0	222.7	-55.0	3.0	-10.0	3.0	0.0	33.0
SS-1	Chiller (Ref - Daikin: EWAQ-G-XR 090)	833918.4	815974.4	107.3	--	--	82.0	182.5	-53.2	3.0	-10.0	3.0	0.0	24.8
SS-2	Chiller (Ref - Daikin: EWAQ-G-XR 090)	833919.8	815972.9	107.3	--	--	82.0	184.4	-53.3	3.0	-10.0	3.0	0.0	24.7
CPCB-1	Chiller (Ref - Daikin: EWAD-D-SX 410)	833977.2	815919.4	116.3	--	--	85.0	258.9	-56.3	3.0	-10.0	3.0	0.0	24.7
HC-1	Chiller (Ref - Daikin: EWAD-D-SX 490)	833930.1	815929.6	121.7	--	--	86.0	227.8	-55.2	3.0	-10.0	3.0	0.0	26.8
HC-2	Chiller (Ref - Daikin: EWAD-D-SX 490)	833933.6	815929.3	121.7	--	--	86.0	229.5	-55.2	3.0	-10.0	3.0	0.0	26.8
HC-3	Chiller (Ref - Daikin: EWAD-D-SX 490)	833936.6	815929.1	121.7	--	--	86.0	230.9	-55.3	3.0	-10.0	3.0	0.0	26.7
HC-4	Chiller (Ref - Daikin: EWAD-D-SX 490)	833942.4	815934.1	121.7	--	--	86.0	229.0	-55.2	3.0	-10.0	3.0	0.0	26.8
HC-5	Chiller (Ref - Daikin: EWAD-D-SX 490)	833945.5	815933.8	121.7	--	--	86.0	230.7	-55.3	3.0	-10.0	3.0	0.0	26.7
HC-6	Chiller (Ref - Daikin: EWAD-D-SX 490)	833942.8	815925.3	121.7	--	--	86.0	237.0	-55.5	3.0	-10.0	3.0	0.0	26.5
HC-7	Chiller (Ref - Daikin: EWAD-D-SX 490)	833938.2	815920.5	121.7	--	--	86.0	239.4	-55.6	3.0	-10.0	3.0	0.0	26.4
HC-8	Chiller (Ref - Daikin: EWAD-D-SX 490)	833941.3	815919.5	121.7	--	--	86.0	241.6	-55.7	3.0	-10.0	3.0	0.0	26.3
KC-1	Chiller (Ref - Daikin: EWAD-C-XR C16)	833838.9	815913.7	132.0	--	--	95.0	225.1	-55.0	3.0	0.0	3.0	0.0	46.0
KC-2	Chiller (Ref - Daikin: EWAD-C-XR C16)	833828.9	815902.1	132.0	--	--	95.0	236.8	-55.5	3.0	0.0	3.0	0.0	45.5
KC-3	Chiller (Ref - Daikin: EWAD-D-SX 490)	833820.6	815901.4	132.0	--	--	86.0	238.0	-55.5	3.0	0.0	3.0	0.0	36.5
TW-1	Cooling Tower (Ref - ryowo: FC/LN 200)	833804.8	816218.3	132.1	64.0	3.8	83.6	88.2	-46.9	3.0	-10.0	3.0	0.0	32.7
TW-2	Cooling Tower (Ref - ryowo: FC/LN 200)	833809.5	816213.8	132.1	64.0	3.8	83.6	82.3	-46.3	3.0	-10.0	3.0	0.0	33.3

299Q-1	Chiller (Ref - Daikin: EWAD-CFXR 600)	833564.5	816227.4	80.9	--	--	92.0	290.8	-57.3	3.0	0.0	3.0	0.0	40.7
299Q-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833559.6	816230.8	80.9	--	--	85.0	296.5	-57.4	3.0	0.0	3.0	0.0	33.6
299Q-3	Chiller (Ref - Daikin: EWAD-CFXR 600)	833556.5	816237.1	80.9	--	--	92.0	301.4	-57.6	3.0	0.0	3.0	0.0	40.4
PBT-1	Chiller (Ref - Daikin: EWAD-CFXR 600)	833715.7	816289.5	83.6	--	--	92.0	198.0	-53.9	3.0	0.0	3.0	0.0	44.1
PBT-2	Chiller (Ref - Daikin: EWAD-CFXR 600)	833716.2	816284.4	83.6	--	--	92.0	193.8	-53.7	3.0	0.0	3.0	0.0	44.3
PBT-3	Chiller (Ref - Daikin: EWAD-D-SX 410)	833724.7	816288.4	83.6	--	--	85.0	191.6	-53.6	3.0	0.0	3.0	0.0	37.4
BC-1	Chiller (Ref - Daikin: EWAD-D-SX 490)	833646.5	816307.1	108.3	--	--	86.0	256.1	-56.2	3.0	0.0	3.0	0.0	35.8
BC-2	Chiller (Ref - Daikin: EWAD-D-SX 490)	833651.7	816304.6	108.3	--	--	86.0	250.6	-56.0	3.0	0.0	3.0	0.0	36.0
S50-1	Chiller (Ref - Daikin: EWAD-CFXR 740)	833628.2	816325.3	98.0	--	--	92.0	282.4	-57.0	3.0	0.0	3.0	0.0	41.0
S50-2	Chiller (Ref - Daikin: EWAD-CFXR 740)	833635.2	816325.0	98.0	--	--	92.0	277.0	-56.8	3.0	0.0	3.0	0.0	41.2
S50-3	Chiller (Ref - Daikin: EWAD-CFXR 740)	833632.9	816321.3	98.0	--	--	92.0	276.2	-56.8	3.0	0.0	3.0	0.0	41.2
HSBH-1	Cooling Tower (Ref - ryowo: FC/LN 200)	834145.9	816199.3	136.2	64.0	3.8	83.6	313.6	-57.9	3.0	-10.0	3.0	0.0	21.7
HSBH-2	Cooling Tower (Ref - ryowo: FC/LN 200)	834149.0	816195.3	136.2	64.0	3.8	83.6	315.8	-58.0	3.0	-10.0	3.0	0.0	21.7
HSBH-3	Cooling Tower (Ref - ryowo: FC/LN 200)	834138.9	816194.1	136.2	64.0	3.8	83.6	305.7	-57.7	3.0	-10.0	3.0	0.0	21.9
HSBH-4	Cooling Tower (Ref - ryowo: FC/LN 200)	834142.1	816190.0	136.2	64.0	3.8	83.6	308.1	-57.8	3.0	-10.0	3.0	0.0	21.9
HSBH-5	Chiller (Ref - Daikin: EWAD-CFXR 600)	834130.7	816195.9	136.2	--	--	92.0	298.0	-57.5	3.0	-10.0	3.0	0.0	30.5
HSBH-6	Chiller (Ref - Daikin: EWAD-CFXR C15)	834129.8	816191.8	136.2	--	--	95.0	296.4	-57.4	3.0	-10.0	3.0	0.0	33.6
HSBH-7	Chiller (Ref - Daikin: EWAD-CFXR C15)	834137.8	816179.8	136.2	--	--	95.0	302.3	-57.6	3.0	-10.0	3.0	0.0	33.4
NFT-1	Chiller (Ref - Daikin: EWAD-CFXR 740)	833967.2	816341.7	30.0	--	--	92.0	255.9	-56.2	3.0	-10.0	3.0	0.0	31.8
NFT-2	Chiller (Ref - Daikin: EWAD-CFXR 740)	833959.3	816329.1	30.0	--	--	92.0	242.0	-55.7	3.0	-10.0	3.0	0.0	32.3
NFT-3	Chiller (Ref - Daikin: EWAD-CFXR 740)	833940.5	816326.2	30.0	--	--	92.0	230.9	-55.3	3.0	-10.0	3.0	0.0	32.7
NFT-4	Chiller (Ref - Daikin: EWAD-CFXR 740)	833930.9	816334.6	30.0	--	--	92.0	233.8	-55.4	3.0	-10.0	3.0	0.0	32.6
NFT-5	Chiller (Ref - Daikin: EWAD-CFXR 740)	833940.2	816350.2	30.0	--	--	92.0	250.7	-56.0	3.0	-10.0	3.0	0.0	32.0
NFT-6	Chiller (Ref - Daikin: EWAD-CFXR 740)	833945.5	816358.6	30.0	--	--	92.0	259.9	-56.3	3.0	-10.0	3.0	0.0	31.7
IP-1	Chiller (Ref - Daikin: EWAD-CFXR C15)	833865.3	816416.7	34.0	--	--	95.0	291.9	-57.3	3.0	-10.0	3.0	0.0	33.7
IP-2	Chiller (Ref - Daikin: EWAD-CFXR C15)	833868.3	816414.0	34.0	--	--	95.0	289.6	-57.2	3.0	-10.0	3.0	0.0	33.8
IP-3	Chiller (Ref - Daikin: EWAD-CFXR C15)	833858.1	816402.3	34.0	--	--	95.0	277.6	-56.9	3.0	-10.0	3.0	0.0	34.1
IP-4	Chiller (Ref - Daikin: EWAD-CFXR C15)	833867.9	816406.9	34.0	--	--	95.0	282.8	-57.0	3.0	-10.0	3.0	0.0	34.0
IP-5	Chiller (Ref - Daikin: EWAD-CFXR C15)	833873.5	816404.4	34.0	--	--	95.0	281.1	-57.0	3.0	-10.0	3.0	0.0	34.0
IP-6	Chiller (Ref - Daikin: EWAD-C-XR C16)	833869.2	816389.1	123.3	--	--	95.0	252.7	-56.1	3.0	-10.0	3.0	0.0	34.9
IP-7	Chiller (Ref - Daikin: EWAD-C-XR C16)	833887.8	816392.4	123.3	--	--	95.0	258.8	-56.3	3.0	-10.0	3.0	0.0	34.7
IP-8	Cooling Tower (Ref - ryowo: FC/LN 400)	833881.7	816397.4	123.3	66.0	5.4	88.7	262.7	-56.4	3.0	-10.0	3.0	0.0	28.3
IP-9	Cooling Tower (Ref - ryowo: FC/LN 400)	833887.6	816401.9	123.3	66.0	5.4	88.7	268.1	-56.6	3.0	-10.0	3.0	0.0	28.1
GC-1	Chiller (Ref - Daikin: EWAD-C-XR C16)	833851.1	816339.2	111.8	--	--	95.0	201.4	-54.1	3.0	-10.0	3.0	0.0	36.9
GC-2	Chiller (Ref - Daikin: EWAD-C-XR C16)	833855.6	816337.5	111.8	--	--	95.0	200.0	-54.0	3.0	-10.0	3.0	0.0	37.0
GC-3	Chiller (Ref - Daikin: EWAD-CFXR 740)	833859.7	816335.7	111.8	--	--	92.0	198.6	-54.0	3.0	-10.0	3.0	0.0	34.0
HB-1	Chiller (Ref - Daikin: EWAD-CFXR 740)	834015.0	816407.1	97.5	--	--	92.0	322.0	-58.2	3.0	-10.0	3.0	0.0	29.8
PTG-1	Cooling Tower (Ref - ryowo: FC/LN 200)	834056.3	815996.1	87.1	64.0	3.8	83.6	261.6	-56.4	3.0	-10.0	3.0	0.0	23.3
PTG-2	Cooling Tower (Ref - ryowo: FC/LN 200)	834053.2	815993.6	87.1	64.0	3.8	83.6	260.4	-56.3	3.0	-10.0	3.0	0.0	23.3
										Noise standard:		**65**	**Overall**	**59**

Predicted Noise Level for Fixed Noise Impact Assessment - Base Case Scenario

Night Time

F03 NSR Coordinate: x = 833838.9 y = 816138.3 z = 117.6

Source ID	Description	Industrial Noise x	Industrial Noise y		SPL	Ref dist.	SWL	Slant distance from source	Distance Corr.	Façade Corr.	Barrier Corr.	Tonality Corr.	Impulsive Corr.	ANL
YSA-1	Chiller (Ref - Daikin: EWAD-D-SX 210)	833920.2	816100.0	96.8	--	--	84.0	92.2	-47.3	3.0	0.0	3.0	0.0	42.7
YSA-2	Chiller (Ref - Daikin: EWAD-D-SX 210)	833923.0	816097.1	96.8	--	--	84.0	95.9	-47.6	3.0	0.0	3.0	0.0	42.4
BOW-1	Chiller (Ref - Daikin: EWAD-D-SX 410)	833909.9	816077.7	91.4	--	--	85.0	97.0	-47.7	3.0	0.0	3.0	0.0	43.3
BOW-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833912.2	816075.5	91.4	--	--	85.0	100.0	-48.0	3.0	0.0	3.0	0.0	43.0
PTG-1	Cooling Tower (Ref - ryowo: FC/LN 200)	834056.3	815996.1	87.1	64.0	3.8	83.6	261.6	-56.4	3.0	-10.0	3.0	0.0	23.3
PTG-2	Cooling Tower (Ref - ryowo: FC/LN 200)	834053.2	815993.6	87.1	64.0	3.8	83.6	260.4	-56.3	3.0	-10.0	3.0	0.0	23.3
										Noise standard:		**55**	**Overall**	**49**

Predicted Noise Level for Fixed Noise Impact Assessment - Base Case Scenario
Day/Evening Time
F04 NSR Coordinate: x = 833834.3 y = 816146.0 z = 59.0

Source ID	Description	Industrial Noise Source Coordinate: x	y	z	SPL	Ref dist.	SWL	Slant distance from source to NSR (m)	Distance Corr.	Façade Corr.	Barrier Corr.	Tonality Corr.	Impulsive Corr.	ANL
OB-1	Chiller (Ref - Daikin: EWAD-D-SX 490)	833870.8	816166.0	121.8	--	--	86.0	75.3	-45.5	3.0	-10.0	3.0	0.0	36.5
OB-2	Cooling Tower (Ref - ryowo: FC/LN 200)	833874.7	816169.8	121.8	64.0	3.8	83.6	78.4	-45.9	3.0	-10.0	3.0	0.0	33.8
CRC-1	Chiller (Ref - Daikin: EWAD-CFXR 740)	833881.0	816161.9	131.1	--	--	92.0	87.4	-46.8	3.0	-10.0	3.0	0.0	41.2
CRC-2	Chiller (Ref - Daikin: EWAD-CFXR 740)	833884.0	816158.8	131.1	--	--	92.0	88.5	-46.9	3.0	-10.0	3.0	0.0	41.1
SB-1	Chiller (Ref - Daikin: EWAD-F-XR 500)	833886.6	816144.1	60.0	--	--	89.0	52.3	-42.4	3.0	-10.0	3.0	0.0	42.6
SB-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833887.3	816138.6	60.0	--	--	85.0	53.5	-42.6	3.0	-10.0	3.0	0.0	38.4
VHB-1	Chiller (Ref - Daikin: EWAD-D-SX 490)	833928.3	816124.3	88.4	--	--	86.0	100.9	-48.1	3.0	-10.0	3.0	0.0	33.9
VHB-2	Chiller (Ref - Daikin: EWAD-D-SX 490)	833932.2	816119.2	88.4	--	--	86.0	105.7	-48.5	3.0	-10.0	3.0	0.0	33.5
VHB-3	Chiller (Ref - Daikin: EWAD-D-SX 490)	833929.6	816114.1	88.4	--	--	86.0	104.7	-48.4	3.0	-10.0	3.0	0.0	33.6
YSA-1	Chiller (Ref - Daikin: EWAD-D-SX 210)	833920.2	816100.0	96.8	--	--	84.0	104.5	-48.4	3.0	-10.0	3.0	0.0	31.6
YSA-2	Chiller (Ref - Daikin: EWAD-D-SX 210)	833923.0	816097.1	96.8	--	--	84.0	108.1	-48.7	3.0	-10.0	3.0	0.0	31.3
TLP-1	Chiller (Ref - Daikin: EWAD-C-SR C14)	833913.6	816181.9	51.8	--	--	95.0	87.3	-46.8	3.0	-10.0	3.0	0.0	44.2
TLP-2	Chiller (Ref - Daikin: EWAQ-F-XR 330)	833918.0	816188.6	51.8	--	--	87.0	94.2	-47.5	3.0	-10.0	3.0	0.0	35.5
TLP-3	Chiller (Ref - Daikin: EWAD-C-SR C14)	833920.3	816184.2	51.8	--	--	95.0	94.4	-47.5	3.0	-10.0	3.0	0.0	43.5
TLP-4	Chiller (Ref - Daikin: EWAQ-F-XR 330)	833913.2	816176.1	51.8	--	--	87.0	84.8	-46.6	3.0	-10.0	3.0	0.0	36.4
BOW-1	Chiller (Ref - Daikin: EWAD-D-SX 410)	833909.9	816077.7	91.4	--	--	85.0	106.9	-48.6	3.0	-10.0	3.0	0.0	32.4
BOW-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833912.2	816075.5	91.4	--	--	85.0	109.9	-48.8	3.0	-10.0	3.0	0.0	32.2
WHIB-1	Chiller (Ref - Daikin: EWAD-CFXR 870)	833911.1	816220.6	73.0	--	--	92.0	108.0	-48.7	3.0	0.0	3.0	0.0	49.3
WHIB-2	Chiller (Ref - Daikin: EWAD-CFXR 870)	833918.3	816235.3	73.0	--	--	92.0	123.4	-49.8	3.0	0.0	3.0	0.0	48.2
OCBC-1	Chiller (Ref - Daikin: EWAQ-G-XR 080)	833876.3	816229.0	72.2	--	--	80.0	94.0	-47.5	3.0	0.0	3.0	0.0	38.5
OCBC-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833875.0	816224.7	72.2	--	--	85.0	89.6	-47.0	3.0	0.0	3.0	0.0	44.0
OCBC-3	Chiller (Ref - Daikin: EWAD-D-SX 410)	833880.2	816225.5	72.2	--	--	85.0	92.7	-47.3	3.0	0.0	3.0	0.0	43.7
OCBC-4	Chiller (Ref - Daikin: EWAD-D-SX 410)	833880.2	816220.3	72.2	--	--	85.0	88.3	-46.9	3.0	0.0	3.0	0.0	44.1
SLCB-1	Chiller (Ref - Daikin: EWAD-CFXR 600)	833884.3	816242.7	73.1	--	--	92.0	109.8	-48.8	3.0	0.0	3.0	0.0	49.2
AB-1	Chiller (Ref - Daikin: EWAD-D-SX 410)	833947.6	816283.2	72.3	--	--	85.0	178.4	-53.0	3.0	0.0	3.0	0.0	38.0
AB-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833949.1	816285.4	72.3	--	--	85.0	181.1	-53.2	3.0	0.0	3.0	0.0	37.8
HKTC-1	Chiller (Ref - Daikin: EWAD-D-SX 410)	833959.3	816314.2	78.4	--	--	85.0	210.5	-54.5	3.0	0.0	3.0	0.0	36.5
HKTC-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833963.4	816311.4	78.4	--	--	85.0	210.7	-54.5	3.0	0.0	3.0	0.0	36.5
HKTC-3	Chiller (Ref - Daikin: EWAD-D-SX 410)	833967.6	816308.9	78.4	--	--	85.0	211.4	-54.5	3.0	0.0	3.0	0.0	36.5
NCBB-1	Chiller (Ref - Daikin: EWAD-CFXR 600)	833980.6	816305.2	57.4	--	--	92.0	216.2	-54.7	3.0	0.0	3.0	0.0	43.3
NCBB-2	Chiller (Ref - Daikin: EWAD-CFXR 600)	833984.4	816302.9	57.4	--	--	92.0	217.1	-54.7	3.0	0.0	3.0	0.0	43.3
NCBB-3	Chiller (Ref - Daikin: EWAD-CFXR 600)	833988.8	816300.1	57.4	--	--	92.0	218.2	-54.8	3.0	0.0	3.0	0.0	43.2
CTGH-1	Chiller (Ref - Daikin: EWAD-CFXR 600)	833982.3	816343.5	94.0	--	--	92.0	249.3	-55.9	3.0	0.0	3.0	0.0	42.1
CTGH-2	Chiller (Ref - Daikin: EWAD-CFXR 600)	833991.6	816340.8	94.0	--	--	92.0	252.8	-56.1	3.0	0.0	3.0	0.0	41.9
CTGH-3	Chiller (Ref - Daikin: EWAD-CFXR 600)	833986.4	816336.9	94.0	--	--	92.0	246.6	-55.8	3.0	0.0	3.0	0.0	42.2
CTGH-4	Chiller (Ref - Daikin: EWAD-D-SX 410)	833980.3	816333.3	94.0	--	--	85.0	240.0	-55.6	3.0	0.0	3.0	0.0	35.4
TB-1	Chiller (Ref - Daikin: EWAD-CFXR 820)	834003.4	816335.1	84.3	--	--	92.0	254.9	-56.1	3.0	0.0	3.0	0.0	41.9
TB-2	Chiller (Ref - Daikin: EWAD-CFXR 820)	834007.2	816324.2	84.3	--	--	92.0	249.6	-55.9	3.0	0.0	3.0	0.0	42.1
IAB-1	Chiller (Ref - Daikin: EWAD-D-SX 490)	833958.7	816104.1	66.6	--	--	86.0	131.5	-50.4	3.0	-10.0	3.0	0.0	31.6
IAB-2	Chiller (Ref - Daikin: EWAD-D-SX 490)	833964.8	816100.4	66.6	--	--	86.0	138.4	-50.8	3.0	-10.0	3.0	0.0	31.2
100QRC-1	Chiller (Ref - Daikin: EWAD-CFXR C15)	834011.1	816060.8	129.5	--	--	95.0	208.5	-54.4	3.0	-10.0	3.0	0.0	36.6
100QRC-2	Chiller (Ref - Daikin: EWAD-CFXR C15)	834008.1	816058.1	129.5	--	--	95.0	207.1	-54.3	3.0	-10.0	3.0	0.0	36.7
100QRC-3	Chiller (Ref - Daikin: EWAD-CFXR 600)	834001.8	816055.5	129.5	--	--	92.0	203.0	-54.2	3.0	-10.0	3.0	0.0	33.8
RC-1	Chiller (Ref - Daikin: EWAD-CFXR C15)	834028.6	816025.5	91.7	--	--	95.0	231.0	-55.3	3.0	-10.0	3.0	0.0	35.7
RC-2	Chiller (Ref - Daikin: EWAD-CFXR C15)	834028.3	816032.4	91.7	--	--	95.0	227.2	-55.1	3.0	-10.0	3.0	0.0	35.9
HQ-1	Cooling Tower (Ref - ryowo: FC/LN 200)	834037.9	816016.4	120.2	64.0	3.8	83.6	249.0	-55.9	3.0	-10.0	3.0	0.0	23.7
HQ-2	Cooling Tower (Ref - ryowo: FC/LN 200)	834039.9	816019.3	120.2	64.0	3.8	83.6	249.1	-55.9	3.0	-10.0	3.0	0.0	23.7
HQ-3	Cooling Tower (Ref - ryowo: FC/LN 200)	834042.0	816022.2	120.2	64.0	3.8	83.6	249.4	-55.9	3.0	-10.0	3.0	0.0	23.7
CH-1	Cooling Tower (Ref - ryowo: FC/LN 400)	834076.4	815970.1	75.6	66.0	5.4	88.7	299.7	-57.5	3.0	-10.0	3.0	0.0	27.1
CH-2	Cooling Tower (Ref - ryowo: FC/LN 400)	834081.3	815963.7	75.6	66.0	5.4	88.7	307.4	-57.8	3.0	-10.0	3.0	0.0	26.9
POH-1	Chiller (Ref - Daikin: EWAD-D-SX 210)	834009.7	816003.1	97.7	--	--	84.0	229.5	-55.2	3.0	-10.0	3.0	0.0	24.8
WTT-1	Chiller (Ref - Daikin: EWAD-CFXR 870)	834016.5	815992.1	85.4	--	--	92.0	240.0	-55.6	3.0	-10.0	3.0	0.0	32.4
WTT-2	Chiller (Ref - Daikin: EWAD-CFXR 870)	834024.3	815984.9	85.4	--	--	92.0	250.5	-56.0	3.0	-10.0	3.0	0.0	32.0
AST-1	Chiller (Ref - Daikin: EWAD-CFXR C10)	834102.6	816020.6	78.0	--	--	94.0	296.8	-57.4	3.0	0.0	3.0	0.0	42.6
AST-2	Chiller (Ref - Daikin: EWAD-CFXR C10)	834104.5	816017.0	78.0	--	--	94.0	300.0	-57.5	3.0	0.0	3.0	0.0	42.5
AST-3	Chiller (Ref - Daikin: EWAD-D-SX 410)	834095.0	816014.2	78.0	--	--	85.0	292.7	-57.3	3.0	0.0	3.0	0.0	33.7
AST-4	Chiller (Ref - Daikin: EWAD-D-SX 410)	834096.8	816010.9	78.0	--	--	85.0	295.8	-57.4	3.0	0.0	3.0	0.0	33.6
BGLAT-1	Chiller (Ref - Daikin: EWAD-CFXR 740)	833959.9	816246.5	16.5	--	--	92.0	166.4	-52.4	3.0	-10.0	3.0	0.0	35.6
BGLAT-2	Chiller (Ref - Daikin: EWAD-CFXR 740)	833964.4	816243.1	16.5	--	--	92.0	167.8	-52.5	3.0	-10.0	3.0	0.0	35.5
TSBB-1	Chiller (Ref - Daikin: EWAD-D-SX 490)	833986.9	816259.8	56.3	--	--	86.0	190.4	-53.6	3.0	-10.0	3.0	0.0	28.4
TSBB-2	Chiller (Ref - Daikin: EWAD-D-SX 490)	833991.5	816257.1	56.3	--	--	86.0	192.5	-53.7	3.0	-10.0	3.0	0.0	28.3
PBC-1	Chiller (Ref - Daikin: EWAD-D-SX 410)	833994.6	816244.2	76.6	--	--	85.0	188.8	-53.5	3.0	-10.0	3.0	0.0	27.5
PBC-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	834001.4	816248.4	76.6	--	--	85.0	196.8	-53.9	3.0	-10.0	3.0	0.0	27.1
JC-1	Chiller (Ref - Daikin: EWAD-CFXR 740)	833950.9	816005.0	99.6	--	--	92.0	187.4	-53.5	3.0	-10.0	3.0	0.0	34.5
1LT-1	Chiller (Ref - Daikin: EWAD-CFXR 600)	833980.8	815970.5	102.3	--	--	92.0	232.7	-55.3	3.0	-10.0	3.0	0.0	32.7
1LT-2	Chiller (Ref - Daikin: EWAD-CFXR 600)	833979.5	815966.3	102.3	--	--	92.0	235.1	-55.4	3.0	-10.0	3.0	0.0	32.6
SS-1	Chiller (Ref - Daikin: EWAQ-G-XR 090)	833918.4	815974.4	107.3	--	--	82.0	197.1	-53.9	3.0	-10.0	3.0	0.0	24.1
SS-2	Chiller (Ref - Daikin: EWAQ-G-XR 090)	833919.8	815972.9	107.3	--	--	82.0	199.0	-54.0	3.0	-10.0	3.0	0.0	24.0
CPCB-1	Chiller (Ref - Daikin: EWAD-D-SX 410)	833977.2	815919.4	116.3	--	--	85.0	274.0	-56.8	3.0	-10.0	3.0	0.0	24.2
HC-1	Chiller (Ref - Daikin: EWAD-D-SX 490)	833930.1	815929.6	121.7	--	--	86.0	244.8	-55.8	3.0	-10.0	3.0	0.0	26.2
HC-2	Chiller (Ref - Daikin: EWAD-D-SX 490)	833933.6	815929.3	121.7	--	--	86.0	246.5	-55.8	3.0	-10.0	3.0	0.0	26.2
HC-3	Chiller (Ref - Daikin: EWAD-D-SX 490)	833936.6	815929.1	121.7	--	--	86.0	247.9	-55.9	3.0	-10.0	3.0	0.0	26.1
HC-4	Chiller (Ref - Daikin: EWAD-D-SX 490)	833942.4	815934.1	121.7	--	--	86.0	246.0	-55.8	3.0	-10.0	3.0	0.0	26.2
HC-5	Chiller (Ref - Daikin: EWAD-D-SX 490)	833945.5	815933.8	121.7	--	--	86.0	247.6	-55.9	3.0	-10.0	3.0	0.0	26.1
HC-6	Chiller (Ref - Daikin: EWAD-D-SX 490)	833942.8	815925.3	121.7	--	--	86.0	253.8	-56.1	3.0	-10.0	3.0	0.0	25.9
HC-7	Chiller (Ref - Daikin: EWAD-D-SX 490)	833938.2	815920.5	121.7	--	--	86.0	256.1	-56.2	3.0	-10.0	3.0	0.0	25.8
HC-8	Chiller (Ref - Daikin: EWAD-D-SX 490)	833941.3	815919.5	121.7	--	--	86.0	258.2	-56.2	3.0	-10.0	3.0	0.0	25.8
KC-1	Chiller (Ref - Daikin: EWAD-C-XR C16)	833838.9	815913.7	132.0	--	--	95.0	243.5	-55.7	3.0	-10.0	3.0	0.0	35.3
KC-2	Chiller (Ref - Daikin: EWAD-C-XR C16)	833828.9	815902.1	132.0	--	--	95.0	254.6	-56.1	3.0	-10.0	3.0	0.0	34.9
KC-3	Chiller (Ref - Daikin: EWAD-D-SX 490)	833820.6	815901.4	132.0	--	--	86.0	255.6	-56.2	3.0	-10.0	3.0	0.0	25.8
TW-1	Cooling Tower (Ref - ryowo: FC/LN 200)	833804.8	816218.3	132.1	64.0	3.8	83.6	107.0	-48.6	3.0	-10.0	3.0	0.0	31.1
TW-2	Cooling Tower (Ref - ryowo: FC/LN 200)	833809.5	816213.8	132.1	64.0	3.8	83.6	102.7	-48.2	3.0	-10.0	3.0	0.0	31.4

299Q-1	Chiller (Ref - Daikin: EWAD-CFXR 600)	833564.5	816227.4	80.9	--	--	92.0	282.7	-57.0	3.0	0.0	3.0	0.0	41.0
299Q-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833559.6	816230.8	80.9	--	--	85.0	288.3	-57.2	3.0	0.0	3.0	0.0	33.8
299Q-3	Chiller (Ref - Daikin: EWAD-CFXR 600)	833556.5	816237.1	80.9	--	--	92.0	293.2	-57.3	3.0	0.0	3.0	0.0	40.7
PBT-1	Chiller (Ref - Daikin: EWAD-CFXR 600)	833715.7	816289.5	83.6	--	--	92.0	187.8	-53.5	3.0	0.0	3.0	0.0	44.5
PBT-2	Chiller (Ref - Daikin: EWAD-CFXR 600)	833716.2	816284.4	83.6	--	--	92.0	183.6	-53.3	3.0	0.0	3.0	0.0	44.7
PBT-3	Chiller (Ref - Daikin: EWAD-D-SX 410)	833724.7	816288.4	83.6	--	--	85.0	181.4	-53.2	3.0	0.0	3.0	0.0	37.8
BC-1	Chiller (Ref - Daikin: EWAD-D-SX 490)	833646.5	816307.1	108.3	--	--	86.0	252.3	-56.0	3.0	0.0	3.0	0.0	36.0
BC-2	Chiller (Ref - Daikin: EWAD-D-SX 490)	833651.7	816304.6	108.3	--	--	86.0	246.8	-55.8	3.0	0.0	3.0	0.0	36.2
S50-1	Chiller (Ref - Daikin: EWAD-CFXR 740)	833628.2	816325.3	98.0	--	--	92.0	275.9	-56.8	3.0	0.0	3.0	0.0	41.2
S50-2	Chiller (Ref - Daikin: EWAD-CFXR 740)	833635.2	816325.0	98.0	--	--	92.0	270.6	-56.6	3.0	0.0	3.0	0.0	41.4
S50-3	Chiller (Ref - Daikin: EWAD-CFXR 740)	833632.9	816321.3	98.0	--	--	92.0	269.8	-56.6	3.0	0.0	3.0	0.0	41.4
HSBH-1	Cooling Tower (Ref - ryowo: FC/LN 200)	834145.9	816199.3	136.2	64.0	3.8	83.6	325.4	-58.2	3.0	-10.0	3.0	0.0	21.4
HSBH-2	Cooling Tower (Ref - ryowo: FC/LN 200)	834149.0	816195.3	136.2	64.0	3.8	83.6	327.8	-58.3	3.0	-10.0	3.0	0.0	21.3
HSBH-3	Cooling Tower (Ref - ryowo: FC/LN 200)	834138.9	816194.1	136.2	64.0	3.8	83.6	317.9	-58.0	3.0	-10.0	3.0	0.0	21.6
HSBH-4	Cooling Tower (Ref - ryowo: FC/LN 200)	834142.1	816190.0	136.2	64.0	3.8	83.6	320.4	-58.1	3.0	-10.0	3.0	0.0	21.5
HSBH-5	Chiller (Ref - Daikin: EWAD-CFXR 600)	834130.7	816195.9	136.2	--	--	92.0	310.3	-57.8	3.0	-10.0	3.0	0.0	30.2
HSBH-6	Chiller (Ref - Daikin: EWAD-CFXR C15)	834129.8	816191.8	136.2	--	--	95.0	308.8	-57.8	3.0	-10.0	3.0	0.0	33.2
HSBH-7	Chiller (Ref - Daikin: EWAD-CFXR C15)	834137.8	816179.8	136.2	--	--	95.0	315.0	-58.0	3.0	-10.0	3.0	0.0	33.0
NFT-1	Chiller (Ref - Daikin: EWAD-CFXR 740)	833967.2	816341.7	30.0	--	--	92.0	238.3	-55.5	3.0	0.0	3.0	0.0	42.5
NFT-2	Chiller (Ref - Daikin: EWAD-CFXR 740)	833959.3	816329.1	30.0	--	--	92.0	223.6	-55.0	3.0	0.0	3.0	0.0	43.0
NFT-3	Chiller (Ref - Daikin: EWAD-CFXR 740)	833940.5	816326.2	30.0	--	--	92.0	211.2	-54.5	3.0	0.0	3.0	0.0	43.5
NFT-4	Chiller (Ref - Daikin: EWAD-CFXR 740)	833930.9	816334.6	30.0	--	--	92.0	213.9	-54.6	3.0	0.0	3.0	0.0	43.4
NFT-5	Chiller (Ref - Daikin: EWAD-CFXR 740)	833940.2	816350.2	30.0	--	--	92.0	231.8	-55.3	3.0	0.0	3.0	0.0	42.7
NFT-6	Chiller (Ref - Daikin: EWAD-CFXR 740)	833945.5	816358.6	30.0	--	--	92.0	241.7	-55.7	3.0	0.0	3.0	0.0	42.3
IP-1	Chiller (Ref - Daikin: EWAD-CFXR C15)	833865.3	816416.7	34.0	--	--	95.0	273.6	-56.7	3.0	-10.0	3.0	0.0	34.3
IP-2	Chiller (Ref - Daikin: EWAD-CFXR C15)	833868.3	816414.0	34.0	--	--	95.0	271.3	-56.7	3.0	-10.0	3.0	0.0	34.3
IP-3	Chiller (Ref - Daikin: EWAD-CFXR C15)	833858.1	816402.3	34.0	--	--	95.0	258.6	-56.3	3.0	-10.0	3.0	0.0	34.7
IP-4	Chiller (Ref - Daikin: EWAD-CFXR C15)	833867.9	816406.9	34.0	--	--	95.0	264.2	-56.4	3.0	-10.0	3.0	0.0	34.6
IP-5	Chiller (Ref - Daikin: EWAD-CFXR C15)	833873.5	816404.4	34.0	--	--	95.0	262.5	-56.4	3.0	-10.0	3.0	0.0	34.6
IP-6	Chiller (Ref - Daikin: EWAD-C-XR C16)	833869.2	816389.1	123.3	--	--	95.0	253.9	-56.1	3.0	-10.0	3.0	0.0	34.9
IP-7	Chiller (Ref - Daikin: EWAD-C-XR C16)	833887.8	816392.4	123.3	--	--	95.0	260.2	-56.3	3.0	-10.0	3.0	0.0	34.7
IP-8	Cooling Tower (Ref - ryowo: FC/LN 400)	833881.7	816397.4	123.3	66.0	5.4	88.7	263.8	-56.4	3.0	-10.0	3.0	0.0	28.2
IP-9	Cooling Tower (Ref - ryowo: FC/LN 400)	833887.6	816401.9	123.3	66.0	5.4	88.7	269.2	-56.6	3.0	-10.0	3.0	0.0	28.1
GC-1	Chiller (Ref - Daikin: EWAD-C-XR C16)	833851.1	816339.2	111.8	--	--	95.0	201.0	-54.1	3.0	0.0	3.0	0.0	46.9
GC-2	Chiller (Ref - Daikin: EWAD-C-XR C16)	833855.6	816337.5	111.8	--	--	95.0	199.8	-54.0	3.0	0.0	3.0	0.0	47.0
GC-3	Chiller (Ref - Daikin: EWAD-CFXR 740)	833859.7	816335.7	111.8	--	--	92.0	198.5	-54.0	3.0	0.0	3.0	0.0	44.0
HB-1	Chiller (Ref - Daikin: EWAD-CFXR 740)	834015.0	816407.1	97.5	--	--	92.0	319.9	-58.1	3.0	0.0	3.0	0.0	39.9
PTG-1	Cooling Tower (Ref - ryowo: FC/LN 200)	834056.3	815996.1	87.1	64.0	3.8	83.6	269.3	-56.6	3.0	-10.0	3.0	0.0	23.0
PTG-2	Cooling Tower (Ref - ryowo: FC/LN 200)	834053.2	815993.6	87.1	64.0	3.8	83.6	268.2	-56.6	3.0	-10.0	3.0	0.0	23.1
										Noise standard:		**65**	**Overall**	**61**

Predicted Noise Level for Fixed Noise Impact Assessment - Base Case Scenario
Night Time
F04 NSR Coordinate: x = 833834.3 y = 816146.0 z = 59.0

Source ID	Description	Industrial Noise x	Industrial Noise y		SPL	Ref dist.	SWL	Slant distance from source	Distance Corr.	Façade Corr.	Barrier Corr.	Tonality Corr.	Impulsive Corr.	ANL
YSA-1	Chiller (Ref - Daikin: EWAD-D-SX 210)	833920.2	816100.0	96.8	--	--	84.0	104.5	-48.4	3.0	-10.0	3.0	0.0	31.6
YSA-2	Chiller (Ref - Daikin: EWAD-D-SX 210)	833923.0	816097.1	96.8	--	--	84.0	108.1	-48.7	3.0	-10.0	3.0	0.0	31.3
BOW-1	Chiller (Ref - Daikin: EWAD-D-SX 410)	833909.9	816077.7	91.4	--	--	85.0	106.9	-48.6	3.0	-10.0	3.0	0.0	32.4
BOW-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833912.2	816075.5	91.4	--	--	85.0	109.9	-48.8	3.0	-10.0	3.0	0.0	32.2
PTG-1	Cooling Tower (Ref - ryowo: FC/LN 200)	834056.3	815996.1	87.1	64.0	3.8	83.6	269.3	-56.6	3.0	-10.0	3.0	0.0	23.0
PTG-2	Cooling Tower (Ref - ryowo: FC/LN 200)	834053.2	815993.6	87.1	64.0	3.8	83.6	268.2	-56.6	3.0	-10.0	3.0	0.0	23.1
										Noise standard:		**55**	**Overall**	**38**

Predicted Noise Level for Fixed Noise Impact Assessment - Base Case Scenario
Day/Evening Time
F04 NSR Coordinate: x = 833834.3 y = 816146.0 z = 88.1

Source ID	Description	Industrial Noise Source Coordinate: x	y	z	SPL	Ref dist.	SWL	Slant distance from source to NSR (m)	Distance Corr.	Façade Corr.	Barrier Corr.	Tonality Corr.	Impulsive Corr.	ANL
OB-1	Chiller (Ref - Daikin: EWAD-D-SX 490)	833870.8	816166.0	121.8	--	--	86.0	53.6	-42.6	3.0	-10.0	3.0	0.0	39.4
OB-2	Cooling Tower (Ref - ryowo: FC/LN 200)	833874.7	816169.8	121.8	64.0	3.8	83.6	57.7	-43.2	3.0	-10.0	3.0	0.0	36.4
CRC-1	Chiller (Ref - Daikin: EWAD-CFXR 740)	833881.0	816161.9	131.1	--	--	92.0	65.4	-44.3	3.0	-10.0	3.0	0.0	43.7
CRC-2	Chiller (Ref - Daikin: EWAD-CFXR 740)	833884.0	816158.8	131.1	--	--	92.0	67.0	-44.5	3.0	-10.0	3.0	0.0	43.5
SB-1	Chiller (Ref - Daikin: EWAD-F-XR 500)	833886.6	816144.1	60.0	--	--	89.0	59.4	-43.5	3.0	-10.0	3.0	0.0	41.5
SB-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833887.3	816138.6	60.0	--	--	85.0	60.4	-43.6	3.0	-10.0	3.0	0.0	37.4
VHB-1	Chiller (Ref - Daikin: EWAD-D-SX 490)	833928.3	816124.3	88.4	--	--	86.0	96.5	-47.7	3.0	-10.0	3.0	0.0	34.3
VHB-2	Chiller (Ref - Daikin: EWAD-D-SX 490)	833932.2	816119.2	88.4	--	--	86.0	101.5	-48.1	3.0	-10.0	3.0	0.0	33.9
VHB-3	Chiller (Ref - Daikin: EWAD-D-SX 490)	833929.6	816114.1	88.4	--	--	86.0	100.5	-48.0	3.0	-10.0	3.0	0.0	34.0
YSA-1	Chiller (Ref - Daikin: EWAD-D-SX 210)	833920.2	816100.0	96.8	--	--	84.0	97.8	-47.8	3.0	-10.0	3.0	0.0	32.2
YSA-2	Chiller (Ref - Daikin: EWAD-D-SX 210)	833923.0	816097.1	96.8	--	--	84.0	101.7	-48.1	3.0	-10.0	3.0	0.0	31.9
TLP-1	Chiller (Ref - Daikin: EWAD-C-SR C14)	833913.6	816181.9	51.8	--	--	95.0	94.3	-47.5	3.0	-10.0	3.0	0.0	43.5
TLP-2	Chiller (Ref - Daikin: EWAQ-F-XR 330)	833918.0	816188.6	51.8	--	--	87.0	100.7	-48.1	3.0	-10.0	3.0	0.0	34.9
TLP-3	Chiller (Ref - Daikin: EWAD-C-SR C14)	833920.3	816184.2	51.8	--	--	95.0	100.9	-48.1	3.0	-10.0	3.0	0.0	42.9
TLP-4	Chiller (Ref - Daikin: EWAQ-F-XR 330)	833913.2	816176.1	51.8	--	--	87.0	91.9	-47.3	3.0	-10.0	3.0	0.0	35.7
BOW-1	Chiller (Ref - Daikin: EWAD-D-SX 410)	833909.9	816077.7	91.4	--	--	85.0	101.9	-48.2	3.0	-10.0	3.0	0.0	32.8
BOW-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833912.2	816075.5	91.4	--	--	85.0	105.1	-48.4	3.0	-10.0	3.0	0.0	32.6
WHIB-1	Chiller (Ref - Daikin: EWAD-CFXR 870)	833911.1	816220.6	73.0	--	--	92.0	108.1	-48.7	3.0	0.0	3.0	0.0	49.3
WHIB-2	Chiller (Ref - Daikin: EWAD-CFXR 870)	833918.3	816235.3	73.0	--	--	92.0	123.5	-49.8	3.0	0.0	3.0	0.0	48.2
OCBC-1	Chiller (Ref - Daikin: EWAQ-G-XR 080)	833876.3	816229.0	72.2	--	--	80.0	94.4	-47.5	3.0	0.0	3.0	0.0	38.5
OCBC-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833875.0	816224.7	72.2	--	--	85.0	90.0	-47.1	3.0	0.0	3.0	0.0	43.9
OCBC-3	Chiller (Ref - Daikin: EWAD-D-SX 410)	833880.2	816225.5	72.2	--	--	85.0	93.2	-47.4	3.0	0.0	3.0	0.0	43.6
OCBC-4	Chiller (Ref - Daikin: EWAD-D-SX 410)	833880.2	816220.3	72.2	--	--	85.0	88.8	-47.0	3.0	0.0	3.0	0.0	44.0
SLCB-1	Chiller (Ref - Daikin: EWAD-CFXR 600)	833884.3	816242.7	73.1	--	--	92.0	109.9	-48.8	3.0	0.0	3.0	0.0	49.2
AB-1	Chiller (Ref - Daikin: EWAD-D-SX 410)	833947.6	816283.2	72.3	--	--	85.0	178.6	-53.0	3.0	0.0	3.0	0.0	38.0
AB-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833949.1	816285.4	72.3	--	--	85.0	181.3	-53.2	3.0	0.0	3.0	0.0	37.8
HKTC-1	Chiller (Ref - Daikin: EWAD-D-SX 410)	833959.3	816314.2	78.4	--	--	85.0	209.8	-54.4	3.0	0.0	3.0	0.0	36.6
HKTC-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833963.4	816311.4	78.4	--	--	85.0	210.0	-54.4	3.0	0.0	3.0	0.0	36.6
HKTC-3	Chiller (Ref - Daikin: EWAD-D-SX 410)	833967.6	816308.9	78.4	--	--	85.0	210.7	-54.5	3.0	0.0	3.0	0.0	36.5
NCBB-1	Chiller (Ref - Daikin: EWAD-CFXR 600)	833980.6	816305.2	57.4	--	--	92.0	218.4	-54.8	3.0	0.0	3.0	0.0	43.2
NCBB-2	Chiller (Ref - Daikin: EWAD-CFXR 600)	833984.4	816302.9	57.4	--	--	92.0	219.3	-54.8	3.0	0.0	3.0	0.0	43.2
NCBB-3	Chiller (Ref - Daikin: EWAD-CFXR 600)	833988.8	816300.1	57.4	--	--	92.0	220.4	-54.9	3.0	0.0	3.0	0.0	43.1
CTGH-1	Chiller (Ref - Daikin: EWAD-CFXR 600)	833982.3	816343.5	94.0	--	--	92.0	246.9	-55.8	3.0	0.0	3.0	0.0	42.2
CTGH-2	Chiller (Ref - Daikin: EWAD-CFXR 600)	833991.6	816340.8	94.0	--	--	92.0	250.4	-56.0	3.0	0.0	3.0	0.0	42.0
CTGH-3	Chiller (Ref - Daikin: EWAD-CFXR 600)	833986.4	816336.9	94.0	--	--	92.0	244.2	-55.8	3.0	0.0	3.0	0.0	42.2
CTGH-4	Chiller (Ref - Daikin: EWAD-D-SX 410)	833980.3	816333.3	94.0	--	--	85.0	237.6	-55.5	3.0	0.0	3.0	0.0	35.5
TB-1	Chiller (Ref - Daikin: EWAD-CFXR 820)	834003.4	816335.1	84.3	--	--	92.0	253.7	-56.1	3.0	0.0	3.0	0.0	41.9
TB-2	Chiller (Ref - Daikin: EWAD-CFXR 820)	834007.2	816324.2	84.3	--	--	92.0	248.3	-55.9	3.0	0.0	3.0	0.0	42.1
IAB-1	Chiller (Ref - Daikin: EWAD-D-SX 490)	833958.7	816104.1	66.6	--	--	86.0	133.0	-50.5	3.0	-10.0	3.0	0.0	31.5
IAB-2	Chiller (Ref - Daikin: EWAD-D-SX 490)	833964.8	816100.4	66.6	--	--	86.0	139.9	-50.9	3.0	-10.0	3.0	0.0	31.1
100QRC-1	Chiller (Ref - Daikin: EWAD-CFXR C15)	834011.1	816060.8	129.5	--	--	95.0	200.6	-54.0	3.0	-10.0	3.0	0.0	37.0
100QRC-2	Chiller (Ref - Daikin: EWAD-CFXR C15)	834008.1	816058.1	129.5	--	--	95.0	199.1	-54.0	3.0	-10.0	3.0	0.0	37.0
100QRC-3	Chiller (Ref - Daikin: EWAD-CFXR 600)	834001.8	816055.5	129.5	--	--	92.0	194.8	-53.8	3.0	-10.0	3.0	0.0	34.2
RC-1	Chiller (Ref - Daikin: EWAD-CFXR C15)	834028.6	816025.5	91.7	--	--	95.0	228.7	-55.2	3.0	-10.0	3.0	0.0	35.8
RC-2	Chiller (Ref - Daikin: EWAD-CFXR C15)	834028.3	816032.4	91.7	--	--	95.0	224.8	-55.0	3.0	-10.0	3.0	0.0	36.0
HQ-1	Cooling Tower (Ref - ryowo: FC/LN 200)	834037.9	816016.4	120.2	64.0	3.8	83.6	243.5	-55.7	3.0	-10.0	3.0	0.0	23.9
HQ-2	Cooling Tower (Ref - ryowo: FC/LN 200)	834039.9	816019.3	120.2	64.0	3.8	83.6	243.6	-55.7	3.0	-10.0	3.0	0.0	23.9
HQ-3	Cooling Tower (Ref - ryowo: FC/LN 200)	834042.0	816022.2	120.2	64.0	3.8	83.6	243.9	-55.7	3.0	-10.0	3.0	0.0	23.9
CH-1	Cooling Tower (Ref - ryowo: FC/LN 400)	834076.4	815970.1	75.6	66.0	5.4	88.7	299.5	-57.5	3.0	-10.0	3.0	0.0	27.1
CH-2	Cooling Tower (Ref - ryowo: FC/LN 400)	834081.3	815963.7	75.6	66.0	5.4	88.7	307.2	-57.7	3.0	-10.0	3.0	0.0	26.9
POH-1	Chiller (Ref - Daikin: EWAD-D-SX 210)	834009.7	816003.1	97.7	--	--	84.0	226.4	-55.1	3.0	-10.0	3.0	0.0	24.9
WTT-1	Chiller (Ref - Daikin: EWAD-CFXR 870)	834016.5	815992.1	85.4	--	--	92.0	238.5	-55.6	3.0	-10.0	3.0	0.0	32.4
WTT-2	Chiller (Ref - Daikin: EWAD-CFXR 870)	834024.3	815984.9	85.4	--	--	92.0	249.1	-55.9	3.0	-10.0	3.0	0.0	32.1
AST-1	Chiller (Ref - Daikin: EWAD-CFXR C10)	834102.6	816020.6	78.0	--	--	94.0	296.3	-57.4	3.0	0.0	3.0	0.0	42.6
AST-2	Chiller (Ref - Daikin: EWAD-CFXR C10)	834104.5	816017.0	78.0	--	--	94.0	299.6	-57.5	3.0	0.0	3.0	0.0	42.5
AST-3	Chiller (Ref - Daikin: EWAD-D-SX 410)	834095.0	816014.2	78.0	--	--	85.0	292.3	-57.3	3.0	0.0	3.0	0.0	33.7
AST-4	Chiller (Ref - Daikin: EWAD-D-SX 410)	834096.8	816010.9	78.0	--	--	85.0	295.4	-57.4	3.0	0.0	3.0	0.0	33.6
BGLAT-1	Chiller (Ref - Daikin: EWAD-CFXR 740)	833959.9	816246.5	16.5	--	--	92.0	176.1	-52.9	3.0	-10.0	3.0	0.0	35.1
BGLAT-2	Chiller (Ref - Daikin: EWAD-CFXR 740)	833964.4	816243.1	16.5	--	--	92.0	177.4	-53.0	3.0	-10.0	3.0	0.0	35.0
TSBB-1	Chiller (Ref - Daikin: EWAD-D-SX 490)	833986.9	816259.8	56.3	--	--	86.0	193.0	-53.7	3.0	-10.0	3.0	0.0	28.3
TSBB-2	Chiller (Ref - Daikin: EWAD-D-SX 490)	833991.5	816257.1	56.3	--	--	86.0	195.1	-53.8	3.0	-10.0	3.0	0.0	28.2
PBC-1	Chiller (Ref - Daikin: EWAD-D-SX 410)	833994.6	816244.2	76.6	--	--	85.0	188.3	-53.5	3.0	-10.0	3.0	0.0	27.5
PBC-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	834001.4	816248.4	76.6	--	--	85.0	196.3	-53.9	3.0	-10.0	3.0	0.0	27.1
JC-1	Chiller (Ref - Daikin: EWAD-CFXR 740)	833950.9	816005.0	99.6	--	--	92.0	183.3	-53.3	3.0	-10.0	3.0	0.0	34.7
1LT-1	Chiller (Ref - Daikin: EWAD-CFXR 600)	833980.8	815970.5	102.3	--	--	92.0	229.1	-55.2	3.0	-10.0	3.0	0.0	32.8
1LT-2	Chiller (Ref - Daikin: EWAD-CFXR 600)	833979.5	815966.3	102.3	--	--	92.0	231.5	-55.3	3.0	-10.0	3.0	0.0	32.7
SS-1	Chiller (Ref - Daikin: EWAQ-G-XR 090)	833918.4	815974.4	107.3	--	--	82.0	192.1	-53.7	3.0	-10.0	3.0	0.0	24.3
SS-2	Chiller (Ref - Daikin: EWAQ-G-XR 090)	833919.8	815972.9	107.3	--	--	82.0	194.0	-53.8	3.0	-10.0	3.0	0.0	24.2
CPCB-1	Chiller (Ref - Daikin: EWAD-D-SX 410)	833977.2	815919.4	116.3	--	--	85.0	269.4	-56.6	3.0	-10.0	3.0	0.0	24.4
HC-1	Chiller (Ref - Daikin: EWAD-D-SX 490)	833930.1	815929.6	121.7	--	--	86.0	239.0	-55.6	3.0	-10.0	3.0	0.0	26.4
HC-2	Chiller (Ref - Daikin: EWAD-D-SX 490)	833933.6	815929.3	121.7	--	--	86.0	240.7	-55.6	3.0	-10.0	3.0	0.0	26.4
HC-3	Chiller (Ref - Daikin: EWAD-D-SX 490)	833936.6	815929.1	121.7	--	--	86.0	242.2	-55.7	3.0	-10.0	3.0	0.0	26.3
HC-4	Chiller (Ref - Daikin: EWAD-D-SX 490)	833942.4	815934.1	121.7	--	--	86.0	240.2	-55.6	3.0	-10.0	3.0	0.0	26.4
HC-5	Chiller (Ref - Daikin: EWAD-D-SX 490)	833945.5	815933.8	121.7	--	--	86.0	241.9	-55.7	3.0	-10.0	3.0	0.0	26.3
HC-6	Chiller (Ref - Daikin: EWAD-D-SX 490)	833942.8	815925.3	121.7	--	--	86.0	248.2	-55.9	3.0	-10.0	3.0	0.0	26.1
HC-7	Chiller (Ref - Daikin: EWAD-D-SX 490)	833938.2	815920.5	121.7	--	--	86.0	250.5	-56.0	3.0	-10.0	3.0	0.0	26.0
HC-8	Chiller (Ref - Daikin: EWAD-D-SX 490)	833941.3	815919.5	121.7	--	--	86.0	252.7	-56.1	3.0	-10.0	3.0	0.0	25.9
KC-1	Chiller (Ref - Daikin: EWAD-C-XR C16)	833838.9	815913.7	132.0	--	--	95.0	236.5	-55.5	3.0	-10.0	3.0	0.0	35.5
KC-2	Chiller (Ref - Daikin: EWAD-C-XR C16)	833828.9	815902.1	132.0	--	--	95.0	247.9	-55.9	3.0	-10.0	3.0	0.0	35.1
KC-3	Chiller (Ref - Daikin: EWAD-D-SX 490)	833820.6	815901.4	132.0	--	--	86.0	248.9	-55.9	3.0	-10.0	3.0	0.0	26.1
TW-1	Cooling Tower (Ref - ryowo: FC/LN 200)	833804.8	816218.3	132.1	64.0	3.8	83.6	89.6	-47.0	3.0	-10.0	3.0	0.0	32.6
TW-2	Cooling Tower (Ref - ryowo: FC/LN 200)	833809.5	816213.8	132.1	64.0	3.8	83.6	84.5	-46.5	3.0	-10.0	3.0	0.0	33.1

299Q-1	Chiller (Ref - Daikin: EWAD-CFXR 600)	833564.5	816227.4	80.9	--	--	92.0	281.9	-57.0	3.0	0.0	3.0	0.0	41.0
299Q-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833559.6	816230.8	80.9	--	--	85.0	287.6	-57.2	3.0	0.0	3.0	0.0	33.8
299Q-3	Chiller (Ref - Daikin: EWAD-CFXR 600)	833556.5	816237.1	80.9	--	--	92.0	292.4	-57.3	3.0	0.0	3.0	0.0	40.7
PBT-1	Chiller (Ref - Daikin: EWAD-CFXR 600)	833715.7	816289.5	83.6	--	--	92.0	186.2	-53.4	3.0	0.0	3.0	0.0	44.6
PBT-2	Chiller (Ref - Daikin: EWAD-CFXR 600)	833716.2	816284.4	83.6	--	--	92.0	182.0	-53.2	3.0	0.0	3.0	0.0	44.8
PBT-3	Chiller (Ref - Daikin: EWAD-D-SX 410)	833724.7	816288.4	83.6	--	--	85.0	179.8	-53.1	3.0	0.0	3.0	0.0	37.9
BC-1	Chiller (Ref - Daikin: EWAD-D-SX 490)	833646.5	816307.1	108.3	--	--	86.0	248.3	-55.9	3.0	0.0	3.0	0.0	36.1
BC-2	Chiller (Ref - Daikin: EWAD-D-SX 490)	833651.7	816304.6	108.3	--	--	86.0	242.7	-55.7	3.0	0.0	3.0	0.0	36.3
S50-1	Chiller (Ref - Daikin: EWAD-CFXR 740)	833628.2	816325.3	98.0	--	--	92.0	273.4	-56.7	3.0	0.0	3.0	0.0	41.3
S50-2	Chiller (Ref - Daikin: EWAD-CFXR 740)	833635.2	816325.0	98.0	--	--	92.0	267.9	-56.6	3.0	0.0	3.0	0.0	41.4
S50-3	Chiller (Ref - Daikin: EWAD-CFXR 740)	833632.9	816321.3	98.0	--	--	92.0	267.2	-56.5	3.0	0.0	3.0	0.0	41.5
HSBH-1	Cooling Tower (Ref - ryowo: FC/LN 200)	834145.9	816199.3	136.2	64.0	3.8	83.6	319.8	-58.1	3.0	-10.0	3.0	0.0	21.5
HSBH-2	Cooling Tower (Ref - ryowo: FC/LN 200)	834149.0	816195.3	136.2	64.0	3.8	83.6	322.1	-58.2	3.0	-10.0	3.0	0.0	21.5
HSBH-3	Cooling Tower (Ref - ryowo: FC/LN 200)	834138.9	816194.1	136.2	64.0	3.8	83.6	312.1	-57.9	3.0	-10.0	3.0	0.0	21.8
HSBH-4	Cooling Tower (Ref - ryowo: FC/LN 200)	834142.1	816190.0	136.2	64.0	3.8	83.6	314.6	-58.0	3.0	-10.0	3.0	0.0	21.7
HSBH-5	Chiller (Ref - Daikin: EWAD-CFXR 600)	834130.7	816195.9	136.2	--	--	92.0	304.4	-57.7	3.0	-10.0	3.0	0.0	30.3
HSBH-6	Chiller (Ref - Daikin: EWAD-CFXR C15)	834129.8	816191.8	136.2	--	--	95.0	302.9	-57.6	3.0	-10.0	3.0	0.0	33.4
HSBH-7	Chiller (Ref - Daikin: EWAD-CFXR C15)	834137.8	816179.8	136.2	--	--	95.0	309.1	-57.8	3.0	-10.0	3.0	0.0	33.2
NFT-1	Chiller (Ref - Daikin: EWAD-CFXR 740)	833967.2	816341.7	30.0	--	--	92.0	243.6	-55.7	3.0	0.0	3.0	0.0	42.3
NFT-2	Chiller (Ref - Daikin: EWAD-CFXR 740)	833959.3	816329.1	30.0	--	--	92.0	229.2	-55.2	3.0	0.0	3.0	0.0	42.8
NFT-3	Chiller (Ref - Daikin: EWAD-CFXR 740)	833940.5	816326.2	30.0	--	--	92.0	217.1	-54.7	3.0	0.0	3.0	0.0	43.3
NFT-4	Chiller (Ref - Daikin: EWAD-CFXR 740)	833930.9	816334.6	30.0	--	--	92.0	219.7	-54.8	3.0	0.0	3.0	0.0	43.2
NFT-5	Chiller (Ref - Daikin: EWAD-CFXR 740)	833940.2	816350.2	30.0	--	--	92.0	237.3	-55.5	3.0	0.0	3.0	0.0	42.5
NFT-6	Chiller (Ref - Daikin: EWAD-CFXR 740)	833945.5	816358.6	30.0	--	--	92.0	246.9	-55.8	3.0	0.0	3.0	0.0	42.2
IP-1	Chiller (Ref - Daikin: EWAD-CFXR C15)	833865.3	816416.7	34.0	--	--	95.0	277.8	-56.9	3.0	-10.0	3.0	0.0	34.1
IP-2	Chiller (Ref - Daikin: EWAD-CFXR C15)	833868.3	816414.0	34.0	--	--	95.0	275.5	-56.8	3.0	-10.0	3.0	0.0	34.2
IP-3	Chiller (Ref - Daikin: EWAD-CFXR C15)	833858.1	816402.3	34.0	--	--	95.0	263.0	-56.4	3.0	-10.0	3.0	0.0	34.6
IP-4	Chiller (Ref - Daikin: EWAD-CFXR C15)	833867.9	816406.9	34.0	--	--	95.0	268.6	-56.6	3.0	-10.0	3.0	0.0	34.4
IP-5	Chiller (Ref - Daikin: EWAD-CFXR C15)	833873.5	816404.4	34.0	--	--	95.0	266.9	-56.5	3.0	-10.0	3.0	0.0	34.5
IP-6	Chiller (Ref - Daikin: EWAD-C-XR C16)	833869.2	816389.1	123.3	--	--	95.0	248.1	-55.9	3.0	-10.0	3.0	0.0	35.1
IP-7	Chiller (Ref - Daikin: EWAD-C-XR C16)	833887.8	816392.4	123.3	--	--	95.0	254.6	-56.1	3.0	-10.0	3.0	0.0	34.9
IP-8	Cooling Tower (Ref - ryowo: FC/LN 400)	833881.7	816397.4	123.3	66.0	5.4	88.7	258.2	-56.2	3.0	-10.0	3.0	0.0	28.4
IP-9	Cooling Tower (Ref - ryowo: FC/LN 400)	833887.6	816401.9	123.3	66.0	5.4	88.7	263.8	-56.4	3.0	-10.0	3.0	0.0	28.2
GC-1	Chiller (Ref - Daikin: EWAD-C-XR C16)	833851.1	816339.2	111.8	--	--	95.0	195.4	-53.8	3.0	0.0	3.0	0.0	47.2
GC-2	Chiller (Ref - Daikin: EWAD-C-XR C16)	833855.6	816337.5	111.8	--	--	95.0	194.1	-53.8	3.0	0.0	3.0	0.0	47.2
GC-3	Chiller (Ref - Daikin: EWAD-CFXR 740)	833859.7	816335.7	111.8	--	--	92.0	192.9	-53.7	3.0	0.0	3.0	0.0	44.3
HB-1	Chiller (Ref - Daikin: EWAD-CFXR 740)	834015.0	816407.1	97.5	--	--	92.0	317.7	-58.0	3.0	0.0	3.0	0.0	40.0
PTG-1	Cooling Tower (Ref - ryowo: FC/LN 200)	834056.3	815996.1	87.1	64.0	3.8	83.6	267.9	-56.6	3.0	-10.0	3.0	0.0	23.1
PTG-2	Cooling Tower (Ref - ryowo: FC/LN 200)	834053.2	815993.6	87.1	64.0	3.8	83.6	266.7	-56.5	3.0	-10.0	3.0	0.0	23.1
										Noise standard:		**65**	**Overall**	**61**

Predicted Noise Level for Fixed Noise Impact Assessment - Base Case Scenario
Night Time
F04 NSR Coordinate: x = 833834.3 y = 816146.0 z = 88.1

Source ID	Description	Industrial Noise x	Industrial Noise y		SPL	Ref dist.	SWL	Slant distance from source	Distance Corr.	Façade Corr.	Barrier Corr.	Tonality Corr.	Impulsive Corr.	ANL
YSA-1	Chiller (Ref - Daikin: EWAD-D-SX 210)	833920.2	816100.0	96.8	--	--	84.0	97.8	-47.8	3.0	-10.0	3.0	0.0	32.2
YSA-2	Chiller (Ref - Daikin: EWAD-D-SX 210)	833923.0	816097.1	96.8	--	--	84.0	101.7	-48.1	3.0	-10.0	3.0	0.0	31.9
BOW-1	Chiller (Ref - Daikin: EWAD-D-SX 410)	833909.9	816077.7	91.4	--	--	85.0	101.9	-48.2	3.0	-10.0	3.0	0.0	32.8
BOW-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833912.2	816075.5	91.4	--	--	85.0	105.1	-48.4	3.0	-10.0	3.0	0.0	32.6
PTG-1	Cooling Tower (Ref - ryowo: FC/LN 200)	834056.3	815996.1	87.1	64.0	3.8	83.6	267.9	-56.6	3.0	-10.0	3.0	0.0	23.1
PTG-2	Cooling Tower (Ref - ryowo: FC/LN 200)	834053.2	815993.6	87.1	64.0	3.8	83.6	266.7	-56.5	3.0	-10.0	3.0	0.0	23.1
										Noise standard:		**55**	**Overall**	**39**

Predicted Noise Level for Fixed Noise Impact Assessment - Base Case Scenario
Day/Evening Time
F04 NSR Coordinate: x = 833834.3 y = 816146.0 z = 117.6

Source ID	Description	Industrial Noise Source Coordinate: x	y	z	SPL	Ref dist.	SWL	Slant distance from source to NSR (m)	Distance Corr.	Façade Corr.	Barrier Corr.	Tonality Corr.	Impulsive Corr.	ANL
OB-1	Chiller (Ref - Daikin: EWAD-D-SX 490)	833870.8	816166.0	121.8	--	--	86.0	41.8	-40.4	3.0	-10.0	3.0	0.0	41.6
OB-2	Cooling Tower (Ref - ryowo: FC/LN 200)	833874.7	816169.8	121.8	64.0	3.8	83.6	47.1	-41.5	3.0	-10.0	3.0	0.0	38.2
CRC-1	Chiller (Ref - Daikin: EWAD-CFXR 740)	833881.0	816161.9	131.1	--	--	92.0	51.1	-42.2	3.0	-10.0	3.0	0.0	45.8
CRC-2	Chiller (Ref - Daikin: EWAD-CFXR 740)	833884.0	816158.8	131.1	--	--	92.0	53.1	-42.5	3.0	-10.0	3.0	0.0	45.5
SB-1	Chiller (Ref - Daikin: EWAD-F-XR 500)	833886.6	816144.1	60.0	--	--	89.0	77.8	-45.8	3.0	-10.0	3.0	0.0	39.2
SB-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833887.3	816138.6	60.0	--	--	85.0	78.6	-45.9	3.0	-10.0	3.0	0.0	35.1
VHB-1	Chiller (Ref - Daikin: EWAD-D-SX 490)	833928.3	816124.3	88.4	--	--	86.0	100.8	-48.1	3.0	-10.0	3.0	0.0	33.9
VHB-2	Chiller (Ref - Daikin: EWAD-D-SX 490)	833932.2	816119.2	88.4	--	--	86.0	105.6	-48.5	3.0	-10.0	3.0	0.0	33.5
VHB-3	Chiller (Ref - Daikin: EWAD-D-SX 490)	833929.6	816114.1	88.4	--	--	86.0	104.7	-48.4	3.0	-10.0	3.0	0.0	33.6
YSA-1	Chiller (Ref - Daikin: EWAD-D-SX 210)	833920.2	816100.0	96.8	--	--	84.0	99.6	-48.0	3.0	-10.0	3.0	0.0	32.0
YSA-2	Chiller (Ref - Daikin: EWAD-D-SX 210)	833923.0	816097.1	96.8	--	--	84.0	103.4	-48.3	3.0	-10.0	3.0	0.0	31.7
TLP-1	Chiller (Ref - Daikin: EWAD-C-SR C14)	833913.6	816181.9	51.8	--	--	95.0	109.1	-48.8	3.0	-10.0	3.0	0.0	42.2
TLP-2	Chiller (Ref - Daikin: EWAQ-F-XR 330)	833918.0	816188.6	51.8	--	--	87.0	114.7	-49.2	3.0	-10.0	3.0	0.0	33.8
TLP-3	Chiller (Ref - Daikin: EWAD-C-SR C14)	833920.3	816184.2	51.8	--	--	95.0	114.8	-49.2	3.0	-10.0	3.0	0.0	41.8
TLP-4	Chiller (Ref - Daikin: EWAQ-F-XR 330)	833913.2	816176.1	51.8	--	--	87.0	107.1	-48.6	3.0	-10.0	3.0	0.0	34.4
BOW-1	Chiller (Ref - Daikin: EWAD-D-SX 410)	833909.9	816077.7	91.4	--	--	85.0	105.2	-48.4	3.0	-10.0	3.0	0.0	32.6
BOW-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833912.2	816075.5	91.4	--	--	85.0	108.3	-48.7	3.0	-10.0	3.0	0.0	32.3
WHIB-1	Chiller (Ref - Daikin: EWAD-CFXR 870)	833911.1	816220.6	73.0	--	--	92.0	116.0	-49.3	3.0	0.0	3.0	0.0	48.7
WHIB-2	Chiller (Ref - Daikin: EWAD-CFXR 870)	833918.3	816235.3	73.0	--	--	92.0	130.5	-50.3	3.0	0.0	3.0	0.0	47.7
OCBC-1	Chiller (Ref - Daikin: EWAQ-G-XR 080)	833876.3	816229.0	72.2	--	--	80.0	103.5	-48.3	3.0	0.0	3.0	0.0	37.7
OCBC-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833875.0	816224.7	72.2	--	--	85.0	99.6	-48.0	3.0	0.0	3.0	0.0	43.0
OCBC-3	Chiller (Ref - Daikin: EWAD-D-SX 410)	833880.2	816225.5	72.2	--	--	85.0	102.4	-48.2	3.0	0.0	3.0	0.0	42.8
OCBC-4	Chiller (Ref - Daikin: EWAD-D-SX 410)	833880.2	816220.3	72.2	--	--	85.0	98.4	-47.9	3.0	0.0	3.0	0.0	43.1
SLCB-1	Chiller (Ref - Daikin: EWAD-CFXR 600)	833884.3	816242.7	73.1	--	--	92.0	117.6	-49.4	3.0	0.0	3.0	0.0	48.6
AB-1	Chiller (Ref - Daikin: EWAD-D-SX 410)	833947.6	816283.2	72.3	--	--	85.0	183.6	-53.3	3.0	0.0	3.0	0.0	37.7
AB-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833949.1	816285.4	72.3	--	--	85.0	186.2	-53.4	3.0	0.0	3.0	0.0	37.6
HKTC-1	Chiller (Ref - Daikin: EWAD-D-SX 410)	833959.3	816314.2	78.4	--	--	85.0	213.2	-54.6	3.0	0.0	3.0	0.0	36.4
HKTC-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833963.4	816311.4	78.4	--	--	85.0	213.4	-54.6	3.0	0.0	3.0	0.0	36.4
HKTC-3	Chiller (Ref - Daikin: EWAD-D-SX 410)	833967.6	816308.9	78.4	--	--	85.0	214.1	-54.6	3.0	0.0	3.0	0.0	36.4
NCBB-1	Chiller (Ref - Daikin: EWAD-CFXR 600)	833980.6	816305.2	57.4	--	--	92.0	224.4	-55.0	3.0	0.0	3.0	0.0	43.0
NCBB-2	Chiller (Ref - Daikin: EWAD-CFXR 600)	833984.4	816302.9	57.4	--	--	92.0	225.3	-55.1	3.0	0.0	3.0	0.0	42.9
NCBB-3	Chiller (Ref - Daikin: EWAD-CFXR 600)	833988.8	816300.1	57.4	--	--	92.0	226.4	-55.1	3.0	0.0	3.0	0.0	42.9
CTGH-1	Chiller (Ref - Daikin: EWAD-CFXR 600)	833982.3	816343.5	94.0	--	--	92.0	247.9	-55.9	3.0	0.0	3.0	0.0	42.1
CTGH-2	Chiller (Ref - Daikin: EWAD-CFXR 600)	833991.6	816340.8	94.0	--	--	92.0	251.5	-56.0	3.0	0.0	3.0	0.0	42.0
CTGH-3	Chiller (Ref - Daikin: EWAD-CFXR 600)	833986.4	816336.9	94.0	--	--	92.0	245.2	-55.8	3.0	0.0	3.0	0.0	42.2
CTGH-4	Chiller (Ref - Daikin: EWAD-D-SX 410)	833980.3	816333.3	94.0	--	--	85.0	238.7	-55.6	3.0	0.0	3.0	0.0	35.4
TB-1	Chiller (Ref - Daikin: EWAD-CFXR 820)	834003.4	816335.1	84.3	--	--	92.0	255.9	-56.2	3.0	0.0	3.0	0.0	41.8
TB-2	Chiller (Ref - Daikin: EWAD-CFXR 820)	834007.2	816324.2	84.3	--	--	92.0	250.5	-56.0	3.0	0.0	3.0	0.0	42.0
IAB-1	Chiller (Ref - Daikin: EWAD-D-SX 490)	833958.7	816104.1	66.6	--	--	86.0	140.8	-51.0	3.0	-10.0	3.0	0.0	31.0
IAB-2	Chiller (Ref - Daikin: EWAD-D-SX 490)	833964.8	816100.4	66.6	--	--	86.0	147.3	-51.4	3.0	-10.0	3.0	0.0	30.6
100QRC-1	Chiller (Ref - Daikin: EWAD-CFXR C15)	834011.1	816060.8	129.5	--	--	95.0	196.6	-53.9	3.0	-10.0	3.0	0.0	37.1
100QRC-2	Chiller (Ref - Daikin: EWAD-CFXR C15)	834008.1	816058.1	129.5	--	--	95.0	195.1	-53.8	3.0	-10.0	3.0	0.0	37.2
100QRC-3	Chiller (Ref - Daikin: EWAD-CFXR 600)	834001.8	816055.5	129.5	--	--	92.0	190.8	-53.6	3.0	-10.0	3.0	0.0	34.4
RC-1	Chiller (Ref - Daikin: EWAD-CFXR C15)	834028.6	816025.5	91.7	--	--	95.0	230.1	-55.2	3.0	-10.0	3.0	0.0	35.8
RC-2	Chiller (Ref - Daikin: EWAD-CFXR C15)	834028.3	816032.4	91.7	--	--	95.0	226.3	-55.1	3.0	-10.0	3.0	0.0	35.9
HQ-1	Cooling Tower (Ref - ryowo: FC/LN 200)	834037.9	816016.4	120.2	64.0	3.8	83.6	241.4	-55.7	3.0	-10.0	3.0	0.0	24.0
HQ-2	Cooling Tower (Ref - ryowo: FC/LN 200)	834039.9	816019.3	120.2	64.0	3.8	83.6	241.5	-55.7	3.0	-10.0	3.0	0.0	24.0
HQ-3	Cooling Tower (Ref - ryowo: FC/LN 200)	834042.0	816022.2	120.2	64.0	3.8	83.6	241.8	-55.7	3.0	-10.0	3.0	0.0	24.0
CH-1	Cooling Tower (Ref - ryowo: FC/LN 400)	834076.4	815970.1	75.6	66.0	5.4	88.7	302.2	-57.6	3.0	-10.0	3.0	0.0	27.1
CH-2	Cooling Tower (Ref - ryowo: FC/LN 400)	834081.3	815963.7	75.6	66.0	5.4	88.7	309.8	-57.8	3.0	-10.0	3.0	0.0	26.8
POH-1	Chiller (Ref - Daikin: EWAD-D-SX 210)	834009.7	816003.1	97.7	--	--	84.0	227.1	-55.1	3.0	-10.0	3.0	0.0	24.9
WTT-1	Chiller (Ref - Daikin: EWAD-CFXR 870)	834016.5	815992.1	85.4	--	--	92.0	240.7	-55.6	3.0	-10.0	3.0	0.0	32.4
WTT-2	Chiller (Ref - Daikin: EWAD-CFXR 870)	834024.3	815984.9	85.4	--	--	92.0	251.2	-56.0	3.0	-10.0	3.0	0.0	32.0
AST-1	Chiller (Ref - Daikin: EWAD-CFXR C10)	834102.6	816020.6	78.0	--	--	94.0	298.8	-57.5	3.0	0.0	3.0	0.0	42.5
AST-2	Chiller (Ref - Daikin: EWAD-CFXR C10)	834104.5	816017.0	78.0	--	--	94.0	302.0	-57.6	3.0	0.0	3.0	0.0	42.4
AST-3	Chiller (Ref - Daikin: EWAD-D-SX 410)	834095.0	816014.2	78.0	--	--	85.0	294.8	-57.4	3.0	0.0	3.0	0.0	33.6
AST-4	Chiller (Ref - Daikin: EWAD-D-SX 410)	834096.8	816010.9	78.0	--	--	85.0	297.9	-57.5	3.0	0.0	3.0	0.0	33.5
BGLAT-1	Chiller (Ref - Daikin: EWAD-CFXR 740)	833959.9	816246.5	16.5	--	--	92.0	190.0	-53.6	3.0	-10.0	3.0	0.0	34.4
BGLAT-2	Chiller (Ref - Daikin: EWAD-CFXR 740)	833964.4	816243.1	16.5	--	--	92.0	191.2	-53.6	3.0	-10.0	3.0	0.0	34.4
TSBB-1	Chiller (Ref - Daikin: EWAD-D-SX 490)	833986.9	816259.8	56.3	--	--	86.0	200.0	-54.0	3.0	-10.0	3.0	0.0	28.0
TSBB-2	Chiller (Ref - Daikin: EWAD-D-SX 490)	833991.5	816257.1	56.3	--	--	86.0	202.0	-54.1	3.0	-10.0	3.0	0.0	27.9
PBC-1	Chiller (Ref - Daikin: EWAD-D-SX 410)	833994.6	816244.2	76.6	--	--	85.0	192.4	-53.7	3.0	-10.0	3.0	0.0	27.3
PBC-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	834001.4	816248.4	76.6	--	--	85.0	200.2	-54.0	3.0	-10.0	3.0	0.0	27.0
JC-1	Chiller (Ref - Daikin: EWAD-CFXR 740)	833950.9	816005.0	99.6	--	--	92.0	183.8	-53.3	3.0	-10.0	3.0	0.0	34.7
1LT-1	Chiller (Ref - Daikin: EWAD-CFXR 600)	833980.8	815970.5	102.3	--	--	92.0	229.1	-55.2	3.0	-10.0	3.0	0.0	32.8
1LT-2	Chiller (Ref - Daikin: EWAD-CFXR 600)	833979.5	815966.3	102.3	--	--	92.0	231.5	-55.3	3.0	-10.0	3.0	0.0	32.7
SS-1	Chiller (Ref - Daikin: EWAQ-G-XR 090)	833918.4	815974.4	107.3	--	--	82.0	191.4	-53.6	3.0	-10.0	3.0	0.0	24.4
SS-2	Chiller (Ref - Daikin: EWAQ-G-XR 090)	833919.8	815972.9	107.3	--	--	82.0	193.3	-53.7	3.0	-10.0	3.0	0.0	24.3
CPCB-1	Chiller (Ref - Daikin: EWAD-D-SX 410)	833977.2	815919.4	116.3	--	--	85.0	267.9	-56.6	3.0	-10.0	3.0	0.0	24.4
HC-1	Chiller (Ref - Daikin: EWAD-D-SX 490)	833930.1	815929.6	121.7	--	--	86.0	236.7	-55.5	3.0	-10.0	3.0	0.0	26.5
HC-2	Chiller (Ref - Daikin: EWAD-D-SX 490)	833933.6	815929.3	121.7	--	--	86.0	238.4	-55.5	3.0	-10.0	3.0	0.0	26.5
HC-3	Chiller (Ref - Daikin: EWAD-D-SX 490)	833936.6	815929.1	121.7	--	--	86.0	239.8	-55.6	3.0	-10.0	3.0	0.0	26.4
HC-4	Chiller (Ref - Daikin: EWAD-D-SX 490)	833942.4	815934.1	121.7	--	--	86.0	237.9	-55.5	3.0	-10.0	3.0	0.0	26.5
HC-5	Chiller (Ref - Daikin: EWAD-D-SX 490)	833945.5	815933.8	121.7	--	--	86.0	239.6	-55.6	3.0	-10.0	3.0	0.0	26.4
HC-6	Chiller (Ref - Daikin: EWAD-D-SX 490)	833942.8	815925.3	121.7	--	--	86.0	246.0	-55.8	3.0	-10.0	3.0	0.0	26.2
HC-7	Chiller (Ref - Daikin: EWAD-D-SX 490)	833938.2	815920.5	121.7	--	--	86.0	248.3	-55.9	3.0	-10.0	3.0	0.0	26.1
HC-8	Chiller (Ref - Daikin: EWAD-D-SX 490)	833941.3	815919.5	121.7	--	--	86.0	250.5	-56.0	3.0	-10.0	3.0	0.0	26.0
KC-1	Chiller (Ref - Daikin: EWAD-C-XR C16)	833838.9	815913.7	132.0	--	--	95.0	232.8	-55.3	3.0	-10.0	3.0	0.0	35.7
KC-2	Chiller (Ref - Daikin: EWAD-C-XR C16)	833828.9	815902.1	132.0	--	--	95.0	244.4	-55.8	3.0	-10.0	3.0	0.0	35.2
KC-3	Chiller (Ref - Daikin: EWAD-D-SX 490)	833820.6	815901.4	132.0	--	--	86.0	245.4	-55.8	3.0	-10.0	3.0	0.0	26.2
TW-1	Cooling Tower (Ref - ryowo: FC/LN 200)	833804.8	816218.3	132.1	64.0	3.8	83.6	79.4	-46.0	3.0	-10.0	3.0	0.0	33.6
TW-2	Cooling Tower (Ref - ryowo: FC/LN 200)	833809.5	816213.8	132.1	64.0	3.8	83.6	73.6	-45.3	3.0	-10.0	3.0	0.0	34.3

299Q-1	Chiller (Ref - Daikin: EWAD-CFXR 600)	833564.5	816227.4	80.9	--	--	92.0	284.2	-57.1	3.0	0.0	3.0	0.0	40.9
299Q-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833559.6	816230.8	80.9	--	--	85.0	289.8	-57.2	3.0	0.0	3.0	0.0	33.8
299Q-3	Chiller (Ref - Daikin: EWAD-CFXR 600)	833556.5	816237.1	80.9	--	--	92.0	294.7	-57.4	3.0	0.0	3.0	0.0	40.6
PBT-1	Chiller (Ref - Daikin: EWAD-CFXR 600)	833715.7	816289.5	83.6	--	--	92.0	189.2	-53.5	3.0	0.0	3.0	0.0	44.5
PBT-2	Chiller (Ref - Daikin: EWAD-CFXR 600)	833716.2	816284.4	83.6	--	--	92.0	185.1	-53.3	3.0	0.0	3.0	0.0	44.7
PBT-3	Chiller (Ref - Daikin: EWAD-D-SX 410)	833724.7	816288.4	83.6	--	--	85.0	182.9	-53.2	3.0	0.0	3.0	0.0	37.8
BC-1	Chiller (Ref - Daikin: EWAD-D-SX 490)	833646.5	816307.1	108.3	--	--	86.0	247.6	-55.9	3.0	0.0	3.0	0.0	36.1
BC-2	Chiller (Ref - Daikin: EWAD-D-SX 490)	833651.7	816304.6	108.3	--	--	86.0	242.0	-55.7	3.0	0.0	3.0	0.0	36.3
S50-1	Chiller (Ref - Daikin: EWAD-CFXR 740)	833628.2	816325.3	98.0	--	--	92.0	273.9	-56.8	3.0	0.0	3.0	0.0	41.2
S50-2	Chiller (Ref - Daikin: EWAD-CFXR 740)	833635.2	816325.0	98.0	--	--	92.0	268.5	-56.6	3.0	0.0	3.0	0.0	41.4
S50-3	Chiller (Ref - Daikin: EWAD-CFXR 740)	833632.9	816321.3	98.0	--	--	92.0	267.7	-56.6	3.0	0.0	3.0	0.0	41.4
HSBH-1	Cooling Tower (Ref - ryowo: FC/LN 200)	834145.9	816199.3	136.2	64.0	3.8	83.6	316.7	-58.0	3.0	-10.0	3.0	0.0	21.6
HSBH-2	Cooling Tower (Ref - ryowo: FC/LN 200)	834149.0	816195.3	136.2	64.0	3.8	83.6	319.1	-58.1	3.0	-10.0	3.0	0.0	21.6
HSBH-3	Cooling Tower (Ref - ryowo: FC/LN 200)	834138.9	816194.1	136.2	64.0	3.8	83.6	308.9	-57.8	3.0	-10.0	3.0	0.0	21.8
HSBH-4	Cooling Tower (Ref - ryowo: FC/LN 200)	834142.1	816190.0	136.2	64.0	3.8	83.6	311.5	-57.9	3.0	-10.0	3.0	0.0	21.8
HSBH-5	Chiller (Ref - Daikin: EWAD-CFXR 600)	834130.7	816195.9	136.2	--	--	92.0	301.1	-57.6	3.0	-10.0	3.0	0.0	30.4
HSBH-6	Chiller (Ref - Daikin: EWAD-CFXR C15)	834129.8	816191.8	136.2	--	--	95.0	299.6	-57.5	3.0	-10.0	3.0	0.0	33.5
HSBH-7	Chiller (Ref - Daikin: EWAD-CFXR C15)	834137.8	816179.8	136.2	--	--	95.0	305.9	-57.7	3.0	-10.0	3.0	0.0	33.3
NFT-1	Chiller (Ref - Daikin: EWAD-CFXR 740)	833967.2	816341.7	30.0	--	--	92.0	252.3	-56.0	3.0	0.0	3.0	0.0	42.0
NFT-2	Chiller (Ref - Daikin: EWAD-CFXR 740)	833959.3	816329.1	30.0	--	--	92.0	238.4	-55.5	3.0	0.0	3.0	0.0	42.5
NFT-3	Chiller (Ref - Daikin: EWAD-CFXR 740)	833940.5	816326.2	30.0	--	--	92.0	226.8	-55.1	3.0	0.0	3.0	0.0	42.9
NFT-4	Chiller (Ref - Daikin: EWAD-CFXR 740)	833930.9	816334.6	30.0	--	--	92.0	229.3	-55.2	3.0	0.0	3.0	0.0	42.8
NFT-5	Chiller (Ref - Daikin: EWAD-CFXR 740)	833940.2	816350.2	30.0	--	--	92.0	246.1	-55.8	3.0	0.0	3.0	0.0	42.2
NFT-6	Chiller (Ref - Daikin: EWAD-CFXR 740)	833945.5	816358.6	30.0	--	--	92.0	255.4	-56.1	3.0	0.0	3.0	0.0	41.9
IP-1	Chiller (Ref - Daikin: EWAD-CFXR C15)	833865.3	816416.7	34.0	--	--	95.0	285.0	-57.1	3.0	-10.0	3.0	0.0	33.9
IP-2	Chiller (Ref - Daikin: EWAD-CFXR C15)	833868.3	816414.0	34.0	--	--	95.0	282.8	-57.0	3.0	-10.0	3.0	0.0	34.0
IP-3	Chiller (Ref - Daikin: EWAD-CFXR C15)	833858.1	816402.3	34.0	--	--	95.0	270.6	-56.6	3.0	-10.0	3.0	0.0	34.4
IP-4	Chiller (Ref - Daikin: EWAD-CFXR C15)	833867.9	816406.9	34.0	--	--	95.0	276.0	-56.8	3.0	-10.0	3.0	0.0	34.2
IP-5	Chiller (Ref - Daikin: EWAD-CFXR C15)	833873.5	816404.4	34.0	--	--	95.0	274.4	-56.8	3.0	-10.0	3.0	0.0	34.2
IP-6	Chiller (Ref - Daikin: EWAD-C-XR C16)	833869.2	816389.1	123.3	--	--	95.0	245.7	-55.8	3.0	-10.0	3.0	0.0	35.2
IP-7	Chiller (Ref - Daikin: EWAD-C-XR C16)	833887.8	816392.4	123.3	--	--	95.0	252.2	-56.0	3.0	-10.0	3.0	0.0	35.0
IP-8	Cooling Tower (Ref - ryowo: FC/LN 400)	833881.7	816397.4	123.3	66.0	5.4	88.7	255.9	-56.2	3.0	-10.0	3.0	0.0	28.5
IP-9	Cooling Tower (Ref - ryowo: FC/LN 400)	833887.6	816401.9	123.3	66.0	5.4	88.7	261.5	-56.3	3.0	-10.0	3.0	0.0	28.3
GC-1	Chiller (Ref - Daikin: EWAD-C-XR C16)	833851.1	816339.2	111.8	--	--	95.0	194.0	-53.8	3.0	0.0	3.0	0.0	47.2
GC-2	Chiller (Ref - Daikin: EWAD-C-XR C16)	833855.6	816337.5	111.8	--	--	95.0	192.8	-53.7	3.0	0.0	3.0	0.0	47.3
GC-3	Chiller (Ref - Daikin: EWAD-CFXR 740)	833859.7	816335.7	111.8	--	--	92.0	191.5	-53.6	3.0	0.0	3.0	0.0	44.4
HB-1	Chiller (Ref - Daikin: EWAD-CFXR 740)	834015.0	816407.1	97.5	--	--	92.0	318.2	-58.1	3.0	0.0	3.0	0.0	39.9
PTG-1	Cooling Tower (Ref - ryowo: FC/LN 200)	834056.3	815996.1	87.1	64.0	3.8	83.6	269.6	-56.6	3.0	-10.0	3.0	0.0	23.0
PTG-2	Cooling Tower (Ref - ryowo: FC/LN 200)	834053.2	815993.6	87.1	64.0	3.8	83.6	268.5	-56.6	3.0	-10.0	3.0	0.0	23.1
										Noise standard:		**65**	**Overall**	**60**

Predicted Noise Level for Fixed Noise Impact Assessment - Base Case Scenario
Night Time
F04 NSR Coordinate: x = 833834.3 y = 816146.0 z = 117.6

Source ID	Description	Industrial Noise x	Industrial Noise y		SPL	Ref dist.	SWL	Slant distance from source	Distance Corr.	Façade Corr.	Barrier Corr.	Tonality Corr.	Impulsive Corr.	ANL
YSA-1	Chiller (Ref - Daikin: EWAD-D-SX 210)	833920.2	816100.0	96.8	--	--	84.0	99.6	-48.0	3.0	-10.0	3.0	0.0	32.0
YSA-2	Chiller (Ref - Daikin: EWAD-D-SX 210)	833923.0	816097.1	96.8	--	--	84.0	103.4	-48.3	3.0	-10.0	3.0	0.0	31.7
BOW-1	Chiller (Ref - Daikin: EWAD-D-SX 410)	833909.9	816077.7	91.4	--	--	85.0	105.2	-48.4	3.0	-10.0	3.0	0.0	32.6
BOW-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833912.2	816075.5	91.4	--	--	85.0	108.3	-48.7	3.0	-10.0	3.0	0.0	32.3
PTG-1	Cooling Tower (Ref - ryowo: FC/LN 200)	834056.3	815996.1	87.1	64.0	3.8	83.6	269.6	-56.6	3.0	-10.0	3.0	0.0	23.0
PTG-2	Cooling Tower (Ref - ryowo: FC/LN 200)	834053.2	815993.6	87.1	64.0	3.8	83.6	268.5	-56.6	3.0	-10.0	3.0	0.0	23.1
										Noise standard:		**55**	**Overall**	**38**

Predicted Noise Level for Fixed Noise Impact Assessment - Base Case Scenario
Day/Evening Time

F05 NSR Coordinate: x = 833849.2 y = 816161.3 z = 59.0

Source ID	Description	Industrial Noise Source Coordinate: x	y	z	SPL	Ref dist.	SWL	Slant distance from source to NSR (m)	Distance Corr.	Façade Corr.	Barrier Corr.	Tonality Corr.	Impulsive Corr.	ANL
OB-1	Chiller (Ref - Daikin: EWAD-D-SX 490)	833870.8	816166.0	121.8	--	--	86.0	66.6	-44.5	3.0	-10.0	3.0	0.0	37.5
OB-2	Cooling Tower (Ref - ryowo: FC/LN 200)	833874.7	816169.8	121.8	64.0	3.8	83.6	68.3	-44.7	3.0	-10.0	3.0	0.0	35.0
CRC-1	Chiller (Ref - Daikin: EWAD-CFXR 740)	833881.0	816161.9	131.1	--	--	92.0	78.8	-45.9	3.0	-10.0	3.0	0.0	42.1
CRC-2	Chiller (Ref - Daikin: EWAD-CFXR 740)	833884.0	816158.8	131.1	--	--	92.0	80.1	-46.1	3.0	-10.0	3.0	0.0	41.9
SB-1	Chiller (Ref - Daikin: EWAD-F-XR 500)	833886.6	816144.1	60.0	--	--	89.0	41.2	-40.3	3.0	-10.0	3.0	0.0	44.7
SB-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833887.3	816138.6	60.0	--	--	85.0	44.4	-40.9	3.0	-10.0	3.0	0.0	40.1
VHB-1	Chiller (Ref - Daikin: EWAD-D-SX 490)	833928.3	816124.3	88.4	--	--	86.0	92.1	-47.3	3.0	-10.0	3.0	0.0	34.7
VHB-2	Chiller (Ref - Daikin: EWAD-D-SX 490)	833932.2	816119.2	88.4	--	--	86.0	97.6	-47.8	3.0	-10.0	3.0	0.0	34.2
VHB-3	Chiller (Ref - Daikin: EWAD-D-SX 490)	833929.6	816114.1	88.4	--	--	86.0	97.8	-47.8	3.0	-10.0	3.0	0.0	34.2
YSA-1	Chiller (Ref - Daikin: EWAD-D-SX 210)	833920.2	816100.0	96.8	--	--	84.0	101.1	-48.1	3.0	-10.0	3.0	0.0	31.9
YSA-2	Chiller (Ref - Daikin: EWAD-D-SX 210)	833923.0	816097.1	96.8	--	--	84.0	104.9	-48.4	3.0	-10.0	3.0	0.0	31.6
TLP-1	Chiller (Ref - Daikin: EWAD-C-SR C14)	833913.6	816181.9	51.8	--	--	95.0	68.0	-44.6	3.0	0.0	3.0	0.0	56.4
TLP-2	Chiller (Ref - Daikin: EWAQ-F-XR 330)	833918.0	816188.6	51.8	--	--	87.0	74.4	-45.4	3.0	0.0	3.0	0.0	47.6
TLP-3	Chiller (Ref - Daikin: EWAD-C-SR C14)	833920.3	816184.2	51.8	--	--	95.0	75.0	-45.5	3.0	0.0	3.0	0.0	55.5
TLP-4	Chiller (Ref - Daikin: EWAQ-F-XR 330)	833913.2	816176.1	51.8	--	--	87.0	66.1	-44.4	3.0	0.0	3.0	0.0	48.6
BOW-1	Chiller (Ref - Daikin: EWAD-D-SX 410)	833909.9	816077.7	91.4	--	--	85.0	108.3	-48.7	3.0	-10.0	3.0	0.0	32.3
BOW-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833912.2	816075.5	91.4	--	--	85.0	111.3	-48.9	3.0	-10.0	3.0	0.0	32.1
WHIB-1	Chiller (Ref - Daikin: EWAD-CFXR 870)	833911.1	816220.6	73.0	--	--	92.0	86.9	-46.8	3.0	0.0	3.0	0.0	51.2
WHIB-2	Chiller (Ref - Daikin: EWAD-CFXR 870)	833918.3	816235.3	73.0	--	--	92.0	102.2	-48.2	3.0	0.0	3.0	0.0	49.8
OCBC-1	Chiller (Ref - Daikin: EWAQ-G-XR 080)	833876.3	816229.0	72.2	--	--	80.0	74.1	-45.4	3.0	0.0	3.0	0.0	40.6
OCBC-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833875.0	816224.7	72.2	--	--	85.0	69.7	-44.9	3.0	0.0	3.0	0.0	46.1
OCBC-3	Chiller (Ref - Daikin: EWAD-D-SX 410)	833880.2	816225.5	72.2	--	--	85.0	72.5	-45.2	3.0	0.0	3.0	0.0	45.8
OCBC-4	Chiller (Ref - Daikin: EWAD-D-SX 410)	833880.2	816220.3	72.2	--	--	85.0	67.9	-44.6	3.0	0.0	3.0	0.0	46.4
SLCB-1	Chiller (Ref - Daikin: EWAD-CFXR 600)	833884.3	816242.7	73.1	--	--	92.0	89.8	-47.1	3.0	0.0	3.0	0.0	50.9
AB-1	Chiller (Ref - Daikin: EWAD-D-SX 410)	833947.6	816283.2	72.3	--	--	85.0	157.2	-51.9	3.0	0.0	3.0	0.0	39.1
AB-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833949.1	816285.4	72.3	--	--	85.0	159.9	-52.1	3.0	0.0	3.0	0.0	38.9
HKTC-1	Chiller (Ref - Daikin: EWAD-D-SX 410)	833959.3	816314.2	78.4	--	--	85.0	189.4	-53.5	3.0	0.0	3.0	0.0	37.5
HKTC-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833963.4	816311.4	78.4	--	--	85.0	189.6	-53.6	3.0	0.0	3.0	0.0	37.4
HKTC-3	Chiller (Ref - Daikin: EWAD-D-SX 410)	833967.6	816308.9	78.4	--	--	85.0	190.2	-53.6	3.0	0.0	3.0	0.0	37.4
NCBB-1	Chiller (Ref - Daikin: EWAD-CFXR 600)	833980.6	816305.2	57.4	--	--	92.0	194.9	-53.8	3.0	0.0	3.0	0.0	44.2
NCBB-2	Chiller (Ref - Daikin: EWAD-CFXR 600)	833984.4	816302.9	57.4	--	--	92.0	195.8	-53.8	3.0	0.0	3.0	0.0	44.2
NCBB-3	Chiller (Ref - Daikin: EWAD-CFXR 600)	833988.8	816300.1	57.4	--	--	92.0	196.9	-53.9	3.0	0.0	3.0	0.0	44.1
CTGH-1	Chiller (Ref - Daikin: EWAD-CFXR 600)	833982.3	816343.5	94.0	--	--	92.0	228.3	-55.2	3.0	0.0	3.0	0.0	42.8
CTGH-2	Chiller (Ref - Daikin: EWAD-CFXR 600)	833991.6	816340.8	94.0	--	--	92.0	231.8	-55.3	3.0	0.0	3.0	0.0	42.7
CTGH-3	Chiller (Ref - Daikin: EWAD-CFXR 600)	833986.4	816336.9	94.0	--	--	92.0	225.6	-55.1	3.0	0.0	3.0	0.0	42.9
CTGH-4	Chiller (Ref - Daikin: EWAD-D-SX 410)	833980.3	816333.3	94.0	--	--	85.0	219.1	-54.8	3.0	0.0	3.0	0.0	36.2
TB-1	Chiller (Ref - Daikin: EWAD-CFXR 820)	834003.4	816335.1	84.3	--	--	92.0	233.7	-55.4	3.0	0.0	3.0	0.0	42.6
TB-2	Chiller (Ref - Daikin: EWAD-CFXR 820)	834007.2	816324.2	84.3	--	--	92.0	228.3	-55.2	3.0	0.0	3.0	0.0	42.8
IAB-1	Chiller (Ref - Daikin: EWAD-D-SX 490)	833958.7	816104.1	66.6	--	--	86.0	123.8	-49.9	3.0	-10.0	3.0	0.0	32.1
IAB-2	Chiller (Ref - Daikin: EWAD-D-SX 490)	833964.8	816100.4	66.6	--	--	86.0	130.9	-50.3	3.0	-10.0	3.0	0.0	31.7
100QRC-1	Chiller (Ref - Daikin: EWAD-CFXR C15)	834011.1	816060.8	129.5	--	--	95.0	203.2	-54.2	3.0	-10.0	3.0	0.0	36.8
100QRC-2	Chiller (Ref - Daikin: EWAD-CFXR C15)	834008.1	816058.1	129.5	--	--	95.0	202.2	-54.1	3.0	-10.0	3.0	0.0	36.9
100QRC-3	Chiller (Ref - Daikin: EWAD-CFXR 600)	834001.8	816055.5	129.5	--	--	92.0	198.6	-54.0	3.0	-10.0	3.0	0.0	34.0
RC-1	Chiller (Ref - Daikin: EWAD-CFXR C15)	834028.6	816025.5	91.7	--	--	95.0	227.4	-55.1	3.0	-10.0	3.0	0.0	35.9
RC-2	Chiller (Ref - Daikin: EWAD-CFXR C15)	834028.3	816032.4	91.7	--	--	95.0	223.1	-55.0	3.0	-10.0	3.0	0.0	36.0
HQ-1	Cooling Tower (Ref - ryowo: FC/LN 200)	834037.9	816016.4	120.2	64.0	3.8	83.6	245.7	-55.8	3.0	-10.0	3.0	0.0	23.8
HQ-2	Cooling Tower (Ref - ryowo: FC/LN 200)	834039.9	816019.3	120.2	64.0	3.8	83.6	245.5	-55.8	3.0	-10.0	3.0	0.0	23.8
HQ-3	Cooling Tower (Ref - ryowo: FC/LN 200)	834042.0	816022.2	120.2	64.0	3.8	83.6	245.5	-55.8	3.0	-10.0	3.0	0.0	23.8
CH-1	Cooling Tower (Ref - ryowo: FC/LN 400)	834076.4	815970.1	75.6	66.0	5.4	88.7	297.4	-57.5	3.0	-10.0	3.0	0.0	27.2
CH-2	Cooling Tower (Ref - ryowo: FC/LN 400)	834081.3	815963.7	75.6	66.0	5.4	88.7	305.3	-57.7	3.0	-10.0	3.0	0.0	27.0
POH-1	Chiller (Ref - Daikin: EWAD-D-SX 210)	834009.7	816003.1	97.7	--	--	84.0	228.7	-55.2	3.0	-10.0	3.0	0.0	24.8
WTT-1	Chiller (Ref - Daikin: EWAD-CFXR 870)	834016.5	815992.1	85.4	--	--	92.0	239.4	-55.6	3.0	-10.0	3.0	0.0	32.4
WTT-2	Chiller (Ref - Daikin: EWAD-CFXR 870)	834024.3	815984.9	85.4	--	--	92.0	249.9	-56.0	3.0	-10.0	3.0	0.0	32.0
AST-1	Chiller (Ref - Daikin: EWAD-CFXR C10)	834102.6	816020.6	78.0	--	--	94.0	290.5	-57.3	3.0	0.0	3.0	0.0	42.7
AST-2	Chiller (Ref - Daikin: EWAD-CFXR C10)	834104.5	816017.0	78.0	--	--	94.0	293.9	-57.4	3.0	0.0	3.0	0.0	42.6
AST-3	Chiller (Ref - Daikin: EWAD-D-SX 410)	834095.0	816014.2	78.0	--	--	85.0	287.1	-57.2	3.0	0.0	3.0	0.0	33.8
AST-4	Chiller (Ref - Daikin: EWAD-D-SX 410)	834096.8	816010.9	78.0	--	--	85.0	290.3	-57.3	3.0	0.0	3.0	0.0	33.7
BGLAT-1	Chiller (Ref - Daikin: EWAD-CFXR 740)	833959.9	816246.5	16.5	--	--	92.0	146.0	-51.3	3.0	0.0	3.0	0.0	46.7
BGLAT-2	Chiller (Ref - Daikin: EWAD-CFXR 740)	833964.4	816243.1	16.5	--	--	92.0	147.5	-51.4	3.0	0.0	3.0	0.0	46.6
TSBB-1	Chiller (Ref - Daikin: EWAD-D-SX 490)	833986.9	816259.8	56.3	--	--	86.0	169.3	-52.6	3.0	0.0	3.0	0.0	39.4
TSBB-2	Chiller (Ref - Daikin: EWAD-D-SX 490)	833991.5	816257.1	56.3	--	--	86.0	171.6	-52.7	3.0	0.0	3.0	0.0	39.3
PBC-1	Chiller (Ref - Daikin: EWAD-D-SX 410)	833994.6	816244.2	76.6	--	--	85.0	168.3	-52.5	3.0	0.0	3.0	0.0	38.5
PBC-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	834001.4	816248.4	76.6	--	--	85.0	176.2	-52.9	3.0	0.0	3.0	0.0	38.1
JC-1	Chiller (Ref - Daikin: EWAD-CFXR 740)	833950.9	816005.0	99.6	--	--	92.0	190.8	-53.6	3.0	-10.0	3.0	0.0	34.4
1LT-1	Chiller (Ref - Daikin: EWAD-CFXR 600)	833980.8	815970.5	102.3	--	--	92.0	235.8	-55.5	3.0	-10.0	3.0	0.0	32.5
1LT-2	Chiller (Ref - Daikin: EWAD-CFXR 600)	833979.5	815966.3	102.3	--	--	92.0	238.5	-55.5	3.0	-10.0	3.0	0.0	32.5
SS-1	Chiller (Ref - Daikin: EWAQ-G-XR 090)	833918.4	815974.4	107.3	--	--	82.0	205.1	-54.2	3.0	-10.0	3.0	0.0	23.8
SS-2	Chiller (Ref - Daikin: EWAQ-G-XR 090)	833919.8	815972.9	107.3	--	--	82.0	206.9	-54.3	3.0	-10.0	3.0	0.0	23.7
CPCB-1	Chiller (Ref - Daikin: EWAD-D-SX 410)	833977.2	815919.4	116.3	--	--	85.0	279.6	-56.9	3.0	-10.0	3.0	0.0	24.1
HC-1	Chiller (Ref - Daikin: EWAD-D-SX 490)	833930.1	815929.6	121.7	--	--	86.0	253.3	-56.1	3.0	-10.0	3.0	0.0	25.9
HC-2	Chiller (Ref - Daikin: EWAD-D-SX 490)	833933.6	815929.3	121.7	--	--	86.0	254.7	-56.1	3.0	-10.0	3.0	0.0	25.9
HC-3	Chiller (Ref - Daikin: EWAD-D-SX 490)	833936.6	815929.1	121.7	--	--	86.0	255.9	-56.2	3.0	-10.0	3.0	0.0	25.8
HC-4	Chiller (Ref - Daikin: EWAD-D-SX 490)	833942.4	815934.1	121.7	--	--	86.0	253.5	-56.1	3.0	-10.0	3.0	0.0	25.9
HC-5	Chiller (Ref - Daikin: EWAD-D-SX 490)	833945.5	815933.8	121.7	--	--	86.0	254.9	-56.1	3.0	-10.0	3.0	0.0	25.9
HC-6	Chiller (Ref - Daikin: EWAD-D-SX 490)	833942.8	815925.3	121.7	--	--	86.0	261.5	-56.3	3.0	-10.0	3.0	0.0	25.7
HC-7	Chiller (Ref - Daikin: EWAD-D-SX 490)	833938.2	815920.5	121.7	--	--	86.0	264.3	-56.4	3.0	-10.0	3.0	0.0	25.6
HC-8	Chiller (Ref - Daikin: EWAD-D-SX 490)	833941.3	815919.5	121.7	--	--	86.0	266.2	-56.5	3.0	-10.0	3.0	0.0	25.5
KC-1	Chiller (Ref - Daikin: EWAD-C-XR C16)	833838.9	815913.7	132.0	--	--	95.0	258.3	-56.2	3.0	-10.0	3.0	0.0	34.8
KC-2	Chiller (Ref - Daikin: EWAD-C-XR C16)	833828.9	815902.1	132.0	--	--	95.0	270.0	-56.6	3.0	-10.0	3.0	0.0	34.4
KC-3	Chiller (Ref - Daikin: EWAD-D-SX 490)	833820.6	815901.4	132.0	--	--	86.0	271.5	-56.7	3.0	-10.0	3.0	0.0	25.3
TW-1	Cooling Tower (Ref - ryowo: FC/LN 200)	833804.8	816218.3	132.1	64.0	3.8	83.6	102.8	-48.2	3.0	-10.0	3.0	0.0	31.4
TW-2	Cooling Tower (Ref - ryowo: FC/LN 200)	833809.5	816213.8	132.1	64.0	3.8	83.6	98.4	-47.9	3.0	-10.0	3.0	0.0	31.8

299Q-1	Chiller (Ref - Daikin: EWAD-CFXR 600)	833564.5	816227.4	80.9	--	--	92.0	293.1	-57.3	3.0	0.0	3.0	0.0	40.7
299Q-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833559.6	816230.8	80.9	--	--	85.0	298.6	-57.5	3.0	0.0	3.0	0.0	33.5
299Q-3	Chiller (Ref - Daikin: EWAD-CFXR 600)	833556.5	816237.1	80.9	--	--	92.0	303.1	-57.6	3.0	0.0	3.0	0.0	40.4
PBT-1	Chiller (Ref - Daikin: EWAD-CFXR 600)	833715.7	816289.5	83.6	--	--	92.0	186.7	-53.4	3.0	0.0	3.0	0.0	44.6
PBT-2	Chiller (Ref - Daikin: EWAD-CFXR 600)	833716.2	816284.4	83.6	--	--	92.0	182.9	-53.2	3.0	0.0	3.0	0.0	44.8
PBT-3	Chiller (Ref - Daikin: EWAD-D-SX 410)	833724.7	816288.4	83.6	--	--	85.0	179.6	-53.1	3.0	0.0	3.0	0.0	37.9
BC-1	Chiller (Ref - Daikin: EWAD-D-SX 490)	833646.5	816307.1	108.3	--	--	86.0	254.5	-56.1	3.0	0.0	3.0	0.0	35.9
BC-2	Chiller (Ref - Daikin: EWAD-D-SX 490)	833651.7	816304.6	108.3	--	--	86.0	248.9	-55.9	3.0	0.0	3.0	0.0	36.1
S50-1	Chiller (Ref - Daikin: EWAD-CFXR 740)	833628.2	816325.3	98.0	--	--	92.0	278.0	-56.9	3.0	0.0	3.0	0.0	41.1
S50-2	Chiller (Ref - Daikin: EWAD-CFXR 740)	833635.2	816325.0	98.0	--	--	92.0	272.2	-56.7	3.0	0.0	3.0	0.0	41.3
S50-3	Chiller (Ref - Daikin: EWAD-CFXR 740)	833632.9	816321.3	98.0	--	--	92.0	271.9	-56.7	3.0	0.0	3.0	0.0	41.3
HSBH-1	Cooling Tower (Ref - ryowo: FC/LN 200)	834145.9	816199.3	136.2	64.0	3.8	83.6	308.9	-57.8	3.0	-10.0	3.0	0.0	21.8
HSBH-2	Cooling Tower (Ref - ryowo: FC/LN 200)	834149.0	816195.3	136.2	64.0	3.8	83.6	311.4	-57.9	3.0	-10.0	3.0	0.0	21.8
HSBH-3	Cooling Tower (Ref - ryowo: FC/LN 200)	834138.9	816194.1	136.2	64.0	3.8	83.6	301.6	-57.6	3.0	-10.0	3.0	0.0	22.1
HSBH-4	Cooling Tower (Ref - ryowo: FC/LN 200)	834142.1	816190.0	136.2	64.0	3.8	83.6	304.3	-57.7	3.0	-10.0	3.0	0.0	22.0
HSBH-5	Chiller (Ref - Daikin: EWAD-CFXR 600)	834130.7	816195.9	136.2	--	--	92.0	293.9	-57.4	3.0	-10.0	3.0	0.0	30.6
HSBH-6	Chiller (Ref - Daikin: EWAD-CFXR C15)	834129.8	816191.8	136.2	--	--	95.0	292.6	-57.3	3.0	-10.0	3.0	0.0	33.7
HSBH-7	Chiller (Ref - Daikin: EWAD-CFXR C15)	834137.8	816179.8	136.2	--	--	95.0	299.3	-57.5	3.0	-10.0	3.0	0.0	33.5
NFT-1	Chiller (Ref - Daikin: EWAD-CFXR 740)	833967.2	816341.7	30.0	--	--	92.0	217.5	-54.7	3.0	0.0	3.0	0.0	43.3
NFT-2	Chiller (Ref - Daikin: EWAD-CFXR 740)	833959.3	816329.1	30.0	--	--	92.0	202.8	-54.1	3.0	0.0	3.0	0.0	43.9
NFT-3	Chiller (Ref - Daikin: EWAD-CFXR 740)	833940.5	816326.2	30.0	--	--	92.0	190.7	-53.6	3.0	0.0	3.0	0.0	44.4
NFT-4	Chiller (Ref - Daikin: EWAD-CFXR 740)	833930.9	816334.6	30.0	--	--	92.0	193.8	-53.7	3.0	0.0	3.0	0.0	44.3
NFT-5	Chiller (Ref - Daikin: EWAD-CFXR 740)	833940.2	816350.2	30.0	--	--	92.0	211.7	-54.5	3.0	0.0	3.0	0.0	43.5
NFT-6	Chiller (Ref - Daikin: EWAD-CFXR 740)	833945.5	816358.6	30.0	--	--	92.0	221.5	-54.9	3.0	0.0	3.0	0.0	43.1
IP-1	Chiller (Ref - Daikin: EWAD-CFXR C15)	833865.3	816416.7	34.0	--	--	95.0	257.1	-56.2	3.0	-10.0	3.0	0.0	34.8
IP-2	Chiller (Ref - Daikin: EWAD-CFXR C15)	833868.3	816414.0	34.0	--	--	95.0	254.7	-56.1	3.0	-10.0	3.0	0.0	34.9
IP-3	Chiller (Ref - Daikin: EWAD-CFXR C15)	833858.1	816402.3	34.0	--	--	95.0	242.5	-55.7	3.0	-10.0	3.0	0.0	35.3
IP-4	Chiller (Ref - Daikin: EWAD-CFXR C15)	833867.9	816406.9	34.0	--	--	95.0	247.6	-55.9	3.0	-10.0	3.0	0.0	35.1
IP-5	Chiller (Ref - Daikin: EWAD-CFXR C15)	833873.5	816404.4	34.0	--	--	95.0	245.6	-55.8	3.0	-10.0	3.0	0.0	35.2
IP-6	Chiller (Ref - Daikin: EWAD-C-XR C16)	833869.2	816389.1	123.3	--	--	95.0	237.5	-55.5	3.0	-10.0	3.0	0.0	35.5
IP-7	Chiller (Ref - Daikin: EWAD-C-XR C16)	833887.8	816392.4	123.3	--	--	95.0	243.0	-55.7	3.0	-10.0	3.0	0.0	35.3
IP-8	Cooling Tower (Ref - ryowo: FC/LN 400)	833881.7	816397.4	123.3	66.0	5.4	88.7	246.8	-55.8	3.0	-10.0	3.0	0.0	28.8
IP-9	Cooling Tower (Ref - ryowo: FC/LN 400)	833887.6	816401.9	123.3	66.0	5.4	88.7	252.0	-56.0	3.0	-10.0	3.0	0.0	28.6
GC-1	Chiller (Ref - Daikin: EWAD-C-XR C16)	833851.1	816339.2	111.8	--	--	95.0	185.6	-53.4	3.0	0.0	3.0	0.0	47.6
GC-2	Chiller (Ref - Daikin: EWAD-C-XR C16)	833855.6	816337.5	111.8	--	--	95.0	184.1	-53.3	3.0	0.0	3.0	0.0	47.7
GC-3	Chiller (Ref - Daikin: EWAD-CFXR 740)	833859.7	816335.7	111.8	--	--	92.0	182.5	-53.2	3.0	0.0	3.0	0.0	44.8
HB-1	Chiller (Ref - Daikin: EWAD-CFXR 740)	834015.0	816407.1	97.5	--	--	92.0	299.0	-57.5	3.0	0.0	3.0	0.0	40.5
PTG-1	Cooling Tower (Ref - ryowo: FC/LN 200)	834056.3	815996.1	87.1	64.0	3.8	83.6	266.4	-56.5	3.0	-10.0	3.0	0.0	23.1
PTG-2	Cooling Tower (Ref - ryowo: FC/LN 200)	834053.2	815993.6	87.1	64.0	3.8	83.6	265.6	-56.5	3.0	-10.0	3.0	0.0	23.2
										Noise standard:		**65**	**Overall**	**64**

Predicted Noise Level for Fixed Noise Impact Assessment - Base Case Scenario

Night Time

F05 NSR Coordinate: x = 833849.2 y = 816161.3 z = 59.0

Source ID	Description	Industrial Noise x	Industrial Noise y		SPL	Ref dist.	SWL	Slant distance from source	Distance Corr.	Façade Corr.	Barrier Corr.	Tonality Corr.	Impulsive Corr.	ANL
YSA-1	Chiller (Ref - Daikin: EWAD-D-SX 210)	833920.2	816100.0	96.8	--	--	84.0	101.1	-48.1	3.0	-10.0	3.0	0.0	31.9
YSA-2	Chiller (Ref - Daikin: EWAD-D-SX 210)	833923.0	816097.1	96.8	--	--	84.0	104.9	-48.4	3.0	-10.0	3.0	0.0	31.6
BOW-1	Chiller (Ref - Daikin: EWAD-D-SX 410)	833909.9	816077.7	91.4	--	--	85.0	108.3	-48.7	3.0	-10.0	3.0	0.0	32.3
BOW-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833912.2	816075.5	91.4	--	--	85.0	111.3	-48.9	3.0	-10.0	3.0	0.0	32.1
PTG-1	Cooling Tower (Ref - ryowo: FC/LN 200)	834056.3	815996.1	87.1	64.0	3.8	83.6	266.4	-56.5	3.0	-10.0	3.0	0.0	23.1
PTG-2	Cooling Tower (Ref - ryowo: FC/LN 200)	834053.2	815993.6	87.1	64.0	3.8	83.6	265.6	-56.5	3.0	-10.0	3.0	0.0	23.2
										Noise standard:		**55**	**Overall**	**38**

Predicted Noise Level for Fixed Noise Impact Assessment - Base Case Scenario
Day/Evening Time
F05 NSR Coordinate: x = 833849.2 y = 816161.3 z = 88.1

Source ID	Description	Industrial Noise Source Coordinate: x	y	z	SPL	Ref dist.	SWL	Slant distance from source to NSR (m)	Distance Corr.	Façade Corr.	Barrier Corr.	Tonality Corr.	Impulsive Corr.	ANL
OB-1	Chiller (Ref - Daikin: EWAD-D-SX 490)	833870.8	816166.0	121.8	--	--	86.0	40.3	-40.1	3.0	-10.0	3.0	0.0	41.9
OB-2	Cooling Tower (Ref - ryowo: FC/LN 200)	833874.7	816169.8	121.8	64.0	3.8	83.6	43.1	-40.7	3.0	-10.0	3.0	0.0	39.0
CRC-1	Chiller (Ref - Daikin: EWAD-CFXR 740)	833881.0	816161.9	131.1	--	--	92.0	53.5	-42.6	3.0	-10.0	3.0	0.0	45.4
CRC-2	Chiller (Ref - Daikin: EWAD-CFXR 740)	833884.0	816158.8	131.1	--	--	92.0	55.4	-42.9	3.0	-10.0	3.0	0.0	45.1
SB-1	Chiller (Ref - Daikin: EWAD-F-XR 500)	833886.6	816144.1	60.0	--	--	89.0	49.8	-42.0	3.0	-10.0	3.0	0.0	43.0
SB-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833887.3	816138.6	60.0	--	--	85.0	52.5	-42.4	3.0	-10.0	3.0	0.0	38.6
VHB-1	Chiller (Ref - Daikin: EWAD-D-SX 490)	833928.3	816124.3	88.4	--	--	86.0	87.3	-46.8	3.0	-10.0	3.0	0.0	35.2
VHB-2	Chiller (Ref - Daikin: EWAD-D-SX 490)	833932.2	816119.2	88.4	--	--	86.0	93.1	-47.4	3.0	-10.0	3.0	0.0	34.6
VHB-3	Chiller (Ref - Daikin: EWAD-D-SX 490)	833929.6	816114.1	88.4	--	--	86.0	93.2	-47.4	3.0	-10.0	3.0	0.0	34.6
YSA-1	Chiller (Ref - Daikin: EWAD-D-SX 210)	833920.2	816100.0	96.8	--	--	84.0	94.2	-47.5	3.0	-10.0	3.0	0.0	32.5
YSA-2	Chiller (Ref - Daikin: EWAD-D-SX 210)	833923.0	816097.1	96.8	--	--	84.0	98.2	-47.8	3.0	-10.0	3.0	0.0	32.2
TLP-1	Chiller (Ref - Daikin: EWAD-C-SR C14)	833913.6	816181.9	51.8	--	--	95.0	76.7	-45.7	3.0	0.0	3.0	0.0	55.3
TLP-2	Chiller (Ref - Daikin: EWAQ-F-XR 330)	833918.0	816188.6	51.8	--	--	87.0	82.4	-46.3	3.0	0.0	3.0	0.0	46.7
TLP-3	Chiller (Ref - Daikin: EWAD-C-SR C14)	833920.3	816184.2	51.8	--	--	95.0	83.1	-46.4	3.0	0.0	3.0	0.0	54.6
TLP-4	Chiller (Ref - Daikin: EWAQ-F-XR 330)	833913.2	816176.1	51.8	--	--	87.0	75.1	-45.5	3.0	0.0	3.0	0.0	47.5
BOW-1	Chiller (Ref - Daikin: EWAD-D-SX 410)	833909.9	816077.7	91.4	--	--	85.0	103.4	-48.3	3.0	-10.0	3.0	0.0	32.7
BOW-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833912.2	816075.5	91.4	--	--	85.0	106.5	-48.5	3.0	-10.0	3.0	0.0	32.5
WHIB-1	Chiller (Ref - Daikin: EWAD-CFXR 870)	833911.1	816220.6	73.0	--	--	92.0	87.0	-46.8	3.0	0.0	3.0	0.0	51.2
WHIB-2	Chiller (Ref - Daikin: EWAD-CFXR 870)	833918.3	816235.3	73.0	--	--	92.0	102.4	-48.2	3.0	0.0	3.0	0.0	49.8
OCBC-1	Chiller (Ref - Daikin: EWAQ-G-XR 080)	833876.3	816229.0	72.2	--	--	80.0	74.6	-45.5	3.0	0.0	3.0	0.0	40.5
OCBC-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833875.0	816224.7	72.2	--	--	85.0	70.3	-44.9	3.0	0.0	3.0	0.0	46.1
OCBC-3	Chiller (Ref - Daikin: EWAD-D-SX 410)	833880.2	816225.5	72.2	--	--	85.0	73.0	-45.3	3.0	0.0	3.0	0.0	45.7
OCBC-4	Chiller (Ref - Daikin: EWAD-D-SX 410)	833880.2	816220.3	72.2	--	--	85.0	68.5	-44.7	3.0	0.0	3.0	0.0	46.3
SLCB-1	Chiller (Ref - Daikin: EWAD-CFXR 600)	833884.3	816242.7	73.1	--	--	92.0	89.9	-47.1	3.0	0.0	3.0	0.0	50.9
AB-1	Chiller (Ref - Daikin: EWAD-D-SX 410)	833947.6	816283.2	72.3	--	--	85.0	157.5	-51.9	3.0	0.0	3.0	0.0	39.1
AB-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833949.1	816285.4	72.3	--	--	85.0	160.1	-52.1	3.0	0.0	3.0	0.0	38.9
HKTC-1	Chiller (Ref - Daikin: EWAD-D-SX 410)	833959.3	816314.2	78.4	--	--	85.0	188.7	-53.5	3.0	0.0	3.0	0.0	37.5
HKTC-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833963.4	816311.4	78.4	--	--	85.0	188.9	-53.5	3.0	0.0	3.0	0.0	37.5
HKTC-3	Chiller (Ref - Daikin: EWAD-D-SX 410)	833967.6	816308.9	78.4	--	--	85.0	189.5	-53.6	3.0	0.0	3.0	0.0	37.4
NCBB-1	Chiller (Ref - Daikin: EWAD-CFXR 600)	833980.6	816305.2	57.4	--	--	92.0	197.3	-53.9	3.0	0.0	3.0	0.0	44.1
NCBB-2	Chiller (Ref - Daikin: EWAD-CFXR 600)	833984.4	816302.9	57.4	--	--	92.0	198.2	-53.9	3.0	0.0	3.0	0.0	44.1
NCBB-3	Chiller (Ref - Daikin: EWAD-CFXR 600)	833988.8	816300.1	57.4	--	--	92.0	199.2	-54.0	3.0	0.0	3.0	0.0	44.0
CTGH-1	Chiller (Ref - Daikin: EWAD-CFXR 600)	833982.3	816343.5	94.0	--	--	92.0	225.7	-55.1	3.0	0.0	3.0	0.0	42.9
CTGH-2	Chiller (Ref - Daikin: EWAD-CFXR 600)	833991.6	816340.8	94.0	--	--	92.0	229.2	-55.2	3.0	0.0	3.0	0.0	42.8
CTGH-3	Chiller (Ref - Daikin: EWAD-CFXR 600)	833986.4	816336.9	94.0	--	--	92.0	222.9	-55.0	3.0	0.0	3.0	0.0	43.0
CTGH-4	Chiller (Ref - Daikin: EWAD-D-SX 410)	833980.3	816333.3	94.0	--	--	85.0	216.3	-54.7	3.0	0.0	3.0	0.0	36.3
TB-1	Chiller (Ref - Daikin: EWAD-CFXR 820)	834003.4	816335.1	84.3	--	--	92.0	232.4	-55.3	3.0	0.0	3.0	0.0	42.7
TB-2	Chiller (Ref - Daikin: EWAD-CFXR 820)	834007.2	816324.2	84.3	--	--	92.0	227.0	-55.1	3.0	0.0	3.0	0.0	42.9
IAB-1	Chiller (Ref - Daikin: EWAD-D-SX 490)	833958.7	816104.1	66.6	--	--	86.0	125.4	-50.0	3.0	-10.0	3.0	0.0	32.0
IAB-2	Chiller (Ref - Daikin: EWAD-D-SX 490)	833964.8	816100.4	66.6	--	--	86.0	132.4	-50.4	3.0	-10.0	3.0	0.0	31.6
100QRC-1	Chiller (Ref - Daikin: EWAD-CFXR C15)	834011.1	816060.8	129.5	--	--	95.0	195.0	-53.8	3.0	-10.0	3.0	0.0	37.2
100QRC-2	Chiller (Ref - Daikin: EWAD-CFXR C15)	834008.1	816058.1	129.5	--	--	95.0	193.9	-53.8	3.0	-10.0	3.0	0.0	37.2
100QRC-3	Chiller (Ref - Daikin: EWAD-CFXR 600)	834001.8	816055.5	129.5	--	--	92.0	190.2	-53.6	3.0	-10.0	3.0	0.0	34.4
RC-1	Chiller (Ref - Daikin: EWAD-CFXR C15)	834028.6	816025.5	91.7	--	--	95.0	225.0	-55.0	3.0	-10.0	3.0	0.0	36.0
RC-2	Chiller (Ref - Daikin: EWAD-CFXR C15)	834028.3	816032.4	91.7	--	--	95.0	220.7	-54.9	3.0	-10.0	3.0	0.0	36.1
HQ-1	Cooling Tower (Ref - ryowo: FC/LN 200)	834037.9	816016.4	120.2	64.0	3.8	83.6	240.1	-55.6	3.0	-10.0	3.0	0.0	24.0
HQ-2	Cooling Tower (Ref - ryowo: FC/LN 200)	834039.9	816019.3	120.2	64.0	3.8	83.6	239.9	-55.6	3.0	-10.0	3.0	0.0	24.0
HQ-3	Cooling Tower (Ref - ryowo: FC/LN 200)	834042.0	816022.2	120.2	64.0	3.8	83.6	239.9	-55.6	3.0	-10.0	3.0	0.0	24.0
CH-1	Cooling Tower (Ref - ryowo: FC/LN 400)	834076.4	815970.1	75.6	66.0	5.4	88.7	297.2	-57.5	3.0	-10.0	3.0	0.0	27.2
CH-2	Cooling Tower (Ref - ryowo: FC/LN 400)	834081.3	815963.7	75.6	66.0	5.4	88.7	305.1	-57.7	3.0	-10.0	3.0	0.0	27.0
POH-1	Chiller (Ref - Daikin: EWAD-D-SX 210)	834009.7	816003.1	97.7	--	--	84.0	225.6	-55.1	3.0	-10.0	3.0	0.0	24.9
WTT-1	Chiller (Ref - Daikin: EWAD-CFXR 870)	834016.5	815992.1	85.4	--	--	92.0	238.0	-55.5	3.0	-10.0	3.0	0.0	32.5
WTT-2	Chiller (Ref - Daikin: EWAD-CFXR 870)	834024.3	815984.9	85.4	--	--	92.0	248.6	-55.9	3.0	-10.0	3.0	0.0	32.1
AST-1	Chiller (Ref - Daikin: EWAD-CFXR C10)	834102.6	816020.6	78.0	--	--	94.0	290.0	-57.2	3.0	0.0	3.0	0.0	42.8
AST-2	Chiller (Ref - Daikin: EWAD-CFXR C10)	834104.5	816017.0	78.0	--	--	94.0	293.4	-57.4	3.0	0.0	3.0	0.0	42.6
AST-3	Chiller (Ref - Daikin: EWAD-D-SX 410)	834095.0	816014.2	78.0	--	--	85.0	286.6	-57.1	3.0	0.0	3.0	0.0	33.9
AST-4	Chiller (Ref - Daikin: EWAD-D-SX 410)	834096.8	816010.9	78.0	--	--	85.0	289.9	-57.2	3.0	0.0	3.0	0.0	33.8
BGLAT-1	Chiller (Ref - Daikin: EWAD-CFXR 740)	833959.9	816246.5	16.5	--	--	92.0	157.0	-51.9	3.0	0.0	3.0	0.0	46.1
BGLAT-2	Chiller (Ref - Daikin: EWAD-CFXR 740)	833964.4	816243.1	16.5	--	--	92.0	158.4	-52.0	3.0	0.0	3.0	0.0	46.0
TSBB-1	Chiller (Ref - Daikin: EWAD-D-SX 490)	833986.9	816259.8	56.3	--	--	86.0	172.3	-52.7	3.0	0.0	3.0	0.0	39.3
TSBB-2	Chiller (Ref - Daikin: EWAD-D-SX 490)	833991.5	816257.1	56.3	--	--	86.0	174.5	-52.8	3.0	0.0	3.0	0.0	39.2
PBC-1	Chiller (Ref - Daikin: EWAD-D-SX 410)	833994.6	816244.2	76.6	--	--	85.0	167.8	-52.5	3.0	0.0	3.0	0.0	38.5
PBC-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	834001.4	816248.4	76.6	--	--	85.0	175.7	-52.9	3.0	0.0	3.0	0.0	38.1
JC-1	Chiller (Ref - Daikin: EWAD-CFXR 740)	833950.9	816005.0	99.6	--	--	92.0	186.8	-53.4	3.0	-10.0	3.0	0.0	34.6
1LT-1	Chiller (Ref - Daikin: EWAD-CFXR 600)	833980.8	815970.5	102.3	--	--	92.0	232.2	-55.3	3.0	-10.0	3.0	0.0	32.7
1LT-2	Chiller (Ref - Daikin: EWAD-CFXR 600)	833979.5	815966.3	102.3	--	--	92.0	235.0	-55.4	3.0	-10.0	3.0	0.0	32.6
SS-1	Chiller (Ref - Daikin: EWAQ-G-XR 090)	833918.4	815974.4	107.3	--	--	82.0	200.2	-54.0	3.0	-10.0	3.0	0.0	24.0
SS-2	Chiller (Ref - Daikin: EWAQ-G-XR 090)	833919.8	815972.9	107.3	--	--	82.0	202.1	-54.1	3.0	-10.0	3.0	0.0	23.9
CPCB-1	Chiller (Ref - Daikin: EWAD-D-SX 410)	833977.2	815919.4	116.3	--	--	85.0	275.1	-56.8	3.0	-10.0	3.0	0.0	24.2
HC-1	Chiller (Ref - Daikin: EWAD-D-SX 490)	833930.1	815929.6	121.7	--	--	86.0	247.7	-55.9	3.0	-10.0	3.0	0.0	26.1
HC-2	Chiller (Ref - Daikin: EWAD-D-SX 490)	833933.6	815929.3	121.7	--	--	86.0	249.2	-55.9	3.0	-10.0	3.0	0.0	26.1
HC-3	Chiller (Ref - Daikin: EWAD-D-SX 490)	833936.6	815929.1	121.7	--	--	86.0	250.4	-56.0	3.0	-10.0	3.0	0.0	26.0
HC-4	Chiller (Ref - Daikin: EWAD-D-SX 490)	833942.4	815934.1	121.7	--	--	86.0	247.9	-55.9	3.0	-10.0	3.0	0.0	26.1
HC-5	Chiller (Ref - Daikin: EWAD-D-SX 490)	833945.5	815933.8	121.7	--	--	86.0	249.3	-55.9	3.0	-10.0	3.0	0.0	26.1
HC-6	Chiller (Ref - Daikin: EWAD-D-SX 490)	833942.8	815925.3	121.7	--	--	86.0	256.1	-56.2	3.0	-10.0	3.0	0.0	25.8
HC-7	Chiller (Ref - Daikin: EWAD-D-SX 490)	833938.2	815920.5	121.7	--	--	86.0	258.9	-56.3	3.0	-10.0	3.0	0.0	25.7
HC-8	Chiller (Ref - Daikin: EWAD-D-SX 490)	833941.3	815919.5	121.7	--	--	86.0	260.9	-56.3	3.0	-10.0	3.0	0.0	25.7
KC-1	Chiller (Ref - Daikin: EWAD-C-XR C16)	833838.9	815913.7	132.0	--	--	95.0	251.7	-56.0	3.0	-10.0	3.0	0.0	35.0
KC-2	Chiller (Ref - Daikin: EWAD-C-XR C16)	833828.9	815902.1	132.0	--	--	95.0	263.7	-56.4	3.0	-10.0	3.0	0.0	34.6
KC-3	Chiller (Ref - Daikin: EWAD-D-SX 490)	833820.6	815901.4	132.0	--	--	86.0	265.1	-56.5	3.0	-10.0	3.0	0.0	25.5
TW-1	Cooling Tower (Ref - ryowo: FC/LN 200)	833804.8	816218.3	132.1	64.0	3.8	83.6	84.6	-46.5	3.0	-10.0	3.0	0.0	33.1
TW-2	Cooling Tower (Ref - ryowo: FC/LN 200)	833809.5	816213.8	132.1	64.0	3.8	83.6	79.2	-46.0	3.0	-10.0	3.0	0.0	33.7

299Q-1	Chiller (Ref - Daikin: EWAD-CFXR 600)	833564.5	816227.4	80.9	--	--	92.0	292.4	-57.3	3.0	0.0	3.0	0.0	40.7
299Q-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833559.6	816230.8	80.9	--	--	85.0	297.9	-57.5	3.0	0.0	3.0	0.0	33.5
299Q-3	Chiller (Ref - Daikin: EWAD-CFXR 600)	833556.5	816237.1	80.9	--	--	92.0	302.4	-57.6	3.0	0.0	3.0	0.0	40.4
PBT-1	Chiller (Ref - Daikin: EWAD-CFXR 600)	833715.7	816289.5	83.6	--	--	92.0	185.1	-53.4	3.0	0.0	3.0	0.0	44.6
PBT-2	Chiller (Ref - Daikin: EWAD-CFXR 600)	833716.2	816284.4	83.6	--	--	92.0	181.3	-53.2	3.0	0.0	3.0	0.0	44.8
PBT-3	Chiller (Ref - Daikin: EWAD-D-SX 410)	833724.7	816288.4	83.6	--	--	85.0	178.0	-53.0	3.0	0.0	3.0	0.0	38.0
BC-1	Chiller (Ref - Daikin: EWAD-D-SX 490)	833646.5	816307.1	108.3	--	--	86.0	250.5	-56.0	3.0	0.0	3.0	0.0	36.0
BC-2	Chiller (Ref - Daikin: EWAD-D-SX 490)	833651.7	816304.6	108.3	--	--	86.0	244.8	-55.8	3.0	0.0	3.0	0.0	36.2
S50-1	Chiller (Ref - Daikin: EWAD-CFXR 740)	833628.2	816325.3	98.0	--	--	92.0	275.4	-56.8	3.0	0.0	3.0	0.0	41.2
S50-2	Chiller (Ref - Daikin: EWAD-CFXR 740)	833635.2	816325.0	98.0	--	--	92.0	269.6	-56.6	3.0	0.0	3.0	0.0	41.4
S50-3	Chiller (Ref - Daikin: EWAD-CFXR 740)	833632.9	816321.3	98.0	--	--	92.0	269.2	-56.6	3.0	0.0	3.0	0.0	41.4
HSBH-1	Cooling Tower (Ref - ryowo: FC/LN 200)	834145.9	816199.3	136.2	64.0	3.8	83.6	303.0	-57.6	3.0	-10.0	3.0	0.0	22.0
HSBH-2	Cooling Tower (Ref - ryowo: FC/LN 200)	834149.0	816195.3	136.2	64.0	3.8	83.6	305.5	-57.7	3.0	-10.0	3.0	0.0	21.9
HSBH-3	Cooling Tower (Ref - ryowo: FC/LN 200)	834138.9	816194.1	136.2	64.0	3.8	83.6	295.5	-57.4	3.0	-10.0	3.0	0.0	22.2
HSBH-4	Cooling Tower (Ref - ryowo: FC/LN 200)	834142.1	816190.0	136.2	64.0	3.8	83.6	298.2	-57.5	3.0	-10.0	3.0	0.0	22.2
HSBH-5	Chiller (Ref - Daikin: EWAD-CFXR 600)	834130.7	816195.9	136.2	--	--	92.0	287.7	-57.2	3.0	-10.0	3.0	0.0	30.8
HSBH-6	Chiller (Ref - Daikin: EWAD-CFXR C15)	834129.8	816191.8	136.2	--	--	95.0	286.3	-57.1	3.0	-10.0	3.0	0.0	33.9
HSBH-7	Chiller (Ref - Daikin: EWAD-CFXR C15)	834137.8	816179.8	136.2	--	--	95.0	293.2	-57.3	3.0	-10.0	3.0	0.0	33.7
NFT-1	Chiller (Ref - Daikin: EWAD-CFXR 740)	833967.2	816341.7	30.0	--	--	92.0	223.3	-55.0	3.0	0.0	3.0	0.0	43.0
NFT-2	Chiller (Ref - Daikin: EWAD-CFXR 740)	833959.3	816329.1	30.0	--	--	92.0	208.9	-54.4	3.0	0.0	3.0	0.0	43.6
NFT-3	Chiller (Ref - Daikin: EWAD-CFXR 740)	833940.5	816326.2	30.0	--	--	92.0	197.2	-53.9	3.0	0.0	3.0	0.0	44.1
NFT-4	Chiller (Ref - Daikin: EWAD-CFXR 740)	833930.9	816334.6	30.0	--	--	92.0	200.2	-54.0	3.0	0.0	3.0	0.0	44.0
NFT-5	Chiller (Ref - Daikin: EWAD-CFXR 740)	833940.2	816350.2	30.0	--	--	92.0	217.6	-54.8	3.0	0.0	3.0	0.0	43.2
NFT-6	Chiller (Ref - Daikin: EWAD-CFXR 740)	833945.5	816358.6	30.0	--	--	92.0	227.1	-55.1	3.0	0.0	3.0	0.0	42.9
IP-1	Chiller (Ref - Daikin: EWAD-CFXR C15)	833865.3	816416.7	34.0	--	--	95.0	261.6	-56.4	3.0	-10.0	3.0	0.0	34.6
IP-2	Chiller (Ref - Daikin: EWAD-CFXR C15)	833868.3	816414.0	34.0	--	--	95.0	259.1	-56.3	3.0	-10.0	3.0	0.0	34.7
IP-3	Chiller (Ref - Daikin: EWAD-CFXR C15)	833858.1	816402.3	34.0	--	--	95.0	247.2	-55.9	3.0	-10.0	3.0	0.0	35.1
IP-4	Chiller (Ref - Daikin: EWAD-CFXR C15)	833867.9	816406.9	34.0	--	--	95.0	252.2	-56.0	3.0	-10.0	3.0	0.0	35.0
IP-5	Chiller (Ref - Daikin: EWAD-CFXR C15)	833873.5	816404.4	34.0	--	--	95.0	250.2	-56.0	3.0	-10.0	3.0	0.0	35.0
IP-6	Chiller (Ref - Daikin: EWAD-C-XR C16)	833869.2	816389.1	123.3	--	--	95.0	231.4	-55.3	3.0	-10.0	3.0	0.0	35.7
IP-7	Chiller (Ref - Daikin: EWAD-C-XR C16)	833887.8	816392.4	123.3	--	--	95.0	236.9	-55.5	3.0	-10.0	3.0	0.0	35.5
IP-8	Cooling Tower (Ref - ryowo: FC/LN 400)	833881.7	816397.4	123.3	66.0	5.4	88.7	240.9	-55.6	3.0	-10.0	3.0	0.0	29.0
IP-9	Cooling Tower (Ref - ryowo: FC/LN 400)	833887.6	816401.9	123.3	66.0	5.4	88.7	246.2	-55.8	3.0	-10.0	3.0	0.0	28.8
GC-1	Chiller (Ref - Daikin: EWAD-C-XR C16)	833851.1	816339.2	111.8	--	--	95.0	179.5	-53.1	3.0	0.0	3.0	0.0	47.9
GC-2	Chiller (Ref - Daikin: EWAD-C-XR C16)	833855.6	816337.5	111.8	--	--	95.0	177.9	-53.0	3.0	0.0	3.0	0.0	48.0
GC-3	Chiller (Ref - Daikin: EWAD-CFXR 740)	833859.7	816335.7	111.8	--	--	92.0	176.3	-52.9	3.0	0.0	3.0	0.0	45.1
HB-1	Chiller (Ref - Daikin: EWAD-CFXR 740)	834015.0	816407.1	97.5	--	--	92.0	296.6	-57.4	3.0	0.0	3.0	0.0	40.6
PTG-1	Cooling Tower (Ref - ryowo: FC/LN 200)	834056.3	815996.1	87.1	64.0	3.8	83.6	264.9	-56.5	3.0	-10.0	3.0	0.0	23.2
PTG-2	Cooling Tower (Ref - ryowo: FC/LN 200)	834053.2	815993.6	87.1	64.0	3.8	83.6	264.1	-56.4	3.0	-10.0	3.0	0.0	23.2
										Noise standard:		**65**	**Overall**	**63**

Predicted Noise Level for Fixed Noise Impact Assessment - Base Case Scenario

Night Time

F05 NSR Coordinate: x = 833849.2 y = 816161.3 z = 88.1

Source ID	Description	Industrial Noise x	Industrial Noise y		SPL	Ref dist.	SWL	Slant distance from source	Distance Corr.	Façade Corr.	Barrier Corr.	Tonality Corr.	Impulsive Corr.	ANL
YSA-1	Chiller (Ref - Daikin: EWAD-D-SX 210)	833920.2	816100.0	96.8	--	--	84.0	94.2	-47.5	3.0	-10.0	3.0	0.0	32.5
YSA-2	Chiller (Ref - Daikin: EWAD-D-SX 210)	833923.0	816097.1	96.8	--	--	84.0	98.2	-47.8	3.0	-10.0	3.0	0.0	32.2
BOW-1	Chiller (Ref - Daikin: EWAD-D-SX 410)	833909.9	816077.7	91.4	--	--	85.0	103.4	-48.3	3.0	-10.0	3.0	0.0	32.7
BOW-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833912.2	816075.5	91.4	--	--	85.0	106.5	-48.5	3.0	-10.0	3.0	0.0	32.5
PTG-1	Cooling Tower (Ref - ryowo: FC/LN 200)	834056.3	815996.1	87.1	64.0	3.8	83.6	264.9	-56.5	3.0	-10.0	3.0	0.0	23.2
PTG-2	Cooling Tower (Ref - ryowo: FC/LN 200)	834053.2	815993.6	87.1	64.0	3.8	83.6	264.1	-56.4	3.0	-10.0	3.0	0.0	23.2
										Noise standard:		**55**	**Overall**	**39**

Predicted Noise Level for Fixed Noise Impact Assessment - Base Case Scenario
Day/Evening Time
F05 NSR Coordinate: x = 833849.2 y = 816161.3 z = 117.6

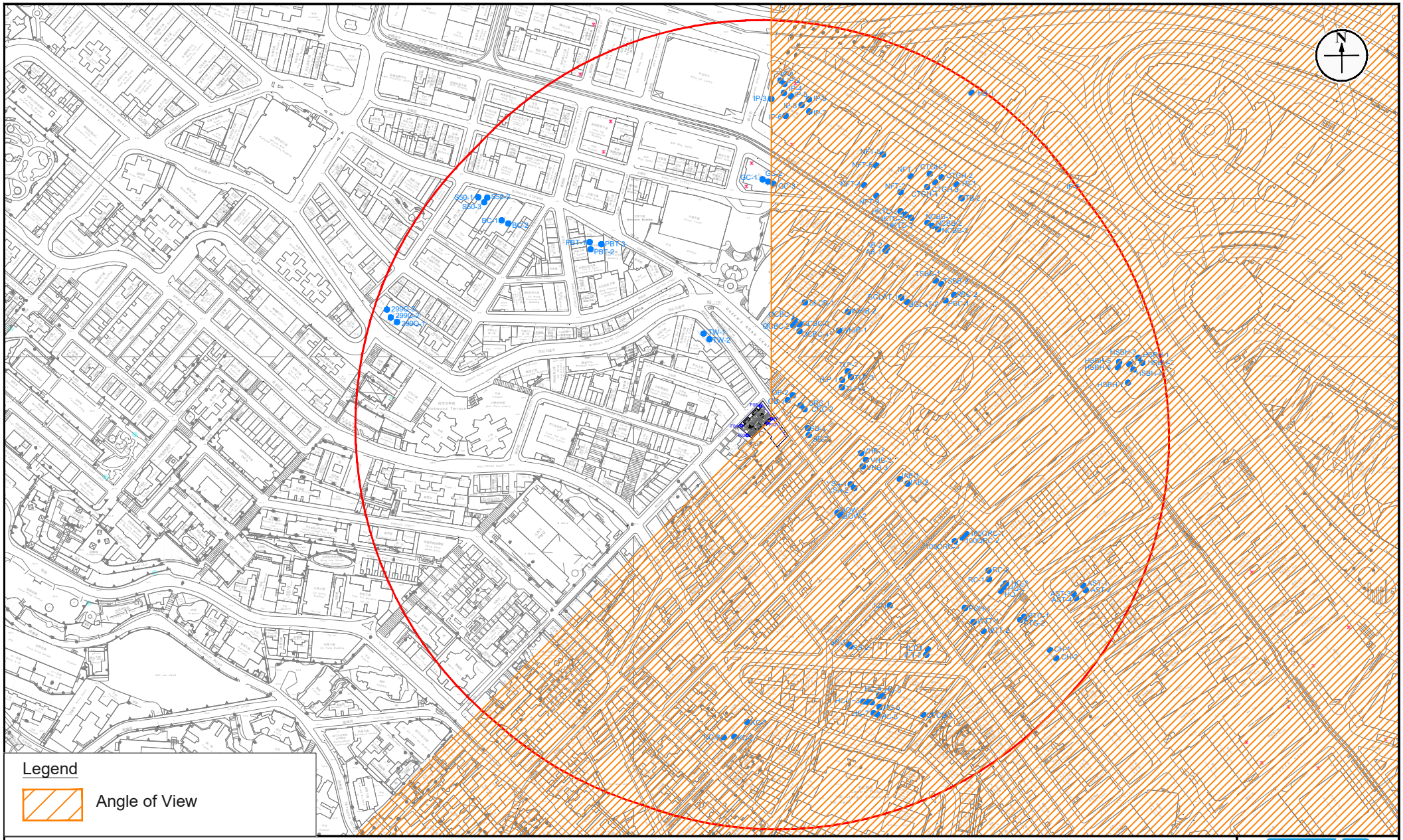
Source ID	Description	Industrial Noise Source Coordinate: x	y	z	SPL	Ref dist.	SWL	Slant distance from source to NSR (m)	Distance Corr.	Façade Corr.	Barrier Corr.	Tonality Corr.	Impulsive Corr.	ANL
OB-1	Chiller (Ref - Daikin: EWAD-D-SX 490)	833870.8	816166.0	121.8	--	--	86.0	22.5	-35.0	3.0	-10.0	3.0	0.0	47.0
OB-2	Cooling Tower (Ref - ryowo: FC/LN 200)	833874.7	816169.8	121.8	64.0	3.8	83.6	27.2	-36.7	3.0	-10.0	3.0	0.0	43.0
CRC-1	Chiller (Ref - Daikin: EWAD-CFXR 740)	833881.0	816161.9	131.1	--	--	92.0	34.6	-38.8	3.0	-10.0	3.0	0.0	49.2
CRC-2	Chiller (Ref - Daikin: EWAD-CFXR 740)	833884.0	816158.8	131.1	--	--	92.0	37.4	-39.5	3.0	-10.0	3.0	0.0	48.5
SB-1	Chiller (Ref - Daikin: EWAD-F-XR 500)	833886.6	816144.1	60.0	--	--	89.0	70.8	-45.0	3.0	-10.0	3.0	0.0	40.0
SB-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833887.3	816138.6	60.0	--	--	85.0	72.7	-45.2	3.0	-10.0	3.0	0.0	35.8
VHB-1	Chiller (Ref - Daikin: EWAD-D-SX 490)	833928.3	816124.3	88.4	--	--	86.0	92.1	-47.3	3.0	-10.0	3.0	0.0	34.7
VHB-2	Chiller (Ref - Daikin: EWAD-D-SX 490)	833932.2	816119.2	88.4	--	--	86.0	97.5	-47.8	3.0	-10.0	3.0	0.0	34.2
VHB-3	Chiller (Ref - Daikin: EWAD-D-SX 490)	833929.6	816114.1	88.4	--	--	86.0	97.7	-47.8	3.0	-10.0	3.0	0.0	34.2
YSA-1	Chiller (Ref - Daikin: EWAD-D-SX 210)	833920.2	816100.0	96.8	--	--	84.0	96.1	-47.7	3.0	-10.0	3.0	0.0	32.3
YSA-2	Chiller (Ref - Daikin: EWAD-D-SX 210)	833923.0	816097.1	96.8	--	--	84.0	100.0	-48.0	3.0	-10.0	3.0	0.0	32.0
TLP-1	Chiller (Ref - Daikin: EWAD-C-SR C14)	833913.6	816181.9	51.8	--	--	95.0	94.3	-47.5	3.0	0.0	3.0	0.0	53.5
TLP-2	Chiller (Ref - Daikin: EWAQ-F-XR 330)	833918.0	816188.6	51.8	--	--	87.0	99.0	-47.9	3.0	0.0	3.0	0.0	45.1
TLP-3	Chiller (Ref - Daikin: EWAD-C-SR C14)	833920.3	816184.2	51.8	--	--	95.0	99.5	-48.0	3.0	0.0	3.0	0.0	53.0
TLP-4	Chiller (Ref - Daikin: EWAQ-F-XR 330)	833913.2	816176.1	51.8	--	--	87.0	93.0	-47.4	3.0	0.0	3.0	0.0	45.6
BOW-1	Chiller (Ref - Daikin: EWAD-D-SX 410)	833909.9	816077.7	91.4	--	--	85.0	106.6	-48.6	3.0	-10.0	3.0	0.0	32.4
BOW-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833912.2	816075.5	91.4	--	--	85.0	109.6	-48.8	3.0	-10.0	3.0	0.0	32.2
WHIB-1	Chiller (Ref - Daikin: EWAD-CFXR 870)	833911.1	816220.6	73.0	--	--	92.0	96.6	-47.7	3.0	0.0	3.0	0.0	50.3
WHIB-2	Chiller (Ref - Daikin: EWAD-CFXR 870)	833918.3	816235.3	73.0	--	--	92.0	110.6	-48.9	3.0	0.0	3.0	0.0	49.1
OCBC-1	Chiller (Ref - Daikin: EWAQ-G-XR 080)	833876.3	816229.0	72.2	--	--	80.0	85.9	-46.7	3.0	0.0	3.0	0.0	39.3
OCBC-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833875.0	816224.7	72.2	--	--	85.0	82.1	-46.3	3.0	0.0	3.0	0.0	44.7
OCBC-3	Chiller (Ref - Daikin: EWAD-D-SX 410)	833880.2	816225.5	72.2	--	--	85.0	84.5	-46.5	3.0	0.0	3.0	0.0	44.5
OCBC-4	Chiller (Ref - Daikin: EWAD-D-SX 410)	833880.2	816220.3	72.2	--	--	85.0	80.6	-46.1	3.0	0.0	3.0	0.0	44.9
SLCB-1	Chiller (Ref - Daikin: EWAD-CFXR 600)	833884.3	816242.7	73.1	--	--	92.0	99.2	-47.9	3.0	0.0	3.0	0.0	50.1
AB-1	Chiller (Ref - Daikin: EWAD-D-SX 410)	833947.6	816283.2	72.3	--	--	85.0	163.1	-52.2	3.0	0.0	3.0	0.0	38.8
AB-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833949.1	816285.4	72.3	--	--	85.0	165.6	-52.4	3.0	0.0	3.0	0.0	38.6
HKTC-1	Chiller (Ref - Daikin: EWAD-D-SX 410)	833959.3	816314.2	78.4	--	--	85.0	192.5	-53.7	3.0	0.0	3.0	0.0	37.3
HKTC-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833963.4	816311.4	78.4	--	--	85.0	192.6	-53.7	3.0	0.0	3.0	0.0	37.3
HKTC-3	Chiller (Ref - Daikin: EWAD-D-SX 410)	833967.6	816308.9	78.4	--	--	85.0	193.2	-53.7	3.0	0.0	3.0	0.0	37.3
NCBB-1	Chiller (Ref - Daikin: EWAD-CFXR 600)	833980.6	816305.2	57.4	--	--	92.0	204.0	-54.2	3.0	0.0	3.0	0.0	43.8
NCBB-2	Chiller (Ref - Daikin: EWAD-CFXR 600)	833984.4	816302.9	57.4	--	--	92.0	204.8	-54.2	3.0	0.0	3.0	0.0	43.8
NCBB-3	Chiller (Ref - Daikin: EWAD-CFXR 600)	833988.8	816300.1	57.4	--	--	92.0	205.9	-54.3	3.0	0.0	3.0	0.0	43.7
CTGH-1	Chiller (Ref - Daikin: EWAD-CFXR 600)	833982.3	816343.5	94.0	--	--	92.0	226.9	-55.1	3.0	0.0	3.0	0.0	42.9
CTGH-2	Chiller (Ref - Daikin: EWAD-CFXR 600)	833991.6	816340.8	94.0	--	--	92.0	230.3	-55.2	3.0	0.0	3.0	0.0	42.8
CTGH-3	Chiller (Ref - Daikin: EWAD-CFXR 600)	833986.4	816336.9	94.0	--	--	92.0	224.1	-55.0	3.0	0.0	3.0	0.0	43.0
CTGH-4	Chiller (Ref - Daikin: EWAD-D-SX 410)	833980.3	816333.3	94.0	--	--	85.0	217.6	-54.8	3.0	0.0	3.0	0.0	36.2
TB-1	Chiller (Ref - Daikin: EWAD-CFXR 820)	834003.4	816335.1	84.3	--	--	92.0	234.7	-55.4	3.0	0.0	3.0	0.0	42.6
TB-2	Chiller (Ref - Daikin: EWAD-CFXR 820)	834007.2	816324.2	84.3	--	--	92.0	229.4	-55.2	3.0	0.0	3.0	0.0	42.8
IAB-1	Chiller (Ref - Daikin: EWAD-D-SX 490)	833958.7	816104.1	66.6	--	--	86.0	133.7	-50.5	3.0	-10.0	3.0	0.0	31.5
IAB-2	Chiller (Ref - Daikin: EWAD-D-SX 490)	833964.8	816100.4	66.6	--	--	86.0	140.3	-50.9	3.0	-10.0	3.0	0.0	31.1
100QRC-1	Chiller (Ref - Daikin: EWAD-CFXR C15)	834011.1	816060.8	129.5	--	--	95.0	190.9	-53.6	3.0	-10.0	3.0	0.0	37.4
100QRC-2	Chiller (Ref - Daikin: EWAD-CFXR C15)	834008.1	816058.1	129.5	--	--	95.0	189.8	-53.6	3.0	-10.0	3.0	0.0	37.4
100QRC-3	Chiller (Ref - Daikin: EWAD-CFXR 600)	834001.8	816055.5	129.5	--	--	92.0	186.1	-53.4	3.0	-10.0	3.0	0.0	34.6
RC-1	Chiller (Ref - Daikin: EWAD-CFXR C15)	834028.6	816025.5	91.7	--	--	95.0	226.5	-55.1	3.0	-10.0	3.0	0.0	35.9
RC-2	Chiller (Ref - Daikin: EWAD-CFXR C15)	834028.3	816032.4	91.7	--	--	95.0	222.2	-54.9	3.0	-10.0	3.0	0.0	36.1
HQ-1	Cooling Tower (Ref - ryowo: FC/LN 200)	834037.9	816016.4	120.2	64.0	3.8	83.6	237.9	-55.5	3.0	-10.0	3.0	0.0	24.1
HQ-2	Cooling Tower (Ref - ryowo: FC/LN 200)	834039.9	816019.3	120.2	64.0	3.8	83.6	237.8	-55.5	3.0	-10.0	3.0	0.0	24.1
HQ-3	Cooling Tower (Ref - ryowo: FC/LN 200)	834042.0	816022.2	120.2	64.0	3.8	83.6	237.8	-55.5	3.0	-10.0	3.0	0.0	24.1
CH-1	Cooling Tower (Ref - ryowo: FC/LN 400)	834076.4	815970.1	75.6	66.0	5.4	88.7	299.9	-57.5	3.0	-10.0	3.0	0.0	27.1
CH-2	Cooling Tower (Ref - ryowo: FC/LN 400)	834081.3	815963.7	75.6	66.0	5.4	88.7	307.7	-57.8	3.0	-10.0	3.0	0.0	26.9
POH-1	Chiller (Ref - Daikin: EWAD-D-SX 210)	834009.7	816003.1	97.7	--	--	84.0	226.2	-55.1	3.0	-10.0	3.0	0.0	24.9
WTT-1	Chiller (Ref - Daikin: EWAD-CFXR 870)	834016.5	815992.1	85.4	--	--	92.0	240.1	-55.6	3.0	-10.0	3.0	0.0	32.4
WTT-2	Chiller (Ref - Daikin: EWAD-CFXR 870)	834024.3	815984.9	85.4	--	--	92.0	250.6	-56.0	3.0	-10.0	3.0	0.0	32.0
AST-1	Chiller (Ref - Daikin: EWAD-CFXR C10)	834102.6	816020.6	78.0	--	--	94.0	292.5	-57.3	3.0	0.0	3.0	0.0	42.7
AST-2	Chiller (Ref - Daikin: EWAD-CFXR C10)	834104.5	816017.0	78.0	--	--	94.0	295.9	-57.4	3.0	0.0	3.0	0.0	42.6
AST-3	Chiller (Ref - Daikin: EWAD-D-SX 410)	834095.0	816014.2	78.0	--	--	85.0	289.2	-57.2	3.0	0.0	3.0	0.0	33.8
AST-4	Chiller (Ref - Daikin: EWAD-D-SX 410)	834096.8	816010.9	78.0	--	--	85.0	292.4	-57.3	3.0	0.0	3.0	0.0	33.7
BGLAT-1	Chiller (Ref - Daikin: EWAD-CFXR 740)	833959.9	816246.5	16.5	--	--	92.0	172.4	-52.7	3.0	0.0	3.0	0.0	45.3
BGLAT-2	Chiller (Ref - Daikin: EWAD-CFXR 740)	833964.4	816243.1	16.5	--	--	92.0	173.7	-52.8	3.0	0.0	3.0	0.0	45.2
TSBB-1	Chiller (Ref - Daikin: EWAD-D-SX 490)	833986.9	816259.8	56.3	--	--	86.0	180.1	-53.1	3.0	0.0	3.0	0.0	38.9
TSBB-2	Chiller (Ref - Daikin: EWAD-D-SX 490)	833991.5	816257.1	56.3	--	--	86.0	182.2	-53.2	3.0	0.0	3.0	0.0	38.8
PBC-1	Chiller (Ref - Daikin: EWAD-D-SX 410)	833994.6	816244.2	76.6	--	--	85.0	172.3	-52.7	3.0	0.0	3.0	0.0	38.3
PBC-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	834001.4	816248.4	76.6	--	--	85.0	180.1	-53.1	3.0	0.0	3.0	0.0	37.9
JC-1	Chiller (Ref - Daikin: EWAD-CFXR 740)	833950.9	816005.0	99.6	--	--	92.0	187.3	-53.5	3.0	-10.0	3.0	0.0	34.5
1LT-1	Chiller (Ref - Daikin: EWAD-CFXR 600)	833980.8	815970.5	102.3	--	--	92.0	232.3	-55.3	3.0	-10.0	3.0	0.0	32.7
1LT-2	Chiller (Ref - Daikin: EWAD-CFXR 600)	833979.5	815966.3	102.3	--	--	92.0	235.0	-55.4	3.0	-10.0	3.0	0.0	32.6
SS-1	Chiller (Ref - Daikin: EWAQ-G-XR 090)	833918.4	815974.4	107.3	--	--	82.0	199.6	-54.0	3.0	-10.0	3.0	0.0	24.0
SS-2	Chiller (Ref - Daikin: EWAQ-G-XR 090)	833919.8	815972.9	107.3	--	--	82.0	201.5	-54.1	3.0	-10.0	3.0	0.0	23.9
CPCB-1	Chiller (Ref - Daikin: EWAD-D-SX 410)	833977.2	815919.4	116.3	--	--	85.0	273.7	-56.7	3.0	-10.0	3.0	0.0	24.3
HC-1	Chiller (Ref - Daikin: EWAD-D-SX 490)	833930.1	815929.6	121.7	--	--	86.0	245.5	-55.8	3.0	-10.0	3.0	0.0	26.2
HC-2	Chiller (Ref - Daikin: EWAD-D-SX 490)	833933.6	815929.3	121.7	--	--	86.0	246.9	-55.9	3.0	-10.0	3.0	0.0	26.1
HC-3	Chiller (Ref - Daikin: EWAD-D-SX 490)	833936.6	815929.1	121.7	--	--	86.0	248.1	-55.9	3.0	-10.0	3.0	0.0	26.1
HC-4	Chiller (Ref - Daikin: EWAD-D-SX 490)	833942.4	815934.1	121.7	--	--	86.0	245.6	-55.8	3.0	-10.0	3.0	0.0	26.2
HC-5	Chiller (Ref - Daikin: EWAD-D-SX 490)	833945.5	815933.8	121.7	--	--	86.0	247.1	-55.9	3.0	-10.0	3.0	0.0	26.1
HC-6	Chiller (Ref - Daikin: EWAD-D-SX 490)	833942.8	815925.3	121.7	--	--	86.0	253.9	-56.1	3.0	-10.0	3.0	0.0	25.9
HC-7	Chiller (Ref - Daikin: EWAD-D-SX 490)	833938.2	815920.5	121.7	--	--	86.0	256.8	-56.2	3.0	-10.0	3.0	0.0	25.8
HC-8	Chiller (Ref - Daikin: EWAD-D-SX 490)	833941.3	815919.5	121.7	--	--	86.0	258.8	-56.3	3.0	-10.0	3.0	0.0	25.7
KC-1	Chiller (Ref - Daikin: EWAD-C-XR C16)	833838.9	815913.7	132.0	--	--	95.0	248.2	-55.9	3.0	-10.0	3.0	0.0	35.1
KC-2	Chiller (Ref - Daikin: EWAD-C-XR C16)	833828.9	815902.1	132.0	--	--	95.0	260.4	-56.3	3.0	-10.0	3.0	0.0	34.7
KC-3	Chiller (Ref - Daikin: EWAD-D-SX 490)	833820.6	815901.4	132.0	--	--	86.0	261.9	-56.4	3.0	-10.0	3.0	0.0	25.6
TW-1	Cooling Tower (Ref - ryowo: FC/LN 200)	833804.8	816218.3	132.1	64.0	3.8	83.6	73.7	-45.3	3.0	-10.0	3.0	0.0	34.3
TW-2	Cooling Tower (Ref - ryowo: FC/LN 200)	833809.5	816213.8	132.1	64.0	3.8	83.6	67.4	-44.6	3.0	-10.0	3.0	0.0	35.1

299Q-1	Chiller (Ref - Daikin: EWAD-CFXR 600)	833564.5	816227.4	80.9	--	--	92.0	294.6	-57.4	3.0	0.0	3.0	0.0	40.6
299Q-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833559.6	816230.8	80.9	--	--	85.0	300.1	-57.5	3.0	0.0	3.0	0.0	33.5
299Q-3	Chiller (Ref - Daikin: EWAD-CFXR 600)	833556.5	816237.1	80.9	--	--	92.0	304.6	-57.7	3.0	0.0	3.0	0.0	40.3
PBT-1	Chiller (Ref - Daikin: EWAD-CFXR 600)	833715.7	816289.5	83.6	--	--	92.0	188.2	-53.5	3.0	0.0	3.0	0.0	44.5
PBT-2	Chiller (Ref - Daikin: EWAD-CFXR 600)	833716.2	816284.4	83.6	--	--	92.0	184.4	-53.3	3.0	0.0	3.0	0.0	44.7
PBT-3	Chiller (Ref - Daikin: EWAD-D-SX 410)	833724.7	816288.4	83.6	--	--	85.0	181.1	-53.2	3.0	0.0	3.0	0.0	37.8
BC-1	Chiller (Ref - Daikin: EWAD-D-SX 490)	833646.5	816307.1	108.3	--	--	86.0	249.9	-56.0	3.0	0.0	3.0	0.0	36.0
BC-2	Chiller (Ref - Daikin: EWAD-D-SX 490)	833651.7	816304.6	108.3	--	--	86.0	244.2	-55.8	3.0	0.0	3.0	0.0	36.2
S50-1	Chiller (Ref - Daikin: EWAD-CFXR 740)	833628.2	816325.3	98.0	--	--	92.0	275.9	-56.8	3.0	0.0	3.0	0.0	41.2
S50-2	Chiller (Ref - Daikin: EWAD-CFXR 740)	833635.2	816325.0	98.0	--	--	92.0	270.1	-56.6	3.0	0.0	3.0	0.0	41.4
S50-3	Chiller (Ref - Daikin: EWAD-CFXR 740)	833632.9	816321.3	98.0	--	--	92.0	269.8	-56.6	3.0	0.0	3.0	0.0	41.4
HSBH-1	Cooling Tower (Ref - ryowo: FC/LN 200)	834145.9	816199.3	136.2	64.0	3.8	83.6	299.7	-57.5	3.0	-10.0	3.0	0.0	22.1
HSBH-2	Cooling Tower (Ref - ryowo: FC/LN 200)	834149.0	816195.3	136.2	64.0	3.8	83.6	302.3	-57.6	3.0	-10.0	3.0	0.0	22.0
HSBH-3	Cooling Tower (Ref - ryowo: FC/LN 200)	834138.9	816194.1	136.2	64.0	3.8	83.6	292.1	-57.3	3.0	-10.0	3.0	0.0	22.3
HSBH-4	Cooling Tower (Ref - ryowo: FC/LN 200)	834142.1	816190.0	136.2	64.0	3.8	83.6	294.9	-57.4	3.0	-10.0	3.0	0.0	22.3
HSBH-5	Chiller (Ref - Daikin: EWAD-CFXR 600)	834130.7	816195.9	136.2	--	--	92.0	284.2	-57.1	3.0	-10.0	3.0	0.0	30.9
HSBH-6	Chiller (Ref - Daikin: EWAD-CFXR C15)	834129.8	816191.8	136.2	--	--	95.0	282.9	-57.0	3.0	-10.0	3.0	0.0	34.0
HSBH-7	Chiller (Ref - Daikin: EWAD-CFXR C15)	834137.8	816179.8	136.2	--	--	95.0	289.8	-57.2	3.0	-10.0	3.0	0.0	33.8
NFT-1	Chiller (Ref - Daikin: EWAD-CFXR 740)	833967.2	816341.7	30.0	--	--	92.0	232.7	-55.3	3.0	0.0	3.0	0.0	42.7
NFT-2	Chiller (Ref - Daikin: EWAD-CFXR 740)	833959.3	816329.1	30.0	--	--	92.0	219.0	-54.8	3.0	0.0	3.0	0.0	43.2
NFT-3	Chiller (Ref - Daikin: EWAD-CFXR 740)	833940.5	816326.2	30.0	--	--	92.0	207.8	-54.4	3.0	0.0	3.0	0.0	43.6
NFT-4	Chiller (Ref - Daikin: EWAD-CFXR 740)	833930.9	816334.6	30.0	--	--	92.0	210.7	-54.5	3.0	0.0	3.0	0.0	43.5
NFT-5	Chiller (Ref - Daikin: EWAD-CFXR 740)	833940.2	816350.2	30.0	--	--	92.0	227.2	-55.1	3.0	0.0	3.0	0.0	42.9
NFT-6	Chiller (Ref - Daikin: EWAD-CFXR 740)	833945.5	816358.6	30.0	--	--	92.0	236.4	-55.5	3.0	0.0	3.0	0.0	42.5
IP-1	Chiller (Ref - Daikin: EWAD-CFXR C15)	833865.3	816416.7	34.0	--	--	95.0	269.2	-56.6	3.0	-10.0	3.0	0.0	34.4
IP-2	Chiller (Ref - Daikin: EWAD-CFXR C15)	833868.3	816414.0	34.0	--	--	95.0	266.9	-56.5	3.0	-10.0	3.0	0.0	34.5
IP-3	Chiller (Ref - Daikin: EWAD-CFXR C15)	833858.1	816402.3	34.0	--	--	95.0	255.2	-56.1	3.0	-10.0	3.0	0.0	34.9
IP-4	Chiller (Ref - Daikin: EWAD-CFXR C15)	833867.9	816406.9	34.0	--	--	95.0	260.1	-56.3	3.0	-10.0	3.0	0.0	34.7
IP-5	Chiller (Ref - Daikin: EWAD-CFXR C15)	833873.5	816404.4	34.0	--	--	95.0	258.2	-56.2	3.0	-10.0	3.0	0.0	34.8
IP-6	Chiller (Ref - Daikin: EWAD-C-XR C16)	833869.2	816389.1	123.3	--	--	95.0	228.7	-55.2	3.0	-10.0	3.0	0.0	35.8
IP-7	Chiller (Ref - Daikin: EWAD-C-XR C16)	833887.8	816392.4	123.3	--	--	95.0	234.4	-55.4	3.0	-10.0	3.0	0.0	35.6
IP-8	Cooling Tower (Ref - ryowo: FC/LN 400)	833881.7	816397.4	123.3	66.0	5.4	88.7	238.4	-55.5	3.0	-10.0	3.0	0.0	29.1
IP-9	Cooling Tower (Ref - ryowo: FC/LN 400)	833887.6	816401.9	123.3	66.0	5.4	88.7	243.7	-55.7	3.0	-10.0	3.0	0.0	28.9
GC-1	Chiller (Ref - Daikin: EWAD-C-XR C16)	833851.1	816339.2	111.8	--	--	95.0	178.0	-53.0	3.0	0.0	3.0	0.0	48.0
GC-2	Chiller (Ref - Daikin: EWAD-C-XR C16)	833855.6	816337.5	111.8	--	--	95.0	176.4	-52.9	3.0	0.0	3.0	0.0	48.1
GC-3	Chiller (Ref - Daikin: EWAD-CFXR 740)	833859.7	816335.7	111.8	--	--	92.0	174.8	-52.9	3.0	0.0	3.0	0.0	45.1
HB-1	Chiller (Ref - Daikin: EWAD-CFXR 740)	834015.0	816407.1	97.5	--	--	92.0	297.2	-57.5	3.0	0.0	3.0	0.0	40.5
PTG-1	Cooling Tower (Ref - ryowo: FC/LN 200)	834056.3	815996.1	87.1	64.0	3.8	83.6	266.7	-56.5	3.0	-10.0	3.0	0.0	23.1
PTG-2	Cooling Tower (Ref - ryowo: FC/LN 200)	834053.2	815993.6	87.1	64.0	3.8	83.6	265.8	-56.5	3.0	-10.0	3.0	0.0	23.2
										Noise standard:		**65**	**Overall**	**63**

Predicted Noise Level for Fixed Noise Impact Assessment - Base Case Scenario
Night Time
F05 NSR Coordinate: x = 833849.2 y = 816161.3 z = 117.6

Source ID	Description	Industrial Noise x	Industrial Noise y		SPL	Ref dist.	SWL	Slant distance from source	Distance Corr.	Façade Corr.	Barrier Corr.	Tonality Corr.	Impulsive Corr.	ANL
YSA-1	Chiller (Ref - Daikin: EWAD-D-SX 210)	833920.2	816100.0	96.8	--	--	84.0	96.1	-47.7	3.0	-10.0	3.0	0.0	32.3
YSA-2	Chiller (Ref - Daikin: EWAD-D-SX 210)	833923.0	816097.1	96.8	--	--	84.0	100.0	-48.0	3.0	-10.0	3.0	0.0	32.0
BOW-1	Chiller (Ref - Daikin: EWAD-D-SX 410)	833909.9	816077.7	91.4	--	--	85.0	106.6	-48.6	3.0	-10.0	3.0	0.0	32.4
BOW-2	Chiller (Ref - Daikin: EWAD-D-SX 410)	833912.2	816075.5	91.4	--	--	85.0	109.6	-48.8	3.0	-10.0	3.0	0.0	32.2
PTG-1	Cooling Tower (Ref - ryowo: FC/LN 200)	834056.3	815996.1	87.1	64.0	3.8	83.6	266.7	-56.5	3.0	-10.0	3.0	0.0	23.1
PTG-2	Cooling Tower (Ref - ryowo: FC/LN 200)	834053.2	815993.6	87.1	64.0	3.8	83.6	265.8	-56.5	3.0	-10.0	3.0	0.0	23.2
										Noise standard:		**55**	**Overall**	**39**

Appendix 3-2 Line of Sight for Selected NSRs



Appendix : 3.2a

Title: Angle of View for F01

Project: S16 Planning Application For Proposed Composite Redevelopment at 152-164 Wellington Street, Central

RAMBOLL

Drawn by:	DC
Checked by:	CC
Rev.:	1.0
Date:	Dec 2023

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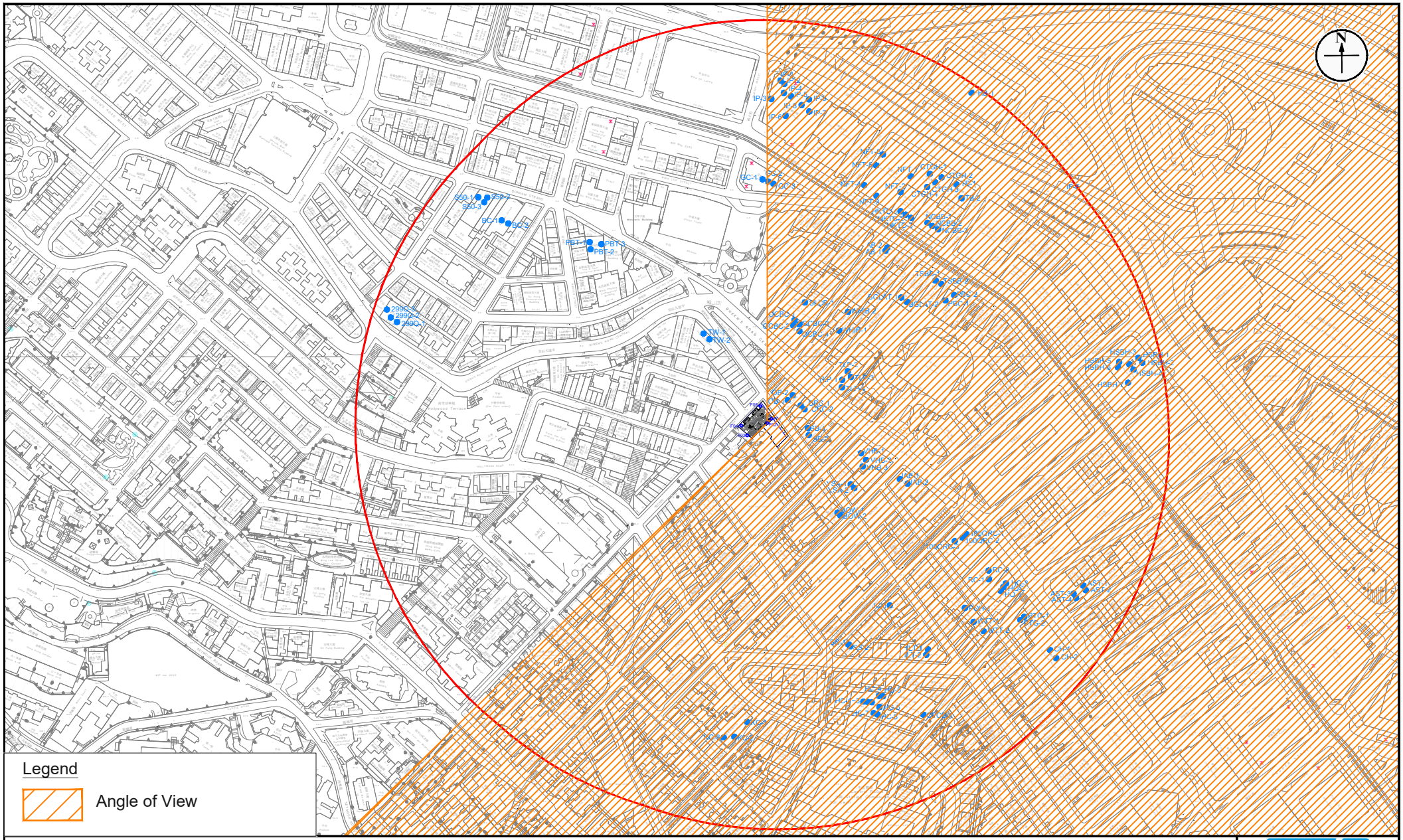

Appendix : 3.2b

Title: Angle of View for F02

Project: S16 Planning Application For Proposed Composite Redevelopment at 152-164 Wellington Street, Central

RAMBOLL

Drawn by:	DC
Checked by:	CC
Rev.:	1.0
Date:	Dec 2023

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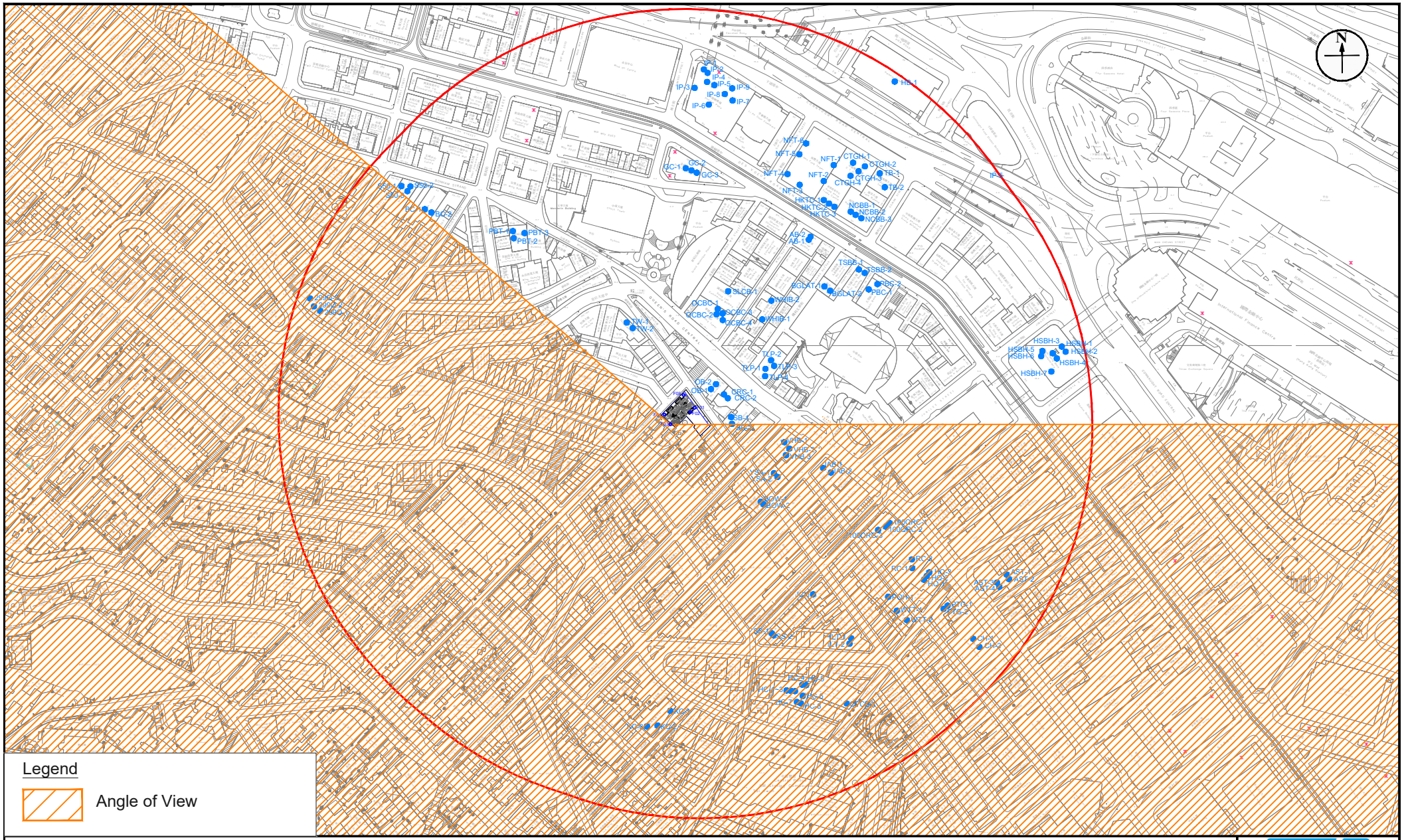

Appendix : 3.2c

Title: Angle of View for F03

Project: S16 Planning Application For Proposed Composite Redevelopment at 152-164 Wellington Street, Central

RAMBOLL

Drawn by:	DC
Checked by:	CC
Rev.:	1.0
Date:	Dec 2023

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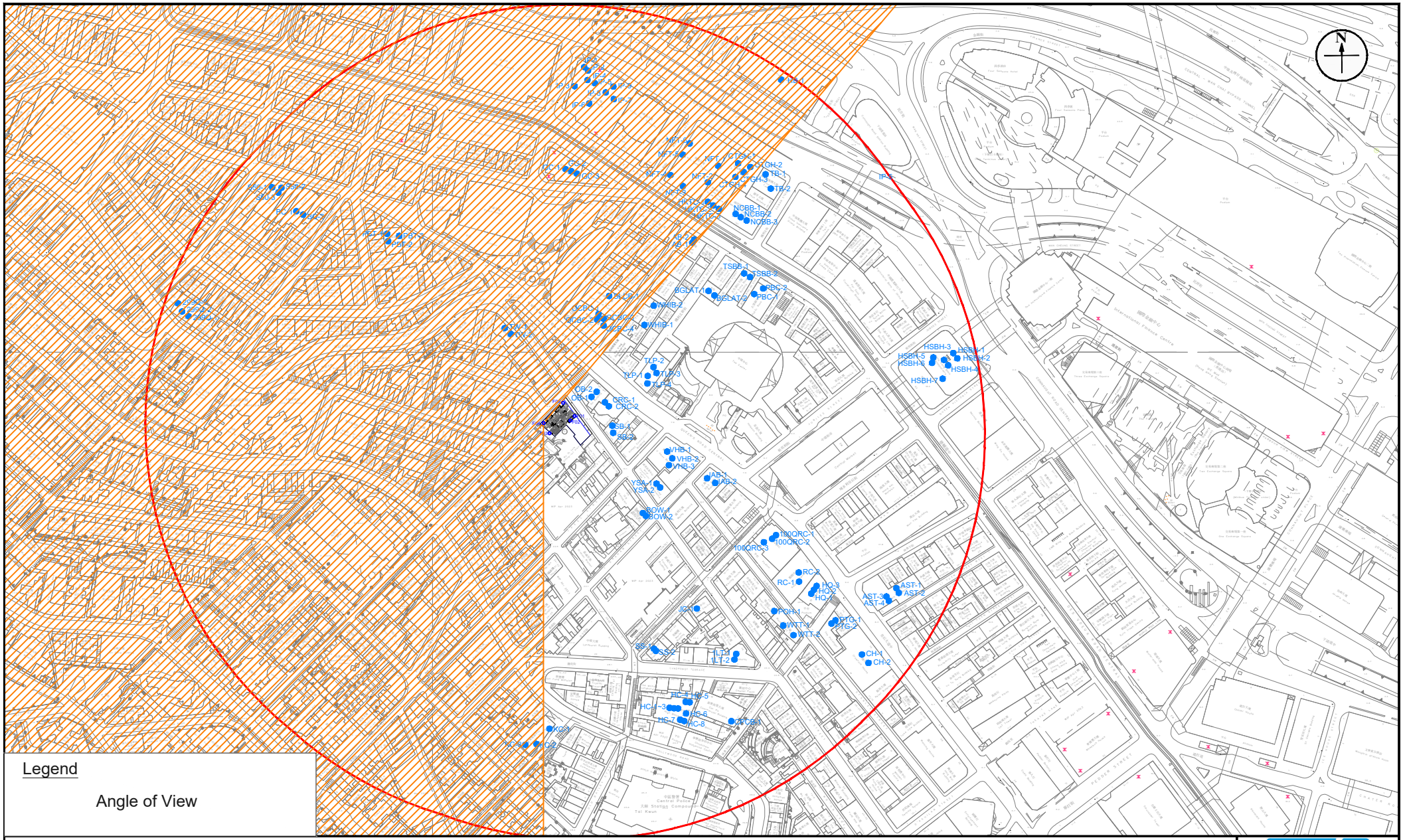

Appendix : 3.2d

Title: Angle of View for F04

Project: S16 Planning Application For Proposed Composite Redevelopment at 152-164 Wellington Street, Central

RAMBOLL

Drawn by:	DC
Checked by:	CC
Rev.:	1.0
Date:	Dec 2023

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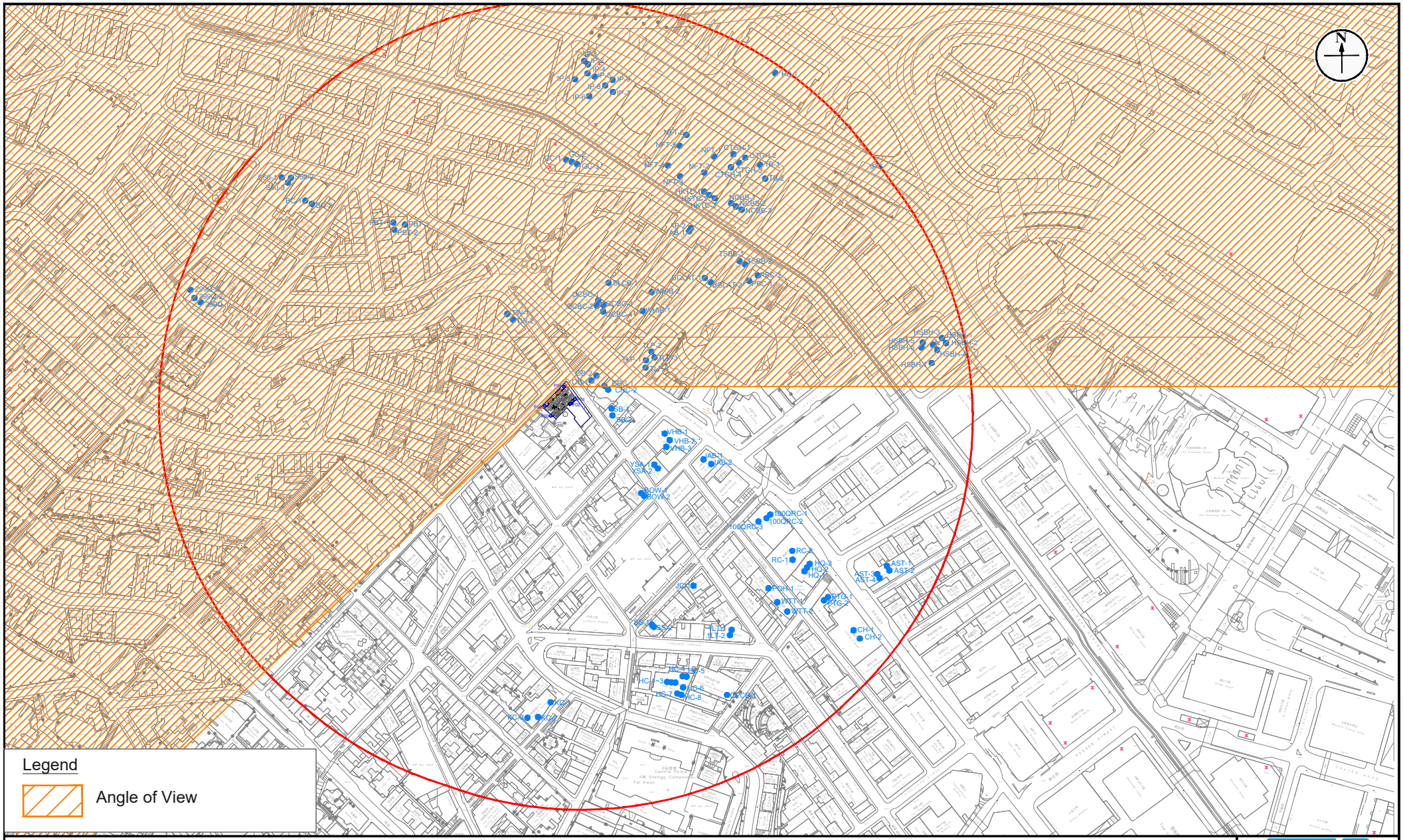

Appendix : 3.2e

Title: Angle of View for F05

Project: S16 Planning Application For Proposed Composite Redevelopment at 152-164 Wellington Street, Central

RAMBOLL

Drawn by:	DC
Checked by:	CC
Rev.:	1.0
Date:	Dec 2023

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Appendix 3-3 Reference Equipment Catalogue

Air cooled screw chiller

Standard efficiency

Extra low sound

EWAD-D-SR/SX

MicroTech III

Cooling only				EWAD-D-SX	210	230	250	270	290	300	310	370	410	450	490
Cooling capacity	Nom.			kW	202	230	252	270	285	298	308	369	412	449	490
Power input	Cooling	Nom.		kW	80.8	86.0	94.4	105	115	127	137	150	171	175	189
Capacity control	Method				Stepless										
	Minimum capacity			%	12.5										
EER					2.50	2.68	2.67	2.56	2.47	2.35	2.25	2.46	2.41	2.56	2.60
ESEER					3.29	3.52	3.41	3.44	3.34	3.29	3.15	3.14	3.39	3.50	3.47
Dimensions	Unit	Height		mm	2,420										
		Width		mm	2,234										
		Depth		mm	3,139	4,040								4,940	
Weight	Unit			kg	3,110	3,475		3,425	3,430			3,560	4,302	4,506	4,581
	Operation weight			kg	3,200	3,590						3,735	4,472	4,676	4,746
Water heat exchanger	Type				Single pass shell & tube										
	Water volume			l	90	115		165	160			175	170		165
	Water flow rate	Cooling	Nom.	l/s	9.7	11.0	12.1	12.9	13.7	14.3	14.7	17.7	19.7	21.5	23.5
	Water pressure drop	Cooling	Nom.	kPa	45	34	38		35	38	41	45	44	50	45
Air heat exchanger	Type				High efficiency fin and tube type with integral subcooler										
Compressor	Type				Single screw compressor								Asymmetric single screw compressor		
	Quantity				2										
Fan	Type				Direct propeller										
	Quantity				6	8								9	10
	Air flow rate	Nom.		l/s	12,876	17,892	17,169					26,496		28,982	33,120
	Speed			rpm	500										
Sound power level	Cooling	Nom.		dBA	84	85								86	
Sound pressure level	Cooling	Nom.		dBA	65									66	
Operation range	Water side	Cooling	Min.~Max.	°CDB	-15~15										
	Air side	Cooling	Min.~Max.	°CDB	-18~48										
Refrigerant	Type / GWP				R-134a / 1,430										
	Circuits	Quantity			2										
Refrigerant charge	Per circuit			kg/TCO$_2$Eq	21.0 / 30.0	24.0 / 34.3	26.0 / 37.2	32.0 / 45.8	33.0 / 47.2	34.0 / 48.6			35.0 / 50.1	38.0 / 54.3	40.0 / 57.2
Piping connections	Evaporator water inlet/outlet (OD)				4"							5"			
Unit	Maximum starting current			A	218	232		276	284	296		406	457	475	
	Nominal running current (RLA)	Cooling		A	135	143	157	173	188	204	220	231	272	280	298
	Maximum running current			A	164	183	199	210	221	235	250	291	316	338	360
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400										

Air cooled screw chiller with free cooling

High efficiency

Reduced sound

EWAD-CFXS/XL/XR

MicroTech III

Cooling only				EWAD-CFXR	600	740	820	870	980	C10	C11	C12	C13	C14	C15
Cooling capacity	Nom.			kW	602 (1)	739 (1)	821 (1)	866 (1)	981 (1)	1,034 (1)	1,229 (1)	1,302 (1)	1,374 (1)	1,424 (1)	1,476 (1)
Free cooling capacity	Nom.			kW	374 (2)	468 (2)	539 (2)	562 (2)	644 (2)	670 (2)	825 (2)	866 (2)	889 (2)	909 (2)	929 (2)
Mechanical capacity				kW	228 (2)	271 (2)	282 (2)	304 (2)	337 (2)	364 (2)	404 (2)	435 (2)	486 (2)	515 (2)	547 (2)
Air temperature for free cooling 100%				°C	-2.3	-1.9	-0.6	-1.5	-0.9	-1.7	0.7	-0.2	-1.1	-1.6	-2.3
Power input	Cooling	Nom.		kW	263 (1) / 46.6 (2)	278 (1) / 56.2 (2)	299 (1) / 58.5 (2)	334 (1) / 63.1 (2)	368 (1) / 68.5 (2)	412 (1) / 74.4 (2)	403 (1) / 80.0 (2)	450 (1) / 87.5 (2)	466 (1) / 93.4 (2)	511 (1) / 103 (2)	556 (1) / 109 (2)
Capacity control	Method				Stepless										
	Minimum capacity			%	12.5										
EER					2.29 (1) / 12.91 (2)	2.66 (1) / 13.17 (2)	2.75 (1) / 14.04 (2)	2.59 (1) / 13.71 (2)	2.67 (1) / 14.33 (2)	2.51 (1) / 13.89 (2)	3.05 (1) / 15.36 (2)	2.90 (1) / 14.87 (2)	2.95 (1) / 14.7(2)	2.79 (1) / 13.85 (2)	2.66 (1) / 13.56 (2)
ESEER					3.59	3.66	3.89	3.62	3.83	3.63	4.13	3.89	4.09	4.02	3.92
Dimensions	Unit	Height		mm	2,565										
		Width		mm	2,480										
		Depth		mm	6,300	7,200	8,100		9,000		10,800				
Weight	Unit			kg	8,050	8,620	9,190		10,450	10,710	12,190		12,830	12,910	12,960
	Operation weight			kg	8,795	9,390	9,995		11,459	11,719	13,566		14,806	14,886	14,936
Water heat exchanger	Type				Single pass shell & tube										
	Water volume			l	741	771	808		1,012		1,372		1,965		
	Water flow rate	Cooling	Nom.	l/s	26.2 (1) / 26.2 (2)	32.1 (1) / 32.1 (2)	35.7 (1) / 35.7 (2)	37.6 (1) / 37.6 (2)	42.6 (1) / 42.6 (2)	44.9 (1) / 44.9 (2)	53.4 (1) / 53.4 (2)	56.6 (1) / 56.6 (2)	59.7 (1) / 59.7 (2)	61.9 (1) / 61.9 (2)	64.1 (1) / 64.1 (2)
	Water pressure drop	Cooling	Nom.	kPa	76 (1) / 115 (2)	97 (1) / 159 (2)	84 (1) / 167 (2)	93 (1) / 184 (2)	102 (1) / 225 (2)	113 (1) / 248 (2)	92 (1) / 219 (2)	103 (1) / 243 (2)	128 (1) / 282 (2)	137 (1) / 301 (2)	146 (1) / 321 (2)
Air heat exchanger	Type				High efficiency fin and tube type with integral subcooler										
Compressor	Type				Asymm single screw										
	Quantity				2										
Fan	Type				Direct propeller										
	Quantity				10	12	14		16		20				
	Air flow rate	Nom.		l/s	38,935	46,722	54,508		62,295		73,011				
	Speed			rpm	715										
Sound power level	Cooling	Nom.		dBA	92				94		95				
Sound pressure level	Cooling	Nom.		dBA	71	72			73		72		73		
Operation range	Water side	Cooling	Min.~Max.	°CDB	-8~15										
	Air side	Cooling	Min.~Max.	°CDB	-20~45										
Refrigerant	Type / GWP				R-134a / 1,430										
	Circuits	Quantity			2										
Refrigerant charge	Per circuit			kg/TCO_2Eq	64.0 / 91.5	73.0 / 104.4	81.0 / 115.8		91.0 / 130.1		107.0 / 153.0		112.5 / 160.9	124.0 / 177.3	
Piping connections	Evaporator water inlet/outlet (OD)				DN150PN16(168.3mm)				DN200PN16(219.1mm)				DN250PN16(273mm)		
Unit	Maximum starting current			A	598	611	648		912	960	1,016			1,059	1,072
	Nominal running current (RLA)		Cooling	A	411	439	473	526	580	647	645	717	738	800	862
	Maximum running current			A	462	493	542	585	649	708	783	847		901	954
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400										

(1) Cooling: entering evaporator water temp. 16°C; leaving evaporator water temp. 10°C; ambient air temp. 35°C; full load operation. (2) Data is calculated at ambient air temperature 5°C, inlet water temperature 16°C.

Air cooled multi-scroll chiller

High efficiency

Reduced sound

EWAQ-F-XS/XL/XR

MicroTech III

Cooling only				EWAQ-F-XR	170	190	210	240	300	310	330	340	390	410	430	500	580	650
Cooling capacity	Nom.			kW	165	188	211	236	304		340		385	407	433	502	579	645
Power input	Cooling	Nom.		kW	53.0	61.2	68.7	77.3	101		117		128	136	146	170	200	219
Capacity control	Method				Step													
	Minimum capacity			%	25.0	21.0	25.0	22.0	23.0		25.0		21.0	20.0	25.0	17.0	14.0	17.0
EER					3.12	3.07	3.08	3.05	3.00		2.92		3.01	2.99	2.96		2.90	2.95
ESEER					4.53	4.64	4.51	4.60	4.53	4.68	4.44	4.63	4.68	4.64	4.54	4.82	4.69	4.65
Dimensions	Unit	Height		mm	2,271					2,221	2,271		2,221					
		Width		mm	1,224					2,258	1,224		2,258					
		Depth		mm	4,413		5,313		6,213	3,210	6,213	3,210	4,110			5,010		5,910
Weight	Unit			kg	2,004	2,303	2,580	2,722	2,900	3,000	3,045	3,145	3,168	3,280	3,298	4,120	4,228	4,655
	Operation weight			kg	2,017	2,317	2,594	2,736	2,914	3,014	3,085	3,185	3,208	3,326	3,344	4,166	4,288	4,716
Water heat exchanger	Type				Plate heat exchanger													
	Water volume			l	12			14			40			46			60	
	Water flow rate	Cooling	Nom.	l/s	7.9	9.0	10.1	11.3	14.5		16.3		18.4	19.5	20.7	24.0	27.7	30.9
	Water pressure drop	Cooling	Nom.	kPa	24	25	31	39	21				28	26	27	38	40	51
Air heat exchanger	Type				High efficiency fin and tube type with integral subcooler													
Compressor	Type				Scroll compressor													
	Quantity				4											6		
Fan	Type				Direct propeller													
	Quantity				4		5		6				8			10		12
	Air flow rate	Nom.		l/s	16,743	16,285	20,618	19,522	24,428		23,426		32,570	31,235		39,044		46,852
	Speed			rpm	705													
Sound power level	Cooling	Nom.		dBA	83	84	85	86	87				89		90	89	90	92
Sound pressure level	Cooling	Nom.		dBA	64	65	66	67		68	67	68	69	70		69	70	71
Operation range	Water side	Cooling	Min.~Max.	°CDB	-13~18													
	Air side	Cooling	Min.~Max.	°CDB	-18~52													
Refrigerant	Type / GWP				R-410A / 2,087.5													
	Circuits	Quantity			2													
Refrigerant charge	Per circuit			kg/TCO$_2$Eq	14.0 / 29.2	15.5 / 32.4	16.5 / 34.4	20.0 / 41.8	24.0 / 50.1	26.0 / 54.3			31.0 / 64.7			35.0 / 73.1	36.0 / 75.2	41.5 / 86.6
Piping connections	Evaporator water inlet/outlet (OD)				3"													
Unit	Maximum starting current			A	276	332	346	401	472		501		618	632	646	628	754	801
	Nominal running current (RLA)	Cooling		A	107	116	125	139	180		204		226	239	255	300	347	380
	Maximum running current			A	132	143	157	173	220		249		283	296	310	377	419	465
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400													

Air cooled screw chiller

Standard efficiency

Reduced sound

EWAD-C-SS/SL/SR

MicroTech III

Cooling only				EWAD-C-SR	620	720	790	880	920	C10	C11	C12	H14	C13	C14	C15	C16	C17	C18	C19
Cooling capacity	Nom.			kW	616	712	786	872	918	1,016	1,107	1,266	1,316	1,363	1,465	1,550	1,616	1,710	1,790	1,828
Power input	Cooling	Nom.		kW	226	276	317	334	373	398	422	461	499	522	582	609	654	706	722	762
Capacity control	Method				Stepless															
	Minimum capacity			%	12.5									7.0						
EER					2.74	2.59	2.48	2.61	2.46	2.55	2.63	2.75	2.63	2.61	2.52	2.54	2.47	2.42	2.48	2.40
ESEER					3.91	3.78	3.81	3.79	3.98	3.76	3.95	3.92	3.81	3.78	3.70	3.72	3.66	3.70	3.71	3.66
Dimensions	Unit	Height		mm	2,540															
		Width		mm	2,285															
		Depth		mm	6,285					7,185	8,085	8,985		10,285		11,185			12,085	
Weight	Unit			kg	5,920	6,030	6,050	6,570	6,850	7,300	7,570	8,190		10,750	10,770	11,150	11,210	11,680	12,040	
	Operation weight			kg	6,200	6,280	6,300	6,820	7,100	7,540	7,810	8,570		11,170		11,550	11,700	12,560	12,920	
Water heat exchanger	Type				Single pass shell & tube															
	Water flow rate	Cooling	Nom.	l/s	29.5	34.1	37.6	41.8	44.0	48.7	53.1	60.6	63.0	65.2	70.2	74.2	77.3	81.8	85.6	87.5
	Water pressure drop	Cooling	Nom.	kPa	43	50	48	58	63	60	69	50	54	45	57	63	46	33	36	37
	Water volume			l	266		251			243		386		421		408	474		850	
Air heat exchanger	Type				High efficiency fin and tube type															
Compressor	Type				Asymmetric single screw compressor															
	Quantity				2									3						
Fan	Type				Direct propeller															
	Quantity				10			12		14	16	18		20		22			24	
	Air flow rate	Nom.		l/s	41,007			49,208		57,410	65,611	73,812		82,014		90,215			98,417	
	Speed			rpm	700															
Sound power level	Cooling	Nom.		dBA	92			93		94				95				96		
Sound pressure level	Cooling	Nom.		dBA	71	72			73									74		
Operation range	Air side	Cooling	Min.~Max.	°CDB	-18~46															
	Water side	Cooling	Min.~Max.	°CDB	-8~15															
Refrigerant	Type / GWP				R-134a / 1,430															
	Circuits	Quantity			2									3						
Refrigerant charge	Per circuit			kg/TCO_2Eq	64.0 / 91.5			76.5 / 109.4	80.0 / 114.4	91.0 / 130.1	94.0 / 134.4	110.0 / 157.3		86.7 / 123.9				91.7 / 131.1	101.7 / 145.4	
Piping connections	Evaporator water inlet/outlet (OD)				168.3mm							219.1mm						273mm		
Unit	Starting current	Max		A	597	642		906	953	1,007	1,010	1,055	1,068	1,241	1,292	1,344	1,346	1,389	1,434	1,447
	Running current	Cooling	Nom.	A	371	450	518	548	609	654	694	755	811	857	954	1,002	1,075	1,158	1,179	1,238
		Max		A	462	531	575	639	698	767	837	895	949	1,052	1,116	1,186	1,250	1,303	1,362	1,415
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400															

Air cooled multi-scroll chiller

High efficiency

Reduced sound

EWAQ-F-XS/XL/XR

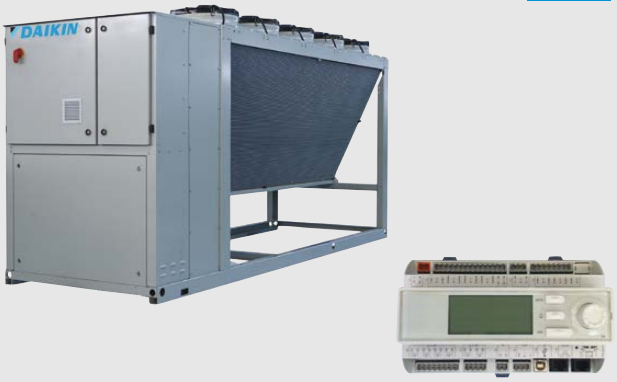
MicroTech III

Cooling only				EWAQ-F-XR	170	190	210	240	300	310	330	340	390	410	430	500	580	650
Cooling capacity	Nom.			kW	165	188	211	236	304		340		385	407	433	502	579	645
Power input	Cooling	Nom.		kW	53.0	61.2	68.7	77.3	101		117		128	136	146	170	200	219
Capacity control	Method				Step													
	Minimum capacity			%	25.0	21.0	25.0	22.0	23.0		25.0		21.0	20.0	25.0	17.0	14.0	17.0
EER					3.12	3.07	3.08	3.05	3.00		2.92		3.01	2.99	2.96		2.90	2.95
ESEER					4.53	4.64	4.51	4.60	4.53	4.68	4.44	4.63	4.68	4.64	4.54	4.82	4.69	4.65
Dimensions	Unit	Height		mm	2,271					2,221	2,271		2,221					
		Width		mm	1,224					2,258	1,224		2,258					
		Depth		mm	4,413		5,313		6,213	3,210	6,213	3,210	4,110			5,010		5,910
Weight	Unit			kg	2,004	2,303	2,580	2,722	2,900	3,000	3,045	3,145	3,168	3,280	3,298	4,120	4,228	4,655
	Operation weight			kg	2,017	2,317	2,594	2,736	2,914	3,014	3,085	3,185	3,208	3,326	3,344	4,166	4,288	4,716
Water heat exchanger	Type				Plate heat exchanger													
	Water volume			l	12			14			40			46			60	
	Water flow rate	Cooling	Nom.	l/s	7.9	9.0	10.1	11.3	14.5		16.3		18.4	19.5	20.7	24.0	27.7	30.9
	Water pressure drop	Cooling	Nom.	kPa	24	25	31	39	21				28	26	27	38	40	51
Air heat exchanger	Type				High efficiency fin and tube type with integral subcooler													
Compressor	Type				Scroll compressor													
	Quantity				4											6		
Fan	Type				Direct propeller													
	Quantity				4		5		6				8			10		12
	Air flow rate	Nom.		l/s	16,743	16,285	20,618	19,522	24,428		23,426		32,570	31,235		39,044		46,852
	Speed			rpm	705													
Sound power level	Cooling	Nom.		dBA	83	84	85	86	87				89		90	89	90	92
Sound pressure level	Cooling	Nom.		dBA	64	65	66	67		68	67	68	69	70		69	70	71
Operation range	Water side	Cooling	Min.~Max.	°CDB	-13~18													
	Air side	Cooling	Min.~Max.	°CDB	-18~52													
Refrigerant	Type / GWP				R-410A / 2,087.5													
	Circuits	Quantity			2													
Refrigerant charge	Per circuit			kg/TCO$_2$Eq	14.0 / 29.2	15.5 / 32.4	16.5 / 34.4	20.0 / 41.8	24.0 / 50.1	26.0 / 54.3			31.0 / 64.7			35.0 / 73.1	36.0 / 75.2	41.5 / 86.6
Piping connections	Evaporator water inlet/outlet (OD)				3"													
Unit	Maximum starting current			A	276	332	346	401	472		501		618	632	646	628	754	801
	Nominal running current (RLA)	Cooling		A	107	116	125	139	180		204		226	239	255	300	347	380
	Maximum running current			A	132	143	157	173	220		249		283	296	310	377	419	465
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400													

Air cooled multi-scroll chiller

High efficiency

Reduced sound



EWAQ-G-XS/XR

Cooling only				EWAQ-G-XR	080	090	105	130	115	150
Cooling capacity	Nom.			kW	76.0	86.0	100	125	110	141
Power input	Cooling	Nom.		kW	26.4	29.9	34.7	43.3	39.0	49.8
Capacity control	Method				Step					
	Minimum capacity			%	50	44	50		44	43
EER					2.88		2.89	2.88	2.83	
ESEER					4.18	4.29	4.27	4.21	4.31	4.33
Dimensions	Unit	Height		mm	1,800			1,820	1,800	1,820
		Width		mm	1,195					
		Depth		mm	2,680	3,200		3,800	3,200	3,800
Weight	Unit			kg	764	880	1,021	1,116	1,050	1,153
	Operation weight			kg	774	890	1,037	1,132	1,065	1,174
Water heat exchanger	Type				Brazed plate					
	Water flow rate	Cooling	Nom.	l/s	3.6	4.1	4.8	6.0	5.3	6.7
	Water pressure drop	Cooling	Nom.	kPa	23.3	29.6	18.4	23.0	17.8	18.4
	Water volume			l	5.58	4.86		5.60		8.10
Air heat exchanger	Type				Microchannel					
Compressor	Type				Scroll compressor					
	Quantity				2					
Fan	Type				Direct propeller					
	Quantity				6		8	10	8	10
	Air flow rate	Nom.		l/s	6,787	7,356	9,023	11,309	9,023	11,309
	Speed			rpm	1,108					
Sound power level	Cooling	Nom.		dBA	80	82	84		86	
Sound pressure level	Cooling	Nom.		dBA	62	65	66	67	68	67
Operation range	Air side	Cooling	Min.~Max.	°CDB	-10~45					
	Water side	Cooling	Min.~Max.	°CDB	-10~15					
Refrigerant	Type / GWP				R-410A / 2,087.5					
	Circuits	Quantity			1					
Refrigerant charge	Per circuit			kg/TCO_2Eq	8.0 / 16.7		10.0 / 20.9			12.0 / 25.1
Piping connections	Evaporator water inlet/outlet (OD)				2" 1/2					
Unit	Starting current	Max		A	209	260	267	324	314	362
	Running current	Cooling	Nom.	A	54	58	63	78	71	90
		Max		A	65	71	78	95	85	109
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400					

Air cooled screw chiller

High efficiency

Reduced sound

EWAD-C-XS/XL/XR

MicroTech III

Cooling only				EWAD-C-XR	740	810	870	970	C10	C11	C12	C13	H14	H15	C16	C17	C18	C19	C20	C21	C22
Cooling capacity	Nom.			kW	732	808	862	970	1,036	1,164	1,243	1,297	1,360	1,460	1,544	1,632	1,715	1,805	1,849	1,897	1,947
Power input	Cooling	Nom.		kW	238	257	285	313	348	369	409	420	460	498	518	548	574	604	629	662	696
Capacity control	Method				Stepless																
	Minimum capacity			%	12.5										7.0						
EER					3.07	3.15	3.03	3.10	2.98	3.16	3.04	3.09	2.96	2.93	2.98		2.99		2.94	2.87	2.80
ESEER					4.01	4.16	4.01	4.12	4.01	4.21	4.07	4.10		4.12	4.08	4.00	4.05	4.00	4.09	3.96	3.94
Dimensions	Unit	Height		mm	2,540																
		Width		mm	2,285																
		Depth		mm	6,285	7,185		8,085		9,885					12,085	12,985	13,885	14,785			
Weight	Unit			kg	6,280	6,630	6,650	7,480	7,760	8,510	8,530	9,190			12,010	12,350	12,700	13,040			
	Operation weight			kg	6,520	6,870	6,890	7,880	8,160	8,900	8,920	10,180			12,870	13,200	13,580	13,910			
Water heat exchanger	Type				Single pass shell & tube																
	Water flow rate	Cooling	Nom.	l/s	35.1	38.7	41.3	46.5	49.7	55.7	59.5	62.1	65.2	70.0	74.0	78.2	82.2	86.5	88.5	90.7	93.1
	Water pressure drop	Cooling	Nom.	kPa	77	54	61	58	65	43	49	64	73	79	59	65		71	37	39	41
	Water volume			l	251	243		403		386		979			850		871	850			
Air heat exchanger	Type				High efficiency fin and tube type																
Compressor	Type				Asymmetric single screw compressor																
	Quantity				2										3						
Fan	Type				Direct propeller																
	Quantity				12	14		16		20					24	26	28	30			
	Air flow rate	Nom.		l/s	49,208	57,410		65,611		82,014					98,417	106,618	114,819	123,021			
	Speed			rpm	700																
Sound power level	Cooling	Nom.		dBA	92			94			95				96					97	
Sound pressure level	Cooling	Nom.		dBA	72				73		72			73						74	
Operation range	Air side	Cooling	Min.~Max.	°CDB	-18~50																
	Water side	Cooling	Min.~Max.	°CDB	-8~15																
Refrigerant	Type / GWP				R-134a / 1,430																
	Circuits	Quantity			2										3						
Refrigerant charge	Per circuit			kg/TCO_2Eq	75.0 / 107.3	81.0 / 115.8		91.0 / v	100.0 / 143.0	115.0 / 164.5	117.5 / 168.0	125.0 / 178.8		124.0 / 177.3	103.3 / 147.8	109.0 / 155.9	113.3 / 162.1	120.0 / 171.6			125.0 / 178.8
Piping connections	Evaporator water inlet/outlet (OD)				168.3mm			219.1mm				273mm									
Unit	Starting current	Max		A	610	647		911	959	1,015			1,058	1,071	1,246	1,303	1,359		1,402	1,444	1,458
	Running current	Cooling	Nom.	A	392	426	470	518	572	613	679	699	753	807	854	903	951	1,000	1,040	1,087	1,136
		Max		A	493	542	585	649	708	783	847		901	954	1,063	1,132	1,201	1,271	1,324	1,377	1,431
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400																

SPECIFICATION

ITEM	MODER			ONE CELL							TWO CELLS					THREE CELLS			FOUR CELLS		
				FC-100	FC-125	FC-150	FC-175	FC-200	FC-225	FC-250	FC-300	FC-350	FC-400	FC-450	FC-500	FC-600	FC-675	FC-750	FC-800	FC-900	FC-1000
CAPACITY	27°C WB	circulating water flow rate	m^3/hr	78.0	97.5	117.0	136.5	156.0	175.5	195.0	234.0	273.0	312.0	351.0	390.0	468.0	526.5	585.0	624.0	702.0	780.0
		make-up water(approx.)	m^3/hr	1.1	1.4	1.7	2.0	2.2	2.5	2.8	3.3	3.9	4.5	5.0	5.6	6.7	7.5	8.4	8.9	10.0	11.2
	28°C WB	circulating water flow rate	m^3/hr	70	88	105	123	140	158	175	210	245	280	315	350	420	473	525	560	630	700
		make-up water(approx.)	m^3/hr	1.0	1.3	1.5	1.8	2.0	2.3	2.5	3.0	3.5	4.0	4.5	5.0	6.0	6.8	7.5	8.0	9.0	10.0
	Air flow rate(Approx.)		m^3/min	630	800	960	1135	1285	1460	1660	1920	2270	2570	2920	3320	3855	4380	4950	5140	5840	6640
	Hot water temperature		℃	37																	
	Cold water temperature		℃	32																	
OVERALL DIMENSION	Width		mm	1650		2000		2300	2600		4000		4600	5200		6900		7800	9200	10400	
	Length		mm	3650		4000		4300	4400		4000		4300	4400		4300		4400	4300	4400	
	Height		mm	3400																	
MATERIAL	Casing			FRP																	
	Steel structure			Steel (hot-dip galvanized)																	
	Filler			PVC																	
	Distribution tray			FRP																	
	Cold water basin			FRP																	
	Sump tank			FRP																	
	Fan			Blade : FRP , Hub : Aluminum Cast alloy																	
	Fan stack			FRP																	
FAN ASSEMBLY	Fan	TYPE		Axial-flow																	
		Diameter X Nos.	∅ mm	1400 x 1		1600 x 1		1800 X1	2000 x 1		1600 x 2	1800 X1	2000 x 2	1800 X3	2000 x 3	1800 X4	2000 x 4				
		Number of blades		4																	
		Fan speed(Approx.)	rpm	470	540	375	420	420	335	370	375	420	420	335	370	420	335	370	420	335	370
		Drive system		V-belt drive																	
	Motor	TYPE		Totally enclosed fan cooled outdoor 3 phase induction motor 4 poles																	
		Power source		380V / 3 / 50Hz																	
		Rated output	Kw	2.2 x 1		3.7 x 1		5.5 x 1		7.5 x 1	3.7 x 2		5.5 x 2		7.5 x 2	5.5 x 3		7.5 x 3	5.5 x 4		7.5 x 4
		Quantity		1							2					3			4		
DISTRIBUTION SYSTEM				Open gravity + redistribution layer																	
PIPING DIMENSION	Hot water inlet pipe		mm	∅100 x 2			∅125 x 2		∅100 x 4		∅125 x 4			∅125 x 6			∅125 x 8				
	Cold water outlet pipe		mm	∅125 x 1		∅150 x 1			∅200 x 1			∅250 x 1		∅200 x 2			∅250 x 2				
	Drain pipe		mm	∅50 x 1		∅ 50 x 1			∅ 50 x 1					∅50 x 2							
	Overflow pipe		mm	∅50 x 1		∅ 50 x 1			∅80 x 1					∅80 x 2							
	Float valve		mm	∅25 x 1				∅40 x 1			∅ 40 x 1			∅40 x 2			∅ 40 x 2				
	Manual make-up		mm	∅25 x 1				∅40 x 1			∅ 40 x 1			∅40 x 2			∅ 40 x 2				
MAKE-UP	Evaporation loss(Approx.)		%	Approx 0.83																	
	Drift loss		%	Less than 0.005																	
WEIGHT	Net weight		kg	970	985	1160	1205	1345	1390	1450	2270	2360	2640	2730	2850	3985	4120	4300	5280	5460	5700
	Operating weight		kg	2475	2490	2975	3020	3450	3750	3810	5455	5545	6400	7000	7120	9850	10755	10935	12800	14005	14245
NOISE LEVEL	Measuring point D=1.13$\sqrt{LxW}$		dBA	64	65	65	66	66	66	67	67	68	68	69	70	70	71	71	72	73	73

ITEM	MODER			ONE CELL					TWO CELLS						THREE CELLS						FOUR CELLS				FIVE CELLS	
				FC/LN-100	FC/LN-125	FC/LN-150	FC/LN-175	FC/LN-200	FC/LN-250	FC/LN-300	FC/LN-350	FC/LN-400	FC/LN-450	FC/LN-500	FC/LN-600	FC/LN-700	FC/LN-800	FC/LN-900	FC/LN-1000
CAPACITY	27°C WB	circulating water flow rate	m^3/hr	78.0	97.5	117.0	136.5	156.0	195.0	234.0	273.0	312.0	351.0	390.0	468.0	546.0	624.0	702.0	780.0
		make-up water(approx.)	m^3/hr	1.1	1.4	1.7	2.0	2.2	2.8	3.3	3.9	4.5	5.0	5.6	6.7	7.8	8.9	10.0	11.2
	28°C WB	circulating water flow rate	m^3/hr	70	88	105	123	140	175	210	245	280	315	350	420	490	560	630	700
		make-up water(approx.)	m^3/hr	1.0	1.3	1.5	1.8	2.0	2.5	3.0	3.5	4.0	4.5	5.0	6.0	7.0	8.0	9.0	10.0
	Air flow rate(Approx.)		m^3/min	530	680	830	980	1100	1360	1660	1960	2200	2490	2940	3300	3920	4400	4900	5500
	Hot water temperature		℃	37															
	Cold water temperature		℃	32															
OVERALL DIMENSION	Width		mm	2000		2300		2600	4000		4600	5200	6900		7800	9200	10400	11500	13000
	Length		mm	4000		4300		4400	4000		4300	4400	4300		4400	4300	4400	4300	4400
	Height		mm	3700															
MATERIAL	Casing			FRP															
	Steel structure			Steel (hot-dip galvanized)															
	Filler			PVC															
	Distribution tray			FRP															
	Cold water basin			FRP															
	Sump tank			FRP															
	Fan			Blade : FRP , Hub : Aluminum Cast alloy															
	Fan stack			FRP															
FAN ASSEMBLY	Fan	TYPE		Axial-flow															
		Diameter X Nos.	∅ mm	1600 x 1		1800 x 1		2000 x 1	1600 x 2		1800 x 2	2000 x 2	1800 x 3		2000 x 3	1800 x 4	2000 x 4	1800 x 5	2000 x 5
		Number of blades		4															
		Fan speed(Approx.)	rpm	270	340	300	360	310	340	300	360	310	300	360	310	360	310	360	310
		Drive system		V-belt drive															
	Motor	TYPE		Totally enclosed fan cooled outdoor 3 phase induction motor 4 poles															
		Power source		380V / 3 / 50Hz															
		Rated output	Kw	1.5 x 1		2.2 x 1		3.7 x 1	2.2 x 2		3.7 x 2		2.2 x 3		3.7 x 3	3.7 x 4		3.7 x 5	
		Quantity		1					2				3			4		5	
DISTRIBUTION SYSTEM				Open gravity + redistribution layer															
PIPING DIMENSION	Hot water inlet pipe		mm	∅100 x 2				∅125 x 2	∅100 x 4		∅125 x 4		∅100 x 6		∅125 x 6	∅100 x 8	∅125 x 8		∅125 x 10
	Cold water outlet pipe		mm	∅125 x 1		∅150 x 1			∅200 x 1		∅250 x 1		∅200 x 2			∅250 x 2		∅200 x 3	
	Drain pipe		mm	∅50 x 1		∅ 50 x 1			∅50 x 1				∅50 x 2						
	Overflow pipe		mm	∅50 x 1		∅ 50 x 1			∅80 x 1				∅80 x 2						
	Float valve		mm	∅25 x 1					∅40 x 1				∅40 x 2					∅ 40 x 2	
	Manual make-up		mm	∅25 x 1					∅40 x 1				∅40 x 2					∅ 40 x 2	
MAKE-UP	Evaporation loss(Approx.)		%	Approx 0.83															
	Drift loss		%	Less than 0.005															
WEIGHT	Net weight		kg	1080	1120	1240	1260	1530	2230	2450	2470	2880	3700	3800	4550	5000	6050	6100	7550
	Operating weight		kg	2250	2340	2640	2730	3170	4340	4920	5090	5910	7560	7820	9080	10180	11820	12910	14990
NOISE LEVEL	Measuring point D=1.13$\sqrt{LxW}$		dBA	60	61	62	63	64	65	65	66	66	67	68	68	69	70	71	71

Note: Nominal cooling capacity is based on 131 / min/ RT(1RT=3,900 Kcal /hr) at 37 ℃ hot water in, 32℃ cold water out 27℃ ambient wet bulb. The SPLs are measured 1.13$\sqrt{WxL}$ horizontally away from air intake side of the tower at 1.5m above the foundation level. Pump head of the cooling tower is approximate equal to the height of tower(H). Dimension shown in this catalogue is metric sized and specifications are subject to change without further notice for technical improvement of our products.

GUARANTEE:

All components are guaranteed against defective material for a period of one(1) year. When return to RYOWO with transportation prepaid, all parts found by factory inspection to be defective will be repaired or replaced without charge, FOB Hong Kong or FOB ShenZhen, PRC. No liability will be assumed for loss or damage resulting form misuse of our products.

Appendix 3-4 Letters of Request Information of the Fixed Noise Source to the Operator/Owner

Ref.: CHPWELTNEI00_0_0002L.23

By Post

11 October 2023

Management Office
Hang Sang Bank Headquarters
83 Des Voeux Road Central, Central
Hong Kong Island, Hong Kong

Dear Sir/Madam,

S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central– Request Information of the Chillers, Cooling Towers and VRV at Hang Sang Bank Headquarters

We are commissioned by the applicant of the captioned lot to assess environmental noise impact on the proposed composite redevelopment at the captioned site. The location plan of the Proposed Development with 300m noise impact study area is attached for your reference.

We would like to have some enquires regarding the fixed noise sources (e.g. chillers, water-cooling towers or varied refrigerant volume system (VRV)) of Hang Sang Bank Headquarters. We would be grateful if you could provide following information for the purpose of Environmental Assessment:

Chillers / Cooling Towers / VRV

1. The locations and numbers of chillers / cooling towers / VRV, their sound data (noise level), model and cooling capacity, if available
2. Operation hours of these equipment
3. Number of operating equipment between 23:00 and 07:00 hours
4. Noise Mitigation Measures for the chillers / cooling towers / VRV (e.g. noise enclosure, silencer, etc.)

In addition, it would be grateful if we could have your permission in carrying out on-site noise measurement at the rooftop of the building. Due to the tight programme of this project, your prompt response on or before 18 October 2023 would be very much appreciated.

Should you have any questions on this submission, please do not hesitate to contact the undersigned at 3465 2828 (email: bfan@ramboll.com) or our Coco Ma at 3465 2807 (email: cocoma@ramboll.com).

Yours faithfully,
For and on behalf of
Ramboll Hong Kong Limited

Billy Fan
Principal Consultant

Enclosure: Location Plan of the Proposed Development

Q:\Projects\CHPWELTNEI00\02 Project Management\02 Corr\CHPWELTNEI00_0_0002L.23.docx

Ref.: CHPWELTNEI00_0_0003L.23

By Post

11 October 2023

Management Office
Dah Sing Life Building
99 Des Voeux Road Central, Central
Hong Kong Island, Hong Kong

Dear Sir/Madam,

S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central– Request Information of the Chillers, Cooling Towers and VRV at Dah Sing Life Building

We are commissioned by the applicant of the captioned lot to assess environmental noise impact on the proposed composite redevelopment at the captioned site. The location plan of the Proposed Development with 300m noise impact study area is attached for your reference.

We would like to have some enquires regarding the fixed noise sources (e.g. chillers, water-cooling towers or varied refrigerant volume system (VRV)) of Dah Sing Life Building. We would be grateful if you could provide following information for the purpose of Environmental Assessment:

Chillers / Cooling Towers / VRV

1. The locations and numbers of chillers / cooling towers / VRV, their sound data (noise level), model and cooling capacity, if available
2. Operation hours of these equipment
3. Number of operating equipment between 23:00 and 07:00 hours
4. Noise Mitigation Measures for the chillers / cooling towers / VRV (e.g. noise enclosure, silencer, etc.)

In addition, it would be grateful if we could have your permission in carrying out on-site noise measurement at the rooftop of the building. Due to the tight programme of this project, your prompt response on or before 18 October 2023 would be very much appreciated.

Should you have any questions on this submission, please do not hesitate to contact the undersigned at 3465 2828 (email: bfan@ramboll.com) or our Coco Ma at 3465 2807 (email: cocoma@ramboll.com).

Yours faithfully,
For and on behalf of
Ramboll Hong Kong Limited

Billy Fan
Principal Consultant

Enclosure: Location Plan of the Proposed Development

Ref.: CHPWELTNEI00_0_0004L.23

By Post

11 October 2023

Management Office
Far East Consortium Building
113-125A Des Voeux Road Central, Central
Hong Kong Island, Hong Kong

Dear Sir/Madam,

S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central– Request Information of the Chillers, Cooling Towers and VRV at Far East Consortium Building

We are commissioned by the applicant of the captioned lot to assess environmental noise impact on the proposed composite redevelopment at the captioned site. The location plan of the Proposed Development with 300m noise impact study area is attached for your reference.

We would like to have some enquires regarding the fixed noise sources (e.g. chillers, water-cooling towers or varied refrigerant volume system (VRV)) of Far East Consortium Building. We would be grateful if you could provide following information for the purpose of Environmental Assessment:

Chillers / Cooling Towers / VRV

1. The locations and numbers of chillers / cooling towers / VRV, their sound data (noise level), model and cooling capacity, if available
2. Operation hours of these equipment
3. Number of operating equipment between 23:00 and 07:00 hours
4. Noise Mitigation Measures for the chillers / cooling towers / VRV (e.g. noise enclosure, silencer, etc.)

In addition, it would be grateful if we could have your permission in carrying out on-site noise measurement at the rooftop of the building. Due to the tight programme of this project, your prompt response on or before 18 October 2023 would be very much appreciated.

Should you have any questions on this submission, please do not hesitate to contact the undersigned at 3465 2828 (email: bfan@ramboll.com) or our Coco Ma at 3465 2807 (email: cocoma@ramboll.com).

Yours faithfully,
For and on behalf of
Ramboll Hong Kong Limited

Billy Fan
Principal Consultant

Enclosure: Location Plan of the Proposed Development

Ref.: CHPWELTNEI00_0_0005L.23

By Post

11 October 2023

Management Office
Unicorn Trade Centre
127-131 Des Voeux Road Central, Central
Hong Kong Island, Hong Kong

Dear Sir/Madam,

S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central– Request Information of the Chillers, Cooling Towers and VRV at Unicorn Trade Centre

We are commissioned by the applicant of the captioned lot to assess environmental noise impact on the proposed composite redevelopment at the captioned site. The location plan of the Proposed Development with 300m noise impact study area is attached for your reference.

We would like to have some enquires regarding the fixed noise sources (e.g. chillers, water-cooling towers or varied refrigerant volume system (VRV)) of Unicorn Trade Centre. We would be grateful if you could provide following information for the purpose of Environmental Assessment:

Chillers / Cooling Towers / VRV

1. The locations and numbers of chillers / cooling towers / VRV, their sound data (noise level), model and cooling capacity, if available
2. Operation hours of these equipment
3. Number of operating equipment between 23:00 and 07:00 hours
4. Noise Mitigation Measures for the chillers / cooling towers / VRV (e.g. noise enclosure, silencer, etc.)

In addition, it would be grateful if we could have your permission in carrying out on-site noise measurement at the rooftop of the building. Due to the tight programme of this project, your prompt response on or before 18 October 2023 would be very much appreciated.

Should you have any questions on this submission, please do not hesitate to contact the undersigned at 3465 2828 (email: bfan@ramboll.com) or our Coco Ma at 3465 2807 (email: cocoma@ramboll.com).

Yours faithfully,
For and on behalf of
Ramboll Hong Kong Limited

Billy Fan
Principal Consultant

Enclosure: Location Plan of the Proposed Development

Ref.: CHPWELTNEI00_0_0006L.23

By Post

11 October 2023

Management Office
CMA Building
64-66 Connaught Road Central, Central
Hong Kong Island, Hong Kong

Dear Sir/Madam,

S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central– Request Information of the Chillers, Cooling Towers and VRV at CMA Building

We are commissioned by the applicant of the captioned lot to assess environmental noise impact on the proposed composite redevelopment at the captioned site. The location plan of the Proposed Development with 300m noise impact study area is attached for your reference.

We would like to have some enquires regarding the fixed noise sources (e.g. chillers, water-cooling towers or varied refrigerant volume system (VRV)) of CMA Building. We would be grateful if you could provide following information for the purpose of Environmental Assessment:

Chillers / Cooling Towers / VRV

1. The locations and numbers of chillers / cooling towers / VRV, their sound data (noise level), model and cooling capacity, if available
2. Operation hours of these equipment
3. Number of operating equipment between 23:00 and 07:00 hours
4. Noise Mitigation Measures for the chillers / cooling towers / VRV (e.g. noise enclosure, silencer, etc.)

In addition, it would be grateful if we could have your permission in carrying out on-site noise measurement at the rooftop of the building. Due to the tight programme of this project, your prompt response on or before 18 October 2023 would be very much appreciated.

Should you have any questions on this submission, please do not hesitate to contact the undersigned at 3465 2828 (email: bfan@ramboll.com) or our Coco Ma at 3465 2807 (email: cocoma@ramboll.com).

Yours faithfully,
For and on behalf of
Ramboll Hong Kong Limited

Billy Fan
Principal Consultant

Enclosure: Location Plan of the Proposed Development

Ref.: CHPWELTNEI00_0_0007L.23

By Post

11 October 2023

Management Office
Two Chinachem Plaza
68 Connaught Road Central, Central
Hong Kong Island, Hong Kong

Dear Sir/Madam,

S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central– Request Information of the Chillers, Cooling Towers and VRV at Two Chinachem Plaza

We are commissioned by the applicant of the captioned lot to assess environmental noise impact on the proposed composite redevelopment at the captioned site. The location plan of the Proposed Development with 300m noise impact study area is attached for your reference.

We would like to have some enquires regarding the fixed noise sources (e.g. chillers, water-cooling towers or varied refrigerant volume system (VRV)) of Two Chinachem Plaza. We would be grateful if you could provide following information for the purpose of Environmental Assessment:

Chillers / Cooling Towers / VRV

1. The locations and numbers of chillers / cooling towers / VRV, their sound data (noise level), model and cooling capacity, if available
2. Operation hours of these equipment
3. Number of operating equipment between 23:00 and 07:00 hours
4. Noise Mitigation Measures for the chillers / cooling towers / VRV (e.g. noise enclosure, silencer, etc.)

In addition, it would be grateful if we could have your permission in carrying out on-site noise measurement at the rooftop of the building. Due to the tight programme of this project, your prompt response on or before 18 October 2023 would be very much appreciated.

Should you have any questions on this submission, please do not hesitate to contact the undersigned at 3465 2828 (email: bfan@ramboll.com) or our Coco Ma at 3465 2807 (email: cocoma@ramboll.com).

Yours faithfully,
For and on behalf of
Ramboll Hong Kong Limited

Billy Fan
Principal Consultant

Enclosure: Location Plan of the Proposed Development

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Ref.: CHPWELTNEI00_0_0008L.23

By Post

11 October 2023

Management Office
China Insurance Group Building
141 Des Voeux Road Central
Hong Kong Island, Hong Kong

Dear Sir/Madam,

S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central– Request Information of the Chillers, Cooling Towers and VRV at China Insurance Group Building

We are commissioned by the applicant of the captioned lot to assess environmental noise impact on the proposed composite redevelopment at the captioned site. The location plan of the Proposed Development with 300m noise impact study area is attached for your reference.

We would like to have some enquires regarding the fixed noise sources (e.g. chillers, water-cooling towers or varied refrigerant volume system (VRV)) of China Insurance Group Building. We would be grateful if you could provide following information for the purpose of Environmental Assessment:

Chillers / Cooling Towers / VRV

1. The locations and numbers of chillers / cooling towers / VRV, their sound data (noise level), model and cooling capacity, if available
2. Operation hours of these equipment
3. Number of operating equipment between 23:00 and 07:00 hours
4. Noise Mitigation Measures for the chillers / cooling towers / VRV (e.g. noise enclosure, silencer, etc.)

In addition, it would be grateful if we could have your permission in carrying out on-site noise measurement at the rooftop of the building. Due to the tight programme of this project, your prompt response on or before 18 October 2023 would be very much appreciated.

Should you have any questions on this submission, please do not hesitate to contact the undersigned at 3465 2828 (email: bfan@ramboll.com) or our Coco Ma at 3465 2807 (email: cocoma@ramboll.com).

Yours faithfully,
For and on behalf of
Ramboll Hong Kong Limited

Billy Fan
Principal Consultant

Enclosure: Location Plan of the Proposed Development

Ref.: CHPWELTNEI00_0_0009L.23

By Post

11 October 2023

Management Office
Beautiful Group Tower
74-77 Connaught Road Central, Central
Hong Kong Island, Hong Kong

Dear Sir/Madam,

S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central– Request Information of the Chillers, Cooling Towers and VRV at Beautiful Group Tower

We are commissioned by the applicant of the captioned lot to assess environmental noise impact on the proposed composite redevelopment at the captioned site. The location plan of the Proposed Development with 300m noise impact study area is attached for your reference.

We would like to have some enquires regarding the fixed noise sources (e.g. chillers, water-cooling towers or varied refrigerant volume system (VRV)) of Beautiful Group Tower. We would be grateful if you could provide following information for the purpose of Environmental Assessment:

Chillers / Cooling Towers / VRV

1. The locations and numbers of chillers / cooling towers / VRV, their sound data (noise level), model and cooling capacity, if available
2. Operation hours of these equipment
3. Number of operating equipment between 23:00 and 07:00 hours
4. Noise Mitigation Measures for the chillers / cooling towers / VRV (e.g. noise enclosure, silencer, etc.)

In addition, it would be grateful if we could have your permission in carrying out on-site noise measurement at the rooftop of the building. Due to the tight programme of this project, your prompt response on or before 18 October 2023 would be very much appreciated.

Should you have any questions on this submission, please do not hesitate to contact the undersigned at 3465 2828 (email: bfan@ramboll.com) or our Coco Ma at 3465 2807 (email: cocoma@ramboll.com).

Yours faithfully,
For and on behalf of
Ramboll Hong Kong Limited

Billy Fan
Principal Consultant

Enclosure: Location Plan of the Proposed Development

Ref.: CHPWELTNEI00_0_0010L.23

By Post

11 October 2023

Management Office
Nanyang Commercial Bank Building
151 Des Voeux Road Central, Central
Hong Kong Island, Hong Kong

Dear Sir/Madam,

S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central– Request Information of the Chillers, Cooling Towers and VRV at Nanyang Commercial Bank Building

We are commissioned by the applicant of the captioned lot to assess environmental noise impact on the proposed composite redevelopment at the captioned site. The location plan of the Proposed Development with 300m noise impact study area is attached for your reference.

We would like to have some enquires regarding the fixed noise sources (e.g. chillers, water-cooling towers or varied refrigerant volume system (VRV)) of Nanyang Commercial Bank Building. We would be grateful if you could provide following information for the purpose of Environmental Assessment:

Chillers / Cooling Towers / VRV

1. The locations and numbers of chillers / cooling towers / VRV, their sound data (noise level), model and cooling capacity, if available
2. Operation hours of these equipment
3. Number of operating equipment between 23:00 and 07:00 hours
4. Noise Mitigation Measures for the chillers / cooling towers / VRV (e.g. noise enclosure, silencer, etc.)

In addition, it would be grateful if we could have your permission in carrying out on-site noise measurement at the rooftop of the building. Due to the tight programme of this project, your prompt response on or before 18 October 2023 would be very much appreciated.

Should you have any questions on this submission, please do not hesitate to contact the undersigned at 3465 2828 (email: bfan@ramboll.com) or our Coco Ma at 3465 2807 (email: cocoma@ramboll.com).

Yours faithfully,
For and on behalf of
Ramboll Hong Kong Limited

Billy Fan
Principal Consultant

Enclosure: Location Plan of the Proposed Development

Ref.: CHPWELTNEI00_0_0011L.23

By Post

11 October 2023

Management Office
CTG House
78-83 Connaught Road Central, Central
Hong Kong Island, Hong Kong

Dear Sir/Madam,

S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central– Request Information of the Chillers, Cooling Towers and VRV at CTG House

We are commissioned by the applicant of the captioned lot to assess environmental noise impact on the proposed composite redevelopment at the captioned site. The location plan of the Proposed Development with 300m noise impact study area is attached for your reference.

We would like to have some enquires regarding the fixed noise sources (e.g. chillers, water-cooling towers or varied refrigerant volume system (VRV)) of CTG House. We would be grateful if you could provide following information for the purpose of Environmental Assessment:

Chillers / Cooling Towers / VRV

1. The locations and numbers of chillers / cooling towers / VRV, their sound data (noise level), model and cooling capacity, if available
2. Operation hours of these equipment
3. Number of operating equipment between 23:00 and 07:00 hours
4. Noise Mitigation Measures for the chillers / cooling towers / VRV (e.g. noise enclosure, silencer, etc.)

In addition, it would be grateful if we could have your permission in carrying out on-site noise measurement at the rooftop of the building. Due to the tight programme of this project, your prompt response on or before 18 October 2023 would be very much appreciated.

Should you have any questions on this submission, please do not hesitate to contact the undersigned at 3465 2828 (email: bfan@ramboll.com) or our Coco Ma at 3465 2807 (email: cocoma@ramboll.com).

Yours faithfully,
For and on behalf of
Ramboll Hong Kong Limited

Billy Fan
Principal Consultant

Enclosure: Location Plan of the Proposed Development

Ref.: CHPWELTNEI00_0_0012L.23

By Post

11 October 2023

Management Office
Hong Kong Trade Centre
161-167 Des Voeux Road Central, Central
Hong Kong Island, Hong Kong

Dear Sir/Madam,

S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central– Request Information of the Chillers, Cooling Towers and VRV at Hong Kong Trade Centre

We are commissioned by the applicant of the captioned lot to assess environmental noise impact on the proposed composite redevelopment at the captioned site. The location plan of the Proposed Development with 300m noise impact study area is attached for your reference.

We would like to have some enquires regarding the fixed noise sources (e.g. chillers, water-cooling towers or varied refrigerant volume system (VRV)) of Hong Kong Trade Centre. We would be grateful if you could provide following information for the purpose of Environmental Assessment:

Chillers / Cooling Towers / VRV

1. The locations and numbers of chillers / cooling towers / VRV, their sound data (noise level), model and cooling capacity, if available
2. Operation hours of these equipment
3. Number of operating equipment between 23:00 and 07:00 hours
4. Noise Mitigation Measures for the chillers / cooling towers / VRV (e.g. noise enclosure, silencer, etc.)

In addition, it would be grateful if we could have your permission in carrying out on-site noise measurement at the rooftop of the building. Due to the tight programme of this project, your prompt response on or before 18 October 2023 would be very much appreciated.

Should you have any questions on this submission, please do not hesitate to contact the undersigned at 3465 2828 (email: bfan@ramboll.com) or our Coco Ma at 3465 2807 (email: cocoma@ramboll.com).

Yours faithfully,
For and on behalf of
Ramboll Hong Kong Limited

Billy Fan
Principal Consultant

Enclosure: Location Plan of the Proposed Development

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Ref.: CHPWELTNEI00_0_0013L.23

By Post

11 October 2023

Management Office
Nan Fung Tower
88 Connaught Road Central, Central
Hong Kong Island, Hong Kong

Dear Sir/Madam,

S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central– Request Information of the Chillers, Cooling Towers and VRV at Nan Fung Tower

We are commissioned by the applicant of the captioned lot to assess environmental noise impact on the proposed composite redevelopment at the captioned site. The location plan of the Proposed Development with 300m noise impact study area is attached for your reference.

We would like to have some enquires regarding the fixed noise sources (e.g. chillers, water-cooling towers or varied refrigerant volume system (VRV)) of Nan Fung Tower. We would be grateful if you could provide following information for the purpose of Environmental Assessment:

Chillers / Cooling Towers / VRV

1. The locations and numbers of chillers / cooling towers / VRV, their sound data (noise level), model and cooling capacity, if available
2. Operation hours of these equipment
3. Number of operating equipment between 23:00 and 07:00 hours
4. Noise Mitigation Measures for the chillers / cooling towers / VRV (e.g. noise enclosure, silencer, etc.)

In addition, it would be grateful if we could have your permission in carrying out on-site noise measurement at the rooftop of the building. Due to the tight programme of this project, your prompt response on or before 18 October 2023 would be very much appreciated.

Should you have any questions on this submission, please do not hesitate to contact the undersigned at 3465 2828 (email: bfan@ramboll.com) or our Coco Ma at 3465 2807 (email: cocoma@ramboll.com).

Yours faithfully,
For and on behalf of
Ramboll Hong Kong Limited

Billy Fan
Principal Consultant

Enclosure: Location Plan of the Proposed Development

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Ref.: CHPWELTNEI00_0_0014L.23

By Post

11 October 2023

Management Office
Sun House
181 Des Voeux Road Central, Sheung Wan
Hong Kong Island, Hong Kong

Dear Sir/Madam,

S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central– Request Information of the Chillers, Cooling Towers and VRV at Sun House

We are commissioned by the applicant of the captioned lot to assess environmental noise impact on the proposed composite redevelopment at the captioned site. The location plan of the Proposed Development with 300m noise impact study area is attached for your reference.

We would like to have some enquires regarding the fixed noise sources (e.g. chillers, water-cooling towers or varied refrigerant volume system (VRV)) of Sun House. We would be grateful if you could provide following information for the purpose of Environmental Assessment:

Chillers / Cooling Towers / VRV

1. The locations and numbers of chillers / cooling towers / VRV, their sound data (noise level), model and cooling capacity, if available
2. Operation hours of these equipment
3. Number of operating equipment between 23:00 and 07:00 hours
4. Noise Mitigation Measures for the chillers / cooling towers / VRV (e.g. noise enclosure, silencer, etc.)

In addition, it would be grateful if we could have your permission in carrying out on-site noise measurement at the rooftop of the building. Due to the tight programme of this project, your prompt response on or before 18 October 2023 would be very much appreciated.

Should you have any questions on this submission, please do not hesitate to contact the undersigned at 3465 2828 (email: bfan@ramboll.com) or our Coco Ma at 3465 2807 (email: cocoma@ramboll.com).

Yours faithfully,
For and on behalf of
Ramboll Hong Kong Limited

Billy Fan
Principal Consultant

Enclosure: Location Plan of the Proposed Development

Ref.: CHPWELTNEI00_0_0015L.23

By Post

11 October 2023

Management Office
Li Po Chun Chambers
189-195 Des Voeux Road Central, Sheung Wan
Hong Kong Island, Hong Kong

Dear Sir/Madam,

S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central– Request Information of the Chillers, Cooling Towers and VRV at Li Po Chun Chambers

We are commissioned by the applicant of the captioned lot to assess environmental noise impact on the proposed composite redevelopment at the captioned site. The location plan of the Proposed Development with 300m noise impact study area is attached for your reference.

We would like to have some enquires regarding the fixed noise sources (e.g. chillers, water-cooling towers or varied refrigerant volume system (VRV)) of Li Po Chun Chambers. We would be grateful if you could provide following information for the purpose of Environmental Assessment:

Chillers / Cooling Towers / VRV

1. The locations and numbers of chillers / cooling towers / VRV, their sound data (noise level), model and cooling capacity, if available
2. Operation hours of these equipment
3. Number of operating equipment between 23:00 and 07:00 hours
4. Noise Mitigation Measures for the chillers / cooling towers / VRV (e.g. noise enclosure, silencer, etc.)

In addition, it would be grateful if we could have your permission in carrying out on-site noise measurement at the rooftop of the building. Due to the tight programme of this project, your prompt response on or before 18 October 2023 would be very much appreciated.

Should you have any questions on this submission, please do not hesitate to contact the undersigned at 3465 2828 (email: bfan@ramboll.com) or our Coco Ma at 3465 2807 (email: cocoma@ramboll.com).

Yours faithfully,
For and on behalf of
Ramboll Hong Kong Limited

Billy Fan
Principal Consultant

Enclosure: Location Plan of the Proposed Development

Ref.: CHPWELTNEI00_0_0016L.23

By Post

11 October 2023

Management Office
Infinitus Plaza
199 Des Voeux Road Central, Sheung Wan
Hong Kong Island, Hong Kong

Dear Sir/Madam,

S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central– Request Information of the Chillers, Cooling Towers and VRV at Infinitus Plaza

We are commissioned by the applicant of the captioned lot to assess environmental noise impact on the proposed composite redevelopment at the captioned site. The location plan of the Proposed Development with 300m noise impact study area is attached for your reference.

We would like to have some enquires regarding the fixed noise sources (e.g. chillers, water-cooling towers or varied refrigerant volume system (VRV)) of Infinitus Plaza. We would be grateful if you could provide following information for the purpose of Environmental Assessment:

Chillers / Cooling Towers / VRV

1. The locations and numbers of chillers / cooling towers / VRV, their sound data (noise level), model and cooling capacity, if available
2. Operation hours of these equipment
3. Number of operating equipment between 23:00 and 07:00 hours
4. Noise Mitigation Measures for the chillers / cooling towers / VRV (e.g. noise enclosure, silencer, etc.)

In addition, it would be grateful if we could have your permission in carrying out on-site noise measurement at the rooftop of the building. Due to the tight programme of this project, your prompt response on or before 18 October 2023 would be very much appreciated.

Should you have any questions on this submission, please do not hesitate to contact the undersigned at 3465 2828 (email: bfan@ramboll.com) or our Coco Ma at 3465 2807 (email: cocoma@ramboll.com).

Yours faithfully,
For and on behalf of
Ramboll Hong Kong Limited

Billy Fan
Principal Consultant

Enclosure: Location Plan of the Proposed Development

Q:\Projects\CHPWELTNEI00\02 Project Management\02 Corr\CHPWELTNEI00_0_0016L.23.docx

Ref.: CHPWELTNEI00_0_0017L.23

By Post

11 October 2023

Management Office
Wing On Centre
110-114 Des Voeux Road Central, Sheung Wan
Hong Kong Island, Hong Kong

Dear Sir/Madam,

S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central– Request Information of the Chillers, Cooling Towers and VRV at Wing On Centre

We are commissioned by the applicant of the captioned lot to assess environmental noise impact on the proposed composite redevelopment at the captioned site. The location plan of the Proposed Development with 300m noise impact study area is attached for your reference.

We would like to have some enquires regarding the fixed noise sources (e.g. chillers, water-cooling towers or varied refrigerant volume system (VRV)) of Wing On Centre. We would be grateful if you could provide following information for the purpose of Environmental Assessment:

Chillers / Cooling Towers / VRV

1. The locations and numbers of chillers / cooling towers / VRV, their sound data (noise level), model and cooling capacity, if available
2. Operation hours of these equipment
3. Number of operating equipment between 23:00 and 07:00 hours
4. Noise Mitigation Measures for the chillers / cooling towers / VRV (e.g. noise enclosure, silencer, etc.)

In addition, it would be grateful if we could have your permission in carrying out on-site noise measurement at the rooftop of the building. Due to the tight programme of this project, your prompt response on or before 18 October 2023 would be very much appreciated.

Should you have any questions on this submission, please do not hesitate to contact the undersigned at 3465 2828 (email: bfan@ramboll.com) or our Coco Ma at 3465 2807 (email: cocoma@ramboll.com).

Yours faithfully,
For and on behalf of
Ramboll Hong Kong Limited

Billy Fan
Principal Consultant

Enclosure: Location Plan of the Proposed Development

Ref.: CHPWELTNEI00_0_0018L.23

By Post

11 October 2023

Management Office
The Bauhinia Serviced Apartments
119-121 Connaught Road Central, Sheung Wan
Hong Kong Island, Hong Kong

Dear Sir/Madam,

S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central– Request Information of the Chillers, Cooling Towers and VRV at the Bauhinia Serviced Apartments

We are commissioned by the applicant of the captioned lot to assess environmental noise impact on the proposed composite redevelopment at the captioned site. The location plan of the Proposed Development with 300m noise impact study area is attached for your reference.

We would like to have some enquires regarding the fixed noise sources (e.g. chillers, water-cooling towers or varied refrigerant volume system (VRV)) of the Bauhinia Serviced Apartments. We would be grateful if you could provide following information for the purpose of Environmental Assessment:

Chillers / Cooling Towers / VRV

1. The locations and numbers of chillers / cooling towers / VRV, their sound data (noise level), model and cooling capacity, if available
2. Operation hours of these equipment
3. Number of operating equipment between 23:00 and 07:00 hours
4. Noise Mitigation Measures for the chillers / cooling towers / VRV (e.g. noise enclosure, silencer, etc.)

In addition, it would be grateful if we could have your permission in carrying out on-site noise measurement at the rooftop of the building. Due to the tight programme of this project, your prompt response on or before 18 October 2023 would be very much appreciated.

Should you have any questions on this submission, please do not hesitate to contact the undersigned at 3465 2828 (email: bfan@ramboll.com) or our Coco Ma at 3465 2807 (email: cocoma@ramboll.com).

Yours faithfully,
For and on behalf of
Ramboll Hong Kong Limited

Billy Fan
Principal Consultant

Enclosure: Location Plan of the Proposed Development

Ref.: CHPWELTNEI00_0_0019L.23

By Post

11 October 2023

Management Office
Tung Ning Building
2 Hillier Street, Sheung Wan
Hong Kong Island, Hong Kong

Dear Sir/Madam,

S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central– Request Information of the Chillers, Cooling Towers and VRV at Tung Ning Building

We are commissioned by the applicant of the captioned lot to assess environmental noise impact on the proposed composite redevelopment at the captioned site. The location plan of the Proposed Development with 300m noise impact study area is attached for your reference.

We would like to have some enquires regarding the fixed noise sources (e.g. chillers, water-cooling towers or varied refrigerant volume system (VRV)) of Tung Ning Building. We would be grateful if you could provide following information for the purpose of Environmental Assessment:

Chillers / Cooling Towers / VRV

1. The locations and numbers of chillers / cooling towers / VRV, their sound data (noise level), model and cooling capacity, if available
2. Operation hours of these equipment
3. Number of operating equipment between 23:00 and 07:00 hours
4. Noise Mitigation Measures for the chillers / cooling towers / VRV (e.g. noise enclosure, silencer, etc.)

In addition, it would be grateful if we could have your permission in carrying out on-site noise measurement at the rooftop of the building. Due to the tight programme of this project, your prompt response on or before 18 October 2023 would be very much appreciated.

Should you have any questions on this submission, please do not hesitate to contact the undersigned at 3465 2828 (email: bfan@ramboll.com) or our Coco Ma at 3465 2807 (email: cocoma@ramboll.com).

Yours faithfully,
For and on behalf of
Ramboll Hong Kong Limited

Billy Fan
Principal Consultant

Enclosure: Location Plan of the Proposed Development

Q:\Projects\CHPWELTNEI00\02 Project Management\02 Corr\CHPWELTNEI00_0_0019L.23.docx

Ref.: CHPWELTNEI00_0_0020L.23

By Post

11 October 2023

Management Office
Lansing House
41-47 Queen's Road Central, Central
Hong Kong Island, Hong Kong

Dear Sir/Madam,

S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central– Request Information of the Chillers, Cooling Towers and VRV at Lansing House

We are commissioned by the applicant of the captioned lot to assess environmental noise impact on the proposed composite redevelopment at the captioned site. The location plan of the Proposed Development with 300m noise impact study area is attached for your reference.

We would like to have some enquires regarding the fixed noise sources (e.g. chillers, water-cooling towers or varied refrigerant volume system (VRV)) of Lansing House. We would be grateful if you could provide following information for the purpose of Environmental Assessment:

Chillers / Cooling Towers / VRV

1. The locations and numbers of chillers / cooling towers / VRV, their sound data (noise level), model and cooling capacity, if available
2. Operation hours of these equipment
3. Number of operating equipment between 23:00 and 07:00 hours
4. Noise Mitigation Measures for the chillers / cooling towers / VRV (e.g. noise enclosure, silencer, etc.)

In addition, it would be grateful if we could have your permission in carrying out on-site noise measurement at the rooftop of the building. Due to the tight programme of this project, your prompt response on or before 18 October 2023 would be very much appreciated.

Should you have any questions on this submission, please do not hesitate to contact the undersigned at 3465 2828 (email: bfan@ramboll.com) or our Coco Ma at 3465 2807 (email: cocoma@ramboll.com).

Yours faithfully,
For and on behalf of
Ramboll Hong Kong Limited

Billy Fan
Principal Consultant

Enclosure: Location Plan of the Proposed Development

Ref.: CHPWELTNEI00_0_0021L.23

By Post

11 October 2023

Management Office
Asia Standard Tower
59-65 Queen's Road Central, Central
Hong Kong Island, Hong Kong

Dear Sir/Madam,

S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central– Request Information of the Chillers, Cooling Towers and VRV at Asia Standard Tower

We are commissioned by the applicant of the captioned lot to assess environmental noise impact on the proposed composite redevelopment at the captioned site. The location plan of the Proposed Development with 300m noise impact study area is attached for your reference.

We would like to have some enquires regarding the fixed noise sources (e.g. chillers, water-cooling towers or varied refrigerant volume system (VRV)) of Asia Standard Tower. We would be grateful if you could provide following information for the purpose of Environmental Assessment:

Chillers / Cooling Towers / VRV

1. The locations and numbers of chillers / cooling towers / VRV, their sound data (noise level), model and cooling capacity, if available
2. Operation hours of these equipment
3. Number of operating equipment between 23:00 and 07:00 hours
4. Noise Mitigation Measures for the chillers / cooling towers / VRV (e.g. noise enclosure, silencer, etc.)

In addition, it would be grateful if we could have your permission in carrying out on-site noise measurement at the rooftop of the building. Due to the tight programme of this project, your prompt response on or before 18 October 2023 would be very much appreciated.

Should you have any questions on this submission, please do not hesitate to contact the undersigned at 3465 2828 (email: bfan@ramboll.com) or our Coco Ma at 3465 2807 (email: cocoma@ramboll.com).

Yours faithfully,
For and on behalf of
Ramboll Hong Kong Limited

Billy Fan
Principal Consultant

Enclosure: Location Plan of the Proposed Development

Q:\Projects\CHPWELTNEI00\02 Project Management\02 Corr\CHPWELTNEI00_0_0021L.23.docx

Ref.: CHPWELTNEI00_0_0022L.23

By Post

11 October 2023

Management Office
Che San Building
10-12 Pottinger Street, Central
Hong Kong Island, Hong Kong

Dear Sir/Madam,

S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central– Request Information of the Chillers, Cooling Towers and VRV at Che San Building

We are commissioned by the applicant of the captioned lot to assess environmental noise impact on the proposed composite redevelopment at the captioned site. The location plan of the Proposed Development with 300m noise impact study area is attached for your reference.

We would like to have some enquires regarding the fixed noise sources (e.g. chillers, water-cooling towers or varied refrigerant volume system (VRV)) of Che San Building. We would be grateful if you could provide following information for the purpose of Environmental Assessment:

Chillers / Cooling Towers / VRV

1. The locations and numbers of chillers / cooling towers / VRV, their sound data (noise level), model and cooling capacity, if available
2. Operation hours of these equipment
3. Number of operating equipment between 23:00 and 07:00 hours
4. Noise Mitigation Measures for the chillers / cooling towers / VRV (e.g. noise enclosure, silencer, etc.)

In addition, it would be grateful if we could have your permission in carrying out on-site noise measurement at the rooftop of the building. Due to the tight programme of this project, your prompt response on or before 18 October 2023 would be very much appreciated.

Should you have any questions on this submission, please do not hesitate to contact the undersigned at 3465 2828 (email: bfan@ramboll.com) or our Coco Ma at 3465 2807 (email: cocoma@ramboll.com).

Yours faithfully,
For and on behalf of
Ramboll Hong Kong Limited

Billy Fan
Principal Consultant

Enclosure: Location Plan of the Proposed Development

Ref.: CHPWELTNEI00_0_0023L.23

By Post

11 October 2023

Management Office
Lee Kum Kee Central
54-58 Des Voeux Road Central, Central
Hong Kong Island, Hong Kong

Dear Sir/Madam,

S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central– Request Information of the Chillers, Cooling Towers and VRV at Lee Kum Kee Central

We are commissioned by the applicant of the captioned lot to assess environmental noise impact on the proposed composite redevelopment at the captioned site. The location plan of the Proposed Development with 300m noise impact study area is attached for your reference.

We would like to have some enquires regarding the fixed noise sources (e.g. chillers, water-cooling towers or varied refrigerant volume system (VRV)) of Lee Kum Kee Central. We would be grateful if you could provide following information for the purpose of Environmental Assessment:

Chillers / Cooling Towers / VRV

1. The locations and numbers of chillers / cooling towers / VRV, their sound data (noise level), model and cooling capacity, if available
2. Operation hours of these equipment
3. Number of operating equipment between 23:00 and 07:00 hours
4. Noise Mitigation Measures for the chillers / cooling towers / VRV (e.g. noise enclosure, silencer, etc.)

In addition, it would be grateful if we could have your permission in carrying out on-site noise measurement at the rooftop of the building. Due to the tight programme of this project, your prompt response on or before 18 October 2023 would be very much appreciated.

Should you have any questions on this submission, please do not hesitate to contact the undersigned at 3465 2828 (email: bfan@ramboll.com) or our Coco Ma at 3465 2807 (email: cocoma@ramboll.com).

Yours faithfully,
For and on behalf of
Ramboll Hong Kong Limited

Billy Fan
Principal Consultant

Enclosure: Location Plan of the Proposed Development

Ref.: CHPWELTNEI00_0_0024L.23

By Post

11 October 2023

Management Office
Prosperous Building
48-52 Des Voeux Road Central, Central
Hong Kong Island, Hong Kong

Dear Sir/Madam,

S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central– Request Information of the Chillers, Cooling Towers and VRV at Prosperous Building

We are commissioned by the applicant of the captioned lot to assess environmental noise impact on the proposed composite redevelopment at the captioned site. The location plan of the Proposed Development with 300m noise impact study area is attached for your reference.

We would like to have some enquires regarding the fixed noise sources (e.g. chillers, water-cooling towers or varied refrigerant volume system (VRV)) of Prosperous Building. We would be grateful if you could provide following information for the purpose of Environmental Assessment:

Chillers / Cooling Towers / VRV

1. The locations and numbers of chillers / cooling towers / VRV, their sound data (noise level), model and cooling capacity, if available
2. Operation hours of these equipment
3. Number of operating equipment between 23:00 and 07:00 hours
4. Noise Mitigation Measures for the chillers / cooling towers / VRV (e.g. noise enclosure, silencer, etc.)

In addition, it would be grateful if we could have your permission in carrying out on-site noise measurement at the rooftop of the building. Due to the tight programme of this project, your prompt response on or before 18 October 2023 would be very much appreciated.

Should you have any questions on this submission, please do not hesitate to contact the undersigned at 3465 2828 (email: bfan@ramboll.com) or our Coco Ma at 3465 2807 (email: cocoma@ramboll.com).

Yours faithfully,
For and on behalf of
Ramboll Hong Kong Limited

Billy Fan
Principal Consultant

Enclosure: Location Plan of the Proposed Development

Ref.: CHPWELTNEI00_0_0025L.23

By Post

11 October 2023

Management Office
Man Yee Building
68 Des Voeux Road Central, Central
Hong Kong Island, Hong Kong

Dear Sir/Madam,

S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central– Request Information of the Chillers, Cooling Towers and VRV at Man Yee Building

We are commissioned by the applicant of the captioned lot to assess environmental noise impact on the proposed composite redevelopment at the captioned site. The location plan of the Proposed Development with 300m noise impact study area is attached for your reference.

We would like to have some enquires regarding the fixed noise sources (e.g. chillers, water-cooling towers or varied refrigerant volume system (VRV)) of Man Yee Building. We would be grateful if you could provide following information for the purpose of Environmental Assessment:

Chillers / Cooling Towers / VRV

1. The locations and numbers of chillers / cooling towers / VRV, their sound data (noise level), model and cooling capacity, if available
2. Operation hours of these equipment
3. Number of operating equipment between 23:00 and 07:00 hours
4. Noise Mitigation Measures for the chillers / cooling towers / VRV (e.g. noise enclosure, silencer, etc.)

In addition, it would be grateful if we could have your permission in carrying out on-site noise measurement at the rooftop of the building. Due to the tight programme of this project, your prompt response on or before 18 October 2023 would be very much appreciated.

Should you have any questions on this submission, please do not hesitate to contact the undersigned at 3465 2828 (email: bfan@ramboll.com) or our Coco Ma at 3465 2807 (email: cocoma@ramboll.com).

Yours faithfully,
For and on behalf of
Ramboll Hong Kong Limited

Billy Fan
Principal Consultant

Enclosure: Location Plan of the Proposed Development

Ref.: CHPWELTNEI00_0_0026L.23

By Post

11 October 2023

Management Office
Hung Kei Mansion
5-8 Queen Victoria Street, Central
Hong Kong Island, Hong Kong

Dear Sir/Madam,

S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central– Request Information of the Chillers, Cooling Towers and VRV at Hung Kei Mansion

We are commissioned by the applicant of the captioned lot to assess environmental noise impact on the proposed composite redevelopment at the captioned site. The location plan of the Proposed Development with 300m noise impact study area is attached for your reference.

We would like to have some enquires regarding the fixed noise sources (e.g. chillers, water-cooling towers or varied refrigerant volume system (VRV)) of Hung Kei Mansion. We would be grateful if you could provide following information for the purpose of Environmental Assessment:

Chillers / Cooling Towers / VRV

1. The locations and numbers of chillers / cooling towers / VRV, their sound data (noise level), model and cooling capacity, if available
2. Operation hours of these equipment
3. Number of operating equipment between 23:00 and 07:00 hours
4. Noise Mitigation Measures for the chillers / cooling towers / VRV (e.g. noise enclosure, silencer, etc.)

In addition, it would be grateful if we could have your permission in carrying out on-site noise measurement at the rooftop of the building. Due to the tight programme of this project, your prompt response on or before 18 October 2023 would be very much appreciated.

Should you have any questions on this submission, please do not hesitate to contact the undersigned at 3465 2828 (email: bfan@ramboll.com) or our Coco Ma at 3465 2807 (email: cocoma@ramboll.com).

Yours faithfully,
For and on behalf of
Ramboll Hong Kong Limited

Billy Fan
Principal Consultant

Enclosure: Location Plan of the Proposed Development

Ref.: CHPWELTNEI00_0_0027L.23

By Post

11 October 2023

Management Office
Chiyu Bank Building
74-78 Des Voeux Road Central, Central
Hong Kong Island, Hong Kong

Dear Sir/Madam,

S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central– Request Information of the Chillers, Cooling Towers and VRV at Chiyu Bank Building

We are commissioned by the applicant of the captioned lot to assess environmental noise impact on the proposed composite redevelopment at the captioned site. The location plan of the Proposed Development with 300m noise impact study area is attached for your reference.

We would like to have some enquires regarding the fixed noise sources (e.g. chillers, water-cooling towers or varied refrigerant volume system (VRV)) of Chiyu Bank Building. We would be grateful if you could provide following information for the purpose of Environmental Assessment:

Chillers / Cooling Towers / VRV

1. The locations and numbers of chillers / cooling towers / VRV, their sound data (noise level), model and cooling capacity, if available
2. Operation hours of these equipment
3. Number of operating equipment between 23:00 and 07:00 hours
4. Noise Mitigation Measures for the chillers / cooling towers / VRV (e.g. noise enclosure, silencer, etc.)

In addition, it would be grateful if we could have your permission in carrying out on-site noise measurement at the rooftop of the building. Due to the tight programme of this project, your prompt response on or before 18 October 2023 would be very much appreciated.

Should you have any questions on this submission, please do not hesitate to contact the undersigned at 3465 2828 (email: bfan@ramboll.com) or our Coco Ma at 3465 2807 (email: cocoma@ramboll.com).

Yours faithfully,
For and on behalf of
Ramboll Hong Kong Limited

Billy Fan
Principal Consultant

Enclosure: Location Plan of the Proposed Development

Ref.: CHPWELTNEI00_0_0028L.23

By Post

11 October 2023

Management Office
Central Market
93 Queen's Road Central, Central
Hong Kong Island, Hong Kong

Dear Sir/Madam,

S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central– Request Information of the Chillers, Cooling Towers and VRV at Central Market

We are commissioned by the applicant of the captioned lot to assess environmental noise impact on the proposed composite redevelopment at the captioned site. The location plan of the Proposed Development with 300m noise impact study area is attached for your reference.

We would like to have some enquires regarding the fixed noise sources (e.g. chillers, water-cooling towers or varied refrigerant volume system (VRV)) of Central Market. We would be grateful if you could provide following information for the purpose of Environmental Assessment:

Chillers / Cooling Towers / VRV

1. The locations and numbers of chillers / cooling towers / VRV, their sound data (noise level), model and cooling capacity, if available
2. Operation hours of these equipment
3. Number of operating equipment between 23:00 and 07:00 hours
4. Noise Mitigation Measures for the chillers / cooling towers / VRV (e.g. noise enclosure, silencer, etc.)

In addition, it would be grateful if we could have your permission in carrying out on-site noise measurement at the rooftop of the building. Due to the tight programme of this project, your prompt response on or before 18 October 2023 would be very much appreciated.

Should you have any questions on this submission, please do not hesitate to contact the undersigned at 3465 2828 (email: bfan@ramboll.com) or our Coco Ma at 3465 2807 (email: cocoma@ramboll.com).

Yours faithfully,
For and on behalf of
Ramboll Hong Kong Limited

Billy Fan
Principal Consultant

Enclosure: Location Plan of the Proposed Development

Ref.: CHPWELTNEI00_0_0029L.23

By Post

11 October 2023

Management Office
Haleson Building
1-3 Jubilee Street, Central
Hong Kong Island, Hong Kong

Dear Sir/Madam,

S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central– Request Information of the Chillers, Cooling Towers and VRV at Haleson Building

We are commissioned by the applicant of the captioned lot to assess environmental noise impact on the proposed composite redevelopment at the captioned site. The location plan of the Proposed Development with 300m noise impact study area is attached for your reference.

We would like to have some enquires regarding the fixed noise sources (e.g. chillers, water-cooling towers or varied refrigerant volume system (VRV)) of Haleson Building. We would be grateful if you could provide following information for the purpose of Environmental Assessment:

Chillers / Cooling Towers / VRV

1. The locations and numbers of chillers / cooling towers / VRV, their sound data (noise level), model and cooling capacity, if available
2. Operation hours of these equipment
3. Number of operating equipment between 23:00 and 07:00 hours
4. Noise Mitigation Measures for the chillers / cooling towers / VRV (e.g. noise enclosure, silencer, etc.)

In addition, it would be grateful if we could have your permission in carrying out on-site noise measurement at the rooftop of the building. Due to the tight programme of this project, your prompt response on or before 18 October 2023 would be very much appreciated.

Should you have any questions on this submission, please do not hesitate to contact the undersigned at 3465 2828 (email: bfan@ramboll.com) or our Coco Ma at 3465 2807 (email: cocoma@ramboll.com).

Yours faithfully,
For and on behalf of
Ramboll Hong Kong Limited

Billy Fan
Principal Consultant

Enclosure: Location Plan of the Proposed Development

Ref.: CHPWELTNEI00_0_0030L.23

By Post

11 October 2023

Management Office
Central 88
88-98 Des Voeux Road Central
Hong Kong Island, Hong Kong

Dear Sir/Madam,

S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central– Request Information of the Chillers, Cooling Towers and VRV at Central 88

We are commissioned by the applicant of the captioned lot to assess environmental noise impact on the proposed composite redevelopment at the captioned site. The location plan of the Proposed Development with 300m noise impact study area is attached for your reference.

We would like to have some enquires regarding the fixed noise sources (e.g. chillers, water-cooling towers or varied refrigerant volume system (VRV)) of Central 88. We would be grateful if you could provide following information for the purpose of Environmental Assessment:

Chillers / Cooling Towers / VRV

1. The locations and numbers of chillers / cooling towers / VRV, their sound data (noise level), model and cooling capacity, if available
2. Operation hours of these equipment
3. Number of operating equipment between 23:00 and 07:00 hours
4. Noise Mitigation Measures for the chillers / cooling towers / VRV (e.g. noise enclosure, silencer, etc.)

In addition, it would be grateful if we could have your permission in carrying out on-site noise measurement at the rooftop of the building. Due to the tight programme of this project, your prompt response on or before 18 October 2023 would be very much appreciated.

Should you have any questions on this submission, please do not hesitate to contact the undersigned at 3465 2828 (email: bfan@ramboll.com) or our Coco Ma at 3465 2807 (email: cocoma@ramboll.com).

Yours faithfully,
For and on behalf of
Ramboll Hong Kong Limited

Billy Fan
Principal Consultant

Enclosure: Location Plan of the Proposed Development

Ref.: CHPWELTNEI00_0_0031L.23

By Post

11 October 2023

Management Office
Public Bank Centre
120 Des Voeux Road Central
Hong Kong Island, Hong Kong

Dear Sir/Madam,

S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central– Request Information of the Chillers, Cooling Towers and VRV at Public Bank Centre

We are commissioned by the applicant of the captioned lot to assess environmental noise impact on the proposed composite redevelopment at the captioned site. The location plan of the Proposed Development with 300m noise impact study area is attached for your reference.

We would like to have some enquires regarding the fixed noise sources (e.g. chillers, water-cooling towers or varied refrigerant volume system (VRV)) of Public Bank Centre. We would be grateful if you could provide following information for the purpose of Environmental Assessment:

Chillers / Cooling Towers / VRV

1. The locations and numbers of chillers / cooling towers / VRV, their sound data (noise level), model and cooling capacity, if available
2. Operation hours of these equipment
3. Number of operating equipment between 23:00 and 07:00 hours
4. Noise Mitigation Measures for the chillers / cooling towers / VRV (e.g. noise enclosure, silencer, etc.)

In addition, it would be grateful if we could have your permission in carrying out on-site noise measurement at the rooftop of the building. Due to the tight programme of this project, your prompt response on or before 18 October 2023 would be very much appreciated.

Should you have any questions on this submission, please do not hesitate to contact the undersigned at 3465 2828 (email: bfan@ramboll.com) or our Coco Ma at 3465 2807 (email: cocoma@ramboll.com).

Yours faithfully,
For and on behalf of
Ramboll Hong Kong Limited

Billy Fan
Principal Consultant

Enclosure: Location Plan of the Proposed Development

Ref.: CHPWELTNEI00_0_0032L.23

By Post

11 October 2023

Management Office
Tai Sang Bank Building
130-132 Des Voeux Road Central, Central
Hong Kong Island, Hong Kong

Dear Sir/Madam,

S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central– Request Information of the Chillers, Cooling Towers and VRV at Tai Sang Bank Building

We are commissioned by the applicant of the captioned lot to assess environmental noise impact on the proposed composite redevelopment at the captioned site. The location plan of the Proposed Development with 300m noise impact study area is attached for your reference.

We would like to have some enquires regarding the fixed noise sources (e.g. chillers, water-cooling towers or varied refrigerant volume system (VRV)) of Tai Sang Bank Building. We would be grateful if you could provide following information for the purpose of Environmental Assessment:

Chillers / Cooling Towers / VRV

1. The locations and numbers of chillers / cooling towers / VRV, their sound data (noise level), model and cooling capacity, if available
2. Operation hours of these equipment
3. Number of operating equipment between 23:00 and 07:00 hours
4. Noise Mitigation Measures for the chillers / cooling towers / VRV (e.g. noise enclosure, silencer, etc.)

In addition, it would be grateful if we could have your permission in carrying out on-site noise measurement at the rooftop of the building. Due to the tight programme of this project, your prompt response on or before 18 October 2023 would be very much appreciated.

Should you have any questions on this submission, please do not hesitate to contact the undersigned at 3465 2828 (email: bfan@ramboll.com) or our Coco Ma at 3465 2807 (email: cocoma@ramboll.com).

Yours faithfully,
For and on behalf of
Ramboll Hong Kong Limited

Billy Fan
Principal Consultant

Enclosure: Location Plan of the Proposed Development

Ref.: CHPWELTNEI00_0_0033L.23

By Post

11 October 2023

Management Office
BOC Group Life Assurance Tower
136 Des Voeux Road Central, Central
Hong Kong Island, Hong Kong

Dear Sir/Madam,

S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central– Request Information of the Chillers, Cooling Towers and VRV at BOC Group Life Assurance Tower

We are commissioned by the applicant of the captioned lot to assess environmental noise impact on the proposed composite redevelopment at the captioned site. The location plan of the Proposed Development with 300m noise impact study area is attached for your reference.

We would like to have some enquires regarding the fixed noise sources (e.g. chillers, water-cooling towers or varied refrigerant volume system (VRV)) of BOC Group Life Assurance Tower. We would be grateful if you could provide following information for the purpose of Environmental Assessment:

Chillers / Cooling Towers / VRV

1. The locations and numbers of chillers / cooling towers / VRV, their sound data (noise level), model and cooling capacity, if available
2. Operation hours of these equipment
3. Number of operating equipment between 23:00 and 07:00 hours
4. Noise Mitigation Measures for the chillers / cooling towers / VRV (e.g. noise enclosure, silencer, etc.)

In addition, it would be grateful if we could have your permission in carrying out on-site noise measurement at the rooftop of the building. Due to the tight programme of this project, your prompt response on or before 18 October 2023 would be very much appreciated.

Should you have any questions on this submission, please do not hesitate to contact the undersigned at 3465 2828 (email: bfan@ramboll.com) or our Coco Ma at 3465 2807 (email: cocoma@ramboll.com).

Yours faithfully,
For and on behalf of
Ramboll Hong Kong Limited

Billy Fan
Principal Consultant

Enclosure: Location Plan of the Proposed Development

Ref.: CHPWELTNEI00_0_0034L.23

By Post

11 October 2023

Management Office
The L.place
139 Queen's Road Central, Central
Hong Kong Island, Hong Kong

Dear Sir/Madam,

S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central– Request Information of the Chillers, Cooling Towers and VRV at The L.place

We are commissioned by the applicant of the captioned lot to assess environmental noise impact on the proposed composite redevelopment at the captioned site. The location plan of the Proposed Development with 300m noise impact study area is attached for your reference.

We would like to have some enquires regarding the fixed noise sources (e.g. chillers, water-cooling towers or varied refrigerant volume system (VRV)) of The L.place. We would be grateful if you could provide following information for the purpose of Environmental Assessment:

Chillers / Cooling Towers / VRV

1. The locations and numbers of chillers / cooling towers / VRV, their sound data (noise level), model and cooling capacity, if available
2. Operation hours of these equipment
3. Number of operating equipment between 23:00 and 07:00 hours
4. Noise Mitigation Measures for the chillers / cooling towers / VRV (e.g. noise enclosure, silencer, etc.)

In addition, it would be grateful if we could have your permission in carrying out on-site noise measurement at the rooftop of the building. Due to the tight programme of this project, your prompt response on or before 18 October 2023 would be very much appreciated.

Should you have any questions on this submission, please do not hesitate to contact the undersigned at 3465 2828 (email: bfan@ramboll.com) or our Coco Ma at 3465 2807 (email: cocoma@ramboll.com).

Yours faithfully,
For and on behalf of
Ramboll Hong Kong Limited

Billy Fan
Principal Consultant

Enclosure: Location Plan of the Proposed Development

Ref.: CHPWELTNEI00_0_0035L.23

By Post

11 October 2023

Management Office
Amte1 Building
144-148 Des Voeux Road Central, Central
Hong Kong Island, Hong Kong

Dear Sir/Madam,

S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central– Request Information of the Chillers, Cooling Towers and VRV at Amtel Building

We are commissioned by the applicant of the captioned lot to assess environmental noise impact on the proposed composite redevelopment at the captioned site. The location plan of the Proposed Development with 300m noise impact study area is attached for your reference.

We would like to have some enquires regarding the fixed noise sources (e.g. chillers, water-cooling towers or varied refrigerant volume system (VRV)) of Amtel Building. We would be grateful if you could provide following information for the purpose of Environmental Assessment:

Chillers / Cooling Towers / VRV

1. The locations and numbers of chillers / cooling towers / VRV, their sound data (noise level), model and cooling capacity, if available
2. Operation hours of these equipment
3. Number of operating equipment between 23:00 and 07:00 hours
4. Noise Mitigation Measures for the chillers / cooling towers / VRV (e.g. noise enclosure, silencer, etc.)

In addition, it would be grateful if we could have your permission in carrying out on-site noise measurement at the rooftop of the building. Due to the tight programme of this project, your prompt response on or before 18 October 2023 would be very much appreciated.

Should you have any questions on this submission, please do not hesitate to contact the undersigned at 3465 2828 (email: bfan@ramboll.com) or our Coco Ma at 3465 2807 (email: cocoma@ramboll.com).

Yours faithfully,
For and on behalf of
Ramboll Hong Kong Limited

Billy Fan
Principal Consultant

Enclosure: Location Plan of the Proposed Development

Ref.: CHPWELTNEI00_0_0036L.23

By Post

11 October 2023

Management Office
Wing Hang Insurance Building
9-17 Wing Kut Street, Central
Hong Kong Island, Hong Kong

Dear Sir/Madam,

S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central– Request Information of the Chillers, Cooling Towers and VRV at Wing Hang Insurance Building

We are commissioned by the applicant of the captioned lot to assess environmental noise impact on the proposed composite redevelopment at the captioned site. The location plan of the Proposed Development with 300m noise impact study area is attached for your reference.

We would like to have some enquires regarding the fixed noise sources (e.g. chillers, water-cooling towers or varied refrigerant volume system (VRV)) of Wing Hang Insurance Building. We would be grateful if you could provide following information for the purpose of Environmental Assessment:

Chillers / Cooling Towers / VRV

1. The locations and numbers of chillers / cooling towers / VRV, their sound data (noise level), model and cooling capacity, if available
2. Operation hours of these equipment
3. Number of operating equipment between 23:00 and 07:00 hours
4. Noise Mitigation Measures for the chillers / cooling towers / VRV (e.g. noise enclosure, silencer, etc.)

In addition, it would be grateful if we could have your permission in carrying out on-site noise measurement at the rooftop of the building. Due to the tight programme of this project, your prompt response on or before 18 October 2023 would be very much appreciated.

Should you have any questions on this submission, please do not hesitate to contact the undersigned at 3465 2828 (email: bfan@ramboll.com) or our Coco Ma at 3465 2807 (email: cocoma@ramboll.com).

Yours faithfully,
For and on behalf of
Ramboll Hong Kong Limited

Billy Fan
Principal Consultant

Enclosure: Location Plan of the Proposed Development

Ref.: CHPWELTNEI00_0_0037L.23

By Post

11 October 2023

Management Office
OCBC Wing Hang Tower
161-169 Queen's Road Central, Central
Hong Kong Island, Hong Kong

Dear Sir/Madam,

S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central– Request Information of the Chillers, Cooling Towers and VRV at OCBC Wing Hang Tower

We are commissioned by the applicant of the captioned lot to assess environmental noise impact on the proposed composite redevelopment at the captioned site. The location plan of the Proposed Development with 300m noise impact study area is attached for your reference.

We would like to have some enquires regarding the fixed noise sources (e.g. chillers, water-cooling towers or varied refrigerant volume system (VRV)) of OCBC Wing Hang Tower. We would be grateful if you could provide following information for the purpose of Environmental Assessment:

Chillers / Cooling Towers / VRV

1. The locations and numbers of chillers / cooling towers / VRV, their sound data (noise level), model and cooling capacity, if available
2. Operation hours of these equipment
3. Number of operating equipment between 23:00 and 07:00 hours
4. Noise Mitigation Measures for the chillers / cooling towers / VRV (e.g. noise enclosure, silencer, etc.)

In addition, it would be grateful if we could have your permission in carrying out on-site noise measurement at the rooftop of the building. Due to the tight programme of this project, your prompt response on or before 18 October 2023 would be very much appreciated.

Should you have any questions on this submission, please do not hesitate to contact the undersigned at 3465 2828 (email: bfan@ramboll.com) or our Coco Ma at 3465 2807 (email: cocoma@ramboll.com).

Yours faithfully,
For and on behalf of
Ramboll Hong Kong Limited

Billy Fan
Principal Consultant

Enclosure: Location Plan of the Proposed Development

Ref.: CHPWELTNEI00_0_0038L.23

By Post

11 October 2023

Management Office
Shing Lee Commercial Building
6-12 Wing Kut Street, Central
Hong Kong Island, Hong Kong

Dear Sir/Madam,

S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central– Request Information of the Chillers, Cooling Towers and VRV at Shing Lee Commercial Building

We are commissioned by the applicant of the captioned lot to assess environmental noise impact on the proposed composite redevelopment at the captioned site. The location plan of the Proposed Development with 300m noise impact study area is attached for your reference.

We would like to have some enquires regarding the fixed noise sources (e.g. chillers, water-cooling towers or varied refrigerant volume system (VRV)) of Shing Lee Commercial Building. We would be grateful if you could provide following information for the purpose of Environmental Assessment:

Chillers / Cooling Towers / VRV

1. The locations and numbers of chillers / cooling towers / VRV, their sound data (noise level), model and cooling capacity, if available
2. Operation hours of these equipment
3. Number of operating equipment between 23:00 and 07:00 hours
4. Noise Mitigation Measures for the chillers / cooling towers / VRV (e.g. noise enclosure, silencer, etc.)

In addition, it would be grateful if we could have your permission in carrying out on-site noise measurement at the rooftop of the building. Due to the tight programme of this project, your prompt response on or before 18 October 2023 would be very much appreciated.

Should you have any questions on this submission, please do not hesitate to contact the undersigned at 3465 2828 (email: bfan@ramboll.com) or our Coco Ma at 3465 2807 (email: cocoma@ramboll.com).

Yours faithfully,
For and on behalf of
Ramboll Hong Kong Limited

Billy Fan
Principal Consultant

Enclosure: Location Plan of the Proposed Development

Ref.: CHPWELTNEI00_0_0039L.23

By Post

11 October 2023

Management Office
Grand Millennium Plaza
181 Queen's Road Central, Central
Hong Kong Island, Hong Kong

Dear Sir/Madam,

S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central– Request Information of the Chillers, Cooling Towers and VRV at Grand Millennium Plaza

We are commissioned by the applicant of the captioned lot to assess environmental noise impact on the proposed composite redevelopment at the captioned site. The location plan of the Proposed Development with 300m noise impact study area is attached for your reference.

We would like to have some enquires regarding the fixed noise sources (e.g. chillers, water-cooling towers or varied refrigerant volume system (VRV)) of Grand Millennium Plaza. We would be grateful if you could provide following information for the purpose of Environmental Assessment:

Chillers / Cooling Towers / VRV

1. The locations and numbers of chillers / cooling towers / VRV, their sound data (noise level), model and cooling capacity, if available
2. Operation hours of these equipment
3. Number of operating equipment between 23:00 and 07:00 hours
4. Noise Mitigation Measures for the chillers / cooling towers / VRV (e.g. noise enclosure, silencer, etc.)

In addition, it would be grateful if we could have your permission in carrying out on-site noise measurement at the rooftop of the building. Due to the tight programme of this project, your prompt response on or before 18 October 2023 would be very much appreciated.

Should you have any questions on this submission, please do not hesitate to contact the undersigned at 3465 2828 (email: bfan@ramboll.com) or our Coco Ma at 3465 2807 (email: cocoma@ramboll.com).

Yours faithfully,
For and on behalf of
Ramboll Hong Kong Limited

Billy Fan
Principal Consultant

Enclosure: Location Plan of the Proposed Development

Ref.: CHPWELTNEI00_0_0040L.23

By Post

11 October 2023

Management Office
Wing On Cheong Building
5 Wing Lok Street, Sheung Wan
Hong Kong Island, Hong Kong

Dear Sir/Madam,

S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central– Request Information of the Chillers, Cooling Towers and VRV at Wing On Cheong Building

We are commissioned by the applicant of the captioned lot to assess environmental noise impact on the proposed composite redevelopment at the captioned site. The location plan of the Proposed Development with 300m noise impact study area is attached for your reference.

We would like to have some enquires regarding the fixed noise sources (e.g. chillers, water-cooling towers or varied refrigerant volume system (VRV)) of Wing On Cheong Building. We would be grateful if you could provide following information for the purpose of Environmental Assessment:

Chillers / Cooling Towers / VRV

1. The locations and numbers of chillers / cooling towers / VRV, their sound data (noise level), model and cooling capacity, if available
2. Operation hours of these equipment
3. Number of operating equipment between 23:00 and 07:00 hours
4. Noise Mitigation Measures for the chillers / cooling towers / VRV (e.g. noise enclosure, silencer, etc.)

In addition, it would be grateful if we could have your permission in carrying out on-site noise measurement at the rooftop of the building. Due to the tight programme of this project, your prompt response on or before 18 October 2023 would be very much appreciated.

Should you have any questions on this submission, please do not hesitate to contact the undersigned at 3465 2828 (email: bfan@ramboll.com) or our Coco Ma at 3465 2807 (email: cocoma@ramboll.com).

Yours faithfully,
For and on behalf of
Ramboll Hong Kong Limited

Billy Fan
Principal Consultant

Enclosure: Location Plan of the Proposed Development

Ref.: CHPWELTNEI00_0_0041L.23

By Post

11 October 2023

Management Office
Cheung's Building
1-3 Wing Lok Street, Sheung Wan
Hong Kong Island, Hong Kong

Dear Sir/Madam,

S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central– Request Information of the Chillers, Cooling Towers and VRV at Cheung's Building

We are commissioned by the applicant of the captioned lot to assess environmental noise impact on the proposed composite redevelopment at the captioned site. The location plan of the Proposed Development with 300m noise impact study area is attached for your reference.

We would like to have some enquires regarding the fixed noise sources (e.g. chillers, water-cooling towers or varied refrigerant volume system (VRV)) of Cheung's Building. We would be grateful if you could provide following information for the purpose of Environmental Assessment:

Chillers / Cooling Towers / VRV

1. The locations and numbers of chillers / cooling towers / VRV, their sound data (noise level), model and cooling capacity, if available
2. Operation hours of these equipment
3. Number of operating equipment between 23:00 and 07:00 hours
4. Noise Mitigation Measures for the chillers / cooling towers / VRV (e.g. noise enclosure, silencer, etc.)

In addition, it would be grateful if we could have your permission in carrying out on-site noise measurement at the rooftop of the building. Due to the tight programme of this project, your prompt response on or before 18 October 2023 would be very much appreciated.

Should you have any questions on this submission, please do not hesitate to contact the undersigned at 3465 2828 (email: bfan@ramboll.com) or our Coco Ma at 3465 2807 (email: cocoma@ramboll.com).

Yours faithfully,
For and on behalf of
Ramboll Hong Kong Limited

Billy Fan
Principal Consultant

Enclosure: Location Plan of the Proposed Development

Ref.: CHPWELTNEI00_0_0042L.23

By Post

11 October 2023

Owners' Corporation
Tams Wan Yeung Building
63-65 Wing Lok Street, Sheung Wan
Hong Kong Island, Hong Kong

Dear Sir/Madam,

S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central– Request Information of the Chillers, Cooling Towers and VRV at Tams Wan Yeung Building

We are commissioned by the applicant of the captioned lot to assess environmental noise impact on the proposed composite redevelopment at the captioned site. The location plan of the Proposed Development with 300m noise impact study area is attached for your reference.

We would like to have some enquires regarding the fixed noise sources (e.g. chillers, water-cooling towers or varied refrigerant volume system (VRV)) of Tams Wan Yeung Building. We would be grateful if you could provide following information for the purpose of Environmental Assessment:

Chillers / Cooling Towers / VRV

1. The locations and numbers of chillers / cooling towers / VRV, their sound data (noise level), model and cooling capacity, if available
2. Operation hours of these equipment
3. Number of operating equipment between 23:00 and 07:00 hours
4. Noise Mitigation Measures for the chillers / cooling towers / VRV (e.g. noise enclosure, silencer, etc.)

In addition, it would be grateful if we could have your permission in carrying out on-site noise measurement at the rooftop of the building. Due to the tight programme of this project, your prompt response on or before 18 October 2023 would be very much appreciated.

Should you have any questions on this submission, please do not hesitate to contact the undersigned at 3465 2828 (email: bfan@ramboll.com) or our Coco Ma at 3465 2807 (email: cocoma@ramboll.com).

Yours faithfully,
For and on behalf of
Ramboll Hong Kong Limited

Billy Fan
Principal Consultant

Enclosure: Location Plan of the Proposed Development

Ref.: CHPWELTNEI00_0_0043L.23

By Post

11 October 2023

Owners' Corporation
On Wing Building
51-59 Bonham Strand, Sheung Wan
Hong Kong Island, Hong Kong

Dear Sir/Madam,

S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central– Request Information of the Chillers, Cooling Towers and VRV at On Wing Building

We are commissioned by the applicant of the captioned lot to assess environmental noise impact on the proposed composite redevelopment at the captioned site. The location plan of the Proposed Development with 300m noise impact study area is attached for your reference.

We would like to have some enquires regarding the fixed noise sources (e.g. chillers, water-cooling towers or varied refrigerant volume system (VRV)) of On Wing Building. We would be grateful if you could provide following information for the purpose of Environmental Assessment:

Chillers / Cooling Towers / VRV

1. The locations and numbers of chillers / cooling towers / VRV, their sound data (noise level), model and cooling capacity, if available
2. Operation hours of these equipment
3. Number of operating equipment between 23:00 and 07:00 hours
4. Noise Mitigation Measures for the chillers / cooling towers / VRV (e.g. noise enclosure, silencer, etc.)

In addition, it would be grateful if we could have your permission in carrying out on-site noise measurement at the rooftop of the building. Due to the tight programme of this project, your prompt response on or before 18 October 2023 would be very much appreciated.

Should you have any questions on this submission, please do not hesitate to contact the undersigned at 3465 2828 (email: bfan@ramboll.com) or our Coco Ma at 3465 2807 (email: cocoma@ramboll.com).

Yours faithfully,
For and on behalf of
Ramboll Hong Kong Limited

Billy Fan
Principal Consultant

Enclosure: Location Plan of the Proposed Development

Ref.: CHPWELTNEI00_0_0044L.23

By Post

11 October 2023

Owners' Corporation
69 Bonham Strand
69 Bonham Strand, Sheung Wan
Hong Kong Island, Hong Kong

Dear Sir/Madam,

S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central– Request Information of the Chillers, Cooling Towers and VRV at 69 Bonham Strand

We are commissioned by the applicant of the captioned lot to assess environmental noise impact on the proposed composite redevelopment at the captioned site. The location plan of the Proposed Development with 300m noise impact study area is attached for your reference.

We would like to have some enquires regarding the fixed noise sources (e.g. chillers, water-cooling towers or varied refrigerant volume system (VRV)) of 69 Bonham Strand. We would be grateful if you could provide following information for the purpose of Environmental Assessment:

Chillers / Cooling Towers / VRV

1. The locations and numbers of chillers / cooling towers / VRV, their sound data (noise level), model and cooling capacity, if available
2. Operation hours of these equipment
3. Number of operating equipment between 23:00 and 07:00 hours
4. Noise Mitigation Measures for the chillers / cooling towers / VRV (e.g. noise enclosure, silencer, etc.)

In addition, it would be grateful if we could have your permission in carrying out on-site noise measurement at the rooftop of the building. Due to the tight programme of this project, your prompt response on or before 18 October 2023 would be very much appreciated.

Should you have any questions on this submission, please do not hesitate to contact the undersigned at 3465 2828 (email: bfan@ramboll.com) or our Coco Ma at 3465 2807 (email: cocoma@ramboll.com).

Yours faithfully,
For and on behalf of
Ramboll Hong Kong Limited

Billy Fan
Principal Consultant

Enclosure: Location Plan of the Proposed Development

Ref.: CHPWELTNEI00_0_0045L.23

By Post

11 October 2023

Management Office
Officeplus Sheung Wan
71-75 Bonham Strand, Sheung Wan
Hong Kong Island, Hong Kong

Dear Sir/Madam,

S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central– Request Information of the Chillers, Cooling Towers and VRV at Officeplus Sheung Wan

We are commissioned by the applicant of the captioned lot to assess environmental noise impact on the proposed composite redevelopment at the captioned site. The location plan of the Proposed Development with 300m noise impact study area is attached for your reference.

We would like to have some enquires regarding the fixed noise sources (e.g. chillers, water-cooling towers or varied refrigerant volume system (VRV)) of Officeplus Sheung Wan. We would be grateful if you could provide following information for the purpose of Environmental Assessment:

Chillers / Cooling Towers / VRV

1. The locations and numbers of chillers / cooling towers / VRV, their sound data (noise level), model and cooling capacity, if available
2. Operation hours of these equipment
3. Number of operating equipment between 23:00 and 07:00 hours
4. Noise Mitigation Measures for the chillers / cooling towers / VRV (e.g. noise enclosure, silencer, etc.)

In addition, it would be grateful if we could have your permission in carrying out on-site noise measurement at the rooftop of the building. Due to the tight programme of this project, your prompt response on or before 18 October 2023 would be very much appreciated.

Should you have any questions on this submission, please do not hesitate to contact the undersigned at 3465 2828 (email: bfan@ramboll.com) or our Coco Ma at 3465 2807 (email: cocoma@ramboll.com).

Yours faithfully,
For and on behalf of
Ramboll Hong Kong Limited

Billy Fan
Principal Consultant

Enclosure: Location Plan of the Proposed Development

Ref.: CHPWELTNEI00_0_0046L.23

By Post

11 October 2023

Management Office
Golden Centre
188 Des Voeux Road Central, Sheung Wan
Hong Kong Island, Hong Kong

Dear Sir/Madam,

S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central– Request Information of the Chillers, Cooling Towers and VRV at Golden Centre

We are commissioned by the applicant of the captioned lot to assess environmental noise impact on the proposed composite redevelopment at the captioned site. The location plan of the Proposed Development with 300m noise impact study area is attached for your reference.

We would like to have some enquires regarding the fixed noise sources (e.g. chillers, water-cooling towers or varied refrigerant volume system (VRV)) of Golden Centre. We would be grateful if you could provide following information for the purpose of Environmental Assessment:

Chillers / Cooling Towers / VRV

1. The locations and numbers of chillers / cooling towers / VRV, their sound data (noise level), model and cooling capacity, if available
2. Operation hours of these equipment
3. Number of operating equipment between 23:00 and 07:00 hours
4. Noise Mitigation Measures for the chillers / cooling towers / VRV (e.g. noise enclosure, silencer, etc.)

In addition, it would be grateful if we could have your permission in carrying out on-site noise measurement at the rooftop of the building. Due to the tight programme of this project, your prompt response on or before 18 October 2023 would be very much appreciated.

Should you have any questions on this submission, please do not hesitate to contact the undersigned at 3465 2828 (email: bfan@ramboll.com) or our Coco Ma at 3465 2807 (email: cocoma@ramboll.com).

Yours faithfully,
For and on behalf of
Ramboll Hong Kong Limited

Billy Fan
Principal Consultant

Enclosure: Location Plan of the Proposed Development

Ref.: CHPWELTNEI00_0_0047L.23

By Post

11 October 2023

Management Office
Tung Hip Commercial Building
244-248 Des Voeux Road Central, Sheung Wan
Hong Kong Island, Hong Kong

Dear Sir/Madam,

S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central– Request Information of the Chillers, Cooling Towers and VRV at Tung Hip Commercial Building

We are commissioned by the applicant of the captioned lot to assess environmental noise impact on the proposed composite redevelopment at the captioned site. The location plan of the Proposed Development with 300m noise impact study area is attached for your reference.

We would like to have some enquires regarding the fixed noise sources (e.g. chillers, water-cooling towers or varied refrigerant volume system (VRV)) of Tung Hip Commercial Building. We would be grateful if you could provide following information for the purpose of Environmental Assessment:

Chillers / Cooling Towers / VRV

1. The locations and numbers of chillers / cooling towers / VRV, their sound data (noise level), model and cooling capacity, if available
2. Operation hours of these equipment
3. Number of operating equipment between 23:00 and 07:00 hours
4. Noise Mitigation Measures for the chillers / cooling towers / VRV (e.g. noise enclosure, silencer, etc.)

In addition, it would be grateful if we could have your permission in carrying out on-site noise measurement at the rooftop of the building. Due to the tight programme of this project, your prompt response on or before 18 October 2023 would be very much appreciated.

Should you have any questions on this submission, please do not hesitate to contact the undersigned at 3465 2828 (email: bfan@ramboll.com) or our Coco Ma at 3465 2807 (email: cocoma@ramboll.com).

Yours faithfully,
For and on behalf of
Ramboll Hong Kong Limited

Billy Fan
Principal Consultant

Enclosure: Location Plan of the Proposed Development

Ref.: CHPWELTNEI00_0_0048L.23

By Post

11 October 2023

Management Office
Hing Yip Commercial Centre
272-284 Des Voeux Road Central, Sheung Wan
Hong Kong Island, Hong Kong

Dear Sir/Madam,

S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central– Request Information of the Chillers, Cooling Towers and VRV at Hing Yip Commercial Centre

We are commissioned by the applicant of the captioned lot to assess environmental noise impact on the proposed composite redevelopment at the captioned site. The location plan of the Proposed Development with 300m noise impact study area is attached for your reference.

We would like to have some enquires regarding the fixed noise sources (e.g. chillers, water-cooling towers or varied refrigerant volume system (VRV)) of Hing Yip Commercial Centre. We would be grateful if you could provide following information for the purpose of Environmental Assessment:

Chillers / Cooling Towers / VRV

1. The locations and numbers of chillers / cooling towers / VRV, their sound data (noise level), model and cooling capacity, if available
2. Operation hours of these equipment
3. Number of operating equipment between 23:00 and 07:00 hours
4. Noise Mitigation Measures for the chillers / cooling towers / VRV (e.g. noise enclosure, silencer, etc.)

In addition, it would be grateful if we could have your permission in carrying out on-site noise measurement at the rooftop of the building. Due to the tight programme of this project, your prompt response on or before 18 October 2023 would be very much appreciated.

Should you have any questions on this submission, please do not hesitate to contact the undersigned at 3465 2828 (email: bfan@ramboll.com) or our Coco Ma at 3465 2807 (email: cocoma@ramboll.com).

Yours faithfully,
For and on behalf of
Ramboll Hong Kong Limited

Billy Fan
Principal Consultant

Enclosure: Location Plan of the Proposed Development

Ref.: CHPWELTNEI00_0_0049L.23

By Post

11 October 2023

Management Office
10 Bonham Strand
10 Bonham Strand, Sheung Wan
Hong Kong Island, Hong Kong

Dear Sir/Madam,

S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central– Request Information of the Chillers, Cooling Towers and VRV at 10 Bonham Strand

We are commissioned by the applicant of the captioned lot to assess environmental noise impact on the proposed composite redevelopment at the captioned site. The location plan of the Proposed Development with 300m noise impact study area is attached for your reference.

We would like to have some enquires regarding the fixed noise sources (e.g. chillers, water-cooling towers or varied refrigerant volume system (VRV)) of 10 Bonham Strand. We would be grateful if you could provide following information for the purpose of Environmental Assessment:

Chillers / Cooling Towers / VRV

1. The locations and numbers of chillers / cooling towers / VRV, their sound data (noise level), model and cooling capacity, if available
2. Operation hours of these equipment
3. Number of operating equipment between 23:00 and 07:00 hours
4. Noise Mitigation Measures for the chillers / cooling towers / VRV (e.g. noise enclosure, silencer, etc.)

In addition, it would be grateful if we could have your permission in carrying out on-site noise measurement at the rooftop of the building. Due to the tight programme of this project, your prompt response on or before 18 October 2023 would be very much appreciated.

Should you have any questions on this submission, please do not hesitate to contact the undersigned at 3465 2828 (email: bfan@ramboll.com) or our Coco Ma at 3465 2807 (email: cocoma@ramboll.com).

Yours faithfully,
For and on behalf of
Ramboll Hong Kong Limited

Billy Fan
Principal Consultant

Enclosure: Location Plan of the Proposed Development

Ref.: CHPWELTNEI00_0_0050L.23

By Post

11 October 2023

Management Office
The Pemberton
22-26 Bonham Strand, Sheung Wan
Hong Kong Island, Hong Kong

Dear Sir/Madam,

S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central– Request Information of the Chillers, Cooling Towers and VRV at The Pemberton

We are commissioned by the applicant of the captioned lot to assess environmental noise impact on the proposed composite redevelopment at the captioned site. The location plan of the Proposed Development with 300m noise impact study area is attached for your reference.

We would like to have some enquires regarding the fixed noise sources (e.g. chillers, water-cooling towers or varied refrigerant volume system (VRV)) of The Pemberton. We would be grateful if you could provide following information for the purpose of Environmental Assessment:

Chillers / Cooling Towers / VRV

1. The locations and numbers of chillers / cooling towers / VRV, their sound data (noise level), model and cooling capacity, if available
2. Operation hours of these equipment
3. Number of operating equipment between 23:00 and 07:00 hours
4. Noise Mitigation Measures for the chillers / cooling towers / VRV (e.g. noise enclosure, silencer, etc.)

In addition, it would be grateful if we could have your permission in carrying out on-site noise measurement at the rooftop of the building. Due to the tight programme of this project, your prompt response on or before 18 October 2023 would be very much appreciated.

Should you have any questions on this submission, please do not hesitate to contact the undersigned at 3465 2828 (email: bfan@ramboll.com) or our Coco Ma at 3465 2807 (email: cocoma@ramboll.com).

Yours faithfully,
For and on behalf of
Ramboll Hong Kong Limited

Billy Fan
Principal Consultant

Enclosure: Location Plan of the Proposed Development

Ref.: CHPWELTNEI00_0_0051L.23

By Post

11 October 2023

Management Office
Gold & Silver Commercial Building
12-18 Mercer Street, Sheung Wan
Hong Kong Island, Hong Kong

Dear Sir/Madam,

S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central– Request Information of the Chillers, Cooling Towers and VRV at Gold & Silver Commercial Building

We are commissioned by the applicant of the captioned lot to assess environmental noise impact on the proposed composite redevelopment at the captioned site. The location plan of the Proposed Development with 300m noise impact study area is attached for your reference.

We would like to have some enquires regarding the fixed noise sources (e.g. chillers, water-cooling towers or varied refrigerant volume system (VRV)) of Gold & Silver Commercial Building. We would be grateful if you could provide following information for the purpose of Environmental Assessment:

Chillers / Cooling Towers / VRV

1. The locations and numbers of chillers / cooling towers / VRV, their sound data (noise level), model and cooling capacity, if available
2. Operation hours of these equipment
3. Number of operating equipment between 23:00 and 07:00 hours
4. Noise Mitigation Measures for the chillers / cooling towers / VRV (e.g. noise enclosure, silencer, etc.)

In addition, it would be grateful if we could have your permission in carrying out on-site noise measurement at the rooftop of the building. Due to the tight programme of this project, your prompt response on or before 18 October 2023 would be very much appreciated.

Should you have any questions on this submission, please do not hesitate to contact the undersigned at 3465 2828 (email: bfan@ramboll.com) or our Coco Ma at 3465 2807 (email: cocoma@ramboll.com).

Yours faithfully,
For and on behalf of
Ramboll Hong Kong Limited

Billy Fan
Principal Consultant

Enclosure: Location Plan of the Proposed Development

Ref.: CHPWELTNEI00_0_0052L.23

By Post

11 October 2023

Management Office
Bonham Circus
40-44 Bonham Strand, Sheung Wan
Hong Kong Island, Hong Kong

Dear Sir/Madam,

S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central– Request Information of the Chillers, Cooling Towers and VRV at Bonham Circus

We are commissioned by the applicant of the captioned lot to assess environmental noise impact on the proposed composite redevelopment at the captioned site. The location plan of the Proposed Development with 300m noise impact study area is attached for your reference.

We would like to have some enquires regarding the fixed noise sources (e.g. chillers, water-cooling towers or varied refrigerant volume system (VRV)) of Bonham Circus. We would be grateful if you could provide following information for the purpose of Environmental Assessment:

Chillers / Cooling Towers / VRV

1. The locations and numbers of chillers / cooling towers / VRV, their sound data (noise level), model and cooling capacity, if available
2. Operation hours of these equipment
3. Number of operating equipment between 23:00 and 07:00 hours
4. Noise Mitigation Measures for the chillers / cooling towers / VRV (e.g. noise enclosure, silencer, etc.)

In addition, it would be grateful if we could have your permission in carrying out on-site noise measurement at the rooftop of the building. Due to the tight programme of this project, your prompt response on or before 18 October 2023 would be very much appreciated.

Should you have any questions on this submission, please do not hesitate to contact the undersigned at 3465 2828 (email: bfan@ramboll.com) or our Coco Ma at 3465 2807 (email: cocoma@ramboll.com).

Yours faithfully,
For and on behalf of
Ramboll Hong Kong Limited

Billy Fan
Principal Consultant

Enclosure: Location Plan of the Proposed Development

Ref.: CHPWELTNEI00_0_0053L.23

By Post

11 October 2023

Management Office
Strand 50
50 Bonham Strand, Sheung Wan
Hong Kong Island, Hong Kong

Dear Sir/Madam,

S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central– Request Information of the Chillers, Cooling Towers and VRV at Strand 50

We are commissioned by the applicant of the captioned lot to assess environmental noise impact on the proposed composite redevelopment at the captioned site. The location plan of the Proposed Development with 300m noise impact study area is attached for your reference.

We would like to have some enquires regarding the fixed noise sources (e.g. chillers, water-cooling towers or varied refrigerant volume system (VRV)) of Strand 50. We would be grateful if you could provide following information for the purpose of Environmental Assessment:

Chillers / Cooling Towers / VRV

1. The locations and numbers of chillers / cooling towers / VRV, their sound data (noise level), model and cooling capacity, if available
2. Operation hours of these equipment
3. Number of operating equipment between 23:00 and 07:00 hours
4. Noise Mitigation Measures for the chillers / cooling towers / VRV (e.g. noise enclosure, silencer, etc.)

In addition, it would be grateful if we could have your permission in carrying out on-site noise measurement at the rooftop of the building. Due to the tight programme of this project, your prompt response on or before 18 October 2023 would be very much appreciated.

Should you have any questions on this submission, please do not hesitate to contact the undersigned at 3465 2828 (email: bfan@ramboll.com) or our Coco Ma at 3465 2807 (email: cocoma@ramboll.com).

Yours faithfully,
For and on behalf of
Ramboll Hong Kong Limited

Billy Fan
Principal Consultant

Enclosure: Location Plan of the Proposed Development

Ref.: CHPWELTNEI00_0_0054L.23

By Post

11 October 2023

Management Office
Tern Centre Tower II
251 Queen's Road Central, Sheung Wan
Hong Kong Island, Hong Kong

Dear Sir/Madam,

S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central– Request Information of the Chillers, Cooling Towers and VRV at Tern Centre Tower II

We are commissioned by the applicant of the captioned lot to assess environmental noise impact on the proposed composite redevelopment at the captioned site. The location plan of the Proposed Development with 300m noise impact study area is attached for your reference.

We would like to have some enquires regarding the fixed noise sources (e.g. chillers, water-cooling towers or varied refrigerant volume system (VRV)) of Tern Centre Tower II. We would be grateful if you could provide following information for the purpose of Environmental Assessment:

Chillers / Cooling Towers / VRV

1. The locations and numbers of chillers / cooling towers / VRV, their sound data (noise level), model and cooling capacity, if available
2. Operation hours of these equipment
3. Number of operating equipment between 23:00 and 07:00 hours
4. Noise Mitigation Measures for the chillers / cooling towers / VRV (e.g. noise enclosure, silencer, etc.)

In addition, it would be grateful if we could have your permission in carrying out on-site noise measurement at the rooftop of the building. Due to the tight programme of this project, your prompt response on or before 18 October 2023 would be very much appreciated.

Should you have any questions on this submission, please do not hesitate to contact the undersigned at 3465 2828 (email: bfan@ramboll.com) or our Coco Ma at 3465 2807 (email: cocoma@ramboll.com).

Yours faithfully,
For and on behalf of
Ramboll Hong Kong Limited

Billy Fan
Principal Consultant

Enclosure: Location Plan of the Proposed Development

Ref.: CHPWELTNEI00_0_0055L.23

By Post

11 October 2023

Management Office
299 QRC
287-299 Queen's Road Central, Sheung Wan
Hong Kong Island, Hong Kong

Dear Sir/Madam,

S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central– Request Information of the Chillers, Cooling Towers and VRV at 299 QRC

We are commissioned by the applicant of the captioned lot to assess environmental noise impact on the proposed composite redevelopment at the captioned site. The location plan of the Proposed Development with 300m noise impact study area is attached for your reference.

We would like to have some enquires regarding the fixed noise sources (e.g. chillers, water-cooling towers or varied refrigerant volume system (VRV)) of 299 QRC. We would be grateful if you could provide following information for the purpose of Environmental Assessment:

Chillers / Cooling Towers / VRV

1. The locations and numbers of chillers / cooling towers / VRV, their sound data (noise level), model and cooling capacity, if available
2. Operation hours of these equipment
3. Number of operating equipment between 23:00 and 07:00 hours
4. Noise Mitigation Measures for the chillers / cooling towers / VRV (e.g. noise enclosure, silencer, etc.)

In addition, it would be grateful if we could have your permission in carrying out on-site noise measurement at the rooftop of the building. Due to the tight programme of this project, your prompt response on or before 18 October 2023 would be very much appreciated.

Should you have any questions on this submission, please do not hesitate to contact the undersigned at 3465 2828 (email: bfan@ramboll.com) or our Coco Ma at 3465 2807 (email: cocoma@ramboll.com).

Yours faithfully,
For and on behalf of
Ramboll Hong Kong Limited

Billy Fan
Principal Consultant

Enclosure: Location Plan of the Proposed Development

Ref.: CHPWELTNEI00_0_0056L.23

By Post

11 October 2023

Management Office
Hong Kong Jewellery Building
178-180 Queen's Road Central, Sheung Wan
Hong Kong Island, Hong Kong

Dear Sir/Madam,

S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central– Request Information of the Chillers, Cooling Towers and VRV at Hong Kong Jewellery Building

We are commissioned by the applicant of the captioned lot to assess environmental noise impact on the proposed composite redevelopment at the captioned site. The location plan of the Proposed Development with 300m noise impact study area is attached for your reference.

We would like to have some enquires regarding the fixed noise sources (e.g. chillers, water-cooling towers or varied refrigerant volume system (VRV)) of Hong Kong Jewellery Building. We would be grateful if you could provide following information for the purpose of Environmental Assessment:

Chillers / Cooling Towers / VRV

1. The locations and numbers of chillers / cooling towers / VRV, their sound data (noise level), model and cooling capacity, if available
2. Operation hours of these equipment
3. Number of operating equipment between 23:00 and 07:00 hours
4. Noise Mitigation Measures for the chillers / cooling towers / VRV (e.g. noise enclosure, silencer, etc.)

In addition, it would be grateful if we could have your permission in carrying out on-site noise measurement at the rooftop of the building. Due to the tight programme of this project, your prompt response on or before 18 October 2023 would be very much appreciated.

Should you have any questions on this submission, please do not hesitate to contact the undersigned at 3465 2828 (email: bfan@ramboll.com) or our Coco Ma at 3465 2807 (email: cocoma@ramboll.com).

Yours faithfully,
For and on behalf of
Ramboll Hong Kong Limited

Billy Fan
Principal Consultant

Enclosure: Location Plan of the Proposed Development

Ref.: CHPWELTNEI00_0_0057L.23

By Post

11 October 2023

Management Office
Kam On Building
176A-176F Queen's Road Central, Central
Hong Kong Island, Hong Kong

Dear Sir/Madam,

S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central– Request Information of the Chillers, Cooling Towers and VRV at Kam On Building

We are commissioned by the applicant of the captioned lot to assess environmental noise impact on the proposed composite redevelopment at the captioned site. The location plan of the Proposed Development with 300m noise impact study area is attached for your reference.

We would like to have some enquires regarding the fixed noise sources (e.g. chillers, water-cooling towers or varied refrigerant volume system (VRV)) of Kam On Building. We would be grateful if you could provide following information for the purpose of Environmental Assessment:

Chillers / Cooling Towers / VRV

1. The locations and numbers of chillers / cooling towers / VRV, their sound data (noise level), model and cooling capacity, if available
2. Operation hours of these equipment
3. Number of operating equipment between 23:00 and 07:00 hours
4. Noise Mitigation Measures for the chillers / cooling towers / VRV (e.g. noise enclosure, silencer, etc.)

In addition, it would be grateful if we could have your permission in carrying out on-site noise measurement at the rooftop of the building. Due to the tight programme of this project, your prompt response on or before 18 October 2023 would be very much appreciated.

Should you have any questions on this submission, please do not hesitate to contact the undersigned at 3465 2828 (email: bfan@ramboll.com) or our Coco Ma at 3465 2807 (email: cocoma@ramboll.com).

Yours faithfully,
For and on behalf of
Ramboll Hong Kong Limited

Billy Fan
Principal Consultant

Enclosure: Location Plan of the Proposed Development

Ref.: CHPWELTNEI00_0_0058L.23

By Post

11 October 2023

Management Office
On Building
158-164 Queen's Road Central, Central
Hong Kong Island, Hong Kong

Dear Sir/Madam,

S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central– Request Information of the Chillers, Cooling Towers and VRV at On Building

We are commissioned by the applicant of the captioned lot to assess environmental noise impact on the proposed composite redevelopment at the captioned site. The location plan of the Proposed Development with 300m noise impact study area is attached for your reference.

We would like to have some enquires regarding the fixed noise sources (e.g. chillers, water-cooling towers or varied refrigerant volume system (VRV)) of On Building. We would be grateful if you could provide following information for the purpose of Environmental Assessment:

Chillers / Cooling Towers / VRV

1. The locations and numbers of chillers / cooling towers / VRV, their sound data (noise level), model and cooling capacity, if available
2. Operation hours of these equipment
3. Number of operating equipment between 23:00 and 07:00 hours
4. Noise Mitigation Measures for the chillers / cooling towers / VRV (e.g. noise enclosure, silencer, etc.)

In addition, it would be grateful if we could have your permission in carrying out on-site noise measurement at the rooftop of the building. Due to the tight programme of this project, your prompt response on or before 18 October 2023 would be very much appreciated.

Should you have any questions on this submission, please do not hesitate to contact the undersigned at 3465 2828 (email: bfan@ramboll.com) or our Coco Ma at 3465 2807 (email: cocoma@ramboll.com).

Yours faithfully,
For and on behalf of
Ramboll Hong Kong Limited

Billy Fan
Principal Consultant

Enclosure: Location Plan of the Proposed Development

Ref.: CHPWELTNEI00_0_0059L.23

By Post

11 October 2023

Management Office
Queen's Road Centre
152 Queen's Road Central, Central
Hong Kong Island, Hong Kong

Dear Sir/Madam,

S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central– Request Information of the Chillers, Cooling Towers and VRV at Queen's Road Centre

We are commissioned by the applicant of the captioned lot to assess environmental noise impact on the proposed composite redevelopment at the captioned site. The location plan of the Proposed Development with 300m noise impact study area is attached for your reference.

We would like to have some enquires regarding the fixed noise sources (e.g. chillers, water-cooling towers or varied refrigerant volume system (VRV)) of Queen's Road Centre. We would be grateful if you could provide following information for the purpose of Environmental Assessment:

Chillers / Cooling Towers / VRV

1. The locations and numbers of chillers / cooling towers / VRV, their sound data (noise level), model and cooling capacity, if available
2. Operation hours of these equipment
3. Number of operating equipment between 23:00 and 07:00 hours
4. Noise Mitigation Measures for the chillers / cooling towers / VRV (e.g. noise enclosure, silencer, etc.)

In addition, it would be grateful if we could have your permission in carrying out on-site noise measurement at the rooftop of the building. Due to the tight programme of this project, your prompt response on or before 18 October 2023 would be very much appreciated.

Should you have any questions on this submission, please do not hesitate to contact the undersigned at 3465 2828 (email: bfan@ramboll.com) or our Coco Ma at 3465 2807 (email: cocoma@ramboll.com).

Yours faithfully,
For and on behalf of
Ramboll Hong Kong Limited

Billy Fan
Principal Consultant

Enclosure: Location Plan of the Proposed Development

Ref.: CHPWELTNEI00_0_0060L.23

By Post

11 October 2023

Management Office
Stag Building
148 Queen's Road Central, Central
Hong Kong Island, Hong Kong

Dear Sir/Madam,

S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central– Request Information of the Chillers, Cooling Towers and VRV at Stag Building

We are commissioned by the applicant of the captioned lot to assess environmental noise impact on the proposed composite redevelopment at the captioned site. The location plan of the Proposed Development with 300m noise impact study area is attached for your reference.

We would like to have some enquires regarding the fixed noise sources (e.g. chillers, water-cooling towers or varied refrigerant volume system (VRV)) of Stag Building. We would be grateful if you could provide following information for the purpose of Environmental Assessment:

Chillers / Cooling Towers / VRV

1. The locations and numbers of chillers / cooling towers / VRV, their sound data (noise level), model and cooling capacity, if available
2. Operation hours of these equipment
3. Number of operating equipment between 23:00 and 07:00 hours
4. Noise Mitigation Measures for the chillers / cooling towers / VRV (e.g. noise enclosure, silencer, etc.)

In addition, it would be grateful if we could have your permission in carrying out on-site noise measurement at the rooftop of the building. Due to the tight programme of this project, your prompt response on or before 18 October 2023 would be very much appreciated.

Should you have any questions on this submission, please do not hesitate to contact the undersigned at 3465 2828 (email: bfan@ramboll.com) or our Coco Ma at 3465 2807 (email: cocoma@ramboll.com).

Yours faithfully,
For and on behalf of
Ramboll Hong Kong Limited

Billy Fan
Principal Consultant

Enclosure: Location Plan of the Proposed Development

Ref.: CHPWELTNEI00_0_0061L.23

By Post

11 October 2023

Management Office
V Heun Building
138 Queen's Road Central, Central
Hong Kong Island, Hong Kong

Dear Sir/Madam,

S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central– Request Information of the Chillers, Cooling Towers and VRV at V Heun Building

We are commissioned by the applicant of the captioned lot to assess environmental noise impact on the proposed composite redevelopment at the captioned site. The location plan of the Proposed Development with 300m noise impact study area is attached for your reference.

We would like to have some enquires regarding the fixed noise sources (e.g. chillers, water-cooling towers or varied refrigerant volume system (VRV)) of V Heun Building. We would be grateful if you could provide following information for the purpose of Environmental Assessment:

Chillers / Cooling Towers / VRV

1. The locations and numbers of chillers / cooling towers / VRV, their sound data (noise level), model and cooling capacity, if available
2. Operation hours of these equipment
3. Number of operating equipment between 23:00 and 07:00 hours
4. Noise Mitigation Measures for the chillers / cooling towers / VRV (e.g. noise enclosure, silencer, etc.)

In addition, it would be grateful if we could have your permission in carrying out on-site noise measurement at the rooftop of the building. Due to the tight programme of this project, your prompt response on or before 18 October 2023 would be very much appreciated.

Should you have any questions on this submission, please do not hesitate to contact the undersigned at 3465 2828 (email: bfan@ramboll.com) or our Coco Ma at 3465 2807 (email: cocoma@ramboll.com).

Yours faithfully,
For and on behalf of
Ramboll Hong Kong Limited

Billy Fan
Principal Consultant

Enclosure: Location Plan of the Proposed Development

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Ref.: CHPWELTNEI00_0_0062L.23

By Post

11 October 2023

Management Office
Yin Serviced Apartments
97A Wellington Street, Central
Hong Kong Island, Hong Kong

Dear Sir/Madam,

S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central– Request Information of the Chillers, Cooling Towers and VRV at Yin Serviced Apartments

We are commissioned by the applicant of the captioned lot to assess environmental noise impact on the proposed composite redevelopment at the captioned site. The location plan of the Proposed Development with 300m noise impact study area is attached for your reference.

We would like to have some enquires regarding the fixed noise sources (e.g. chillers, water-cooling towers or varied refrigerant volume system (VRV)) of Yin Serviced Apartments. We would be grateful if you could provide following information for the purpose of Environmental Assessment:

Chillers / Cooling Towers / VRV

1. The locations and numbers of chillers / cooling towers / VRV, their sound data (noise level), model and cooling capacity, if available
2. Operation hours of these equipment
3. Number of operating equipment between 23:00 and 07:00 hours
4. Noise Mitigation Measures for the chillers / cooling towers / VRV (e.g. noise enclosure, silencer, etc.)

In addition, it would be grateful if we could have your permission in carrying out on-site noise measurement at the rooftop of the building. Due to the tight programme of this project, your prompt response on or before 18 October 2023 would be very much appreciated.

Should you have any questions on this submission, please do not hesitate to contact the undersigned at 3465 2828 (email: bfan@ramboll.com) or our Coco Ma at 3465 2807 (email: cocoma@ramboll.com).

Yours faithfully,
For and on behalf of
Ramboll Hong Kong Limited

Billy Fan
Principal Consultant

Enclosure: Location Plan of the Proposed Development

Q:\Projects\CHPWELTNEI00\02 Project Management\02 Corr\CHPWELTNEI00_0_0062L.23.docx

Ref.: CHPWELTNEI00_0_0063L.23

By Post

11 October 2023

Management Office
ICBC Asia Building
122-126 Queen's Road Central, Central
Hong Kong Island, Hong Kong

Dear Sir/Madam,

S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central– Request Information of the Chillers, Cooling Towers and VRV at ICBC Asia Building

We are commissioned by the applicant of the captioned lot to assess environmental noise impact on the proposed composite redevelopment at the captioned site. The location plan of the Proposed Development with 300m noise impact study area is attached for your reference.

We would like to have some enquires regarding the fixed noise sources (e.g. chillers, water-cooling towers or varied refrigerant volume system (VRV)) of ICBC Asia Building. We would be grateful if you could provide following information for the purpose of Environmental Assessment:

Chillers / Cooling Towers / VRV

1. The locations and numbers of chillers / cooling towers / VRV, their sound data (noise level), model and cooling capacity, if available
2. Operation hours of these equipment
3. Number of operating equipment between 23:00 and 07:00 hours
4. Noise Mitigation Measures for the chillers / cooling towers / VRV (e.g. noise enclosure, silencer, etc.)

In addition, it would be grateful if we could have your permission in carrying out on-site noise measurement at the rooftop of the building. Due to the tight programme of this project, your prompt response on or before 18 October 2023 would be very much appreciated.

Should you have any questions on this submission, please do not hesitate to contact the undersigned at 3465 2828 (email: bfan@ramboll.com) or our Coco Ma at 3465 2807 (email: cocoma@ramboll.com).

Yours faithfully,
For and on behalf of
Ramboll Hong Kong Limited

Billy Fan
Principal Consultant

Enclosure: Location Plan of the Proposed Development

Q:\Projects\CHPWELTNEI00\02 Project Management\02 Corr\CHPWELTNEI00_0_0063L.23.docx

Ref.: CHPWELTNEI00_0_0064L.23

By Post

11 October 2023

Management Office
Wings Building
110-116 Queen's Road Central, Central
Hong Kong Island, Hong Kong

Dear Sir/Madam,

S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central– Request Information of the Chillers, Cooling Towers and VRV at Wings Building

We are commissioned by the applicant of the captioned lot to assess environmental noise impact on the proposed composite redevelopment at the captioned site. The location plan of the Proposed Development with 300m noise impact study area is attached for your reference.

We would like to have some enquires regarding the fixed noise sources (e.g. chillers, water-cooling towers or varied refrigerant volume system (VRV)) of Wings Building. We would be grateful if you could provide following information for the purpose of Environmental Assessment:

Chillers / Cooling Towers / VRV

1. The locations and numbers of chillers / cooling towers / VRV, their sound data (noise level), model and cooling capacity, if available
2. Operation hours of these equipment
3. Number of operating equipment between 23:00 and 07:00 hours
4. Noise Mitigation Measures for the chillers / cooling towers / VRV (e.g. noise enclosure, silencer, etc.)

In addition, it would be grateful if we could have your permission in carrying out on-site noise measurement at the rooftop of the building. Due to the tight programme of this project, your prompt response on or before 18 October 2023 would be very much appreciated.

Should you have any questions on this submission, please do not hesitate to contact the undersigned at 3465 2828 (email: bfan@ramboll.com) or our Coco Ma at 3465 2807 (email: cocoma@ramboll.com).

Yours faithfully,
For and on behalf of
Ramboll Hong Kong Limited

Billy Fan
Principal Consultant

Enclosure: Location Plan of the Proposed Development

Ref.: CHPWELTNEI00_0_0065L.23

By Post

11 October 2023

Management Office
100QRC
100 Queen's Road Central, Central
Hong Kong Island, Hong Kong

Dear Sir/Madam,

S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central– Request Information of the Chillers, Cooling Towers and VRV at 100QRC

We are commissioned by the applicant of the captioned lot to assess environmental noise impact on the proposed composite redevelopment at the captioned site. The location plan of the Proposed Development with 300m noise impact study area is attached for your reference.

We would like to have some enquires regarding the fixed noise sources (e.g. chillers, water-cooling towers or varied refrigerant volume system (VRV)) of 100QRC. We would be grateful if you could provide following information for the purpose of Environmental Assessment:

Chillers / Cooling Towers / VRV

1. The locations and numbers of chillers / cooling towers / VRV, their sound data (noise level), model and cooling capacity, if available
2. Operation hours of these equipment
3. Number of operating equipment between 23:00 and 07:00 hours
4. Noise Mitigation Measures for the chillers / cooling towers / VRV (e.g. noise enclosure, silencer, etc.)

In addition, it would be grateful if we could have your permission in carrying out on-site noise measurement at the rooftop of the building. Due to the tight programme of this project, your prompt response on or before 18 October 2023 would be very much appreciated.

Should you have any questions on this submission, please do not hesitate to contact the undersigned at 3465 2828 (email: bfan@ramboll.com) or our Coco Ma at 3465 2807 (email: cocoma@ramboll.com).

Yours faithfully,
For and on behalf of
Ramboll Hong Kong Limited

Billy Fan
Principal Consultant

Enclosure: Location Plan of the Proposed Development

Ref.: CHPWELTNEI00_0_0066L.23

By Post

11 October 2023

Management Office
Regent Centre
88 Queen's Road Central, Central
Hong Kong Island, Hong Kong

Dear Sir/Madam,

S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central– Request Information of the Chillers, Cooling Towers and VRV at Regent Centre

We are commissioned by the applicant of the captioned lot to assess environmental noise impact on the proposed composite redevelopment at the captioned site. The location plan of the Proposed Development with 300m noise impact study area is attached for your reference.

We would like to have some enquires regarding the fixed noise sources (e.g. chillers, water-cooling towers or varied refrigerant volume system (VRV)) of Regent Centre. We would be grateful if you could provide following information for the purpose of Environmental Assessment:

Chillers / Cooling Towers / VRV

1. The locations and numbers of chillers / cooling towers / VRV, their sound data (noise level), model and cooling capacity, if available
2. Operation hours of these equipment
3. Number of operating equipment between 23:00 and 07:00 hours
4. Noise Mitigation Measures for the chillers / cooling towers / VRV (e.g. noise enclosure, silencer, etc.)

In addition, it would be grateful if we could have your permission in carrying out on-site noise measurement at the rooftop of the building. Due to the tight programme of this project, your prompt response on or before 18 October 2023 would be very much appreciated.

Should you have any questions on this submission, please do not hesitate to contact the undersigned at 3465 2828 (email: bfan@ramboll.com) or our Coco Ma at 3465 2807 (email: cocoma@ramboll.com).

Yours faithfully,
For and on behalf of
Ramboll Hong Kong Limited

Billy Fan
Principal Consultant

Enclosure: Location Plan of the Proposed Development

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Ref.: CHPWELTNEI00_0_0067L.23

By Post

11 October 2023

Management Office
H Queen's
80 Queen's Road Central, Central
Hong Kong Island, Hong Kong

Dear Sir/Madam,

S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central– Request Information of the Chillers, Cooling Towers and VRV at H Queen's

We are commissioned by the applicant of the captioned lot to assess environmental noise impact on the proposed composite redevelopment at the captioned site. The location plan of the Proposed Development with 300m noise impact study area is attached for your reference.

We would like to have some enquires regarding the fixed noise sources (e.g. chillers, water-cooling towers or varied refrigerant volume system (VRV)) of H Queen's. We would be grateful if you could provide following information for the purpose of Environmental Assessment:

Chillers / Cooling Towers / VRV

1. The locations and numbers of chillers / cooling towers / VRV, their sound data (noise level), model and cooling capacity, if available
2. Operation hours of these equipment
3. Number of operating equipment between 23:00 and 07:00 hours
4. Noise Mitigation Measures for the chillers / cooling towers / VRV (e.g. noise enclosure, silencer, etc.)

In addition, it would be grateful if we could have your permission in carrying out on-site noise measurement at the rooftop of the building. Due to the tight programme of this project, your prompt response on or before 18 October 2023 would be very much appreciated.

Should you have any questions on this submission, please do not hesitate to contact the undersigned at 3465 2828 (email: bfan@ramboll.com) or our Coco Ma at 3465 2807 (email: cocoma@ramboll.com).

Yours faithfully,
For and on behalf of
Ramboll Hong Kong Limited

Billy Fan
Principal Consultant

Enclosure: Location Plan of the Proposed Development

Ref.: CHPWELTNEI00_0_0068L.23

By Post

11 October 2023

Management Office
The Pottinger
21 Stanley Street, Central
Hong Kong Island, Hong Kong

Dear Sir/Madam,

S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central– Request Information of the Chillers, Cooling Towers and VRV at The Pottinger

We are commissioned by the applicant of the captioned lot to assess environmental noise impact on the proposed composite redevelopment at the captioned site. The location plan of the Proposed Development with 300m noise impact study area is attached for your reference.

We would like to have some enquires regarding the fixed noise sources (e.g. chillers, water-cooling towers or varied refrigerant volume system (VRV)) of The Pottinger. We would be grateful if you could provide following information for the purpose of Environmental Assessment:

Chillers / Cooling Towers / VRV

1. The locations and numbers of chillers / cooling towers / VRV, their sound data (noise level), model and cooling capacity, if available
2. Operation hours of these equipment
3. Number of operating equipment between 23:00 and 07:00 hours
4. Noise Mitigation Measures for the chillers / cooling towers / VRV (e.g. noise enclosure, silencer, etc.)

In addition, it would be grateful if we could have your permission in carrying out on-site noise measurement at the rooftop of the building. Due to the tight programme of this project, your prompt response on or before 18 October 2023 would be very much appreciated.

Should you have any questions on this submission, please do not hesitate to contact the undersigned at 3465 2828 (email: bfan@ramboll.com) or our Coco Ma at 3465 2807 (email: cocoma@ramboll.com).

Yours faithfully,
For and on behalf of
Ramboll Hong Kong Limited

Billy Fan
Principal Consultant

Enclosure: Location Plan of the Proposed Development

Ref.: CHPWELTNEI00_0_0069L.23

By Post

11 October 2023

Management Office
Crawford House
70 Queen's Road Central, Central
Hong Kong Island, Hong Kong

Dear Sir/Madam,

S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central– Request Information of the Chillers, Cooling Towers and VRV at Crawford House

We are commissioned by the applicant of the captioned lot to assess environmental noise impact on the proposed composite redevelopment at the captioned site. The location plan of the Proposed Development with 300m noise impact study area is attached for your reference.

We would like to have some enquires regarding the fixed noise sources (e.g. chillers, water-cooling towers or varied refrigerant volume system (VRV)) of Crawford House. We would be grateful if you could provide following information for the purpose of Environmental Assessment:

Chillers / Cooling Towers / VRV

1. The locations and numbers of chillers / cooling towers / VRV, their sound data (noise level), model and cooling capacity, if available
2. Operation hours of these equipment
3. Number of operating equipment between 23:00 and 07:00 hours
4. Noise Mitigation Measures for the chillers / cooling towers / VRV (e.g. noise enclosure, silencer, etc.)

In addition, it would be grateful if we could have your permission in carrying out on-site noise measurement at the rooftop of the building. Due to the tight programme of this project, your prompt response on or before 18 October 2023 would be very much appreciated.

Should you have any questions on this submission, please do not hesitate to contact the undersigned at 3465 2828 (email: bfan@ramboll.com) or our Coco Ma at 3465 2807 (email: cocoma@ramboll.com).

Yours faithfully,
For and on behalf of
Ramboll Hong Kong Limited

Billy Fan
Principal Consultant

Enclosure: Location Plan of the Proposed Development

Ref.: CHPWELTNEI00_0_0070L.23

By Post

11 October 2023

Management Office
Pearl Oriental House
58-64 Stanley Street, Central
Hong Kong Island, Hong Kong

Dear Sir/Madam,

S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central– Request Information of the Chillers, Cooling Towers and VRV at Pearl Oriental House

We are commissioned by the applicant of the captioned lot to assess environmental noise impact on the proposed composite redevelopment at the captioned site. The location plan of the Proposed Development with 300m noise impact study area is attached for your reference.

We would like to have some enquires regarding the fixed noise sources (e.g. chillers, water-cooling towers or varied refrigerant volume system (VRV)) of Pearl Oriental House. We would be grateful if you could provide following information for the purpose of Environmental Assessment:

Chillers / Cooling Towers / VRV

1. The locations and numbers of chillers / cooling towers / VRV, their sound data (noise level), model and cooling capacity, if available
2. Operation hours of these equipment
3. Number of operating equipment between 23:00 and 07:00 hours
4. Noise Mitigation Measures for the chillers / cooling towers / VRV (e.g. noise enclosure, silencer, etc.)

In addition, it would be grateful if we could have your permission in carrying out on-site noise measurement at the rooftop of the building. Due to the tight programme of this project, your prompt response on or before 18 October 2023 would be very much appreciated.

Should you have any questions on this submission, please do not hesitate to contact the undersigned at 3465 2828 (email: bfan@ramboll.com) or our Coco Ma at 3465 2807 (email: cocoma@ramboll.com).

Yours faithfully,
For and on behalf of
Ramboll Hong Kong Limited

Billy Fan
Principal Consultant

Enclosure: Location Plan of the Proposed Development

Ref.: CHPWELTNEI00_0_0071L.23

By Post

11 October 2023

Management Office
World Trust Tower
50 Stanley Street, Central
Hong Kong Island, Hong Kong

Dear Sir/Madam,

S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central– Request Information of the Chillers, Cooling Towers and VRV at World Trust Tower

We are commissioned by the applicant of the captioned lot to assess environmental noise impact on the proposed composite redevelopment at the captioned site. The location plan of the Proposed Development with 300m noise impact study area is attached for your reference.

We would like to have some enquires regarding the fixed noise sources (e.g. chillers, water-cooling towers or varied refrigerant volume system (VRV)) of World Trust Tower. We would be grateful if you could provide following information for the purpose of Environmental Assessment:

Chillers / Cooling Towers / VRV

1. The locations and numbers of chillers / cooling towers / VRV, their sound data (noise level), model and cooling capacity, if available
2. Operation hours of these equipment
3. Number of operating equipment between 23:00 and 07:00 hours
4. Noise Mitigation Measures for the chillers / cooling towers / VRV (e.g. noise enclosure, silencer, etc.)

In addition, it would be grateful if we could have your permission in carrying out on-site noise measurement at the rooftop of the building. Due to the tight programme of this project, your prompt response on or before 18 October 2023 would be very much appreciated.

Should you have any questions on this submission, please do not hesitate to contact the undersigned at 3465 2828 (email: bfan@ramboll.com) or our Coco Ma at 3465 2807 (email: cocoma@ramboll.com).

Yours faithfully,
For and on behalf of
Ramboll Hong Kong Limited

Billy Fan
Principal Consultant

Enclosure: Location Plan of the Proposed Development

Ref.: CHPWELTNEI00_0_0072L.23

By Post

11 October 2023

Management Office
The Loop
33 Wellington Street, Central
Hong Kong Island, Hong Kong

Dear Sir/Madam,

S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central– Request Information of the Chillers, Cooling Towers and VRV at The Loop

We are commissioned by the applicant of the captioned lot to assess environmental noise impact on the proposed composite redevelopment at the captioned site. The location plan of the Proposed Development with 300m noise impact study area is attached for your reference.

We would like to have some enquires regarding the fixed noise sources (e.g. chillers, water-cooling towers or varied refrigerant volume system (VRV)) of The Loop. We would be grateful if you could provide following information for the purpose of Environmental Assessment:

Chillers / Cooling Towers / VRV

1. The locations and numbers of chillers / cooling towers / VRV, their sound data (noise level), model and cooling capacity, if available
2. Operation hours of these equipment
3. Number of operating equipment between 23:00 and 07:00 hours
4. Noise Mitigation Measures for the chillers / cooling towers / VRV (e.g. noise enclosure, silencer, etc.)

In addition, it would be grateful if we could have your permission in carrying out on-site noise measurement at the rooftop of the building. Due to the tight programme of this project, your prompt response on or before 18 October 2023 would be very much appreciated.

Should you have any questions on this submission, please do not hesitate to contact the undersigned at 3465 2828 (email: bfan@ramboll.com) or our Coco Ma at 3465 2807 (email: cocoma@ramboll.com).

Yours faithfully,
For and on behalf of
Ramboll Hong Kong Limited

Billy Fan
Principal Consultant

Enclosure: Location Plan of the Proposed Development

Ref.: CHPWELTNEI00_0_0073L.23

By Post

11 October 2023

Management Office
PMQ
35 Aberdeen Street, Central
Hong Kong Island, Hong Kong

Dear Sir/Madam,

S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central– Request Information of the Chillers, Cooling Towers and VRV at PMQ

We are commissioned by the applicant of the captioned lot to assess environmental noise impact on the proposed composite redevelopment at the captioned site. The location plan of the Proposed Development with 300m noise impact study area is attached for your reference.

We would like to have some enquires regarding the fixed noise sources (e.g. chillers, water-cooling towers or varied refrigerant volume system (VRV)) of PMQ. We would be grateful if you could provide following information for the purpose of Environmental Assessment:

Chillers / Cooling Towers / VRV

1. The locations and numbers of chillers / cooling towers / VRV, their sound data (noise level), model and cooling capacity, if available
2. Operation hours of these equipment
3. Number of operating equipment between 23:00 and 07:00 hours
4. Noise Mitigation Measures for the chillers / cooling towers / VRV (e.g. noise enclosure, silencer, etc.)

In addition, it would be grateful if we could have your permission in carrying out on-site noise measurement at the rooftop of the building. Due to the tight programme of this project, your prompt response on or before 18 October 2023 would be very much appreciated.

Should you have any questions on this submission, please do not hesitate to contact the undersigned at 3465 2828 (email: bfan@ramboll.com) or our Coco Ma at 3465 2807 (email: cocoma@ramboll.com).

Yours faithfully,
For and on behalf of
Ramboll Hong Kong Limited

Billy Fan
Principal Consultant

Enclosure: Location Plan of the Proposed Development

Ref.: CHPWELTNEI00_0_0074L.23

By Post

11 October 2023

Management Office
Kinwick Centre
32 Hollywood Road, Central
Hong Kong Island, Hong Kong

Dear Sir/Madam,

S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central– Request Information of the Chillers, Cooling Towers and VRV at Kinwick Centre

We are commissioned by the applicant of the captioned lot to assess environmental noise impact on the proposed composite redevelopment at the captioned site. The location plan of the Proposed Development with 300m noise impact study area is attached for your reference.

We would like to have some enquires regarding the fixed noise sources (e.g. chillers, water-cooling towers or varied refrigerant volume system (VRV)) of Kinwick Centre. We would be grateful if you could provide following information for the purpose of Environmental Assessment:

Chillers / Cooling Towers / VRV

1. The locations and numbers of chillers / cooling towers / VRV, their sound data (noise level), model and cooling capacity, if available
2. Operation hours of these equipment
3. Number of operating equipment between 23:00 and 07:00 hours
4. Noise Mitigation Measures for the chillers / cooling towers / VRV (e.g. noise enclosure, silencer, etc.)

In addition, it would be grateful if we could have your permission in carrying out on-site noise measurement at the rooftop of the building. Due to the tight programme of this project, your prompt response on or before 18 October 2023 would be very much appreciated.

Should you have any questions on this submission, please do not hesitate to contact the undersigned at 3465 2828 (email: bfan@ramboll.com) or our Coco Ma at 3465 2807 (email: cocoma@ramboll.com).

Yours faithfully,
For and on behalf of
Ramboll Hong Kong Limited

Billy Fan
Principal Consultant

Enclosure: Location Plan of the Proposed Development

Ref.: CHPWELTNEI00_0_0075L.23

By Post

11 October 2023

Management Office
Oriental Crystal Commercial Building
46 Lyndhurst Terrace, Central
Hong Kong Island, Hong Kong

Dear Sir/Madam,

S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central– Request Information of the Chillers, Cooling Towers and VRV at Oriental Crystal Commercial Building

We are commissioned by the applicant of the captioned lot to assess environmental noise impact on the proposed composite redevelopment at the captioned site. The location plan of the Proposed Development with 300m noise impact study area is attached for your reference.

We would like to have some enquires regarding the fixed noise sources (e.g. chillers, water-cooling towers or varied refrigerant volume system (VRV)) of Oriental Crystal Commercial Building. We would be grateful if you could provide following information for the purpose of Environmental Assessment:

Chillers / Cooling Towers / VRV

1. The locations and numbers of chillers / cooling towers / VRV, their sound data (noise level), model and cooling capacity, if available
2. Operation hours of these equipment
3. Number of operating equipment between 23:00 and 07:00 hours
4. Noise Mitigation Measures for the chillers / cooling towers / VRV (e.g. noise enclosure, silencer, etc.)

In addition, it would be grateful if we could have your permission in carrying out on-site noise measurement at the rooftop of the building. Due to the tight programme of this project, your prompt response on or before 18 October 2023 would be very much appreciated.

Should you have any questions on this submission, please do not hesitate to contact the undersigned at 3465 2828 (email: bfan@ramboll.com) or our Coco Ma at 3465 2807 (email: cocoma@ramboll.com).

Yours faithfully,
For and on behalf of
Ramboll Hong Kong Limited

Billy Fan
Principal Consultant

Enclosure: Location Plan of the Proposed Development

Ref.: CHPWELTNEI00_0_0076L.23

By Post

11 October 2023

Management Office
Car Po Commercial Building
18-20 Lyndhurst Terrace, Central
Hong Kong Island, Hong Kong

Dear Sir/Madam,

S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central– Request Information of the Chillers, Cooling Towers and VRV at Car Po Commercial Building

We are commissioned by the applicant of the captioned lot to assess environmental noise impact on the proposed composite redevelopment at the captioned site. The location plan of the Proposed Development with 300m noise impact study area is attached for your reference.

We would like to have some enquires regarding the fixed noise sources (e.g. chillers, water-cooling towers or varied refrigerant volume system (VRV)) of Car Po Commercial Building. We would be grateful if you could provide following information for the purpose of Environmental Assessment:

Chillers / Cooling Towers / VRV

1. The locations and numbers of chillers / cooling towers / VRV, their sound data (noise level), model and cooling capacity, if available
2. Operation hours of these equipment
3. Number of operating equipment between 23:00 and 07:00 hours
4. Noise Mitigation Measures for the chillers / cooling towers / VRV (e.g. noise enclosure, silencer, etc.)

In addition, it would be grateful if we could have your permission in carrying out on-site noise measurement at the rooftop of the building. Due to the tight programme of this project, your prompt response on or before 18 October 2023 would be very much appreciated.

Should you have any questions on this submission, please do not hesitate to contact the undersigned at 3465 2828 (email: bfan@ramboll.com) or our Coco Ma at 3465 2807 (email: cocoma@ramboll.com).

Yours faithfully,
For and on behalf of
Ramboll Hong Kong Limited

Billy Fan
Principal Consultant

Enclosure: Location Plan of the Proposed Development

Ref.: CHPWELTNEI00_0_0077L.23

By Post

11 October 2023

Management Office
H Code
45 Pottinger Street, Central
Hong Kong Island, Hong Kong

Dear Sir/Madam,

S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central– Request Information of the Chillers, Cooling Towers and VRV at H Code

We are commissioned by the applicant of the captioned lot to assess environmental noise impact on the proposed composite redevelopment at the captioned site. The location plan of the Proposed Development with 300m noise impact study area is attached for your reference.

We would like to have some enquires regarding the fixed noise sources (e.g. chillers, water-cooling towers or varied refrigerant volume system (VRV)) of H Code. We would be grateful if you could provide following information for the purpose of Environmental Assessment:

Chillers / Cooling Towers / VRV

1. The locations and numbers of chillers / cooling towers / VRV, their sound data (noise level), model and cooling capacity, if available
2. Operation hours of these equipment
3. Number of operating equipment between 23:00 and 07:00 hours
4. Noise Mitigation Measures for the chillers / cooling towers / VRV (e.g. noise enclosure, silencer, etc.)

In addition, it would be grateful if we could have your permission in carrying out on-site noise measurement at the rooftop of the building. Due to the tight programme of this project, your prompt response on or before 18 October 2023 would be very much appreciated.

Should you have any questions on this submission, please do not hesitate to contact the undersigned at 3465 2828 (email: bfan@ramboll.com) or our Coco Ma at 3465 2807 (email: cocoma@ramboll.com).

Yours faithfully,
For and on behalf of
Ramboll Hong Kong Limited

Billy Fan
Principal Consultant

Enclosure: Location Plan of the Proposed Development

Ref.: CHPWELTNEI00_0_0078L.23

By Post

11 October 2023

Management Office
Soho Square
21 Lyndhurst Terrace, Central
Hong Kong Island, Hong Kong

Dear Sir/Madam,

S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central– Request Information of the Chillers, Cooling Towers and VRV at Soho Square

We are commissioned by the applicant of the captioned lot to assess environmental noise impact on the proposed composite redevelopment at the captioned site. The location plan of the Proposed Development with 300m noise impact study area is attached for your reference.

We would like to have some enquires regarding the fixed noise sources (e.g. chillers, water-cooling towers or varied refrigerant volume system (VRV)) of Soho Square. We would be grateful if you could provide following information for the purpose of Environmental Assessment:

Chillers / Cooling Towers / VRV

1. The locations and numbers of chillers / cooling towers / VRV, their sound data (noise level), model and cooling capacity, if available
2. Operation hours of these equipment
3. Number of operating equipment between 23:00 and 07:00 hours
4. Noise Mitigation Measures for the chillers / cooling towers / VRV (e.g. noise enclosure, silencer, etc.)

In addition, it would be grateful if we could have your permission in carrying out on-site noise measurement at the rooftop of the building. Due to the tight programme of this project, your prompt response on or before 18 October 2023 would be very much appreciated.

Should you have any questions on this submission, please do not hesitate to contact the undersigned at 3465 2828 (email: bfan@ramboll.com) or our Coco Ma at 3465 2807 (email: cocoma@ramboll.com).

Yours faithfully,
For and on behalf of
Ramboll Hong Kong Limited

Billy Fan
Principal Consultant

Enclosure: Location Plan of the Proposed Development

Ref.: CHPWELTNEI00_0_0079L.23

By Post

11 October 2023

Management Office
Jade Centre
98 Wellington Street, Central
Hong Kong Island, Hong Kong

Dear Sir/Madam,

S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central– Request Information of the Chillers, Cooling Towers and VRV at Jade Centre

We are commissioned by the applicant of the captioned lot to assess environmental noise impact on the proposed composite redevelopment at the captioned site. The location plan of the Proposed Development with 300m noise impact study area is attached for your reference.

We would like to have some enquires regarding the fixed noise sources (e.g. chillers, water-cooling towers or varied refrigerant volume system (VRV)) of Jade Centre. We would be grateful if you could provide following information for the purpose of Environmental Assessment:

Chillers / Cooling Towers / VRV

1. The locations and numbers of chillers / cooling towers / VRV, their sound data (noise level), model and cooling capacity, if available
2. Operation hours of these equipment
3. Number of operating equipment between 23:00 and 07:00 hours
4. Noise Mitigation Measures for the chillers / cooling towers / VRV (e.g. noise enclosure, silencer, etc.)

In addition, it would be grateful if we could have your permission in carrying out on-site noise measurement at the rooftop of the building. Due to the tight programme of this project, your prompt response on or before 18 October 2023 would be very much appreciated.

Should you have any questions on this submission, please do not hesitate to contact the undersigned at 3465 2828 (email: bfan@ramboll.com) or our Coco Ma at 3465 2807 (email: cocoma@ramboll.com).

Yours faithfully,
For and on behalf of
Ramboll Hong Kong Limited

Billy Fan
Principal Consultant

Enclosure: Location Plan of the Proposed Development

Ref.: CHPWELTNEI00_0_0080L.23

By Post

11 October 2023

Management Office
1 Lyndhurst Tower
1 Lyndhurst Terrace, Central
Hong Kong Island, Hong Kong

Dear Sir/Madam,

S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central– Request Information of the Chillers, Cooling Towers and VRV at 1 Lyndhurst Tower

We are commissioned by the applicant of the captioned lot to assess environmental noise impact on the proposed composite redevelopment at the captioned site. The location plan of the Proposed Development with 300m noise impact study area is attached for your reference.

We would like to have some enquires regarding the fixed noise sources (e.g. chillers, water-cooling towers or varied refrigerant volume system (VRV)) of 1 Lyndhurst Tower. We would be grateful if you could provide following information for the purpose of Environmental Assessment:

Chillers / Cooling Towers / VRV

1. The locations and numbers of chillers / cooling towers / VRV, their sound data (noise level), model and cooling capacity, if available
2. Operation hours of these equipment
3. Number of operating equipment between 23:00 and 07:00 hours
4. Noise Mitigation Measures for the chillers / cooling towers / VRV (e.g. noise enclosure, silencer, etc.)

In addition, it would be grateful if we could have your permission in carrying out on-site noise measurement at the rooftop of the building. Due to the tight programme of this project, your prompt response on or before 18 October 2023 would be very much appreciated.

Should you have any questions on this submission, please do not hesitate to contact the undersigned at 3465 2828 (email: bfan@ramboll.com) or our Coco Ma at 3465 2807 (email: cocoma@ramboll.com).

Yours faithfully,
For and on behalf of
Ramboll Hong Kong Limited

Billy Fan
Principal Consultant

Enclosure: Location Plan of the Proposed Development

Ref.: CHPWELTNEI00_0_0081L.23

By Post

11 October 2023

Management Office
Butterfly on Wellington
122 Wellington Street, Central
Hong Kong Island, Hong Kong

Dear Sir/Madam,

S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central– Request Information of the Chillers, Cooling Towers and VRV at Butterfly on Wellington

We are commissioned by the applicant of the captioned lot to assess environmental noise impact on the proposed composite redevelopment at the captioned site. The location plan of the Proposed Development with 300m noise impact study area is attached for your reference.

We would like to have some enquires regarding the fixed noise sources (e.g. chillers, water-cooling towers or varied refrigerant volume system (VRV)) of Butterfly on Wellington. We would be grateful if you could provide following information for the purpose of Environmental Assessment:

Chillers / Cooling Towers / VRV

1. The locations and numbers of chillers / cooling towers / VRV, their sound data (noise level), model and cooling capacity, if available
2. Operation hours of these equipment
3. Number of operating equipment between 23:00 and 07:00 hours
4. Noise Mitigation Measures for the chillers / cooling towers / VRV (e.g. noise enclosure, silencer, etc.)

In addition, it would be grateful if we could have your permission in carrying out on-site noise measurement at the rooftop of the building. Due to the tight programme of this project, your prompt response on or before 18 October 2023 would be very much appreciated.

Should you have any questions on this submission, please do not hesitate to contact the undersigned at 3465 2828 (email: bfan@ramboll.com) or our Coco Ma at 3465 2807 (email: cocoma@ramboll.com).

Yours faithfully,
For and on behalf of
Ramboll Hong Kong Limited

Billy Fan
Principal Consultant

Enclosure: Location Plan of the Proposed Development

Ref.: CHPWELTNEI00_0_0082L.23

By Post

11 October 2023

Management Office
The Mercer Hong Kong
29 Jervois Street, Sheung Wan
Hong Kong Island, Hong Kong

Dear Sir/Madam,

S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central– Request Information of the Chillers, Cooling Towers and VRV at The Mercer Hong Kong

We are commissioned by the applicant of the captioned lot to assess environmental noise impact on the proposed composite redevelopment at the captioned site. The location plan of the Proposed Development with 300m noise impact study area is attached for your reference.

We would like to have some enquires regarding the fixed noise sources (e.g. chillers, water-cooling towers or varied refrigerant volume system (VRV)) of The Mercer Hong Kong. We would be grateful if you could provide following information for the purpose of Environmental Assessment:

Chillers / Cooling Towers / VRV

1. The locations and numbers of chillers / cooling towers / VRV, their sound data (noise level), model and cooling capacity, if available
2. Operation hours of these equipment
3. Number of operating equipment between 23:00 and 07:00 hours
4. Noise Mitigation Measures for the chillers / cooling towers / VRV (e.g. noise enclosure, silencer, etc.)

In addition, it would be grateful if we could have your permission in carrying out on-site noise measurement at the rooftop of the building. Due to the tight programme of this project, your prompt response on or before 18 October 2023 would be very much appreciated.

Should you have any questions on this submission, please do not hesitate to contact the undersigned at 3465 2828 (email: bfan@ramboll.com) or our Coco Ma at 3465 2807 (email: cocoma@ramboll.com).

Yours faithfully,
For and on behalf of
Ramboll Hong Kong Limited

Billy Fan
Principal Consultant

Enclosure: Location Plan of the Proposed Development

Ref.: CHPWELTNEI00_0_0083L.23

By Post

11 October 2023

Management Office
The Wellington
184-198 Wellington Street, Sheung Wan
Hong Kong Island, Hong Kong

Dear Sir/Madam,

S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central– Request Information of the Chillers, Cooling Towers and VRV at The Wellington

We are commissioned by the applicant of the captioned lot to assess environmental noise impact on the proposed composite redevelopment at the captioned site. The location plan of the Proposed Development with 300m noise impact study area is attached for your reference.

We would like to have some enquires regarding the fixed noise sources (e.g. chillers, water-cooling towers or varied refrigerant volume system (VRV)) of The Wellington. We would be grateful if you could provide following information for the purpose of Environmental Assessment:

Chillers / Cooling Towers / VRV

1. The locations and numbers of chillers / cooling towers / VRV, their sound data (noise level), model and cooling capacity, if available
2. Operation hours of these equipment
3. Number of operating equipment between 23:00 and 07:00 hours
4. Noise Mitigation Measures for the chillers / cooling towers / VRV (e.g. noise enclosure, silencer, etc.)

In addition, it would be grateful if we could have your permission in carrying out on-site noise measurement at the rooftop of the building. Due to the tight programme of this project, your prompt response on or before 18 October 2023 would be very much appreciated.

Should you have any questions on this submission, please do not hesitate to contact the undersigned at 3465 2828 (email: bfan@ramboll.com) or our Coco Ma at 3465 2807 (email: cocoma@ramboll.com).

Yours faithfully,
For and on behalf of
Ramboll Hong Kong Limited

Billy Fan
Principal Consultant

Enclosure: Location Plan of the Proposed Development

Ref.: CHPWELTNEI00_0_0084L.23

By Post

11 October 2023

Management Office
CentreStage
108 Hollywood Road, Sheung Wan
Hong Kong Island, Hong Kong

Dear Sir/Madam,

S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central– Request Information of the Chillers, Cooling Towers and VRV at CentreStage

We are commissioned by the applicant of the captioned lot to assess environmental noise impact on the proposed composite redevelopment at the captioned site. The location plan of the Proposed Development with 300m noise impact study area is attached for your reference.

We would like to have some enquires regarding the fixed noise sources (e.g. chillers, water-cooling towers or varied refrigerant volume system (VRV)) of CentreStage. We would be grateful if you could provide following information for the purpose of Environmental Assessment:

Chillers / Cooling Towers / VRV

1. The locations and numbers of chillers / cooling towers / VRV, their sound data (noise level), model and cooling capacity, if available
2. Operation hours of these equipment
3. Number of operating equipment between 23:00 and 07:00 hours
4. Noise Mitigation Measures for the chillers / cooling towers / VRV (e.g. noise enclosure, silencer, etc.)

In addition, it would be grateful if we could have your permission in carrying out on-site noise measurement at the rooftop of the building. Due to the tight programme of this project, your prompt response on or before 18 October 2023 would be very much appreciated.

Should you have any questions on this submission, please do not hesitate to contact the undersigned at 3465 2828 (email: bfan@ramboll.com) or our Coco Ma at 3465 2807 (email: cocoma@ramboll.com).

Yours faithfully,
For and on behalf of
Ramboll Hong Kong Limited

Billy Fan
Principal Consultant

Enclosure: Location Plan of the Proposed Development

Ref.: CHPWELTNEI00_0_0085L.23

By Post

11 October 2023

Management Office
Luk Yu Building
24-26 Stanley Street, Central
Hong Kong Island, Hong Kong

Dear Sir/Madam,

S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central– Request Information of the Chillers, Cooling Towers and VRV at Luk Yu Building

We are commissioned by the applicant of the captioned lot to assess environmental noise impact on the proposed composite redevelopment at the captioned site. The location plan of the Proposed Development with 300m noise impact study area is attached for your reference.

We would like to have some enquires regarding the fixed noise sources (e.g. chillers, water-cooling towers or varied refrigerant volume system (VRV)) of Luk Yu Building. We would be grateful if you could provide following information for the purpose of Environmental Assessment:

Chillers / Cooling Towers / VRV

1. The locations and numbers of chillers / cooling towers / VRV, their sound data (noise level), model and cooling capacity, if available
2. Operation hours of these equipment
3. Number of operating equipment between 23:00 and 07:00 hours
4. Noise Mitigation Measures for the chillers / cooling towers / VRV (e.g. noise enclosure, silencer, etc.)

In addition, it would be grateful if we could have your permission in carrying out on-site noise measurement at the rooftop of the building. Due to the tight programme of this project, your prompt response on or before 18 October 2023 would be very much appreciated.

Should you have any questions on this submission, please do not hesitate to contact the undersigned at 3465 2828 (email: bfan@ramboll.com) or our Coco Ma at 3465 2807 (email: cocoma@ramboll.com).

Yours faithfully,
For and on behalf of
Ramboll Hong Kong Limited

Billy Fan
Principal Consultant

Enclosure: Location Plan of the Proposed Development

Ref.: CHPWELTNEI00_0_0086L.23

By Post

11 October 2023

Management Office
Harbour Building
38 Pier Road, Central
Hong Kong Island, Hong Kong

Dear Sir/Madam,

S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central– Request Information of the Chillers, Cooling Towers and VRV at Harbour Building

We are commissioned by the applicant of the captioned lot to assess environmental noise impact on the proposed composite redevelopment at the captioned site. The location plan of the Proposed Development with 300m noise impact study area is attached for your reference.

We would like to have some enquires regarding the fixed noise sources (e.g. chillers, water-cooling towers or varied refrigerant volume system (VRV)) of Harbour Building. We would be grateful if you could provide following information for the purpose of Environmental Assessment:

Chillers / Cooling Towers / VRV

1. The locations and numbers of chillers / cooling towers / VRV, their sound data (noise level), model and cooling capacity, if available
2. Operation hours of these equipment
3. Number of operating equipment between 23:00 and 07:00 hours
4. Noise Mitigation Measures for the chillers / cooling towers / VRV (e.g. noise enclosure, silencer, etc.)

In addition, it would be grateful if we could have your permission in carrying out on-site noise measurement at the rooftop of the building. Due to the tight programme of this project, your prompt response on or before 18 October 2023 would be very much appreciated.

Should you have any questions on this submission, please do not hesitate to contact the undersigned at 3465 2828 (email: bfan@ramboll.com) or our Coco Ma at 3465 2807 (email: cocoma@ramboll.com).

Yours faithfully,
For and on behalf of
Ramboll Hong Kong Limited

Billy Fan
Principal Consultant

Enclosure: Location Plan of the Proposed Development

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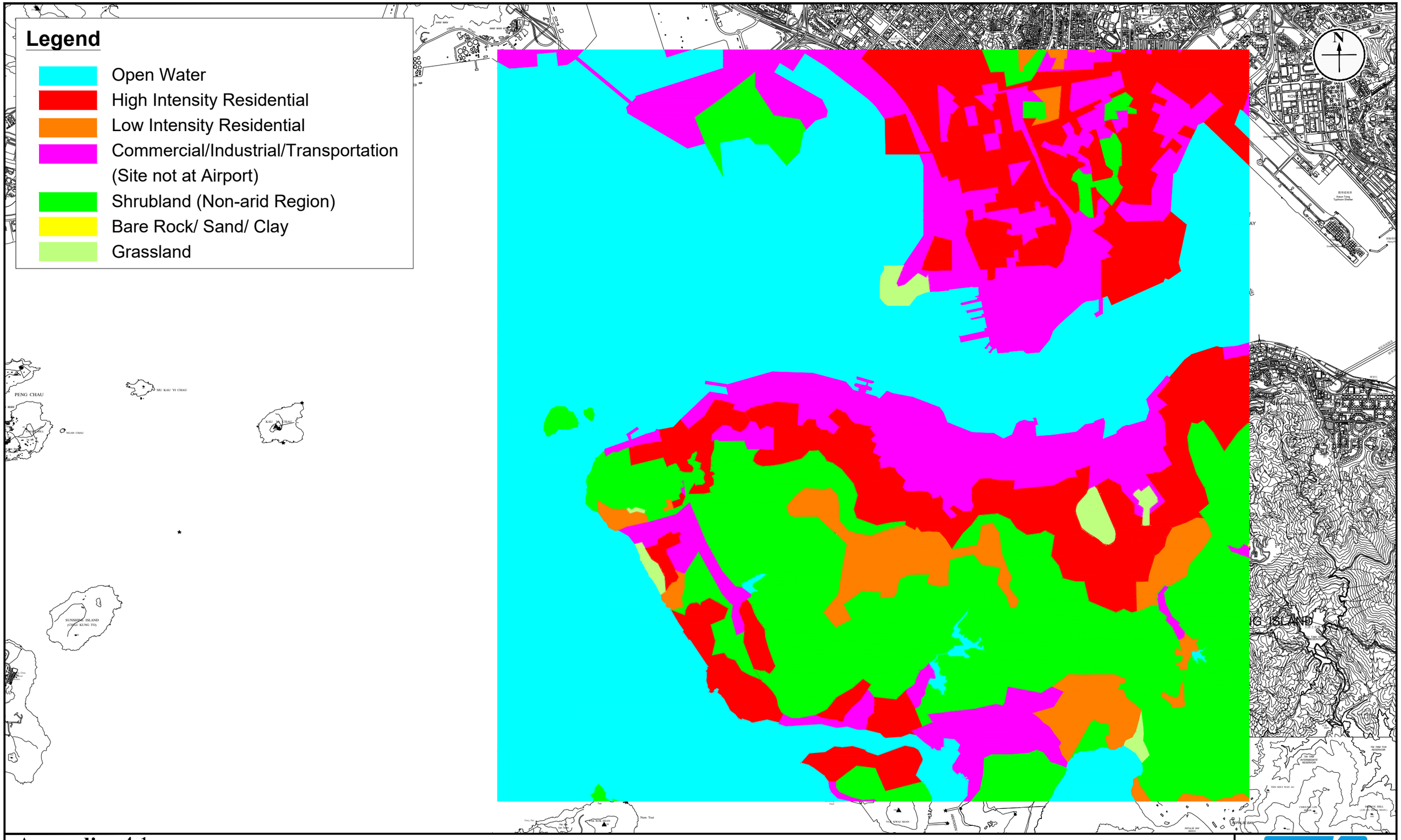
Appendix 4-1 Detailed Calculation Characterizing Landuse for AEARMET

Legend

- Open Water
- High Intensity Residential
- Low Intensity Residential
- Commercial/Industrial/Transportation (Site not at Airport)
- Shrubland (Non-arid Region)
- Bare Rock/ Sand/ Clay
- Grassland



Appendix: 4.1	RAMBOLL
Title: Landuse Parameter (Albedo Value, Bowen Ratio) Derivation by 10km x 10km Region	Drawn by: AW
	Checked by: CC
Project: S16 Planning Application for Proposed Composite Redevelopment at 152-164 Weillington Street, Central	Rev.: 1.0
	Date: Aug 2023

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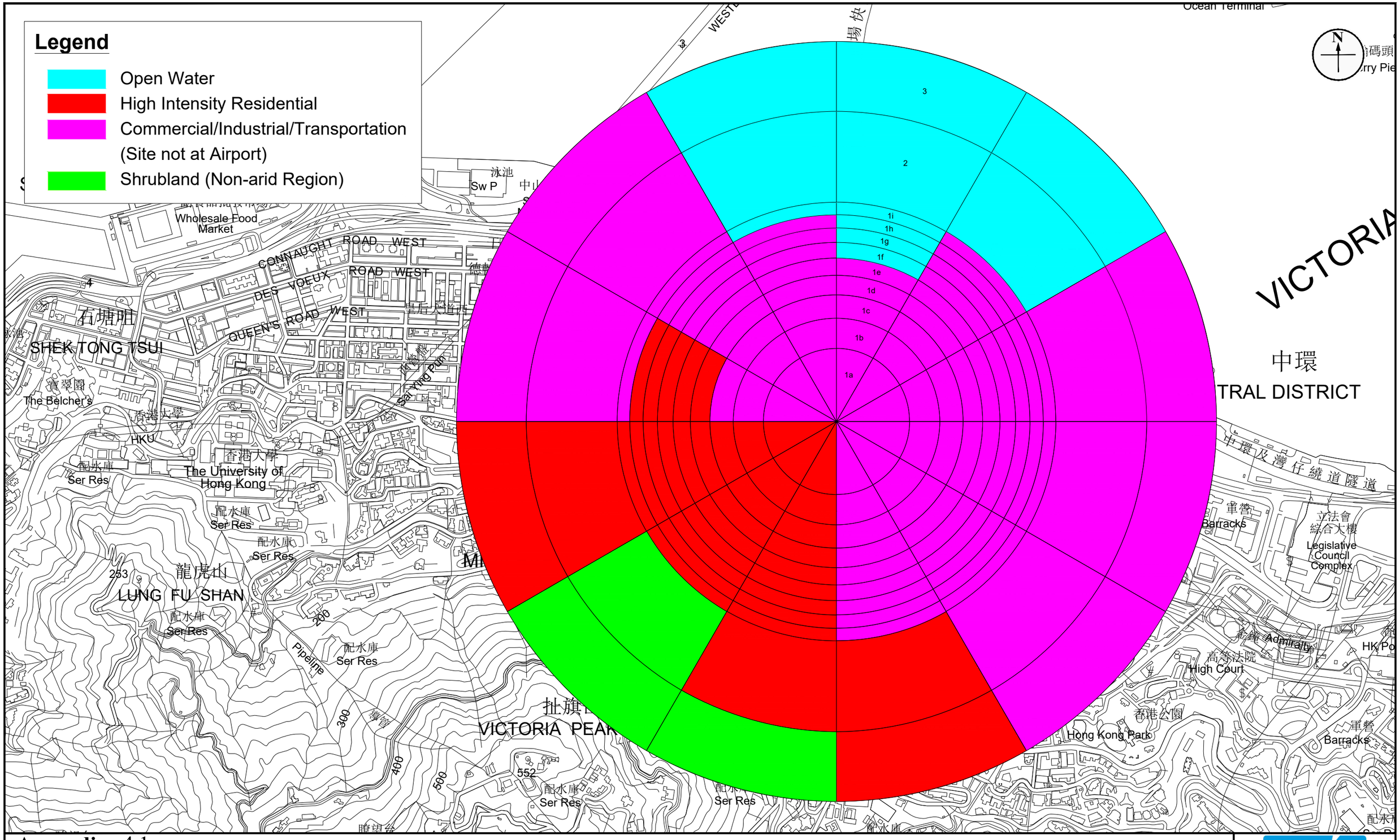

Appendix: 4.1	RAMBOLL
Title: Landuse Parameter (Surface Roughness) Derivation by a Circle of 1km in Radius	Drawn by: AW Checked by: CC
Project: S16 Planning Application for Proposed Composite Redevelopment at 152-164 Weillington Street, Central	Rev.: 1.0 Date: Aug 2023

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Project: S16 Planning Application for Proposed Composite Redevelopment at 152-164 Weillington Street, Central

Land Use Type as Extracted from LAKES = AERMOD

rows	Type	Season	Albedo Value	Bowen Ratio	Surface Roughness
1.	Open water	Winter	0.1	0.1	0.0010
		Spring	0.1	0.1	0.0010
		Summer	0.1	0.1	0.0010
		Autumn	0.1	0.1	0.0010
2.	Low Intensity Residential	Winter	0.18	1	0.3000
		Spring	0.16	0.8	0.4000
		Summer	0.16	0.8	0.4000
		Autumn	0.16	1	0.4000
3.	High Intensity Residential	Winter	0.18	1.5	1.0000
		Spring	0.18	1.5	1.0000
		Summer	0.18	1.5	1.0000
		Autumn	0.18	1.5	1.0000
4.	Woody Wetland	Winter	0.14	0.3	0.4000
		Spring	0.14	0.2	0.5000
		Summer	0.14	0.2	0.5000
		Autumn	0.14	0.2	0.5000
5.	Commercial/Industrial/Transportation (Not at Airport)	Winter	0.18	1.5	0.7000
		Spring	0.18	1.5	0.7000
		Summer	0.18	1.5	0.7000
		Autumn	0.18	1.5	0.7000
6.	Bare Rock/Sand/Clay (Non-arid region)	Winter	0.2	1.5	0.0500
		Spring	0.2	1.5	0.0500
		Summer	0.2	1.5	0.0500
		Autumn	0.2	1.5	0.0500
7.	Shrubland (Non-arid Region)	Winter	0.18	1.5	0.3000
		Spring	0.18	1	0.3000
		Summer	0.18	1	0.3000
		Autumn	0.18	1.5	0.3000
8.	Deciduous forest	Winter	0.17	1	0.6000
		Spring	0.16	0.7	1.0000
		Summer	0.16	0.3	1.3000
		Autumn	0.16	1	1.3000
9.	Grassland	Winter	0.2	1	0.0100
		Spring	0.18	0.4	0.0500
		Summer	0.18	0.8	0.1000
		Autumn	0.18	1	0.1000

Reference:

1. Tables A-1, A-2, A-3 from AERSURFACE User's Guide, USEPA, revised on 16 Jan 2013

Sector	Area of Concern	Season	Albedo Value	Bowen Ratio	Surface Roughness
1.	0° - 30° (clockwise from N)	Winter	0.1447	0.4436	0.01398
		Spring	0.1438	0.4026	0.01398
		Summer	0.1438	0.40475	0.01398
		Autumn	0.1438	0.4436	0.01398
2.	30° - 60° (clockwise from N)	Winter	0.1447	0.4436	0.03838
		Spring	0.1438	0.4026	0.03838
		Summer	0.1438	0.40475	0.03838
		Autumn	0.1438	0.4436	0.03838
3.	60° - 90° (clockwise from N)	Winter	0.1447	0.4436	0.7
		Spring	0.1438	0.4026	0.7
		Summer	0.1438	0.40475	0.7
		Autumn	0.1438	0.4436	0.7
4.	90° - 120° (clockwise from N)	Winter	0.1447	0.4436	0.7
		Spring	0.1438	0.4026	0.7
		Summer	0.1438	0.40475	0.7
		Autumn	0.1438	0.4436	0.7
5.	120° - 150° (clockwise from N)	Winter	0.1447	0.4436	0.7
		Spring	0.1438	0.4026	0.7
		Summer	0.1438	0.40475	0.7
		Autumn	0.1438	0.4436	0.7
6.	150° - 180° (clockwise from N)	Winter	0.1447	0.4436	0.81988
		Spring	0.1438	0.4026	0.81988
		Summer	0.1438	0.40475	0.81988
		Autumn	0.1438	0.4436	0.81988
7.	180° - 210° (clockwise from N)	Winter	0.1447	0.4436	0.7932
		Spring	0.1438	0.4026	0.7932
		Summer	0.1438	0.40475	0.7932
		Autumn	0.1438	0.4436	0.7932
8.	210° - 240° (clockwise from N)	Winter	0.1447	0.4436	0.58648
		Spring	0.1438	0.4026	0.58648
		Summer	0.1438	0.40475	0.58648
		Autumn	0.1438	0.4436	0.58648
9.	240° - 270° (clockwise from N)	Winter	0.1447	0.4436	1
		Spring	0.1438	0.4026	1
		Summer	0.1438	0.40475	1
		Autumn	0.1438	0.4436	1
10.	270° - 300° (clockwise from N)	Winter	0.1447	0.4436	0.75748
		Spring	0.1438	0.4026	0.75748
		Summer	0.1438	0.40475	0.75748
		Autumn	0.1438	0.4436	0.75748
11.	300° - 330° (clockwise from N)	Winter	0.1447	0.4436	0.7
		Spring	0.1438	0.4026	0.7
		Summer	0.1438	0.40475	0.7
		Autumn	0.1438	0.4436	0.7
12.	330° - 360° (clockwise from N)	Winter	0.1447	0.4436	0.03059
		Spring	0.1438	0.4026	0.03059
		Summer	0.1438	0.40475	0.03059
		Autumn	0.1438	0.4436	0.03059

Notes:

1. The determination of the surface roughness length should be based on an inverse-distance weighted geometric mean for a default upwind distance of 1 kilometer relative to the measurement site. Surface roughness length may be varied by sector to account for variations in land cover near the measurement site; however, the sector widths should be no smaller than 30 degrees.

2. The determination of the Albedo and Bowen ratio should be based on an applicable land fraction to weight each value.
3. Seasonal average of these parameters were adpoted except the parameter in winter season (4 - Winter with continuous snow on ground).

4 Option of seasonal average in AERMET is adopted to define the land surface characteristics over the year.

Determination of Albedo Value and Bowen Ratio by 10km x 10km Region

Land Type	Albedo Value (A)				Bowen Ratio (B)				Occupied Area (km^2)	Frac of Area (Frac)	A x Frac				B^Frac			
	Winter	Spring	Summer	Autumn	Winter	Spring	Summer	Autumn			Winter	Spring	Summer	Autumn	Winter	Spring	Summer	Autumn
Open water	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	44.29	0.44	0.0443	0.0443	0.0443	0.0443	0.3607	0.3607	0.3607	0.3607
Low Intensity Residential	0.18	0.16	0.16	0.16	1	0.8	0.8	1	3.89	0.04	0.0070	0.0062	0.0062	0.0062	1.0000	0.9914	0.9914	1.0000
High Intensity Residential	0.18	0.18	0.18	0.18	1.5	1.5	1.5	1.5	16.35	0.16	0.0294	0.0294	0.0294	0.0294	1.0685	1.0685	1.0685	1.0685
Woody Wetland	0.14	0.14	0.14	0.14	0.3	0.2	0.2	0.2	0.00	0.00	0.0000	0.0000	0.0000	0.0000	1.0000	1.0000	1.0000	1.0000
Commercial/Industrial/Transportation (Not at Airport)	0.18	0.18	0.18	0.18	1.5	1.5	1.5	1.5	14.66	0.15	0.0264	0.0264	0.0264	0.0264	1.0612	1.0612	1.0612	1.0612
Bare Rock/Sand/Clay (Non-arid region)	0.2	0.2	0.2	0.2	1.5	1.5	1.5	1.5	0.00	0.00	0.0000	0.0000	0.0000	0.0000	1.0000	1.0000	1.0000	1.0000
Shrubland (Non-arid Region)	0.18	0.18	0.18	0.18	1.5	1	1	1.5	20.04	0.20	0.0361	0.0361	0.0361	0.0361	1.0846	1.0000	1.0000	1.0846
Deciduous forest	0.17	0.16	0.16	0.16	1	0.7	0.3	1	0.00	0.00	0.0000	0.0000	0.0000	0.0000	1.0000	1.0000	1.0000	1.0000
Grassland	0.2	0.18	0.18	0.18	1	0.4	0.8	1	0.77	0.01	0.0015	0.0014	0.0014	0.0014	1.0000	0.9930	0.9983	1.0000
								Sum	100	1								

Overall Value of Area of Concern

Season	Winter	Spring	Summer	Autumn
Albedo value	0.1447	0.1438	0.1438	0.1438
Bowen ratio	0.4436	0.4026	0.4048	0.4436

Determination of Surface Roughness in each sector

Sector 1 (0° - 30°) (clockwise from N)

Fraction Index	Land Type	Surface Roughness (Z)				Area (km2)	Frac of Area (Frac)	Distance from centre (km) (Dist)	Weighting (Frac/Dist)	Z^(Frac/Dist)			
		Winter	Spring	Summer	Autumn					Winter	Spring	Summer	Autumn
1a	Commercial/Industrial/Transportation (Not at Airport)	0.7	0.7	0.7	0.7	0.01	0.0370	0.1288	0.2876	0.9025	0.9025	0.9025	0.9025
1b	Commercial/Industrial/Transportation (Not at Airport)	0.7	0.7	0.7	0.7	0.01	0.0370	0.2359	0.1570	0.9455	0.9455	0.9455	0.9455
1c	Commercial/Industrial/Transportation (Not at Airport)	0.7	0.7	0.7	0.7	0.01	0.0370	0.3074	0.1205	0.9579	0.9579	0.9579	0.9579
1d	Commercial/Industrial/Transportation (Not at Airport)	0.7	0.7	0.7	0.7	0.01	0.0370	0.3647	0.1016	0.9644	0.9644	0.9644	0.9644
1e	Commercial/Industrial/Transportation (Not at Airport)	0.7	0.7	0.7	0.7	0.01	0.0370	0.4139	0.0895	0.9686	0.9686	0.9686	0.9686
1f	Open water	0.001	0.001	0.001	0.001	0.01	0.0370	0.4579	0.0809	0.5719	0.5719	0.5719	0.5719
1g	Open water	0.001	0.001	0.001	0.001	0.01	0.0370	0.4979	0.0744	0.5982	0.5982	0.5982	0.5982
1h	Open water	0.001	0.001	0.001	0.001	0.01	0.0370	0.5349	0.0692	0.6198	0.6198	0.6198	0.6198
1i	Open water	0.001	0.001	0.001	0.001	0.01	0.0370	0.5695	0.0650	0.6381	0.6381	0.6381	0.6381
2	Open water	0.001	0.001	0.001	0.001	0.09	0.3333	0.7077	0.4710	0.0386	0.0386	0.0386	0.0386
3	Open water	0.001	0.001	0.001	0.001	0.09	0.3333	0.9224	0.3614	0.0824	0.0824	0.0824	0.0824
	Inverse distance geometric mean =	0.0140	0.0140	0.0140	0.0140								

Sector 2 (30° - 60°) (clockwise from N)

Fraction Index	Land Type	Surface Roughness (Z)				Area (km2)	Frac of Area (Frac)	Distance from centre (km) (Dist)	Weighting (Frac/Dist)	Z^(Frac/Dist)			
		Winter	Spring	Summer	Autumn					Winter	Spring	Summer	Autumn
1a	Commercial/Industrial/Transportation (Not at Airport)	0.7	0.7	0.7	0.7	0.01	0.0370	0.12877	0.287621628	0.9025	0.9025	0.9025	0.9025
1b	Commercial/Industrial/Transportation (Not at Airport)	0.7	0.7	0.7	0.7	0.01	0.0370	0.23588	0.157016436	0.9455	0.9455	0.9455	0.9455
1c	Commercial/Industrial/Transportation (Not at Airport)	0.7	0.7	0.7	0.7	0.01	0.0370	0.30743	0.120473074	0.9579	0.9579	0.9579	0.9579
1d	Commercial/Industrial/Transportation (Not at Airport)	0.7	0.7	0.7	0.7	0.01	0.0370	0.36468	0.101560374	0.9644	0.9644	0.9644	0.9644
1e	Commercial/Industrial/Transportation (Not at Airport)	0.7	0.7	0.7	0.7	0.01	0.0370	0.41393	0.089476571	0.9686	0.9686	0.9686	0.9686
1f	Commercial/Industrial/Transportation (Not at Airport)	0.7	0.7	0.7	0.7	0.01	0.0370	0.45786	0.08089162	0.9716	0.9716	0.9716	0.9716
1g	Commercial/Industrial/Transportation (Not at Airport)	0.7	0.7	0.7	0.7	0.01	0.0370	0.49789	0.074387991	0.9738	0.9738	0.9738	0.9738
1h	Commercial/Industrial/Transportation (Not at Airport)	0.7	0.7	0.7	0.7	0.01	0.0370	0.53492	0.06923846	0.9756	0.9756	0.9756	0.9756
1i	Commercial/Industrial/Transportation (Not at Airport)	0.7	0.7	0.7	0.7	0.01	0.0370	0.56954	0.065029738	0.9771	0.9771	0.9771	0.9771
2	Open water	0.001	0.001	0.001	0.001	0.09	0.3333	0.70774	0.470982753	0.0386	0.0386	0.0386	0.0386
3	Open water	0.001	0.001	0.001	0.001	0.09	0.3333	0.92235	0.36139571	0.0824	0.0824	0.0824	0.0824
	Inverse distance geometric mean =	0.0384	0.0384	0.0384	0.0384								

Sector 3 (60° - 90°) (clockwise from N)

Fraction Index	Land Type	Surface Roughness (Z)				Area (km2)	Frac of Area (Frac)	Distance from centre (km) (Dist)	Weighting (Frac/Dist)	Z^(Frac/Dist)			
		Winter	Spring	Summer	Autumn					Winter	Spring	Summer	Autumn
1a	Commercial/Industrial/Transportation (Not at Airport)	0.7	0.7	0.7	0.7	0.01	0.0370	0.12877	0.287621628	0.9025	0.9025	0.9025	0.9025
1b	Commercial/Industrial/Transportation (Not at Airport)	0.7	0.7	0.7	0.7	0.01	0.0370	0.23588	0.157016436	0.9455	0.9455	0.9455	0.9455
1c	Commercial/Industrial/Transportation (Not at Airport)	0.7	0.7	0.7	0.7	0.01	0.0370	0.30743	0.120473074	0.9579	0.9579	0.9579	0.9579
1d	Commercial/Industrial/Transportation (Not at Airport)	0.7	0.7	0.7	0.7	0.01	0.0370	0.36468	0.101560374	0.9644	0.9644	0.9644	0.9644
1e	Commercial/Industrial/Transportation (Not at Airport)	0.7	0.7	0.7	0.7	0.01	0.0370	0.41393	0.089476571	0.9686	0.9686	0.9686	0.9686
1f	Commercial/Industrial/Transportation (Not at Airport)	0.7	0.7	0.7	0.7	0.01	0.0370	0.45786	0.08089162	0.9716	0.9716	0.9716	0.9716
1g	Commercial/Industrial/Transportation (Not at Airport)	0.7	0.7	0.7	0.7	0.01	0.0370	0.49789	0.074387991	0.9738	0.9738	0.9738	0.9738
1h	Commercial/Industrial/Transportation (Not at Airport)	0.7	0.7	0.7	0.7	0.01	0.0370	0.53492	0.06923846	0.9756	0.9756	0.9756	0.9756
1i	Commercial/Industrial/Transportation (Not at Airport)	0.7	0.7	0.7	0.7	0.01	0.0370	0.56954	0.065029738	0.9771	0.9771	0.9771	0.9771
2	Commercial/Industrial/Transportation (Not at Airport)	0.7	0.7	0.7	0.7	0.09	0.3333	0.70774	0.470982753	0.8454	0.8454	0.8454	0.8454
3	Commercial/Industrial/Transportation (Not at Airport)	0.7	0.7	0.7	0.7	0.09	0.3333	0.92235	0.36139571	0.8791	0.8791	0.8791	0.8791
	Inverse distance geometric mean =	0.7000	0.7000	0.7000	0.7000								

Confidential

Determination of Surface Roughness in each sector

Sector 4 (90° - 120°) (clockwise from N)

Fraction Index	Land Type	Surface Roughness (Z)				Area (km2)	Frac of Area (Frac)	Distance from centre (km) (Dist)	Weighting (Frac/Dist)	Z^(Frac/Dist)			
		Winter	Spring	Summer	Autumn					Winter	Spring	Summer	Autumn
1a	Commercial/Industrial/Transportation (Not at Airport)	0.7	0.7	0.7	0.7	0.01	0.0370	0.12877	0.287621628	0.9025	0.9025	0.9025	0.9025
1b	Commercial/Industrial/Transportation (Not at Airport)	0.7	0.7	0.7	0.7	0.01	0.0370	0.23588	0.157016436	0.9455	0.9455	0.9455	0.9455
1c	Commercial/Industrial/Transportation (Not at Airport)	0.7	0.7	0.7	0.7	0.01	0.0370	0.30743	0.120473074	0.9579	0.9579	0.9579	0.9579
1d	Commercial/Industrial/Transportation (Not at Airport)	0.7	0.7	0.7	0.7	0.01	0.0370	0.36468	0.101560374	0.9644	0.9644	0.9644	0.9644
1e	Commercial/Industrial/Transportation (Not at Airport)	0.7	0.7	0.7	0.7	0.01	0.0370	0.41393	0.089476571	0.9686	0.9686	0.9686	0.9686
1f	Commercial/Industrial/Transportation (Not at Airport)	0.7	0.7	0.7	0.7	0.01	0.0370	0.45786	0.08089162	0.9716	0.9716	0.9716	0.9716
1g	Commercial/Industrial/Transportation (Not at Airport)	0.7	0.7	0.7	0.7	0.01	0.0370	0.49789	0.074387991	0.9738	0.9738	0.9738	0.9738
1h	Commercial/Industrial/Transportation (Not at Airport)	0.7	0.7	0.7	0.7	0.01	0.0370	0.53492	0.06923846	0.9756	0.9756	0.9756	0.9756
1i	Commercial/Industrial/Transportation (Not at Airport)	0.7	0.7	0.7	0.7	0.01	0.0370	0.56954	0.065029738	0.9771	0.9771	0.9771	0.9771
2	Commercial/Industrial/Transportation (Not at Airport)	0.7	0.7	0.7	0.7	0.09	0.3333	0.70774	0.470982753	0.8454	0.8454	0.8454	0.8454
3	Commercial/Industrial/Transportation (Not at Airport)	0.7	0.7	0.7	0.7	0.09	0.3333	0.92235	0.36139571	0.8791	0.8791	0.8791	0.8791
	Inverse distance geometric mean =	0.7000	0.7000	0.7000	0.7000								

Sector 5 (120° - 150°) (clockwise from N)

Fraction Index	Land Type	Surface Roughness (Z)				Area (km2)	Frac of Area (Frac)	Distance from centre (km) (Dist)	Weighting (Frac/Dist)	Z^(Frac/Dist)			
		Winter	Spring	Summer	Autumn					Winter	Spring	Summer	Autumn
1a	Commercial/Industrial/Transportation (Not at Airport)	0.7	0.7	0.7	0.7	0.01	0.0370	0.12877	0.287621628	0.9025	0.9025	0.9025	0.9025
1b	Commercial/Industrial/Transportation (Not at Airport)	0.7	0.7	0.7	0.7	0.01	0.0370	0.23588	0.157016436	0.9455	0.9455	0.9455	0.9455
1c	Commercial/Industrial/Transportation (Not at Airport)	0.7	0.7	0.7	0.7	0.01	0.0370	0.30743	0.120473074	0.9579	0.9579	0.9579	0.9579
1d	Commercial/Industrial/Transportation (Not at Airport)	0.7	0.7	0.7	0.7	0.01	0.0370	0.36468	0.101560374	0.9644	0.9644	0.9644	0.9644
1e	Commercial/Industrial/Transportation (Not at Airport)	0.7	0.7	0.7	0.7	0.01	0.0370	0.41393	0.089476571	0.9686	0.9686	0.9686	0.9686
1f	Commercial/Industrial/Transportation (Not at Airport)	0.7	0.7	0.7	0.7	0.01	0.0370	0.45786	0.08089162	0.9716	0.9716	0.9716	0.9716
1g	Commercial/Industrial/Transportation (Not at Airport)	0.7	0.7	0.7	0.7	0.01	0.0370	0.49789	0.074387991	0.9738	0.9738	0.9738	0.9738
1h	Commercial/Industrial/Transportation (Not at Airport)	0.7	0.7	0.7	0.7	0.01	0.0370	0.53492	0.06923846	0.9756	0.9756	0.9756	0.9756
1i	Commercial/Industrial/Transportation (Not at Airport)	0.7	0.7	0.7	0.7	0.01	0.0370	0.56954	0.065029738	0.9771	0.9771	0.9771	0.9771
2	Commercial/Industrial/Transportation (Not at Airport)	0.7	0.7	0.7	0.7	0.09	0.3333	0.70774	0.470982753	0.8454	0.8454	0.8454	0.8454
3	Commercial/Industrial/Transportation (Not at Airport)	0.7	0.7	0.7	0.7	0.09	0.3333	0.92235	0.36139571	0.8791	0.8791	0.8791	0.8791
	Inverse distance geometric mean =	0.7000	0.7000	0.7000	0.7000								

Sector 6 (150° - 180°) (clockwise from N)

Fraction Index	Land Type	Surface Roughness (Z)				Area (km2)	Frac of Area (Frac)	Distance from centre (km) (Dist)	Weighting (Frac/Dist)	Z^(Frac/Dist)			
		Winter	Spring	Summer	Autumn					Winter	Spring	Summer	Autumn
1a	Commercial/Industrial/Transportation (Not at Airport)	0.7	0.7	0.7	0.7	0.01	0.0370	0.12877	0.287621628	0.9025	0.9025	0.9025	0.9025
1b	Commercial/Industrial/Transportation (Not at Airport)	0.7	0.7	0.7	0.7	0.01	0.0370	0.23588	0.157016436	0.9455	0.9455	0.9455	0.9455
1c	Commercial/Industrial/Transportation (Not at Airport)	0.7	0.7	0.7	0.7	0.01	0.0370	0.30743	0.120473074	0.9579	0.9579	0.9579	0.9579
1d	Commercial/Industrial/Transportation (Not at Airport)	0.7	0.7	0.7	0.7	0.01	0.0370	0.36468	0.101560374	0.9644	0.9644	0.9644	0.9644
1e	Commercial/Industrial/Transportation (Not at Airport)	0.7	0.7	0.7	0.7	0.01	0.0370	0.41393	0.089476571	0.9686	0.9686	0.9686	0.9686
1f	Commercial/Industrial/Transportation (Not at Airport)	0.7	0.7	0.7	0.7	0.01	0.0370	0.45786	0.08089162	0.9716	0.9716	0.9716	0.9716
1g	Commercial/Industrial/Transportation (Not at Airport)	0.7	0.7	0.7	0.7	0.01	0.0370	0.49789	0.074387991	0.9738	0.9738	0.9738	0.9738
1h	Commercial/Industrial/Transportation (Not at Airport)	0.7	0.7	0.7	0.7	0.01	0.0370	0.53492	0.06923846	0.9756	0.9756	0.9756	0.9756
1i	Commercial/Industrial/Transportation (Not at Airport)	0.7	0.7	0.7	0.7	0.01	0.0370	0.56954	0.065029738	0.9771	0.9771	0.9771	0.9771
2	High Intensity Residential	1	1	1	1	0.09	0.3333	0.70774	0.470982753	1.0000	1.0000	1.0000	1.0000
3	High Intensity Residential	1	1	1	1	0.09	0.3333	0.92235	0.36139571	1.0000	1.0000	1.0000	1.0000
	Inverse distance geometric mean =	0.8199	0.8199	0.8199	0.8199								

Confidential

Determination of Surface Roughness in each sector

Sector 7 (180° - 210°) (clockwise from N)

Fraction Index	Land Type	Surface Roughness (Z)				Area (km2)	Frac of Area (Frac)	Distance from centre (km) (Dist)	Weighting (Frac/Dist)	Z^(Frac/Dist)			
		Winter	Spring	Summer	Autumn					Winter	Spring	Summer	Autumn
1a	High Intensity Residential	1	1	1	1	0.01	0.0370	0.12877	0.287621628	1.0000	1.0000	1.0000	1.0000
1b	High Intensity Residential	1	1	1	1	0.01	0.0370	0.23588	0.157016436	1.0000	1.0000	1.0000	1.0000
1c	High Intensity Residential	1	1	1	1	0.01	0.0370	0.30743	0.120473074	1.0000	1.0000	1.0000	1.0000
1d	High Intensity Residential	1	1	1	1	0.01	0.0370	0.36468	0.101560374	1.0000	1.0000	1.0000	1.0000
1e	High Intensity Residential	1	1	1	1	0.01	0.0370	0.41393	0.089476571	1.0000	1.0000	1.0000	1.0000
1f	High Intensity Residential	1	1	1	1	0.01	0.0370	0.45786	0.08089162	1.0000	1.0000	1.0000	1.0000
1g	High Intensity Residential	1	1	1	1	0.01	0.0370	0.49789	0.074387991	1.0000	1.0000	1.0000	1.0000
1h	High Intensity Residential	1	1	1	1	0.01	0.0370	0.53492	0.06923846	1.0000	1.0000	1.0000	1.0000
1i	High Intensity Residential	1	1	1	1	0.01	0.0370	0.56954	0.065029738	1.0000	1.0000	1.0000	1.0000
2	High Intensity Residential	1	1	1	1	0.09	0.3333	0.70774	0.470982753	1.0000	1.0000	1.0000	1.0000
3	Shrubland (Non-arid Region)	0.3	0.3	0.3	0.3	0.09	0.3333	0.92235	0.36139571	0.6472	0.6472	0.6472	0.6472
	Inverse distance geometric mean =	0.7932	0.7932	0.7932	0.7932								

Sector 8 (210° - 240°) (clockwise from N)

Fraction Index	Land Type	Surface Roughness (Z)				Area (km2)	Frac of Area (Frac)	Distance from centre (km) (Dist)	Weighting (Frac/Dist)	Z^(Frac/Dist)			
		Winter	Spring	Summer	Autumn					Winter	Spring	Summer	Autumn
1a	High Intensity Residential	1	1	1	1	0.01	0.0370	0.12877	0.287621628	1.0000	1.0000	1.0000	1.0000
1b	High Intensity Residential	1	1	1	1	0.01	0.0370	0.23588	0.157016436	1.0000	1.0000	1.0000	1.0000
1c	High Intensity Residential	1	1	1	1	0.01	0.0370	0.30743	0.120473074	1.0000	1.0000	1.0000	1.0000
1d	High Intensity Residential	1	1	1	1	0.01	0.0370	0.36468	0.101560374	1.0000	1.0000	1.0000	1.0000
1e	High Intensity Residential	1	1	1	1	0.01	0.0370	0.41393	0.089476571	1.0000	1.0000	1.0000	1.0000
1f	High Intensity Residential	1	1	1	1	0.01	0.0370	0.45786	0.08089162	1.0000	1.0000	1.0000	1.0000
1g	High Intensity Residential	1	1	1	1	0.01	0.0370	0.49789	0.074387991	1.0000	1.0000	1.0000	1.0000
1h	High Intensity Residential	1	1	1	1	0.01	0.0370	0.53492	0.06923846	1.0000	1.0000	1.0000	1.0000
1i	High Intensity Residential	1	1	1	1	0.01	0.0370	0.56954	0.065029738	1.0000	1.0000	1.0000	1.0000
2	Shrubland (Non-arid Region)	0.3	0.3	0.3	0.3	0.09	0.3333	0.70774	0.470982753	0.5672	0.5672	0.5672	0.5672
3	Shrubland (Non-arid Region)	0.3	0.3	0.3	0.3	0.09	0.3333	0.92235	0.36139571	0.6472	0.6472	0.6472	0.6472
	Inverse distance geometric mean =	0.5865	0.5865	0.5865	0.5865								

Sector 9 (240° - 270°) (clockwise from N)

Fraction Index	Land Type	Surface Roughness (Z)				Area (km2)	Frac of Area (Frac)	Distance from centre (km) (Dist)	Weighting (Frac/Dist)	Z^(Frac/Dist)			
		Winter	Spring	Summer	Autumn					Winter	Spring	Summer	Autumn
1a	High Intensity Residential	1	1	1	1	0.01	0.0370	0.12877	0.287621628	1.0000	1.0000	1.0000	1.0000
1b	High Intensity Residential	1	1	1	1	0.01	0.0370	0.23588	0.157016436	1.0000	1.0000	1.0000	1.0000
1c	High Intensity Residential	1	1	1	1	0.01	0.0370	0.30743	0.120473074	1.0000	1.0000	1.0000	1.0000
1d	High Intensity Residential	1	1	1	1	0.01	0.0370	0.36468	0.101560374	1.0000	1.0000	1.0000	1.0000
1e	High Intensity Residential	1	1	1	1	0.01	0.0370	0.41393	0.089476571	1.0000	1.0000	1.0000	1.0000
1f	High Intensity Residential	1	1	1	1	0.01	0.0370	0.45786	0.08089162	1.0000	1.0000	1.0000	1.0000
1g	High Intensity Residential	1	1	1	1	0.01	0.0370	0.49789	0.074387991	1.0000	1.0000	1.0000	1.0000
1h	High Intensity Residential	1	1	1	1	0.01	0.0370	0.53492	0.06923846	1.0000	1.0000	1.0000	1.0000
1i	High Intensity Residential	1	1	1	1	0.01	0.0370	0.56954	0.065029738	1.0000	1.0000	1.0000	1.0000
2	High Intensity Residential	1	1	1	1	0.09	0.3333	0.70774	0.470982753	1.0000	1.0000	1.0000	1.0000
3	High Intensity Residential	1	1	1	1	0.09	0.3333	0.92235	0.36139571	1.0000	1.0000	1.0000	1.0000
	Inverse distance geometric mean =	1.0000	1.0000	1.0000	1.0000								

Determination of Surface Roughness in each sector

Sector 10 (270° - 300°) (clockwise from N)

Fraction Index	Land Type	Surface Roughness (Z)				Area (km2)	Frac of Area (Frac)	Distance from centre (km) (Dist)	Weighting (Frac/Dist)	Z^(Frac/Dist)			
		Winter	Spring	Summer	Autumn					Winter	Spring	Summer	Autumn
1a	Commercial/Industrial/Transportation (Not at Airport)	0.7	0.7	0.7	0.7	0.01	0.0370	0.12877	0.287621628	0.9025	0.9025	0.9025	0.9025
1b	Commercial/Industrial/Transportation (Not at Airport)	0.7	0.7	0.7	0.7	0.01	0.0370	0.23588	0.157016436	0.9455	0.9455	0.9455	0.9455
1c	Commercial/Industrial/Transportation (Not at Airport)	0.7	0.7	0.7	0.7	0.01	0.0370	0.30743	0.120473074	0.9579	0.9579	0.9579	0.9579
1d	High Intensity Residential	1	1	1	1	0.01	0.0370	0.36468	0.101560374	1.0000	1.0000	1.0000	1.0000
1e	High Intensity Residential	1	1	1	1	0.01	0.0370	0.41393	0.089476571	1.0000	1.0000	1.0000	1.0000
1f	High Intensity Residential	1	1	1	1	0.01	0.0370	0.45786	0.08089162	1.0000	1.0000	1.0000	1.0000
1g	High Intensity Residential	1	1	1	1	0.01	0.0370	0.49789	0.074387991	1.0000	1.0000	1.0000	1.0000
1h	High Intensity Residential	1	1	1	1	0.01	0.0370	0.53492	0.06923846	1.0000	1.0000	1.0000	1.0000
1i	Commercial/Industrial/Transportation (Not at Airport)	0.7	0.7	0.7	0.7	0.01	0.0370	0.56954	0.065029738	0.9771	0.9771	0.9771	0.9771
2	Commercial/Industrial/Transportation (Not at Airport)	0.7	0.7	0.7	0.7	0.09	0.3333	0.70774	0.470982753	0.8454	0.8454	0.8454	0.8454
3	Commercial/Industrial/Transportation (Not at Airport)	0.7	0.7	0.7	0.7	0.09	0.3333	0.92235	0.36139571	0.8791	0.8791	0.8791	0.8791
	Inverse distance geometric mean =	0.7575	0.7575	0.7575	0.7575								

Sector 11 (300° - 330°) (clockwise from N)

Fraction Index	Land Type	Surface Roughness (Z)				Area (km2)	Frac of Area (Frac)	Distance from centre (km) (Dist)	Weighting (Frac/Dist)	Z^(Frac/Dist)			
		Winter	Spring	Summer	Autumn					Winter	Spring	Summer	Autumn
1a	Commercial/Industrial/Transportation (Not at Airport)	0.7	0.7	0.7	0.7	0.01	0.0370	0.12877	0.287621628	0.9025	0.9025	0.9025	0.9025
1b	Commercial/Industrial/Transportation (Not at Airport)	0.7	0.7	0.7	0.7	0.01	0.0370	0.23588	0.157016436	0.9455	0.9455	0.9455	0.9455
1c	Commercial/Industrial/Transportation (Not at Airport)	0.7	0.7	0.7	0.7	0.01	0.0370	0.30743	0.120473074	0.9579	0.9579	0.9579	0.9579
1d	Commercial/Industrial/Transportation (Not at Airport)	0.7	0.7	0.7	0.7	0.01	0.0370	0.36468	0.101560374	0.9644	0.9644	0.9644	0.9644
1e	Commercial/Industrial/Transportation (Not at Airport)	0.7	0.7	0.7	0.7	0.01	0.0370	0.41393	0.089476571	0.9686	0.9686	0.9686	0.9686
1f	Commercial/Industrial/Transportation (Not at Airport)	0.7	0.7	0.7	0.7	0.01	0.0370	0.45786	0.08089162	0.9716	0.9716	0.9716	0.9716
1g	Commercial/Industrial/Transportation (Not at Airport)	0.7	0.7	0.7	0.7	0.01	0.0370	0.49789	0.074387991	0.9738	0.9738	0.9738	0.9738
1h	Commercial/Industrial/Transportation (Not at Airport)	0.7	0.7	0.7	0.7	0.01	0.0370	0.53492	0.06923846	0.9756	0.9756	0.9756	0.9756
1i	Commercial/Industrial/Transportation (Not at Airport)	0.7	0.7	0.7	0.7	0.01	0.0370	0.56954	0.065029738	0.9771	0.9771	0.9771	0.9771
2	Commercial/Industrial/Transportation (Not at Airport)	0.7	0.7	0.7	0.7	0.09	0.3333	0.70774	0.470982753	0.8454	0.8454	0.8454	0.8454
3	Commercial/Industrial/Transportation (Not at Airport)	0.7	0.7	0.7	0.7	0.09	0.3333	0.92235	0.36139571	0.8791	0.8791	0.8791	0.8791
	Inverse distance geometric mean =	0.7000	0.7000	0.7000	0.7000								

Sector 12 (330° - 360°) (clockwise from N)

Fraction Index	Land Type	Surface Roughness (Z)				Area (km2)	Frac of Area (Frac)	Distance from centre (km) (Dist)	Weighting (Frac/Dist)	Z^(Frac/Dist)			
		Winter	Spring	Summer	Autumn					Winter	Spring	Summer	Autumn
1a	Commercial/Industrial/Transportation (Not at Airport)	0.7	0.7	0.7	0.7	0.01	0.0370	0.12877	0.287621628	0.9025	0.9025	0.9025	0.9025
1b	Commercial/Industrial/Transportation (Not at Airport)	0.7	0.7	0.7	0.7	0.01	0.0370	0.23588	0.157016436	0.9455	0.9455	0.9455	0.9455
1c	Commercial/Industrial/Transportation (Not at Airport)	0.7	0.7	0.7	0.7	0.01	0.0370	0.30743	0.120473074	0.9579	0.9579	0.9579	0.9579
1d	Commercial/Industrial/Transportation (Not at Airport)	0.7	0.7	0.7	0.7	0.01	0.0370	0.36468	0.101560374	0.9644	0.9644	0.9644	0.9644
1e	Commercial/Industrial/Transportation (Not at Airport)	0.7	0.7	0.7	0.7	0.01	0.0370	0.41393	0.089476571	0.9686	0.9686	0.9686	0.9686
1f	Commercial/Industrial/Transportation (Not at Airport)	0.7	0.7	0.7	0.7	0.01	0.0370	0.45786	0.08089162	0.9716	0.9716	0.9716	0.9716
1g	Commercial/Industrial/Transportation (Not at Airport)	0.7	0.7	0.7	0.7	0.01	0.0370	0.49789	0.074387991	0.9738	0.9738	0.9738	0.9738
1h	Commercial/Industrial/Transportation (Not at Airport)	0.7	0.7	0.7	0.7	0.01	0.0370	0.53492	0.06923846	0.9756	0.9756	0.9756	0.9756
1i	Open water	0.001	0.001	0.001	0.001	0.01	0.0370	0.56954	0.065029738	0.6381	0.6381	0.6381	0.6381
2	Open water	0.001	0.001	0.001	0.001	0.09	0.3333	0.70774	0.470982753	0.0386	0.0386	0.0386	0.0386
3	Open water	0.001	0.001	0.001	0.001	0.09	0.3333	0.92235	0.36139571	0.0824	0.0824	0.0824	0.0824
	Inverse distance geometric mean =	0.0306	0.0306	0.0306	0.0306								

Appendix 4-2 Ferry Schedule at HKMFT Available at Marine Department's Website

Ferry Schedule at the HKMFT Available at Marine Department's Website

Berth No.	1-4		1-4		
	Depature Date	Depature	Depature Date	Depature	**Maximum**
00:00-01:00	Aug19	1	Aug20	1	1
01:00-02:00	Aug19	0	Aug20	0	0
02:00-03:00	Aug19	0	Aug20	0	0
03:00-04:00	Aug19	0	Aug20	0	0
04:00-05:00	Aug19	0	Aug20	0	0
05:00-06:00	Aug19	0	Aug20	0	0
06:00-07:00	Aug19	0	Aug20	0	0
07:00-08:00	Aug19	1	Aug20	1	1
08:00-09:00	Aug19	3	Aug20	2	3
09:00-10:00	Aug19	2	Aug20	2	2
10:00-11:00	Aug19	4	Aug20	4	4
11:00-12:00	Aug19	3	Aug20	3	3
12:00-13:00	Aug19	2	Aug20	2	2
13:00-14:00	Aug19	3	Aug20	3	3
14:00-15:00	Aug19	3	Aug20	3	3
15:00-16:00	Aug19	3	Aug20	3	3
16:00-17:00	Aug19	2	Aug20	2	2
17:00-18:00	Aug19	3	Aug20	3	3
18:00-19:00	Aug19	1	Aug20	1	1
19:00-20:00	Aug19	1	Aug20	1	1
20:00-21:00	Aug19	2	Aug20	2	2
21:00-22:00	Aug19	2	Aug20	2	2
22:00-23:00	Aug19	0	Aug20	0	0
23:00-00:00	Aug19	1	Aug20	2	2

Berth No.	5-8		5-8		
	Depature Date	Depature	Depature Date	Depature	**Maximum**
00:00-01:00	Aug19	0	Aug20	0	0
01:00-02:00	Aug19	0	Aug20	0	0
02:00-03:00	Aug19	0	Aug20	0	0
03:00-04:00	Aug19	0	Aug20	0	0
04:00-05:00	Aug19	0	Aug20	0	0
05:00-06:00	Aug19	0	Aug20	0	0
06:00-07:00	Aug19	0	Aug20	0	0
07:00-08:00	Aug19	1	Aug20	1	1
08:00-09:00	Aug19	1	Aug20	1	1
09:00-10:00	Aug19	2	Aug20	2	2
10:00-11:00	Aug19	0	Aug20	0	0
11:00-12:00	Aug19	1	Aug20	1	1
12:00-13:00	Aug19	2	Aug20	2	2
13:00-14:00	Aug19	2	Aug20	2	2
14:00-15:00	Aug19	1	Aug20	1	1
15:00-16:00	Aug19	1	Aug20	1	1
16:00-17:00	Aug19	1	Aug20	1	1
17:00-18:00	Aug19	1	Aug20	1	1
18:00-19:00	Aug19	2	Aug20	2	2
19:00-20:00	Aug19	1	Aug20	0	1
20:00-21:00	Aug19	0	Aug20	0	0
21:00-22:00	Aug19	1	Aug20	1	1
22:00-23:00	Aug19	1	Aug20	1	1
23:00-00:00	Aug19	1	Aug20	0	1

Appendix 4-3 Input Parameters of Fast Ferry Services at HKMFT in AERMOD

Emission Inventory of Helicopter Emissions

Emission Point ID	Source Description	Source Type	Coordinates of Sources		Maximum Emission Rate						Emission Height		Exhaust Temperature		Exit Velocity	Equiv. Stack dia.	Operating Period with Emissions	No. of Operating Days per Year
					NO_x	NO_2	NO	RSP	FSP	SO_2								
			X	Y	g/s	g/s	g/s	g/s	g/s	g/s	mPD	mAG	°C	K	m/s	m		
B2	Idling Emissions HKMFT to Macau	Point	833693.2	816638.9	1.13E+00	2.27E-01	9.07E-01	4.04E-02	3.69E-02	1.70E-02	6	2.55	499.8	773	0.001	0.7	0000-0100 (1 Ferry/100%) 0100-0700 (0 Ferry/0%) 0700-1900 (1 Ferries/100%) 1900-0000 (1 Ferries/100%)	365
B3	Idling Emissions HKMFT to Macau	Point	833731.9	816628.2	1.13E+00	2.27E-01	9.07E-01	4.04E-02	3.69E-02	1.70E-02	6	2.55	499.8	773	0.001	0.7	0000-0100 (1 Ferry/100%) 0100-0700 (0 Ferry/0%) 0700-1900 (1 Ferries/100%) 1900-0000 (1 Ferries/100%)	365
B4	Idling Emissions HKMFT to Macau	Point	833769.88	816618.15	1.13E+00	2.27E-01	9.07E-01	4.04E-02	3.69E-02	1.70E-02	6	2.55	499.8	773	0.001	0.7	0000-0100 (1 Ferry/100%) 0100-0700 (0 Ferry/0%) 0700-1900 (1 Ferries/100%) 1900-0000 (1 Ferries/100%)	365
M36	R1 Travelling (Macau)	Point	833829.5	816658.6	1.49E-02	1.19E-02	2.99E-03	2.13E-03	1.95E-03	3.58E-03	6.2	2.75	499.8	773	0.001	0.7	0000-0100 (2 Ferries/50%) 0100-0700 (0 Ferry/0%) 0700-1900 (4 Ferries/100%) 1900-0000 (2 Ferries/50%)	365
M37	R1 Travelling (Macau)	Point	833853.3	816652.5	1.49E-02	1.19E-02	2.99E-03	2.13E-03	1.95E-03	8.96E-04	6.2	2.75	499.8	773	0.001	0.7	0000-0100 (2 Ferries/50%) 0100-0700 (0 Ferry/0%) 0700-1900 (4 Ferries/100%) 1900-0000 (2 Ferries/50%)	365
M38	R1 Travelling (Macau)	Point	833877.7	816658.5	1.49E-02	1.19E-02	2.99E-03	2.13E-03	1.95E-03	8.96E-04	6.2	2.75	499.8	773	0.001	0.7	0000-0100 (2 Ferries/50%) 0100-0700 (0 Ferry/0%) 0700-1900 (4 Ferries/100%) 1900-0000 (2 Ferries/50%)	365
M39	R1 Travelling (Macau)	Point	833902.4	816664.6	1.49E-02	1.19E-02	2.99E-03	2.13E-03	1.95E-03	8.96E-04	6.2	2.75	499.8	773	0.001	0.7	0000-0100 (2 Ferries/50%) 0100-0700 (0 Ferry/0%) 0700-1900 (4 Ferries/100%) 1900-0000 (2 Ferries/50%)	365
M94	R2 Travelling (Taipa, Macau)	Point	833669.9	816647.1	1.49E-02	1.19E-02	2.98E-03	2.12E-03	1.94E-03	8.93E-04	6.2	2.75	499.8	773	0.001	0.7	0000-0100 (2 Ferries/50%) 0100-0700 (0 Ferry/0%) 0700-1900 (4 Ferries/100%) 1900-0000 (2 Ferries/50%)	365
M95	R2 Travelling (Taipa, Macau)	Point	833694.1	816640.1	1.49E-02	1.19E-02	2.98E-03	2.12E-03	1.94E-03	8.93E-04	6.2	2.75	499.8	773	0.001	0.7	0000-0100 (2 Ferries/50%) 0100-0700 (0 Ferry/0%) 0700-1900 (4 Ferries/100%) 1900-0000 (2 Ferries/50%)	365
M96	R2 Travelling (Taipa, Macau)	Point	833717.9	816633.6	1.49E-02	1.19E-02	2.98E-03	2.12E-03	1.94E-03	8.93E-04	6.2	2.75	499.8	773	0.001	0.7	0000-0100 (2 Ferries/50%) 0100-0700 (0 Ferry/0%) 0700-1900 (4 Ferries/100%) 1900-0000 (2 Ferries/50%)	365
M97	R2 Travelling (Taipa, Macau)	Point	833742	816627.2	1.49E-02	1.19E-02	2.98E-03	2.12E-03	1.94E-03	8.93E-04	6.2	2.75	499.8	773	0.001	0.7	0000-0100 (2 Ferries/50%) 0100-0700 (0 Ferry/0%) 0700-1900 (4 Ferries/100%) 1900-0000 (2 Ferries/50%)	365
M98	R2 Travelling (Taipa, Macau)	Point	833766.1	816620.4	1.49E-02	1.19E-02	2.98E-03	2.12E-03	1.94E-03	8.93E-04	6.2	2.75	499.8	773	0.001	0.7	0000-0100 (2 Ferries/50%) 0100-0700 (0 Ferry/0%) 0700-1900 (4 Ferries/100%) 1900-0000 (2 Ferries/50%)	365
M99	R2 Travelling (Taipa, Macau)	Point	833790.2	816613.4	1.49E-02	1.19E-02	2.98E-03	2.12E-03	1.94E-03	8.93E-04	6.2	2.75	499.8	773	0.001	0.7	0000-0100 (2 Ferries/50%) 0100-0700 (0 Ferry/0%) 0700-1900 (4 Ferries/100%) 1900-0000 (2 Ferries/50%)	365
M100	R2 Travelling (Taipa, Macau)	Point	833814.4	816606.9	1.49E-02	1.19E-02	2.98E-03	2.12E-03	1.94E-03	8.93E-04	6.2	2.75	499.8	773	0.001	0.7	0000-0100 (2 Ferries/50%) 0100-0700 (0 Ferry/0%) 0700-1900 (4 Ferries/100%) 1900-0000 (2 Ferries/50%)	365
M101	R2 Travelling (Taipa, Macau)	Point	833837.9	816600.2	1.49E-02	1.19E-02	2.98E-03	2.12E-03	1.94E-03	8.93E-04	6.2	2.75	499.8	773	0.001	0.7	0000-0100 (2 Ferries/50%) 0100-0700 (0 Ferry/0%) 0700-1900 (4 Ferries/100%) 1900-0000 (2 Ferries/50%)	365
M102	R2 Travelling (Taipa, Macau)	Point	833860.9	816610.6	1.49E-02	1.19E-02	2.98E-03	2.12E-03	1.94E-03	8.93E-04	6.2	2.75	499.8	773	0.001	0.7	0000-0100 (2 Ferries/50%) 0100-0700 (0 Ferry/0%) 0700-1900 (4 Ferries/100%) 1900-0000 (2 Ferries/50%)	365

M103	R2 Travelling (Taipa, Macau)	Point	833883.9	816620.7	1.49E-02	1.19E-02	2.98E-03	2.12E-03	1.94E-03	8.93E-04	6.2	2.75	499.8	773	0.001	0.7	0000-0100 (2 Ferries/50%) 0100-0700 (0 Ferry/0%) 0700-1900 (4 Ferries/100%) 1900-0000 (2 Ferries/50%)	365
M104	R2 Travelling (Taipa, Macau)	Point	833907.5	816631	1.49E-02	1.19E-02	2.98E-03	2.12E-03	1.94E-03	8.93E-04	6.2	2.75	499.8	773	0.001	0.7	0000-0100 (2 Ferries/50%) 0100-0700 (0 Ferry/0%) 0700-1900 (4 Ferries/100%) 1900-0000 (2 Ferries/50%)	365
M105	R2 Travelling (Taipa, Macau)	Point	833929.8	816641.3	1.49E-02	1.19E-02	2.98E-03	2.12E-03	1.94E-03	8.93E-04	6.2	2.75	499.8	773	0.001	0.7	0000-0100 (2 Ferries/50%) 0100-0700 (0 Ferry/0%) 0700-1900 (4 Ferries/100%) 1900-0000 (2 Ferries/50%)	365
M106	R2 Travelling (Taipa, Macau)	Point	833945.8	816659.5	1.49E-02	1.19E-02	2.98E-03	2.12E-03	1.94E-03	8.93E-04	6.2	2.75	499.8	773	0.001	0.7	0000-0100 (2 Ferries/50%) 0100-0700 (0 Ferry/0%) 0700-1900 (4 Ferries/100%) 1900-0000 (2 Ferries/50%)	365

Appendix 4-4 Input Parameters of Cruise Vessels at Ocean Terminal in AERMOD

Cruise Vessel Emission - Point Source

ID	Source Description	X	Y	Emission Rate (g/s) [1]					Exit Temperature	Exit Velocity	Internal diameter	Emission Height	Operation Hours
				NO_2	NO	RSP	FSP	SO_2					
				g/s	g/s	g/s	g/s	g/s	K	m/s	m	mPD	
H1a	Hotelling of Star Pisces	835175.4	817276.3	0.65	2.59	0.47	0.47	0.74	448.2 [3]	10.65 [3]	0.6 [3]	50 [2]	08:00 - 20:00 [4]
H1b		835175.4	817276.3	0.65	2.59	0.47	0.47	0.74	448.2 [3]	10.65 [3]	0.6 [3]	50 [2]	
H1c		835175.4	817276.3	0.65	2.59	0.47	0.47	0.74	448.2 [3]	10.65 [3]	0.6 [3]	50 [2]	
H1d		835175.4	817276.3	0.65	2.59	0.47	0.47	0.74	448.2 [3]	10.65 [3]	0.6 [3]	50 [2]	
H2a	Hotelling of Queen Victoria	835170.5	817393.3	0.73	2.91	0.49	0.49	0.77	448.2 [3]	21.12 [3]	0.6 [3]	50 [2]	Full day [4]
H2b		835170.5	817393.3	0.73	2.91	0.49	0.49	0.77	448.2 [3]	21.12 [3]	0.6 [3]	50 [2]	
H2c		835170.5	817393.3	0.73	2.91	0.49	0.49	0.77	448.2 [3]	21.12 [3]	0.6 [3]	50 [2]	
H2d		835170.5	817393.3	0.73	2.91	0.49	0.49	0.77	448.2 [3]	21.12 [3]	0.6 [3]	50 [2]	

Notes:

[1] By making reference to Table 1 of Appendix 3.6 of EIA Report for Proposed Road Improvement in West Kowloon Reclamation Development Phase 1 (Agreement No. CE44/2011 (HY)), 4 chimneys were assumed for each cruise. Therefore, it is assumed that the emission would be emitted equally via the 4 chimneys and the emission rate has been divided by 4. Emission rate is referred to Table 2 of Appendix 3.6 of EIA Report for Proposed Road Improvement in West Kowloon Reclamation Development Phase 1 (Agreement No. CE44/2011 (HY)). By referring to Table 2-6 in USEPA: Current Methodologies in Preparing Mobile Source Port-Related Emission Inventories, the value of Auxiliary Engine Emission Factor of FSP is slightly lower than the value of Auxiliary Engine Emission Factor of RSP. As a conservative approach, the emission rate of RSP is adopted as the emission rate of FSP.

[2] The emission height of the chimney of Star Pisces is estimated based on the height of the Cruise (50mPD) as stated in Table 1 of Appendix 3.6 of EIA Report for Proposed Road Improvement Works in West Kowloon Reclamation Development (Agreement No. CE44/2011 (HY)).

[3] The values of Exhaust Temperature, Exit Velocity and Equivalent Stack Diameter are made reference to the information stated in Table 5 of Appendix 3.6 of EIA Report for Proposed Road Improvement Works in West Kowloon Reclamation Development (Agreement No. CE44/2011 (HY)).

[4] The operation hours are made reference to the information stated in Table 1 of Appendix 3.6 of EIA Report for Proposed Road Improvement Works in West Kowloon Reclamation Development (Agreement No. CE44/2011 (HY)).

Appendix 4-5 Input Parameters of Helicopter Emission Sources in AERMOD

Emission Inventory of Helicopter Emissions

Emission Point ID	Source Description	Source Type	Coordinates of Sources		Maximum Emission Rate						Emission Height		Exhaust Temperature		Exit Velocity	Equiv. Stack dia.	Operating Period with Emissions	No. of Operating Days per Year
					NO_x	NO_2	NO	RSP	FSP	SO_2								
			X	Y	g/s	g/s	g/s	g/s	g/s	g/s	mPD	mAG	°C	K	m/s	m		
H1_1	Hovering (Approach) + Touchdown (first helipad)	Point	833774.0	816645.6	1.06E-01	2.12E-02	8.49E-02	2.68E-03	2.68E-03	2.14E-05	40.8	37.3	100.0	373.2	6.0	0.3	0800-1800 (100%) 1800-2300 (75%) 2300-0800 (0%)	365
H1_2	Helicopter idling emission (first helipad)	Point	833774.0	816645.6	1.07E-01	2.13E-02	8.54E-02	4.62E-03	4.62E-03	1.06E-04	39.9	36.5	100.0	373.2	6.0	0.3	0800-1800 (100%) 1800-2300 (75%) 2300-0800 (0%)	365
H1_3	Hovering (Take-off) and Lift-off (first helipad)	Point	833774.0	816645.6	1.97E-01	3.95E-02	1.58E-01	4.99E-03	4.99E-03	3.98E-05	40.8	37.3	100.0	373.2	6.0	0.3	0800-1800 (100%) 1800-2300 (75%) 2300-0800 (0%)	365

Column I and J are the NOx marine emissions for annual NO2 assessment in the TMFB AQIA, TMFB AQIA (2020) has two emissions inventory for the same marine emissions, "for assessment except annual NO2" and "for annual NO2 assessment". The emissions inventory for " for assessment except annual NO2" is always equal to or greater than "for annual NO2 assessment" with up to 33 times difference. Reason being that in the "for assessment except annual NO2", the number of vessels at berth each day and number of trips of vessels arriving and departing each day agreed with CEDD is much larger which implies the busiest days of the TMFB while the "for annual NO2 assessment" inventory took an average value of vessels at berth and arrival and departure per day in a year of operation also agreed with CEDD.

"As advised by CEDD, material transport at barging point B was assumed to be 2 times/week during the period of 0700-2300."
"As advised by CEDD, material import at each barging point (IB1 or IB2) accounts for 3% of the time on average annually."

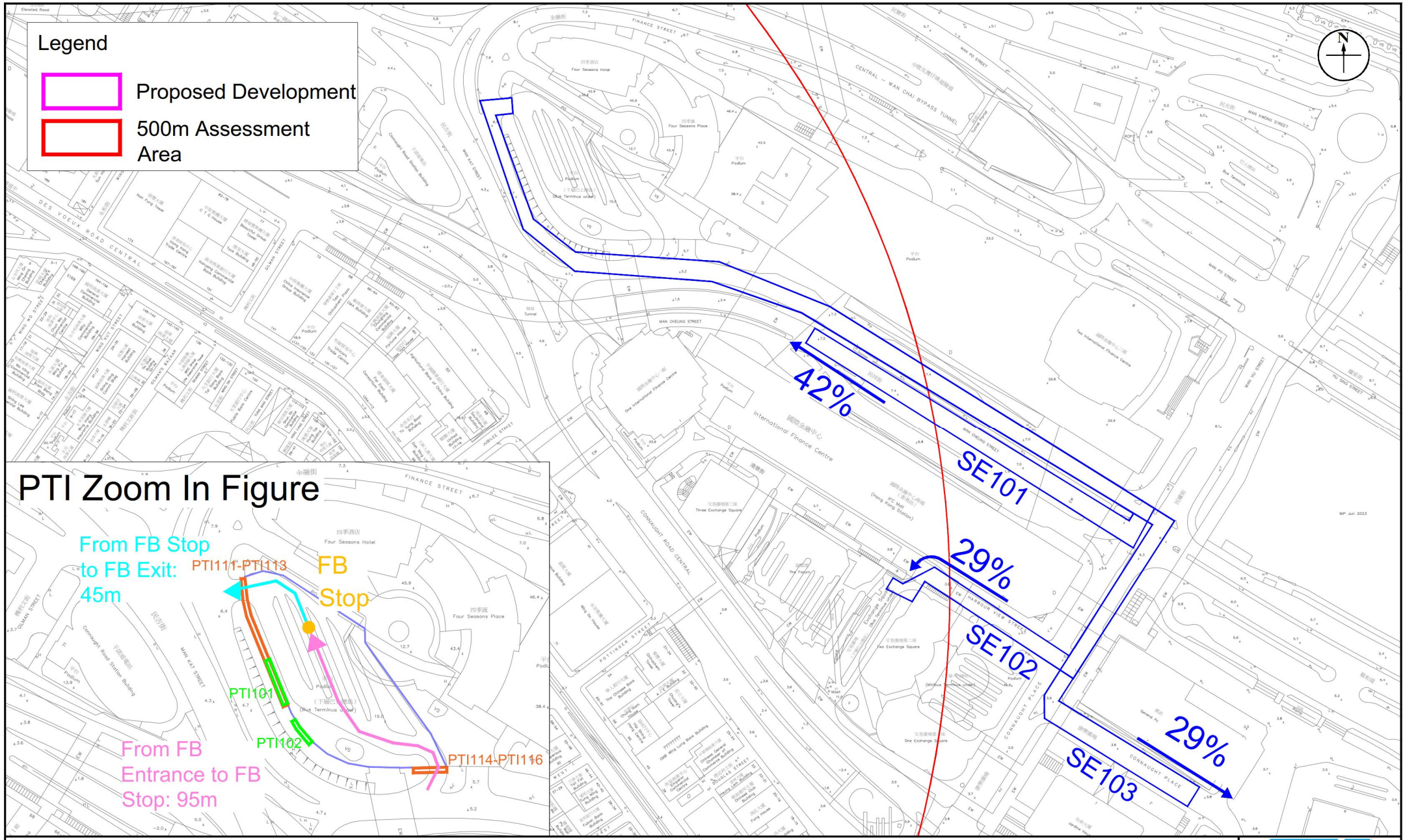
(Source :TMFB 2020 AQIA Review Annex A1 - NOx, SO2, RSP and FSP Emission Rate Calculations for Marine Vessels (for annual NO2 assessment), Adobe Reader PDF Page 41/255)

Emission Inventory of Helicopter Emissions

Emission Point ID	Source Description	Type of Fuel	Width (m)	Total Path Length (m)	Area of Path	Source Type	Coordinates of Area source				Emission Rate						Emission Height	Operating Period with Emissions	No. of Operating Days per Year
							Start		End		NOx	NO_2	NO	RSP	FSP	SO2			
							X	Y	X	Y	g/s	(g/m^2s)	(g/m^2s)	(g/m^2s)	(g/m^2s)	(g/m^2s)	mAG		
H1_4	Helipad 1 (Approach)	Diesel	2.3	99.7	225.3	Line	833774.0	816645.6	833782.7	816646.5	1.04E-01	9.21E-05	3.68E-04	1.16E-05	1.16E-05	9.28E-08	43.25	0800-1800 (100%) 1801-2259 (75%) 2300-0759 (0%)	365
H1_5		Diesel	2.3	99.7	225.3	Line	833782.7	816646.5	833789.7	816646.8	1.04E-01	9.21E-05	3.68E-04	1.16E-05	1.16E-05	9.28E-08	44.05	0800-1800 (100%) 1801-2259 (75%) 2300-0759 (0%)	365
H1_6		Diesel	2.3	99.7	225.3	Line	833789.7	816646.8	833796.7	816647.2	1.04E-01	9.21E-05	3.68E-04	1.16E-05	1.16E-05	9.28E-08	44.75	0800-1800 (100%) 1801-2259 (75%) 2300-0759 (0%)	365
H1_7		Diesel	2.3	99.7	225.3	Line	833796.7	816647.2	833803.7	816647.6	1.04E-01	9.21E-05	3.68E-04	1.16E-05	1.16E-05	9.28E-08	45.45	0800-1800 (100%) 1801-2259 (75%) 2300-0759 (0%)	365
H1_8		Diesel	2.3	99.7	225.3	Line	833803.7	816647.6	833810.6	816648.0	1.04E-01	9.21E-05	3.68E-04	1.16E-05	1.16E-05	9.28E-08	46.25	0800-1800 (100%) 1801-2259 (75%) 2300-0759 (0%)	365
H1_9		Diesel	2.3	99.7	225.3	Line	833810.6	816648.0	833817.6	816648.4	1.04E-01	9.21E-05	3.68E-04	1.16E-05	1.16E-05	9.28E-08	46.95	0800-1800 (100%) 1801-2259 (75%) 2300-0759 (0%)	365
H1_10		Diesel	2.3	99.7	225.3	Line	833817.6	816648.4	833824.6	816648.8	1.04E-01	9.21E-05	3.68E-04	1.16E-05	1.16E-05	9.28E-08	47.75	0800-1800 (100%) 1801-2259 (75%) 2300-0759 (0%)	365
H1_11		Diesel	2.3	99.7	225.3	Line	833824.6	816648.8	833831.6	816649.2	1.04E-01	9.21E-05	3.68E-04	1.16E-05	1.16E-05	9.28E-08	48.45	0800-1800 (100%) 1801-2259 (75%) 2300-0759 (0%)	365
H1_12		Diesel	2.3	99.7	225.3	Line	833831.6	816649.2	833838.6	816649.5	1.04E-01	9.21E-05	3.68E-04	1.16E-05	1.16E-05	9.28E-08	49.15	0800-1800 (100%) 1801-2259 (75%) 2300-0759 (0%)	365
H1_13		Diesel	2.3	99.7	225.3	Line	833838.6	816649.5	833846.6	816649.9	1.04E-01	9.21E-05	3.68E-04	1.16E-05	1.16E-05	9.28E-08	49.95	0800-1800 (100%) 1801-2259 (75%) 2300-0759 (0%)	365
H1_14		Diesel	2.3	99.7	225.3	Line	833846.6	816649.9	833852.6	816650.3	1.04E-01	9.21E-05	3.68E-04	1.16E-05	1.16E-05	9.28E-08	50.65	0800-1800 (100%) 1801-2259 (75%) 2300-0759 (0%)	365
H1_15		Diesel	2.3	99.7	225.3	Line	833852.6	816650.3	833859.6	816650.7	1.04E-01	9.21E-05	3.68E-04	1.16E-05	1.16E-05	9.28E-08	51.35	0800-1800 (100%) 1801-2259 (75%) 2300-0759 (0%)	365
H1_16		Diesel	2.3	99.7	225.3	Line	833859.6	816650.7	833866.6	816651.1	1.04E-01	9.21E-05	3.68E-04	1.16E-05	1.16E-05	9.28E-08	52.15	0800-1800 (100%) 1801-2259 (75%) 2300-0759 (0%)	365
H1_17		Diesel	2.3	99.7	225.3	Line	833866.6	816651.1	833873.5	816651.5	1.04E-01	9.21E-05	3.68E-04	1.16E-05	1.16E-05	9.28E-08	52.15	0800-1800 (100%) 1801-2259 (75%) 2300-0759 (0%)	365
H1_18	Helipad 1 (Takeoff)	Diesel	2.3	96.8	218.8	Line	833774.0	816645.6	833769.4	816649.2	4.42E-02	4.04E-05	1.62E-04	5.10E-06	5.10E-06	4.07E-08	43.25	0800-1800 (100%) 1801-2259 (75%) 2300-0759 (0%)	365
H1_19		Diesel	2.3	96.8	218.8	Line	833769.4	816649.2	833763.1	816652.3	4.42E-02	4.04E-05	1.62E-04	5.10E-06	5.10E-06	4.07E-08	44.05	0800-1800 (100%) 1801-2259 (75%) 2300-0759 (0%)	365
H1_20		Diesel	2.3	96.8	218.8	Line	833763.1	816652.3	833756.9	816655.4	4.42E-02	4.04E-05	1.62E-04	5.10E-06	5.10E-06	4.07E-08	44.75	0800-1800 (100%) 1801-2259 (75%) 2300-0759 (0%)	365
H1_21		Diesel	2.3	96.8	218.8	Line	833756.9	816655.4	833750.6	816658.4	4.42E-02	4.04E-05	1.62E-04	5.10E-06	5.10E-06	4.07E-08	45.45	0800-1800 (100%) 1801-2259 (75%) 2300-0759 (0%)	365
H1_22		Diesel	2.3	96.8	218.8	Line	833750.6	816658.4	833744.3	816661.5	4.42E-02	4.04E-05	1.62E-04	5.10E-06	5.10E-06	4.07E-08	46.25	0800-1800 (100%) 1801-2259 (75%) 2300-0759 (0%)	365
H1_23		Diesel	2.3	96.8	218.8	Line	833744.3	816661.5	833738.0	816664.6	4.42E-02	4.04E-05	1.62E-04	5.10E-06	5.10E-06	4.07E-08	46.95	0800-1800 (100%) 1801-2259 (75%) 2300-0759 (0%)	365
H1_24		Diesel	2.3	96.8	218.8	Line	833738.0	816664.6	833731.7	816667.7	4.42E-02	4.04E-05	1.62E-04	5.10E-06	5.10E-06	4.07E-08	47.75	0800-1800 (100%) 1801-2259 (75%) 2300-0759 (0%)	365
H1_25		Diesel	2.3	96.8	218.8	Line	833731.7	816667.7	833725.5	816670.8	4.42E-02	4.04E-05	1.62E-04	5.10E-06	5.10E-06	4.07E-08	48.45	0800-1800 (100%) 1801-2259 (75%) 2300-0759 (0%)	365
H1_26		Diesel	2.3	96.8	218.8	Line	833725.5	816670.8	833719.2	816673.9	4.42E-02	4.04E-05	1.62E-04	5.10E-06	5.10E-06	4.07E-08	49.15	0800-1800 (100%) 1801-2259 (75%) 2300-0759 (0%)	365

H1_27		Diesel	2.3	96.8	218.8	Line	833719.2	816673.9	833712.9	816677.0	4.42E-02	4.04E-05	1.62E-04	5.10E-06	5.10E-06	4.07E-08	49.95	0800-1800 (100%) 1801-2259 (75%) 2300-0759 (0%)	365
H1_28		Diesel	2.3	96.8	218.8	Line	833712.9	816677.0	833706.6	816680.1	4.42E-02	4.04E-05	1.62E-04	5.10E-06	5.10E-06	4.07E-08	50.65	0800-1800 (100%) 1801-2259 (75%) 2300-0759 (0%)	365
H1_29		Diesel	2.3	96.8	218.8	Line	833706.6	816680.1	833700.3	816683.2	4.42E-02	4.04E-05	1.62E-04	5.10E-06	5.10E-06	4.07E-08	51.35	0800-1800 (100%) 1801-2259 (75%) 2300-0759 (0%)	365
H1_30		Diesel	2.3	96.8	218.8	Line	833700.3	816683.2	833694.1	816686.3	4.42E-02	4.04E-05	1.62E-04	5.10E-06	5.10E-06	4.07E-08	52.15	0800-1800 (100%) 1801-2259 (75%) 2300-0759 (0%)	365
H1_31		Diesel	2.3	96.8	218.8	Line	833694.1	816686.3	833687.8	816689.4	4.42E-02	4.04E-05	1.62E-04	5.10E-06	5.10E-06	4.07E-08	52.15	0800-1800 (100%) 1801-2259 (75%) 2300-0759 (0%)	365

Appendix 4-6 Input Parameters of Public Transport Interchanges and Bus Terminus in AERMOD



Appendix: 4.6	RAMBOLL
Title: Public Transport Interchange Emission Sources - Hong Kong Station Bus Terminus	Drawn by: AW Checked by: CC
Project: S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central	Rev.: 1.0 Date: Nov 2023

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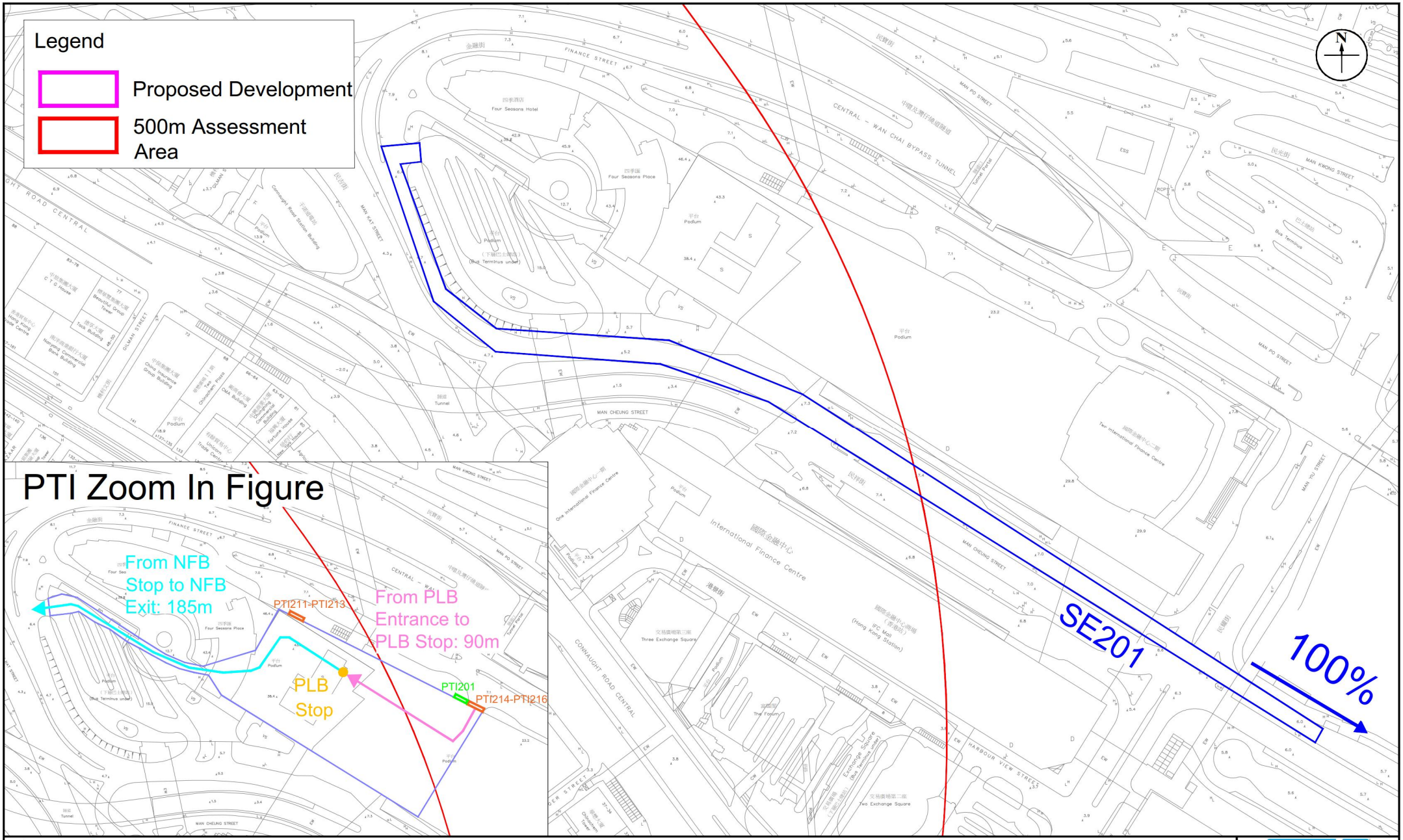

Appendix: 4.6	RAMBOLL
Title: Public Transport Interchange Emission Sources - Hong Kong Station Public Light Bus Terminus (Diesel)	Drawn by: AW Checked by: CC
Project: S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central	Rev.: 1.0 Date: Nov 2023

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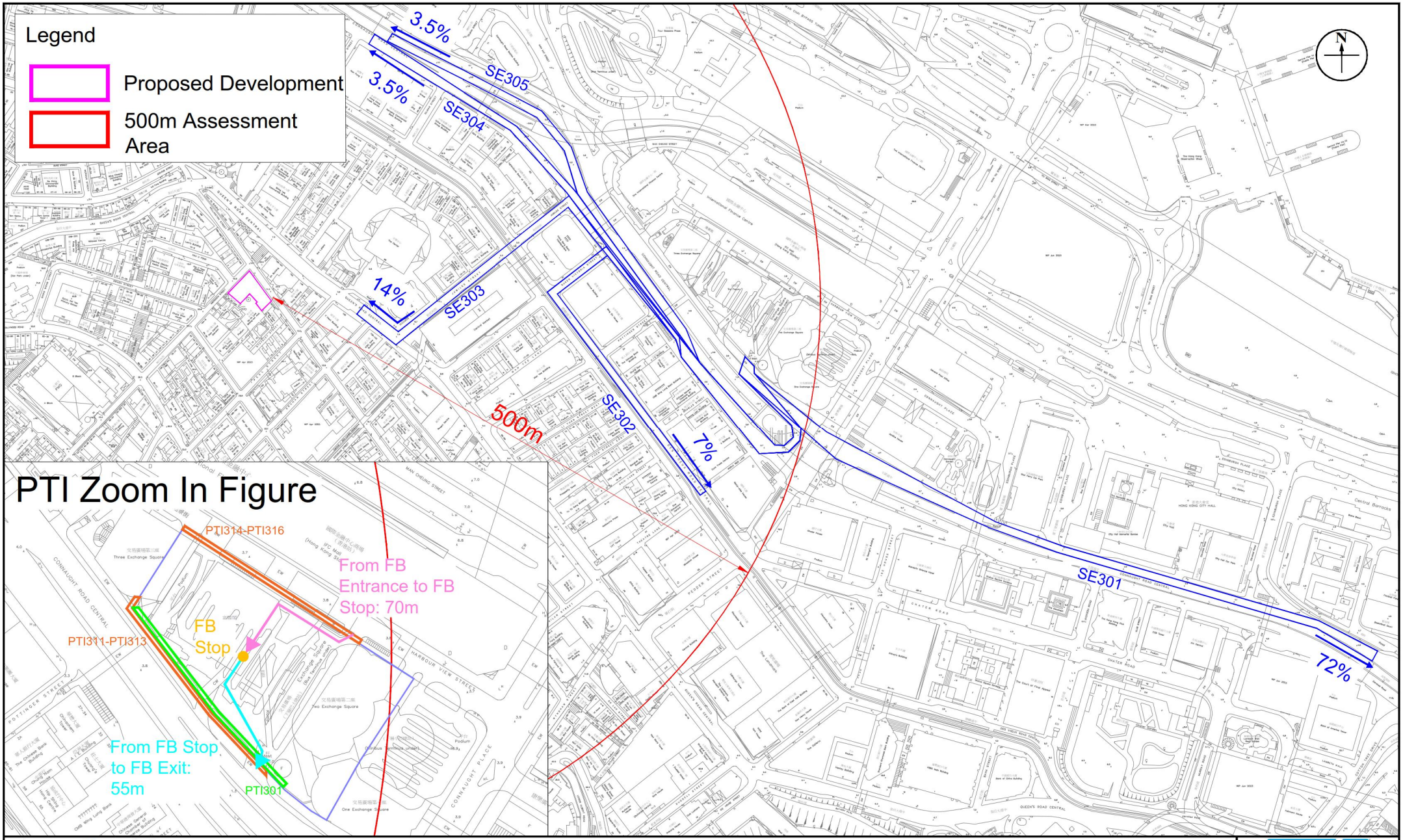

Appendix: 4.6	RAMBOLL
Title: Public Transport Interchange Emission Sources - Exchange Square Bus Terminus	Drawn by: AW Checked by: CC
Project: S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central	Rev.: 1.0 Date: Nov 2023

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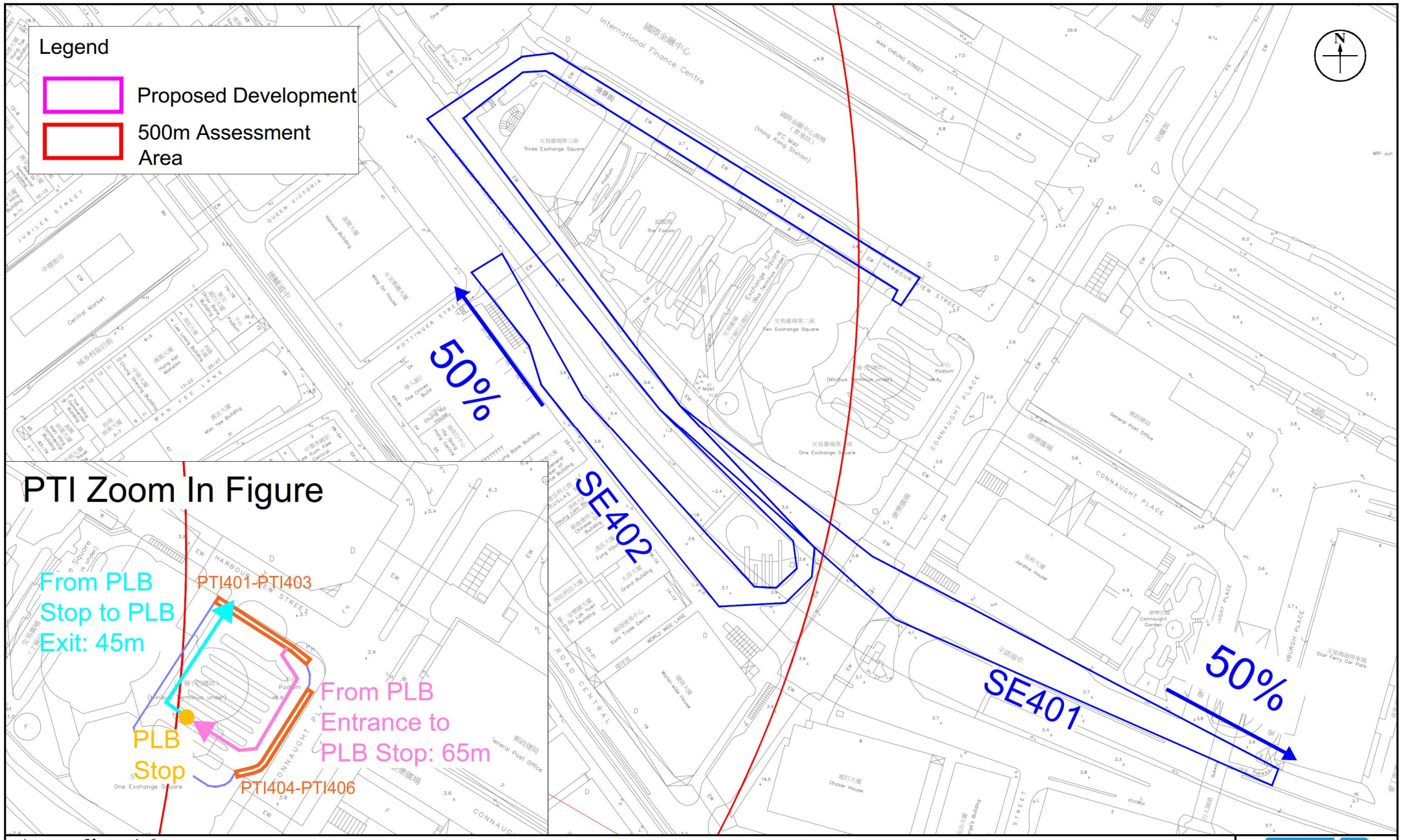

Appendix:	4.6
Title:	Public Transport Interchange Emission Sources - Exchange Square Public Light Bus Terminus (Diesel)
Project:	S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central

RAMBOLL

Drawn by:	AW
Checked by:	CC
Rev.:	1.0
Date:	Nov 2023

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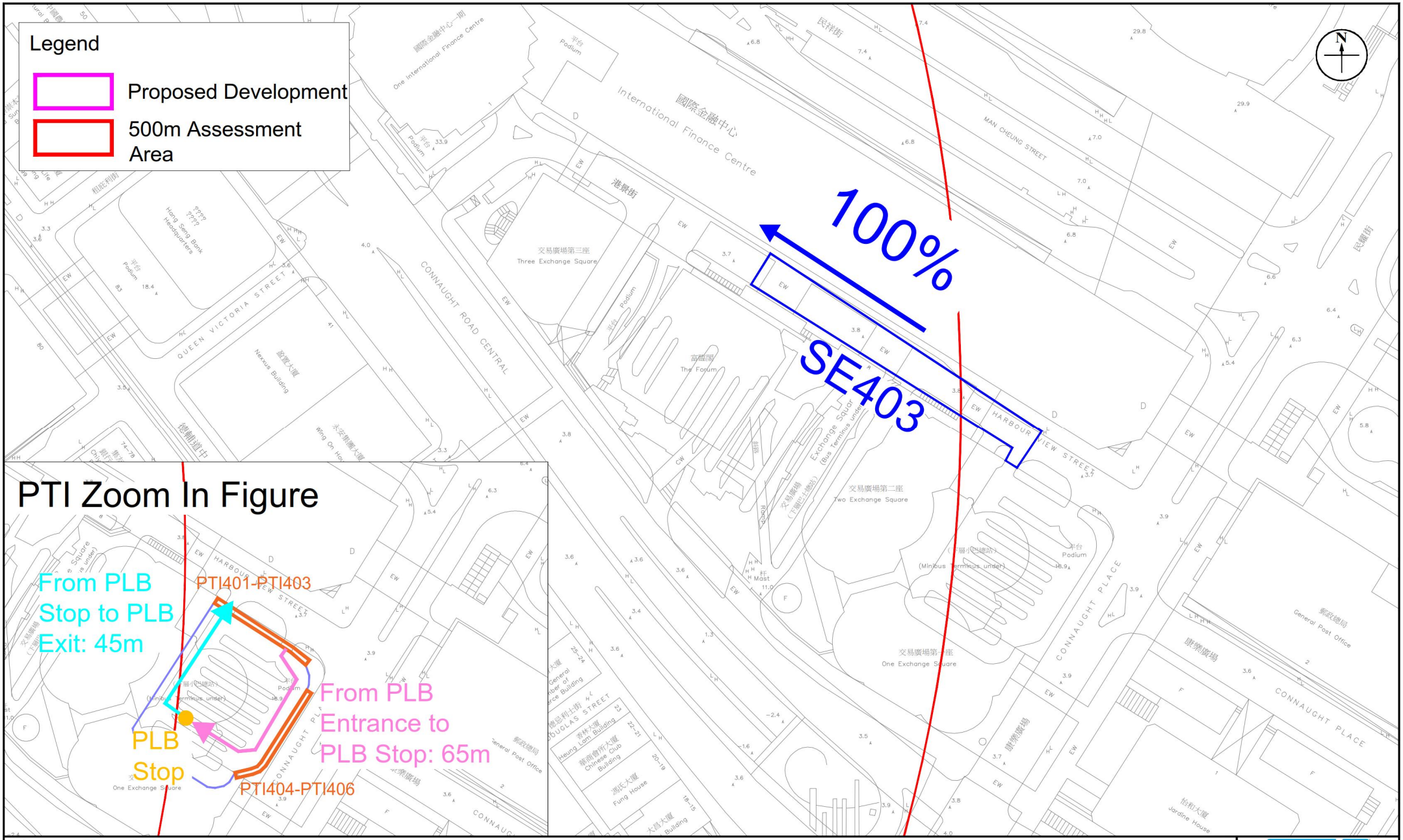

Appendix:	4.6
Title:	Public Transport Interchange Emission Sources - Exchange Square Public Light Bus Terminus (LPG)
Project:	S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central

RAMBOLL

Drawn by:	AW
Checked by:	CC
Rev.:	1.0
Date:	Nov 2023

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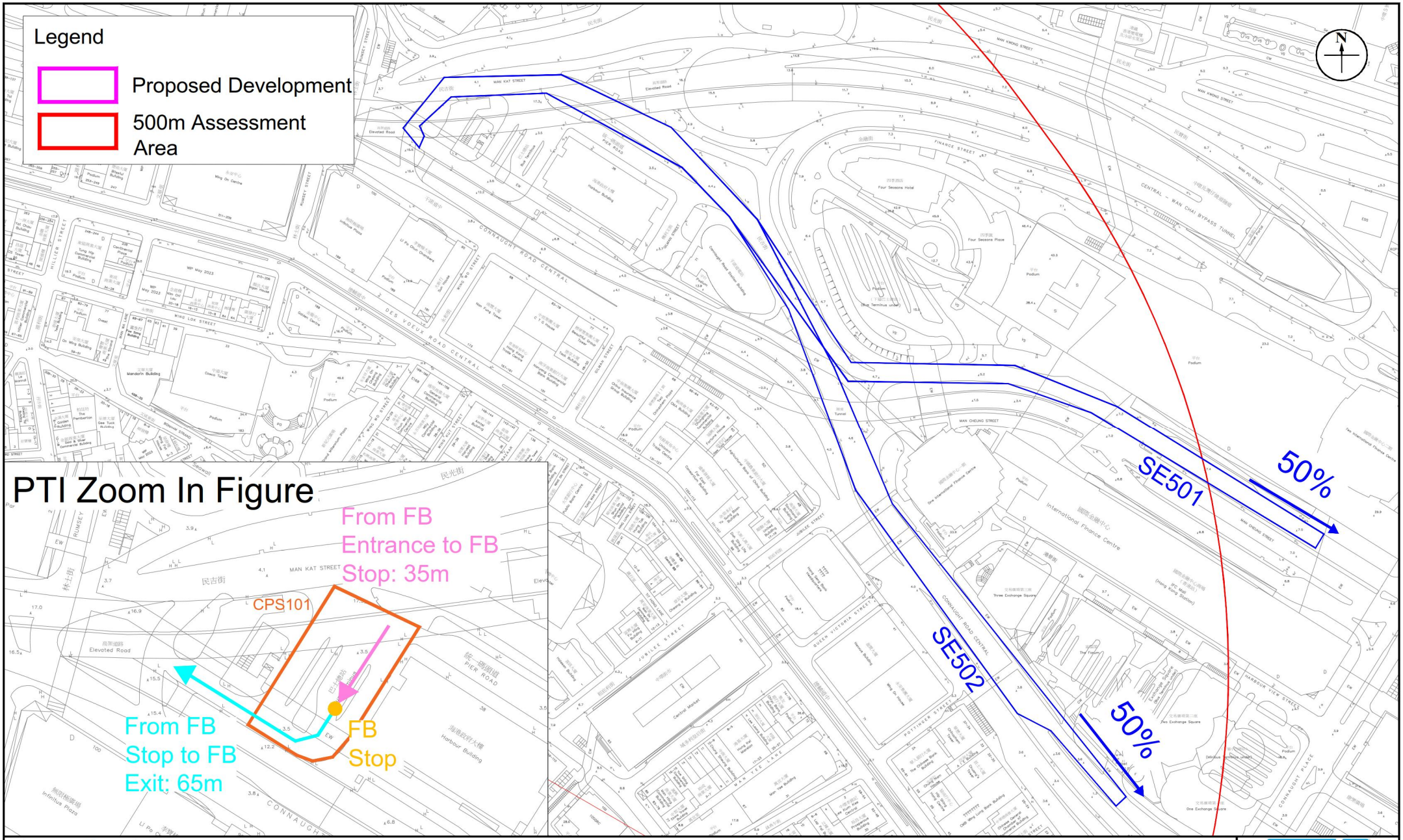

Appendix:	4.6
Title:	Public Transport Interchange Emission Sources - Man Kat Street Bus Terminus
Project:	S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central

RAMBOLL

Drawn by:	AW
Checked by:	CC
Rev.:	1.0
Date:	Nov 2023

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Emission Inventory for AERMOD Model - Start Emission Outside Bus Terminus (Year 2030 - Q1)

Bus Terminus	Source ID	Type	X (m)	Y (m)	Base Elevation (mPD)	Release Height (mAG)	Max. Hourly Emission Rate (g/m2/s) NO	NO2
Emission Outside Terminus								
Hong Kong Station Bus Terminus - Franchised Bus	SE101	AREAPOLY	834123.9	816397.2	6.4	3.9	8.75E-07	6.92E-08
			834140.7	816398.7				
			834141.3	816390.5				
			834132.2	816389.5				
			834152.1	816334.9				
			834174.2	816317.6				
			834249.9	816312.4				
			834308.3	816288.8				
			834479.1	816182.3				
			834467.8	816161.6				
			834295.4	816269.7				
			834300.3	816277.5				
			834465.7	816175.8				
			834468.0	816179.7				
			834293.4	816285.5				
			834246.2	816302.0				
			834173.8	816307.5				
			834146.7	816329.5				
	SE102	AREAPOLY	834123.9	816397.2	5.6	3.9	6.34E-07	5.02E-08
			834140.7	816398.7				
			834141.3	816390.5				
			834132.2	816389.5				
			834152.1	816334.9				
			834174.2	816317.6				
			834249.9	816312.4				
			834308.2	816288.9				
			834489.6	816175.7				
			834436.2	816092.8				
			834358.1	816143.9				
			834351.4	816133.3				
			834337.9	816140.0				
			834341.4	816145.8				
			834346.5	816142.7				
			834363.3	816151.5				
			834434.1	816104.8				
			834478.0	816173.7				
			834293.4	816285.5				
			834246.2	816302.0				
			834173.8	816307.5				
			834146.7	816329.5				
	SE103	AREAPOLY	834123.9	816397.2	5.5	3.9	6.05E-07	4.79E-08
			834140.7	816398.7				
			834141.3	816390.5				
			834132.2	816389.5				
			834152.1	816334.9				
			834174.2	816317.6				
			834249.9	816312.4				
			834308.2	816288.9				
			834489.6	816175.7				
			834428.7	816081.2				
			834502.7	816035.7				
			834496.4	816025.5				
			834421.1	816071.9				
			834421.0	816084.2				
			834478.0	816173.7				
			834293.4	816285.5				
			834246.2	816302.0				
			834173.8	816307.5				
			834146.7	816329.5				
Hong Kong Station Bus Terminus - Public Light Bus (Diesel)	SE201	AREAPOLY	834140.7	816398.7	6	2.6	1.65E-06	2.13E-07
			834141.3	816390.5				
			834132.2	816389.5				
			834152.1	816334.9				
			834174.2	816317.6				
			834249.9	816312.4				
			834308.3	816288.8				
			834535.9	816142.4				
			834532.5	816136.4				
			834293.4	816285.5				
			834246.2	816302.0				
			834173.8	816307.5				
			834146.7	816329.5				
			834123.9	816397.2				

Emission Inventory for AERMOD Model - Start Emission Outside Bus Terminus (Year 2030 - Q2)

Bus Terminus	Source ID	Type	X (m)	Y (m)	Base Elevation (mPD)	Release Height (mAG)	Max. Hourly Emission Rate (g/m2/s) NO	NO2
Emission Outside Terminus								
Hong Kong Station Bus Terminus - Franchised Bus	SE101	AREAPOLY	834123.9	816397.2	6.4	3.9	8.75E-07	6.92E-08
			834140.7	816398.7				
			834141.3	816390.5				
			834132.2	816389.5				
			834152.1	816334.9				
			834174.2	816317.6				
			834249.9	816312.4				
			834308.3	816288.8				
			834479.1	816182.3				
			834467.8	816161.6				
			834295.4	816269.7				
			834300.3	816277.5				
			834465.7	816175.8				
			834468.0	816179.7				
			834293.4	816285.5				
			834246.2	816302.0				
			834173.8	816307.5				
			834146.7	816329.5				
	SE102	AREAPOLY	834123.9	816397.2	5.6	3.9	6.34E-07	5.02E-08
			834140.7	816398.7				
			834141.3	816390.5				
			834132.2	816389.5				
			834152.1	816334.9				
			834174.2	816317.6				
			834249.9	816312.4				
			834308.2	816288.9				
			834489.6	816175.7				
			834436.2	816092.8				
			834358.1	816143.9				
			834351.4	816133.3				
			834337.9	816140.0				
			834341.4	816145.8				
			834346.5	816142.7				
			834363.3	816151.5				
			834434.1	816104.8				
			834478.0	816173.7				
			834293.4	816285.5				
			834246.2	816302.0				
			834173.8	816307.5				
			834146.7	816329.5				
	SE103	AREAPOLY	834123.9	816397.2	5.5	3.9	6.05E-07	4.79E-08
			834140.7	816398.7				
			834141.3	816390.5				
			834132.2	816389.5				
			834152.1	816334.9				
			834174.2	816317.6				
			834249.9	816312.4				
			834308.2	816288.9				
			834489.6	816175.7				
			834428.7	816081.2				
			834502.7	816035.7				
			834496.4	816025.5				
			834421.1	816071.9				
			834421.0	816084.2				
			834478.0	816173.7				
			834293.4	816285.5				
			834246.2	816302.0				
			834173.8	816307.5				
			834146.7	816329.5				
Hong Kong Station Bus Terminus - Public Light Bus (Diesel)	SE201	AREAPOLY	834140.7	816398.7	6	2.6	1.57E-06	2.13E-07
			834141.3	816390.5				
			834132.2	816389.5				
			834152.1	816334.9				
			834174.2	816317.6				
			834249.9	816312.4				
			834308.3	816288.8				
			834535.9	816142.4				
			834532.5	816136.4				
			834293.4	816285.5				
			834246.2	816302.0				
			834173.8	816307.5				
			834146.7	816329.5				
			834123.9	816397.2				

Emission Inventory for AERMOD Model - Start Emission Outside Bus Terminus (Year 2030 - Q3)

Bus Terminus	Source ID	Type	X (m)	Y (m)	Base Elevation (mPD)	Release Height (mAG)	Max. Hourly Emission Rate (g/m2/s) NO	NO2
Emission Outside Terminus								
Hong Kong Station Bus Terminus - Franchised Bus	SE101	AREAPOLY	834123.9	816397.2	6.4	3.9	8.75E-07	6.92E-08
			834140.7	816398.7				
			834141.3	816390.5				
			834132.2	816389.5				
			834152.1	816334.9				
			834174.2	816317.6				
			834249.9	816312.4				
			834308.3	816288.8				
			834479.1	816182.3				
			834467.8	816161.6				
			834295.4	816269.7				
			834300.3	816277.5				
			834465.7	816175.8				
			834468.0	816179.7				
			834293.4	816285.5				
			834246.2	816302.0				
			834173.8	816307.5				
			834146.7	816329.5				
	SE102	AREAPOLY	834123.9	816397.2	5.6	3.9	6.34E-07	5.02E-08
			834140.7	816398.7				
			834141.3	816390.5				
			834132.2	816389.5				
			834152.1	816334.9				
			834174.2	816317.6				
			834249.9	816312.4				
			834308.2	816288.9				
			834489.6	816175.7				
			834436.2	816092.8				
			834358.1	816143.9				
			834351.4	816133.3				
			834337.9	816140.0				
			834341.4	816145.8				
			834346.5	816142.7				
			834363.3	816151.5				
			834434.1	816104.8				
			834478.0	816173.7				
			834293.4	816285.5				
			834246.2	816302.0				
			834173.8	816307.5				
			834146.7	816329.5				
	SE103	AREAPOLY	834123.9	816397.2	5.5	3.9	6.05E-07	4.79E-08
			834140.7	816398.7				
			834141.3	816390.5				
			834132.2	816389.5				
			834152.1	816334.9				
			834174.2	816317.6				
			834249.9	816312.4				
			834308.2	816288.9				
			834489.6	816175.7				
			834428.7	816081.2				
			834502.7	816035.7				
			834496.4	816025.5				
			834421.1	816071.9				
			834421.0	816084.2				
			834478.0	816173.7				
			834293.4	816285.5				
			834246.2	816302.0				
			834173.8	816307.5				
			834146.7	816329.5				
Hong Kong Station Bus Terminus - Public Light Bus (Diesel)	SE201	AREAPOLY	834140.7	816398.7	6	2.6	1.45E-06	2.12E-07
			834141.3	816390.5				
			834132.2	816389.5				
			834152.1	816334.9				
			834174.2	816317.6				
			834249.9	816312.4				
			834308.3	816288.8				
			834535.9	816142.4				
			834532.5	816136.4				
			834293.4	816285.5				
			834246.2	816302.0				
			834173.8	816307.5				
			834146.7	816329.5				
			834123.9	816397.2				

Emission Inventory for AERMOD Model - Start Emission Outside Bus Terminus (Year 2030 - Q4)

Bus Terminus	Source ID	Type	X (m)	Y (m)	Base Elevation (mPD)	Release Height (mAG)	Max. Hourly Emission Rate (g/m2/s) NO	NO2
Emission Outside Terminus								
Hong Kong Station Bus Terminus - Franchised Bus	SE101	AREAPOLY	834123.9	816397.2	6.4	3.9	8.75E-07	6.92E-08
			834140.7	816398.7				
			834141.3	816390.5				
			834132.2	816389.5				
			834152.1	816334.9				
			834174.2	816317.6				
			834249.9	816312.4				
			834308.3	816288.8				
			834479.1	816182.3				
			834467.8	816161.6				
			834295.4	816269.7				
			834300.3	816277.5				
			834465.7	816175.8				
			834468.0	816179.7				
			834293.4	816285.5				
			834246.2	816302.0				
			834173.8	816307.5				
			834146.7	816329.5				
	SE102	AREAPOLY	834123.9	816397.2	5.6	3.9	6.34E-07	5.02E-08
			834140.7	816398.7				
			834141.3	816390.5				
			834132.2	816389.5				
			834152.1	816334.9				
			834174.2	816317.6				
			834249.9	816312.4				
			834308.2	816288.9				
			834489.6	816175.7				
			834436.2	816092.8				
			834358.1	816143.9				
			834351.4	816133.3				
			834337.9	816140.0				
			834341.4	816145.8				
			834346.5	816142.7				
			834363.3	816151.5				
			834434.1	816104.8				
			834478.0	816173.7				
			834293.4	816285.5				
			834246.2	816302.0				
			834173.8	816307.5				
			834146.7	816329.5				
	SE103	AREAPOLY	834123.9	816397.2	5.5	3.9	6.05E-07	4.79E-08
			834140.7	816398.7				
			834141.3	816390.5				
			834132.2	816389.5				
			834152.1	816334.9				
			834174.2	816317.6				
			834249.9	816312.4				
			834308.2	816288.9				
			834489.6	816175.7				
			834428.7	816081.2				
			834502.7	816035.7				
			834496.4	816025.5				
			834421.1	816071.9				
			834421.0	816084.2				
			834478.0	816173.7				
			834293.4	816285.5				
			834246.2	816302.0				
			834173.8	816307.5				
			834146.7	816329.5				
Hong Kong Station Bus Terminus - Public Light Bus (Diesel)	SE201	AREAPOLY	834140.7	816398.7	6	2.6	1.62E-06	2.13E-07
			834141.3	816390.5				
			834132.2	816389.5				
			834152.1	816334.9				
			834174.2	816317.6				
			834249.9	816312.4				
			834308.3	816288.8				
			834535.9	816142.4				
			834532.5	816136.4				
			834293.4	816285.5				
			834246.2	816302.0				
			834173.8	816307.5				
			834146.7	816329.5				
			834123.9	816397.2				

Emission Inventory for AERMOD Model - Start Emission Outside Bus Terminus (Year 2030 - Q1)

Bus Terminus	Source ID	Type	X (m)	Y (m)	Base Elevation (mPD)	Release Height (mAG)	Max. Hourly Emission Rate NO (g/m2/s)	Max. Hourly Emission Rate NO2 (g/m2/s)
Emission Outside Terminus								
Exchange Square Bus Terminus - Franchised Bus	SE301	AREAPOLY	834302.7	816087.6	4.1	3.9	3.54E-06	2.89E-07
			834311.0	816078.9				
			834311.1	816072.3				
			834376.6	816018.9				
			834530.5	815937.0				
			834591.4	815914.9				
			834825.4	815846.8				
			834878.7	815819.2				
			834873.7	815810.2				
			834823.5	815839.9				
			834585.8	815909.4				
			834524.5	815931.6				
			834385.6	815993.8				
			834297.2	816071.8				
	SE302	AREAPOLY	834302.7	816087.6	4	3.9	4.40E-07	3.59E-08
			834311.0	816078.9				
			834311.1	816072.3				
			834353.7	816022.2				
			834352.5	816010.5				
			834342.0	816000.2				
			834315.5	815998.8				
			834244.6	816087.4				
			834239.8	816102.9				
			834177.3	816179.5				
			834131.7	816144.6				
			834267.0	815964.6				
			834261.8	815961.0				
			834122.5	816146.3				
			834176.2	816187.7				
			834261.2	816082.4				
			834329.6	816006.7				
			834338.4	816006.2				
			834346.6	816013.9				
			834345.1	816024.8				
			834297.2	816071.8				
	SE303	AREAPOLY	834297.2	816071.8	7.9	3.9	7.79E-07	6.35E-08
			834302.7	816087.6				
			834311.0	816078.9				
			834311.1	816072.3				
			834353.7	816022.2				
			834352.5	816010.5				
			834342.0	816000.2				
			834315.5	815998.8				
			834244.6	816087.4				
			834239.8	816102.9				
			834141.6	816223.4				
			833984.6	816098.4				
			833949.2	816126.3				
			833955.8	816134.6				
			833986.9	816110.3				
			834142.4	816233.8				
			834261.2	816082.4				
			834329.6	816006.7				
			834338.4	816006.2				
			834346.6	816013.9				
			834345.1	816024.8				
	SE304	AREAPOLY	833960.1	816372.1	3.9	3.9	1.98E-07	1.61E-08
			833965.3	816380.9				
			834095.1	816296.7				
			834150.0	816235.9				
			834261.2	816082.4				
			834329.6	816006.7				
			834338.4	816006.2				
			834346.6	816013.9				
			834345.1	816024.8				
			834297.2	816071.8				
			834302.7	816087.6				
			834311.0	816078.9				
			834311.1	816072.3				
			834353.7	816022.2				
			834352.5	816010.5				
			834342.0	816000.2				
			834315.5	815998.8				
			834244.6	816087.4				
			834239.8	816102.9				
			834140.5	816236.4				
			834089.1	816293.4				
	SE305	AREAPOLY	833977.0	816374.4	6.9	3.9	1.84E-07	1.50E-08
			833981.4	816381.4				
			834117.7	816310.9				
			834144.6	816278.0				
			834159.0	816237.6				
			834249.0	816112.8				
			834261.2	816082.4				
			834329.6	816006.7				
			834338.4	816006.2				
			834346.6	816013.9				
			834345.1	816024.8				
			834297.2	816071.8				
			834302.7	816087.6				
			834311.0	816078.9				
			834311.1	816072.3				
			834353.7	816022.2				
			834352.5	816010.5				
			834342.0	816000.2				
			834315.5	815998.8				
			834244.6	816087.4				
			834242.6	816108.0				
			834150.0	816235.9				
			834138.2	816274.6				
			834113.2	816305.0				

Exchange Square Bus Terminus - Public Light Bus (Diesel)	SE401	AREAPOLY	834538.8	815934.0	3.7	2.6	2.26E-07	3.06E-08
			834376.6	816018.9				
			834299.8	816079.2				
			834213.5	816193.6				
			834243.3	816215.4				
			834386.8	816125.1				
			834384.8	816121.3				
			834388.2	816119.1				
			834395.6	816130.2				
			834249.3	816219.6				
			834237.0	816218.2				
			834199.1	816193.4				
			834291.8	816077.7				
			834385.6	815993.8				
			834536.2	815927.5				
	SE402	AREAPOLY	834395.6	816130.2	3.8	2.6	2.44E-07	3.31E-08
			834388.2	816119.1				
			834384.8	816121.3				
			834386.8	816125.1				
			834243.3	816215.4				
			834213.5	816193.6				
			834299.8	816079.2				
			834353.7	816022.2				
			834352.5	816010.5				
			834342.0	816000.2				
			834315.5	815998.8				
			834244.6	816087.4				
			834216.8	816132.2				
			834229.0	816139.7				
			834261.2	816082.4				
			834329.6	816006.7				
			834338.4	816006.2				
			834346.6	816013.9				
			834345.1	816024.8				
			834291.8	816077.7				
			834199.1	816193.4				
			834237.0	816218.2				
			834249.3	816219.6				
Exchange Square Bus Terminus - Public Light Bus (LPG)	SE403	AREAPOLY	834313.9	816183.8	3.8	2.6	9.94E-07	1.37E-07
			834308.1	816174.5				
			834386.8	816125.1				
			834384.8	816121.3				
			834388.2	816119.1				
			834395.6	816130.2				

Emission Inventory for AERMOD Model - Start Emission Outside Bus Terminus (Year 2030 - Q2)

Bus Terminus	Source ID	Type	X (m)	Y (m)	Base Elevation (mPD)	Release Height (mAG)	Max. Hourly Emission Rate NO (g/m2/s)	Max. Hourly Emission Rate NO2 (g/m2/s)
Emission Outside Terminus								
Exchange Square Bus Terminus - Franchised Bus	SE301	AREAPOLY	834302.7	816087.6	4.1	3.9	3.54E-06	2.89E-07
			834311.0	816078.9				
			834311.1	816072.3				
			834376.6	816018.9				
			834530.5	815937.0				
			834591.4	815914.9				
			834825.4	815846.8				
			834878.7	815819.2				
			834873.7	815810.2				
			834823.5	815839.9				
			834585.8	815909.4				
			834524.5	815931.6				
			834385.6	815993.8				
			834297.2	816071.8				
	SE302	AREAPOLY	834302.7	816087.6	4	3.9	4.40E-07	3.59E-08
			834311.0	816078.9				
			834311.1	816072.3				
			834353.7	816022.2				
			834352.5	816010.5				
			834342.0	816000.2				
			834315.5	815998.8				
			834244.6	816087.4				
			834239.8	816102.9				
			834177.3	816179.5				
			834131.7	816144.6				
			834267.0	815964.6				
			834261.8	815961.0				
			834122.5	816146.3				
			834176.2	816187.7				
			834261.2	816082.4				
			834329.6	816006.7				
			834338.4	816006.2				
			834346.6	816013.9				
			834345.1	816024.8				
			834297.2	816071.8				
	SE303	AREAPOLY	834297.2	816071.8	7.9	3.9	7.79E-07	6.35E-08
			834302.7	816087.6				
			834311.0	816078.9				
			834311.1	816072.3				
			834353.7	816022.2				
			834352.5	816010.5				
			834342.0	816000.2				
			834315.5	815998.8				
			834244.6	816087.4				
			834239.8	816102.9				
			834141.6	816223.4				
			833984.6	816098.4				
			833949.2	816126.3				
			833955.8	816134.6				
			833986.9	816110.3				
			834142.4	816233.8				
			834261.2	816082.4				
			834329.6	816006.7				
			834338.4	816006.2				
			834346.6	816013.9				
			834345.1	816024.8				
	SE304	AREAPOLY	833960.1	816372.1	3.9	3.9	1.98E-07	1.61E-08
			833965.3	816380.9				
			834095.1	816296.7				
			834150.0	816235.9				
			834261.2	816082.4				
			834329.6	816006.7				
			834338.4	816006.2				
			834346.6	816013.9				
			834345.1	816024.8				
			834297.2	816071.8				
			834302.7	816087.6				
			834311.0	816078.9				
			834311.1	816072.3				
			834353.7	816022.2				
			834352.5	816010.5				
			834342.0	816000.2				
			834315.5	815998.8				
			834244.6	816087.4				
			834239.8	816102.9				
			834140.5	816236.4				
			834089.1	816293.4				
	SE305	AREAPOLY	833977.0	816374.4	6.9	3.9	1.84E-07	1.50E-08
			833981.4	816381.4				
			834117.7	816310.9				
			834144.6	816278.0				
			834159.0	816237.6				
			834249.0	816112.8				
			834261.2	816082.4				
			834329.6	816006.7				
			834338.4	816006.2				
			834346.6	816013.9				
			834345.1	816024.8				
			834297.2	816071.8				
			834302.7	816087.6				
			834311.0	816078.9				
			834311.1	816072.3				
			834353.7	816022.2				
			834352.5	816010.5				
			834342.0	816000.2				
			834315.5	815998.8				
			834244.6	816087.4				
			834242.6	816108.0				
			834150.0	816235.9				
			834138.2	816274.6				
			834113.2	816305.0				

Exchange Square Bus Terminus - Public Light Bus (Diesel)	SE401	AREAPOLY	834538.8	815934.0	3.7	2.6	2.16E-07	3.05E-08
			834376.6	816018.9				
			834299.8	816079.2				
			834213.5	816193.6				
			834243.3	816215.4				
			834386.8	816125.1				
			834384.8	816121.3				
			834388.2	816119.1				
			834395.6	816130.2				
			834249.3	816219.6				
			834237.0	816218.2				
			834199.1	816193.4				
			834291.8	816077.7				
			834385.6	815993.8				
			834536.2	815927.5				
	SE402	AREAPOLY	834395.6	816130.2	3.8	2.6	2.33E-07	3.30E-08
			834388.2	816119.1				
			834384.8	816121.3				
			834386.8	816125.1				
			834243.3	816215.4				
			834213.5	816193.6				
			834299.8	816079.2				
			834353.7	816022.2				
			834352.5	816010.5				
			834342.0	816000.2				
			834315.5	815998.8				
			834244.6	816087.4				
			834216.8	816132.2				
			834229.0	816139.7				
			834261.2	816082.4				
			834329.6	816006.7				
			834338.4	816006.2				
			834346.6	816013.9				
			834345.1	816024.8				
			834291.8	816077.7				
			834199.1	816193.4				
			834237.0	816218.2				
			834249.3	816219.6				
Exchange Square Bus Terminus - Public Light Bus (LPG)	SE403	AREAPOLY	834313.9	816183.8	3.8	2.6	9.49E-07	1.37E-07
			834308.1	816174.5				
			834386.8	816125.1				
			834384.8	816121.3				
			834388.2	816119.1				
			834395.6	816130.2				

Emission Inventory for AERMOD Model - Start Emission Outside Bus Terminus (Year 2030 - Q3)

Bus Terminus	Source ID	Type	X (m)	Y (m)	Base Elevation (mPD)	Release Height (mAG)	Max. Hourly Emission Rate NO (g/m2/s)	Max. Hourly Emission Rate NO2 (g/m2/s)
Emission Outside Terminus								
Exchange Square Bus Terminus - Franchised Bus	SE301	AREAPOLY	834302.7	816087.6	4.1	3.9	3.54E-06	2.89E-07
			834311.0	816078.9				
			834311.1	816072.3				
			834376.6	816018.9				
			834530.5	815937.0				
			834591.4	815914.9				
			834825.4	815846.8				
			834878.7	815819.2				
			834873.7	815810.2				
			834823.5	815839.9				
			834585.8	815909.4				
			834524.5	815931.6				
			834385.6	815993.8				
			834297.2	816071.8				
	SE302	AREAPOLY	834302.7	816087.6	4	3.9	4.40E-07	3.59E-08
			834311.0	816078.9				
			834311.1	816072.3				
			834353.7	816022.2				
			834352.5	816010.5				
			834342.0	816000.2				
			834315.5	815998.8				
			834244.6	816087.4				
			834239.8	816102.9				
			834177.3	816179.5				
			834131.7	816144.6				
			834267.0	815964.6				
			834261.8	815961.0				
			834122.5	816146.3				
			834176.2	816187.7				
			834261.2	816082.4				
			834329.6	816006.7				
			834338.4	816006.2				
			834346.6	816013.9				
			834345.1	816024.8				
			834297.2	816071.8				
	SE303	AREAPOLY	834297.2	816071.8	7.9	3.9	7.79E-07	6.35E-08
			834302.7	816087.6				
			834311.0	816078.9				
			834311.1	816072.3				
			834353.7	816022.2				
			834352.5	816010.5				
			834342.0	816000.2				
			834315.5	815998.8				
			834244.6	816087.4				
			834239.8	816102.9				
			834141.6	816223.4				
			833984.6	816098.4				
			833949.2	816126.3				
			833955.8	816134.6				
			833986.9	816110.3				
			834142.4	816233.8				
			834261.2	816082.4				
			834329.6	816006.7				
			834338.4	816006.2				
			834346.6	816013.9				
			834345.1	816024.8				
	SE304	AREAPOLY	833960.1	816372.1	3.9	3.9	1.98E-07	1.61E-08
			833965.3	816380.9				
			834095.1	816296.7				
			834150.0	816235.9				
			834261.2	816082.4				
			834329.6	816006.7				
			834338.4	816006.2				
			834346.6	816013.9				
			834345.1	816024.8				
			834297.2	816071.8				
			834302.7	816087.6				
			834311.0	816078.9				
			834311.1	816072.3				
			834353.7	816022.2				
			834352.5	816010.5				
			834342.0	816000.2				
			834315.5	815998.8				
			834244.6	816087.4				
			834239.8	816102.9				
			834140.5	816236.4				
			834089.1	816293.4				
	SE305	AREAPOLY	833977.0	816374.4	6.9	3.9	1.84E-07	1.50E-08
			833981.4	816381.4				
			834117.7	816310.9				
			834144.6	816278.0				
			834159.0	816237.6				
			834249.0	816112.8				
			834261.2	816082.4				
			834329.6	816006.7				
			834338.4	816006.2				
			834346.6	816013.9				
			834345.1	816024.8				
			834297.2	816071.8				
			834302.7	816087.6				
			834311.0	816078.9				
			834311.1	816072.3				
			834353.7	816022.2				
			834352.5	816010.5				
			834342.0	816000.2				
			834315.5	815998.8				
			834244.6	816087.4				
			834242.6	816108.0				
			834150.0	816235.9				
			834138.2	816274.6				
			834113.2	816305.0				

Exchange Square Bus Terminus - Public Light Bus (Diesel)	SE401	AREAPOLY	834538.8	815934.0	3.7	2.6	2.00E-07	3.04E-08
			834376.6	816018.9				
			834299.8	816079.2				
			834213.5	816193.6				
			834243.3	816215.4				
			834386.8	816125.1				
			834384.8	816121.3				
			834388.2	816119.1				
			834395.6	816130.2				
			834249.3	816219.6				
			834237.0	816218.2				
			834199.1	816193.4				
			834291.8	816077.7				
			834385.6	815993.8				
			834536.2	815927.5				
	SE402	AREAPOLY	834395.6	816130.2	3.8	2.6	2.16E-07	3.29E-08
			834388.2	816119.1				
			834384.8	816121.3				
			834386.8	816125.1				
			834243.3	816215.4				
			834213.5	816193.6				
			834299.8	816079.2				
			834353.7	816022.2				
			834352.5	816010.5				
			834342.0	816000.2				
			834315.5	815998.8				
			834244.6	816087.4				
			834216.8	816132.2				
			834229.0	816139.7				
			834261.2	816082.4				
			834329.6	816006.7				
			834338.4	816006.2				
			834346.6	816013.9				
			834345.1	816024.8				
			834291.8	816077.7				
			834199.1	816193.4				
			834237.0	816218.2				
			834249.3	816219.6				
Exchange Square Bus Terminus - Public Light Bus (LPG)	SE403	AREAPOLY	834313.9	816183.8	3.8	2.6	8.78E-07	1.36E-07
			834308.1	816174.5				
			834386.8	816125.1				
			834384.8	816121.3				
			834388.2	816119.1				
			834395.6	816130.2				

Emission Inventory for AERMOD Model - Start Emission Outside Bus Terminus (Year 2030 - Q4)

Bus Terminus	Source ID	Type	X (m)	Y (m)	Base Elevation (mPD)	Release Height (mAG)	Max. Hourly Emission Rate NO (g/m2/s)	Max. Hourly Emission Rate NO2 (g/m2/s)
Emission Outside Terminus								
Exchange Square Bus Terminus - Franchised Bus	SE301	AREAPOLY	834302.7	816087.6	4.1	3.9	3.54E-06	2.89E-07
			834311.0	816078.9				
			834311.1	816072.3				
			834376.6	816018.9				
			834530.5	815937.0				
			834591.4	815914.9				
			834825.4	815846.8				
			834878.7	815819.2				
			834873.7	815810.2				
			834823.5	815839.9				
			834585.8	815909.4				
			834524.5	815931.6				
			834385.6	815993.8				
			834297.2	816071.8				
	SE302	AREAPOLY	834302.7	816087.6	4	3.9	4.40E-07	3.59E-08
			834311.0	816078.9				
			834311.1	816072.3				
			834353.7	816022.2				
			834352.5	816010.5				
			834342.0	816000.2				
			834315.5	815998.8				
			834244.6	816087.4				
			834239.8	816102.9				
			834177.3	816179.5				
			834131.7	816144.6				
			834267.0	815964.6				
			834261.8	815961.0				
			834122.5	816146.3				
			834176.2	816187.7				
			834261.2	816082.4				
			834329.6	816006.7				
			834338.4	816006.2				
			834346.6	816013.9				
			834345.1	816024.8				
			834297.2	816071.8				
	SE303	AREAPOLY	834297.2	816071.8	7.9	3.9	7.79E-07	6.35E-08
			834302.7	816087.6				
			834311.0	816078.9				
			834311.1	816072.3				
			834353.7	816022.2				
			834352.5	816010.5				
			834342.0	816000.2				
			834315.5	815998.8				
			834244.6	816087.4				
			834239.8	816102.9				
			834141.6	816223.4				
			833984.6	816098.4				
			833949.2	816126.3				
			833955.8	816134.6				
			833986.9	816110.3				
			834142.4	816233.8				
			834261.2	816082.4				
			834329.6	816006.7				
			834338.4	816006.2				
			834346.6	816013.9				
			834345.1	816024.8				
	SE304	AREAPOLY	833960.1	816372.1	3.9	3.9	1.98E-07	1.61E-08
			833965.3	816380.9				
			834095.1	816296.7				
			834150.0	816235.9				
			834261.2	816082.4				
			834329.6	816006.7				
			834338.4	816006.2				
			834346.6	816013.9				
			834345.1	816024.8				
			834297.2	816071.8				
			834302.7	816087.6				
			834311.0	816078.9				
			834311.1	816072.3				
			834353.7	816022.2				
			834352.5	816010.5				
			834342.0	816000.2				
			834315.5	815998.8				
			834244.6	816087.4				
			834239.8	816102.9				
			834140.5	816236.4				
			834089.1	816293.4				
	SE305	AREAPOLY	833977.0	816374.4	6.9	3.9	1.84E-07	1.50E-08
			833981.4	816381.4				
			834117.7	816310.9				
			834144.6	816278.0				
			834159.0	816237.6				
			834249.0	816112.8				
			834261.2	816082.4				
			834329.6	816006.7				
			834338.4	816006.2				
			834346.6	816013.9				
			834345.1	816024.8				
			834297.2	816071.8				
			834302.7	816087.6				
			834311.0	816078.9				
			834311.1	816072.3				
			834353.7	816022.2				
			834352.5	816010.5				
			834342.0	816000.2				
			834315.5	815998.8				
			834244.6	816087.4				
			834242.6	816108.0				
			834150.0	816235.9				
			834138.2	816274.6				
			834113.2	816305.0				

Exchange Square Bus Terminus - Public Light Bus (Diesel)	SE401	AREAPOLY	834538.8	815934.0	3.7	2.6	2.23E-07	3.06E-08
			834376.6	816018.9				
			834299.8	816079.2				
			834213.5	816193.6				
			834243.3	816215.4				
			834386.8	816125.1				
			834384.8	816121.3				
			834388.2	816119.1				
			834395.6	816130.2				
			834249.3	816219.6				
			834237.0	816218.2				
			834199.1	816193.4				
			834291.8	816077.7				
			834385.6	815993.8				
			834536.2	815927.5				
	SE402	AREAPOLY	834395.6	816130.2	3.8	2.6	2.40E-07	3.30E-08
			834388.2	816119.1				
			834384.8	816121.3				
			834386.8	816125.1				
			834243.3	816215.4				
			834213.5	816193.6				
			834299.8	816079.2				
			834353.7	816022.2				
			834352.5	816010.5				
			834342.0	816000.2				
			834315.5	815998.8				
			834244.6	816087.4				
			834216.8	816132.2				
			834229.0	816139.7				
			834261.2	816082.4				
			834329.6	816006.7				
			834338.4	816006.2				
			834346.6	816013.9				
			834345.1	816024.8				
			834291.8	816077.7				
			834199.1	816193.4				
			834237.0	816218.2				
			834249.3	816219.6				
Exchange Square Bus Terminus - Public Light Bus (LPG)	SE403	AREAPOLY	834313.9	816183.8	3.8	2.6	9.80E-07	1.37E-07
			834308.1	816174.5				
			834386.8	816125.1				
			834384.8	816121.3				
			834388.2	816119.1				
			834395.6	816130.2				

Appendix 4-7 Input Parameters of Portals in AERMOD

Emission Inventory for Portals - 1st Quarter

Road No.	Portal Description		Emission Source ID	Source Type	x-coordinate	y-coordinate	Release Height	Initial Lateral Dimension	Initial Vertical Dimension	Maximum Hourly Emission Rate of Each Bound (g/s) [1]			
							(m)	(m)	(m)	NO_2	NO	RSP	FSP
L1D	Man Cheung Street (WB)	Nearest 50m	MCSWB01	Volume	834106.6	816299.2	2.75	3.92	2.56	1.37E-04	1.47E-03	2.77E-05	2.54E-05
			MCSWB02	Volume	834099.2	816303.0	2.75	3.92	2.56	1.37E-04	1.47E-03	2.77E-05	2.54E-05
			MCSWB03	Volume	834091.8	816306.9	2.75	3.92	2.56	1.37E-04	1.47E-03	2.77E-05	2.54E-05
			MCSWB04	Volume	834084.4	816310.7	2.75	3.92	2.56	1.37E-04	1.47E-03	2.77E-05	2.54E-05
			MCSWB05	Volume	834077.0	816314.5	2.75	3.92	2.56	1.37E-04	1.47E-03	2.77E-05	2.54E-05
			MCSWB06	Volume	834069.6	816318.3	2.75	3.92	2.56	1.37E-04	1.47E-03	2.77E-05	2.54E-05
		Farest 50m	MCSWB07	Volume	834062.2	816322.2	2.75	3.92	2.56	6.83E-05	7.36E-04	1.39E-05	1.27E-05
			MCSWB08	Volume	834054.8	816326.0	2.75	3.92	2.56	6.83E-05	7.36E-04	1.39E-05	1.27E-05
			MCSWB09	Volume	834047.4	816329.8	2.75	3.92	2.56	6.83E-05	7.36E-04	1.39E-05	1.27E-05
			MCSWB10	Volume	834040.0	816333.6	2.75	3.92	2.56	6.83E-05	7.36E-04	1.39E-05	1.27E-05
			MCSWB11	Volume	834032.5	816337.4	2.75	3.92	2.56	6.83E-05	7.36E-04	1.39E-05	1.27E-05
			MCSWB12	Volume	834025.1	816341.3	2.75	3.92	2.56	6.83E-05	7.36E-04	1.39E-05	1.27E-05
L42J	Connaught Road Central Underpass (WB)	Nearest 50m	CRCUWB01	Volume	834308.6	816036.4	2.75	3.61	2.56	2.35E-04	2.25E-03	6.50E-05	5.98E-05
			CRCUWB02	Volume	834302.5	816042.0	2.75	3.61	2.56	2.35E-04	2.25E-03	6.50E-05	5.98E-05
			CRCUWB03	Volume	834296.4	816047.7	2.75	3.61	2.56	2.35E-04	2.25E-03	6.50E-05	5.98E-05
			CRCUWB04	Volume	834290.3	816053.4	2.75	3.61	2.56	2.35E-04	2.25E-03	6.50E-05	5.98E-05
			CRCUWB05	Volume	834284.2	816059.1	2.75	3.61	2.56	2.35E-04	2.25E-03	6.50E-05	5.98E-05
			CRCUWB06	Volume	834278.1	816064.8	2.75	3.61	2.56	2.35E-04	2.25E-03	6.50E-05	5.98E-05
		Farest 50m	CRCUWB07	Volume	834272.0	816070.5	2.75	3.61	2.56	1.18E-04	1.12E-03	3.25E-05	2.99E-05
			CRCUWB08	Volume	834265.9	816076.1	2.75	3.61	2.56	1.18E-04	1.12E-03	3.25E-05	2.99E-05
			CRCUWB09	Volume	834259.8	816081.8	2.75	3.61	2.56	1.18E-04	1.12E-03	3.25E-05	2.99E-05
			CRCUWB10	Volume	834253.8	816087.5	2.75	3.61	2.56	1.18E-04	1.12E-03	3.25E-05	2.99E-05
			CRCUWB11	Volume	834247.7	816093.2	2.75	3.61	2.56	1.18E-04	1.12E-03	3.25E-05	2.99E-05
			CRCUWB12	Volume	834241.6	816098.9	2.75	3.61	2.56	1.18E-04	1.12E-03	3.25E-05	2.99E-05

Calculated AERMOD input data:

Release Height, m = "Height of Tunnel" / 2

Initial Lateral Dimension, m = "Width of tunnel" / 2.15

Initial Vertical Dimension, m = "Height of tunnel" / 2.15

Emissions from portals were predicted assuming the emissions behave a volume sources in accordance with the recommendations in the 1991 Permanent International Association of Road Congress Report (1991 PIARC Report) as adopted in Route 3 Tai Lam Tunnel & Yuen Long Approach Northern Section - Volume 1 Detailed Environmental Impact Assessment - Final Report

Emission Inventory for Portals - 2nd Quarter

Road No.	Portal Description		Emission Source ID	Source Type	x-coordinate	y-coordinate	Release Height	Initial Lateral Dimension	Initial Vertical Dimension	Maximum Hourly Emission Rate of Each Bound (g/s) [1]			
							(m)	(m)	(m)	NO_2	NO	RSP	FSP
L1D	Man Cheung Street (WB)	Nearest 50m	MCSWB01	Volume	834106.6	816299.2	2.75	3.92	2.56	1.35E-04	1.42E-03	2.77E-05	2.54E-05
			MCSWB02	Volume	834099.2	816303.0	2.75	3.92	2.56	1.35E-04	1.42E-03	2.77E-05	2.54E-05
			MCSWB03	Volume	834091.8	816306.9	2.75	3.92	2.56	1.35E-04	1.42E-03	2.77E-05	2.54E-05
			MCSWB04	Volume	834084.4	816310.7	2.75	3.92	2.56	1.35E-04	1.42E-03	2.77E-05	2.54E-05
			MCSWB05	Volume	834077.0	816314.5	2.75	3.92	2.56	1.35E-04	1.42E-03	2.77E-05	2.54E-05
			MCSWB06	Volume	834069.6	816318.3	2.75	3.92	2.56	1.35E-04	1.42E-03	2.77E-05	2.54E-05
		Farest 50m	MCSWB07	Volume	834062.2	816322.2	2.75	3.92	2.56	6.75E-05	7.12E-04	1.39E-05	1.27E-05
			MCSWB08	Volume	834054.8	816326.0	2.75	3.92	2.56	6.75E-05	7.12E-04	1.39E-05	1.27E-05
			MCSWB09	Volume	834047.4	816329.8	2.75	3.92	2.56	6.75E-05	7.12E-04	1.39E-05	1.27E-05
			MCSWB10	Volume	834040.0	816333.6	2.75	3.92	2.56	6.75E-05	7.12E-04	1.39E-05	1.27E-05
			MCSWB11	Volume	834032.5	816337.4	2.75	3.92	2.56	6.75E-05	7.12E-04	1.39E-05	1.27E-05
			MCSWB12	Volume	834025.1	816341.3	2.75	3.92	2.56	6.75E-05	7.12E-04	1.39E-05	1.27E-05
L42J	Connaught Road Central Underpass (WB)	Nearest 50m	CRCUWB01	Volume	834308.6	816036.4	2.75	3.61	2.56	2.33E-04	2.13E-03	6.50E-05	5.98E-05
			CRCUWB02	Volume	834302.5	816042.0	2.75	3.61	2.56	2.33E-04	2.13E-03	6.50E-05	5.98E-05
			CRCUWB03	Volume	834296.4	816047.7	2.75	3.61	2.56	2.33E-04	2.13E-03	6.50E-05	5.98E-05
			CRCUWB04	Volume	834290.3	816053.4	2.75	3.61	2.56	2.33E-04	2.13E-03	6.50E-05	5.98E-05
			CRCUWB05	Volume	834284.2	816059.1	2.75	3.61	2.56	2.33E-04	2.13E-03	6.50E-05	5.98E-05
			CRCUWB06	Volume	834278.1	816064.8	2.75	3.61	2.56	2.33E-04	2.13E-03	6.50E-05	5.98E-05
		Farest 50m	CRCUWB07	Volume	834272.0	816070.5	2.75	3.61	2.56	1.16E-04	1.06E-03	3.25E-05	2.99E-05
			CRCUWB08	Volume	834265.9	816076.1	2.75	3.61	2.56	1.16E-04	1.06E-03	3.25E-05	2.99E-05
			CRCUWB09	Volume	834259.8	816081.8	2.75	3.61	2.56	1.16E-04	1.06E-03	3.25E-05	2.99E-05
			CRCUWB10	Volume	834253.8	816087.5	2.75	3.61	2.56	1.16E-04	1.06E-03	3.25E-05	2.99E-05
			CRCUWB11	Volume	834247.7	816093.2	2.75	3.61	2.56	1.16E-04	1.06E-03	3.25E-05	2.99E-05
			CRCUWB12	Volume	834241.6	816098.9	2.75	3.61	2.56	1.16E-04	1.06E-03	3.25E-05	2.99E-05

Calculated AERMOD input data:

Release Height, m = "Height of Tunnel" / 2

Initial Lateral Dimension, m = "Width of tunnel" / 2.15

Initial Vertical Dimension, m = "Height of tunnel" / 2.15

Emissions from portals were predicted assuming the emissions behave a volume sources in accordance with the recommendations in the 1991 Permanent International Association of Road Congress Report (1991 PIARC Report) as adopted in Route 3 Tai Lam Tunnel & Yuen Long Approach Northern Section - Volume 1 Detailed Environmental Impact Assessment - Final Report

Emission Inventory for Portals - 3rd Quarter

Road No.	Portal Description		Emission Source ID	Source Type	x-coordinate	y-coordinate	Release Height	Initial Lateral Dimension	Initial Vertical Dimension	Maximum Hourly Emission Rate of Each Bound (g/s) [1]			
							(m)	(m)	(m)	NO_2	NO	RSP	FSP
L1D	Man Cheung Street (WB)	Nearest 50m	MCSWB01	Volume	834106.6	816299.2	2.75	3.92	2.56	1.22E-04	1.24E-03	2.77E-05	2.54E-05
			MCSWB02	Volume	834099.2	816303.0	2.75	3.92	2.56	1.22E-04	1.24E-03	2.77E-05	2.54E-05
			MCSWB03	Volume	834091.8	816306.9	2.75	3.92	2.56	1.22E-04	1.24E-03	2.77E-05	2.54E-05
			MCSWB04	Volume	834084.4	816310.7	2.75	3.92	2.56	1.22E-04	1.24E-03	2.77E-05	2.54E-05
			MCSWB05	Volume	834077.0	816314.5	2.75	3.92	2.56	1.22E-04	1.24E-03	2.77E-05	2.54E-05
			MCSWB06	Volume	834069.6	816318.3	2.75	3.92	2.56	1.22E-04	1.24E-03	2.77E-05	2.54E-05
		Farest 50m	MCSWB07	Volume	834062.2	816322.2	2.75	3.92	2.56	6.12E-05	6.22E-04	1.39E-05	1.27E-05
			MCSWB08	Volume	834054.8	816326.0	2.75	3.92	2.56	6.12E-05	6.22E-04	1.39E-05	1.27E-05
			MCSWB09	Volume	834047.4	816329.8	2.75	3.92	2.56	6.12E-05	6.22E-04	1.39E-05	1.27E-05
			MCSWB10	Volume	834040.0	816333.6	2.75	3.92	2.56	6.12E-05	6.22E-04	1.39E-05	1.27E-05
			MCSWB11	Volume	834032.5	816337.4	2.75	3.92	2.56	6.12E-05	6.22E-04	1.39E-05	1.27E-05
			MCSWB12	Volume	834025.1	816341.3	2.75	3.92	2.56	6.12E-05	6.22E-04	1.39E-05	1.27E-05
L42J	Connaught Road Central Underpass (WB)	Nearest 50m	CRCUWB01	Volume	834308.6	816036.4	2.75	3.61	2.56	2.11E-04	1.80E-03	6.50E-05	5.98E-05
			CRCUWB02	Volume	834302.5	816042.0	2.75	3.61	2.56	2.11E-04	1.80E-03	6.50E-05	5.98E-05
			CRCUWB03	Volume	834296.4	816047.7	2.75	3.61	2.56	2.11E-04	1.80E-03	6.50E-05	5.98E-05
			CRCUWB04	Volume	834290.3	816053.4	2.75	3.61	2.56	2.11E-04	1.80E-03	6.50E-05	5.98E-05
			CRCUWB05	Volume	834284.2	816059.1	2.75	3.61	2.56	2.11E-04	1.80E-03	6.50E-05	5.98E-05
			CRCUWB06	Volume	834278.1	816064.8	2.75	3.61	2.56	2.11E-04	1.80E-03	6.50E-05	5.98E-05
		Farest 50m	CRCUWB07	Volume	834272.0	816070.5	2.75	3.61	2.56	1.05E-04	9.02E-04	3.25E-05	2.99E-05
			CRCUWB08	Volume	834265.9	816076.1	2.75	3.61	2.56	1.05E-04	9.02E-04	3.25E-05	2.99E-05
			CRCUWB09	Volume	834259.8	816081.8	2.75	3.61	2.56	1.05E-04	9.02E-04	3.25E-05	2.99E-05
			CRCUWB10	Volume	834253.8	816087.5	2.75	3.61	2.56	1.05E-04	9.02E-04	3.25E-05	2.99E-05
			CRCUWB11	Volume	834247.7	816093.2	2.75	3.61	2.56	1.05E-04	9.02E-04	3.25E-05	2.99E-05
			CRCUWB12	Volume	834241.6	816098.9	2.75	3.61	2.56	1.05E-04	9.02E-04	3.25E-05	2.99E-05

Calculated AERMOD input data:

Release Height, m = "Height of Tunnel" / 2

Initial Lateral Dimension, m = "Width of tunnel" / 2.15

Initial Vertical Dimension, m = "Height of tunnel" / 2.15

Emissions from portals were predicted assuming the emissions behave a volume sources in accordance with the recommendations in the 1991 Permanent International Association of Road Congress Report (1991 PIARC Report) as adopted in Route 3 Tai Lam Tunnel & Yuen Long Approach Northern Section - Volume 1 Detailed Environmental Impact Assessment - Final Report

Emission Inventory for Portals - 4th Quarter

Road No.	Portal Description		Emission Source ID	Source Type	x-coordinate	y-coordinate	Release Height	Initial Lateral Dimension	Initial Vertical Dimension	Maximum Hourly Emission Rate of Each Bound (g/s) [1]			
							(m)	(m)	(m)	NO_2	NO	RSP	FSP
L1D	Man Cheung Street (WB)	Nearest 50m	MCSWB01	Volume	834106.6	816299.2	2.75	3.92	2.56	1.37E-04	1.47E-03	2.77E-05	2.54E-05
			MCSWB02	Volume	834099.2	816303.0	2.75	3.92	2.56	1.37E-04	1.47E-03	2.77E-05	2.54E-05
			MCSWB03	Volume	834091.8	816306.9	2.75	3.92	2.56	1.37E-04	1.47E-03	2.77E-05	2.54E-05
			MCSWB04	Volume	834084.4	816310.7	2.75	3.92	2.56	1.37E-04	1.47E-03	2.77E-05	2.54E-05
			MCSWB05	Volume	834077.0	816314.5	2.75	3.92	2.56	1.37E-04	1.47E-03	2.77E-05	2.54E-05
			MCSWB06	Volume	834069.6	816318.3	2.75	3.92	2.56	1.37E-04	1.47E-03	2.77E-05	2.54E-05
		Farest 50m	MCSWB07	Volume	834062.2	816322.2	2.75	3.92	2.56	6.86E-05	7.35E-04	1.39E-05	1.27E-05
			MCSWB08	Volume	834054.8	816326.0	2.75	3.92	2.56	6.86E-05	7.35E-04	1.39E-05	1.27E-05
			MCSWB09	Volume	834047.4	816329.8	2.75	3.92	2.56	6.86E-05	7.35E-04	1.39E-05	1.27E-05
			MCSWB10	Volume	834040.0	816333.6	2.75	3.92	2.56	6.86E-05	7.35E-04	1.39E-05	1.27E-05
			MCSWB11	Volume	834032.5	816337.4	2.75	3.92	2.56	6.86E-05	7.35E-04	1.39E-05	1.27E-05
			MCSWB12	Volume	834025.1	816341.3	2.75	3.92	2.56	6.86E-05	7.35E-04	1.39E-05	1.27E-05
L42J	Connaught Road Central Underpass (WB)	Nearest 50m	CRCUWB01	Volume	834308.6	816036.4	2.75	3.61	2.56	2.36E-04	2.23E-03	6.50E-05	5.98E-05
			CRCUWB02	Volume	834302.5	816042.0	2.75	3.61	2.56	2.36E-04	2.23E-03	6.50E-05	5.98E-05
			CRCUWB03	Volume	834296.4	816047.7	2.75	3.61	2.56	2.36E-04	2.23E-03	6.50E-05	5.98E-05
			CRCUWB04	Volume	834290.3	816053.4	2.75	3.61	2.56	2.36E-04	2.23E-03	6.50E-05	5.98E-05
			CRCUWB05	Volume	834284.2	816059.1	2.75	3.61	2.56	2.36E-04	2.23E-03	6.50E-05	5.98E-05
			CRCUWB06	Volume	834278.1	816064.8	2.75	3.61	2.56	2.36E-04	2.23E-03	6.50E-05	5.98E-05
		Farest 50m	CRCUWB07	Volume	834272.0	816070.5	2.75	3.61	2.56	1.18E-04	1.11E-03	3.25E-05	2.99E-05
			CRCUWB08	Volume	834265.9	816076.1	2.75	3.61	2.56	1.18E-04	1.11E-03	3.25E-05	2.99E-05
			CRCUWB09	Volume	834259.8	816081.8	2.75	3.61	2.56	1.18E-04	1.11E-03	3.25E-05	2.99E-05
			CRCUWB10	Volume	834253.8	816087.5	2.75	3.61	2.56	1.18E-04	1.11E-03	3.25E-05	2.99E-05
			CRCUWB11	Volume	834247.7	816093.2	2.75	3.61	2.56	1.18E-04	1.11E-03	3.25E-05	2.99E-05
			CRCUWB12	Volume	834241.6	816098.9	2.75	3.61	2.56	1.18E-04	1.11E-03	3.25E-05	2.99E-05

Calculated AERMOD input data:

Release Height, m = "Height of Tunnel" / 2

Initial Lateral Dimension, m = "Width of tunnel" / 2.15

Initial Vertical Dimension, m = "Height of tunnel" / 2.15

Emissions from portals were predicted assuming the emissions behave a volume sources in accordance with the recommendations in the 1991 Permanent International Association of Road Congress Report (1991 PIARC Report) as adopted in Route 3 Tai Lam Tunnel & Yuen Long Approach Northern Section - Volume 1 Detailed Environmental Impact Assessment - Final Report

Appendix 4-8 Derivation of Emission Rate of Fast Ferry Services at HKMFT

Marine Emission Rate at Hong Kong Macau Ferry Terminal

Operation Mode							**Remark**
Sailing Schedule:		07:00-02:00(daytime)					Referenced from Marine Department's website for Ferry Schedule at HKMFT (https://crossboundaryferryservices.mardep.gov.hk/en/index.php)
Vessel Information							
Vessel Name:		Austal Cat					Vessel with highest energy consumption found at company website (https://www.turbojet.com.hk/en/vessel-information/austal-cat.aspx)
Engine:		MTU 16V 4000 M70					
Passenger Carry Capacity (PAX)	=	410-427					
Engine Power:	=	4 x 2320	kW				Engine power referenced from another ferry with same engine http://www.barcaferry.com/photo/photo_shipyards/fbm/52mtricat_date.html
	=	9280	kW				
Fuel Emission Factors							
SO_2 (0.5% Sulphur Content)	=	1.98	g/kWh				Values are taken from Table 3-27 of the Study on Marine Vessels Emissions Inventory, Feb 2012 (assuming engine type of Medium Speed Diesel (MSD) engine and use of marine diesel oil for RSP, FSP and NOx emission factors while SO_2 emission factor assumes 0.5% sulphur content of MSD and use of marine gas oil). The Air Pollution Control (Marine Light Diesel) Regulation was introduced on 1 April 2014 to cap the sulphur content of locally supplied marine light diesel at 0.05%.
SO_2 (0.05% Sulphur Content)	=	0.20	g/kWh				
RSP	=	0.47	g/kWh				
FSP	=	0.43	g/kWh				
NOx	=	13.20	g/kWh				
Emission Rate (100% Loading Factor, 4 Engines)							
SO_2	=	1.84	kg/hr				
	=	0.51	g/s				
RSP	=	4.36	kg/hr				
	=	1.21	g/s				
FSP	=	3.99	kg/hr				
	=	1.11	g/s				
NOx	=	122.50	kg/hr				
	=	34.03	g/s				
NO	=	27.22	g/s				Number of idling ferries at HKMFT, conversion factor from NOx to NO2 (20%) follows the approved EIA report "Expansion of Heliport Facilities at Macau Ferry Terminal" (AEIAR-095/2006)
NO_2	=	6.81	g/s				
Emission Rate Accounting for Operation Modes							
Emission Rate = Engine Power x Loading Factor x Emission Factor							
Engine Load Factor (Travelling)	=	36.6%					Loading factor taken from Table 3-18 of Study on Marine Vessels Emissions Inventory, February 2012 (assuming Cruise/Ferry type with PAX range 300 - 699 and taking the highest loading factor of Fairway Cruise)
Engine Load Factor (Idling)	=	10%					Idling loading factor referenced from Appendix 5.1b of the approved EIA report "Expansion of Heliport Facilities at Macau Ferry Terminal" (AEIAR-095/2006)
		SO_2	**RSP**	**FSP**	**NO**	**NO_2**	
Emission Rate - Idling (g/s/ferry)	=	5.10E-02	1.21E-01	1.11E-01	2.72E+00	6.81E-01	
		SO_2	**RSP**	**FSP**	**NO**	**NO_2**	
Emission Rate - Travelling (g/s/ferry)	=	1.87E-01	4.43E-01	4.06E-01	9.96E+00	2.49E+00	

Idling Emissions

Type of Ferry	**No. of Ferries per hour at 1 Berth (daytime)**	**No. of Ferries per hour at 1 Berth (night time)**	**$Time_{(Idling)}$ (min per ferry)**	**Maximum Emission Rate (g/s)**				
				NO (daytime)	**NO_2 (daytime)**	**SO_2 (daytime)**	**RSP (daytime)**	**FSP (daytime)**
A	1	1	20	9.07E-01	2.27E-01	1.70E-02	4.04E-02	3.69E-02

Cruising Emissions

Route	**Speed (kt)**	**Speed (m/s)**	**Distance travel (m)**	**Travelling Time per Ferry (s)**	**Flow (daytime) (ferry/hr)**	**Flow (night time) (ferry/hr)**	**Maximum Emission Rate (g/s)**				
							NO (daytime)	**NO_2 (daytime)**	**SO_2 (daytime)**	**RSP (daytime)**	**FSP (daytime)**
MFT <-> Macau R1	45	23.15	1575	68	4	2	7.53E-01	1.88E-01	1.41E-02	3.35E-02	3.07E-02
MFT <-> Macau R2	45	23.15	1650	71	4	2	7.86E-01	1.96E-01	1.47E-02	3.50E-02	3.20E-02

Appendix 4-9 Derivation of Emission Rate of Cruise Vessels at Ocean Terminal

Marine Emission from Cruises at Ocean Terminal

Emission Factors for Cruises (for Hotelling)

Cruises	Engine Type	Engine Power kW	Loading Factor [3]	Emission Factor (g/kWh)		
			Hotelling	RSP [6]	NO_x [4]	SO_2 [5]
Star Pisces	Auxiliary Engine [1]	8880	0.416	1.61	12.07	2.12
	Boiler [2]	1000	1	0.8	2.1	2.83
Queen Victoria	Auxiliary Engine [1]	9360	0.416	1.61	12.91	2.12
	Boiler [2]	1000	1	0.8	2.1	2.83

Note:

[1] Engine Power for the Auxiliary Engine of Star Pisces and Queen Victoria - Information is referred to Table 1 of Appendix 3.6 of EIA Report for Proposed Road Improvement Works in West Kowloon Reclamation Development (Agreement No. CE44/2011 (HY)).

[2] Engine Power for the Boiler of Star Pisces and Queen Victoria - Information is referred to Table 1 of Appendix 3.6 of EIA Report for Proposed Road Improvement Works in West Kowloon Reclamation Development (Agreement No. CE44/2011 (HY)).

[3] Loading Factor - Information is referred to Table 1 of Appendix 3.6 of EIA Report for Proposed Road Improvement Works in West Kowloon Reclamation Development (Agreement No. CE44/2011 (HY)).

[4] NOx Emission = 45 * (speed of engines in units of rpm)^(-0.2), where rpm of Star Pisces and Queen Victoria is 720 and 514 respectively. Emission limit for Tier 1 engines stated in MARPOL 73/78 Annex VI Regulation for the Prevention of Air Pollution from Ships, from https://wwwcdn.imo.org/localresources/en/OurWork/Environment/Documents/Air%20pollution/MEPC.328(76).pdf. Speed is referred to Table 1 of Appendix 3.6 of EIA Report for Proposed Road Improvement Works in West Kowloon Reclamation Development (Agreement No. CE44/2011 (HY)).

[5] According to the Air Pollution Control (Fuel for Vessels) Regulation, starting from 1 January 2019, all vessels except for specified vessel types as set out in the Regulation, are required to use low sulphur marine fuel (i.e. with sulphur content no exceeding 0.5% by weight).

- Emission Factor for the Auxiliary Engine - According to Table 3-28 of the Institute for the Environment, The Hong Kong University of Science & Technology: Study on Marine Vessels Emission Inventory, February 2012 (assuming the use of marine gas oil with 0.5% sulphur content).

- Emission Factor for the Boiler - According to Table 3-29 of the Institute for the Environment, The Hong Kong University of Science & Technology: Study on Marine Vessels Emission Inventory, February 2012 (assuming the use of marine gas oil with 0.5% sulphur content).

[6] Emission Factor for Auxiliary Engine and Boiler - Information is referred to Table 1 of Appendix 3.6 of EIA Report for Proposed Road Improvement Works in West Kowloon Reclamation Development (Agreement No. CE44/2011 (HY)).

Emission Rate (Hotelling)

Emission Rate = Engine Power x Loading Factor x Emission Factor

Cruises	Air Pollutants	Emission Rate (kg/hr)			Total Emission Rate for 60 mins within an hour (g/s)
		Auxiliary Engine	Boiler	Total	
Star Pisces	RSP	5.96	0.80	6.76	1.88
	NO_x	44.59	2.10	46.69	12.97
	SO_2	7.83	2.83	10.66	2.96
Queen Victoria	RSP	6.28	0.80	7.08	1.97
	NO_x	50.28	2.10	52.38	14.55
	SO_2	8.25	2.83	11.08	3.08

Cruises	Air Pollutants	Total Emission Rate for 60 mins within an hour (g/s)
Star Pisces	RSP	1.88
	NO	10.38
	NO_2	2.59
	SO_2	2.96
Queen Victoria	RSP	1.97
	NO	11.64
	NO_2	2.91
	SO_2	3.08

Appendix 4-10 Derivation of Emission Rate of Helicopter

Helicopter Emission Rate at Hong Kong Macau Ferry Terminal

Operation Mode

Time: 0800 – 18:00 (daytime) 18:01 – 22:59 (nighttime)[a]

Flight frequency: Max 8 landing and take off cycles (LTO) per hour (daytime, 2 helipads, 4 LTO per helipad per hour), Max 6 LTO per hour (nighttime, 2 helipads, 3 LTO per helipad per hour)[a]

Helicopter Information

Helicopter Model: AgustaWestland AW139[b]

Engine: 2 × Pratt & Whitney Canada PT6C-67C turboshaft engine[c]

Max. Shaft Horsepower (SHP) per Engine: 1800 SHP

Event	Average Time (s)[a]	% of SHP per Engine[d]	Esimated SHP per Engine	Fuel Flow per Engine (kg/s)[e]	NOx Emission Factor (g/kg)[e]	NOx Emission Rate per Helicopter (g/s)[g]	NOx Emission Rate per Helipad- Daytime (g/s)[h]	NOx Emission Rate per Helipad- Nighttime (g/s)[i]
Approach	29.33	100%	1800	1.07E-01	1.49E+01	3.18E+00	1.04E-01	7.78E-02
Hovering (Approach)	30	100%	1800	1.07E-01	1.49E+01	3.18E+00	1.06E-01	7.96E-02
Idling	673.5	6%	108	2.36E-02	3.01E+00	1.43E-01	1.07E-01	8.00E-02
Hovering (Take-off)	55.83	100%	1800	1.07E-01	1.49E+01	3.18E+00	1.97E-01	1.48E-01
Take-off	12.5	100%	1800	1.07E-01	1.49E+01	3.18E+00	4.42E-02	3.32E-02

Event	Average Time (s)[a]	% of SHP per Engine[d]	Esimated SHP per Engine	Fuel Flow per Engine (kg/s)[e]	PM Emission Factor (g/kg)[e]	RSP Emission Factor (g/kg)[f]	FSP Emission Factor (g/kg)[f]	RSP Emission Rate per Helicopter (g/s)[g]	FSP Emission Rate per Helicopter (g/s)[g]	RSP Emission Rate per Helipad- Daytime (g/s)[h]	RSP Emission Rate per Helipad- Nighttime (g/s)[i]	FSP Emission Rate per Helipad- Daytime (g/s)[h]	FSP Emission Rate per Helipad- Nighttime (g/s)[i]
Approach	29.33	100%	1800	1.07E-01	3.76E-01	3.76E-01	3.76E-01	8.04E-02	8.04E-02	2.62E-03	1.96E-03	2.62E-03	1.96E-03
Hovering (Approach)	30	100%	1800	1.07E-01	3.76E-01	3.76E-01	3.76E-01	8.04E-02	8.04E-02	2.68E-03	2.01E-03	2.68E-03	2.01E-03
Idling	673.5	6%	108	2.36E-02	1.31E-01	1.31E-01	1.31E-01	6.18E-03	6.18E-03	4.62E-03	3.47E-03	4.62E-03	3.47E-03
Hovering (Take-off)	55.83	100%	1800	1.07E-01	3.76E-01	3.76E-01	3.76E-01	8.04E-02	8.04E-02	4.99E-03	3.74E-03	4.99E-03	3.74E-03
Take-off	12.5	100%	1800	1.07E-01	3.76E-01	3.76E-01	3.76E-01	8.04E-02	8.04E-02	1.12E-03	8.37E-04	1.12E-03	8.37E-04

Event	Average Time (s)[a]	% of SHP per Engine[d]	Esimated SHP per Engine	Fuel Flow per Engine (kg/s)[e]	SO2 Emission Rate per Helicopter (g/s)[j]	SO2 Emission Rate per Helipad- Daytime (g/s)[h]	SO2 Emission Rate per Helipad- Nighttime (g/s)[i]
Approach	29.33	100%	1800	1.07E-01	6.41E-04	2.09E-05	1.57E-05
Hovering (Approach)	30	100%	1800	1.07E-01	6.41E-04	2.14E-05	1.60E-05
Idling	673.5	6%	108	2.36E-02	1.42E-04	1.06E-04	7.96E-05
Hovering (Take-off)	55.83	100%	1800	1.07E-01	6.41E-04	3.98E-05	2.98E-05
Take-off	12.5	100%	1800	1.07E-01	6.41E-04	8.91E-06	6.68E-06

Note:
(a) Referenced from Table 5.4 and Appendix 5.1a of the approved EIA report "Expansion of Heliport Facilities at Macau Ferry Terminal" (AEIAR-095/2006).
(b) Helicopter
(c) Typical engine used by the helicopter model referenced from Type Certificate Data Sheets (European Aviation Safety Agency, 2020).
(d) Power for take-off per engine assumed as 100% of maximum power per engine while 6% of maximum power per engine is used for idling with reference to Table 4 of Guidance on the Determination of Helicopter Emission (GDHE) (Swiss Confederation 2015).
(e) Fuel flow per engine, NOx and PM emission factor is based on the emipirical formulas listed in Section 3.2, Fuel Flow for Engines above 1000 SHP and Emission Factors for NOx and PM for Engines above 1000 SHP respectively (GDHE, 2015).
(f) RSP and FSP Emission Conversion Factor is assumed as 1 as a conservative approach.
(g) Emission Rate per Helicopter = Fuel Flow per Engine x Emission Factor x 2
(h) Emission Rate per Helipad (Daytime) = Emission Rate per Helicopter x Average Time x 4 LTO/hour /3600
(i) Emission Rate per Helipad (Nighttime) = Emission Rate per Helicopter x Average Time x 3 LTO/hour /3600
(j) Emission Rate per Helicopter = Fuel Flow per Engine x sulphur content for SO_2 (0.3%) x 2

Appendix 4-11 Derivation of Emission Rates of Public Transport Interchanges and Bus Depot

Hong Kong Station Bus Terminus

Minimum Hourly Temperature and Relative Humidity for 1st Quarter

Temperature: 8 ^{o}C

Relative Humidity: 32 %

Start Emission

Single-Deck Franchised Bus (FBSD) Start Emission Factor (g/trip)

	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
NOx	2.0E-01	3.6E-01	4.8E-01	6.8E-01	8.4E-01	1.1E+00	1.6E+00	2.0E+00	3.0E+00	3.9E+00	4.4E+00	5.2E+00	5.7E+00	6.0E+00	6.2E+00	6.3E+00	6.4E+00	6.4E+00
NO	1.7E-01	3.0E-01	4.1E-01	5.8E-01	7.1E-01	9.5E-01	1.4E+00	1.7E+00	2.5E+00	3.3E+00	3.7E+00	4.4E+00	4.8E+00	5.1E+00	5.2E+00	5.4E+00	5.4E+00	5.4E+00
NO2	3.2E-02	5.7E-02	7.6E-02	1.1E-01	1.3E-01	1.8E-01	2.6E-01	3.2E-01	4.7E-01	6.2E-01	6.9E-01	8.2E-01	9.0E-01	9.5E-01	9.7E-01	1.0E+00	1.0E+00	1.0E+00
RSP	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
FSP	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00

Double-Deck Franchised Bus (FBDD) Start Emission Factor (g/trip)

	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
NOx	7.2E-01	1.3E+00	1.7E+00	2.4E+00	3.0E+00	4.0E+00	5.9E+00	7.3E+00	1.1E+01	1.4E+01	1.6E+01	1.9E+01	2.1E+01	2.2E+01	2.2E+01	2.3E+01	2.3E+01	2.3E+01
NO	6.7E-01	1.2E+00	1.6E+00	2.3E+00	2.8E+00	3.7E+00	5.5E+00	6.8E+00	1.0E+01	1.3E+01	1.5E+01	1.7E+01	1.9E+01	2.0E+01	2.1E+01	2.1E+01	2.1E+01	2.1E+01
NO2	5.0E-02	9.1E-02	1.2E-01	1.7E-01	2.1E-01	2.8E-01	4.1E-01	5.1E-01	7.5E-01	9.8E-01	1.1E+00	1.3E+00	1.4E+00	1.5E+00	1.5E+00	1.6E+00	1.6E+00	1.6E+00
RSP	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
FSP	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00

No. of Trips of FBSD

Soaking Time (min) / Hour	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
0000 - 0100																		
0100 - 0200																		
0200 - 0300																		
0300 - 0400																		
0400 - 0500																		
0500 - 0600																		
0600 - 0700																		
0700 - 0800																		
0800 - 0900																		
0900 - 1000																		
1000 - 1100																		
1100 - 1200																		
1200 - 1300																		
1300 - 1400																		
1400 - 1500																		
1500 - 1600																		
1600 - 1700																		
1700 - 1800																		
1800 - 1900																		
1900 - 2000																		
2000 - 2100																		
2100 - 2200																		
2200 - 2300																		
2300 - 2400																		

Daily Total 0

No. of Trips of FBDD

Soaking Time (min) / Hour	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
0000 - 0100	0	0	1	0	0	0	0	0	0	0	0	3	1	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	0
0600 - 0700	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0700 - 0800	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0800 - 0900	0	0	2	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0
0900 - 1000	0	1	0	3	0	1	0	0	0	0	0	0	0	1	0	0	0	0
1000 - 1100	1	0	1	1	1	1	1	0	1	0	0	1	1	0	0	0	0	0
1100 - 1200	0	0	1	1	2	0	0	0	0	0	1	1	0	0	0	0	0	0
1200 - 1300	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
1300 - 1400	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1400 - 1500	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1500 - 1600	0	1	1	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0
1600 - 1700	0	1	2	2	1	1	0	1	0	0	0	0	0	0	0	0	0	0
1700 - 1800	2	1	4	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0
1800 - 1900	1	1	2	3	0	1	0	0	0	1	0	0	0	0	0	0	0	0
1900 - 2000	3	2	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2000 - 2100	0	0	4	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0
2100 - 2200	1	0	2	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0
2200 - 2300	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
2300 - 2400	1	1	0	3	0	0	0	0	0	0	0	0	2	0	0	0	0	0

Daily Total 121

Total Start Emission of FBSD & FBDD (g)

Hour	NOx	NO	NO2	RSP	FSP
0000 - 0100	7.8E+01	7.3E+01	5.5E+00	0.0E+00	0.0E+00
0100 - 0200	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0600 - 0700	5.9E+00	5.5E+00	4.1E-01	0.0E+00	0.0E+00
0700 - 0800	4.9E+00	4.5E+00	3.4E-01	0.0E+00	0.0E+00
0800 - 0900	1.3E+01	1.2E+01	9.2E-01	0.0E+00	0.0E+00
0900 - 1000	3.4E+01	3.2E+01	2.4E+00	0.0E+00	0.0E+00
1000 - 1100	6.8E+01	6.3E+01	4.7E+00	0.0E+00	0.0E+00
1100 - 1200	4.5E+01	4.2E+01	3.1E+00	0.0E+00	0.0E+00
1200 - 1300	8.6E+00	8.0E+00	6.0E-01	0.0E+00	0.0E+00
1300 - 1400	7.9E+00	7.4E+00	5.5E-01	0.0E+00	0.0E+00
1400 - 1500	1.3E+01	1.2E+01	8.7E-01	0.0E+00	0.0E+00
1500 - 1600	1.2E+01	1.1E+01	8.3E-01	0.0E+00	0.0E+00
1600 - 1700	2.4E+01	2.2E+01	1.7E+00	0.0E+00	0.0E+00
1700 - 1800	2.5E+01	2.3E+01	1.7E+00	0.0E+00	0.0E+00
1800 - 1900	3.1E+01	2.9E+01	2.2E+00	0.0E+00	0.0E+00
1900 - 2000	1.7E+01	1.6E+01	1.2E+00	0.0E+00	0.0E+00
2000 - 2100	2.0E+01	1.8E+01	1.4E+00	0.0E+00	0.0E+00
2100 - 2200	1.9E+01	1.8E+01	1.3E+00	0.0E+00	0.0E+00
2200 - 2300	4.7E+00	4.4E+00	3.3E-01	0.0E+00	0.0E+00
2300 - 2400	5.0E+01	4.7E+01	3.5E+00	0.0E+00	0.0E+00

Idling Emission - Terminating Buses

Idling Time for Terminating Buses	2	min
Max. Idling Time for Adjusting Start Emission =	1	min

FBSD – Cold Idling

Hour	Frequency	Cold Idling Emission Factor (g/s) NOx	NO	NO_2	RSP	FSP	Cold Idling Emission (g) [1] NOx	NO	NO_2	RSP	FSP
0000 - 0100	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0100 - 0200	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0600 - 0700	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0700 - 0800	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0800 - 0900	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0900 - 1000	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1000 - 1100	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1100 - 1200	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1200 - 1300	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1300 - 1400	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1400 - 1500	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1500 - 1600	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1600 - 1700	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1700 - 1800	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1800 - 1900	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1900 - 2000	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2000 - 2100	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2100 - 2200	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2200 - 2300	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2300 - 2400	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
Daily Total	0										

FBDD – Cold Idling

Hour	Frequency	Cold Idling Emission Factor (g/s) NOx	NO	NO_2	RSP	FSP	Cold Idling Emission (g) [1] NOx	NO	NO_2	RSP	FSP
0000 - 0100	4	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	5.1E+01	4.8E+01	3.2E+00	1.4E-02	1.4E-02
0100 - 0200	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0600 - 0700	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0700 - 0800	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0800 - 0900	1	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	1.3E+01	1.2E+01	8.1E-01	3.5E-03	3.5E-03
0900 - 1000	1	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	1.3E+01	1.2E+01	8.1E-01	3.5E-03	3.5E-03
1000 - 1100	4	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	5.1E+01	4.8E+01	3.2E+00	1.4E-02	1.4E-02
1100 - 1200	2	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	2.6E+01	2.4E+01	1.6E+00	7.1E-03	7.1E-03
1200 - 1300	1	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	1.3E+01	1.2E+01	8.1E-01	3.5E-03	3.5E-03
1300 - 1400	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1400 - 1500	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1500 - 1600	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1600 - 1700	1	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	1.3E+01	1.2E+01	8.1E-01	3.5E-03	3.5E-03
1700 - 1800	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1800 - 1900	1	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	1.3E+01	1.2E+01	8.1E-01	3.5E-03	3.5E-03
1900 - 2000	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2000 - 2100	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2100 - 2200	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2200 - 2300	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2300 - 2400	2	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	2.6E+01	2.4E+01	1.6E+00	7.1E-03	7.1E-03
Daily Total	17										

FBSD – Hot Idling

Hour	Frequency	Hot Idling Emission Factor (g/s) NOx	NO	NO_2	RSP	FSP	Hot Idling Emission (g) [1] NOx	NO	NO_2	RSP	FSP
0000 - 0100	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0100 - 0200	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0600 - 0700	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0700 - 0800	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0800 - 0900	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0900 - 1000	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1000 - 1100	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1100 - 1200	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1200 - 1300	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1300 - 1400	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1400 - 1500	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1500 - 1600	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1600 - 1700	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1700 - 1800	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1800 - 1900	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1900 - 2000	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2000 - 2100	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2100 - 2200	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2200 - 2300	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2300 - 2400	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
	0										

FBDD – Hot Idling

Hour	Frequency	Hot Idling Emission Factor (g/s) NOx	NO	NO_2	RSP	FSP	Hot Idling Emission (g) [1] NOx	NO	NO_2	RSP	FSP
0000 - 0100	1	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	4.2E-01	4.0E-01	2.7E-02	3.5E-03	3.5E-03
0100 - 0200	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0600 - 0700	3	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.3E+00	1.2E+00	8.0E-02	1.1E-02	1.1E-02
0700 - 0800	4	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.7E+00	1.6E+00	1.1E-01	1.4E-02	1.4E-02
0800 - 0900	3	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.3E+00	1.2E+00	8.0E-02	1.1E-02	1.1E-02
0900 - 1000	5	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.1E+00	2.0E+00	1.3E-01	1.8E-02	1.8E-02
1000 - 1100	5	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.1E+00	2.0E+00	1.3E-01	1.8E-02	1.8E-02
1100 - 1200	4	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.7E+00	1.6E+00	1.1E-01	1.4E-02	1.4E-02
1200 - 1300	1	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	4.2E-01	4.0E-01	2.7E-02	3.5E-03	3.5E-03
1300 - 1400	4	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.7E+00	1.6E+00	1.1E-01	1.4E-02	1.4E-02
1400 - 1500	6	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.5E+00	2.4E+00	1.6E-01	2.1E-02	2.1E-02
1500 - 1600	5	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.1E+00	2.0E+00	1.3E-01	1.8E-02	1.8E-02
1600 - 1700	7	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	3.0E+00	2.8E+00	1.9E-01	2.5E-02	2.5E-02
1700 - 1800	13	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	5.5E+00	5.2E+00	3.5E-01	4.6E-02	4.6E-02
1800 - 1900	8	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	3.4E+00	3.2E+00	2.1E-01	2.8E-02	2.8E-02
1900 - 2000	11	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	4.7E+00	4.4E+00	2.9E-01	3.9E-02	3.9E-02
2000 - 2100	9	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	3.8E+00	3.6E+00	2.4E-01	3.2E-02	3.2E-02
2100 - 2200	8	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	3.4E+00	3.2E+00	2.1E-01	2.8E-02	2.8E-02
2200 - 2300	2	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	8.5E-01	8.0E-01	5.3E-02	7.1E-03	7.1E-03
2300 - 2400	5	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.1E+00	2.0E+00	1.3E-01	1.8E-02	1.8E-02
	104										

Average Distance from Starting Place to Egress =	45	m
Average Distance from PTI Egress to Open Road Network	0	m
Average Spread Distance outside bus terminus =	655	m

Hour	Total Idling Emission (g) [2] NOx	NO	NO_2	RSP	FSP	Idling Emission for Start Emission Adjustment (g) [3] NOx	NO	NO_2	RSP	FSP	Adjusted Start Emission within bus terminus (g) [4] NOx	NO	NO_2	RSP	FSP	Adjusted Start Emission outside bus terminus (g) [5] NOx	NO	NO_2	RSP	FSP	Start Emission Rate outside bus terminus (g/s) NOx	NO	NO_2	RSP	FSP
0000 - 0100	5.2E+01	4.8E+01	3.3E+00	1.8E-02	1.8E-02	2.6E+01	2.4E+01	1.6E+00	8.8E-03	8.8E-03	3.4E+00	3.1E+00	2.5E-01	0.0E+00	0.0E+00	4.9E+01	4.6E+01	3.6E+00	0.0E+00	0.0E+00	1.4E-02	1.3E-02	1.0E-03	0.0E+00	0.0E+00
0100 - 0200	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0600 - 0700	1.3E+00	1.2E+00	8.0E-02	1.1E-02	1.1E-02	6.4E-01	6.0E-01	4.0E-02	5.3E-03	5.3E-03	3.4E-01	3.1E-01	2.4E-02	0.0E+00	0.0E+00	4.9E+00	4.6E+00	3.5E-01	0.0E+00	0.0E+00	1.4E-03	1.3E-03	9.7E-05	0.0E+00	0.0E+00
0700 - 0800	1.7E+00	1.6E+00	1.1E-01	1.4E-02	1.4E-02	8.5E-01	8.0E-01	5.3E-02	7.1E-03	7.1E-03	2.6E-01	2.4E-01	1.9E-02	0.0E+00	0.0E+00	3.8E+00	3.5E+00	2.7E-01	0.0E+00	0.0E+00	1.0E-03	9.7E-04	7.5E-05	0.0E+00	0.0E+00
0800 - 0900	1.4E+01	1.3E+01	8.9E-01	1.4E-02	1.4E-02	7.0E+00	6.6E+00	4.4E-01	7.1E-03	7.1E-03	4.0E-01	3.7E-01	3.1E-02	0.0E+00	0.0E+00	5.8E+00	5.3E+00	4.5E-01	0.0E+00	0.0E+00	1.6E-03	1.5E-03	1.2E-04	0.0E+00	0.0E+00
0900 - 1000	1.5E+01	1.4E+01	9.4E-01	2.1E-02	2.1E-02	7.5E+00	7.0E+00	4.7E-01	1.1E-02	1.1E-02	1.7E+00	1.6E+00	1.2E-01	0.0E+00	0.0E+00	2.5E+01	2.3E+01	1.8E+00	0.0E+00	0.0E+00	7.0E-03	6.5E-03	5.0E-04	0.0E+00	0.0E+00
1000 - 1100	5.3E+01	5.0E+01	3.4E+00	3.2E-02	3.2E-02	2.7E+01	2.5E+01	1.7E+00	1.6E-02	1.6E-02	2.6E+00	2.4E+00	2.0E-01	0.0E+00	0.0E+00	3.9E+01	3.6E+01	2.9E+00	0.0E+00	0.0E+00	1.1E-02	9.9E-03	8.0E-04	0.0E+00	0.0E+00
1100 - 1200	2.7E+01	2.6E+01	1.7E+00	2.1E-02	2.1E-02	1.4E+01	1.3E+01	8.6E-01	1.1E-02	1.1E-02	2.0E+00	1.8E+00	1.5E-01	0.0E+00	0.0E+00	2.9E+01	2.7E+01	2.1E+00	0.0E+00	0.0E+00	8.1E-03	7.5E-03	5.9E-04	0.0E+00	0.0E+00
1200 - 1300	1.3E+01	1.2E+01	8.3E-01	7.1E-03	7.1E-03	6.6E+00	6.2E+00	4.2E-01	3.5E-03	3.5E-03	1.3E-01	1.2E-01	1.2E-02	0.0E+00	0.0E+00	1.9E+00	1.7E+00	1.7E-01	0.0E+00	0.0E+00	5.2E-04	4.7E-04	4.8E-05	0.0E+00	0.0E+00
1300 - 1400	1.7E+00	1.6E+00	1.1E-01	1.4E-02	1.4E-02	8.5E-01	8.0E-01	5.3E-02	7.1E-03	7.1E-03	4.5E-01	4.2E-01	3.2E-02	0.0E+00	0.0E+00	6.6E+00	6.1E+00	4.7E-01	0.0E+00	0.0E+00	1.8E-03	1.7E-03	1.3E-04	0.0E+00	0.0E+00
1400 - 1500	2.5E+00	2.4E+00	1.6E-01	2.1E-02	2.1E-02	1.3E+00	1.2E+00	8.0E-02	1.1E-02	1.1E-02	7.2E-01	6.7E-01	5.1E-02	0.0E+00	0.0E+00	1.1E+01	9.8E+00	7.4E-01	0.0E+00	0.0E+00	2.9E-03	2.7E-03	2.1E-04	0.0E+00	0.0E+00
1500 - 1600	2.1E+00	2.0E+00	1.3E-01	1.8E-02	1.8E-02	1.1E+00	9.9E-01	6.7E-02	8.8E-03	8.8E-03	7.0E-01	6.5E-01	4.9E-02	0.0E+00	0.0E+00	1.0E+01	9.5E+00	7.2E-01	0.0E+00	0.0E+00	2.8E-03	2.6E-03	2.0E-04	0.0E+00	0.0E+00
1600 - 1700	1.6E+01	1.5E+01	9.9E-01	2.8E-02	2.8E-02	7.9E+00	7.4E+00	5.0E-01	1.4E-02	1.4E-02	1.0E+00	9.6E-01	7.6E-02	0.0E+00	0.0E+00	1.5E+01	1.4E+01	1.1E+00	0.0E+00	0.0E+00	4.2E-03	3.9E-03	3.1E-04	0.0E+00	0.0E+00
1700 - 1800	5.5E+00	5.2E+00	3.5E-01	4.6E-02	4.6E-02	2.8E+00	2.6E+00	1.7E-01	2.3E-02	2.3E-02	1.4E+00	1.3E+00	1.0E-01	0.0E+00	0.0E+00	2.1E+01	1.9E+01	1.5E+00	0.0E+00	0.0E+00	5.7E-03	5.3E-03	4.1E-04	0.0E+00	0.0E+00
1800 - 1900	1.6E+01	1.5E+01	1.0E+00	3.2E-02	3.2E-02	8.1E+00	7.6E+00	5.1E-01	1.6E-02	1.6E-02	1.5E+00	1.4E+00	1.1E-01	0.0E+00	0.0E+00	2.1E+01	2.0E+01	1.5E+00	0.0E+00	0.0E+00	5.9E-03	5.5E-03	4.3E-04	0.0E+00	0.0E+00
1900 - 2000	4.7E+00	4.4E+00	2.9E-01	3.9E-02	3.9E-02	2.3E+00	2.2E+00	1.5E-01	1.9E-02	1.9E-02	9.6E-01	8.9E-01	6.8E-02	0.0E+00	0.0E+00	1.4E+01	1.3E+01	9.9E-01	0.0E+00	0.0E+00	3.9E-03	3.6E-03	2.8E-04	0.0E+00	0.0E+00
2000 - 2100	3.8E+00	3.6E+00	2.4E-01	3.2E-02	3.2E-02	1.9E+00	1.8E+00	1.2E-01	1.6E-02	1.6E-02	1.1E+00	1.1E+00	8.1E-02	0.0E+00	0.0E+00	1.7E+01	1.5E+01	1.2E+00	0.0E+00	0.0E+00	4.6E-03	4.3E-03	3.3E-04	0.0E+00	0.0E+00
2100 - 2200	3.4E+00	3.2E+00	2.1E-01	2.8E-02	2.8E-02	1.7E+00	1.6E+00	1.1E-01	1.4E-02	1.4E-02	1.1E+00	1.0E+00	8.0E-02	0.0E+00	0.0E+00	1.6E+01	1.5E+01	1.2E+00	0.0E+00	0.0E+00	4.6E-03	4.2E-03	3.2E-04	0.0E+00	0.0E+00
2200 - 2300	8.5E-01	8.0E-01	5.3E-02	7.1E-03	7.1E-03	4.2E-01	4.0E-01	2.7E-02	3.5E-03	3.5E-03	2.8E-01	2.6E-01	2.0E-02	0.0E+00	0.0E+00	4.0E+00	3.8E+00	2.9E-01	0.0E+00	0.0E+00	1.1E-03	1.0E-03	7.9E-05	0.0E+00	0.0E+00
2300 - 2400	2.8E+01	2.6E+01	1.7E+00	2.5E-02	2.5E-02	1.4E+01	1.3E+01	8.7E-01	1.2E-02	1.2E-02	2.4E+00	2.2E+00	1.7E-01	0.0E+00	0.0E+00	3.4E+01	3.2E+01	2.5E+00	0.0E+00	0.0E+00	9.5E-03	8.8E-03	6.9E-04	0.0E+00	0.0E+00

Running Emission - Terminating and Bypass Buses

Average Travelling Distance within bus terminus =	140	m
Average Travelling Speed =	10	km/h

Hour	FBSD										FBDD									
	Frequency	Running Emission Factor (g/km-vehicle)					Running Emission (g)					Frequency	Running Emission Factor (g/km-vehicle)					Running Emission (g)				
	y	NOx	NO	NO2	RSP	FSP	NOx	NO	NO2	RSP	FSP	y	NOx	NO	NO2	RSP	FSP	NOx	NO	NO2	RSP	FSP
0000 - 0100	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	11	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	1.7E+01	1.6E+01	1.1E+00	5.9E-01	5.4E-01
0100 - 0200	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0600 - 0700	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	7	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	1.1E+01	1.0E+01	6.9E-01	3.7E-01	3.4E-01
0700 - 0800	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	9	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	1.4E+01	1.3E+01	8.8E-01	4.8E-01	4.4E-01
0800 - 0900	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	12	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	1.9E+01	1.8E+01	1.2E+00	6.4E-01	5.9E-01
0900 - 1000	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	17	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	2.6E+01	2.5E+01	1.7E+00	9.1E-01	8.3E-01
1000 - 1100	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	19	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	3.0E+01	2.8E+01	1.9E+00	1.0E+00	9.3E-01
1100 - 1200	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	12	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	1.9E+01	1.8E+01	1.2E+00	6.4E-01	5.9E-01
1200 - 1300	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	8	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	1.2E+01	1.2E+01	7.8E-01	4.3E-01	3.9E-01
1300 - 1400	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	9	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	1.4E+01	1.3E+01	8.8E-01	4.8E-01	4.4E-01
1400 - 1500	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	12	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	1.9E+01	1.8E+01	1.2E+00	6.4E-01	5.9E-01
1500 - 1600	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	10	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	1.6E+01	1.5E+01	9.8E-01	5.3E-01	4.9E-01
1600 - 1700	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	16	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	2.5E+01	2.3E+01	1.6E+00	8.5E-01	7.8E-01
1700 - 1800	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	26	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	4.0E+01	3.8E+01	2.6E+00	1.4E+00	1.3E+00
1800 - 1900	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	18	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	2.8E+01	2.6E+01	1.8E+00	9.6E-01	8.8E-01
1900 - 2000	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	22	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	3.4E+01	3.2E+01	2.2E+00	1.2E+00	1.1E+00
2000 - 2100	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	18	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	2.8E+01	2.6E+01	1.8E+00	9.6E-01	8.8E-01
2100 - 2200	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	16	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	2.5E+01	2.3E+01	1.6E+00	8.5E-01	7.8E-01
2200 - 2300	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	4	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	6.2E+00	5.8E+00	3.9E-01	2.1E-01	2.0E-01
2300 - 2400	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	14	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	2.2E+01	2.0E+01	1.4E+00	7.5E-01	6.9E-01
Daily Total	0											260										

Idling Emission - Bypass Buses

Idling Time for Bypass Buses	2	min

Hour	FBSD										FBDD									
	Frequency	Hot Idling Emission Factor (g/s)					Hot Idling Emission (g)					Frequency	Hot Idling Emission Factor (g/s)					Hot Idling Emission (g)				
	y	NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP	y	NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP
0000 - 0100	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	6	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.5E+00	2.4E+00	1.6E-01	2.1E-02	2.1E-02
0100 - 0200	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0600 - 0700	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	4	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.7E+00	1.6E+00	1.1E-01	1.4E-02	1.4E-02
0700 - 0800	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	5	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.1E+00	2.0E+00	1.3E-01	1.8E-02	1.8E-02
0800 - 0900	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	8	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	3.4E+00	3.2E+00	2.1E-01	2.8E-02	2.8E-02
0900 - 1000	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	11	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	4.7E+00	4.4E+00	2.9E-01	3.9E-02	3.9E-02
1000 - 1100	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	10	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	4.2E+00	4.0E+00	2.7E-01	3.5E-02	3.5E-02
1100 - 1200	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	6	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.5E+00	2.4E+00	1.6E-01	2.1E-02	2.1E-02
1200 - 1300	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	6	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.5E+00	2.4E+00	1.6E-01	2.1E-02	2.1E-02
1300 - 1400	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	5	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.1E+00	2.0E+00	1.3E-01	1.8E-02	1.8E-02
1400 - 1500	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	6	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.5E+00	2.4E+00	1.6E-01	2.1E-02	2.1E-02
1500 - 1600	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	5	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.1E+00	2.0E+00	1.3E-01	1.8E-02	1.8E-02
1600 - 1700	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	8	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	3.4E+00	3.2E+00	2.1E-01	2.8E-02	2.8E-02
1700 - 1800	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	13	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	5.5E+00	5.2E+00	3.5E-01	4.6E-02	4.6E-02
1800 - 1900	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	9	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	3.8E+00	3.6E+00	2.4E-01	3.2E-02	3.2E-02
1900 - 2000	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	11	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	4.7E+00	4.4E+00	2.9E-01	3.9E-02	3.9E-02
2000 - 2100	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	9	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	3.8E+00	3.6E+00	2.4E-01	3.2E-02	3.2E-02
2100 - 2200	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	8	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	3.4E+00	3.2E+00	2.1E-01	2.8E-02	2.8E-02
2200 - 2300	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	2	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	8.5E-01	8.0E-01	5.3E-02	7.1E-03	7.1E-03
2300 - 2400	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	7	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	3.0E+00	2.8E+00	1.9E-01	2.5E-02	2.5E-02
Daily Total	0											139										

Total Hourly Emission

Hour	Total Emission inside bus terminus (g) (Running + Idling + Start) [6]					Total Emission Rate (g/s)				
	NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP
0000 - 0100	7.5E+01	7.0E+01	4.7E+00	6.3E-01	5.8E-01	2.1E-02	1.9E-02	1.3E-03	1.7E-04	1.6E-04
0100 - 0200	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0600 - 0700	1.4E+01	1.3E+01	9.0E-01	4.0E-01	3.7E-01	3.9E-03	3.7E-03	2.5E-04	1.1E-04	1.0E-04
0700 - 0800	1.8E+01	1.7E+01	1.1E+00	5.1E-01	4.7E-01	5.0E-03	4.7E-03	3.2E-04	1.4E-04	1.3E-04
0800 - 0900	3.7E+01	3.4E+01	2.3E+00	6.8E-01	6.3E-01	1.0E-02	9.5E-03	6.4E-04	1.9E-04	1.8E-04
0900 - 1000	4.8E+01	4.5E+01	3.0E+00	9.7E-01	8.9E-01	1.3E-02	1.2E-02	8.4E-04	2.7E-04	2.5E-04
1000 - 1100	9.0E+01	8.4E+01	5.7E+00	1.1E+00	1.0E+00	2.5E-02	2.3E-02	1.6E-03	3.0E-04	2.8E-04
1100 - 1200	5.1E+01	4.7E+01	3.2E+00	6.8E-01	6.3E-01	1.4E-02	1.3E-02	8.9E-04	1.9E-04	1.8E-04
1200 - 1300	2.8E+01	2.7E+01	1.8E+00	4.5E-01	4.2E-01	7.9E-03	7.4E-03	5.0E-04	1.3E-04	1.2E-04
1300 - 1400	1.8E+01	1.7E+01	1.2E+00	5.1E-01	4.7E-01	5.1E-03	4.8E-03	3.2E-04	1.4E-04	1.3E-04
1400 - 1500	2.5E+01	2.3E+01	1.5E+00	6.8E-01	6.3E-01	6.8E-03	6.4E-03	4.3E-04	1.9E-04	1.8E-04
1500 - 1600	2.1E+01	1.9E+01	1.3E+00	5.7E-01	5.3E-01	5.7E-03	5.3E-03	3.6E-04	1.6E-04	1.5E-04
1600 - 1700	4.5E+01	4.2E+01	2.9E+00	9.1E-01	8.4E-01	1.3E-02	1.2E-02	7.9E-04	2.5E-04	2.3E-04
1700 - 1800	5.3E+01	5.0E+01	3.3E+00	1.5E+00	1.4E+00	1.5E-02	1.4E-02	9.3E-04	4.1E-04	3.8E-04
1800 - 1900	5.0E+01	4.6E+01	3.1E+00	1.0E+00	9.5E-01	1.4E-02	1.3E-02	8.7E-04	2.8E-04	2.6E-04
1900 - 2000	4.5E+01	4.2E+01	2.8E+00	1.3E+00	1.2E+00	1.2E-02	1.2E-02	7.8E-04	3.5E-04	3.2E-04
2000 - 2100	3.7E+01	3.4E+01	2.3E+00	1.0E+00	9.5E-01	1.0E-02	9.6E-03	6.5E-04	2.8E-04	2.6E-04
2100 - 2200	3.3E+01	3.1E+01	2.1E+00	9.1E-01	8.4E-01	9.1E-03	8.5E-03	5.8E-04	2.5E-04	2.3E-04
2200 - 2300	8.2E+00	7.7E+00	5.2E-01	2.3E-01	2.1E-01	2.3E-03	2.1E-03	1.4E-04	6.3E-05	5.8E-05
2300 - 2400	5.5E+01	5.1E+01	3.5E+00	8.0E-01	7.4E-01	1.5E-02	1.4E-02	9.7E-04	2.2E-04	2.0E-04
						max: 2.3E-02	2.1E-02	1.6E-03	4.1E-04	3.8E-04

PTI opening hourly emission factor

NO	NO_2	RSP	FSP
0.83	0.83	0.42	0.42
0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00
0.16	0.16	0.27	0.27
0.20	0.20	0.35	0.35
0.41	0.41	0.46	0.46
0.53	0.53	0.65	0.65
1.00	1.00	0.73	0.73
0.56	0.56	0.46	0.46
0.32	0.31	0.31	0.31
0.20	0.20	0.35	0.35
0.27	0.27	0.46	0.46
0.23	0.23	0.38	0.38
0.50	0.50	0.62	0.62
0.59	0.59	1.00	1.00
0.55	0.55	0.69	0.69
0.50	0.49	0.85	0.85
0.41	0.41	0.69	0.69
0.37	0.36	0.62	0.62
0.09	0.09	0.15	0.15
0.61	0.61	0.54	0.54

Remarks:

[1] Idling Emission (g) = Idling Emission Factor (g/s) * Actual Idling time (min) * 60 * Frequency

[2] Total Idling Emission (g) = Cold Idling Emission of FBSD & FBDD (g) + Hot Idling Emission of FBSD & FBDD (g)

[3] If Actual Idling Time ≤ 1 min, Idling Emission for Start Emission Adjustment (g) = Idling rate (g/min) * Actual Idling Time (min)

If Actual Idling Time > 1 min, Idling Emission for Start Emission Adjustment (g) = Idling rate (g/min) * Maximum Duration for Adjusting Start Emission "K" (min)

Where Idling rate (g/min) = Total Idling Emission (g) / Idling Time (min), and "K" = 1 min for Diesel vehicles with SCR

[4] Adjusted Start Emission within bus terminus (g) = [Total Start Emission of FBSD & FBDD (g) - Idling Emission for Start Emission Adjustment (g)] * [Average Distance from Starting Place to Egress (m) / 700m]

Minimum value = 0 g

[5] Adjusted Start Emission outside bus terminus (g) = [Total Start Emission of FBSD & FBDD (g) - Idling Emission for Start Emission Adjustment (g)] * [Average Spread Distance outside bus terminus (m) / 700m]

Minimum value = 0 g

[6] Total Emission Inside bus terminus (g) = Total Running Emission (g) + Idling Emission (g) + Adjusted Start Emission within bus terminus (g)

Hong Kong Station Bus Terminus

Minimum Hourly Temperature and Relative Humidity for 2nd Quarter

Temperature: 14 ^{o}C

Relative Humidity: 21 %

Start Emission

	Single-Deck Franchised Bus (FBSD) Start Emission Factor (g/trip)																	
NOx	2.0E-01	3.6E-01	4.8E-01	6.8E-01	8.4E-01	1.1E+00	1.6E+00	2.0E+00	3.0E+00	3.9E+00	4.4E+00	5.2E+00	5.7E+00	6.0E+00	6.2E+00	6.3E+00	6.4E+00	6.4E+00
NO	1.7E-01	3.0E-01	4.1E-01	5.8E-01	7.1E-01	9.5E-01	1.4E+00	1.7E+00	2.5E+00	3.3E+00	3.7E+00	4.4E+00	4.8E+00	5.1E+00	5.2E+00	5.4E+00	5.4E+00	5.4E+00
NO2	3.2E-02	5.7E-02	7.6E-02	1.1E-01	1.3E-01	1.8E-01	2.6E-01	3.2E-01	4.7E-01	6.2E-01	6.9E-01	8.2E-01	9.0E-01	9.5E-01	9.7E-01	1.0E+00	1.0E+00	1.0E+00
RSP	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
FSP	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00

	Double-Deck Franchised Bus (FBDD) Start Emission Factor (g/trip)																	
NOx	7.2E-01	1.3E+00	1.7E+00	2.4E+00	3.0E+00	4.0E+00	5.9E+00	7.3E+00	1.1E+01	1.4E+01	1.6E+01	1.9E+01	2.1E+01	2.2E+01	2.2E+01	2.3E+01	2.3E+01	2.3E+01
NO	6.7E-01	1.2E+00	1.6E+00	2.3E+00	2.8E+00	3.7E+00	5.5E+00	6.8E+00	1.0E+01	1.3E+01	1.5E+01	1.7E+01	1.9E+01	2.0E+01	2.1E+01	2.1E+01	2.1E+01	2.1E+01
NO2	5.0E-02	9.1E-02	1.2E-01	1.7E-01	2.1E-01	2.8E-01	4.1E-01	5.1E-01	7.5E-01	9.8E-01	1.1E+00	1.3E+00	1.4E+00	1.5E+00	1.5E+00	1.6E+00	1.6E+00	1.6E+00
RSP	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
FSP	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00

	No. of Trips of FBSD																	
Soaking Time (min) / Hour	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
0000 - 0100																		
0100 - 0200																		
0200 - 0300																		
0300 - 0400																		
0400 - 0500																		
0500 - 0600																		
0600 - 0700																		
0700 - 0800																		
0800 - 0900																		
0900 - 1000																		
1000 - 1100																		
1100 - 1200																		
1200 - 1300																		
1300 - 1400																		
1400 - 1500																		
1500 - 1600																		
1600 - 1700																		
1700 - 1800																		
1800 - 1900																		
1900 - 2000																		
2000 - 2100																		
2100 - 2200																		
2200 - 2300																		
2300 - 2400																		
																Daily Total		0

	No. of Trips of FBDD																	
Soaking Time (min) / Hour	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
0000 - 0100	0	0	1	0	0	0	0	0	0	0	0	3	1	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	0
0600 - 0700	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0700 - 0800	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0800 - 0900	0	0	2	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0
0900 - 1000	0	1	0	3	0	1	0	0	0	0	0	0	0	1	0	0	0	0
1000 - 1100	1	0	1	1	1	1	1	0	1	0	0	1	1	0	0	0	0	0
1100 - 1200	0	0	1	1	2	0	0	0	0	0	1	1	0	0	0	0	0	0
1200 - 1300	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
1300 - 1400	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1400 - 1500	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1500 - 1600	0	1	1	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0
1600 - 1700	0	1	2	2	1	1	0	1	0	0	0	0	0	0	0	0	0	0
1700 - 1800	2	1	4	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0
1800 - 1900	1	1	2	3	0	1	0	0	0	1	0	0	0	0	0	0	0	0
1900 - 2000	3	2	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2000 - 2100	0	0	4	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0
2100 - 2200	1	0	2	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0
2200 - 2300	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
2300 - 2400	1	1	0	3	0	0	0	0	0	0	0	0	2	0	0	0	0	0
																Daily Total		121

Total Start Emission of FBSD & FBDD (g)					
Hour	NOx	NO	NO2	RSP	FSP
0000 - 0100	7.8E+01	7.3E+01	5.5E+00	0.0E+00	0.0E+00
0100 - 0200	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0600 - 0700	5.9E+00	5.5E+00	4.1E-01	0.0E+00	0.0E+00
0700 - 0800	4.9E+00	4.5E+00	3.4E-01	0.0E+00	0.0E+00
0800 - 0900	1.3E+01	1.2E+01	9.2E-01	0.0E+00	0.0E+00
0900 - 1000	3.4E+01	3.2E+01	2.4E+00	0.0E+00	0.0E+00
1000 - 1100	6.8E+01	6.3E+01	4.7E+00	0.0E+00	0.0E+00
1100 - 1200	4.5E+01	4.2E+01	3.1E+00	0.0E+00	0.0E+00
1200 - 1300	8.6E+00	8.0E+00	6.0E-01	0.0E+00	0.0E+00
1300 - 1400	7.9E+00	7.4E+00	5.5E-01	0.0E+00	0.0E+00
1400 - 1500	1.3E+01	1.2E+01	8.7E-01	0.0E+00	0.0E+00
1500 - 1600	1.2E+01	1.1E+01	8.3E-01	0.0E+00	0.0E+00
1600 - 1700	2.4E+01	2.2E+01	1.7E+00	0.0E+00	0.0E+00
1700 - 1800	2.5E+01	2.3E+01	1.7E+00	0.0E+00	0.0E+00
1800 - 1900	3.1E+01	2.9E+01	2.2E+00	0.0E+00	0.0E+00
1900 - 2000	1.7E+01	1.6E+01	1.2E+00	0.0E+00	0.0E+00
2000 - 2100	2.0E+01	1.8E+01	1.4E+00	0.0E+00	0.0E+00
2100 - 2200	1.9E+01	1.8E+01	1.3E+00	0.0E+00	0.0E+00
2200 - 2300	4.7E+00	4.4E+00	3.3E-01	0.0E+00	0.0E+00
2300 - 2400	5.0E+01	4.7E+01	3.5E+00	0.0E+00	0.0E+00

Idling Emission - Terminating Buses

Idling Time for Terminating Buses	2	min
Max. Idling Time for Adjusting Start Emission =	1	min

Hour	FBSD											FBDD										
	Frequency	Cold Idling Emission Factor (g/s)					Cold Idling Emission (g) [1]					Frequency	Cold Idling Emission Factor (g/s)					Cold Idling Emission (g) [1]				
		NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP		NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP
0000 - 0100	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	4	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	5.1E+01	4.8E+01	3.2E+00	1.4E-02	1.4E-02
0100 - 0200	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0600 - 0700	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0700 - 0800	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0800 - 0900	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	1.3E+01	1.2E+01	8.1E-01	3.5E-03	3.5E-03
0900 - 1000	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	1.3E+01	1.2E+01	8.1E-01	3.5E-03	3.5E-03
1000 - 1100	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	4	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	5.1E+01	4.8E+01	3.2E+00	1.4E-02	1.4E-02
1100 - 1200	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	2	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	2.6E+01	2.4E+01	1.6E+00	7.1E-03	7.1E-03
1200 - 1300	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	1.3E+01	1.2E+01	8.1E-01	3.5E-03	3.5E-03
1300 - 1400	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1400 - 1500	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1500 - 1600	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1600 - 1700	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	1.3E+01	1.2E+01	8.1E-01	3.5E-03	3.5E-03
1700 - 1800	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1800 - 1900	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	1.3E+01	1.2E+01	8.1E-01	3.5E-03	3.5E-03
1900 - 2000	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2000 - 2100	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2100 - 2200	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2200 - 2300	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2300 - 2400	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	2	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	2.6E+01	2.4E+01	1.6E+00	7.1E-03	7.1E-03
Daily Total	0											17										

Hour	FBSD											FBDD										
	Frequency	Hot Idling Emission Factor (g/s)					Hot Idling Emission (g) [1]					Frequency	Hot Idling Emission Factor (g/s)					Hot Idling Emission (g) [1]				
		NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP		NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP
0000 - 0100	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	4.2E-01	4.0E-01	2.7E-02	3.5E-03	3.5E-03
0100 - 0200	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0600 - 0700	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	3	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.3E+00	1.2E+00	8.0E-02	1.1E-02	1.1E-02
0700 - 0800	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	4	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.7E+00	1.6E+00	1.1E-01	1.4E-02	1.4E-02
0800 - 0900	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	3	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.3E+00	1.2E+00	8.0E-02	1.1E-02	1.1E-02
0900 - 1000	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	5	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.1E+00	2.0E+00	1.3E-01	1.8E-02	1.8E-02
1000 - 1100	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	5	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.1E+00	2.0E+00	1.3E-01	1.8E-02	1.8E-02
1100 - 1200	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	4	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.7E+00	1.6E+00	1.1E-01	1.4E-02	1.4E-02
1200 - 1300	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	4.2E-01	4.0E-01	2.7E-02	3.5E-03	3.5E-03
1300 - 1400	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	4	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.7E+00	1.6E+00	1.1E-01	1.4E-02	1.4E-02
1400 - 1500	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	6	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.5E+00	2.4E+00	1.6E-01	2.1E-02	2.1E-02
1500 - 1600	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	5	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.1E+00	2.0E+00	1.3E-01	1.8E-02	1.8E-02
1600 - 1700	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	7	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	3.0E+00	2.8E+00	1.9E-01	2.5E-02	2.5E-02
1700 - 1800	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	13	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	5.5E+00	5.2E+00	3.5E-01	4.6E-02	4.6E-02
1800 - 1900	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	8	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	3.4E+00	3.2E+00	2.1E-01	2.8E-02	2.8E-02
1900 - 2000	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	11	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	4.7E+00	4.4E+00	2.9E-01	3.9E-02	3.9E-02
2000 - 2100	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	9	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	3.8E+00	3.6E+00	2.4E-01	3.2E-02	3.2E-02
2100 - 2200	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	8	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	3.4E+00	3.2E+00	2.1E-01	2.8E-02	2.8E-02
2200 - 2300	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	2	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	8.5E-01	8.0E-01	5.3E-02	7.1E-03	7.1E-03
2300 - 2400	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	5	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.1E+00	2.0E+00	1.3E-01	1.8E-02	1.8E-02
	0											104										

Average Distance from Starting Place to Egress =	45	m
Average Distance from PTI Egress to Open Road Network	0	m
Average Spread Distance outside bus terminus =	655	m

Hour	Total Idling Emission (g) [2]					Idling Emission for Start Emission Adjustment (g) [3]					Adjusted Start Emission within bus terminus (g) [4]					Adjusted Start Emission outside bus terminus (g) [5]					Start Emission Rate outside bus terminus (g/s)				
	NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP
0000 - 0100	5.2E+01	4.8E+01	3.3E+00	1.8E-02	1.8E-02	2.6E+01	2.4E+01	1.6E+00	8.8E-03	8.8E-03	3.4E+00	3.1E+00	2.5E-01	0.0E+00	0.0E+00	4.9E+01	4.6E+01	3.6E+00	0.0E+00	0.0E+00	1.4E-02	1.3E-02	1.0E-03	0.0E+00	0.0E+00
0100 - 0200	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0600 - 0700	1.3E+00	1.2E+00	8.0E-02	1.1E-02	1.1E-02	6.4E-01	6.0E-01	4.0E-02	5.3E-03	5.3E-03	3.4E-01	3.1E-01	2.4E-02	0.0E+00	0.0E+00	4.9E+00	4.6E+00	3.5E-01	0.0E+00	0.0E+00	1.4E-03	1.3E-03	9.7E-05	0.0E+00	0.0E+00
0700 - 0800	1.7E+00	1.6E+00	1.1E-01	1.4E-02	1.4E-02	8.5E-01	8.0E-01	5.3E-02	7.1E-03	7.1E-03	2.6E-01	2.4E-01	1.9E-02	0.0E+00	0.0E+00	3.8E+00	3.5E+00	2.7E-01	0.0E+00	0.0E+00	1.0E-03	9.7E-04	7.5E-05	0.0E+00	0.0E+00
0800 - 0900	1.4E+01	1.3E+01	8.9E-01	1.4E-02	1.4E-02	7.0E+00	6.6E+00	4.4E-01	7.1E-03	7.1E-03	4.0E-01	3.7E-01	3.1E-02	0.0E+00	0.0E+00	5.8E+00	5.3E+00	4.5E-01	0.0E+00	0.0E+00	1.6E-03	1.5E-03	1.2E-04	0.0E+00	0.0E+00
0900 - 1000	1.5E+01	1.4E+01	9.4E-01	2.1E-02	2.1E-02	7.5E+00	7.0E+00	4.7E-01	1.1E-02	1.1E-02	1.7E+00	1.6E+00	1.2E-01	0.0E+00	0.0E+00	2.5E+01	2.3E+01	1.8E+00	0.0E+00	0.0E+00	7.0E-03	6.5E-03	5.0E-04	0.0E+00	0.0E+00
1000 - 1100	5.3E+01	5.0E+01	3.4E+00	3.2E-02	3.2E-02	2.7E+01	2.5E+01	1.7E+00	1.6E-02	1.6E-02	2.6E+00	2.4E+00	2.0E-01	0.0E+00	0.0E+00	3.9E+01	3.6E+01	2.9E+00	0.0E+00	0.0E+00	1.1E-02	9.9E-03	8.0E-04	0.0E+00	0.0E+00
1100 - 1200	2.7E+01	2.6E+01	1.7E+00	2.1E-02	2.1E-02	1.4E+01	1.3E+01	8.6E-01	1.1E-02	1.1E-02	2.0E+00	1.8E+00	1.5E-01	0.0E+00	0.0E+00	2.9E+01	2.7E+01	2.1E+00	0.0E+00	0.0E+00	8.1E-03	7.5E-03	5.9E-04	0.0E+00	0.0E+00
1200 - 1300	1.3E+01	1.2E+01	8.3E-01	7.1E-03	7.1E-03	6.6E+00	6.2E+00	4.2E-01	3.5E-03	3.5E-03	1.3E-01	1.2E-01	1.2E-02	0.0E+00	0.0E+00	1.9E+00	1.7E+00	1.7E-01	0.0E+00	0.0E+00	5.2E-04	4.7E-04	4.8E-05	0.0E+00	0.0E+00
1300 - 1400	1.7E+00	1.6E+00	1.1E-01	1.4E-02	1.4E-02	8.5E-01	8.0E-01	5.3E-02	7.1E-03	7.1E-03	4.5E-01	4.2E-01	3.2E-02	0.0E+00	0.0E+00	6.6E+00	6.1E+00	4.7E-01	0.0E+00	0.0E+00	1.8E-03	1.7E-03	1.3E-04	0.0E+00	0.0E+00
1400 - 1500	2.5E+00	2.4E+00	1.6E-01	2.1E-02	2.1E-02	1.3E+00	1.2E+00	8.0E-02	1.1E-02	1.1E-02	7.2E-01	6.7E-01	5.1E-02	0.0E+00	0.0E+00	1.1E+01	9.8E+00	7.4E-01	0.0E+00	0.0E+00	2.9E-03	2.7E-03	2.1E-04	0.0E+00	0.0E+00
1500 - 1600	2.1E+00	2.0E+00	1.3E-01	1.8E-02	1.8E-02	1.1E+00	9.9E-01	6.7E-02	8.8E-03	8.8E-03	7.0E-01	6.5E-01	4.9E-02	0.0E+00	0.0E+00	1.0E+01	9.5E+00	7.2E-01	0.0E+00	0.0E+00	2.8E-03	2.6E-03	2.0E-04	0.0E+00	0.0E+00
1600 - 1700	1.6E+01	1.5E+01	9.9E-01	2.8E-02	2.8E-02	7.9E+00	7.4E+00	5.0E-01	1.4E-02	1.4E-02	1.0E+00	9.6E-01	7.6E-02	0.0E+00	0.0E+00	1.5E+01	1.4E+01	1.1E+00	0.0E+00	0.0E+00	4.2E-03	3.9E-03	3.1E-04	0.0E+00	0.0E+00
1700 - 1800	5.5E+00	5.2E+00	3.5E-01	4.6E-02	4.6E-02	2.8E+00	2.6E+00	1.7E-01	2.3E-02	2.3E-02	1.4E+00	1.3E+00	1.0E-01	0.0E+00	0.0E+00	2.1E+01	1.9E+01	1.5E+00	0.0E+00	0.0E+00	5.7E-03	5.3E-03	4.1E-04	0.0E+00	0.0E+00
1800 - 1900	1.6E+01	1.5E+01	1.0E+00	3.2E-02	3.2E-02	8.1E+00	7.6E+00	5.1E-01	1.6E-02	1.6E-02	1.5E+00	1.4E+00	1.1E-01	0.0E+00	0.0E+00	2.1E+01	2.0E+01	1.5E+00	0.0E+00	0.0E+00	5.9E-03	5.5E-03	4.3E-04	0.0E+00	0.0E+00
1900 - 2000	4.7E+00	4.4E+00	2.9E-01	3.9E-02	3.9E-02	2.3E+00	2.2E+00	1.5E-01	1.9E-02	1.9E-02	9.6E-01	8.9E-01	6.8E-02	0.0E+00	0.0E+00	1.4E+01	1.3E+01	9.9E-01	0.0E+00	0.0E+00	3.9E-03	3.6E-03	2.8E-04	0.0E+00	0.0E+00
2000 - 2100	3.8E+00	3.6E+00	2.4E-01	3.2E-02	3.2E-02	1.9E+00	1.8E+00	1.2E-01	1.6E-02	1.6E-02	1.1E+00	1.1E+00	8.1E-02	0.0E+00	0.0E+00	1.7E+01	1.5E+01	1.2E+00	0.0E+00	0.0E+00	4.6E-03	4.3E-03	3.3E-04	0.0E+00	0.0E+00
2100 - 2200	3.4E+00	3.2E+00	2.1E-01	2.8E-02	2.8E-02	1.7E+00	1.6E+00	1.1E-01	1.4E-02	1.4E-02	1.1E+00	1.0E+00	8.0E-02	0.0E+00	0.0E+00	1.6E+01	1.5E+01	1.2E+00	0.0E+00	0.0E+00	4.6E-03	4.2E-03	3.2E-04	0.0E+00	0.0E+00
2200 - 2300	8.5E-01	8.0E-01	5.3E-02	7.1E-03	7.1E-03	4.2E-01	4.0E-01	2.7E-02	3.5E-03	3.5E-03	2.8E-01	2.6E-01	2.0E-02	0.0E+00	0.0E+00	4.0E+00	3.8E+00	2.9E-01	0.0E+00	0.0E+00	1.1E-03	1.0E-03	7.9E-05	0.0E+00	0.0E+00
2300 - 2400	2.8E+01	2.6E+01	1.7E+00	2.5E-02	2.5E-02	1.4E+01	1.3E+01	8.7E-01	1.2E-02	1.2E-02	2.4E+00	2.2E+00	1.7E-01	0.0E+00	0.0E+00	3.4E+01	3.2E+01	2.5E+00	0.0E+00	0.0E+00	9.5E-03	8.8E-03	6.9E-04	0.0E+00	0.0E+00

Running Emission - Terminating and Bypass Buses

Average Travelling Distance within bus terminus =	140	m
Average Travelling Speed =	10	km/h

Hour	FBSD										FBDD									
	Frequency	Running Emission Factor (g/km-vehicle)					Running Emission (g)					Frequency	Running Emission Factor (g/km-vehicle)					Running Emission (g)			
	y	NOx	NO	NO2	RSP	FSP	NOx	NO	NO2	RSP	FSP	y	NOx	NO	NO2	RSP	FSP	NOx	NO	NO2	RSP	FSP
0000 - 0100	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	11	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	1.7E+01	1.6E+01	1.1E+00	5.9E-01	5.4E-01
0100 - 0200	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0600 - 0700	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	7	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	1.1E+01	1.0E+01	6.9E-01	3.7E-01	3.4E-01
0700 - 0800	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	9	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	1.4E+01	1.3E+01	8.8E-01	4.8E-01	4.4E-01
0800 - 0900	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	12	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	1.9E+01	1.8E+01	1.2E+00	6.4E-01	5.9E-01
0900 - 1000	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	17	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	2.6E+01	2.5E+01	1.7E+00	9.1E-01	8.3E-01
1000 - 1100	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	19	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	3.0E+01	2.8E+01	1.9E+00	1.0E+00	9.3E-01
1100 - 1200	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	12	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	1.9E+01	1.8E+01	1.2E+00	6.4E-01	5.9E-01
1200 - 1300	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	8	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	1.2E+01	1.2E+01	7.9E-01	4.3E-01	3.9E-01
1300 - 1400	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	9	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	1.4E+01	1.3E+01	8.8E-01	4.8E-01	4.4E-01
1400 - 1500	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	12	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	1.9E+01	1.8E+01	1.2E+00	6.4E-01	5.9E-01
1500 - 1600	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	10	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	1.6E+01	1.5E+01	9.8E-01	5.3E-01	4.9E-01
1600 - 1700	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	16	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	2.5E+01	2.3E+01	1.6E+00	8.5E-01	7.8E-01
1700 - 1800	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	26	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	4.1E+01	3.8E+01	2.6E+00	1.4E+00	1.3E+00
1800 - 1900	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	18	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	2.8E+01	2.6E+01	1.8E+00	9.6E-01	8.8E-01
1900 - 2000	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	22	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	3.4E+01	3.2E+01	2.2E+00	1.2E+00	1.1E+00
2000 - 2100	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	18	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	2.8E+01	2.6E+01	1.8E+00	9.6E-01	8.8E-01
2100 - 2200	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	16	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	2.5E+01	2.3E+01	1.6E+00	8.5E-01	7.8E-01
2200 - 2300	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	4	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	6.2E+00	5.8E+00	3.9E-01	2.1E-01	2.0E-01
2300 - 2400	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	14	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	2.2E+01	2.0E+01	1.4E+00	7.5E-01	6.9E-01
Daily Total	0											260										

Idling Emission - Bypass Buses

Idling Time for Bypass Buses	2	min

Hour	FBSD										FBDD									
	Frequency	Hot Idling Emission Factor (g/s)					Hot Idling Emission (g)					Frequency	Hot Idling Emission Factor (g/s)					Hot Idling Emission (g)				
	y	NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP	y	NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP
0000 - 0100	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	6	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.5E+00	2.4E+00	1.6E-01	2.1E-02	2.1E-02
0100 - 0200	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0600 - 0700	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	4	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.7E+00	1.6E+00	1.1E-01	1.4E-02	1.4E-02
0700 - 0800	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	5	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.1E+00	2.0E+00	1.3E-01	1.8E-02	1.8E-02
0800 - 0900	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	8	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	3.4E+00	3.2E+00	2.1E-01	2.8E-02	2.8E-02
0900 - 1000	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	11	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	4.7E+00	4.4E+00	2.9E-01	3.9E-02	3.9E-02
1000 - 1100	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	10	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	4.2E+00	4.0E+00	2.7E-01	3.5E-02	3.5E-02
1100 - 1200	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	6	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.5E+00	2.4E+00	1.6E-01	2.1E-02	2.1E-02
1200 - 1300	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	6	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.5E+00	2.4E+00	1.6E-01	2.1E-02	2.1E-02
1300 - 1400	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	5	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.1E+00	2.0E+00	1.3E-01	1.8E-02	1.8E-02
1400 - 1500	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	6	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.5E+00	2.4E+00	1.6E-01	2.1E-02	2.1E-02
1500 - 1600	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	5	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.1E+00	2.0E+00	1.3E-01	1.8E-02	1.8E-02
1600 - 1700	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	8	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	3.4E+00	3.2E+00	2.1E-01	2.8E-02	2.8E-02
1700 - 1800	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	13	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	5.5E+00	5.2E+00	3.5E-01	4.6E-02	4.6E-02
1800 - 1900	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	9	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	3.8E+00	3.6E+00	2.4E-01	3.2E-02	3.2E-02
1900 - 2000	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	11	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	4.7E+00	4.4E+00	2.9E-01	3.9E-02	3.9E-02
2000 - 2100	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	9	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	3.8E+00	3.6E+00	2.4E-01	3.2E-02	3.2E-02
2100 - 2200	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	8	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	3.4E+00	3.2E+00	2.1E-01	2.8E-02	2.8E-02
2200 - 2300	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	2	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	8.5E-01	8.0E-01	5.3E-02	7.1E-03	7.1E-03
2300 - 2400	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	7	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	3.0E+00	2.8E+00	1.9E-01	2.5E-02	2.5E-02
Daily Total	0											139										

Total Hourly Emission

Hour	Total Emission inside bus terminus (g) (Running + Idling + Start) [6]					Total Emission Rate (g/s)				
	NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP
0000 - 0100	7.5E+01	7.0E+01	4.7E+00	6.3E-01	5.8E-01	2.1E-02	1.9E-02	1.3E-03	1.7E-04	1.6E-04
0100 - 0200	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0600 - 0700	1.4E+01	1.3E+01	9.0E-01	4.0E-01	3.7E-01	4.0E-03	3.7E-03	2.5E-04	1.1E-04	1.0E-04
0700 - 0800	1.8E+01	1.7E+01	1.1E+00	5.1E-01	4.7E-01	5.0E-03	4.7E-03	3.2E-04	1.4E-04	1.3E-04
0800 - 0900	3.7E+01	3.4E+01	2.3E+00	6.8E-01	6.3E-01	1.0E-02	9.5E-03	6.4E-04	1.9E-04	1.8E-04
0900 - 1000	4.8E+01	4.5E+01	3.0E+00	9.7E-01	8.9E-01	1.3E-02	1.2E-02	8.4E-04	2.7E-04	2.5E-04
1000 - 1100	9.0E+01	8.4E+01	5.7E+00	1.1E+00	1.0E+00	2.5E-02	2.3E-02	1.6E-03	3.0E-04	2.8E-04
1100 - 1200	5.1E+01	4.7E+01	3.2E+00	6.8E-01	6.3E-01	1.4E-02	1.3E-02	8.9E-04	1.9E-04	1.8E-04
1200 - 1300	2.8E+01	2.7E+01	1.8E+00	4.5E-01	4.2E-01	7.9E-03	7.4E-03	5.0E-04	1.3E-04	1.2E-04
1300 - 1400	1.8E+01	1.7E+01	1.2E+00	5.1E-01	4.7E-01	5.1E-03	4.8E-03	3.2E-04	1.4E-04	1.3E-04
1400 - 1500	2.5E+01	2.3E+01	1.5E+00	6.8E-01	6.3E-01	6.8E-03	6.4E-03	4.3E-04	1.9E-04	1.8E-04
1500 - 1600	2.1E+01	1.9E+01	1.3E+00	5.7E-01	5.3E-01	5.7E-03	5.3E-03	3.6E-04	1.6E-04	1.5E-04
1600 - 1700	4.5E+01	4.2E+01	2.9E+00	9.1E-01	8.4E-01	1.3E-02	1.2E-02	7.9E-04	2.5E-04	2.3E-04
1700 - 1800	5.3E+01	5.0E+01	3.3E+00	1.5E+00	1.4E+00	1.5E-02	1.4E-02	9.3E-04	4.1E-04	3.8E-04
1800 - 1900	5.0E+01	4.6E+01	3.1E+00	1.0E+00	9.5E-01	1.4E-02	1.3E-02	8.7E-04	2.8E-04	2.6E-04
1900 - 2000	4.5E+01	4.2E+01	2.8E+00	1.3E+00	1.2E+00	1.2E-02	1.2E-02	7.8E-04	3.5E-04	3.2E-04
2000 - 2100	3.7E+01	3.5E+01	2.3E+00	1.0E+00	9.5E-01	1.0E-02	9.6E-03	6.5E-04	2.8E-04	2.6E-04
2100 - 2200	3.3E+01	3.1E+01	2.1E+00	9.1E-01	8.4E-01	9.1E-03	8.6E-03	5.8E-04	2.5E-04	2.3E-04
2200 - 2300	8.2E+00	7.7E+00	5.2E-01	2.3E-01	2.1E-01	2.3E-03	2.1E-03	1.4E-04	6.3E-05	5.8E-05
2300 - 2400	5.5E+01	5.1E+01	3.5E+00	8.0E-01	7.4E-01	1.5E-02	1.4E-02	9.7E-04	2.2E-04	2.0E-04
						max: 2.3E-02	1.6E-03	4.1E-04	3.8E-04	

PTI opening hourly emission factor

NO	NO_2	RSP	FSP
0.83	0.83	0.42	0.42
0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00
0.16	0.16	0.27	0.27
0.20	0.20	0.35	0.35
0.41	0.41	0.46	0.46
0.53	0.53	0.65	0.65
1.00	1.00	0.73	0.73
0.56	0.56	0.46	0.46
0.32	0.31	0.31	0.31
0.20	0.20	0.35	0.35
0.27	0.27	0.46	0.46
0.23	0.23	0.38	0.38
0.50	0.50	0.62	0.62
0.59	0.59	1.00	1.00
0.55	0.55	0.69	0.69
0.50	0.49	0.85	0.85
0.41	0.41	0.69	0.69
0.37	0.36	0.62	0.62
0.09	0.09	0.15	0.15
0.61	0.61	0.54	0.54

Remarks:

[1] Idling Emission (g) = Idling Emission Factor (g/s) * Actual Idling time (min) * 60 * Frequency

[2] Total Idling Emission (g) = Cold Idling Emission of FBSD & FBDD (g) + Hot Idling Emission of FBSD & FBDD (g)

[3] If Actual Idling Time ≤ 1 min, Idling Emission for Start Emission Adjustment (g) = Idling rate (g/min) * Actual Idling Time (min)

If Actual Idling Time > 1 min, Idling Emission for Start Emission Adjustment (g) = Idling rate (g/min) * Maximum Duration for Adjusting Start Emission "K" (min)

Where Idling rate (g/min) = Total Idling Emission (g) / Idling Time (min), and "K" = 1 min for Diesel vehicles with SCR

[4] Adjusted Start Emission within bus terminus (g) = [Total Start Emission of FBSD & FBDD (g) - Idling Emission for Start Emission Adjustment (g)] * [Average Distance from Starting Place to Egress (m) / 700m]

Minimum value = 0 g

[5] Adjusted Start Emission outside bus terminus (g) = [Total Start Emission of FBSD & FBDD (g) - Idling Emission for Start Emission Adjustment (g)] * [Average Spread Distance outside bus terminus (m) / 700m]

Minimum value = 0 g

[6] Total Emission Inside bus terminus (g) = Total Running Emission (g) + Idling Emission (g) + Adjusted Start Emission within bus terminus (g)

Hong Kong Station Bus Terminus

Minimum Hourly Temperature and Relative Humidity for 3rd Quarter

Temperature: 24 ^{o}C

Relative Humidity: 38 %

Start Emission

Single-Deck Franchised Bus (FBSD) Start Emission Factor (g/trip)

	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
NOx	2.0E-01	3.6E-01	4.8E-01	6.8E-01	8.4E-01	1.1E+00	1.6E+00	2.0E+00	3.0E+00	3.9E+00	4.4E+00	5.2E+00	5.7E+00	6.0E+00	6.2E+00	6.3E+00	6.4E+00	6.4E+00
NO	1.7E-01	3.0E-01	4.1E-01	5.8E-01	7.1E-01	9.5E-01	1.4E+00	1.7E+00	2.5E+00	3.3E+00	3.7E+00	4.4E+00	4.8E+00	5.1E+00	5.2E+00	5.4E+00	5.4E+00	5.4E+00
NO2	3.2E-02	5.7E-02	7.6E-02	1.1E-01	1.3E-01	1.8E-01	2.6E-01	3.2E-01	4.7E-01	6.2E-01	6.9E-01	8.2E-01	9.0E-01	9.5E-01	9.7E-01	1.0E+00	1.0E+00	1.0E+00
RSP	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
FSP	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00

Double-Deck Franchised Bus (FBDD) Start Emission Factor (g/trip)

	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
NOx	7.2E-01	1.3E+00	1.7E+00	2.4E+00	3.0E+00	4.0E+00	5.9E+00	7.3E+00	1.1E+01	1.4E+01	1.6E+01	1.9E+01	2.1E+01	2.2E+01	2.2E+01	2.3E+01	2.3E+01	2.3E+01
NO	6.7E-01	1.2E+00	1.6E+00	2.3E+00	2.8E+00	3.7E+00	5.5E+00	6.8E+00	1.0E+01	1.3E+01	1.5E+01	1.7E+01	1.9E+01	2.0E+01	2.1E+01	2.1E+01	2.1E+01	2.1E+01
NO2	5.0E-02	9.1E-02	1.2E-01	1.7E-01	2.1E-01	2.8E-01	4.1E-01	5.1E-01	7.5E-01	9.8E-01	1.1E+00	1.3E+00	1.4E+00	1.5E+00	1.5E+00	1.6E+00	1.6E+00	1.6E+00
RSP	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
FSP	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00

No. of Trips of FBSD

Soaking Time (min) / Hour	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
0000 - 0100																		
0100 - 0200																		
0200 - 0300																		
0300 - 0400																		
0400 - 0500																		
0500 - 0600																		
0600 - 0700																		
0700 - 0800																		
0800 - 0900																		
0900 - 1000																		
1000 - 1100																		
1100 - 1200																		
1200 - 1300																		
1300 - 1400																		
1400 - 1500																		
1500 - 1600																		
1600 - 1700																		
1700 - 1800																		
1800 - 1900																		
1900 - 2000																		
2000 - 2100																		
2100 - 2200																		
2200 - 2300																		
2300 - 2400																		
																Daily Total	0	

No. of Trips of FBDD

Soaking Time (min) / Hour	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
0000 - 0100	0	0	1	0	0	0	0	0	0	0	0	3	1	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	0
0600 - 0700	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0700 - 0800	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0800 - 0900	0	0	2	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0
0900 - 1000	0	1	0	3	0	1	0	0	0	0	0	0	0	1	0	0	0	0
1000 - 1100	1	0	1	1	1	1	1	0	1	0	0	1	1	0	0	0	0	0
1100 - 1200	0	0	1	1	2	0	0	0	0	0	1	1	0	0	0	0	0	0
1200 - 1300	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
1300 - 1400	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1400 - 1500	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1500 - 1600	0	1	1	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0
1600 - 1700	0	1	2	2	1	1	0	1	0	0	0	0	0	0	0	0	0	0
1700 - 1800	2	1	4	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0
1800 - 1900	1	1	2	3	0	1	0	0	0	1	0	0	0	0	0	0	0	0
1900 - 2000	3	2	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2000 - 2100	0	0	4	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0
2100 - 2200	1	0	2	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0
2200 - 2300	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
2300 - 2400	1	1	0	3	0	0	0	0	0	0	0	0	2	0	0	0	0	0
															Daily Total	121		

Total Start Emission of FBSD & FBDD (g)

Hour	NOx	NO	NO2	RSP	FSP
0000 - 0100	7.8E+01	7.3E+01	5.5E+00	0.0E+00	0.0E+00
0100 - 0200	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0600 - 0700	5.9E+00	5.5E+00	4.1E-01	0.0E+00	0.0E+00
0700 - 0800	4.9E+00	4.5E+00	3.4E-01	0.0E+00	0.0E+00
0800 - 0900	1.3E+01	1.2E+01	9.2E-01	0.0E+00	0.0E+00
0900 - 1000	3.4E+01	3.2E+01	2.4E+00	0.0E+00	0.0E+00
1000 - 1100	6.8E+01	6.3E+01	4.7E+00	0.0E+00	0.0E+00
1100 - 1200	4.5E+01	4.2E+01	3.1E+00	0.0E+00	0.0E+00
1200 - 1300	8.6E+00	8.0E+00	6.0E-01	0.0E+00	0.0E+00
1300 - 1400	7.9E+00	7.4E+00	5.5E-01	0.0E+00	0.0E+00
1400 - 1500	1.3E+01	1.2E+01	8.7E-01	0.0E+00	0.0E+00
1500 - 1600	1.2E+01	1.1E+01	8.3E-01	0.0E+00	0.0E+00
1600 - 1700	2.4E+01	2.2E+01	1.7E+00	0.0E+00	0.0E+00
1700 - 1800	2.5E+01	2.3E+01	1.7E+00	0.0E+00	0.0E+00
1800 - 1900	3.1E+01	2.9E+01	2.2E+00	0.0E+00	0.0E+00
1900 - 2000	1.7E+01	1.6E+01	1.2E+00	0.0E+00	0.0E+00
2000 - 2100	2.0E+01	1.8E+01	1.4E+00	0.0E+00	0.0E+00
2100 - 2200	1.9E+01	1.8E+01	1.3E+00	0.0E+00	0.0E+00
2200 - 2300	4.7E+00	4.4E+00	3.3E-01	0.0E+00	0.0E+00
2300 - 2400	5.0E+01	4.7E+01	3.5E+00	0.0E+00	0.0E+00

Idling Emission - Terminating Buses

Idling Time for Terminating Buses	2	min
Max. Idling Time for Adjusting Start Emission =	1	min

Cold Idling – FBSD

Hour	Frequency	Cold Idling Emission Factor (g/s) NOx	NO	NO_2	RSP	FSP	Cold Idling Emission (g) [1] NOx	NO	NO_2	RSP	FSP
0000 - 0100	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0100 - 0200	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0600 - 0700	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0700 - 0800	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0800 - 0900	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0900 - 1000	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1000 - 1100	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1100 - 1200	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1200 - 1300	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1300 - 1400	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1400 - 1500	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1500 - 1600	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1600 - 1700	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1700 - 1800	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1800 - 1900	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1900 - 2000	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2000 - 2100	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2100 - 2200	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2200 - 2300	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2300 - 2400	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
Daily Total	0										

Cold Idling – FBDD

Hour	Frequency	Cold Idling Emission Factor (g/s) NOx	NO	NO_2	RSP	FSP	Cold Idling Emission (g) [1] NOx	NO	NO_2	RSP	FSP
0000 - 0100	4	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	5.1E+01	4.8E+01	3.2E+00	1.4E-02	1.4E-02
0100 - 0200	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0600 - 0700	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0700 - 0800	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0800 - 0900	1	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	1.3E+01	1.2E+01	8.1E-01	3.5E-03	3.5E-03
0900 - 1000	1	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	1.3E+01	1.2E+01	8.1E-01	3.5E-03	3.5E-03
1000 - 1100	4	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	5.1E+01	4.8E+01	3.2E+00	1.4E-02	1.4E-02
1100 - 1200	2	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	2.6E+01	2.4E+01	1.6E+00	7.1E-03	7.1E-03
1200 - 1300	1	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	1.3E+01	1.2E+01	8.1E-01	3.5E-03	3.5E-03
1300 - 1400	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1400 - 1500	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1500 - 1600	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1600 - 1700	1	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	1.3E+01	1.2E+01	8.1E-01	3.5E-03	3.5E-03
1700 - 1800	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1800 - 1900	1	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	1.3E+01	1.2E+01	8.1E-01	3.5E-03	3.5E-03
1900 - 2000	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2000 - 2100	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2100 - 2200	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2200 - 2300	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2300 - 2400	2	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	2.6E+01	2.4E+01	1.6E+00	7.1E-03	7.1E-03
Daily Total	17										

Hot Idling – FBSD

Hour	Frequency	Hot Idling Emission Factor (g/s) NOx	NO	NO_2	RSP	FSP	Hot Idling Emission (g) [1] NOx	NO	NO_2	RSP	FSP
0000 - 0100	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0100 - 0200	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0600 - 0700	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0700 - 0800	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0800 - 0900	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0900 - 1000	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1000 - 1100	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1100 - 1200	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1200 - 1300	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1300 - 1400	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1400 - 1500	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1500 - 1600	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1600 - 1700	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1700 - 1800	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1800 - 1900	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1900 - 2000	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2000 - 2100	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2100 - 2200	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2200 - 2300	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2300 - 2400	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
	0										

Hot Idling – FBDD

Hour	Frequency	Hot Idling Emission Factor (g/s) NOx	NO	NO_2	RSP	FSP	Hot Idling Emission (g) [1] NOx	NO	NO_2	RSP	FSP
0000 - 0100	1	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	4.2E-01	4.0E-01	2.7E-02	3.5E-03	3.5E-03
0100 - 0200	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0600 - 0700	3	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.3E+00	1.2E+00	8.0E-02	1.1E-02	1.1E-02
0700 - 0800	4	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.7E+00	1.6E+00	1.1E-01	1.4E-02	1.4E-02
0800 - 0900	3	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.3E+00	1.2E+00	8.0E-02	1.1E-02	1.1E-02
0900 - 1000	5	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.1E+00	2.0E+00	1.3E-01	1.8E-02	1.8E-02
1000 - 1100	5	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.1E+00	2.0E+00	1.3E-01	1.8E-02	1.8E-02
1100 - 1200	4	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.7E+00	1.6E+00	1.1E-01	1.4E-02	1.4E-02
1200 - 1300	1	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	4.2E-01	4.0E-01	2.7E-02	3.5E-03	3.5E-03
1300 - 1400	4	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.7E+00	1.6E+00	1.1E-01	1.4E-02	1.4E-02
1400 - 1500	6	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.5E+00	2.4E+00	1.6E-01	2.1E-02	2.1E-02
1500 - 1600	5	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.1E+00	2.0E+00	1.3E-01	1.8E-02	1.8E-02
1600 - 1700	7	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	3.0E+00	2.8E+00	1.9E-01	2.5E-02	2.5E-02
1700 - 1800	13	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	5.5E+00	5.2E+00	3.5E-01	4.6E-02	4.6E-02
1800 - 1900	8	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	3.4E+00	3.2E+00	2.1E-01	2.8E-02	2.8E-02
1900 - 2000	11	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	4.7E+00	4.4E+00	2.9E-01	3.9E-02	3.9E-02
2000 - 2100	9	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	3.8E+00	3.6E+00	2.4E-01	3.2E-02	3.2E-02
2100 - 2200	8	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	3.4E+00	3.2E+00	2.1E-01	2.8E-02	2.8E-02
2200 - 2300	2	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	8.5E-01	8.0E-01	5.3E-02	7.1E-03	7.1E-03
2300 - 2400	5	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.1E+00	2.0E+00	1.3E-01	1.8E-02	1.8E-02
	104										

Average Distance from Starting Place to Egress =	45	m
Average Distance from PTI Egress to Open Road Network	0	m
Average Spread Distance outside bus terminus =	655	m

Hour	Total Idling Emission (g) [2] NOx	NO	NO_2	RSP	FSP	Idling Emission for Start Emission Adjustment (g) [3] NOx	NO	NO_2	RSP	FSP
0000 - 0100	5.2E+01	4.8E+01	3.3E+00	1.8E-02	1.8E-02	2.6E+01	2.4E+01	1.6E+00	8.8E-03	8.8E-03
0100 - 0200	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0600 - 0700	1.3E+00	1.2E+00	8.0E-02	1.1E-02	1.1E-02	6.4E-01	6.0E-01	4.0E-02	5.3E-03	5.3E-03
0700 - 0800	1.7E+00	1.6E+00	1.1E-01	1.4E-02	1.4E-02	8.5E-01	8.0E-01	5.3E-02	7.1E-03	7.1E-03
0800 - 0900	1.4E+01	1.3E+01	8.9E-01	1.4E-02	1.4E-02	7.0E+00	6.6E+00	4.4E-01	7.1E-03	7.1E-03
0900 - 1000	1.5E+01	1.4E+01	9.4E-01	2.1E-02	2.1E-02	7.5E+00	7.0E+00	4.7E-01	1.1E-02	1.1E-02
1000 - 1100	5.3E+01	5.0E+01	3.4E+00	3.2E-02	3.2E-02	2.7E+01	2.5E+01	1.7E+00	1.6E-02	1.6E-02
1100 - 1200	2.7E+01	2.6E+01	1.7E+00	2.1E-02	2.1E-02	1.4E+01	1.3E+01	8.6E-01	1.1E-02	1.1E-02
1200 - 1300	1.3E+01	1.2E+01	8.3E-01	7.1E-03	7.1E-03	6.6E+00	6.2E+00	4.2E-01	3.5E-03	3.5E-03
1300 - 1400	1.7E+00	1.6E+00	1.1E-01	1.4E-02	1.4E-02	8.5E-01	8.0E-01	5.3E-02	7.1E-03	7.1E-03
1400 - 1500	2.5E+00	2.4E+00	1.6E-01	2.1E-02	2.1E-02	1.3E+00	1.2E+00	8.0E-02	1.1E-02	1.1E-02
1500 - 1600	2.1E+00	2.0E+00	1.3E-01	1.8E-02	1.8E-02	1.1E+00	9.9E-01	6.7E-02	8.8E-03	8.8E-03
1600 - 1700	1.6E+01	1.5E+01	9.9E-01	2.8E-02	2.8E-02	7.9E+00	7.4E+00	5.0E-01	1.4E-02	1.4E-02
1700 - 1800	5.5E+00	5.2E+00	3.5E-01	4.6E-02	4.6E-02	2.8E+00	2.6E+00	1.7E-01	2.3E-02	2.3E-02
1800 - 1900	1.6E+01	1.5E+01	1.0E+00	3.2E-02	3.2E-02	8.1E+00	7.6E+00	5.1E-01	1.6E-02	1.6E-02
1900 - 2000	4.7E+00	4.4E+00	2.9E-01	3.9E-02	3.9E-02	2.3E+00	2.2E+00	1.5E-01	1.9E-02	1.9E-02
2000 - 2100	3.8E+00	3.6E+00	2.4E-01	3.2E-02	3.2E-02	1.9E+00	1.8E+00	1.2E-01	1.6E-02	1.6E-02
2100 - 2200	3.4E+00	3.2E+00	2.1E-01	2.8E-02	2.8E-02	1.7E+00	1.6E+00	1.1E-01	1.4E-02	1.4E-02
2200 - 2300	8.5E-01	8.0E-01	5.3E-02	7.1E-03	7.1E-03	4.2E-01	4.0E-01	2.7E-02	3.5E-03	3.5E-03
2300 - 2400	2.8E+01	2.6E+01	1.7E+00	2.5E-02	2.5E-02	1.4E+01	1.3E+01	8.7E-01	1.2E-02	1.2E-02

Hour	Adjusted Start Emission within bus terminus (g) [4] NOx	NO	NO_2	RSP	FSP	Adjusted Start Emission outside bus terminus (g) [5] NOx	NO	NO_2	RSP	FSP	Start Emission Rate outside bus terminus (g/s) NOx	NO	NO_2	RSP	FSP
0000 - 0100	3.4E+00	3.1E+00	2.5E-01	0.0E+00	0.0E+00	4.9E+01	4.6E+01	3.6E+00	0.0E+00	0.0E+00	1.4E-02	1.3E-02	1.0E-03	0.0E+00	0.0E+00
0100 - 0200	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0600 - 0700	3.4E-01	3.1E-01	2.4E-02	0.0E+00	0.0E+00	4.9E+00	4.6E+00	3.5E-01	0.0E+00	0.0E+00	1.4E-03	1.3E-03	9.7E-05	0.0E+00	0.0E+00
0700 - 0800	2.6E-01	2.4E-01	1.9E-02	0.0E+00	0.0E+00	3.8E+00	3.5E+00	2.7E-01	0.0E+00	0.0E+00	1.0E-03	9.7E-04	7.5E-05	0.0E+00	0.0E+00
0800 - 0900	4.0E-01	3.7E-01	3.1E-02	0.0E+00	0.0E+00	5.8E+00	5.3E+00	4.5E-01	0.0E+00	0.0E+00	1.6E-03	1.5E-03	1.2E-04	0.0E+00	0.0E+00
0900 - 1000	1.7E+00	1.6E+00	1.2E-01	0.0E+00	0.0E+00	2.5E+01	2.3E+01	1.8E+00	0.0E+00	0.0E+00	7.0E-03	6.5E-03	5.0E-04	0.0E+00	0.0E+00
1000 - 1100	2.6E+00	2.4E+00	2.0E-01	0.0E+00	0.0E+00	3.9E+01	3.6E+01	2.9E+00	0.0E+00	0.0E+00	1.1E-02	9.9E-03	8.0E-04	0.0E+00	0.0E+00
1100 - 1200	2.0E+00	1.8E+00	1.5E-01	0.0E+00	0.0E+00	2.9E+01	2.7E+01	2.1E+00	0.0E+00	0.0E+00	8.1E-03	7.5E-03	5.9E-04	0.0E+00	0.0E+00
1200 - 1300	1.3E-01	1.2E-01	1.2E-02	0.0E+00	0.0E+00	1.9E+00	1.7E+00	1.7E-01	0.0E+00	0.0E+00	5.2E-04	4.7E-04	4.8E-05	0.0E+00	0.0E+00
1300 - 1400	4.5E-01	4.2E-01	3.2E-02	0.0E+00	0.0E+00	6.6E+00	6.1E+00	4.7E-01	0.0E+00	0.0E+00	1.8E-03	1.7E-03	1.3E-04	0.0E+00	0.0E+00
1400 - 1500	7.2E-01	6.7E-01	5.1E-02	0.0E+00	0.0E+00	1.1E+01	9.8E+00	7.4E-01	0.0E+00	0.0E+00	2.9E-03	2.7E-03	2.1E-04	0.0E+00	0.0E+00
1500 - 1600	7.0E-01	6.5E-01	4.9E-02	0.0E+00	0.0E+00	1.0E+01	9.5E+00	7.2E-01	0.0E+00	0.0E+00	2.8E-03	2.6E-03	2.0E-04	0.0E+00	0.0E+00
1600 - 1700	1.0E+00	9.6E-01	7.6E-02	0.0E+00	0.0E+00	1.5E+01	1.4E+01	1.1E+00	0.0E+00	0.0E+00	4.2E-03	3.9E-03	3.1E-04	0.0E+00	0.0E+00
1700 - 1800	1.4E+00	1.3E+00	1.0E-01	0.0E+00	0.0E+00	2.1E+01	1.9E+01	1.5E+00	0.0E+00	0.0E+00	5.7E-03	5.3E-03	4.1E-04	0.0E+00	0.0E+00
1800 - 1900	1.5E+00	1.4E+00	1.1E-01	0.0E+00	0.0E+00	2.1E+01	2.0E+01	1.5E+00	0.0E+00	0.0E+00	5.9E-03	5.5E-03	4.3E-04	0.0E+00	0.0E+00
1900 - 2000	9.6E-01	8.9E-01	6.8E-02	0.0E+00	0.0E+00	1.4E+01	1.3E+01	9.9E-01	0.0E+00	0.0E+00	3.9E-03	3.6E-03	2.8E-04	0.0E+00	0.0E+00
2000 - 2100	1.1E+00	1.1E+00	8.1E-02	0.0E+00	0.0E+00	1.7E+01	1.5E+01	1.2E+00	0.0E+00	0.0E+00	4.6E-03	4.3E-03	3.3E-04	0.0E+00	0.0E+00
2100 - 2200	1.1E+00	1.0E+00	8.0E-02	0.0E+00	0.0E+00	1.6E+01	1.5E+01	1.2E+00	0.0E+00	0.0E+00	4.6E-03	4.2E-03	3.2E-04	0.0E+00	0.0E+00
2200 - 2300	2.8E-01	2.6E-01	2.0E-02	0.0E+00	0.0E+00	4.0E+00	3.8E+00	2.9E-01	0.0E+00	0.0E+00	1.1E-03	1.0E-03	7.9E-05	0.0E+00	0.0E+00
2300 - 2400	2.4E+00	2.2E+00	1.7E-01	0.0E+00	0.0E+00	3.4E+01	3.2E+01	2.5E+00	0.0E+00	0.0E+00	9.5E-03	8.8E-03	6.9E-04	0.0E+00	0.0E+00

Running Emission - Terminating and Bypass Buses

Average Travelling Distance within bus terminus =	140	m
Average Travelling Speed =	10	km/h

Hour	FBSD										FBDD									
	Frequency	Running Emission Factor (g/km-vehicle)					Running Emission (g)					Frequency	Running Emission Factor (g/km-vehicle)					Running Emission (g)			
	y	NOx	NO	NO2	RSP	FSP	NOx	NO	NO2	RSP	FSP	y	NOx	NO	NO2	RSP	FSP	NOx	NO	NO2	RSP	FSP
0000 - 0100	0	3.2E+00	2.7E+00	4.9E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	11	1.0E+01	9.6E+00	6.4E-01	3.8E-01	3.5E-01	1.6E+01	1.5E+01	9.9E-01	5.9E-01	5.4E-01
0100 - 0200	0	3.2E+00	2.7E+00	4.9E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.0E+01	9.6E+00	6.4E-01	3.8E-01	3.5E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0	3.2E+00	2.7E+00	4.9E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.0E+01	9.6E+00	6.4E-01	3.8E-01	3.5E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0	3.2E+00	2.7E+00	4.9E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.0E+01	9.6E+00	6.4E-01	3.8E-01	3.5E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0	3.2E+00	2.7E+00	4.9E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.0E+01	9.6E+00	6.4E-01	3.8E-01	3.5E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0	3.2E+00	2.7E+00	4.9E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.0E+01	9.6E+00	6.4E-01	3.8E-01	3.5E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0600 - 0700	0	3.2E+00	2.7E+00	4.9E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	7	1.0E+01	9.6E+00	6.4E-01	3.8E-01	3.5E-01	1.0E+01	9.4E+00	6.3E-01	3.7E-01	3.4E-01
0700 - 0800	0	3.2E+00	2.7E+00	4.9E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	9	1.0E+01	9.6E+00	6.4E-01	3.8E-01	3.5E-01	1.3E+01	1.2E+01	8.1E-01	4.8E-01	4.4E-01
0800 - 0900	0	3.2E+00	2.7E+00	4.9E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	12	1.0E+01	9.6E+00	6.4E-01	3.8E-01	3.5E-01	1.7E+01	1.6E+01	1.1E+00	6.4E-01	5.9E-01
0900 - 1000	0	3.2E+00	2.7E+00	4.9E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	17	1.0E+01	9.6E+00	6.4E-01	3.8E-01	3.5E-01	2.4E+01	2.3E+01	1.5E+00	9.1E-01	8.3E-01
1000 - 1100	0	3.2E+00	2.7E+00	4.9E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	19	1.0E+01	9.6E+00	6.4E-01	3.8E-01	3.5E-01	2.7E+01	2.6E+01	1.7E+00	1.0E+00	9.3E-01
1100 - 1200	0	3.2E+00	2.7E+00	4.9E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	12	1.0E+01	9.6E+00	6.4E-01	3.8E-01	3.5E-01	1.7E+01	1.6E+01	1.1E+00	6.4E-01	5.9E-01
1200 - 1300	0	3.2E+00	2.7E+00	4.9E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	8	1.0E+01	9.6E+00	6.4E-01	3.8E-01	3.5E-01	1.1E+01	1.1E+01	7.2E-01	4.3E-01	3.9E-01
1300 - 1400	0	3.2E+00	2.7E+00	4.9E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	9	1.0E+01	9.6E+00	6.4E-01	3.8E-01	3.5E-01	1.3E+01	1.2E+01	8.1E-01	4.8E-01	4.4E-01
1400 - 1500	0	3.2E+00	2.7E+00	4.9E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	12	1.0E+01	9.6E+00	6.4E-01	3.8E-01	3.5E-01	1.7E+01	1.6E+01	1.1E+00	6.4E-01	5.9E-01
1500 - 1600	0	3.2E+00	2.7E+00	4.9E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	10	1.0E+01	9.6E+00	6.4E-01	3.8E-01	3.5E-01	1.4E+01	1.3E+01	9.0E-01	5.3E-01	4.9E-01
1600 - 1700	0	3.2E+00	2.7E+00	4.9E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	16	1.0E+01	9.6E+00	6.4E-01	3.8E-01	3.5E-01	2.3E+01	2.1E+01	1.4E+00	8.5E-01	7.8E-01
1700 - 1800	0	3.2E+00	2.7E+00	4.9E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	26	1.0E+01	9.6E+00	6.4E-01	3.8E-01	3.5E-01	3.7E+01	3.5E+01	2.3E+00	1.4E+00	1.3E+00
1800 - 1900	0	3.2E+00	2.7E+00	4.9E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	18	1.0E+01	9.6E+00	6.4E-01	3.8E-01	3.5E-01	2.6E+01	2.4E+01	1.6E+00	9.6E-01	8.8E-01
1900 - 2000	0	3.2E+00	2.7E+00	4.9E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	22	1.0E+01	9.6E+00	6.4E-01	3.8E-01	3.5E-01	3.2E+01	3.0E+01	2.0E+00	1.2E+00	1.1E+00
2000 - 2100	0	3.2E+00	2.7E+00	4.9E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	18	1.0E+01	9.6E+00	6.4E-01	3.8E-01	3.5E-01	2.6E+01	2.4E+01	1.6E+00	9.6E-01	8.8E-01
2100 - 2200	0	3.2E+00	2.7E+00	4.9E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	16	1.0E+01	9.6E+00	6.4E-01	3.8E-01	3.5E-01	2.3E+01	2.1E+01	1.4E+00	8.5E-01	7.8E-01
2200 - 2300	0	3.2E+00	2.7E+00	4.9E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	4	1.0E+01	9.6E+00	6.4E-01	3.8E-01	3.5E-01	5.7E+00	5.4E+00	3.6E-01	2.1E-01	2.0E-01
2300 - 2400	0	3.2E+00	2.7E+00	4.9E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	14	1.0E+01	9.6E+00	6.4E-01	3.8E-01	3.5E-01	2.0E+01	1.9E+01	1.3E+00	7.5E-01	6.9E-01
Daily Total	0											260										

Idling Emission - Bypass Buses

Idling Time for Bypass Buses	2	min

Hour	FBSD										FBDD									
	Frequency	Hot Idling Emission Factor (g/s)					Hot Idling Emission (g)					Frequency	Hot Idling Emission Factor (g/s)					Hot Idling Emission (g)				
	y	NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP	y	NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP
0000 - 0100	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	6	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.5E+00	2.4E+00	1.6E-01	2.1E-02	2.1E-02
0100 - 0200	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0600 - 0700	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	4	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.7E+00	1.6E+00	1.1E-01	1.4E-02	1.4E-02
0700 - 0800	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	5	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.1E+00	2.0E+00	1.3E-01	1.8E-02	1.8E-02
0800 - 0900	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	8	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	3.4E+00	3.2E+00	2.1E-01	2.8E-02	2.8E-02
0900 - 1000	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	11	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	4.7E+00	4.4E+00	2.9E-01	3.9E-02	3.9E-02
1000 - 1100	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	10	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	4.2E+00	4.0E+00	2.7E-01	3.5E-02	3.5E-02
1100 - 1200	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	6	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.5E+00	2.4E+00	1.6E-01	2.1E-02	2.1E-02
1200 - 1300	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	6	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.5E+00	2.4E+00	1.6E-01	2.1E-02	2.1E-02
1300 - 1400	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	5	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.1E+00	2.0E+00	1.3E-01	1.8E-02	1.8E-02
1400 - 1500	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	6	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.5E+00	2.4E+00	1.6E-01	2.1E-02	2.1E-02
1500 - 1600	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	5	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.1E+00	2.0E+00	1.3E-01	1.8E-02	1.8E-02
1600 - 1700	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	8	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	3.4E+00	3.2E+00	2.1E-01	2.8E-02	2.8E-02
1700 - 1800	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	13	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	5.5E+00	5.2E+00	3.5E-01	4.6E-02	4.6E-02
1800 - 1900	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	9	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	3.8E+00	3.6E+00	2.4E-01	3.2E-02	3.2E-02
1900 - 2000	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	11	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	4.7E+00	4.4E+00	2.9E-01	3.9E-02	3.9E-02
2000 - 2100	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	9	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	3.8E+00	3.6E+00	2.4E-01	3.2E-02	3.2E-02
2100 - 2200	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	8	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	3.4E+00	3.2E+00	2.1E-01	2.8E-02	2.8E-02
2200 - 2300	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	2	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	8.5E-01	8.0E-01	5.3E-02	7.1E-03	7.1E-03
2300 - 2400	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	7	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	3.0E+00	2.8E+00	1.9E-01	2.5E-02	2.5E-02
Daily Total	0											139										

Total Hourly Emission

Hour	Total Emission inside bus terminus (g) (Running + Idling + Start) [6]					Total Emission Rate (g/s)				
	NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP
0000 - 0100	7.3E+01	6.9E+01	4.7E+00	6.3E-01	5.8E-01	2.0E-02	1.9E-02	1.3E-03	1.7E-04	1.6E-04
0100 - 0200	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0600 - 0700	1.3E+01	1.2E+01	8.4E-01	4.0E-01	3.7E-01	3.7E-03	3.5E-03	2.3E-04	1.1E-04	1.0E-04
0700 - 0800	1.7E+01	1.6E+01	1.1E+00	5.1E-01	4.7E-01	4.7E-03	4.4E-03	3.0E-04	1.4E-04	1.3E-04
0800 - 0900	3.5E+01	3.3E+01	2.2E+00	6.8E-01	6.3E-01	9.7E-03	9.1E-03	6.2E-04	1.9E-04	1.8E-04
0900 - 1000	4.6E+01	4.3E+01	2.9E+00	9.7E-01	8.9E-01	1.3E-02	1.2E-02	8.0E-04	2.7E-04	2.5E-04
1000 - 1100	8.8E+01	8.2E+01	5.5E+00	1.1E+00	1.0E+00	2.4E-02	2.3E-02	1.5E-03	3.0E-04	2.8E-04
1100 - 1200	4.9E+01	4.6E+01	3.1E+00	6.8E-01	6.3E-01	1.4E-02	1.3E-02	8.6E-04	1.9E-04	1.8E-04
1200 - 1300	2.7E+01	2.6E+01	1.7E+00	4.5E-01	4.2E-01	7.6E-03	7.1E-03	4.8E-04	1.3E-04	1.2E-04
1300 - 1400	1.7E+01	1.6E+01	1.1E+00	5.1E-01	4.7E-01	4.8E-03	4.5E-03	3.0E-04	1.4E-04	1.3E-04
1400 - 1500	2.3E+01	2.2E+01	1.5E+00	6.8E-01	6.3E-01	6.4E-03	6.0E-03	4.0E-04	1.9E-04	1.8E-04
1500 - 1600	1.9E+01	1.8E+01	1.2E+00	5.7E-01	5.3E-01	5.4E-03	5.0E-03	3.4E-04	1.6E-04	1.5E-04
1600 - 1700	4.3E+01	4.0E+01	2.7E+00	9.1E-01	8.4E-01	1.2E-02	1.1E-02	7.6E-04	2.5E-04	2.3E-04
1700 - 1800	5.0E+01	4.7E+01	3.1E+00	1.5E+00	1.4E+00	1.4E-02	1.3E-02	8.7E-04	4.1E-04	3.8E-04
1800 - 1900	4.7E+01	4.4E+01	3.0E+00	1.0E+00	9.5E-01	1.3E-02	1.2E-02	8.3E-04	2.8E-04	2.6E-04
1900 - 2000	4.2E+01	3.9E+01	2.6E+00	1.3E+00	1.2E+00	1.2E-02	1.1E-02	7.3E-04	3.5E-04	3.2E-04
2000 - 2100	3.5E+01	3.2E+01	2.2E+00	1.0E+00	9.5E-01	9.6E-03	9.0E-03	6.1E-04	2.8E-04	2.6E-04
2100 - 2200	3.1E+01	2.9E+01	2.0E+00	9.1E-01	8.4E-01	8.6E-03	8.0E-03	5.4E-04	2.5E-04	2.3E-04
2200 - 2300	7.7E+00	7.2E+00	4.9E-01	2.3E-01	2.1E-01	2.1E-03	2.0E-03	1.4E-04	6.3E-05	5.8E-05
2300 - 2400	5.3E+01	5.0E+01	3.4E+00	8.0E-01	7.4E-01	1.5E-02	1.4E-02	9.4E-04	2.2E-04	2.0E-04
						max:	2.3E-02	1.5E-03	4.1E-04	3.8E-04

PTI opening hourly emission factor

NO	NO_2	RSP	FSP
0.84	0.84	0.42	0.42
0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00
0.15	0.15	0.27	0.27
0.19	0.19	0.35	0.35
0.40	0.40	0.46	0.46
0.52	0.52	0.65	0.65
1.00	1.00	0.73	0.73
0.56	0.56	0.46	0.46
0.31	0.31	0.31	0.31
0.20	0.20	0.35	0.35
0.26	0.26	0.46	0.46
0.22	0.22	0.38	0.38
0.49	0.49	0.62	0.62
0.57	0.57	1.00	1.00
0.54	0.54	0.69	0.69
0.48	0.48	0.85	0.85
0.40	0.39	0.69	0.69
0.35	0.35	0.62	0.62
0.09	0.09	0.15	0.15
0.61	0.61	0.54	0.54

Remarks:

[1] Idling Emission (g) = Idling Emission Factor (g/s) * Actual Idling time (min) * 60 * Frequency

[2] Total Idling Emission (g) = Cold Idling Emission of FBSD & FBDD (g) + Hot Idling Emission of FBSD & FBDD (g)

[3] If Actual Idling Time ≤ 1 min, Idling Emission for Start Emission Adjustment (g) = Idling rate (g/min) * Actual Idling Time (min)

If Actual Idling Time > 1 min, Idling Emission for Start Emission Adjustment (g) = Idling rate (g/min) * Maximum Duration for Adjusting Start Emission "K" (min)

Where Idling rate (g/min) = Total Idling Emission (g) / Idling Time (min), and "K" = 1 min for Diesel vehicles with SCR

[4] Adjusted Start Emission within bus terminus (g) = [Total Start Emission of FBSD & FBDD (g) - Idling Emission for Start Emission Adjustment (g)] * [Average Distance from Starting Place to Egress (m) / 700m]

Minimum value = 0 g

[5] Adjusted Start Emission outside bus terminus (g) = [Total Start Emission of FBSD & FBDD (g) - Idling Emission for Start Emission Adjustment (g)] * [Average Spread Distance outside bus terminus (m) / 700m]

Minimum value = 0 g

[6] Total Emission Inside bus terminus (g) = Total Running Emission (g) + Idling Emission (g) + Adjusted Start Emission within bus terminus (g)

Hong Kong Station Bus Terminus

Minimum Hourly Temperature and Relative Humidity for 4th Quarter

Temperature: 10 °C

Relative Humidity: 22 %

Start Emission

Single-Deck Franchised Bus (FBSD) Start Emission Factor (g/trip)

	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
NOx	2.0E-01	3.6E-01	4.8E-01	6.8E-01	8.4E-01	1.1E+00	1.6E+00	2.0E+00	3.0E+00	3.9E+00	4.4E+00	5.2E+00	5.7E+00	6.0E+00	6.2E+00	6.3E+00	6.4E+00	6.4E+00
NO	1.7E-01	3.0E-01	4.1E-01	5.8E-01	7.1E-01	9.5E-01	1.4E+00	1.7E+00	2.5E+00	3.3E+00	3.7E+00	4.4E+00	4.8E+00	5.1E+00	5.2E+00	5.4E+00	5.4E+00	5.4E+00
NO2	3.2E-02	5.7E-02	7.6E-02	1.1E-01	1.3E-01	1.8E-01	2.6E-01	3.2E-01	4.7E-01	6.2E-01	6.9E-01	8.2E-01	9.0E-01	9.5E-01	9.7E-01	1.0E+00	1.0E+00	1.0E+00
RSP	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
FSP	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00

Double-Deck Franchised Bus (FBDD) Start Emission Factor (g/trip)

	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
NOx	7.2E-01	1.3E+00	1.7E+00	2.4E+00	3.0E+00	4.0E+00	5.9E+00	7.3E+00	1.1E+01	1.4E+01	1.6E+01	1.9E+01	2.1E+01	2.2E+01	2.2E+01	2.3E+01	2.3E+01	2.3E+01
NO	6.7E-01	1.2E+00	1.6E+00	2.3E+00	2.8E+00	3.7E+00	5.5E+00	6.8E+00	1.0E+01	1.3E+01	1.5E+01	1.7E+01	1.9E+01	2.0E+01	2.1E+01	2.1E+01	2.1E+01	2.1E+01
NO2	5.0E-02	9.1E-02	1.2E-01	1.7E-01	2.1E-01	2.8E-01	4.1E-01	5.1E-01	7.5E-01	9.8E-01	1.1E+00	1.3E+00	1.4E+00	1.5E+00	1.5E+00	1.6E+00	1.6E+00	1.6E+00
RSP	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
FSP	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00

No. of Trips of FBSD

Soaking Time (min) / Hour	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
0000 - 0100																		
0100 - 0200																		
0200 - 0300																		
0300 - 0400																		
0400 - 0500																		
0500 - 0600																		
0600 - 0700																		
0700 - 0800																		
0800 - 0900																		
0900 - 1000																		
1000 - 1100																		
1100 - 1200																		
1200 - 1300																		
1300 - 1400																		
1400 - 1500																		
1500 - 1600																		
1600 - 1700																		
1700 - 1800																		
1800 - 1900																		
1900 - 2000																		
2000 - 2100																		
2100 - 2200																		
2200 - 2300																		
2300 - 2400																		
																	Daily Total	0

No. of Trips of FBDD

Soaking Time (min) / Hour	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
0000 - 0100	0	0	1	0	0	0	0	0	0	0	0	3	1	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	0
0600 - 0700	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0700 - 0800	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0800 - 0900	0	0	2	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0
0900 - 1000	0	1	0	3	0	1	0	0	0	0	0	0	0	1	0	0	0	0
1000 - 1100	1	0	1	1	1	1	1	0	1	0	0	1	1	0	0	0	0	0
1100 - 1200	0	0	1	1	2	0	0	0	0	0	1	1	0	0	0	0	0	0
1200 - 1300	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
1300 - 1400	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1400 - 1500	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1500 - 1600	0	1	1	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0
1600 - 1700	0	1	2	2	1	1	0	1	0	0	0	0	0	0	0	0	0	0
1700 - 1800	2	1	4	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0
1800 - 1900	1	1	2	3	0	1	0	0	0	1	0	0	0	0	0	0	0	0
1900 - 2000	3	2	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2000 - 2100	0	0	4	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0
2100 - 2200	1	0	2	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0
2200 - 2300	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
2300 - 2400	1	1	0	3	0	0	0	0	0	0	0	0	2	0	0	0	0	0
																Daily Total	121	

Total Start Emission of FBSD & FBDD (g)

Hour	NOx	NO	NO2	RSP	FSP
0000 - 0100	7.8E+01	7.3E+01	5.5E+00	0.0E+00	0.0E+00
0100 - 0200	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0600 - 0700	5.9E+00	5.5E+00	4.1E-01	0.0E+00	0.0E+00
0700 - 0800	4.9E+00	4.5E+00	3.4E-01	0.0E+00	0.0E+00
0800 - 0900	1.3E+01	1.2E+01	9.2E-01	0.0E+00	0.0E+00
0900 - 1000	3.4E+01	3.2E+01	2.4E+00	0.0E+00	0.0E+00
1000 - 1100	6.8E+01	6.3E+01	4.7E+00	0.0E+00	0.0E+00
1100 - 1200	4.5E+01	4.2E+01	3.1E+00	0.0E+00	0.0E+00
1200 - 1300	8.6E+00	8.0E+00	6.0E-01	0.0E+00	0.0E+00
1300 - 1400	7.9E+00	7.4E+00	5.5E-01	0.0E+00	0.0E+00
1400 - 1500	1.3E+01	1.2E+01	8.7E-01	0.0E+00	0.0E+00
1500 - 1600	1.2E+01	1.1E+01	8.3E-01	0.0E+00	0.0E+00
1600 - 1700	2.4E+01	2.2E+01	1.7E+00	0.0E+00	0.0E+00
1700 - 1800	2.5E+01	2.3E+01	1.7E+00	0.0E+00	0.0E+00
1800 - 1900	3.1E+01	2.9E+01	2.2E+00	0.0E+00	0.0E+00
1900 - 2000	1.7E+01	1.6E+01	1.2E+00	0.0E+00	0.0E+00
2000 - 2100	2.0E+01	1.8E+01	1.4E+00	0.0E+00	0.0E+00
2100 - 2200	1.9E+01	1.8E+01	1.3E+00	0.0E+00	0.0E+00
2200 - 2300	4.7E+00	4.4E+00	3.3E-01	0.0E+00	0.0E+00
2300 - 2400	5.0E+01	4.7E+01	3.5E+00	0.0E+00	0.0E+00

Idling Emission - Terminating Buses

Idling Time for Terminating Buses	2	min
Max. Idling Time for Adjusting Start Emission =	1	min

FBSD

Hour	Frequency	Cold Idling Emission Factor (g/s) NOx	NO	NO_2	RSP	FSP	Cold Idling Emission (g) [1] NOx	NO	NO_2	RSP	FSP
0000 - 0100	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0100 - 0200	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0600 - 0700	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0700 - 0800	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0800 - 0900	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0900 - 1000	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1000 - 1100	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1100 - 1200	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1200 - 1300	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1300 - 1400	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1400 - 1500	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1500 - 1600	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1600 - 1700	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1700 - 1800	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1800 - 1900	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1900 - 2000	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2000 - 2100	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2100 - 2200	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2200 - 2300	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2300 - 2400	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
Daily Total	0										

FBDD

Hour	Frequency	Cold Idling Emission Factor (g/s) NOx	NO	NO_2	RSP	FSP	Cold Idling Emission (g) [1] NOx	NO	NO_2	RSP	FSP
0000 - 0100	4	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	5.1E+01	4.8E+01	3.2E+00	1.4E-02	1.4E-02
0100 - 0200	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0600 - 0700	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0700 - 0800	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0800 - 0900	1	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	1.3E+01	1.2E+01	8.1E-01	3.5E-03	3.5E-03
0900 - 1000	1	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	1.3E+01	1.2E+01	8.1E-01	3.5E-03	3.5E-03
1000 - 1100	4	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	5.1E+01	4.8E+01	3.2E+00	1.4E-02	1.4E-02
1100 - 1200	2	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	2.6E+01	2.4E+01	1.6E+00	7.1E-03	7.1E-03
1200 - 1300	1	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	1.3E+01	1.2E+01	8.1E-01	3.5E-03	3.5E-03
1300 - 1400	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1400 - 1500	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1500 - 1600	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1600 - 1700	1	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	1.3E+01	1.2E+01	8.1E-01	3.5E-03	3.5E-03
1700 - 1800	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1800 - 1900	1	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	1.3E+01	1.2E+01	8.1E-01	3.5E-03	3.5E-03
1900 - 2000	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2000 - 2100	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2100 - 2200	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2200 - 2300	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2300 - 2400	2	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	2.6E+01	2.4E+01	1.6E+00	7.1E-03	7.1E-03
	17										

FBSD

Hour	Frequency	Hot Idling Emission Factor (g/s) NOx	NO	NO_2	RSP	FSP	Hot Idling Emission (g) [1] NOx	NO	NO_2	RSP	FSP
0000 - 0100	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0100 - 0200	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0600 - 0700	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0700 - 0800	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0800 - 0900	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0900 - 1000	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1000 - 1100	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1100 - 1200	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1200 - 1300	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1300 - 1400	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1400 - 1500	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1500 - 1600	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1600 - 1700	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1700 - 1800	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1800 - 1900	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1900 - 2000	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2000 - 2100	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2100 - 2200	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2200 - 2300	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2300 - 2400	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
	0										

FBDD

Hour	Frequency	Hot Idling Emission Factor (g/s) NOx	NO	NO_2	RSP	FSP	Hot Idling Emission (g) [1] NOx	NO	NO_2	RSP	FSP
0000 - 0100	1	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	4.2E-01	4.0E-01	2.7E-02	3.5E-03	3.5E-03
0100 - 0200	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0600 - 0700	3	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.3E+00	1.2E+00	8.0E-02	1.1E-02	1.1E-02
0700 - 0800	4	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.7E+00	1.6E+00	1.1E-01	1.4E-02	1.4E-02
0800 - 0900	3	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.3E+00	1.2E+00	8.0E-02	1.1E-02	1.1E-02
0900 - 1000	5	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.1E+00	2.0E+00	1.3E-01	1.8E-02	1.8E-02
1000 - 1100	5	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.1E+00	2.0E+00	1.3E-01	1.8E-02	1.8E-02
1100 - 1200	4	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.7E+00	1.6E+00	1.1E-01	1.4E-02	1.4E-02
1200 - 1300	1	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	4.2E-01	4.0E-01	2.7E-02	3.5E-03	3.5E-03
1300 - 1400	4	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.7E+00	1.6E+00	1.1E-01	1.4E-02	1.4E-02
1400 - 1500	6	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.5E+00	2.4E+00	1.6E-01	2.1E-02	2.1E-02
1500 - 1600	5	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.1E+00	2.0E+00	1.3E-01	1.8E-02	1.8E-02
1600 - 1700	7	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	3.0E+00	2.8E+00	1.9E-01	2.5E-02	2.5E-02
1700 - 1800	13	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	5.5E+00	5.2E+00	3.5E-01	4.6E-02	4.6E-02
1800 - 1900	8	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	3.4E+00	3.2E+00	2.1E-01	2.8E-02	2.8E-02
1900 - 2000	11	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	4.7E+00	4.4E+00	2.9E-01	3.9E-02	3.9E-02
2000 - 2100	9	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	3.8E+00	3.6E+00	2.4E-01	3.2E-02	3.2E-02
2100 - 2200	8	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	3.4E+00	3.2E+00	2.1E-01	2.8E-02	2.8E-02
2200 - 2300	2	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	8.5E-01	8.0E-01	5.3E-02	7.1E-03	7.1E-03
2300 - 2400	5	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.1E+00	2.0E+00	1.3E-01	1.8E-02	1.8E-02
	104										

Average Distance from Starting Place to Egress =	45	m
Average Distance from PTI Egress to Open Road Network	0	m
Average Spread Distance outside bus terminus =	655	m

Hour	Total Idling Emission (g) [2] NOx	NO	NO_2	RSP	FSP	Idling Emission for Start Emission Adjustment (g) [3] NOx	NO	NO_2	RSP	FSP
0000 - 0100	5.2E+01	4.8E+01	3.3E+00	1.8E-02	1.8E-02	2.6E+01	2.4E+01	1.6E+00	8.8E-03	8.8E-03
0100 - 0200	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0600 - 0700	1.3E+00	1.2E+00	8.0E-02	1.1E-02	1.1E-02	6.4E-01	6.0E-01	4.0E-02	5.3E-03	5.3E-03
0700 - 0800	1.7E+00	1.6E+00	1.1E-01	1.4E-02	1.4E-02	8.5E-01	8.0E-01	5.3E-02	7.1E-03	7.1E-03
0800 - 0900	1.4E+01	1.3E+01	8.9E-01	1.4E-02	1.4E-02	7.0E+00	6.6E+00	4.4E-01	7.1E-03	7.1E-03
0900 - 1000	1.5E+01	1.4E+01	9.4E-01	2.1E-02	2.1E-02	7.5E+00	7.0E+00	4.7E-01	1.1E-02	1.1E-02
1000 - 1100	5.3E+01	5.0E+01	3.4E+00	3.2E-02	3.2E-02	2.7E+01	2.5E+01	1.7E+00	1.6E-02	1.6E-02
1100 - 1200	2.7E+01	2.6E+01	1.7E+00	2.1E-02	2.1E-02	1.4E+01	1.3E+01	8.6E-01	1.1E-02	1.1E-02
1200 - 1300	1.3E+01	1.2E+01	8.3E-01	7.1E-03	7.1E-03	6.6E+00	6.2E+00	4.2E-01	3.5E-03	3.5E-03
1300 - 1400	1.7E+00	1.6E+00	1.1E-01	1.4E-02	1.4E-02	8.5E-01	8.0E-01	5.3E-02	7.1E-03	7.1E-03
1400 - 1500	2.5E+00	2.4E+00	1.6E-01	2.1E-02	2.1E-02	1.3E+00	1.2E+00	8.0E-02	1.1E-02	1.1E-02
1500 - 1600	2.1E+00	2.0E+00	1.3E-01	1.8E-02	1.8E-02	1.1E+00	9.9E-01	6.7E-02	8.8E-03	8.8E-03
1600 - 1700	1.6E+01	1.5E+01	9.9E-01	2.8E-02	2.8E-02	7.9E+00	7.4E+00	5.0E-01	1.4E-02	1.4E-02
1700 - 1800	5.5E+00	5.2E+00	3.5E-01	4.6E-02	4.6E-02	2.8E+00	2.6E+00	1.7E-01	2.3E-02	2.3E-02
1800 - 1900	1.6E+01	1.5E+01	1.0E+00	3.2E-02	3.2E-02	8.1E+00	7.6E+00	5.1E-01	1.6E-02	1.6E-02
1900 - 2000	4.7E+00	4.4E+00	2.9E-01	3.9E-02	3.9E-02	2.3E+00	2.2E+00	1.5E-01	1.9E-02	1.9E-02
2000 - 2100	3.8E+00	3.6E+00	2.4E-01	3.2E-02	3.2E-02	1.9E+00	1.8E+00	1.2E-01	1.6E-02	1.6E-02
2100 - 2200	3.4E+00	3.2E+00	2.1E-01	2.8E-02	2.8E-02	1.7E+00	1.6E+00	1.1E-01	1.4E-02	1.4E-02
2200 - 2300	8.5E-01	8.0E-01	5.3E-02	7.1E-03	7.1E-03	4.2E-01	4.0E-01	2.7E-02	3.5E-03	3.5E-03
2300 - 2400	2.8E+01	2.6E+01	1.7E+00	2.5E-02	2.5E-02	1.4E+01	1.3E+01	8.7E-01	1.2E-02	1.2E-02

Hour	Adjusted Start Emission within bus terminus (g) [4] NOx	NO	NO_2	RSP	FSP	Adjusted Start Emission outside bus terminus (g) [5] NOx	NO	NO_2	RSP	FSP	Start Emission Rate outside bus terminus (g/s) NOx	NO	NO_2	RSP	FSP
0000 - 0100	3.4E+00	3.1E+00	2.5E-01	0.0E+00	0.0E+00	4.9E+01	4.6E+01	3.6E+00	0.0E+00	0.0E+00	1.4E-02	1.3E-02	1.0E-03	0.0E+00	0.0E+00
0100 - 0200	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0600 - 0700	3.4E-01	3.1E-01	2.4E-02	0.0E+00	0.0E+00	4.9E+00	4.6E+00	3.5E-01	0.0E+00	0.0E+00	1.4E-03	1.3E-03	9.7E-05	0.0E+00	0.0E+00
0700 - 0800	2.6E-01	2.4E-01	1.9E-02	0.0E+00	0.0E+00	3.8E+00	3.5E+00	2.7E-01	0.0E+00	0.0E+00	1.0E-03	9.7E-04	7.5E-05	0.0E+00	0.0E+00
0800 - 0900	4.0E-01	3.7E-01	3.1E-02	0.0E+00	0.0E+00	5.8E+00	5.3E+00	4.5E-01	0.0E+00	0.0E+00	1.6E-03	1.5E-03	1.2E-04	0.0E+00	0.0E+00
0900 - 1000	1.7E+00	1.6E+00	1.2E-01	0.0E+00	0.0E+00	2.5E+01	2.3E+01	1.8E+00	0.0E+00	0.0E+00	7.0E-03	6.5E-03	5.0E-04	0.0E+00	0.0E+00
1000 - 1100	2.6E+00	2.4E+00	2.0E-01	0.0E+00	0.0E+00	3.9E+01	3.6E+01	2.9E+00	0.0E+00	0.0E+00	1.1E-02	9.9E-03	8.0E-04	0.0E+00	0.0E+00
1100 - 1200	2.0E+00	1.8E+00	1.5E-01	0.0E+00	0.0E+00	2.9E+01	2.7E+01	2.1E+00	0.0E+00	0.0E+00	8.1E-03	7.5E-03	5.9E-04	0.0E+00	0.0E+00
1200 - 1300	1.3E-01	1.2E-01	1.2E-02	0.0E+00	0.0E+00	1.9E+00	1.7E+00	1.7E-01	0.0E+00	0.0E+00	5.2E-04	4.7E-04	4.8E-05	0.0E+00	0.0E+00
1300 - 1400	4.5E-01	4.2E-01	3.2E-02	0.0E+00	0.0E+00	6.6E+00	6.1E+00	4.7E-01	0.0E+00	0.0E+00	1.8E-03	1.7E-03	1.3E-04	0.0E+00	0.0E+00
1400 - 1500	7.2E-01	6.7E-01	5.1E-02	0.0E+00	0.0E+00	1.1E+01	9.8E+00	7.4E-01	0.0E+00	0.0E+00	2.9E-03	2.7E-03	2.1E-04	0.0E+00	0.0E+00
1500 - 1600	7.0E-01	6.5E-01	4.9E-02	0.0E+00	0.0E+00	1.0E+01	9.5E+00	7.2E-01	0.0E+00	0.0E+00	2.8E-03	2.6E-03	2.0E-04	0.0E+00	0.0E+00
1600 - 1700	1.0E+00	9.6E-01	7.6E-02	0.0E+00	0.0E+00	1.5E+01	1.4E+01	1.1E+00	0.0E+00	0.0E+00	4.2E-03	3.9E-03	3.1E-04	0.0E+00	0.0E+00
1700 - 1800	1.4E+00	1.3E+00	1.0E-01	0.0E+00	0.0E+00	2.1E+01	1.9E+01	1.5E+00	0.0E+00	0.0E+00	5.7E-03	5.3E-03	4.1E-04	0.0E+00	0.0E+00
1800 - 1900	1.5E+00	1.4E+00	1.1E-01	0.0E+00	0.0E+00	2.1E+01	2.0E+01	1.5E+00	0.0E+00	0.0E+00	5.9E-03	5.5E-03	4.3E-04	0.0E+00	0.0E+00
1900 - 2000	9.6E-01	8.9E-01	6.8E-02	0.0E+00	0.0E+00	1.4E+01	1.3E+01	9.9E-01	0.0E+00	0.0E+00	3.9E-03	3.6E-03	2.8E-04	0.0E+00	0.0E+00
2000 - 2100	1.1E+00	1.1E+00	8.1E-02	0.0E+00	0.0E+00	1.7E+01	1.5E+01	1.2E+00	0.0E+00	0.0E+00	4.6E-03	4.3E-03	3.3E-04	0.0E+00	0.0E+00
2100 - 2200	1.1E+00	1.0E+00	8.0E-02	0.0E+00	0.0E+00	1.6E+01	1.5E+01	1.2E+00	0.0E+00	0.0E+00	4.6E-03	4.2E-03	3.2E-04	0.0E+00	0.0E+00
2200 - 2300	2.8E-01	2.6E-01	2.0E-02	0.0E+00	0.0E+00	4.0E+00	3.8E+00	2.9E-01	0.0E+00	0.0E+00	1.1E-03	1.0E-03	7.9E-05	0.0E+00	0.0E+00
2300 - 2400	2.4E+00	2.2E+00	1.7E-01	0.0E+00	0.0E+00	3.4E+01	3.2E+01	2.5E+00	0.0E+00	0.0E+00	9.5E-03	8.8E-03	6.9E-04	0.0E+00	0.0E+00

Running Emission - Terminating and Bypass Buses

Average Travelling Distance within bus terminus =	140	m
Average Travelling Speed =	10	km/h

Hour	FBSD										FBDD									
	Frequency	Running Emission Factor (g/km-vehicle)					Running Emission (g)					Frequency	Running Emission Factor (g/km-vehicle)					Running Emission (g)				
	y	NOx	NO	NO2	RSP	FSP	NOx	NO	NO2	RSP	FSP	y	NOx	NO	NO2	RSP	FSP	NOx	NO	NO2	RSP	FSP
0000 - 0100	0	3.5E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	11	1.1E+01	1.0E+01	7.1E-01	3.8E-01	3.5E-01	1.7E+01	1.6E+01	1.1E+00	5.9E-01	5.4E-01
0100 - 0200	0	3.5E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E+01	1.0E+01	7.1E-01	3.8E-01	3.5E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0	3.5E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E+01	1.0E+01	7.1E-01	3.8E-01	3.5E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0	3.5E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E+01	1.0E+01	7.1E-01	3.8E-01	3.5E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0	3.5E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E+01	1.0E+01	7.1E-01	3.8E-01	3.5E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0	3.5E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E+01	1.0E+01	7.1E-01	3.8E-01	3.5E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0600 - 0700	0	3.5E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	7	1.1E+01	1.0E+01	7.1E-01	3.8E-01	3.5E-01	1.1E+01	1.0E+01	6.9E-01	3.7E-01	3.4E-01
0700 - 0800	0	3.5E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	9	1.1E+01	1.0E+01	7.1E-01	3.8E-01	3.5E-01	1.4E+01	1.3E+01	8.9E-01	4.8E-01	4.4E-01
0800 - 0900	0	3.5E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	12	1.1E+01	1.0E+01	7.1E-01	3.8E-01	3.5E-01	1.9E+01	1.8E+01	1.2E+00	6.4E-01	5.9E-01
0900 - 1000	0	3.5E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	17	1.1E+01	1.0E+01	7.1E-01	3.8E-01	3.5E-01	2.7E+01	2.5E+01	1.7E+00	9.1E-01	8.3E-01
1000 - 1100	0	3.5E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	19	1.1E+01	1.0E+01	7.1E-01	3.8E-01	3.5E-01	3.0E+01	2.8E+01	1.9E+00	1.0E+00	9.3E-01
1100 - 1200	0	3.5E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	12	1.1E+01	1.0E+01	7.1E-01	3.8E-01	3.5E-01	1.9E+01	1.8E+01	1.2E+00	6.4E-01	5.9E-01
1200 - 1300	0	3.5E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	8	1.1E+01	1.0E+01	7.1E-01	3.8E-01	3.5E-01	1.3E+01	1.2E+01	7.9E-01	4.3E-01	3.9E-01
1300 - 1400	0	3.5E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	9	1.1E+01	1.0E+01	7.1E-01	3.8E-01	3.5E-01	1.4E+01	1.3E+01	8.9E-01	4.8E-01	4.4E-01
1400 - 1500	0	3.5E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	12	1.1E+01	1.0E+01	7.1E-01	3.8E-01	3.5E-01	1.9E+01	1.8E+01	1.2E+00	6.4E-01	5.9E-01
1500 - 1600	0	3.5E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	10	1.1E+01	1.0E+01	7.1E-01	3.8E-01	3.5E-01	1.6E+01	1.5E+01	9.9E-01	5.3E-01	4.9E-01
1600 - 1700	0	3.5E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	16	1.1E+01	1.0E+01	7.1E-01	3.8E-01	3.5E-01	2.5E+01	2.4E+01	1.6E+00	8.5E-01	7.8E-01
1700 - 1800	0	3.5E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	26	1.1E+01	1.0E+01	7.1E-01	3.8E-01	3.5E-01	4.1E+01	3.8E+01	2.6E+00	1.4E+00	1.3E+00
1800 - 1900	0	3.5E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	18	1.1E+01	1.0E+01	7.1E-01	3.8E-01	3.5E-01	2.8E+01	2.6E+01	1.8E+00	9.6E-01	8.8E-01
1900 - 2000	0	3.5E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	22	1.1E+01	1.0E+01	7.1E-01	3.8E-01	3.5E-01	3.5E+01	3.2E+01	2.2E+00	1.2E+00	1.1E+00
2000 - 2100	0	3.5E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	18	1.1E+01	1.0E+01	7.1E-01	3.8E-01	3.5E-01	2.8E+01	2.6E+01	1.8E+00	9.6E-01	8.8E-01
2100 - 2200	0	3.5E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	16	1.1E+01	1.0E+01	7.1E-01	3.8E-01	3.5E-01	2.5E+01	2.4E+01	1.6E+00	8.5E-01	7.8E-01
2200 - 2300	0	3.5E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	4	1.1E+01	1.0E+01	7.1E-01	3.8E-01	3.5E-01	6.3E+00	5.9E+00	4.0E-01	2.1E-01	2.0E-01
2300 - 2400	0	3.5E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	14	1.1E+01	1.0E+01	7.1E-01	3.8E-01	3.5E-01	2.2E+01	2.1E+01	1.4E+00	7.5E-01	6.9E-01
Daily Total	0											260										

Idling Emission - Bypass Buses

Idling Time for Bypass Buses	2	min

Hour	FBSD										FBDD									
	Frequency	Hot Idling Emission Factor (g/s)					Hot Idling Emission (g)					Frequency	Hot Idling Emission Factor (g/s)					Hot Idling Emission (g)				
	y	NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP	y	NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP
0000 - 0100	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	6	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.5E+00	2.4E+00	1.6E-01	2.1E-02	2.1E-02
0100 - 0200	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0600 - 0700	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	4	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.7E+00	1.6E+00	1.1E-01	1.4E-02	1.4E-02
0700 - 0800	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	5	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.1E+00	2.0E+00	1.3E-01	1.8E-02	1.8E-02
0800 - 0900	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	8	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	3.4E+00	3.2E+00	2.1E-01	2.8E-02	2.8E-02
0900 - 1000	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	11	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	4.7E+00	4.4E+00	2.9E-01	3.9E-02	3.9E-02
1000 - 1100	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	10	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	4.2E+00	4.0E+00	2.7E-01	3.5E-02	3.5E-02
1100 - 1200	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	6	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.5E+00	2.4E+00	1.6E-01	2.1E-02	2.1E-02
1200 - 1300	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	6	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.5E+00	2.4E+00	1.6E-01	2.1E-02	2.1E-02
1300 - 1400	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	5	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.1E+00	2.0E+00	1.3E-01	1.8E-02	1.8E-02
1400 - 1500	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	6	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.5E+00	2.4E+00	1.6E-01	2.1E-02	2.1E-02
1500 - 1600	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	5	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.1E+00	2.0E+00	1.3E-01	1.8E-02	1.8E-02
1600 - 1700	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	8	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	3.4E+00	3.2E+00	2.1E-01	2.8E-02	2.8E-02
1700 - 1800	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	13	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	5.5E+00	5.2E+00	3.5E-01	4.6E-02	4.6E-02
1800 - 1900	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	9	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	3.8E+00	3.6E+00	2.4E-01	3.2E-02	3.2E-02
1900 - 2000	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	11	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	4.7E+00	4.4E+00	2.9E-01	3.9E-02	3.9E-02
2000 - 2100	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	9	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	3.8E+00	3.6E+00	2.4E-01	3.2E-02	3.2E-02
2100 - 2200	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	8	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	3.4E+00	3.2E+00	2.1E-01	2.8E-02	2.8E-02
2200 - 2300	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	2	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	8.5E-01	8.0E-01	5.3E-02	7.1E-03	7.1E-03
2300 - 2400	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	7	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	3.0E+00	2.8E+00	1.9E-01	2.5E-02	2.5E-02
Daily Total	0											139										

Total Hourly Emission

Hour	Total Emission inside bus terminus (g) (Running + Idling + Start) [6]					Total Emission Rate (g/s)				
	NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP
0000 - 0100	7.5E+01	7.0E+01	4.8E+00	6.3E-01	5.8E-01	2.1E-02	1.9E-02	1.3E-03	1.7E-04	1.6E-04
0100 - 0200	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0600 - 0700	1.4E+01	1.3E+01	9.0E-01	4.0E-01	3.7E-01	4.0E-03	3.7E-03	2.5E-04	1.1E-04	1.0E-04
0700 - 0800	1.8E+01	1.7E+01	1.1E+00	5.1E-01	4.7E-01	5.1E-03	4.7E-03	3.2E-04	1.4E-04	1.3E-04
0800 - 0900	3.7E+01	3.4E+01	2.3E+00	6.8E-01	6.3E-01	1.0E-02	9.6E-03	6.4E-04	1.9E-04	1.8E-04
0900 - 1000	4.8E+01	4.5E+01	3.0E+00	9.7E-01	8.9E-01	1.3E-02	1.2E-02	8.4E-04	2.7E-04	2.5E-04
1000 - 1100	9.0E+01	8.4E+01	5.7E+00	1.1E+00	1.0E+00	2.5E-02	2.3E-02	1.6E-03	3.0E-04	2.8E-04
1100 - 1200	5.1E+01	4.7E+01	3.2E+00	6.8E-01	6.3E-01	1.4E-02	1.3E-02	8.9E-04	1.9E-04	1.8E-04
1200 - 1300	2.8E+01	2.7E+01	1.8E+00	4.5E-01	4.2E-01	7.9E-03	7.4E-03	5.0E-04	1.3E-04	1.2E-04
1300 - 1400	1.8E+01	1.7E+01	1.2E+00	5.1E-01	4.7E-01	5.1E-03	4.8E-03	3.2E-04	1.4E-04	1.3E-04
1400 - 1500	2.5E+01	2.3E+01	1.6E+00	6.8E-01	6.3E-01	6.8E-03	6.4E-03	4.3E-04	1.9E-04	1.8E-04
1500 - 1600	2.1E+01	1.9E+01	1.3E+00	5.7E-01	5.3E-01	5.7E-03	5.4E-03	3.6E-04	1.6E-04	1.5E-04
1600 - 1700	4.5E+01	4.2E+01	2.9E+00	9.1E-01	8.4E-01	1.3E-02	1.2E-02	8.0E-04	2.5E-04	2.3E-04
1700 - 1800	5.3E+01	5.0E+01	3.4E+00	1.5E+00	1.4E+00	1.5E-02	1.4E-02	9.3E-04	4.1E-04	3.8E-04
1800 - 1900	5.0E+01	4.7E+01	3.1E+00	1.0E+00	9.5E-01	1.4E-02	1.3E-02	8.7E-04	2.8E-04	2.6E-04
1900 - 2000	4.5E+01	4.2E+01	2.8E+00	1.3E+00	1.2E+00	1.2E-02	1.2E-02	7.9E-04	3.5E-04	3.2E-04
2000 - 2100	3.7E+01	3.5E+01	2.3E+00	1.0E+00	9.5E-01	1.0E-02	9.6E-03	6.5E-04	2.8E-04	2.6E-04
2100 - 2200	3.3E+01	3.1E+01	2.1E+00	9.1E-01	8.4E-01	9.2E-03	8.6E-03	5.8E-04	2.5E-04	2.3E-04
2200 - 2300	8.3E+00	7.7E+00	5.2E-01	2.3E-01	2.1E-01	2.3E-03	2.1E-03	1.4E-04	6.3E-05	5.8E-05
2300 - 2400	5.5E+01	5.2E+01	3.5E+00	8.0E-01	7.4E-01	1.5E-02	1.4E-02	9.7E-04	2.2E-04	2.0E-04
						max: 2.3E-02	2.1E-02	1.6E-03	4.1E-04	3.8E-04

PTI opening hourly emission factor

NO	NO_2	RSP	FSP
0.83	0.83	0.42	0.42
0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00
0.16	0.16	0.27	0.27
0.20	0.20	0.35	0.35
0.41	0.41	0.46	0.46
0.53	0.53	0.65	0.65
1.00	1.00	0.73	0.73
0.56	0.56	0.46	0.46
0.32	0.31	0.31	0.31
0.20	0.20	0.35	0.35
0.27	0.27	0.46	0.46
0.23	0.23	0.38	0.38
0.50	0.50	0.62	0.62
0.59	0.59	1.00	1.00
0.55	0.55	0.69	0.69
0.50	0.50	0.85	0.85
0.41	0.41	0.69	0.69
0.37	0.37	0.62	0.62
0.09	0.09	0.15	0.15
0.61	0.61	0.54	0.54

Remarks:

[1] Idling Emission (g) = Idling Emission Factor (g/s) * Actual Idling time (min) * 60 * Frequency

[2] Total Idling Emission (g) = Cold Idling Emission of FBSD & FBDD (g) + Hot Idling Emission of FBSD & FBDD (g)

[3] If Actual Idling Time ≤ 1 min, Idling Emission for Start Emission Adjustment (g) = Idling rate (g/min) * Actual Idling Time (min)

If Actual Idling Time > 1 min, Idling Emission for Start Emission Adjustment (g) = Idling rate (g/min) * Maximum Duration for Adjusting Start Emission "K" (min)

Where Idling rate (g/min) = Total Idling Emission (g) / Idling Time (min), and "K" = 1 min for Diesel vehicles with SCR

[4] Adjusted Start Emission within bus terminus (g) = [Total Start Emission of FBSD & FBDD (g) - Idling Emission for Start Emission Adjustment (g)] * [Average Distance from Starting Place to Egress (m) / 700m]

Minimum value = 0 g

[5] Adjusted Start Emission outside bus terminus (g) = [Total Start Emission of FBSD & FBDD (g) - Idling Emission for Start Emission Adjustment (g)] * [Average Spread Distance outside bus terminus (m) / 700m]

Minimum value = 0 g

[6] Total Emission Inside bus terminus (g) = Total Running Emission (g) + Idling Emission (g) + Adjusted Start Emission within bus terminus (g)

Hong Kong Station Bus Terminus (PLB)

Minimum Hourly Temperature and Relative Humidity for 1st Quarter

Temperature: 8 °C

Relative Humidity: 32 %

Start Emission

No. of PLB (Diesel) to No. of PLB (LPG) Ratio	3.2

	Public Light Buses (PLB) Start Emission Factor (g/trip)																	
NOx	4.6E-01	7.1E-01	1.1E+00	1.5E+00	1.7E+00	2.0E+00	2.2E+00	2.3E+00	2.5E+00	2.7E+00	2.8E+00	3.0E+00	3.1E+00	3.1E+00	3.1E+00	3.1E+00	3.1E+00	3.1E+00
NO	4.5E-01	6.9E-01	1.1E+00	1.4E+00	1.7E+00	1.9E+00	2.1E+00	2.2E+00	2.3E+00	2.5E+00	2.5E+00	2.6E+00	2.7E+00	2.7E+00	2.7E+00	2.7E+00	2.7E+00	2.7E+00
NO2	1.5E-02	2.6E-02	3.5E-02	4.9E-02	6.1E-02	7.9E-02	1.1E-01	1.4E-01	2.0E-01	2.6E-01	2.9E-01	3.4E-01	3.7E-01	3.9E-01	4.0E-01	4.1E-01	4.1E-01	4.1E-01
RSP	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
FSP	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00

Soaking Time (min) / Hour	No. of Trips of PLB (Diesel)																	
	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	1	0	0	0	1	1
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	0
0600 - 0700	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
0700 - 0800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0800 - 0900	1	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
0900 - 1000	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1000 - 1100	3	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
1100 - 1200	1	1	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0
1200 - 1300	1	1	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
1300 - 1400	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1400 - 1500	3	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
1500 - 1600	1	0	1	0	0	0	1	0	0	1	1	1	0	0	0	0	0	0
1600 - 1700	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1700 - 1800	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1800 - 1900	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
1900 - 2000	1	1	1	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0
2000 - 2100	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
2100 - 2200	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2200 - 2300	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2300 - 2400	2	2	0	0	0	0	0	1	0	0	0	0	1	9	1	0	0	1
																Daily Total	76	

Total Start Emission of PLB (Diesel) (g)				
NOx	**NO**	**NO2**	**RSP**	**FSP**
9.2E+00	8.0E+00	1.2E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
3.0E+00	2.9E+00	1.6E-01	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
3.5E+00	3.3E+00	1.8E-01	0.0E+00	0.0E+00
9.3E-01	9.0E-01	2.9E-02	0.0E+00	0.0E+00
5.3E+00	5.1E+00	1.8E-01	0.0E+00	0.0E+00
5.8E+00	5.6E+00	2.0E-01	0.0E+00	0.0E+00
5.3E+00	4.9E+00	4.1E-01	0.0E+00	0.0E+00
2.6E+00	2.5E+00	9.2E-02	0.0E+00	0.0E+00
5.2E+00	5.0E+00	1.8E-01	0.0E+00	0.0E+00
1.2E+01	1.1E+01	1.0E+00	0.0E+00	0.0E+00
4.6E-01	4.5E-01	1.5E-02	0.0E+00	0.0E+00
1.4E+00	1.4E+00	4.4E-02	0.0E+00	0.0E+00
2.2E+00	2.1E+00	7.5E-02	0.0E+00	0.0E+00
8.0E+00	7.6E+00	3.8E-01	0.0E+00	0.0E+00
2.9E+00	2.8E+00	1.0E-01	0.0E+00	0.0E+00
2.2E+00	2.2E+00	7.0E-02	0.0E+00	0.0E+00
1.1E+00	1.1E+00	3.5E-02	0.0E+00	0.0E+00
4.2E+01	3.7E+01	4.9E+00	0.0E+00	0.0E+00

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.
[2] Population ratio of PLB (Diesel) to PLB (LPG) was extracted from Year 2028 data of EMFAC-HK.

Idling Emission - Terminating Public Light Buses

Idling Time for Terminating Public Light Buses	1	min
Max. Idling Time for Adjusting Start Emission =	1	min

Hour	PLB (Diesel)											PLB (Diesel)									
	Frequenc	Cold Idling Emission Factor (g/s)					Cold Idling Emission (g) [1]					Frequenc	Hot Idling Emission Factor (g/s)					Hot Idling Emission (g) [1]				
	y	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**	**y**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**
0000 - 0100	3	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	1.8E-01	1.5E-01	3.3E-02	1.3E-03	1.3E-03	0	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0100 - 0200	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0600 - 0700	1	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	6.0E-02	4.9E-02	1.1E-02	4.3E-04	4.3E-04	1	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	3.5E-02	2.8E-02	6.3E-03	4.3E-04	4.3E-04
0700 - 0800	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0800 - 0900	1	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	6.0E-02	4.9E-02	1.1E-02	4.3E-04	4.3E-04	2	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	6.9E-02	5.7E-02	1.3E-02	8.7E-04	8.7E-04
0900 - 1000	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	2	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	6.9E-02	5.7E-02	1.3E-02	8.7E-04	8.7E-04
1000 - 1100	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	6	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	2.1E-01	1.7E-01	3.8E-02	2.6E-03	2.6E-03
1100 - 1200	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	5	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	1.7E-01	1.4E-01	3.2E-02	2.2E-03	2.2E-03
1200 - 1300	1	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	6.0E-02	4.9E-02	1.1E-02	4.3E-04	4.3E-04	3	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	1.0E-01	8.5E-02	1.9E-02	1.3E-03	1.3E-03
1300 - 1400	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	4	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	1.4E-01	1.1E-01	2.5E-02	1.7E-03	1.7E-03
1400 - 1500	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	6	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	2.1E-01	1.7E-01	3.8E-02	2.6E-03	2.6E-03
1500 - 1600	4	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	2.4E-01	2.0E-01	4.4E-02	1.7E-03	1.7E-03	2	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	6.9E-02	5.7E-02	1.3E-02	8.7E-04	8.7E-04
1600 - 1700	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	3.5E-02	2.8E-02	6.3E-03	4.3E-04	4.3E-04
1700 - 1800	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	3	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	1.0E-01	8.5E-02	1.9E-02	1.3E-03	1.3E-03
1800 - 1900	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	2	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	6.9E-02	5.7E-02	1.3E-02	8.7E-04	8.7E-04
1900 - 2000	1	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	6.0E-02	4.9E-02	1.1E-02	4.3E-04	4.3E-04	5	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	1.7E-01	1.4E-01	3.2E-02	2.2E-03	2.2E-03
2000 - 2100	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	3	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	1.0E-01	8.5E-02	1.9E-02	1.3E-03	1.3E-03
2100 - 2200	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	2	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	6.9E-02	5.7E-02	1.3E-02	8.7E-04	8.7E-04
2200 - 2300	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	3.5E-02	2.8E-02	6.3E-03	4.3E-04	4.3E-04
2300 - 2400	13	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	7.8E-01	6.4E-01	1.4E-01	5.6E-03	5.6E-03	4	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	1.4E-01	1.1E-01	2.5E-02	1.7E-03	1.7E-03
Daily Total	24											52										

Average Distance from Starting Place to Egress =	185	m
Average Spread Distance outside bus terminus =	515	m

Hour	Total Idling Emission (g) [2]					Idling Emission for Start Emission Adjustment (g) [3]					Adjusted Start Emission within bus terminus (g) [4]					Adjusted Start Emission outside bus terminus (g) [5]					Start Emission Rate outside bus terminus (g/s)				
	NOx	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**
0000 - 0100	1.8E-01	1.5E-01	3.3E-02	1.3E-03	1.3E-03	1.8E-01	1.5E-01	3.3E-02	1.3E-03	1.3E-03	2.4E+00	2.1E+00	3.1E-01	0.0E+00	0.0E+00	6.7E+00	5.8E+00	8.5E-01	0.0E+00	0.0E+00	1.9E-03	1.6E-03	2.4E-04	0.0E+00	0.0E+00
0100 - 0200	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0600 - 0700	9.5E-02	7.8E-02	1.7E-02	8.7E-04	8.7E-04	9.5E-02	7.8E-02	1.7E-02	8.7E-04	8.7E-04	7.8E-01	7.4E-01	3.9E-02	0.0E+00	0.0E+00	2.2E+00	2.1E+00	1.1E-01	0.0E+00	0.0E+00	6.0E-04	5.7E-04	3.0E-05	0.0E+00	0.0E+00
0700 - 0800	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0800 - 0900	1.3E-01	1.1E-01	2.4E-02	1.3E-03	1.3E-03	1.3E-01	1.1E-01	2.4E-02	1.3E-03	1.3E-03	8.9E-01	8.5E-01	4.1E-02	0.0E+00	0.0E+00	2.5E+00	2.4E+00	1.1E-01	0.0E+00	0.0E+00	6.9E-04	6.6E-04	3.2E-05	0.0E+00	0.0E+00
0900 - 1000	6.9E-02	5.7E-02	1.3E-02	8.7E-04	8.7E-04	6.9E-02	5.7E-02	1.3E-02	8.7E-04	8.7E-04	2.3E-01	2.2E-01	4.4E-03	0.0E+00	0.0E+00	6.3E-01	6.2E-01	1.2E-02	0.0E+00	0.0E+00	1.8E-04	1.7E-04	3.4E-06	0.0E+00	0.0E+00
1000 - 1100	2.1E-01	1.7E-01	3.8E-02	2.6E-03	2.6E-03	2.1E-01	1.7E-01	3.8E-02	2.6E-03	2.6E-03	1.3E+00	1.3E+00	3.8E-02	0.0E+00	0.0E+00	3.8E+00	3.6E+00	1.0E-01	0.0E+00	0.0E+00	1.0E-03	1.0E-03	2.9E-05	0.0E+00	0.0E+00
1100 - 1200	1.7E-01	1.4E-01	3.2E-02	2.2E-03	2.2E-03	1.7E-01	1.4E-01	3.2E-02	2.2E-03	2.2E-03	1.5E+00	1.5E+00	4.4E-02	0.0E+00	0.0E+00	4.2E+00	4.0E+00	1.2E-01	0.0E+00	0.0E+00	1.2E-03	1.1E-03	3.4E-05	0.0E+00	0.0E+00
1200 - 1300	1.6E-01	1.3E-01	3.0E-02	1.7E-03	1.7E-03	1.6E-01	1.3E-01	3.0E-02	1.7E-03	1.7E-03	1.3E+00	1.2E+00	1.0E-01	0.0E+00	0.0E+00	3.8E+00	3.5E+00	2.8E-01	0.0E+00	0.0E+00	1.0E-03	9.6E-04	7.8E-05	0.0E+00	0.0E+00
1300 - 1400	1.4E-01	1.1E-01	2.5E-02	1.7E-03	1.7E-03	1.4E-01	1.1E-01	2.5E-02	1.7E-03	1.7E-03	6.5E-01	6.3E-01	1.8E-02	0.0E+00	0.0E+00	1.8E+00	1.8E+00	4.9E-02	0.0E+00	0.0E+00	5.0E-04	4.9E-04	1.4E-05	0.0E+00	0.0E+00
1400 - 1500	2.1E-01	1.7E-01	3.8E-02	2.6E-03	2.6E-03	2.1E-01	1.7E-01	3.8E-02	2.6E-03	2.6E-03	1.3E+00	1.3E+00	3.9E-02	0.0E+00	0.0E+00	3.7E+00	3.6E+00	1.1E-01	0.0E+00	0.0E+00	1.0E-03	9.9E-04	3.0E-05	0.0E+00	0.0E+00
1500 - 1600	3.1E-01	2.5E-01	5.6E-02	2.6E-03	2.6E-03	3.1E-01	2.5E-01	5.6E-02	2.6E-03	2.6E-03	3.2E+00	2.9E+00	2.6E-01	0.0E+00	0.0E+00	8.8E+00	8.1E+00	7.2E-01	0.0E+00	0.0E+00	2.4E-03	2.2E-03	2.0E-04	0.0E+00	0.0E+00
1600 - 1700	3.5E-02	2.8E-02	6.3E-03	4.3E-04	4.3E-04	3.5E-02	2.8E-02	6.3E-03	4.3E-04	4.3E-04	1.1E-01	1.1E-01	2.2E-03	0.0E+00	0.0E+00	3.2E-01	3.1E-01	6.2E-03	0.0E+00	0.0E+00	8.8E-05	8.6E-05	1.7E-06	0.0E+00	0.0E+00
1700 - 1800	1.0E-01	8.5E-02	1.9E-02	1.3E-03	1.3E-03	1.0E-01	8.5E-02	1.9E-02	1.3E-03	1.3E-03	3.4E-01	3.3E-01	6.7E-03	0.0E+00	0.0E+00	9.5E-01	9.3E-01	1.9E-02	0.0E+00	0.0E+00	2.6E-04	2.6E-04	5.1E-06	0.0E+00	0.0E+00
1800 - 1900	6.9E-02	5.7E-02	1.3E-02	8.7E-04	8.7E-04	6.9E-02	5.7E-02	1.3E-02	8.7E-04	8.7E-04	5.6E-01	5.5E-01	1.7E-02	0.0E+00	0.0E+00	1.6E+00	1.5E+00	4.6E-02	0.0E+00	0.0E+00	4.4E-04	4.2E-04	1.3E-05	0.0E+00	0.0E+00
1900 - 2000	2.3E-01	1.9E-01	4.2E-02	2.6E-03	2.6E-03	2.3E-01	1.9E-01	4.2E-02	2.6E-03	2.6E-03	2.1E+00	2.0E+00	9.0E-02	0.0E+00	0.0E+00	5.7E+00	5.5E+00	2.5E-01	0.0E+00	0.0E+00	1.6E-03	1.5E-03	7.0E-05	0.0E+00	0.0E+00
2000 - 2100	1.0E-01	8.5E-02	1.9E-02	1.3E-03	1.3E-03	1.0E-01	8.5E-02	1.9E-02	1.3E-03	1.3E-03	7.4E-01	7.2E-01	2.2E-02	0.0E+00	0.0E+00	2.1E+00	2.0E+00	6.0E-02	0.0E+00	0.0E+00	5.7E-04	5.6E-04	1.7E-05	0.0E+00	0.0E+00
2100 - 2200	6.9E-02	5.7E-02	1.3E-02	8.7E-04	8.7E-04	6.9E-02	5.7E-02	1.3E-02	8.7E-04	8.7E-04	5.7E-01	5.6E-01	1.5E-02	0.0E+00	0.0E+00	1.6E+00	1.5E+00	4.3E-02	0.0E+00	0.0E+00	4.4E-04	4.3E-04	1.2E-05	0.0E+00	0.0E+00
2200 - 2300	3.5E-02	2.8E-02	6.3E-03	4.3E-04	4.3E-04	3.5E-02	2.8E-02	6.3E-03	4.3E-04	4.3E-04	2.9E-01	2.8E-01	7.6E-03	0.0E+00	0.0E+00	7.9E-01	7.7E-01	2.1E-02	0.0E+00	0.0E+00	2.2E-04	2.1E-04	5.9E-06	0.0E+00	0.0E+00
2300 - 2400	9.2E-01	7.5E-01	1.7E-01	7.4E-03	7.4E-03	9.2E-01	7.5E-01	1.7E-01	7.4E-03	7.4E-03	1.1E+01	9.6E+00	1.2E+00	0.0E+00	0.0E+00	3.0E+01	2.7E+01	3.5E+00	0.0E+00	0.0E+00	8.4E-03	7.4E-03	9.6E-04	0.0E+00	0.0E+00

Start Emission

No. of PLB (Diesel) to No. of PLB (LPG) Ratio	3.2

	Public Light Buses (PLB) Start Emission Factor (g/trip)																	
NOx	4.6E-01	7.1E-01	1.1E+00	1.5E+00	1.7E+00	2.0E+00	2.2E+00	2.3E+00	2.5E+00	2.7E+00	2.8E+00	3.0E+00	3.1E+00	3.1E+00	3.1E+00	3.1E+00	3.1E+00	3.1E+00
NO	4.5E-01	6.9E-01	1.1E+00	1.4E+00	1.7E+00	1.9E+00	2.1E+00	2.2E+00	2.3E+00	2.5E+00	2.5E+00	2.6E+00	2.7E+00	2.7E+00	2.7E+00	2.7E+00	2.7E+00	2.7E+00
NO2	1.5E-02	2.6E-02	3.5E-02	4.9E-02	6.1E-02	7.9E-02	1.1E-01	1.4E-01	2.0E-01	2.6E-01	2.9E-01	3.4E-01	3.7E-01	3.9E-01	4.0E-01	4.1E-01	4.1E-01	4.1E-01
RSP	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
FSP	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00

Soaking Time (min) / Hour	No. of Trips of PLB (LPG)																	
	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	1	0	0	0	1	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	0
0600 - 0700	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0700 - 0800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0800 - 0900	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
0900 - 1000	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1000 - 1100	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1100 - 1200	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1200 - 1300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1300 - 1400	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1400 - 1500	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1500 - 1600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1600 - 1700	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1700 - 1800	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1800 - 1900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1900 - 2000	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2000 - 2100	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
2100 - 2200	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2200 - 2300	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2300 - 2400	1	1	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0
																Daily Total	26	

Total Start Emission of PLB (LPG) (g)				
NOx	**NO**	**NO2**	**RSP**	**FSP**
6.2E+00	5.4E+00	7.8E-01	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
7.1E-01	6.9E-01	2.6E-02	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
3.0E+00	2.9E+00	1.6E-01	0.0E+00	0.0E+00
4.6E-01	4.5E-01	1.5E-02	0.0E+00	0.0E+00
2.6E+00	2.6E+00	9.0E-02	0.0E+00	0.0E+00
1.9E+00	1.9E+00	6.4E-02	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1.2E+00	1.1E+00	4.1E-02	0.0E+00	0.0E+00
4.6E-01	4.5E-01	1.5E-02	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
4.6E-01	4.5E-01	1.5E-02	0.0E+00	0.0E+00
4.6E-01	4.5E-01	1.5E-02	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1.2E+00	1.1E+00	4.1E-02	0.0E+00	0.0E+00
1.7E+00	1.7E+00	6.1E-02	0.0E+00	0.0E+00
1.1E+00	1.1E+00	3.5E-02	0.0E+00	0.0E+00
1.1E+00	1.1E+00	3.5E-02	0.0E+00	0.0E+00
1.1E+01	9.3E+00	1.2E+00	0.0E+00	0.0E+00

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.
[2] Population ratio of PLB (Diesel) to PLB (LPG) was extracted from Year 2028 data of EMFAC-HK.

Idling Emission - Terminating Public Light Buses

Idling Time for Terminating Public Light Buses	1	min
Max. Idling Time for Adjusting Start Emission =	1	min

Hour	PLB (LPG)											PLB (LPG)										
	Frequenc	Cold Idling Emission Factor (g/s)					Cold Idling Emission (g) [1]					Frequenc	Hot Idling Emission Factor (g/s)					Hot Idling Emission (g) [1]				
	y	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**	y	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**
0000 - 0100	2	3.9E-03	3.2E-03	7.1E-04	9.5E-06	9.5E-06	4.7E-01	3.8E-01	8.5E-02	1.1E-03	1.1E-03	0	5.1E-03	4.1E-03	9.2E-04	9.5E-06	9.5E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0100 - 0200	0	3.9E-03	3.2E-03	7.1E-04	9.5E-06	9.5E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	5.1E-03	4.1E-03	9.2E-04	9.5E-06	9.5E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0	3.9E-03	3.2E-03	7.1E-04	9.5E-06	9.5E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	5.1E-03	4.1E-03	9.2E-04	9.5E-06	9.5E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0	3.9E-03	3.2E-03	7.1E-04	9.5E-06	9.5E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	5.1E-03	4.1E-03	9.2E-04	9.5E-06	9.5E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0	3.9E-03	3.2E-03	7.1E-04	9.5E-06	9.5E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	5.1E-03	4.1E-03	9.2E-04	9.5E-06	9.5E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0	3.9E-03	3.2E-03	7.1E-04	9.5E-06	9.5E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	5.1E-03	4.1E-03	9.2E-04	9.5E-06	9.5E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0600 - 0700	0	3.9E-03	3.2E-03	7.1E-04	9.5E-06	9.5E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	5.1E-03	4.1E-03	9.2E-04	9.5E-06	9.5E-06	3.0E-01	2.5E-01	5.5E-02	5.7E-04	5.7E-04
0700 - 0800	0	3.9E-03	3.2E-03	7.1E-04	9.5E-06	9.5E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	5.1E-03	4.1E-03	9.2E-04	9.5E-06	9.5E-06	3.0E-01	2.5E-01	5.5E-02	5.7E-04	5.7E-04
0800 - 0900	1	3.9E-03	3.2E-03	7.1E-04	9.5E-06	9.5E-06	2.3E-01	1.9E-01	4.3E-02	5.7E-04	5.7E-04	1	5.1E-03	4.1E-03	9.2E-04	9.5E-06	9.5E-06	3.0E-01	2.5E-01	5.5E-02	5.7E-04	5.7E-04
0900 - 1000	0	3.9E-03	3.2E-03	7.1E-04	9.5E-06	9.5E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	5.1E-03	4.1E-03	9.2E-04	9.5E-06	9.5E-06	3.0E-01	2.5E-01	5.5E-02	5.7E-04	5.7E-04
1000 - 1100	0	3.9E-03	3.2E-03	7.1E-04	9.5E-06	9.5E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	3	5.1E-03	4.1E-03	9.2E-04	9.5E-06	9.5E-06	9.1E-01	7.5E-01	1.7E-01	1.7E-03	1.7E-03
1100 - 1200	0	3.9E-03	3.2E-03	7.1E-04	9.5E-06	9.5E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	2	5.1E-03	4.1E-03	9.2E-04	9.5E-06	9.5E-06	6.1E-01	5.0E-01	1.1E-01	1.1E-03	1.1E-03
1200 - 1300	0	3.9E-03	3.2E-03	7.1E-04	9.5E-06	9.5E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	5.1E-03	4.1E-03	9.2E-04	9.5E-06	9.5E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1300 - 1400	0	3.9E-03	3.2E-03	7.1E-04	9.5E-06	9.5E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	2	5.1E-03	4.1E-03	9.2E-04	9.5E-06	9.5E-06	6.1E-01	5.0E-01	1.1E-01	1.1E-03	1.1E-03
1400 - 1500	0	3.9E-03	3.2E-03	7.1E-04	9.5E-06	9.5E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	5.1E-03	4.1E-03	9.2E-04	9.5E-06	9.5E-06	3.0E-01	2.5E-01	5.5E-02	5.7E-04	5.7E-04
1500 - 1600	0	3.9E-03	3.2E-03	7.1E-04	9.5E-06	9.5E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	5.1E-03	4.1E-03	9.2E-04	9.5E-06	9.5E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1600 - 1700	0	3.9E-03	3.2E-03	7.1E-04	9.5E-06	9.5E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	5.1E-03	4.1E-03	9.2E-04	9.5E-06	9.5E-06	3.0E-01	2.5E-01	5.5E-02	5.7E-04	5.7E-04
1700 - 1800	0	3.9E-03	3.2E-03	7.1E-04	9.5E-06	9.5E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	5.1E-03	4.1E-03	9.2E-04	9.5E-06	9.5E-06	3.0E-01	2.5E-01	5.5E-02	5.7E-04	5.7E-04
1800 - 1900	0	3.9E-03	3.2E-03	7.1E-04	9.5E-06	9.5E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	5.1E-03	4.1E-03	9.2E-04	9.5E-06	9.5E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1900 - 2000	0	3.9E-03	3.2E-03	7.1E-04	9.5E-06	9.5E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	2	5.1E-03	4.1E-03	9.2E-04	9.5E-06	9.5E-06	6.1E-01	5.0E-01	1.1E-01	1.1E-03	1.1E-03
2000 - 2100	0	3.9E-03	3.2E-03	7.1E-04	9.5E-06	9.5E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	5.1E-03	4.1E-03	9.2E-04	9.5E-06	9.5E-06	3.0E-01	2.5E-01	5.5E-02	5.7E-04	5.7E-04
2100 - 2200	0	3.9E-03	3.2E-03	7.1E-04	9.5E-06	9.5E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	5.1E-03	4.1E-03	9.2E-04	9.5E-06	9.5E-06	3.0E-01	2.5E-01	5.5E-02	5.7E-04	5.7E-04
2200 - 2300	0	3.9E-03	3.2E-03	7.1E-04	9.5E-06	9.5E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	5.1E-03	4.1E-03	9.2E-04	9.5E-06	9.5E-06	3.0E-01	2.5E-01	5.5E-02	5.7E-04	5.7E-04
2300 - 2400	3	3.9E-03	3.2E-03	7.1E-04	9.5E-06	9.5E-06	7.0E-01	5.7E-01	1.3E-01	1.7E-03	1.7E-03	2	5.1E-03	4.1E-03	9.2E-04	9.5E-06	9.5E-06	6.1E-01	5.0E-01	1.1E-01	1.1E-03	1.1E-03
Daily Total	6											20										

Average Distance from Starting Place to Egress =	185	m
Average Distance from PTI Egress to Open Road Network	0	m
Average Spread Distance outside bus terminus =	0	m

Hour	Total Idling Emission (g) [2]					Idling Emission for Start Emission Adjustment (g) [3]					Adjusted Start Emission within bus terminus (g) [6]					Adjusted Start Emission outside bus terminus (g) [7]					Start Emission Rate outside bus terminus (g/s)				
	NOx	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**
0000 - 0100	4.7E-01	3.8E-01	8.5E-02	1.1E-03	1.1E-03	4.7E-01	3.8E-01	8.5E-02	1.1E-03	1.1E-03	7.0E+00	6.2E+00	8.6E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0100 - 0200	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0600 - 0700	3.0E-01	2.5E-01	5.5E-02	5.7E-04	5.7E-04	3.0E-01	2.5E-01	5.5E-02	5.7E-04	5.7E-04	5.1E-01	5.4E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0700 - 0800	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0800 - 0900	5.4E-01	4.4E-01	9.8E-02	1.1E-03	1.1E-03	5.4E-01	4.4E-01	9.8E-02	1.1E-03	1.1E-03	3.1E+00	3.0E+00	8.1E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0900 - 1000	3.0E-01	2.5E-01	5.5E-02	5.7E-04	5.7E-04	3.0E-01	2.5E-01	5.5E-02	5.7E-04	5.7E-04	2.0E-01	2.5E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1000 - 1100	9.1E-01	7.5E-01	1.7E-01	1.7E-03	1.7E-03	9.1E-01	7.5E-01	1.7E-01	1.7E-03	1.7E-03	2.1E+00	2.2E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1100 - 1200	6.1E-01	5.0E-01	1.1E-01	1.1E-03	1.1E-03	6.1E-01	5.0E-01	1.1E-01	1.1E-03	1.1E-03	1.6E+00	1.7E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1200 - 1300	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1300 - 1400	6.1E-01	5.0E-01	1.1E-01	1.1E-03	1.1E-03	6.1E-01	5.0E-01	1.1E-01	1.1E-03	1.1E-03	7.0E-01	7.9E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1400 - 1500	3.0E-01	2.5E-01	5.5E-02	5.7E-04	5.7E-04	3.0E-01	2.5E-01	5.5E-02	5.7E-04	5.7E-04	2.0E-01	2.5E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1500 - 1600	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1600 - 1700	3.0E-01	2.5E-01	5.5E-02	5.7E-04	5.7E-04	3.0E-01	2.5E-01	5.5E-02	5.7E-04	5.7E-04	2.0E-01	2.5E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1700 - 1800	3.0E-01	2.5E-01	5.5E-02	5.7E-04	5.7E-04	3.0E-01	2.5E-01	5.5E-02	5.7E-04	5.7E-04	2.0E-01	2.5E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1800 - 1900	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1900 - 2000	6.1E-01	5.0E-01	1.1E-01	1.1E-03	1.1E-03	6.1E-01	5.0E-01	1.1E-01	1.1E-03	1.1E-03	7.0E-01	7.9E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2000 - 2100	3.0E-01	2.5E-01	5.5E-02	5.7E-04	5.7E-04	3.0E-01	2.5E-01	5.5E-02	5.7E-04	5.7E-04	1.8E+00	1.8E+00	6.6E-03	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2100 - 2200	3.0E-01	2.5E-01	5.5E-02	5.7E-04	5.7E-04	3.0E-01	2.5E-01	5.5E-02	5.7E-04	5.7E-04	1.0E+00	1.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2200 - 2300	3.0E-01	2.5E-01	5.5E-02	5.7E-04	5.7E-04	3.0E-01	2.5E-01	5.5E-02	5.7E-04	5.7E-04	1.0E+00	1.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2300 - 2400	1.3E+00	1.1E+00	2.4E-01	2.8E-03	2.8E-03	1.3E+00	1.1E+00	2.4E-01	2.8E-03	2.8E-03	1.1E+01	1.0E+01	1.2E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00

Running Emission - Terminating and Bypass Public Light Buses

Average Travelling Distance within bus terminus =	275	m
Average Travelling Speed =	10	km/h

Hour	PLB (Diesel + LPG)											
	Frequency	Running Emission Factor (g/km·vehicle)					Running Emission (g)					
		NOx	NO	NO2	RSP	FSP	NOx	NO	NO2	RSP	FSP
0000 - 0100	10	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	3.5E+00	2.8E+00	6.3E-01	1.4E-01	1.3E-01
0100 - 0200	0	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0600 - 0700	9	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	3.1E+00	2.6E+00	5.7E-01	1.2E-01	1.1E-01
0700 - 0800	18	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	6.3E+00	5.1E+00	1.1E+00	2.5E-01	2.3E-01
0800 - 0900	23	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	8.0E+00	6.5E+00	1.5E+00	3.2E-01	2.9E-01
0900 - 1000	18	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	6.3E+00	5.1E+00	1.1E+00	2.5E-01	2.3E-01
1000 - 1100	27	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	9.4E+00	7.7E+00	1.7E+00	3.7E-01	3.4E-01
1100 - 1200	30	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	1.0E+01	8.5E+00	1.9E+00	4.1E-01	3.8E-01
1200 - 1300	21	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	7.3E+00	6.0E+00	1.3E+00	2.9E-01	2.7E-01
1300 - 1400	23	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	8.0E+00	6.5E+00	1.5E+00	3.2E-01	2.9E-01
1400 - 1500	24	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	8.3E+00	6.8E+00	1.5E+00	3.3E-01	3.0E-01
1500 - 1600	23	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	8.0E+00	6.5E+00	1.5E+00	3.2E-01	2.9E-01
1600 - 1700	13	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	4.5E+00	3.7E+00	8.2E-01	1.8E-01	1.6E-01
1700 - 1800	18	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	6.3E+00	5.1E+00	1.1E+00	2.5E-01	2.3E-01
1800 - 1900	18	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	6.3E+00	5.1E+00	1.1E+00	2.5E-01	2.3E-01
1900 - 2000	21	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	7.3E+00	6.0E+00	1.3E+00	2.9E-01	2.7E-01
2000 - 2100	16	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	5.6E+00	4.6E+00	1.0E+00	2.2E-01	2.0E-01
2100 - 2200	17	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	5.9E+00	4.8E+00	1.1E+00	2.3E-01	2.2E-01
2200 - 2300	11	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	3.8E+00	3.1E+00	7.0E-01	1.5E-01	1.4E-01
2300 - 2400	54	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	1.9E+01	1.5E+01	3.4E+00	7.4E-01	6.8E-01
Daily Total	394										

Idling Emission - Bypass Public Light Buses

No. of PLB (Diesel) to No. of PLB (LPG) Ratio	3.2	
Idling Time for Bypass Public Light Buses	2	min

Hour	PLB (Diesel)											PLB (LPG)										
	Frequency	Hot Idling Emission Factor (g/s)					Hot Idling Emission (g)					Frequency	Hot Idling Emission Factor (g/s)					Hot Idling Emission (g)				
		NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP		NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP
0000 - 0100	4	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	5.2E-01	4.0E-01	1.2E-01	3.7E-03	3.7E-03	1	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	5.2E-01	4.0E-01	1.2E-01	3.7E-03	3.7E-03
0100 - 0200	0	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0600 - 0700	5	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	6.5E-01	5.0E-01	1.5E-01	4.6E-03	4.6E-03	1	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	6.5E-01	5.0E-01	1.5E-01	4.6E-03	4.6E-03
0700 - 0800	14	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.8E+00	1.4E+00	4.3E-01	1.3E-02	1.3E-02	4	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.8E+00	1.4E+00	4.3E-01	1.3E-02	1.3E-02
0800 - 0900	14	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.8E+00	1.4E+00	4.3E-01	1.3E-02	1.3E-02	4	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.8E+00	1.4E+00	4.3E-01	1.3E-02	1.3E-02
0900 - 1000	11	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.4E+00	1.1E+00	3.4E-01	1.0E-02	1.0E-02	4	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.4E+00	1.1E+00	3.4E-01	1.0E-02	1.0E-02
1000 - 1100	14	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.8E+00	1.4E+00	4.3E-01	1.3E-02	1.3E-02	4	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.8E+00	1.4E+00	4.3E-01	1.3E-02	1.3E-02
1100 - 1200	18	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	2.3E+00	1.8E+00	5.6E-01	1.7E-02	1.7E-02	5	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	2.3E+00	1.8E+00	5.6E-01	1.7E-02	1.7E-02
1200 - 1300	13	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.7E+00	1.3E+00	4.0E-01	1.2E-02	1.2E-02	4	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.7E+00	1.3E+00	4.0E-01	1.2E-02	1.2E-02
1300 - 1400	13	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.7E+00	1.3E+00	4.0E-01	1.2E-02	1.2E-02	4	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.7E+00	1.3E+00	4.0E-01	1.2E-02	1.2E-02
1400 - 1500	13	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.7E+00	1.3E+00	4.0E-01	1.2E-02	1.2E-02	4	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.7E+00	1.3E+00	4.0E-01	1.2E-02	1.2E-02
1500 - 1600	13	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.7E+00	1.3E+00	4.0E-01	1.2E-02	1.2E-02	4	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.7E+00	1.3E+00	4.0E-01	1.2E-02	1.2E-02
1600 - 1700	8	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.0E+00	7.9E-01	2.5E-01	7.4E-03	7.4E-03	3	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.0E+00	7.9E-01	2.5E-01	7.4E-03	7.4E-03
1700 - 1800	11	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.4E+00	1.1E+00	3.4E-01	1.0E-02	1.0E-02	3	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.4E+00	1.1E+00	3.4E-01	1.0E-02	1.0E-02
1800 - 1900	12	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.6E+00	1.2E+00	3.7E-01	1.1E-02	1.1E-02	4	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.6E+00	1.2E+00	3.7E-01	1.1E-02	1.1E-02
1900 - 2000	10	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.3E+00	9.9E-01	3.1E-01	9.2E-03	9.2E-03	3	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.3E+00	9.9E-01	3.1E-01	9.2E-03	9.2E-03
2000 - 2100	9	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.2E+00	8.9E-01	2.8E-01	8.3E-03	8.3E-03	3	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.2E+00	8.9E-01	2.8E-01	8.3E-03	8.3E-03
2100 - 2200	11	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.4E+00	1.1E+00	3.4E-01	1.0E-02	1.0E-02	3	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.4E+00	1.1E+00	3.4E-01	1.0E-02	1.0E-02
2200 - 2300	7	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	9.1E-01	6.9E-01	2.2E-01	6.5E-03	6.5E-03	2	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	9.1E-01	6.9E-01	2.2E-01	6.5E-03	6.5E-03
2300 - 2400	24	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	3.1E+00	2.4E+00	7.4E-01	2.2E-02	2.2E-02	8	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	3.1E+00	2.4E+00	7.4E-01	2.2E-02	2.2E-02
Daily Total	224											68										

Total Hourly Emission

Hour	Total Emission inside bus terminus (g) (Running + Idling + Start) [8]					Total Emission Rate (g/s)				
	NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP
0000 - 0100	1.5E+01	1.2E+01	2.2E+00	1.5E-01	1.4E-01	4.1E-03	3.5E-03	6.0E-04	4.1E-05	3.8E-05
0100 - 0200	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0600 - 0700	6.1E+00	5.2E+00	9.9E-01	1.3E-01	1.2E-01	1.7E-03	1.4E-03	2.7E-04	3.7E-05	3.5E-05
0700 - 0800	9.9E+00	7.9E+00	2.0E+00	2.7E-01	2.5E-01	2.8E-03	2.2E-03	5.6E-04	7.6E-05	7.0E-05
0800 - 0900	1.6E+01	1.4E+01	2.6E+00	3.4E-01	3.2E-01	4.5E-03	3.8E-03	7.1E-04	9.6E-05	8.9E-05
0900 - 1000	9.9E+00	8.1E+00	1.9E+00	2.7E-01	2.5E-01	2.8E-03	2.2E-03	5.2E-04	7.5E-05	6.9E-05
1000 - 1100	1.8E+01	1.5E+01	2.8E+00	4.0E-01	3.7E-01	4.9E-03	4.1E-03	7.8E-04	1.1E-04	1.0E-04
1100 - 1200	1.9E+01	1.6E+01	3.2E+00	4.5E-01	4.2E-01	5.3E-03	4.4E-03	8.9E-04	1.2E-04	1.2E-04
1200 - 1300	1.2E+01	9.9E+00	2.3E+00	3.1E-01	2.9E-01	3.4E-03	2.8E-03	6.3E-04	8.7E-05	8.1E-05
1300 - 1400	1.3E+01	1.1E+01	2.4E+00	3.4E-01	3.2E-01	3.7E-03	3.1E-03	6.7E-04	9.5E-05	8.8E-05
1400 - 1500	1.4E+01	1.1E+01	2.5E+00	3.6E-01	3.3E-01	3.8E-03	3.2E-03	6.8E-04	9.9E-05	9.2E-05
1500 - 1600	1.5E+01	1.2E+01	2.6E+00	3.4E-01	3.2E-01	4.1E-03	3.4E-03	7.1E-04	9.5E-05	8.8E-05
1600 - 1700	7.3E+00	5.9E+00	1.4E+00	1.9E-01	1.8E-01	2.0E-03	1.6E-03	3.8E-04	5.4E-05	5.0E-05
1700 - 1800	1.0E+01	8.2E+00	1.9E+00	2.7E-01	2.5E-01	2.8E-03	2.3E-03	5.3E-04	7.5E-05	6.9E-05
1800 - 1900	1.0E+01	8.1E+00	1.9E+00	2.7E-01	2.5E-01	2.8E-03	2.3E-03	5.3E-04	7.5E-05	7.0E-05
1900 - 2000	1.4E+01	1.1E+01	2.2E+00	3.1E-01	2.9E-01	3.8E-03	3.2E-03	6.1E-04	8.6E-05	8.0E-05
2000 - 2100	1.1E+01	9.2E+00	1.7E+00	2.4E-01	2.2E-01	3.0E-03	2.5E-03	4.6E-04	6.6E-05	6.1E-05
2100 - 2200	1.1E+01	8.9E+00	1.8E+00	2.6E-01	2.4E-01	3.0E-03	2.5E-03	5.1E-04	7.1E-05	6.6E-05
2200 - 2300	7.3E+00	6.1E+00	1.2E+00	1.7E-01	1.5E-01	2.0E-03	1.7E-03	3.3E-04	4.6E-05	4.3E-05
2300 - 2400	4.9E+01	4.2E+01	7.7E+00	8.0E-01	7.4E-01	1.4E-02	1.2E-02	2.1E-03	2.2E-04	2.0E-04
						max:	1.2E-02	2.1E-03	2.2E-04	2.0E-04

PTI opening hourly emission factor

NO	NO_2	RSP	FSP
0.30	0.28	0.18	0.18
0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00
0.12	0.13	0.17	0.17
0.19	0.26	0.34	0.34
0.33	0.33	0.43	0.43
0.19	0.24	0.34	0.34
0.36	0.36	0.50	0.50
0.38	0.41	0.56	0.56
0.24	0.29	0.39	0.40
0.27	0.31	0.43	0.43
0.27	0.32	0.45	0.45
0.29	0.33	0.43	0.43
0.14	0.18	0.24	0.24
0.20	0.25	0.34	0.34
0.19	0.25	0.34	0.34
0.27	0.28	0.39	0.39
0.22	0.22	0.30	0.30
0.21	0.24	0.32	0.32
0.15	0.15	0.21	0.21
1.00	1.00	1.00	1.00

Remarks:

[1] Idling Emission (g) = Idling Emission Factor (g/s) * Actual Idling time (min) * 60 * Frequency

[2] Total Idling Emission (g) = Cold Idling Emission of PLB (g) + Hot Idling Emission of PLB (g)

[3] If Actual Idling Time ≤ 1 min, Idling Emission for Start Emission Adjustment (g) = Idling rate (g/min) * Actual Idling Time (min)

If Actual Idling Time > 1 min, Idling Emission for Start Emission Adjustment (g) = Idling rate (g/min) * Maximum Duration for Adjusting Start Emission "K" (min)

Where Idling rate (g/min) = Total Idling Emission (g) / Idling Time (min), and "K" = 1 min for LPG PLB

[4] Adjusted Start Emission within bus terminus (g) = [Total Start Emission of PLB (Diesel) (g) - Idling Emission for Start Emission Adjustment (g)] * [Average Distance from Starting Place to Egress (m) / 700m]

Minimum value = 0 g

[5] Adjusted Start Emission outside bus terminus (g) = [Total Start Emission of PLB (Diesel) (g) - Idling Emission for Start Emission Adjustment (g)] * [Average Spread Distance outside bus terminus (m) / 700m]

Minimum value = 0 g

[6] Adjusted Start Emission within bus terminus (g) = [Total Start Emission of PLB (LPG) (g) - Idling Emission for Start Emission Adjustment (g)] * [Average Distance from Starting Place to Egress (m) / 150m]

Minimum value = 0 g

[7] Adjusted Start Emission outside bus terminus (g) = [Total Start Emission of PLB (LPG) (g) - Idling Emission for Start Emission Adjustment (g)] * [Average Spread Distance outside bus terminus (m) / 150m]

Minimum value = 0 g

[8] Total Emission Inside bus terminus (g) = Total Running Emission (g) + Idling Emission (g) + Adjusted Start Emission within bus terminus (g)

Hong Kong Station Bus Terminus (PLB)

Minimum Hourly Temperature and Relative Humidity for 2nd Quarter

Temperature: 14 °C

Relative Humidity: 21 %

Start Emission

No. of PLB (Diesel) to No. of PLB (LPG) Ratio	3.2

	Public Light Buses (PLB) Start Emission Factor (g/trip)																	
NOx	4.4E-01	6.7E-01	1.1E+00	1.4E+00	1.6E+00	1.9E+00	2.1E+00	2.2E+00	2.4E+00	2.6E+00	2.7E+00	2.8E+00	2.9E+00	3.0E+00	3.0E+00	3.0E+00	3.0E+00	2.9E+00
NO	4.2E-01	6.5E-01	1.0E+00	1.3E+00	1.6E+00	1.8E+00	2.0E+00	2.0E+00	2.2E+00	2.3E+00	2.4E+00	2.5E+00	2.6E+00	2.6E+00	2.6E+00	2.6E+00	2.6E+00	2.5E+00
NO2	1.5E-02	2.6E-02	3.5E-02	4.9E-02	6.0E-02	7.9E-02	1.1E-01	1.4E-01	2.0E-01	2.6E-01	2.9E-01	3.4E-01	3.7E-01	3.9E-01	4.0E-01	4.1E-01	4.1E-01	4.1E-01
RSP	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
FSP	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00

Soaking Time (min) / Hour	No. of Trips of PLB (Diesel)																	
	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	1	0	0	0	1	1
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	0
0600 - 0700	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
0700 - 0800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0800 - 0900	1	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
0900 - 1000	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1000 - 1100	3	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
1100 - 1200	1	1	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0
1200 - 1300	1	1	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
1300 - 1400	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1400 - 1500	3	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
1500 - 1600	1	0	1	0	0	0	1	0	0	1	1	1	0	0	0	0	0	0
1600 - 1700	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1700 - 1800	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1800 - 1900	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
1900 - 2000	1	1	1	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0
2000 - 2100	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
2100 - 2200	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2200 - 2300	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2300 - 2400	2	2	0	0	0	0	0	1	0	0	0	0	1	9	1	0	0	1
																	Daily Total	76

Total Start Emission of PLB (Diesel) (g)				
NOx	**NO**	**NO2**	**RSP**	**FSP**
8.9E+00	7.7E+00	1.2E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2.9E+00	2.7E+00	1.6E-01	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
3.3E+00	3.1E+00	1.8E-01	0.0E+00	0.0E+00
8.8E-01	8.5E-01	2.9E-02	0.0E+00	0.0E+00
5.0E+00	4.8E+00	1.8E-01	0.0E+00	0.0E+00
5.5E+00	5.3E+00	2.0E-01	0.0E+00	0.0E+00
5.0E+00	4.6E+00	4.1E-01	0.0E+00	0.0E+00
2.5E+00	2.4E+00	9.1E-02	0.0E+00	0.0E+00
4.9E+00	4.7E+00	1.8E-01	0.0E+00	0.0E+00
1.2E+01	1.1E+01	1.0E+00	0.0E+00	0.0E+00
4.4E-01	4.2E-01	1.5E-02	0.0E+00	0.0E+00
1.3E+00	1.3E+00	4.4E-02	0.0E+00	0.0E+00
2.1E+00	2.0E+00	7.5E-02	0.0E+00	0.0E+00
7.6E+00	7.2E+00	3.8E-01	0.0E+00	0.0E+00
2.8E+00	2.7E+00	1.0E-01	0.0E+00	0.0E+00
2.1E+00	2.0E+00	7.0E-02	0.0E+00	0.0E+00
1.1E+00	1.0E+00	3.5E-02	0.0E+00	0.0E+00
4.0E+01	3.5E+01	4.9E+00	0.0E+00	0.0E+00

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.
[2] Population ratio of PLB (Diesel) to PLB (LPG) was extracted from Year 2028 data of EMFAC-HK.

Idling Emission - Terminating Public Light Buses

Idling Time for Terminating Public Light Buses	1	min
Max. Idling Time for Adjusting Start Emission =	1	min

Hour	PLB (Diesel)											PLB (Diesel)									
	Frequenc	Cold Idling Emission Factor (g/s)					Cold Idling Emission (g) [1]					Frequenc	Hot Idling Emission Factor (g/s)					Hot Idling Emission (g) [1]				
	y	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**	y	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**
0000 - 0100	3	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	1.8E-01	1.5E-01	3.3E-02	1.3E-03	1.3E-03	0	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0100 - 0200	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0600 - 0700	1	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	6.0E-02	4.9E-02	1.1E-02	4.3E-04	4.3E-04	1	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	3.5E-02	2.8E-02	6.4E-03	4.3E-04	4.3E-04
0700 - 0800	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0800 - 0900	1	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	6.0E-02	4.9E-02	1.1E-02	4.3E-04	4.3E-04	2	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	6.9E-02	5.7E-02	1.3E-02	8.7E-04	8.7E-04
0900 - 1000	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	2	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	6.9E-02	5.7E-02	1.3E-02	8.7E-04	8.7E-04
1000 - 1100	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	6	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	2.1E-01	1.7E-01	3.8E-02	2.6E-03	2.6E-03
1100 - 1200	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	5	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	1.7E-01	1.4E-01	3.2E-02	2.2E-03	2.2E-03
1200 - 1300	1	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	6.0E-02	4.9E-02	1.1E-02	4.3E-04	4.3E-04	3	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	1.0E-01	8.5E-02	1.9E-02	1.3E-03	1.3E-03
1300 - 1400	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	4	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	1.4E-01	1.1E-01	2.6E-02	1.7E-03	1.7E-03
1400 - 1500	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	6	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	2.1E-01	1.7E-01	3.8E-02	2.6E-03	2.6E-03
1500 - 1600	4	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	2.4E-01	2.0E-01	4.4E-02	1.7E-03	1.7E-03	2	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	6.9E-02	5.7E-02	1.3E-02	8.7E-04	8.7E-04
1600 - 1700	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	3.5E-02	2.8E-02	6.4E-03	4.3E-04	4.3E-04
1700 - 1800	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	3	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	1.0E-01	8.5E-02	1.9E-02	1.3E-03	1.3E-03
1800 - 1900	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	2	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	6.9E-02	5.7E-02	1.3E-02	8.7E-04	8.7E-04
1900 - 2000	1	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	6.0E-02	4.9E-02	1.1E-02	4.3E-04	4.3E-04	5	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	1.7E-01	1.4E-01	3.2E-02	2.2E-03	2.2E-03
2000 - 2100	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	3	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	1.0E-01	8.5E-02	1.9E-02	1.3E-03	1.3E-03
2100 - 2200	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	2	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	6.9E-02	5.7E-02	1.3E-02	8.7E-04	8.7E-04
2200 - 2300	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	3.5E-02	2.8E-02	6.4E-03	4.3E-04	4.3E-04
2300 - 2400	13	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	7.8E-01	6.4E-01	1.4E-01	5.6E-03	5.6E-03	4	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	1.4E-01	1.1E-01	2.6E-02	1.7E-03	1.7E-03
Daily Total	24											52										

Average Distance from Starting Place to Egress =	185	m
Average Spread Distance outside bus terminus =	515	m

Hour	Total Idling Emission (g) [2]					Idling Emission for Start Emission Adjustment (g) [3]					Adjusted Start Emission within bus terminus (g) [4]					Adjusted Start Emission outside bus terminus (g) [5]					Start Emission Rate outside bus terminus (g/s)				
	NOx	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**
0000 - 0100	1.8E-01	1.5E-01	3.3E-02	1.3E-03	1.3E-03	1.8E-01	1.5E-01	3.3E-02	1.3E-03	1.3E-03	2.3E+00	2.0E+00	3.1E-01	0.0E+00	0.0E+00	6.4E+00	5.6E+00	8.5E-01	0.0E+00	0.0E+00	1.8E-03	1.5E-03	2.4E-04	0.0E+00	0.0E+00
0100 - 0200	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0600 - 0700	9.5E-02	7.7E-02	1.7E-02	8.7E-04	8.7E-04	9.5E-02	7.7E-02	1.7E-02	8.7E-04	8.7E-04	7.3E-01	6.9E-01	3.8E-02	0.0E+00	0.0E+00	2.0E+00	1.9E+00	1.1E-01	0.0E+00	0.0E+00	5.6E-04	5.4E-04	3.0E-05	0.0E+00	0.0E+00
0700 - 0800	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0800 - 0900	1.3E-01	1.1E-01	2.4E-02	1.3E-03	1.3E-03	1.3E-01	1.1E-01	2.4E-02	1.3E-03	1.3E-03	8.4E-01	8.0E-01	4.0E-02	0.0E+00	0.0E+00	2.3E+00	2.2E+00	1.1E-01	0.0E+00	0.0E+00	6.5E-04	6.2E-04	3.1E-05	0.0E+00	0.0E+00
0900 - 1000	6.9E-02	5.7E-02	1.3E-02	8.7E-04	8.7E-04	6.9E-02	5.7E-02	1.3E-02	8.7E-04	8.7E-04	2.1E-01	2.1E-01	4.3E-03	0.0E+00	0.0E+00	5.9E-01	5.8E-01	1.2E-02	0.0E+00	0.0E+00	1.7E-04	1.6E-04	3.3E-06	0.0E+00	0.0E+00
1000 - 1100	2.1E-01	1.7E-01	3.8E-02	2.6E-03	2.6E-03	2.1E-01	1.7E-01	3.8E-02	2.6E-03	2.6E-03	1.3E+00	1.2E+00	3.7E-02	0.0E+00	0.0E+00	3.5E+00	3.4E+00	1.0E-01	0.0E+00	0.0E+00	9.8E-04	9.5E-04	2.9E-05	0.0E+00	0.0E+00
1100 - 1200	1.7E-01	1.4E-01	3.2E-02	2.2E-03	2.2E-03	1.7E-01	1.4E-01	3.2E-02	2.2E-03	2.2E-03	1.4E+00	1.4E+00	4.4E-02	0.0E+00	0.0E+00	3.9E+00	3.8E+00	1.2E-01	0.0E+00	0.0E+00	1.1E-03	1.1E-03	3.4E-05	0.0E+00	0.0E+00
1200 - 1300	1.6E-01	1.3E-01	3.0E-02	1.7E-03	1.7E-03	1.6E-01	1.3E-01	3.0E-02	1.7E-03	1.7E-03	1.3E+00	1.2E+00	1.0E-01	0.0E+00	0.0E+00	3.6E+00	3.3E+00	2.8E-01	0.0E+00	0.0E+00	9.9E-04	9.1E-04	7.8E-05	0.0E+00	0.0E+00
1300 - 1400	1.4E-01	1.1E-01	2.6E-02	1.7E-03	1.7E-03	1.4E-01	1.1E-01	2.6E-02	1.7E-03	1.7E-03	6.1E-01	6.0E-01	1.7E-02	0.0E+00	0.0E+00	1.7E+00	1.7E+00	4.8E-02	0.0E+00	0.0E+00	4.7E-04	4.6E-04	1.3E-05	0.0E+00	0.0E+00
1400 - 1500	2.1E-01	1.7E-01	3.8E-02	2.6E-03	2.6E-03	2.1E-01	1.7E-01	3.8E-02	2.6E-03	2.6E-03	1.2E+00	1.2E+00	3.8E-02	0.0E+00	0.0E+00	3.5E+00	3.3E+00	1.1E-01	0.0E+00	0.0E+00	9.6E-04	9.3E-04	2.9E-05	0.0E+00	0.0E+00
1500 - 1600	3.1E-01	2.5E-01	5.7E-02	2.6E-03	2.6E-03	3.1E-01	2.5E-01	5.7E-02	2.6E-03	2.6E-03	3.0E+00	2.7E+00	2.6E-01	0.0E+00	0.0E+00	8.4E+00	7.6E+00	7.2E-01	0.0E+00	0.0E+00	2.3E-03	2.1E-03	2.0E-04	0.0E+00	0.0E+00
1600 - 1700	3.5E-02	2.8E-02	6.4E-03	4.3E-04	4.3E-04	3.5E-02	2.8E-02	6.4E-03	4.3E-04	4.3E-04	1.1E-01	1.0E-01	2.2E-03	0.0E+00	0.0E+00	3.0E-01	2.9E-01	6.0E-03	0.0E+00	0.0E+00	8.3E-05	8.1E-05	1.7E-06	0.0E+00	0.0E+00
1700 - 1800	1.0E-01	8.5E-02	1.9E-02	1.3E-03	1.3E-03	1.0E-01	8.5E-02	1.9E-02	1.3E-03	1.3E-03	3.2E-01	3.1E-01	6.5E-03	0.0E+00	0.0E+00	8.9E-01	8.7E-01	1.8E-02	0.0E+00	0.0E+00	2.5E-04	2.4E-04	5.0E-06	0.0E+00	0.0E+00
1800 - 1900	6.9E-02	5.7E-02	1.3E-02	8.7E-04	8.7E-04	6.9E-02	5.7E-02	1.3E-02	8.7E-04	8.7E-04	5.3E-01	5.1E-01	1.6E-02	0.0E+00	0.0E+00	1.5E+00	1.4E+00	4.6E-02	0.0E+00	0.0E+00	4.1E-04	4.0E-04	1.3E-05	0.0E+00	0.0E+00
1900 - 2000	2.3E-01	1.9E-01	4.3E-02	2.6E-03	2.6E-03	2.3E-01	1.9E-01	4.3E-02	2.6E-03	2.6E-03	1.9E+00	1.9E+00	8.9E-02	0.0E+00	0.0E+00	5.4E+00	5.2E+00	2.5E-01	0.0E+00	0.0E+00	1.5E-03	1.4E-03	6.9E-05	0.0E+00	0.0E+00
2000 - 2100	1.0E-01	8.5E-02	1.9E-02	1.3E-03	1.3E-03	1.0E-01	8.5E-02	1.9E-02	1.3E-03	1.3E-03	7.0E-01	6.8E-01	2.1E-02	0.0E+00	0.0E+00	1.9E+00	1.9E+00	6.0E-02	0.0E+00	0.0E+00	5.4E-04	5.2E-04	1.7E-05	0.0E+00	0.0E+00
2100 - 2200	6.9E-02	5.7E-02	1.3E-02	8.7E-04	8.7E-04	6.9E-02	5.7E-02	1.3E-02	8.7E-04	8.7E-04	5.4E-01	5.2E-01	1.5E-02	0.0E+00	0.0E+00	1.5E+00	1.5E+00	4.2E-02	0.0E+00	0.0E+00	4.2E-04	4.0E-04	1.2E-05	0.0E+00	0.0E+00
2200 - 2300	3.5E-02	2.8E-02	6.4E-03	4.3E-04	4.3E-04	3.5E-02	2.8E-02	6.4E-03	4.3E-04	4.3E-04	2.7E-01	2.6E-01	7.5E-03	0.0E+00	0.0E+00	7.5E-01	7.3E-01	2.1E-02	0.0E+00	0.0E+00	2.1E-04	2.0E-04	5.8E-06	0.0E+00	0.0E+00
2300 - 2400	9.2E-01	7.5E-01	1.7E-01	7.4E-03	7.4E-03	9.2E-01	7.5E-01	1.7E-01	7.4E-03	7.4E-03	1.0E+01	9.1E+00	1.2E+00	0.0E+00	0.0E+00	2.9E+01	2.5E+01	3.5E+00	0.0E+00	0.0E+00	8.0E-03	7.1E-03	9.6E-04	0.0E+00	0.0E+00

Start Emission

No. of PLB (Diesel) to No. of PLB (LPG) Ratio	3.2

	Public Light Buses (PLB) Start Emission Factor (g/trip)																	
NOx	4.4E-01	6.7E-01	1.1E+00	1.4E+00	1.6E+00	1.9E+00	2.1E+00	2.2E+00	2.4E+00	2.6E+00	2.7E+00	2.8E+00	2.9E+00	3.0E+00	3.0E+00	3.0E+00	3.0E+00	2.9E+00
NO	4.2E-01	6.5E-01	1.0E+00	1.3E+00	1.6E+00	1.8E+00	2.0E+00	2.0E+00	2.2E+00	2.3E+00	2.4E+00	2.5E+00	2.6E+00	2.6E+00	2.6E+00	2.6E+00	2.6E+00	2.5E+00
NO2	1.5E-02	2.6E-02	3.5E-02	4.9E-02	6.0E-02	7.9E-02	1.1E-01	1.4E-01	2.0E-01	2.6E-01	2.9E-01	3.4E-01	3.7E-01	3.9E-01	4.0E-01	4.1E-01	4.1E-01	4.1E-01
RSP	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
FSP	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00

Soaking Time (min) / Hour	No. of Trips of PLB (LPG)																	
	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	1	0	0	0	1	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	0
0600 - 0700	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0700 - 0800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0800 - 0900	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
0900 - 1000	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1000 - 1100	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1100 - 1200	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1200 - 1300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1300 - 1400	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1400 - 1500	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1500 - 1600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1600 - 1700	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1700 - 1800	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1800 - 1900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1900 - 2000	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2000 - 2100	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
2100 - 2200	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2200 - 2300	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2300 - 2400	1	1	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0
																Daily Total	26	

Total Start Emission of PLB (LPG) (g)				
NOx	**NO**	**NO2**	**RSP**	**FSP**
5.9E+00	5.2E+00	7.8E-01	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
6.7E-01	6.5E-01	2.6E-02	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2.9E+00	2.7E+00	1.6E-01	0.0E+00	0.0E+00
4.4E-01	4.2E-01	1.5E-02	0.0E+00	0.0E+00
2.5E+00	2.4E+00	8.9E-02	0.0E+00	0.0E+00
1.8E+00	1.8E+00	6.4E-02	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1.1E+00	1.1E+00	4.0E-02	0.0E+00	0.0E+00
4.4E-01	4.2E-01	1.5E-02	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
4.4E-01	4.2E-01	1.5E-02	0.0E+00	0.0E+00
4.4E-01	4.2E-01	1.5E-02	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1.1E+00	1.1E+00	4.0E-02	0.0E+00	0.0E+00
1.6E+00	1.6E+00	6.0E-02	0.0E+00	0.0E+00
1.1E+00	1.0E+00	3.5E-02	0.0E+00	0.0E+00
1.1E+00	1.0E+00	3.5E-02	0.0E+00	0.0E+00
1.0E+01	8.9E+00	1.2E+00	0.0E+00	0.0E+00

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.
[2] Population ratio of PLB (Diesel) to PLB (LPG) was extracted from Year 2028 data of EMFAC-HK.

Idling Emission - Terminating Public Light Buses

Idling Time for Terminating Public Light Buses	1	min
Max. Idling Time for Adjusting Start Emission =	1	min

Hour	PLB (LPG)											PLB (LPG)										
	Frequenc	Cold Idling Emission Factor (g/s)					Cold Idling Emission (g) [1]					Frequenc	Hot Idling Emission Factor (g/s)					Hot Idling Emission (g) [1]				
	y	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**	y	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**
0000 - 0100	2	3.8E-03	3.1E-03	7.0E-04	8.4E-06	8.4E-06	4.5E-01	3.7E-01	8.4E-02	1.0E-03	1.0E-03	0	4.9E-03	4.0E-03	9.1E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0100 - 0200	0	3.8E-03	3.1E-03	7.0E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	4.9E-03	4.0E-03	9.1E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0	3.8E-03	3.1E-03	7.0E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	4.9E-03	4.0E-03	9.1E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0	3.8E-03	3.1E-03	7.0E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	4.9E-03	4.0E-03	9.1E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0	3.8E-03	3.1E-03	7.0E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	4.9E-03	4.0E-03	9.1E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0	3.8E-03	3.1E-03	7.0E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	4.9E-03	4.0E-03	9.1E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0600 - 0700	0	3.8E-03	3.1E-03	7.0E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	4.9E-03	4.0E-03	9.1E-04	8.4E-06	8.4E-06	2.9E-01	2.4E-01	5.4E-02	5.0E-04	5.0E-04
0700 - 0800	0	3.8E-03	3.1E-03	7.0E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	4.9E-03	4.0E-03	9.1E-04	8.4E-06	8.4E-06	2.9E-01	2.4E-01	5.4E-02	5.0E-04	5.0E-04
0800 - 0900	1	3.8E-03	3.1E-03	7.0E-04	8.4E-06	8.4E-06	2.3E-01	1.8E-01	4.2E-02	5.0E-04	5.0E-04	1	4.9E-03	4.0E-03	9.1E-04	8.4E-06	8.4E-06	2.9E-01	2.4E-01	5.4E-02	5.0E-04	5.0E-04
0900 - 1000	0	3.8E-03	3.1E-03	7.0E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	4.9E-03	4.0E-03	9.1E-04	8.4E-06	8.4E-06	2.9E-01	2.4E-01	5.4E-02	5.0E-04	5.0E-04
1000 - 1100	0	3.8E-03	3.1E-03	7.0E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	3	4.9E-03	4.0E-03	9.1E-04	8.4E-06	8.4E-06	8.8E-01	7.2E-01	1.6E-01	1.5E-03	1.5E-03
1100 - 1200	0	3.8E-03	3.1E-03	7.0E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	2	4.9E-03	4.0E-03	9.1E-04	8.4E-06	8.4E-06	5.9E-01	4.8E-01	1.1E-01	1.0E-03	1.0E-03
1200 - 1300	0	3.8E-03	3.1E-03	7.0E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	4.9E-03	4.0E-03	9.1E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1300 - 1400	0	3.8E-03	3.1E-03	7.0E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	2	4.9E-03	4.0E-03	9.1E-04	8.4E-06	8.4E-06	5.9E-01	4.8E-01	1.1E-01	1.0E-03	1.0E-03
1400 - 1500	0	3.8E-03	3.1E-03	7.0E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	4.9E-03	4.0E-03	9.1E-04	8.4E-06	8.4E-06	2.9E-01	2.4E-01	5.4E-02	5.0E-04	5.0E-04
1500 - 1600	0	3.8E-03	3.1E-03	7.0E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	4.9E-03	4.0E-03	9.1E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1600 - 1700	0	3.8E-03	3.1E-03	7.0E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	4.9E-03	4.0E-03	9.1E-04	8.4E-06	8.4E-06	2.9E-01	2.4E-01	5.4E-02	5.0E-04	5.0E-04
1700 - 1800	0	3.8E-03	3.1E-03	7.0E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	4.9E-03	4.0E-03	9.1E-04	8.4E-06	8.4E-06	2.9E-01	2.4E-01	5.4E-02	5.0E-04	5.0E-04
1800 - 1900	0	3.8E-03	3.1E-03	7.0E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	4.9E-03	4.0E-03	9.1E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1900 - 2000	0	3.8E-03	3.1E-03	7.0E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	2	4.9E-03	4.0E-03	9.1E-04	8.4E-06	8.4E-06	5.9E-01	4.8E-01	1.1E-01	1.0E-03	1.0E-03
2000 - 2100	0	3.8E-03	3.1E-03	7.0E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	4.9E-03	4.0E-03	9.1E-04	8.4E-06	8.4E-06	2.9E-01	2.4E-01	5.4E-02	5.0E-04	5.0E-04
2100 - 2200	0	3.8E-03	3.1E-03	7.0E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	4.9E-03	4.0E-03	9.1E-04	8.4E-06	8.4E-06	2.9E-01	2.4E-01	5.4E-02	5.0E-04	5.0E-04
2200 - 2300	0	3.8E-03	3.1E-03	7.0E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	4.9E-03	4.0E-03	9.1E-04	8.4E-06	8.4E-06	2.9E-01	2.4E-01	5.4E-02	5.0E-04	5.0E-04
2300 - 2400	3	3.8E-03	3.1E-03	7.0E-04	8.4E-06	8.4E-06	6.8E-01	5.5E-01	1.3E-01	1.5E-03	1.5E-03	2	4.9E-03	4.0E-03	9.1E-04	8.4E-06	8.4E-06	5.9E-01	4.8E-01	1.1E-01	1.0E-03	1.0E-03
Daily Total	6											20										

Average Distance from Starting Place to Egress =	185	m
Average Distance from PTI Egress to Open Road Network	0	m
Average Spread Distance outside bus terminus =	0	m

Hour	Total Idling Emission (g) [2]					Idling Emission for Start Emission Adjustment (g) [3]					Adjusted Start Emission within bus terminus (g) [6]					Adjusted Start Emission outside bus terminus (g) [7]					Start Emission Rate outside bus terminus (g/s)				
	NOx	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**
0000 - 0100	4.5E-01	3.7E-01	8.4E-02	1.0E-03	1.0E-03	4.5E-01	3.7E-01	8.4E-02	1.0E-03	1.0E-03	6.8E+00	5.9E+00	8.6E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0100 - 0200	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0600 - 0700	2.9E-01	2.4E-01	5.4E-02	5.0E-04	5.0E-04	2.9E-01	2.4E-01	5.4E-02	5.0E-04	5.0E-04	4.7E-01	5.0E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0700 - 0800	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0800 - 0900	5.2E-01	4.3E-01	9.6E-02	1.0E-03	1.0E-03	5.2E-01	4.3E-01	9.6E-02	1.0E-03	1.0E-03	2.9E+00	2.8E+00	8.2E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0900 - 1000	2.9E-01	2.4E-01	5.4E-02	5.0E-04	5.0E-04	2.9E-01	2.4E-01	5.4E-02	5.0E-04	5.0E-04	1.8E-01	2.3E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1000 - 1100	8.8E-01	7.2E-01	1.6E-01	1.5E-03	1.5E-03	8.8E-01	7.2E-01	1.6E-01	1.5E-03	1.5E-03	2.0E+00	2.1E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1100 - 1200	5.9E-01	4.8E-01	1.1E-01	1.0E-03	1.0E-03	5.9E-01	4.8E-01	1.1E-01	1.0E-03	1.0E-03	1.5E+00	1.6E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1200 - 1300	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1300 - 1400	5.9E-01	4.8E-01	1.1E-01	1.0E-03	1.0E-03	5.9E-01	4.8E-01	1.1E-01	1.0E-03	1.0E-03	6.5E-01	7.3E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1400 - 1500	2.9E-01	2.4E-01	5.4E-02	5.0E-04	5.0E-04	2.9E-01	2.4E-01	5.4E-02	5.0E-04	5.0E-04	1.8E-01	2.3E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1500 - 1600	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1600 - 1700	2.9E-01	2.4E-01	5.4E-02	5.0E-04	5.0E-04	2.9E-01	2.4E-01	5.4E-02	5.0E-04	5.0E-04	1.8E-01	2.3E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1700 - 1800	2.9E-01	2.4E-01	5.4E-02	5.0E-04	5.0E-04	2.9E-01	2.4E-01	5.4E-02	5.0E-04	5.0E-04	1.8E-01	2.3E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1800 - 1900	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1900 - 2000	5.9E-01	4.8E-01	1.1E-01	1.0E-03	1.0E-03	5.9E-01	4.8E-01	1.1E-01	1.0E-03	1.0E-03	6.5E-01	7.3E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2000 - 2100	2.9E-01	2.4E-01	5.4E-02	5.0E-04	5.0E-04	2.9E-01	2.4E-01	5.4E-02	5.0E-04	5.0E-04	1.7E+00	1.7E+00	7.0E-03	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2100 - 2200	2.9E-01	2.4E-01	5.4E-02	5.0E-04	5.0E-04	2.9E-01	2.4E-01	5.4E-02	5.0E-04	5.0E-04	9.3E-01	9.6E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2200 - 2300	2.9E-01	2.4E-01	5.4E-02	5.0E-04	5.0E-04	2.9E-01	2.4E-01	5.4E-02	5.0E-04	5.0E-04	9.3E-01	9.6E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2300 - 2400	1.3E+00	1.0E+00	2.3E-01	2.5E-03	2.5E-03	1.3E+00	1.0E+00	2.3E-01	2.5E-03	2.5E-03	1.1E+01	9.7E+00	1.2E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00

Running Emission - Terminating and Bypass Public Light Buses

Average Travelling Distance within bus terminus =	275	m
Average Travelling Speed =	10	km/h

Hour	PLB (Diesel + LPG)											
	Frequency	Running Emission Factor (g/km·vehicle)					Running Emission (g)					
		NOx	NO	NO2	RSP	FSP	NOx	NO	NO2	RSP	FSP
0000 - 0100	10	1.2E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	3.4E+00	2.8E+00	6.3E-01	1.4E-01	1.3E-01
0100 - 0200	0	1.2E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0	1.2E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0	1.2E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0	1.2E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0	1.2E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0600 - 0700	9	1.2E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	3.1E+00	2.5E+00	5.7E-01	1.2E-01	1.1E-01
0700 - 0800	18	1.2E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	6.2E+00	5.0E+00	1.1E+00	2.5E-01	2.3E-01
0800 - 0900	23	1.2E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	7.9E+00	6.4E+00	1.5E+00	3.2E-01	2.9E-01
0900 - 1000	18	1.2E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	6.2E+00	5.0E+00	1.1E+00	2.5E-01	2.3E-01
1000 - 1100	27	1.2E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	9.2E+00	7.5E+00	1.7E+00	3.7E-01	3.4E-01
1100 - 1200	30	1.2E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	1.0E+01	8.4E+00	1.9E+00	4.1E-01	3.8E-01
1200 - 1300	21	1.2E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	7.2E+00	5.9E+00	1.3E+00	2.9E-01	2.7E-01
1300 - 1400	23	1.2E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	7.9E+00	6.4E+00	1.5E+00	3.2E-01	2.9E-01
1400 - 1500	24	1.2E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	8.2E+00	6.7E+00	1.5E+00	3.3E-01	3.0E-01
1500 - 1600	23	1.2E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	7.9E+00	6.4E+00	1.5E+00	3.2E-01	2.9E-01
1600 - 1700	13	1.2E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	4.5E+00	3.6E+00	8.2E-01	1.8E-01	1.6E-01
1700 - 1800	18	1.2E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	6.2E+00	5.0E+00	1.1E+00	2.5E-01	2.3E-01
1800 - 1900	18	1.2E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	6.2E+00	5.0E+00	1.1E+00	2.5E-01	2.3E-01
1900 - 2000	21	1.2E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	7.2E+00	5.9E+00	1.3E+00	2.9E-01	2.7E-01
2000 - 2100	16	1.2E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	5.5E+00	4.5E+00	1.0E+00	2.2E-01	2.0E-01
2100 - 2200	17	1.2E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	5.8E+00	4.7E+00	1.1E+00	2.3E-01	2.2E-01
2200 - 2300	11	1.2E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	3.8E+00	3.1E+00	7.0E-01	1.5E-01	1.4E-01
2300 - 2400	54	1.2E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	1.8E+01	1.5E+01	3.4E+00	7.4E-01	6.8E-01
Daily Total	394										

Idling Emission - Bypass Public Light Buses

No. of PLB (Diesel) to No. of PLB (LPG) Ratio	3.2	
Idling Time for Bypass Public Light Buses	2	min

Hour	PLB (Diesel)										PLB (LPG)									
	Frequency	Hot Idling Emission Factor (g/s)					Hot Idling Emission (g)					Frequency	Hot Idling Emission Factor (g/s)					Hot Idling Emission (g)				
		NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP		NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP
0000 - 0100	4	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	5.2E-01	4.0E-01	1.2E-01	3.7E-03	3.7E-03	1	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	5.2E-01	4.0E-01	1.2E-01	3.7E-03	3.7E-03
0100 - 0200	0	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0600 - 0700	5	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	6.5E-01	5.0E-01	1.5E-01	4.6E-03	4.6E-03	1	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	6.5E-01	5.0E-01	1.5E-01	4.6E-03	4.6E-03
0700 - 0800	14	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.8E+00	1.4E+00	4.3E-01	1.3E-02	1.3E-02	4	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.8E+00	1.4E+00	4.3E-01	1.3E-02	1.3E-02
0800 - 0900	14	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.8E+00	1.4E+00	4.3E-01	1.3E-02	1.3E-02	4	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.8E+00	1.4E+00	4.3E-01	1.3E-02	1.3E-02
0900 - 1000	11	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.4E+00	1.1E+00	3.4E-01	1.0E-02	1.0E-02	4	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.4E+00	1.1E+00	3.4E-01	1.0E-02	1.0E-02
1000 - 1100	14	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.8E+00	1.4E+00	4.3E-01	1.3E-02	1.3E-02	4	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.8E+00	1.4E+00	4.3E-01	1.3E-02	1.3E-02
1100 - 1200	18	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	2.3E+00	1.8E+00	5.6E-01	1.7E-02	1.7E-02	5	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	2.3E+00	1.8E+00	5.6E-01	1.7E-02	1.7E-02
1200 - 1300	13	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.7E+00	1.3E+00	4.0E-01	1.2E-02	1.2E-02	4	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.7E+00	1.3E+00	4.0E-01	1.2E-02	1.2E-02
1300 - 1400	13	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.7E+00	1.3E+00	4.0E-01	1.2E-02	1.2E-02	4	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.7E+00	1.3E+00	4.0E-01	1.2E-02	1.2E-02
1400 - 1500	13	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.7E+00	1.3E+00	4.0E-01	1.2E-02	1.2E-02	4	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.7E+00	1.3E+00	4.0E-01	1.2E-02	1.2E-02
1500 - 1600	13	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.7E+00	1.3E+00	4.0E-01	1.2E-02	1.2E-02	4	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.7E+00	1.3E+00	4.0E-01	1.2E-02	1.2E-02
1600 - 1700	8	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.0E+00	7.9E-01	2.5E-01	7.4E-03	7.4E-03	3	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.0E+00	7.9E-01	2.5E-01	7.4E-03	7.4E-03
1700 - 1800	11	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.4E+00	1.1E+00	3.4E-01	1.0E-02	1.0E-02	3	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.4E+00	1.1E+00	3.4E-01	1.0E-02	1.0E-02
1800 - 1900	12	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.6E+00	1.2E+00	3.7E-01	1.1E-02	1.1E-02	4	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.6E+00	1.2E+00	3.7E-01	1.1E-02	1.1E-02
1900 - 2000	10	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.3E+00	9.9E-01	3.1E-01	9.2E-03	9.2E-03	3	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.3E+00	9.9E-01	3.1E-01	9.2E-03	9.2E-03
2000 - 2100	9	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.2E+00	8.9E-01	2.8E-01	8.3E-03	8.3E-03	3	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.2E+00	8.9E-01	2.8E-01	8.3E-03	8.3E-03
2100 - 2200	11	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.4E+00	1.1E+00	3.4E-01	1.0E-02	1.0E-02	3	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.4E+00	1.1E+00	3.4E-01	1.0E-02	1.0E-02
2200 - 2300	7	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	9.1E-01	6.9E-01	2.2E-01	6.5E-03	6.5E-03	2	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	9.1E-01	6.9E-01	2.2E-01	6.5E-03	6.5E-03
2300 - 2400	24	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	3.1E+00	2.4E+00	7.4E-01	2.2E-02	2.2E-02	8	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	3.1E+00	2.4E+00	7.4E-01	2.2E-02	2.2E-02
Daily Total	224											68										

Total Hourly Emission

Hour	Total Emission inside bus terminus (g) (Running + Idling + Start) [8]					Total Emission Rate (g/s)				
	NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP
0000 - 0100	1.4E+01	1.2E+01	2.2E+00	1.5E-01	1.4E-01	3.9E-03	3.3E-03	6.0E-04	4.1E-05	3.8E-05
0100 - 0200	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0600 - 0700	6.0E+00	5.0E+00	9.9E-01	1.3E-01	1.2E-01	1.7E-03	1.4E-03	2.7E-04	3.7E-05	3.5E-05
0700 - 0800	9.8E+00	7.8E+00	2.0E+00	2.7E-01	2.5E-01	2.7E-03	2.2E-03	5.6E-04	7.6E-05	7.0E-05
0800 - 0900	1.6E+01	1.3E+01	2.6E+00	3.4E-01	3.2E-01	4.4E-03	3.7E-03	7.1E-04	9.6E-05	8.9E-05
0900 - 1000	9.8E+00	7.9E+00	1.9E+00	2.7E-01	2.5E-01	2.7E-03	2.2E-03	5.2E-04	7.5E-05	6.9E-05
1000 - 1100	1.7E+01	1.5E+01	2.8E+00	4.0E-01	3.7E-01	4.8E-03	4.0E-03	7.8E-04	1.1E-04	1.0E-04
1100 - 1200	1.9E+01	1.6E+01	3.2E+00	4.5E-01	4.2E-01	5.2E-03	4.3E-03	8.9E-04	1.2E-04	1.2E-04
1200 - 1300	1.2E+01	9.8E+00	2.3E+00	3.1E-01	2.9E-01	3.3E-03	2.7E-03	6.3E-04	8.7E-05	8.1E-05
1300 - 1400	1.3E+01	1.1E+01	2.4E+00	3.4E-01	3.2E-01	3.7E-03	3.0E-03	6.7E-04	9.5E-05	8.8E-05
1400 - 1500	1.4E+01	1.1E+01	2.5E+00	3.6E-01	3.3E-01	3.8E-03	3.1E-03	6.8E-04	9.9E-05	9.2E-05
1500 - 1600	1.5E+01	1.2E+01	2.6E+00	3.4E-01	3.2E-01	4.0E-03	3.3E-03	7.1E-04	9.5E-05	8.8E-05
1600 - 1700	7.1E+00	5.8E+00	1.4E+00	1.9E-01	1.8E-01	2.0E-03	1.6E-03	3.8E-04	5.4E-05	5.0E-05
1700 - 1800	9.9E+00	8.1E+00	1.9E+00	2.7E-01	2.5E-01	2.8E-03	2.2E-03	5.3E-04	7.5E-05	6.9E-05
1800 - 1900	9.9E+00	8.0E+00	1.9E+00	2.7E-01	2.5E-01	2.7E-03	2.2E-03	5.3E-04	7.5E-05	7.0E-05
1900 - 2000	1.3E+01	1.1E+01	2.2E+00	3.1E-01	2.9E-01	3.7E-03	3.1E-03	6.1E-04	8.6E-05	8.0E-05
2000 - 2100	1.1E+01	8.9E+00	1.7E+00	2.4E-01	2.2E-01	2.9E-03	2.5E-03	4.6E-04	6.6E-05	6.1E-05
2100 - 2200	1.1E+01	8.7E+00	1.8E+00	2.6E-01	2.4E-01	2.9E-03	2.4E-03	5.1E-04	7.1E-05	6.6E-05
2200 - 2300	7.1E+00	5.9E+00	1.2E+00	1.7E-01	1.5E-01	2.0E-03	1.7E-03	3.3E-04	4.6E-05	4.3E-05
2300 - 2400	4.8E+01	4.0E+01	7.7E+00	8.0E-01	7.4E-01	1.3E-02	1.1E-02	2.1E-03	2.2E-04	2.0E-04
						max:	1.1E-02	2.1E-03	2.2E-04	2.0E-04

PTI opening hourly emission factor

NO	NO_2	RSP	FSP
0.30	0.28	0.18	0.18
0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00
0.12	0.13	0.17	0.17
0.19	0.26	0.34	0.34
0.33	0.33	0.43	0.43
0.20	0.24	0.34	0.34
0.36	0.36	0.50	0.50
0.38	0.41	0.56	0.56
0.24	0.29	0.39	0.40
0.27	0.31	0.43	0.43
0.28	0.32	0.45	0.45
0.30	0.33	0.43	0.43
0.14	0.18	0.24	0.24
0.20	0.25	0.34	0.34
0.20	0.25	0.34	0.34
0.27	0.28	0.39	0.39
0.22	0.22	0.30	0.30
0.22	0.24	0.32	0.32
0.15	0.15	0.21	0.21
1.00	1.00	1.00	1.00

Remarks:

[1] Idling Emission (g) = Idling Emission Factor (g/s) * Actual Idling time (min) * 60 * Frequency

[2] Total Idling Emission (g) = Cold Idling Emission of PLB (g) + Hot Idling Emission of PLB (g)

[3] If Actual Idling Time ≤ 1 min, Idling Emission for Start Emission Adjustment (g) = Idling rate (g/min) * Actual Idling Time (min)

If Actual Idling Time > 1 min, Idling Emission for Start Emission Adjustment (g) = Idling rate (g/min) * Maximum Duration for Adjusting Start Emission "K" (min)

Where Idling rate (g/min) = Total Idling Emission (g) / Idling Time (min), and "K" = 1 min for LPG PLB

[4] Adjusted Start Emission within bus terminus (g) = [Total Start Emission of PLB (Diesel) (g) - Idling Emission for Start Emission Adjustment (g)] * [Average Distance from Starting Place to Egress (m) / 700m]

Minimum value = 0 g

[5] Adjusted Start Emission outside bus terminus (g) = [Total Start Emission of PLB (Diesel) (g) - Idling Emission for Start Emission Adjustment (g)] * [Average Spread Distance outside bus terminus (m) / 700m]

Minimum value = 0 g

[6] Adjusted Start Emission within bus terminus (g) = [Total Start Emission of PLB (LPG) (g) - Idling Emission for Start Emission Adjustment (g)] * [Average Distance from Starting Place to Egress (m) / 150m]

Minimum value = 0 g

[7] Adjusted Start Emission outside bus terminus (g) = [Total Start Emission of PLB (LPG) (g) - Idling Emission for Start Emission Adjustment (g)] * [Average Spread Distance outside bus terminus (m) / 150m]

Minimum value = 0 g

[8] Total Emission Inside bus terminus (g) = Total Running Emission (g) + Idling Emission (g) + Adjusted Start Emission within bus terminus (g)

Hong Kong Station Bus Terminus (PLB)

Minimum Hourly Temperature and Relative Humidity for 3rd Quarter

Temperature: 24 °C

Relative Humidity: 38 %

Start Emission

No. of PLB (Diesel) to No. of PLB (LPG) Ratio	3.2

	Public Light Buses (PLB) Start Emission Factor (g/trip)																	
NOx	4.0E-01	6.1E-01	9.6E-01	1.3E+00	1.5E+00	1.7E+00	1.9E+00	2.0E+00	2.2E+00	2.4E+00	2.5E+00	2.7E+00	2.8E+00	2.8E+00	2.8E+00	2.8E+00	2.8E+00	2.8E+00
NO	3.8E-01	5.9E-01	9.2E-01	1.2E+00	1.4E+00	1.6E+00	1.8E+00	1.9E+00	2.0E+00	2.1E+00	2.2E+00	2.3E+00	2.4E+00	2.4E+00	2.4E+00	2.4E+00	2.4E+00	2.4E+00
NO2	1.4E-02	2.5E-02	3.4E-02	4.8E-02	5.9E-02	7.8E-02	1.1E-01	1.4E-01	2.0E-01	2.5E-01	2.8E-01	3.3E-01	3.7E-01	3.8E-01	3.9E-01	4.0E-01	4.1E-01	4.1E-01
RSP	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
FSP	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00

Soaking Time (min) / Hour	No. of Trips of PLB (Diesel)																	
	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	1	0	0	0	1	1
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	0
0600 - 0700	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
0700 - 0800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0800 - 0900	1	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
0900 - 1000	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1000 - 1100	3	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
1100 - 1200	1	1	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0
1200 - 1300	1	1	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
1300 - 1400	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1400 - 1500	3	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
1500 - 1600	1	0	1	0	0	0	1	0	0	1	1	1	0	0	0	0	0	0
1600 - 1700	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1700 - 1800	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1800 - 1900	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
1900 - 2000	1	1	1	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0
2000 - 2100	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
2100 - 2200	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2200 - 2300	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2300 - 2400	2	2	0	0	0	0	0	1	0	0	0	0	1	9	1	0	0	1
																Daily Total	76	

Total Start Emission of PLB (Diesel) (g)				
NOx	**NO**	**NO2**	**RSP**	**FSP**
8.3E+00	7.2E+00	1.2E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2.6E+00	2.4E+00	1.6E-01	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
3.0E+00	2.8E+00	1.8E-01	0.0E+00	0.0E+00
8.0E-01	7.7E-01	2.9E-02	0.0E+00	0.0E+00
4.6E+00	4.4E+00	1.8E-01	0.0E+00	0.0E+00
5.0E+00	4.8E+00	2.0E-01	0.0E+00	0.0E+00
4.6E+00	4.2E+00	4.1E-01	0.0E+00	0.0E+00
2.2E+00	2.2E+00	9.0E-02	0.0E+00	0.0E+00
4.5E+00	4.3E+00	1.8E-01	0.0E+00	0.0E+00
1.1E+01	9.8E+00	1.0E+00	0.0E+00	0.0E+00
4.0E-01	3.8E-01	1.4E-02	0.0E+00	0.0E+00
1.2E+00	1.2E+00	4.3E-02	0.0E+00	0.0E+00
1.9E+00	1.8E+00	7.4E-02	0.0E+00	0.0E+00
6.9E+00	6.5E+00	3.8E-01	0.0E+00	0.0E+00
2.5E+00	2.4E+00	9.9E-02	0.0E+00	0.0E+00
1.9E+00	1.8E+00	6.9E-02	0.0E+00	0.0E+00
9.6E-01	9.2E-01	3.4E-02	0.0E+00	0.0E+00
3.8E+01	3.3E+01	4.8E+00	0.0E+00	0.0E+00

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.
[2] Population ratio of PLB (Diesel) to PLB (LPG) was extracted from Year 2028 data of EMFAC-HK.

Idling Emission - Terminating Public Light Buses

Idling Time for Terminating Public Light Buses	1	min
Max. Idling Time for Adjusting Start Emission =	1	min

Hour	PLB (Diesel)											PLB (Diesel)										
	Frequenc	Cold Idling Emission Factor (g/s)					Cold Idling Emission (g) [1]					Frequenc	Hot Idling Emission Factor (g/s)					Hot Idling Emission (g) [1]				
	y	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**	y	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**
0000 - 0100	3	1.0E-03	8.1E-04	1.9E-04	7.2E-06	7.2E-06	1.8E-01	1.5E-01	3.5E-02	1.3E-03	1.3E-03	0	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0100 - 0200	0	1.0E-03	8.1E-04	1.9E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0	1.0E-03	8.1E-04	1.9E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0	1.0E-03	8.1E-04	1.9E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0	1.0E-03	8.1E-04	1.9E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0	1.0E-03	8.1E-04	1.9E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0600 - 0700	1	1.0E-03	8.1E-04	1.9E-04	7.2E-06	7.2E-06	6.0E-02	4.8E-02	1.2E-02	4.3E-04	4.3E-04	1	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	3.5E-02	2.8E-02	6.7E-03	4.3E-04	4.3E-04
0700 - 0800	0	1.0E-03	8.1E-04	1.9E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0800 - 0900	1	1.0E-03	8.1E-04	1.9E-04	7.2E-06	7.2E-06	6.0E-02	4.8E-02	1.2E-02	4.3E-04	4.3E-04	2	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	6.9E-02	5.6E-02	1.3E-02	8.7E-04	8.7E-04
0900 - 1000	0	1.0E-03	8.1E-04	1.9E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	2	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	6.9E-02	5.6E-02	1.3E-02	8.7E-04	8.7E-04
1000 - 1100	0	1.0E-03	8.1E-04	1.9E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	6	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	2.1E-01	1.7E-01	4.0E-02	2.6E-03	2.6E-03
1100 - 1200	0	1.0E-03	8.1E-04	1.9E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	5	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	1.7E-01	1.4E-01	3.3E-02	2.2E-03	2.2E-03
1200 - 1300	1	1.0E-03	8.1E-04	1.9E-04	7.2E-06	7.2E-06	6.0E-02	4.8E-02	1.2E-02	4.3E-04	4.3E-04	3	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	1.0E-01	8.4E-02	2.0E-02	1.3E-03	1.3E-03
1300 - 1400	0	1.0E-03	8.1E-04	1.9E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	4	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	1.4E-01	1.1E-01	2.7E-02	1.7E-03	1.7E-03
1400 - 1500	0	1.0E-03	8.1E-04	1.9E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	6	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	2.1E-01	1.7E-01	4.0E-02	2.6E-03	2.6E-03
1500 - 1600	4	1.0E-03	8.1E-04	1.9E-04	7.2E-06	7.2E-06	2.4E-01	1.9E-01	4.6E-02	1.7E-03	1.7E-03	2	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	6.9E-02	5.6E-02	1.3E-02	8.7E-04	8.7E-04
1600 - 1700	0	1.0E-03	8.1E-04	1.9E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	3.5E-02	2.8E-02	6.7E-03	4.3E-04	4.3E-04
1700 - 1800	0	1.0E-03	8.1E-04	1.9E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	3	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	1.0E-01	8.4E-02	2.0E-02	1.3E-03	1.3E-03
1800 - 1900	0	1.0E-03	8.1E-04	1.9E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	2	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	6.9E-02	5.6E-02	1.3E-02	8.7E-04	8.7E-04
1900 - 2000	1	1.0E-03	8.1E-04	1.9E-04	7.2E-06	7.2E-06	6.0E-02	4.8E-02	1.2E-02	4.3E-04	4.3E-04	5	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	1.7E-01	1.4E-01	3.3E-02	2.2E-03	2.2E-03
2000 - 2100	0	1.0E-03	8.1E-04	1.9E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	3	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	1.0E-01	8.4E-02	2.0E-02	1.3E-03	1.3E-03
2100 - 2200	0	1.0E-03	8.1E-04	1.9E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	2	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	6.9E-02	5.6E-02	1.3E-02	8.7E-04	8.7E-04
2200 - 2300	0	1.0E-03	8.1E-04	1.9E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	3.5E-02	2.8E-02	6.7E-03	4.3E-04	4.3E-04
2300 - 2400	13	1.0E-03	8.1E-04	1.9E-04	7.2E-06	7.2E-06	7.8E-01	6.3E-01	1.5E-01	5.6E-03	5.6E-03	4	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	1.4E-01	1.1E-01	2.7E-02	1.7E-03	1.7E-03
Daily Total	24											52										

Average Distance from Starting Place to Egress =	185	m
Average Spread Distance outside bus terminus =	515	m

Hour	Total Idling Emission (g) [2]					Idling Emission for Start Emission Adjustment (g) [3]					Adjusted Start Emission within bus terminus (g) [4]					Adjusted Start Emission outside bus terminus (g) [5]					Start Emission Rate outside bus terminus (g/s)				
	NOx	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**
0000 - 0100	1.8E-01	1.5E-01	3.5E-02	1.3E-03	1.3E-03	1.8E-01	1.5E-01	3.5E-02	1.3E-03	1.3E-03	2.2E+00	1.9E+00	3.0E-01	0.0E+00	0.0E+00	6.0E+00	5.2E+00	8.5E-01	0.0E+00	0.0E+00	1.7E-03	1.4E-03	2.4E-04	0.0E+00	0.0E+00
0100 - 0200	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0600 - 0700	9.5E-02	7.6E-02	1.8E-02	8.7E-04	8.7E-04	9.5E-02	7.6E-02	1.8E-02	8.7E-04	8.7E-04	6.6E-01	6.3E-01	3.8E-02	0.0E+00	0.0E+00	1.8E+00	1.7E+00	1.1E-01	0.0E+00	0.0E+00	5.1E-04	4.8E-04	2.9E-05	0.0E+00	0.0E+00
0700 - 0800	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0800 - 0900	1.3E-01	1.0E-01	2.5E-02	1.3E-03	1.3E-03	1.3E-01	1.0E-01	2.5E-02	1.3E-03	1.3E-03	7.6E-01	7.2E-01	4.0E-02	0.0E+00	0.0E+00	2.1E+00	2.0E+00	1.1E-01	0.0E+00	0.0E+00	5.9E-04	5.6E-04	3.1E-05	0.0E+00	0.0E+00
0900 - 1000	6.9E-02	5.6E-02	1.3E-02	8.7E-04	8.7E-04	6.9E-02	5.6E-02	1.3E-02	8.7E-04	8.7E-04	1.9E-01	1.9E-01	4.1E-03	0.0E+00	0.0E+00	5.4E-01	5.3E-01	1.1E-02	0.0E+00	0.0E+00	1.5E-04	1.5E-04	3.2E-06	0.0E+00	0.0E+00
1000 - 1100	2.1E-01	1.7E-01	4.0E-02	2.6E-03	2.6E-03	2.1E-01	1.7E-01	4.0E-02	2.6E-03	2.6E-03	1.2E+00	1.1E+00	3.6E-02	0.0E+00	0.0E+00	3.2E+00	3.1E+00	1.0E-01	0.0E+00	0.0E+00	8.9E-04	8.6E-04	2.8E-05	0.0E+00	0.0E+00
1100 - 1200	1.7E-01	1.4E-01	3.3E-02	2.2E-03	2.2E-03	1.7E-01	1.4E-01	3.3E-02	2.2E-03	2.2E-03	1.3E+00	1.2E+00	4.3E-02	0.0E+00	0.0E+00	3.6E+00	3.5E+00	1.2E-01	0.0E+00	0.0E+00	9.9E-04	9.6E-04	3.3E-05	0.0E+00	0.0E+00
1200 - 1300	1.6E-01	1.3E-01	3.2E-02	1.7E-03	1.7E-03	1.6E-01	1.3E-01	3.2E-02	1.7E-03	1.7E-03	1.2E+00	1.1E+00	1.0E-01	0.0E+00	0.0E+00	3.3E+00	3.0E+00	2.8E-01	0.0E+00	0.0E+00	9.1E-04	8.4E-04	7.7E-05	0.0E+00	0.0E+00
1300 - 1400	1.4E-01	1.1E-01	2.7E-02	1.7E-03	1.7E-03	1.4E-01	1.1E-01	2.7E-02	1.7E-03	1.7E-03	5.6E-01	5.4E-01	1.7E-02	0.0E+00	0.0E+00	1.5E+00	1.5E+00	4.7E-02	0.0E+00	0.0E+00	4.3E-04	4.2E-04	1.3E-05	0.0E+00	0.0E+00
1400 - 1500	2.1E-01	1.7E-01	4.0E-02	2.6E-03	2.6E-03	2.1E-01	1.7E-01	4.0E-02	2.6E-03	2.6E-03	1.1E+00	1.1E+00	3.7E-02	0.0E+00	0.0E+00	3.1E+00	3.0E+00	1.0E-01	0.0E+00	0.0E+00	8.7E-04	8.4E-04	2.9E-05	0.0E+00	0.0E+00
1500 - 1600	3.1E-01	2.5E-01	6.0E-02	2.6E-03	2.6E-03	3.1E-01	2.5E-01	6.0E-02	2.6E-03	2.6E-03	2.8E+00	2.5E+00	2.6E-01	0.0E+00	0.0E+00	7.7E+00	7.0E+00	7.2E-01	0.0E+00	0.0E+00	2.1E-03	1.9E-03	2.0E-04	0.0E+00	0.0E+00
1600 - 1700	3.5E-02	2.8E-02	6.7E-03	4.3E-04	4.3E-04	3.5E-02	2.8E-02	6.7E-03	4.3E-04	4.3E-04	9.6E-02	9.4E-02	2.0E-03	0.0E+00	0.0E+00	2.7E-01	2.6E-01	5.7E-03	0.0E+00	0.0E+00	7.5E-05	7.3E-05	1.6E-06	0.0E+00	0.0E+00
1700 - 1800	1.0E-01	8.4E-02	2.0E-02	1.3E-03	1.3E-03	1.0E-01	8.4E-02	2.0E-02	1.3E-03	1.3E-03	2.9E-01	2.8E-01	6.1E-03	0.0E+00	0.0E+00	8.0E-01	7.9E-01	1.7E-02	0.0E+00	0.0E+00	2.2E-04	2.2E-04	4.7E-06	0.0E+00	0.0E+00
1800 - 1900	6.9E-02	5.6E-02	1.3E-02	8.7E-04	8.7E-04	6.9E-02	5.6E-02	1.3E-02	8.7E-04	8.7E-04	4.8E-01	4.7E-01	1.6E-02	0.0E+00	0.0E+00	1.3E+00	1.3E+00	4.4E-02	0.0E+00	0.0E+00	3.7E-04	3.6E-04	1.2E-05	0.0E+00	0.0E+00
1900 - 2000	2.3E-01	1.9E-01	4.5E-02	2.6E-03	2.6E-03	2.3E-01	1.9E-01	4.5E-02	2.6E-03	2.6E-03	1.8E+00	1.7E+00	8.8E-02	0.0E+00	0.0E+00	4.9E+00	4.7E+00	2.5E-01	0.0E+00	0.0E+00	1.4E-03	1.3E-03	6.8E-05	0.0E+00	0.0E+00
2000 - 2100	1.0E-01	8.4E-02	2.0E-02	1.3E-03	1.3E-03	1.0E-01	8.4E-02	2.0E-02	1.3E-03	1.3E-03	6.4E-01	6.1E-01	2.1E-02	0.0E+00	0.0E+00	1.8E+00	1.7E+00	5.8E-02	0.0E+00	0.0E+00	4.9E-04	4.8E-04	1.6E-05	0.0E+00	0.0E+00
2100 - 2200	6.9E-02	5.6E-02	1.3E-02	8.7E-04	8.7E-04	6.9E-02	5.6E-02	1.3E-02	8.7E-04	8.7E-04	4.9E-01	4.7E-01	1.5E-02	0.0E+00	0.0E+00	1.4E+00	1.3E+00	4.1E-02	0.0E+00	0.0E+00	3.8E-04	3.7E-04	1.1E-05	0.0E+00	0.0E+00
2200 - 2300	3.5E-02	2.8E-02	6.7E-03	4.3E-04	4.3E-04	3.5E-02	2.8E-02	6.7E-03	4.3E-04	4.3E-04	2.4E-01	2.4E-01	7.3E-03	0.0E+00	0.0E+00	6.8E-01	6.6E-01	2.0E-02	0.0E+00	0.0E+00	1.9E-04	1.8E-04	5.7E-06	0.0E+00	0.0E+00
2300 - 2400	9.2E-01	7.4E-01	1.8E-01	7.4E-03	7.4E-03	9.2E-01	7.4E-01	1.8E-01	7.4E-03	7.4E-03	9.7E+00	8.5E+00	1.2E+00	0.0E+00	0.0E+00	2.7E+01	2.4E+01	3.4E+00	0.0E+00	0.0E+00	7.5E-03	6.5E-03	9.5E-04	0.0E+00	0.0E+00

Start Emission

No. of PLB (Diesel) to No. of PLB (LPG) Ratio	3.2

	Public Light Buses (PLB) Start Emission Factor (g/trip)																	
NOx	4.0E-01	6.1E-01	9.6E-01	1.3E+00	1.5E+00	1.7E+00	1.9E+00	2.0E+00	2.2E+00	2.4E+00	2.5E+00	2.7E+00	2.8E+00	2.8E+00	2.8E+00	2.8E+00	2.8E+00	2.8E+00
NO	3.8E-01	5.9E-01	9.2E-01	1.2E+00	1.4E+00	1.6E+00	1.8E+00	1.9E+00	2.0E+00	2.1E+00	2.2E+00	2.3E+00	2.4E+00	2.4E+00	2.4E+00	2.4E+00	2.4E+00	2.4E+00
NO2	1.4E-02	2.5E-02	3.4E-02	4.8E-02	5.9E-02	7.8E-02	1.1E-01	1.4E-01	2.0E-01	2.5E-01	2.8E-01	3.3E-01	3.7E-01	3.8E-01	3.9E-01	4.0E-01	4.1E-01	4.1E-01
RSP	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
FSP	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00

Soaking Time (min) / Hour	No. of Trips of PLB (LPG)																	
	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	1	0	0	0	1	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	0
0600 - 0700	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0700 - 0800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0800 - 0900	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
0900 - 1000	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1000 - 1100	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1100 - 1200	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1200 - 1300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1300 - 1400	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1400 - 1500	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1500 - 1600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1600 - 1700	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1700 - 1800	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1800 - 1900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1900 - 2000	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2000 - 2100	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
2100 - 2200	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2200 - 2300	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2300 - 2400	1	1	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0
																Daily Total	26	

Total Start Emission of PLB (LPG) (g)				
NOx	**NO**	**NO2**	**RSP**	**FSP**
5.6E+00	4.8E+00	7.8E-01	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
6.1E-01	5.9E-01	2.5E-02	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2.6E+00	2.4E+00	1.6E-01	0.0E+00	0.0E+00
4.0E-01	3.8E-01	1.4E-02	0.0E+00	0.0E+00
2.3E+00	2.2E+00	8.8E-02	0.0E+00	0.0E+00
1.7E+00	1.6E+00	6.3E-02	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1.0E+00	9.7E-01	4.0E-02	0.0E+00	0.0E+00
4.0E-01	3.8E-01	1.4E-02	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
4.0E-01	3.8E-01	1.4E-02	0.0E+00	0.0E+00
4.0E-01	3.8E-01	1.4E-02	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1.0E+00	9.7E-01	4.0E-02	0.0E+00	0.0E+00
1.5E+00	1.4E+00	5.9E-02	0.0E+00	0.0E+00
9.6E-01	9.2E-01	3.4E-02	0.0E+00	0.0E+00
9.6E-01	9.2E-01	3.4E-02	0.0E+00	0.0E+00
9.4E+00	8.2E+00	1.2E+00	0.0E+00	0.0E+00

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.
[2] Population ratio of PLB (Diesel) to PLB (LPG) was extracted from Year 2028 data of EMFAC-HK.

Idling Emission - Terminating Public Light Buses

Idling Time for Terminating Public Light Buses	1	min
Max. Idling Time for Adjusting Start Emission =	1	min

Hour	PLB (LPG)											PLB (LPG)										
	Frequenc	Cold Idling Emission Factor (g/s)					Cold Idling Emission (g) [1]					Frequenc	Hot Idling Emission Factor (g/s)					Hot Idling Emission (g) [1]				
	y	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**	y	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**
0000 - 0100	2	3.8E-03	3.1E-03	7.3E-04	8.4E-06	8.4E-06	4.5E-01	3.7E-01	8.7E-02	1.0E-03	1.0E-03	0	4.9E-03	4.0E-03	9.5E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0100 - 0200	0	3.8E-03	3.1E-03	7.3E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	4.9E-03	4.0E-03	9.5E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0	3.8E-03	3.1E-03	7.3E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	4.9E-03	4.0E-03	9.5E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0	3.8E-03	3.1E-03	7.3E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	4.9E-03	4.0E-03	9.5E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0	3.8E-03	3.1E-03	7.3E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	4.9E-03	4.0E-03	9.5E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0	3.8E-03	3.1E-03	7.3E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	4.9E-03	4.0E-03	9.5E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0600 - 0700	0	3.8E-03	3.1E-03	7.3E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	4.9E-03	4.0E-03	9.5E-04	8.4E-06	8.4E-06	2.9E-01	2.4E-01	5.7E-02	5.0E-04	5.0E-04
0700 - 0800	0	3.8E-03	3.1E-03	7.3E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	4.9E-03	4.0E-03	9.5E-04	8.4E-06	8.4E-06	2.9E-01	2.4E-01	5.7E-02	5.0E-04	5.0E-04
0800 - 0900	1	3.8E-03	3.1E-03	7.3E-04	8.4E-06	8.4E-06	2.3E-01	1.8E-01	4.4E-02	5.0E-04	5.0E-04	1	4.9E-03	4.0E-03	9.5E-04	8.4E-06	8.4E-06	2.9E-01	2.4E-01	5.7E-02	5.0E-04	5.0E-04
0900 - 1000	0	3.8E-03	3.1E-03	7.3E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	4.9E-03	4.0E-03	9.5E-04	8.4E-06	8.4E-06	2.9E-01	2.4E-01	5.7E-02	5.0E-04	5.0E-04
1000 - 1100	0	3.8E-03	3.1E-03	7.3E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	3	4.9E-03	4.0E-03	9.5E-04	8.4E-06	8.4E-06	8.8E-01	7.1E-01	1.7E-01	1.5E-03	1.5E-03
1100 - 1200	0	3.8E-03	3.1E-03	7.3E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	2	4.9E-03	4.0E-03	9.5E-04	8.4E-06	8.4E-06	5.9E-01	4.8E-01	1.1E-01	1.0E-03	1.0E-03
1200 - 1300	0	3.8E-03	3.1E-03	7.3E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	4.9E-03	4.0E-03	9.5E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1300 - 1400	0	3.8E-03	3.1E-03	7.3E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	2	4.9E-03	4.0E-03	9.5E-04	8.4E-06	8.4E-06	5.9E-01	4.8E-01	1.1E-01	1.0E-03	1.0E-03
1400 - 1500	0	3.8E-03	3.1E-03	7.3E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	4.9E-03	4.0E-03	9.5E-04	8.4E-06	8.4E-06	2.9E-01	2.4E-01	5.7E-02	5.0E-04	5.0E-04
1500 - 1600	0	3.8E-03	3.1E-03	7.3E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	4.9E-03	4.0E-03	9.5E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1600 - 1700	0	3.8E-03	3.1E-03	7.3E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	4.9E-03	4.0E-03	9.5E-04	8.4E-06	8.4E-06	2.9E-01	2.4E-01	5.7E-02	5.0E-04	5.0E-04
1700 - 1800	0	3.8E-03	3.1E-03	7.3E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	4.9E-03	4.0E-03	9.5E-04	8.4E-06	8.4E-06	2.9E-01	2.4E-01	5.7E-02	5.0E-04	5.0E-04
1800 - 1900	0	3.8E-03	3.1E-03	7.3E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	4.9E-03	4.0E-03	9.5E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1900 - 2000	0	3.8E-03	3.1E-03	7.3E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	2	4.9E-03	4.0E-03	9.5E-04	8.4E-06	8.4E-06	5.9E-01	4.8E-01	1.1E-01	1.0E-03	1.0E-03
2000 - 2100	0	3.8E-03	3.1E-03	7.3E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	4.9E-03	4.0E-03	9.5E-04	8.4E-06	8.4E-06	2.9E-01	2.4E-01	5.7E-02	5.0E-04	5.0E-04
2100 - 2200	0	3.8E-03	3.1E-03	7.3E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	4.9E-03	4.0E-03	9.5E-04	8.4E-06	8.4E-06	2.9E-01	2.4E-01	5.7E-02	5.0E-04	5.0E-04
2200 - 2300	0	3.8E-03	3.1E-03	7.3E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	4.9E-03	4.0E-03	9.5E-04	8.4E-06	8.4E-06	2.9E-01	2.4E-01	5.7E-02	5.0E-04	5.0E-04
2300 - 2400	3	3.8E-03	3.1E-03	7.3E-04	8.4E-06	8.4E-06	6.8E-01	5.5E-01	1.3E-01	1.5E-03	1.5E-03	2	4.9E-03	4.0E-03	9.5E-04	8.4E-06	8.4E-06	5.9E-01	4.8E-01	1.1E-01	1.0E-03	1.0E-03
Daily Total	6											20										

Average Distance from Starting Place to Egress =	185	m
Average Distance from PTI Egress to Open Road Network	0	m
Average Spread Distance outside bus terminus =	0	m

Hour	Total Idling Emission (g) [2]					Idling Emission for Start Emission Adjustment (g) [3]					Adjusted Start Emission within bus terminus (g) [6]					Adjusted Start Emission outside bus terminus (g) [7]					Start Emission Rate outside bus terminus (g/s)				
	NOx	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**
0000 - 0100	4.5E-01	3.7E-01	8.7E-02	1.0E-03	1.0E-03	4.5E-01	3.7E-01	8.7E-02	1.0E-03	1.0E-03	6.3E+00	5.5E+00	8.5E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0100 - 0200	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0600 - 0700	2.9E-01	2.4E-01	5.7E-02	5.0E-04	5.0E-04	2.9E-01	2.4E-01	5.7E-02	5.0E-04	5.0E-04	3.9E-01	4.3E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0700 - 0800	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0800 - 0900	5.2E-01	4.2E-01	1.0E-01	1.0E-03	1.0E-03	5.2E-01	4.2E-01	1.0E-01	1.0E-03	1.0E-03	2.6E+00	2.5E+00	7.5E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0900 - 1000	2.9E-01	2.4E-01	5.7E-02	5.0E-04	5.0E-04	2.9E-01	2.4E-01	5.7E-02	5.0E-04	5.0E-04	1.3E-01	1.8E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1000 - 1100	8.8E-01	7.1E-01	1.7E-01	1.5E-03	1.5E-03	8.8E-01	7.1E-01	1.7E-01	1.5E-03	1.5E-03	1.7E+00	1.8E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1100 - 1200	5.9E-01	4.8E-01	1.1E-01	1.0E-03	1.0E-03	5.9E-01	4.8E-01	1.1E-01	1.0E-03	1.0E-03	1.3E+00	1.4E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1200 - 1300	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1300 - 1400	5.9E-01	4.8E-01	1.1E-01	1.0E-03	1.0E-03	5.9E-01	4.8E-01	1.1E-01	1.0E-03	1.0E-03	5.2E-01	6.1E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1400 - 1500	2.9E-01	2.4E-01	5.7E-02	5.0E-04	5.0E-04	2.9E-01	2.4E-01	5.7E-02	5.0E-04	5.0E-04	1.3E-01	1.8E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1500 - 1600	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1600 - 1700	2.9E-01	2.4E-01	5.7E-02	5.0E-04	5.0E-04	2.9E-01	2.4E-01	5.7E-02	5.0E-04	5.0E-04	1.3E-01	1.8E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1700 - 1800	2.9E-01	2.4E-01	5.7E-02	5.0E-04	5.0E-04	2.9E-01	2.4E-01	5.7E-02	5.0E-04	5.0E-04	1.3E-01	1.8E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1800 - 1900	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1900 - 2000	5.9E-01	4.8E-01	1.1E-01	1.0E-03	1.0E-03	5.9E-01	4.8E-01	1.1E-01	1.0E-03	1.0E-03	5.2E-01	6.1E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2000 - 2100	2.9E-01	2.4E-01	5.7E-02	5.0E-04	5.0E-04	2.9E-01	2.4E-01	5.7E-02	5.0E-04	5.0E-04	1.5E+00	1.5E+00	3.2E-03	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2100 - 2200	2.9E-01	2.4E-01	5.7E-02	5.0E-04	5.0E-04	2.9E-01	2.4E-01	5.7E-02	5.0E-04	5.0E-04	8.2E-01	8.4E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2200 - 2300	2.9E-01	2.4E-01	5.7E-02	5.0E-04	5.0E-04	2.9E-01	2.4E-01	5.7E-02	5.0E-04	5.0E-04	8.2E-01	8.4E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2300 - 2400	1.3E+00	1.0E+00	2.4E-01	2.5E-03	2.5E-03	1.3E+00	1.0E+00	2.4E-01	2.5E-03	2.5E-03	1.0E+01	8.9E+00	1.2E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00

Running Emission - Terminating and Bypass Public Light Buses

Average Travelling Distance within bus terminus =	275	m
Average Travelling Speed =	10	km/h

Hour	PLB (Diesel + LPG)											
	Frequency	Running Emission Factor (g/km·vehicle)					Running Emission (g)					
		NOx	NO	NO2	RSP	FSP	NOx	NO	NO2	RSP	FSP
0000 - 0100	10	1.1E+00	8.8E-01	2.1E-01	5.0E-02	4.6E-02	3.0E+00	2.4E+00	5.8E-01	1.4E-01	1.3E-01
0100 - 0200	0	1.1E+00	8.8E-01	2.1E-01	5.0E-02	4.6E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0	1.1E+00	8.8E-01	2.1E-01	5.0E-02	4.6E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0	1.1E+00	8.8E-01	2.1E-01	5.0E-02	4.6E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0	1.1E+00	8.8E-01	2.1E-01	5.0E-02	4.6E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0	1.1E+00	8.8E-01	2.1E-01	5.0E-02	4.6E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0600 - 0700	9	1.1E+00	8.8E-01	2.1E-01	5.0E-02	4.6E-02	2.7E+00	2.2E+00	5.2E-01	1.2E-01	1.1E-01
0700 - 0800	18	1.1E+00	8.8E-01	2.1E-01	5.0E-02	4.6E-02	5.4E+00	4.4E+00	1.0E+00	2.5E-01	2.3E-01
0800 - 0900	23	1.1E+00	8.8E-01	2.1E-01	5.0E-02	4.6E-02	6.9E+00	5.6E+00	1.3E+00	3.2E-01	2.9E-01
0900 - 1000	18	1.1E+00	8.8E-01	2.1E-01	5.0E-02	4.6E-02	5.4E+00	4.4E+00	1.0E+00	2.5E-01	2.3E-01
1000 - 1100	27	1.1E+00	8.8E-01	2.1E-01	5.0E-02	4.6E-02	8.1E+00	6.6E+00	1.6E+00	3.7E-01	3.4E-01
1100 - 1200	30	1.1E+00	8.8E-01	2.1E-01	5.0E-02	4.6E-02	9.0E+00	7.3E+00	1.7E+00	4.1E-01	3.8E-01
1200 - 1300	21	1.1E+00	8.8E-01	2.1E-01	5.0E-02	4.6E-02	6.3E+00	5.1E+00	1.2E+00	2.9E-01	2.7E-01
1300 - 1400	23	1.1E+00	8.8E-01	2.1E-01	5.0E-02	4.6E-02	6.9E+00	5.6E+00	1.3E+00	3.2E-01	2.9E-01
1400 - 1500	24	1.1E+00	8.8E-01	2.1E-01	5.0E-02	4.6E-02	7.2E+00	5.8E+00	1.4E+00	3.3E-01	3.0E-01
1500 - 1600	23	1.1E+00	8.8E-01	2.1E-01	5.0E-02	4.6E-02	6.9E+00	5.6E+00	1.3E+00	3.2E-01	2.9E-01
1600 - 1700	13	1.1E+00	8.8E-01	2.1E-01	5.0E-02	4.6E-02	3.9E+00	3.2E+00	7.5E-01	1.8E-01	1.6E-01
1700 - 1800	18	1.1E+00	8.8E-01	2.1E-01	5.0E-02	4.6E-02	5.4E+00	4.4E+00	1.0E+00	2.5E-01	2.3E-01
1800 - 1900	18	1.1E+00	8.8E-01	2.1E-01	5.0E-02	4.6E-02	5.4E+00	4.4E+00	1.0E+00	2.5E-01	2.3E-01
1900 - 2000	21	1.1E+00	8.8E-01	2.1E-01	5.0E-02	4.6E-02	6.3E+00	5.1E+00	1.2E+00	2.9E-01	2.7E-01
2000 - 2100	16	1.1E+00	8.8E-01	2.1E-01	5.0E-02	4.6E-02	4.8E+00	3.9E+00	9.3E-01	2.2E-01	2.0E-01
2100 - 2200	17	1.1E+00	8.8E-01	2.1E-01	5.0E-02	4.6E-02	5.1E+00	4.1E+00	9.9E-01	2.3E-01	2.2E-01
2200 - 2300	11	1.1E+00	8.8E-01	2.1E-01	5.0E-02	4.6E-02	3.3E+00	2.7E+00	6.4E-01	1.5E-01	1.4E-01
2300 - 2400	54	1.1E+00	8.8E-01	2.1E-01	5.0E-02	4.6E-02	1.6E+01	1.3E+01	3.1E+00	7.4E-01	6.8E-01
Daily Total	394										

Idling Emission - Bypass Public Light Buses

No. of PLB (Diesel) to No. of PLB (LPG) Ratio	3.2	
Idling Time for Bypass Public Light Buses	2	min

Hour	PLB (Diesel)											PLB (LPG)										
	Frequency	Hot Idling Emission Factor (g/s)					Hot Idling Emission (g)					Frequency	Hot Idling Emission Factor (g/s)					Hot Idling Emission (g)				
		NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP		NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP
0000 - 0100	4	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	5.2E-01	4.0E-01	1.2E-01	3.7E-03	3.7E-03	1	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	5.2E-01	4.0E-01	1.2E-01	3.7E-03	3.7E-03
0100 - 0200	0	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0600 - 0700	5	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	6.5E-01	5.0E-01	1.5E-01	4.6E-03	4.6E-03	1	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	6.5E-01	5.0E-01	1.5E-01	4.6E-03	4.6E-03
0700 - 0800	14	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.8E+00	1.4E+00	4.3E-01	1.3E-02	1.3E-02	4	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.8E+00	1.4E+00	4.3E-01	1.3E-02	1.3E-02
0800 - 0900	14	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.8E+00	1.4E+00	4.3E-01	1.3E-02	1.3E-02	4	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.8E+00	1.4E+00	4.3E-01	1.3E-02	1.3E-02
0900 - 1000	11	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.4E+00	1.1E+00	3.4E-01	1.0E-02	1.0E-02	4	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.4E+00	1.1E+00	3.4E-01	1.0E-02	1.0E-02
1000 - 1100	14	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.8E+00	1.4E+00	4.3E-01	1.3E-02	1.3E-02	4	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.8E+00	1.4E+00	4.3E-01	1.3E-02	1.3E-02
1100 - 1200	18	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	2.3E+00	1.8E+00	5.6E-01	1.7E-02	1.7E-02	5	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	2.3E+00	1.8E+00	5.6E-01	1.7E-02	1.7E-02
1200 - 1300	13	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.7E+00	1.3E+00	4.0E-01	1.2E-02	1.2E-02	4	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.7E+00	1.3E+00	4.0E-01	1.2E-02	1.2E-02
1300 - 1400	13	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.7E+00	1.3E+00	4.0E-01	1.2E-02	1.2E-02	4	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.7E+00	1.3E+00	4.0E-01	1.2E-02	1.2E-02
1400 - 1500	13	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.7E+00	1.3E+00	4.0E-01	1.2E-02	1.2E-02	4	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.7E+00	1.3E+00	4.0E-01	1.2E-02	1.2E-02
1500 - 1600	13	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.7E+00	1.3E+00	4.0E-01	1.2E-02	1.2E-02	4	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.7E+00	1.3E+00	4.0E-01	1.2E-02	1.2E-02
1600 - 1700	8	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.0E+00	7.9E-01	2.5E-01	7.4E-03	7.4E-03	3	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.0E+00	7.9E-01	2.5E-01	7.4E-03	7.4E-03
1700 - 1800	11	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.4E+00	1.1E+00	3.4E-01	1.0E-02	1.0E-02	3	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.4E+00	1.1E+00	3.4E-01	1.0E-02	1.0E-02
1800 - 1900	12	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.6E+00	1.2E+00	3.7E-01	1.1E-02	1.1E-02	4	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.6E+00	1.2E+00	3.7E-01	1.1E-02	1.1E-02
1900 - 2000	10	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.3E+00	9.9E-01	3.1E-01	9.2E-03	9.2E-03	3	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.3E+00	9.9E-01	3.1E-01	9.2E-03	9.2E-03
2000 - 2100	9	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.2E+00	8.9E-01	2.8E-01	8.3E-03	8.3E-03	3	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.2E+00	8.9E-01	2.8E-01	8.3E-03	8.3E-03
2100 - 2200	11	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.4E+00	1.1E+00	3.4E-01	1.0E-02	1.0E-02	3	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.4E+00	1.1E+00	3.4E-01	1.0E-02	1.0E-02
2200 - 2300	7	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	9.1E-01	6.9E-01	2.2E-01	6.5E-03	6.5E-03	2	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	9.1E-01	6.9E-01	2.2E-01	6.5E-03	6.5E-03
2300 - 2400	24	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	3.1E+00	2.4E+00	7.4E-01	2.2E-02	2.2E-02	8	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	3.1E+00	2.4E+00	7.4E-01	2.2E-02	2.2E-02
Daily Total	224											68										

Total Hourly Emission

Hour	Total Emission inside bus terminus (g) (Running + Idling + Start) [8]					Total Emission Rate (g/s)				
	NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP
0000 - 0100	1.3E+01	1.1E+01	2.1E+00	1.5E-01	1.4E-01	3.7E-03	3.1E-03	5.8E-04	4.1E-05	3.8E-05
0100 - 0200	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0600 - 0700	5.5E+00	4.6E+00	9.4E-01	1.3E-01	1.2E-01	1.5E-03	1.3E-03	2.6E-04	3.7E-05	3.5E-05
0700 - 0800	9.1E+00	7.2E+00	1.9E+00	2.7E-01	2.5E-01	2.5E-03	2.0E-03	5.3E-04	7.6E-05	7.0E-05
0800 - 0900	1.5E+01	1.2E+01	2.4E+00	3.4E-01	3.2E-01	4.0E-03	3.4E-03	6.8E-04	9.6E-05	8.9E-05
0900 - 1000	9.0E+00	7.2E+00	1.8E+00	2.7E-01	2.5E-01	2.5E-03	2.0E-03	5.0E-04	7.5E-05	6.9E-05
1000 - 1100	1.6E+01	1.3E+01	2.7E+00	4.0E-01	3.7E-01	4.4E-03	3.7E-03	7.4E-04	1.1E-04	1.0E-04
1100 - 1200	1.7E+01	1.4E+01	3.0E+00	4.5E-01	4.2E-01	4.7E-03	3.9E-03	8.5E-04	1.2E-04	1.2E-04
1200 - 1300	1.1E+01	8.9E+00	2.2E+00	3.1E-01	2.9E-01	3.1E-03	2.5E-03	6.0E-04	8.7E-05	8.1E-05
1300 - 1400	1.2E+01	9.9E+00	2.3E+00	3.4E-01	3.2E-01	3.4E-03	2.8E-03	6.4E-04	9.5E-05	8.8E-05
1400 - 1500	1.2E+01	1.0E+01	2.3E+00	3.6E-01	3.3E-01	3.4E-03	2.8E-03	6.5E-04	9.9E-05	9.2E-05
1500 - 1600	1.3E+01	1.1E+01	2.5E+00	3.4E-01	3.2E-01	3.7E-03	3.0E-03	6.8E-04	9.5E-05	8.8E-05
1600 - 1700	6.6E+00	5.3E+00	1.3E+00	1.9E-01	1.8E-01	1.8E-03	1.5E-03	3.7E-04	5.4E-05	5.0E-05
1700 - 1800	9.1E+00	7.3E+00	1.8E+00	2.7E-01	2.5E-01	2.5E-03	2.0E-03	5.0E-04	7.5E-05	6.9E-05
1800 - 1900	9.1E+00	7.3E+00	1.8E+00	2.7E-01	2.5E-01	2.5E-03	2.0E-03	5.0E-04	7.5E-05	7.0E-05
1900 - 2000	1.2E+01	1.0E+01	2.1E+00	3.1E-01	2.9E-01	3.3E-03	2.8E-03	5.8E-04	8.6E-05	8.0E-05
2000 - 2100	9.7E+00	8.1E+00	1.6E+00	2.4E-01	2.2E-01	2.7E-03	2.2E-03	4.4E-04	6.6E-05	6.1E-05
2100 - 2200	9.7E+00	7.9E+00	1.8E+00	2.6E-01	2.4E-01	2.7E-03	2.2E-03	4.9E-04	7.1E-05	6.6E-05
2200 - 2300	6.5E+00	5.4E+00	1.1E+00	1.7E-01	1.5E-01	1.8E-03	1.5E-03	3.2E-04	4.6E-05	4.3E-05
2300 - 2400	4.4E+01	3.7E+01	7.4E+00	8.0E-01	7.4E-01	1.2E-02	1.0E-02	2.1E-03	2.2E-04	2.0E-04
						max:	1.0E-02	2.1E-03	2.2E-04	2.0E-04

PTI opening hourly emission factor

NO	NO_2	RSP	FSP
0.30	0.28	0.18	0.18
0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00
0.12	0.13	0.17	0.17
0.19	0.26	0.34	0.34
0.33	0.33	0.43	0.43
0.20	0.24	0.34	0.34
0.36	0.36	0.50	0.50
0.38	0.41	0.56	0.56
0.24	0.29	0.39	0.40
0.27	0.31	0.43	0.43
0.27	0.31	0.45	0.45
0.30	0.33	0.43	0.43
0.14	0.18	0.24	0.24
0.20	0.24	0.34	0.34
0.20	0.24	0.34	0.34
0.27	0.28	0.39	0.39
0.22	0.21	0.30	0.30
0.21	0.24	0.32	0.32
0.15	0.15	0.21	0.21
1.00	1.00	1.00	1.00

Remarks:

[1] Idling Emission (g) = Idling Emission Factor (g/s) * Actual Idling time (min) * 60 * Frequency

[2] Total Idling Emission (g) = Cold Idling Emission of PLB (g) + Hot Idling Emission of PLB (g)

[3] If Actual Idling Time ≤ 1 min, Idling Emission for Start Emission Adjustment (g) = Idling rate (g/min) * Actual Idling Time (min)

If Actual Idling Time > 1 min, Idling Emission for Start Emission Adjustment (g) = Idling rate (g/min) * Maximum Duration for Adjusting Start Emission "K" (min)

Where Idling rate (g/min) = Total Idling Emission (g) / Idling Time (min), and "K" = 1 min for LPG PLB

[4] Adjusted Start Emission within bus terminus (g) = [Total Start Emission of PLB (Diesel) (g) - Idling Emission for Start Emission Adjustment (g)] * [Average Distance from Starting Place to Egress (m) / 700m]

Minimum value = 0 g

[5] Adjusted Start Emission outside bus terminus (g) = [Total Start Emission of PLB (Diesel) (g) - Idling Emission for Start Emission Adjustment (g)] * [Average Spread Distance outside bus terminus (m) / 700m]

Minimum value = 0 g

[6] Adjusted Start Emission within bus terminus (g) = [Total Start Emission of PLB (LPG) (g) - Idling Emission for Start Emission Adjustment (g)] * [Average Distance from Starting Place to Egress (m) / 150m]

Minimum value = 0 g

[7] Adjusted Start Emission outside bus terminus (g) = [Total Start Emission of PLB (LPG) (g) - Idling Emission for Start Emission Adjustment (g)] * [Average Spread Distance outside bus terminus (m) / 150m]

Minimum value = 0 g

[8] Total Emission Inside bus terminus (g) = Total Running Emission (g) + Idling Emission (g) + Adjusted Start Emission within bus terminus (g)

Hong Kong Station Bus Terminus (PLB)

Minimum Hourly Temperature and Relative Humidity for 4th Quarter

Temperature: 10 °C

Relative Humidity: 22 %

Start Emission

No. of PLB (Diesel) to No. of PLB (LPG) Ratio	3.2

	Public Light Buses (PLB) Start Emission Factor (g/trip)																	
NOx	4.6E-01	7.0E-01	1.1E+00	1.4E+00	1.7E+00	1.9E+00	2.1E+00	2.3E+00	2.5E+00	2.7E+00	2.8E+00	2.9E+00	3.0E+00	3.1E+00	3.1E+00	3.1E+00	3.1E+00	3.0E+00
NO	4.4E-01	6.7E-01	1.1E+00	1.4E+00	1.6E+00	1.8E+00	2.0E+00	2.1E+00	2.3E+00	2.4E+00	2.5E+00	2.6E+00	2.7E+00	2.7E+00	2.7E+00	2.7E+00	2.7E+00	2.6E+00
NO2	1.5E-02	2.6E-02	3.5E-02	4.9E-02	6.0E-02	7.9E-02	1.1E-01	1.4E-01	2.0E-01	2.6E-01	2.9E-01	3.4E-01	3.7E-01	3.9E-01	4.0E-01	4.1E-01	4.1E-01	4.1E-01
RSP	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
FSP	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00

Soaking Time (min) / Hour	No. of Trips of PLB (Diesel)																	
	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	1	0	0	0	1	1
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	0
0600 - 0700	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
0700 - 0800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0800 - 0900	1	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
0900 - 1000	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1000 - 1100	3	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
1100 - 1200	1	1	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0
1200 - 1300	1	1	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
1300 - 1400	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1400 - 1500	3	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
1500 - 1600	1	0	1	0	0	0	1	0	0	1	1	1	0	0	0	0	0	0
1600 - 1700	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1700 - 1800	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1800 - 1900	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
1900 - 2000	1	1	1	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0
2000 - 2100	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
2100 - 2200	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2200 - 2300	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2300 - 2400	2	2	0	0	0	0	0	1	0	0	0	0	1	9	1	0	0	1
																Daily Total	76	

Total Start Emission of PLB (Diesel) (g)				
NOx	**NO**	**NO2**	**RSP**	**FSP**
9.1E+00	7.9E+00	1.2E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
3.0E+00	2.8E+00	1.6E-01	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
3.4E+00	3.2E+00	1.8E-01	0.0E+00	0.0E+00
9.1E-01	8.8E-01	2.9E-02	0.0E+00	0.0E+00
5.2E+00	5.0E+00	1.8E-01	0.0E+00	0.0E+00
5.7E+00	5.5E+00	2.0E-01	0.0E+00	0.0E+00
5.2E+00	4.8E+00	4.1E-01	0.0E+00	0.0E+00
2.6E+00	2.5E+00	9.2E-02	0.0E+00	0.0E+00
5.1E+00	4.9E+00	1.8E-01	0.0E+00	0.0E+00
1.2E+01	1.1E+01	1.0E+00	0.0E+00	0.0E+00
4.6E-01	4.4E-01	1.5E-02	0.0E+00	0.0E+00
1.4E+00	1.3E+00	4.4E-02	0.0E+00	0.0E+00
2.2E+00	2.1E+00	7.5E-02	0.0E+00	0.0E+00
7.9E+00	7.5E+00	3.8E-01	0.0E+00	0.0E+00
2.9E+00	2.8E+00	1.0E-01	0.0E+00	0.0E+00
2.2E+00	2.1E+00	7.0E-02	0.0E+00	0.0E+00
1.1E+00	1.1E+00	3.5E-02	0.0E+00	0.0E+00
4.1E+01	3.6E+01	4.9E+00	0.0E+00	0.0E+00

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.
[2] Population ratio of PLB (Diesel) to PLB (LPG) was extracted from Year 2028 data of EMFAC-HK.

Idling Emission - Terminating Public Light Buses

Idling Time for Terminating Public Light Buses	1	min
Max. Idling Time for Adjusting Start Emission =	1	min

Hour	PLB (Diesel)											PLB (Diesel)									
	Frequenc	Cold Idling Emission Factor (g/s)					Cold Idling Emission (g) [1]					Frequenc	Hot Idling Emission Factor (g/s)					Hot Idling Emission (g) [1]				
	y	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**	y	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**
0000 - 0100	3	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	1.8E-01	1.5E-01	3.3E-02	1.3E-03	1.3E-03	0	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0100 - 0200	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0600 - 0700	1	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	6.0E-02	4.9E-02	1.1E-02	4.3E-04	4.3E-04	1	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	3.5E-02	2.8E-02	6.3E-03	4.3E-04	4.3E-04
0700 - 0800	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0800 - 0900	1	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	6.0E-02	4.9E-02	1.1E-02	4.3E-04	4.3E-04	2	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	6.9E-02	5.7E-02	1.3E-02	8.7E-04	8.7E-04
0900 - 1000	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	2	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	6.9E-02	5.7E-02	1.3E-02	8.7E-04	8.7E-04
1000 - 1100	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	6	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	2.1E-01	1.7E-01	3.8E-02	2.6E-03	2.6E-03
1100 - 1200	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	5	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	1.7E-01	1.4E-01	3.2E-02	2.2E-03	2.2E-03
1200 - 1300	1	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	6.0E-02	4.9E-02	1.1E-02	4.3E-04	4.3E-04	3	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	1.0E-01	8.5E-02	1.9E-02	1.3E-03	1.3E-03
1300 - 1400	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	4	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	1.4E-01	1.1E-01	2.5E-02	1.7E-03	1.7E-03
1400 - 1500	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	6	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	2.1E-01	1.7E-01	3.8E-02	2.6E-03	2.6E-03
1500 - 1600	4	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	2.4E-01	2.0E-01	4.4E-02	1.7E-03	1.7E-03	2	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	6.9E-02	5.7E-02	1.3E-02	8.7E-04	8.7E-04
1600 - 1700	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	3.5E-02	2.8E-02	6.3E-03	4.3E-04	4.3E-04
1700 - 1800	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	3	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	1.0E-01	8.5E-02	1.9E-02	1.3E-03	1.3E-03
1800 - 1900	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	2	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	6.9E-02	5.7E-02	1.3E-02	8.7E-04	8.7E-04
1900 - 2000	1	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	6.0E-02	4.9E-02	1.1E-02	4.3E-04	4.3E-04	5	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	1.7E-01	1.4E-01	3.2E-02	2.2E-03	2.2E-03
2000 - 2100	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	3	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	1.0E-01	8.5E-02	1.9E-02	1.3E-03	1.3E-03
2100 - 2200	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	2	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	6.9E-02	5.7E-02	1.3E-02	8.7E-04	8.7E-04
2200 - 2300	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	3.5E-02	2.8E-02	6.3E-03	4.3E-04	4.3E-04
2300 - 2400	13	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	7.8E-01	6.4E-01	1.4E-01	5.6E-03	5.6E-03	4	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	1.4E-01	1.1E-01	2.5E-02	1.7E-03	1.7E-03
Daily Total	24											52										

Average Distance from Starting Place to Egress =	185	m
Average Spread Distance outside bus terminus =	515	m

Hour	Total Idling Emission (g) [2]					Idling Emission for Start Emission Adjustment (g) [3]					Adjusted Start Emission within bus terminus (g) [4]					Adjusted Start Emission outside bus terminus (g) [5]					Start Emission Rate outside bus terminus (g/s)				
	NOx	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**
0000 - 0100	1.8E-01	1.5E-01	3.3E-02	1.3E-03	1.3E-03	1.8E-01	1.5E-01	3.3E-02	1.3E-03	1.3E-03	2.4E+00	2.1E+00	3.1E-01	0.0E+00	0.0E+00	6.6E+00	5.7E+00	8.5E-01	0.0E+00	0.0E+00	1.8E-03	1.6E-03	2.4E-04	0.0E+00	0.0E+00
0100 - 0200	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0600 - 0700	9.5E-02	7.7E-02	1.7E-02	8.7E-04	8.7E-04	9.5E-02	7.7E-02	1.7E-02	8.7E-04	8.7E-04	7.6E-01	7.2E-01	3.9E-02	0.0E+00	0.0E+00	2.1E+00	2.0E+00	1.1E-01	0.0E+00	0.0E+00	5.9E-04	5.6E-04	3.0E-05	0.0E+00	0.0E+00
0700 - 0800	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0800 - 0900	1.3E-01	1.1E-01	2.4E-02	1.3E-03	1.3E-03	1.3E-01	1.1E-01	2.4E-02	1.3E-03	1.3E-03	8.7E-01	8.3E-01	4.1E-02	0.0E+00	0.0E+00	2.4E+00	2.3E+00	1.1E-01	0.0E+00	0.0E+00	6.7E-04	6.4E-04	3.1E-05	0.0E+00	0.0E+00
0900 - 1000	6.9E-02	5.7E-02	1.3E-02	8.7E-04	8.7E-04	6.9E-02	5.7E-02	1.3E-02	8.7E-04	8.7E-04	2.2E-01	2.2E-01	4.4E-03	0.0E+00	0.0E+00	6.2E-01	6.1E-01	1.2E-02	0.0E+00	0.0E+00	1.7E-04	1.7E-04	3.4E-06	0.0E+00	0.0E+00
1000 - 1100	2.1E-01	1.7E-01	3.8E-02	2.6E-03	2.6E-03	2.1E-01	1.7E-01	3.8E-02	2.6E-03	2.6E-03	1.3E+00	1.3E+00	3.7E-02	0.0E+00	0.0E+00	3.7E+00	3.6E+00	1.0E-01	0.0E+00	0.0E+00	1.0E-03	9.9E-04	2.9E-05	0.0E+00	0.0E+00
1100 - 1200	1.7E-01	1.4E-01	3.2E-02	2.2E-03	2.2E-03	1.7E-01	1.4E-01	3.2E-02	2.2E-03	2.2E-03	1.5E+00	1.4E+00	4.4E-02	0.0E+00	0.0E+00	4.1E+00	4.0E+00	1.2E-01	0.0E+00	0.0E+00	1.1E-03	1.1E-03	3.4E-05	0.0E+00	0.0E+00
1200 - 1300	1.6E-01	1.3E-01	3.0E-02	1.7E-03	1.7E-03	1.6E-01	1.3E-01	3.0E-02	1.7E-03	1.7E-03	1.3E+00	1.2E+00	1.0E-01	0.0E+00	0.0E+00	3.7E+00	3.4E+00	2.8E-01	0.0E+00	0.0E+00	1.0E-03	9.5E-04	7.8E-05	0.0E+00	0.0E+00
1300 - 1400	1.4E-01	1.1E-01	2.5E-02	1.7E-03	1.7E-03	1.4E-01	1.1E-01	2.5E-02	1.7E-03	1.7E-03	6.4E-01	6.2E-01	1.8E-02	0.0E+00	0.0E+00	1.8E+00	1.7E+00	4.9E-02	0.0E+00	0.0E+00	4.9E-04	4.8E-04	1.4E-05	0.0E+00	0.0E+00
1400 - 1500	2.1E-01	1.7E-01	3.8E-02	2.6E-03	2.6E-03	2.1E-01	1.7E-01	3.8E-02	2.6E-03	2.6E-03	1.3E+00	1.3E+00	3.8E-02	0.0E+00	0.0E+00	3.6E+00	3.5E+00	1.1E-01	0.0E+00	0.0E+00	1.0E-03	9.7E-04	3.0E-05	0.0E+00	0.0E+00
1500 - 1600	3.1E-01	2.5E-01	5.6E-02	2.6E-03	2.6E-03	3.1E-01	2.5E-01	5.6E-02	2.6E-03	2.6E-03	3.1E+00	2.8E+00	2.6E-01	0.0E+00	0.0E+00	8.6E+00	7.9E+00	7.2E-01	0.0E+00	0.0E+00	2.4E-03	2.2E-03	2.0E-04	0.0E+00	0.0E+00
1600 - 1700	3.5E-02	2.8E-02	6.3E-03	4.3E-04	4.3E-04	3.5E-02	2.8E-02	6.3E-03	4.3E-04	4.3E-04	1.1E-01	1.1E-01	2.2E-03	0.0E+00	0.0E+00	3.1E-01	3.0E-01	6.1E-03	0.0E+00	0.0E+00	8.6E-05	8.4E-05	1.7E-06	0.0E+00	0.0E+00
1700 - 1800	1.0E-01	8.5E-02	1.9E-02	1.3E-03	1.3E-03	1.0E-01	8.5E-02	1.9E-02	1.3E-03	1.3E-03	3.3E-01	3.3E-01	6.6E-03	0.0E+00	0.0E+00	9.3E-01	9.1E-01	1.8E-02	0.0E+00	0.0E+00	2.6E-04	2.5E-04	5.1E-06	0.0E+00	0.0E+00
1800 - 1900	6.9E-02	5.7E-02	1.3E-02	8.7E-04	8.7E-04	6.9E-02	5.7E-02	1.3E-02	8.7E-04	8.7E-04	5.5E-01	5.4E-01	1.6E-02	0.0E+00	0.0E+00	1.5E+00	1.5E+00	4.6E-02	0.0E+00	0.0E+00	4.3E-04	4.1E-04	1.3E-05	0.0E+00	0.0E+00
1900 - 2000	2.3E-01	1.9E-01	4.3E-02	2.6E-03	2.6E-03	2.3E-01	1.9E-01	4.3E-02	2.6E-03	2.6E-03	2.0E+00	1.9E+00	9.0E-02	0.0E+00	0.0E+00	5.6E+00	5.4E+00	2.5E-01	0.0E+00	0.0E+00	1.6E-03	1.5E-03	6.9E-05	0.0E+00	0.0E+00
2000 - 2100	1.0E-01	8.5E-02	1.9E-02	1.3E-03	1.3E-03	1.0E-01	8.5E-02	1.9E-02	1.3E-03	1.3E-03	7.3E-01	7.1E-01	2.2E-02	0.0E+00	0.0E+00	2.0E+00	2.0E+00	6.0E-02	0.0E+00	0.0E+00	5.6E-04	5.5E-04	1.7E-05	0.0E+00	0.0E+00
2100 - 2200	6.9E-02	5.7E-02	1.3E-02	8.7E-04	8.7E-04	6.9E-02	5.7E-02	1.3E-02	8.7E-04	8.7E-04	5.6E-01	5.4E-01	1.5E-02	0.0E+00	0.0E+00	1.6E+00	1.5E+00	4.2E-02	0.0E+00	0.0E+00	4.3E-04	4.2E-04	1.2E-05	0.0E+00	0.0E+00
2200 - 2300	3.5E-02	2.8E-02	6.3E-03	4.3E-04	4.3E-04	3.5E-02	2.8E-02	6.3E-03	4.3E-04	4.3E-04	2.8E-01	2.7E-01	7.6E-03	0.0E+00	0.0E+00	7.8E-01	7.6E-01	2.1E-02	0.0E+00	0.0E+00	2.2E-04	2.1E-04	5.9E-06	0.0E+00	0.0E+00
2300 - 2400	9.2E-01	7.5E-01	1.7E-01	7.4E-03	7.4E-03	9.2E-01	7.5E-01	1.7E-01	7.4E-03	7.4E-03	1.1E+01	9.4E+00	1.2E+00	0.0E+00	0.0E+00	3.0E+01	2.6E+01	3.5E+00	0.0E+00	0.0E+00	8.3E-03	7.3E-03	9.6E-04	0.0E+00	0.0E+00

Start Emission

No. of PLB (Diesel) to No. of PLB (LPG) Ratio	3.2

	Public Light Buses (PLB) Start Emission Factor (g/trip)																	
NOx	4.6E-01	7.0E-01	1.1E+00	1.4E+00	1.7E+00	1.9E+00	2.1E+00	2.3E+00	2.5E+00	2.7E+00	2.8E+00	2.9E+00	3.0E+00	3.1E+00	3.1E+00	3.1E+00	3.1E+00	3.0E+00
NO	4.4E-01	6.7E-01	1.1E+00	1.4E+00	1.6E+00	1.8E+00	2.0E+00	2.1E+00	2.3E+00	2.4E+00	2.5E+00	2.6E+00	2.7E+00	2.7E+00	2.7E+00	2.7E+00	2.7E+00	2.6E+00
NO2	1.5E-02	2.6E-02	3.5E-02	4.9E-02	6.0E-02	7.9E-02	1.1E-01	1.4E-01	2.0E-01	2.6E-01	2.9E-01	3.4E-01	3.7E-01	3.9E-01	4.0E-01	4.1E-01	4.1E-01	4.1E-01
RSP	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
FSP	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00

Soaking Time (min) / Hour	No. of Trips of PLB (LPG)																	
	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	1	0	0	0	1	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	0
0600 - 0700	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0700 - 0800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0800 - 0900	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
0900 - 1000	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1000 - 1100	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1100 - 1200	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1200 - 1300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1300 - 1400	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1400 - 1500	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1500 - 1600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1600 - 1700	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1700 - 1800	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1800 - 1900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1900 - 2000	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2000 - 2100	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
2100 - 2200	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2200 - 2300	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2300 - 2400	1	1	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0
																Daily Total	26	

Total Start Emission of PLB (LPG) (g)				
NOx	**NO**	**NO2**	**RSP**	**FSP**
6.1E+00	5.3E+00	7.8E-01	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
7.0E-01	6.7E-01	2.6E-02	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
3.0E+00	2.8E+00	1.6E-01	0.0E+00	0.0E+00
4.6E-01	4.4E-01	1.5E-02	0.0E+00	0.0E+00
2.6E+00	2.5E+00	9.0E-02	0.0E+00	0.0E+00
1.9E+00	1.8E+00	6.4E-02	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1.2E+00	1.1E+00	4.0E-02	0.0E+00	0.0E+00
4.6E-01	4.4E-01	1.5E-02	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
4.6E-01	4.4E-01	1.5E-02	0.0E+00	0.0E+00
4.6E-01	4.4E-01	1.5E-02	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1.2E+00	1.1E+00	4.0E-02	0.0E+00	0.0E+00
1.7E+00	1.6E+00	6.0E-02	0.0E+00	0.0E+00
1.1E+00	1.1E+00	3.5E-02	0.0E+00	0.0E+00
1.1E+00	1.1E+00	3.5E-02	0.0E+00	0.0E+00
1.0E+01	9.2E+00	1.2E+00	0.0E+00	0.0E+00

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.
[2] Population ratio of PLB (Diesel) to PLB (LPG) was extracted from Year 2028 data of EMFAC-HK.

Idling Emission - Terminating Public Light Buses

Idling Time for Terminating Public Light Buses	1	min
Max. Idling Time for Adjusting Start Emission =	1	min

Hour	PLB (LPG)											PLB (LPG)										
	Frequenc	Cold Idling Emission Factor (g/s)					Cold Idling Emission (g) [1]					Frequenc	Hot Idling Emission Factor (g/s)					Hot Idling Emission (g) [1]				
	y	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**	y	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**
0000 - 0100	2	3.8E-03	3.1E-03	6.9E-04	8.4E-06	8.4E-06	4.5E-01	3.7E-01	8.3E-02	1.0E-03	1.0E-03	0	4.9E-03	4.0E-03	9.0E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0100 - 0200	0	3.8E-03	3.1E-03	6.9E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	4.9E-03	4.0E-03	9.0E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0	3.8E-03	3.1E-03	6.9E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	4.9E-03	4.0E-03	9.0E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0	3.8E-03	3.1E-03	6.9E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	4.9E-03	4.0E-03	9.0E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0	3.8E-03	3.1E-03	6.9E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	4.9E-03	4.0E-03	9.0E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0	3.8E-03	3.1E-03	6.9E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	4.9E-03	4.0E-03	9.0E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0600 - 0700	0	3.8E-03	3.1E-03	6.9E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	4.9E-03	4.0E-03	9.0E-04	8.4E-06	8.4E-06	2.9E-01	2.4E-01	5.4E-02	5.0E-04	5.0E-04
0700 - 0800	0	3.8E-03	3.1E-03	6.9E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	4.9E-03	4.0E-03	9.0E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0800 - 0900	1	3.8E-03	3.1E-03	6.9E-04	8.4E-06	8.4E-06	2.3E-01	1.9E-01	4.1E-02	5.0E-04	5.0E-04	1	4.9E-03	4.0E-03	9.0E-04	8.4E-06	8.4E-06	2.9E-01	2.4E-01	5.4E-02	5.0E-04	5.0E-04
0900 - 1000	0	3.8E-03	3.1E-03	6.9E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	4.9E-03	4.0E-03	9.0E-04	8.4E-06	8.4E-06	2.9E-01	2.4E-01	5.4E-02	5.0E-04	5.0E-04
1000 - 1100	0	3.8E-03	3.1E-03	6.9E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	3	4.9E-03	4.0E-03	9.0E-04	8.4E-06	8.4E-06	8.8E-01	7.2E-01	1.6E-01	1.5E-03	1.5E-03
1100 - 1200	0	3.8E-03	3.1E-03	6.9E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	2	4.9E-03	4.0E-03	9.0E-04	8.4E-06	8.4E-06	5.9E-01	4.8E-01	1.1E-01	1.0E-03	1.0E-03
1200 - 1300	0	3.8E-03	3.1E-03	6.9E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	4.9E-03	4.0E-03	9.0E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1300 - 1400	0	3.8E-03	3.1E-03	6.9E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	2	4.9E-03	4.0E-03	9.0E-04	8.4E-06	8.4E-06	5.9E-01	4.8E-01	1.1E-01	1.0E-03	1.0E-03
1400 - 1500	0	3.8E-03	3.1E-03	6.9E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	4.9E-03	4.0E-03	9.0E-04	8.4E-06	8.4E-06	2.9E-01	2.4E-01	5.4E-02	5.0E-04	5.0E-04
1500 - 1600	0	3.8E-03	3.1E-03	6.9E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	4.9E-03	4.0E-03	9.0E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1600 - 1700	0	3.8E-03	3.1E-03	6.9E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	4.9E-03	4.0E-03	9.0E-04	8.4E-06	8.4E-06	2.9E-01	2.4E-01	5.4E-02	5.0E-04	5.0E-04
1700 - 1800	0	3.8E-03	3.1E-03	6.9E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	4.9E-03	4.0E-03	9.0E-04	8.4E-06	8.4E-06	2.9E-01	2.4E-01	5.4E-02	5.0E-04	5.0E-04
1800 - 1900	0	3.8E-03	3.1E-03	6.9E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	4.9E-03	4.0E-03	9.0E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1900 - 2000	0	3.8E-03	3.1E-03	6.9E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	2	4.9E-03	4.0E-03	9.0E-04	8.4E-06	8.4E-06	5.9E-01	4.8E-01	1.1E-01	1.0E-03	1.0E-03
2000 - 2100	0	3.8E-03	3.1E-03	6.9E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	4.9E-03	4.0E-03	9.0E-04	8.4E-06	8.4E-06	2.9E-01	2.4E-01	5.4E-02	5.0E-04	5.0E-04
2100 - 2200	0	3.8E-03	3.1E-03	6.9E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	4.9E-03	4.0E-03	9.0E-04	8.4E-06	8.4E-06	2.9E-01	2.4E-01	5.4E-02	5.0E-04	5.0E-04
2200 - 2300	0	3.8E-03	3.1E-03	6.9E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	4.9E-03	4.0E-03	9.0E-04	8.4E-06	8.4E-06	2.9E-01	2.4E-01	5.4E-02	5.0E-04	5.0E-04
2300 - 2400	3	3.8E-03	3.1E-03	6.9E-04	8.4E-06	8.4E-06	6.8E-01	5.6E-01	1.2E-01	1.5E-03	1.5E-03	2	4.9E-03	4.0E-03	9.0E-04	8.4E-06	8.4E-06	5.9E-01	4.8E-01	1.1E-01	1.0E-03	1.0E-03
Daily Total	6											20										

Average Distance from Starting Place to Egress =	185	m
Average Distance from PTI Egress to Open Road Network	0	m
Average Spread Distance outside bus terminus =	0	m

Hour	Total Idling Emission (g) [2]					Idling Emission for Start Emission Adjustment (g) [3]					Adjusted Start Emission within bus terminus (g) [6]					Adjusted Start Emission outside bus terminus (g) [7]					Start Emission Rate outside bus terminus (g/s)				
	NOx	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**
0000 - 0100	4.5E-01	3.7E-01	8.3E-02	1.0E-03	1.0E-03	4.5E-01	3.7E-01	8.3E-02	1.0E-03	1.0E-03	7.0E+00	6.1E+00	8.6E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0100 - 0200	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0600 - 0700	2.9E-01	2.4E-01	5.4E-02	5.0E-04	5.0E-04	2.9E-01	2.4E-01	5.4E-02	5.0E-04	5.0E-04	5.0E-01	5.3E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0700 - 0800	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0800 - 0900	5.2E-01	4.3E-01	9.5E-02	1.0E-03	1.0E-03	5.2E-01	4.3E-01	9.5E-02	1.0E-03	1.0E-03	3.0E+00	2.9E+00	8.4E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0900 - 1000	2.9E-01	2.4E-01	5.4E-02	5.0E-04	5.0E-04	2.9E-01	2.4E-01	5.4E-02	5.0E-04	5.0E-04	2.0E-01	2.5E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1000 - 1100	8.8E-01	7.2E-01	1.6E-01	1.5E-03	1.5E-03	8.8E-01	7.2E-01	1.6E-01	1.5E-03	1.5E-03	2.1E+00	2.2E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1100 - 1200	5.9E-01	4.8E-01	1.1E-01	1.0E-03	1.0E-03	5.9E-01	4.8E-01	1.1E-01	1.0E-03	1.0E-03	1.6E+00	1.7E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1200 - 1300	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1300 - 1400	5.9E-01	4.8E-01	1.1E-01	1.0E-03	1.0E-03	5.9E-01	4.8E-01	1.1E-01	1.0E-03	1.0E-03	7.0E-01	7.8E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1400 - 1500	2.9E-01	2.4E-01	5.4E-02	5.0E-04	5.0E-04	2.9E-01	2.4E-01	5.4E-02	5.0E-04	5.0E-04	2.0E-01	2.5E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1500 - 1600	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1600 - 1700	2.9E-01	2.4E-01	5.4E-02	5.0E-04	5.0E-04	2.9E-01	2.4E-01	5.4E-02	5.0E-04	5.0E-04	2.0E-01	2.5E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1700 - 1800	2.9E-01	2.4E-01	5.4E-02	5.0E-04	5.0E-04	2.9E-01	2.4E-01	5.4E-02	5.0E-04	5.0E-04	2.0E-01	2.5E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1800 - 1900	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1900 - 2000	5.9E-01	4.8E-01	1.1E-01	1.0E-03	1.0E-03	5.9E-01	4.8E-01	1.1E-01	1.0E-03	1.0E-03	7.0E-01	7.8E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2000 - 2100	2.9E-01	2.4E-01	5.4E-02	5.0E-04	5.0E-04	2.9E-01	2.4E-01	5.4E-02	5.0E-04	5.0E-04	1.7E+00	1.7E+00	8.1E-03	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2100 - 2200	2.9E-01	2.4E-01	5.4E-02	5.0E-04	5.0E-04	2.9E-01	2.4E-01	5.4E-02	5.0E-04	5.0E-04	9.8E-01	1.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2200 - 2300	2.9E-01	2.4E-01	5.4E-02	5.0E-04	5.0E-04	2.9E-01	2.4E-01	5.4E-02	5.0E-04	5.0E-04	9.8E-01	1.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2300 - 2400	1.3E+00	1.0E+00	2.3E-01	2.5E-03	2.5E-03	1.3E+00	1.0E+00	2.3E-01	2.5E-03	2.5E-03	1.1E+01	1.0E+01	1.2E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00

Running Emission - Terminating and Bypass Public Light Buses

Average Travelling Distance within bus terminus =	275	m
Average Travelling Speed =	10	km/h

Hour	PLB (Diesel + LPG)											
	Frequency	Running Emission Factor (g/km·vehicle)					Running Emission (g)					
		NOx	NO	NO2	RSP	FSP	NOx	NO	NO2	RSP	FSP
0000 - 0100	10	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	3.5E+00	2.9E+00	6.4E-01	1.4E-01	1.3E-01
0100 - 0200	0	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0600 - 0700	9	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	3.1E+00	2.6E+00	5.7E-01	1.2E-01	1.1E-01
0700 - 0800	18	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	6.3E+00	5.1E+00	1.1E+00	2.5E-01	2.3E-01
0800 - 0900	23	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	8.0E+00	6.6E+00	1.5E+00	3.2E-01	2.9E-01
0900 - 1000	18	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	6.3E+00	5.1E+00	1.1E+00	2.5E-01	2.3E-01
1000 - 1100	27	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	9.4E+00	7.7E+00	1.7E+00	3.7E-01	3.4E-01
1100 - 1200	30	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	1.0E+01	8.6E+00	1.9E+00	4.1E-01	3.8E-01
1200 - 1300	21	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	7.3E+00	6.0E+00	1.3E+00	2.9E-01	2.7E-01
1300 - 1400	23	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	8.0E+00	6.6E+00	1.5E+00	3.2E-01	2.9E-01
1400 - 1500	24	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	8.4E+00	6.8E+00	1.5E+00	3.3E-01	3.0E-01
1500 - 1600	23	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	8.0E+00	6.6E+00	1.5E+00	3.2E-01	2.9E-01
1600 - 1700	13	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	4.5E+00	3.7E+00	8.3E-01	1.8E-01	1.6E-01
1700 - 1800	18	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	6.3E+00	5.1E+00	1.1E+00	2.5E-01	2.3E-01
1800 - 1900	18	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	6.3E+00	5.1E+00	1.1E+00	2.5E-01	2.3E-01
1900 - 2000	21	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	7.3E+00	6.0E+00	1.3E+00	2.9E-01	2.7E-01
2000 - 2100	16	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	5.6E+00	4.6E+00	1.0E+00	2.2E-01	2.0E-01
2100 - 2200	17	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	5.9E+00	4.8E+00	1.1E+00	2.3E-01	2.2E-01
2200 - 2300	11	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	3.8E+00	3.1E+00	7.0E-01	1.5E-01	1.4E-01
2300 - 2400	54	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	1.9E+01	1.5E+01	3.4E+00	7.4E-01	6.8E-01
Daily Total	394										

Idling Emission - Bypass Public Light Buses

No. of PLB (Diesel) to No. of PLB (LPG) Ratio	3.2	
Idling Time for Bypass Public Light Buses	2	min

Hour	PLB (Diesel)										PLB (LPG)									
	Frequency	Hot Idling Emission Factor (g/s)					Hot Idling Emission (g)					Frequency	Hot Idling Emission Factor (g/s)					Hot Idling Emission (g)				
		NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP		NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP
0000 - 0100	4	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	5.2E-01	4.0E-01	1.2E-01	3.7E-03	3.7E-03	1	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	5.2E-01	4.0E-01	1.2E-01	3.7E-03	3.7E-03
0100 - 0200	0	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0600 - 0700	5	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	6.5E-01	5.0E-01	1.5E-01	4.6E-03	4.6E-03	1	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	6.5E-01	5.0E-01	1.5E-01	4.6E-03	4.6E-03
0700 - 0800	14	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.8E+00	1.4E+00	4.3E-01	1.3E-02	1.3E-02	4	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.8E+00	1.4E+00	4.3E-01	1.3E-02	1.3E-02
0800 - 0900	14	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.8E+00	1.4E+00	4.3E-01	1.3E-02	1.3E-02	4	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.8E+00	1.4E+00	4.3E-01	1.3E-02	1.3E-02
0900 - 1000	11	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.4E+00	1.1E+00	3.4E-01	1.0E-02	1.0E-02	4	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.4E+00	1.1E+00	3.4E-01	1.0E-02	1.0E-02
1000 - 1100	14	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.8E+00	1.4E+00	4.3E-01	1.3E-02	1.3E-02	4	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.8E+00	1.4E+00	4.3E-01	1.3E-02	1.3E-02
1100 - 1200	18	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	2.3E+00	1.8E+00	5.6E-01	1.7E-02	1.7E-02	5	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	2.3E+00	1.8E+00	5.6E-01	1.7E-02	1.7E-02
1200 - 1300	13	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.7E+00	1.3E+00	4.0E-01	1.2E-02	1.2E-02	4	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.7E+00	1.3E+00	4.0E-01	1.2E-02	1.2E-02
1300 - 1400	13	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.7E+00	1.3E+00	4.0E-01	1.2E-02	1.2E-02	4	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.7E+00	1.3E+00	4.0E-01	1.2E-02	1.2E-02
1400 - 1500	13	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.7E+00	1.3E+00	4.0E-01	1.2E-02	1.2E-02	4	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.7E+00	1.3E+00	4.0E-01	1.2E-02	1.2E-02
1500 - 1600	13	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.7E+00	1.3E+00	4.0E-01	1.2E-02	1.2E-02	4	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.7E+00	1.3E+00	4.0E-01	1.2E-02	1.2E-02
1600 - 1700	8	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.0E+00	7.9E-01	2.5E-01	7.4E-03	7.4E-03	3	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.0E+00	7.9E-01	2.5E-01	7.4E-03	7.4E-03
1700 - 1800	11	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.4E+00	1.1E+00	3.4E-01	1.0E-02	1.0E-02	3	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.4E+00	1.1E+00	3.4E-01	1.0E-02	1.0E-02
1800 - 1900	12	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.6E+00	1.2E+00	3.7E-01	1.1E-02	1.1E-02	4	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.6E+00	1.2E+00	3.7E-01	1.1E-02	1.1E-02
1900 - 2000	10	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.3E+00	9.9E-01	3.1E-01	9.2E-03	9.2E-03	3	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.3E+00	9.9E-01	3.1E-01	9.2E-03	9.2E-03
2000 - 2100	9	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.2E+00	8.9E-01	2.8E-01	8.3E-03	8.3E-03	3	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.2E+00	8.9E-01	2.8E-01	8.3E-03	8.3E-03
2100 - 2200	11	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.4E+00	1.1E+00	3.4E-01	1.0E-02	1.0E-02	3	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.4E+00	1.1E+00	3.4E-01	1.0E-02	1.0E-02
2200 - 2300	7	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	9.1E-01	6.9E-01	2.2E-01	6.5E-03	6.5E-03	2	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	9.1E-01	6.9E-01	2.2E-01	6.5E-03	6.5E-03
2300 - 2400	24	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	3.1E+00	2.4E+00	7.4E-01	2.2E-02	2.2E-02	8	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	3.1E+00	2.4E+00	7.4E-01	2.2E-02	2.2E-02
Daily Total	224											68										

Total Hourly Emission

Hour	Total Emission inside bus terminus (g) (Running + Idling + Start) [8]					Total Emission Rate (g/s)				
	NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP
0000 - 0100	1.4E+01	1.2E+01	2.2E+00	1.5E-01	1.4E-01	4.0E-03	3.4E-03	6.0E-04	4.1E-05	3.8E-05
0100 - 0200	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0600 - 0700	6.1E+00	5.1E+00	9.9E-01	1.3E-01	1.2E-01	1.7E-03	1.4E-03	2.8E-04	3.7E-05	3.5E-05
0700 - 0800	9.9E+00	7.9E+00	2.0E+00	2.7E-01	2.5E-01	2.8E-03	2.2E-03	5.6E-04	7.6E-05	7.0E-05
0800 - 0900	1.6E+01	1.4E+01	2.6E+00	3.4E-01	3.2E-01	4.5E-03	3.8E-03	7.1E-04	9.6E-05	8.9E-05
0900 - 1000	9.9E+00	8.1E+00	1.9E+00	2.7E-01	2.5E-01	2.8E-03	2.2E-03	5.3E-04	7.5E-05	6.9E-05
1000 - 1100	1.8E+01	1.5E+01	2.8E+00	4.0E-01	3.7E-01	4.9E-03	4.1E-03	7.8E-04	1.1E-04	1.0E-04
1100 - 1200	1.9E+01	1.6E+01	3.2E+00	4.5E-01	4.2E-01	5.3E-03	4.4E-03	8.9E-04	1.2E-04	1.2E-04
1200 - 1300	1.2E+01	9.9E+00	2.3E+00	3.1E-01	2.9E-01	3.4E-03	2.8E-03	6.3E-04	8.7E-05	8.1E-05
1300 - 1400	1.3E+01	1.1E+01	2.4E+00	3.4E-01	3.2E-01	3.7E-03	3.1E-03	6.7E-04	9.5E-05	8.8E-05
1400 - 1500	1.4E+01	1.1E+01	2.5E+00	3.6E-01	3.3E-01	3.8E-03	3.1E-03	6.8E-04	9.9E-05	9.2E-05
1500 - 1600	1.5E+01	1.2E+01	2.6E+00	3.4E-01	3.2E-01	4.1E-03	3.4E-03	7.2E-04	9.5E-05	8.8E-05
1600 - 1700	7.3E+00	5.9E+00	1.4E+00	1.9E-01	1.8E-01	2.0E-03	1.6E-03	3.8E-04	5.4E-05	5.0E-05
1700 - 1800	1.0E+01	8.2E+00	1.9E+00	2.7E-01	2.5E-01	2.8E-03	2.3E-03	5.3E-04	7.5E-05	6.9E-05
1800 - 1900	1.0E+01	8.1E+00	1.9E+00	2.7E-01	2.5E-01	2.8E-03	2.3E-03	5.3E-04	7.5E-05	7.0E-05
1900 - 2000	1.3E+01	1.1E+01	2.2E+00	3.1E-01	2.9E-01	3.7E-03	3.2E-03	6.1E-04	8.6E-05	8.0E-05
2000 - 2100	1.1E+01	9.1E+00	1.7E+00	2.4E-01	2.2E-01	3.0E-03	2.5E-03	4.7E-04	6.6E-05	6.1E-05
2100 - 2200	1.1E+01	8.9E+00	1.8E+00	2.6E-01	2.4E-01	3.0E-03	2.5E-03	5.1E-04	7.1E-05	6.6E-05
2200 - 2300	7.3E+00	6.1E+00	1.2E+00	1.7E-01	1.5E-01	2.0E-03	1.7E-03	3.3E-04	4.6E-05	4.3E-05
2300 - 2400	4.9E+01	4.1E+01	7.8E+00	8.0E-01	7.4E-01	1.4E-02	1.1E-02	2.2E-03	2.2E-04	2.0E-04
						max:	1.1E-02	2.2E-03	2.2E-04	2.0E-04

PTI opening hourly emission factor

NO	NO_2	RSP	FSP
0.30	0.28	0.18	0.18
0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00
0.12	0.13	0.17	0.17
0.19	0.26	0.34	0.34
0.33	0.33	0.43	0.43
0.20	0.24	0.34	0.34
0.36	0.36	0.50	0.50
0.38	0.41	0.56	0.56
0.24	0.29	0.39	0.40
0.27	0.31	0.43	0.43
0.27	0.32	0.45	0.45
0.30	0.33	0.43	0.43
0.14	0.18	0.24	0.24
0.20	0.25	0.34	0.34
0.20	0.25	0.34	0.34
0.27	0.28	0.39	0.39
0.22	0.22	0.30	0.30
0.21	0.24	0.32	0.32
0.15	0.15	0.21	0.21
1.00	1.00	1.00	1.00

Remarks:

[1] Idling Emission (g) = Idling Emission Factor (g/s) * Actual Idling time (min) * 60 * Frequency

[2] Total Idling Emission (g) = Cold Idling Emission of PLB (g) + Hot Idling Emission of PLB (g)

[3] If Actual Idling Time ≤ 1 min, Idling Emission for Start Emission Adjustment (g) = Idling rate (g/min) * Actual Idling Time (min)

If Actual Idling Time > 1 min, Idling Emission for Start Emission Adjustment (g) = Idling rate (g/min) * Maximum Duration for Adjusting Start Emission "K" (min)

Where Idling rate (g/min) = Total Idling Emission (g) / Idling Time (min), and "K" = 1 min for LPG PLB

[4] Adjusted Start Emission within bus terminus (g) = [Total Start Emission of PLB (Diesel) (g) - Idling Emission for Start Emission Adjustment (g)] * [Average Distance from Starting Place to Egress (m) / 700m]

Minimum value = 0 g

[5] Adjusted Start Emission outside bus terminus (g) = [Total Start Emission of PLB (Diesel) (g) - Idling Emission for Start Emission Adjustment (g)] * [Average Spread Distance outside bus terminus (m) / 700m]

Minimum value = 0 g

[6] Adjusted Start Emission within bus terminus (g) = [Total Start Emission of PLB (LPG) (g) - Idling Emission for Start Emission Adjustment (g)] * [Average Distance from Starting Place to Egress (m) / 150m]

Minimum value = 0 g

[7] Adjusted Start Emission outside bus terminus (g) = [Total Start Emission of PLB (LPG) (g) - Idling Emission for Start Emission Adjustment (g)] * [Average Spread Distance outside bus terminus (m) / 150m]

Minimum value = 0 g

[8] Total Emission Inside bus terminus (g) = Total Running Emission (g) + Idling Emission (g) + Adjusted Start Emission within bus terminus (g)

Exchange Square Bus Terminus

Minimum Hourly Temperature and Relative Humidity for 1st Quarter

Temperature: 8 ^{o}C

Relative Humidity: 32 %

Start Emission

	Single-Deck Franchised Bus (FBSD) Start Emission Factor (g/trip)																	
NOx	2.0E-01	3.6E-01	4.8E-01	6.8E-01	8.4E-01	1.1E+00	1.6E+00	2.0E+00	3.0E+00	3.9E+00	4.4E+00	5.2E+00	5.7E+00	6.0E+00	6.2E+00	6.3E+00	6.4E+00	6.4E+00
NO	1.7E-01	3.0E-01	4.1E-01	5.8E-01	7.1E-01	9.5E-01	1.4E+00	1.7E+00	2.5E+00	3.3E+00	3.7E+00	4.4E+00	4.8E+00	5.1E+00	5.2E+00	5.4E+00	5.4E+00	5.4E+00
NO2	3.2E-02	5.7E-02	7.6E-02	1.1E-01	1.3E-01	1.8E-01	2.6E-01	3.2E-01	4.7E-01	6.2E-01	6.9E-01	8.2E-01	9.0E-01	9.5E-01	9.7E-01	1.0E+00	1.0E+00	1.0E+00
RSP	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
FSP	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00

	Double-Deck Franchised Bus (FBDD) Start Emission Factor (g/trip)																	
NOx	7.2E-01	1.3E+00	1.7E+00	2.4E+00	3.0E+00	4.0E+00	5.9E+00	7.3E+00	1.1E+01	1.4E+01	1.6E+01	1.9E+01	2.1E+01	2.2E+01	2.2E+01	2.3E+01	2.3E+01	2.3E+01
NO	6.7E-01	1.2E+00	1.6E+00	2.3E+00	2.8E+00	3.7E+00	5.5E+00	6.8E+00	1.0E+01	1.3E+01	1.5E+01	1.7E+01	1.9E+01	2.0E+01	2.1E+01	2.1E+01	2.1E+01	2.1E+01
NO2	5.0E-02	9.1E-02	1.2E-01	1.7E-01	2.1E-01	2.8E-01	4.1E-01	5.1E-01	7.5E-01	9.8E-01	1.1E+00	1.3E+00	1.4E+00	1.5E+00	1.5E+00	1.6E+00	1.6E+00	1.6E+00
RSP	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
FSP	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00

	No. of Trips of FBSD																	
Soaking Time (min) / Hour	**5**	**10**	**20**	**30**	**40**	**50**	**60**	**120**	**180**	**240**	**300**	**360**	**420**	**480**	**540**	**600**	**660**	**720**
0000 - 0100																		
0100 - 0200																		
0200 - 0300																		
0300 - 0400																		
0400 - 0500																		
0500 - 0600																		
0600 - 0700																		
0700 - 0800																		
0800 - 0900																		
0900 - 1000																		
1000 - 1100																		
1100 - 1200																		
1200 - 1300																		
1300 - 1400																		
1400 - 1500																		
1500 - 1600																		
1600 - 1700																		
1700 - 1800																		
1800 - 1900																		
1900 - 2000																		
2000 - 2100																		
2100 - 2200																		
2200 - 2300																		
2300 - 2400																		
																	Daily Total	0

	No. of Trips of FBDD																	
Soaking Time (min) / Hour	**5**	**10**	**20**	**30**	**40**	**50**	**60**	**120**	**180**	**240**	**300**	**360**	**420**	**480**	**540**	**600**	**660**	**720**
0000 - 0100	2	1	2	5	0	1	0	0	0	0	2	2	2	0	0	0	0	0
0100 - 0200	0	0	0	0	0	0	0	0	0	0	1	1	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	1	0	0	0	0	0	0	0	0	0	0
0500 - 0600	1	2	1	0	3	2	0	2	0	0	0	0	0	0	0	0	0	0
0600 - 0700	3	4	8	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0700 - 0800	7	12	7	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0800 - 0900	5	11	9	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
0900 - 1000	14	6	8	5	0	0	0	0	2	1	0	0	1	1	0	0	0	0
1000 - 1100	3	4	15	5	1	0	0	0	0	1	0	0	0	0	0	0	0	0
1100 - 1200	2	5	14	3	1	0	0	0	0	1	0	0	1	0	0	0	0	0
1200 - 1300	2	10	12	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0
1300 - 1400	6	7	6	2	0	1	0	1	0	0	0	0	0	0	0	0	0	0
1400 - 1500	3	5	16	3	0	0	0	1	0	0	0	0	0	0	0	0	0	0
1500 - 1600	1	6	9	7	1	0	0	0	0	0	0	0	0	0	0	0	0	0
1600 - 1700	10	5	16	4	0	2	1	0	0	0	0	0	0	0	0	0	0	0
1700 - 1800	1	10	18	8	1	1	1	0	0	0	0	0	0	0	0	0	0	0
1800 - 1900	2	8	16	2	0	0	1	2	0	0	0	0	0	0	0	0	0	0
1900 - 2000	4	6	15	5	1	0	0	1	1	0	0	0	0	0	0	0	0	0
2000 - 2100	1	4	16	3	1	1	0	2	1	0	0	0	0	0	0	0	0	0
2100 - 2200	2	3	11	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
2200 - 2300	2	4	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2300 - 2400	4	7	4	5	0	1	0	9	0	0	0	0	4	1	1	0	0	0
																	Daily Total	537

Total Start Emission of FBSD & FBDD (g)				
NOx	**NO**	**NO2**	**RSP**	**FSP**
1.3E+02	1.2E+02	9.3E+00	0.0E+00	0.0E+00
3.5E+01	3.2E+01	2.4E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
7.3E+00	6.8E+00	5.1E-01	0.0E+00	0.0E+00
3.7E+01	3.4E+01	2.6E+00	0.0E+00	0.0E+00
2.6E+01	2.4E+01	1.8E+00	0.0E+00	0.0E+00
4.5E+01	4.2E+01	3.1E+00	0.0E+00	0.0E+00
4.2E+01	3.9E+01	2.9E+00	0.0E+00	0.0E+00
1.2E+02	1.1E+02	8.5E+00	0.0E+00	0.0E+00
6.3E+01	5.8E+01	4.4E+00	0.0E+00	0.0E+00
7.7E+01	7.2E+01	5.4E+00	0.0E+00	0.0E+00
5.5E+01	5.1E+01	3.9E+00	0.0E+00	0.0E+00
4.0E+01	3.7E+01	2.8E+00	0.0E+00	0.0E+00
5.1E+01	4.7E+01	3.6E+00	0.0E+00	0.0E+00
4.4E+01	4.1E+01	3.1E+00	0.0E+00	0.0E+00
6.5E+01	6.0E+01	4.5E+00	0.0E+00	0.0E+00
7.7E+01	7.2E+01	5.4E+00	0.0E+00	0.0E+00
6.5E+01	6.0E+01	4.5E+00	0.0E+00	0.0E+00
7.0E+01	6.5E+01	4.9E+00	0.0E+00	0.0E+00
7.3E+01	6.8E+01	5.1E+00	0.0E+00	0.0E+00
3.2E+01	2.9E+01	2.2E+00	0.0E+00	0.0E+00
1.5E+01	1.4E+01	1.0E+00	0.0E+00	0.0E+00
2.3E+02	2.1E+02	1.6E+01	0.0E+00	0.0E+00

Idling Emission - Terminating Buses

Idling Time for Terminating Buses	3	min
Max. Idling Time for Adjusting Start Emission =	1	min

Hour	FBSD											FBDD										
	Frequency	Cold Idling Emission Factor (g/s)					Cold Idling Emission (g) [1]					Frequency	Cold Idling Emission Factor (g/s)					Cold Idling Emission (g) [1]				
		NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP		NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP
0000 - 0100	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	6	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	1.2E+02	1.1E+02	7.3E+00	3.2E-02	3.2E-02
0100 - 0200	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	2	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	3.8E+01	3.6E+01	2.4E+00	1.1E-02	1.1E-02
0200 - 0300	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	1.9E+01	1.8E+01	1.2E+00	5.3E-03	5.3E-03
0500 - 0600	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	2	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	3.8E+01	3.6E+01	2.4E+00	1.1E-02	1.1E-02
0600 - 0700	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0700 - 0800	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0800 - 0900	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	1.9E+01	1.8E+01	1.2E+00	5.3E-03	5.3E-03
0900 - 1000	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	5	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	9.6E+01	9.0E+01	6.1E+00	2.7E-02	2.7E-02
1000 - 1100	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	1.9E+01	1.8E+01	1.2E+00	5.3E-03	5.3E-03
1100 - 1200	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	2	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	3.8E+01	3.6E+01	2.4E+00	1.1E-02	1.1E-02
1200 - 1300	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	2	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	3.8E+01	3.6E+01	2.4E+00	1.1E-02	1.1E-02
1300 - 1400	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	1.9E+01	1.8E+01	1.2E+00	5.3E-03	5.3E-03
1400 - 1500	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	1.9E+01	1.8E+01	1.2E+00	5.3E-03	5.3E-03
1500 - 1600	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1600 - 1700	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	1.9E+01	1.8E+01	1.2E+00	5.3E-03	5.3E-03
1700 - 1800	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	1.9E+01	1.8E+01	1.2E+00	5.3E-03	5.3E-03
1800 - 1900	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	3	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	5.8E+01	5.4E+01	3.6E+00	1.6E-02	1.6E-02
1900 - 2000	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	2	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	3.8E+01	3.6E+01	2.4E+00	1.1E-02	1.1E-02
2000 - 2100	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	3	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	5.8E+01	5.4E+01	3.6E+00	1.6E-02	1.6E-02
2100 - 2200	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	1.9E+01	1.8E+01	1.2E+00	5.3E-03	5.3E-03
2200 - 2300	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2300 - 2400	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	15	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	2.9E+02	2.7E+02	1.8E+01	8.0E-02	8.0E-02
Daily Total	0											50										

Hour	FBSD											FBDD										
	Frequency	Hot Idling Emission Factor (g/s)					Hot Idling Emission (g) [1]					Frequency	Hot Idling Emission Factor (g/s)					Hot Idling Emission (g) [1]				
		NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP		NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP
0000 - 0100	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	11	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	7.0E+00	6.6E+00	4.4E-01	5.8E-02	5.8E-02
0100 - 0200	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	9	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	5.7E+00	5.4E+00	3.6E-01	4.8E-02	4.8E-02
0600 - 0700	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	17	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.1E+01	1.0E+01	6.8E-01	9.0E-02	9.0E-02
0700 - 0800	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	31	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.0E+01	1.8E+01	1.2E+00	1.6E-01	1.6E-01
0800 - 0900	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	26	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.7E+01	1.6E+01	1.0E+00	1.4E-01	1.4E-01
0900 - 1000	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	33	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.1E+01	2.0E+01	1.3E+00	1.7E-01	1.7E-01
1000 - 1100	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	28	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.8E+01	1.7E+01	1.1E+00	1.5E-01	1.5E-01
1100 - 1200	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	25	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.6E+01	1.5E+01	1.0E+00	1.3E-01	1.3E-01
1200 - 1300	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	26	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.7E+01	1.6E+01	1.0E+00	1.4E-01	1.4E-01
1300 - 1400	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	22	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.4E+01	1.3E+01	8.8E-01	1.2E-01	1.2E-01
1400 - 1500	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	27	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.7E+01	1.6E+01	1.1E+00	1.4E-01	1.4E-01
1500 - 1600	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	24	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.5E+01	1.4E+01	9.6E-01	1.3E-01	1.3E-01
1600 - 1700	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	37	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.4E+01	2.2E+01	1.5E+00	2.0E-01	2.0E-01
1700 - 1800	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	39	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.5E+01	2.3E+01	1.6E+00	2.1E-01	2.1E-01
1800 - 1900	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	28	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.8E+01	1.7E+01	1.1E+00	1.5E-01	1.5E-01
1900 - 2000	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	31	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.0E+01	1.8E+01	1.2E+00	1.6E-01	1.6E-01
2000 - 2100	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	26	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.7E+01	1.6E+01	1.0E+00	1.4E-01	1.4E-01
2100 - 2200	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	16	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.0E+01	9.5E+00	6.4E-01	8.5E-02	8.5E-02
2200 - 2300	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	10	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	6.4E+00	6.0E+00	4.0E-01	5.3E-02	5.3E-02
2300 - 2400	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	21	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.3E+01	1.3E+01	8.4E-01	1.1E-01	1.1E-01
	0											487										

Average Distance from Starting Place to Egress =	55	m
Average Distance from PTI Egress to Open Road Network	0	m
Average Spread Distance outside bus terminus =	645	m

Hour	Total Idling Emission (g) [2]					Idling Emission for Start Emission Adjustment (g) [3]					Adjusted Start Emission within bus terminus (g) [4]				
	NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP
0000 - 0100	1.2E+02	1.1E+02	7.7E+00	9.0E-02	9.0E-02	4.1E+01	3.8E+01	2.6E+00	3.0E-02	3.0E-02	7.2E+00	6.7E+00	5.3E-01	0.0E+00	0.0E+00
0100 - 0200	3.8E+01	3.6E+01	2.4E+00	1.1E-02	1.1E-02	1.3E+01	1.2E+01	8.1E-01	3.5E-03	3.5E-03	1.7E+00	1.6E+00	1.3E-01	0.0E+00	0.0E+00
0200 - 0300	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	1.9E+01	1.8E+01	1.2E+00	5.3E-03	5.3E-03	6.4E+00	6.0E+00	4.0E-01	1.8E-03	1.8E-03	7.2E-02	6.4E-02	8.5E-03	0.0E+00	0.0E+00
0500 - 0600	4.4E+01	4.1E+01	2.8E+00	5.8E-02	5.8E-02	1.5E+01	1.4E+01	9.3E-01	1.9E-02	1.9E-02	1.7E+00	1.6E+00	1.3E-01	0.0E+00	0.0E+00
0600 - 0700	1.1E+01	1.0E+01	6.8E-01	9.0E-02	9.0E-02	3.6E+00	3.4E+00	2.3E-01	3.0E-02	3.0E-02	1.8E+00	1.6E+00	1.3E-01	0.0E+00	0.0E+00
0700 - 0800	2.0E+01	1.8E+01	1.2E+00	1.6E-01	1.6E-01	6.6E+00	6.2E+00	4.1E-01	5.5E-02	5.5E-02	3.0E+00	2.8E+00	2.1E-01	0.0E+00	0.0E+00
0800 - 0900	3.6E+01	3.4E+01	2.3E+00	1.4E-01	1.4E-01	1.2E+01	1.1E+01	7.5E-01	4.8E-02	4.8E-02	2.3E+00	2.2E+00	1.7E-01	0.0E+00	0.0E+00
0900 - 1000	1.2E+02	1.1E+02	7.4E+00	2.0E-01	2.0E-01	3.9E+01	3.7E+01	2.5E+00	6.7E-02	6.7E-02	6.5E+00	6.0E+00	4.7E-01	0.0E+00	0.0E+00
1000 - 1100	3.7E+01	3.5E+01	2.3E+00	1.5E-01	1.5E-01	1.2E+01	1.2E+01	7.8E-01	5.1E-02	5.1E-02	3.9E+00	3.7E+00	2.8E-01	0.0E+00	0.0E+00
1100 - 1200	5.4E+01	5.1E+01	3.4E+00	1.4E-01	1.4E-01	1.8E+01	1.7E+01	1.1E+00	4.8E-02	4.8E-02	4.6E+00	4.3E+00	3.3E-01	0.0E+00	0.0E+00
1200 - 1300	5.5E+01	5.2E+01	3.5E+00	1.5E-01	1.5E-01	1.8E+01	1.7E+01	1.2E+00	4.9E-02	4.9E-02	2.9E+00	2.7E+00	2.1E-01	0.0E+00	0.0E+00
1300 - 1400	3.3E+01	3.1E+01	2.1E+00	1.2E-01	1.2E-01	1.1E+01	1.0E+01	7.0E-01	4.1E-02	4.1E-02	2.3E+00	2.1E+00	1.6E-01	0.0E+00	0.0E+00
1400 - 1500	3.6E+01	3.4E+01	2.3E+00	1.5E-01	1.5E-01	1.2E+01	1.1E+01	7.6E-01	4.9E-02	4.9E-02	3.0E+00	2.8E+00	2.2E-01	0.0E+00	0.0E+00
1500 - 1600	1.5E+01	1.4E+01	9.6E-01	1.3E-01	1.3E-01	5.1E+00	4.8E+00	3.2E-01	4.2E-02	4.2E-02	3.1E+00	2.9E+00	2.2E-01	0.0E+00	0.0E+00
1600 - 1700	4.3E+01	4.0E+01	2.7E+00	2.0E-01	2.0E-01	1.4E+01	1.3E+01	9.0E-01	6.7E-02	6.7E-02	4.0E+00	3.7E+00	2.9E-01	0.0E+00	0.0E+00
1700 - 1800	4.4E+01	4.1E+01	2.8E+00	2.1E-01	2.1E-01	1.5E+01	1.4E+01	9.3E-01	7.1E-02	7.1E-02	4.9E+00	4.6E+00	3.5E-01	0.0E+00	0.0E+00
1800 - 1900	7.6E+01	7.1E+01	4.8E+00	1.6E-01	1.6E-01	2.5E+01	2.4E+01	1.6E+00	5.5E-02	5.5E-02	3.1E+00	2.9E+00	2.3E-01	0.0E+00	0.0E+00
1900 - 2000	5.8E+01	5.5E+01	3.7E+00	1.7E-01	1.7E-01	1.9E+01	1.8E+01	1.2E+00	5.8E-02	5.8E-02	4.0E+00	3.7E+00	2.9E-01	0.0E+00	0.0E+00
2000 - 2100	7.4E+01	7.0E+01	4.7E+00	1.5E-01	1.5E-01	2.5E+01	2.3E+01	1.6E+00	5.1E-02	5.1E-02	3.8E+00	3.5E+00	2.8E-01	0.0E+00	0.0E+00
2100 - 2200	2.9E+01	2.8E+01	1.9E+00	9.0E-02	9.0E-02	9.8E+00	9.2E+00	6.2E-01	3.0E-02	3.0E-02	1.7E+00	1.6E+00	1.3E-01	0.0E+00	0.0E+00
2200 - 2300	6.4E+00	6.0E+00	4.0E-01	5.3E-02	5.3E-02	2.1E+00	2.0E+00	1.3E-01	1.8E-02	1.8E-02	1.0E+00	9.4E-01	7.2E-02	0.0E+00	0.0E+00
2300 - 2400	3.0E+02	2.8E+02	1.9E+01	1.9E-01	1.9E-01	1.0E+02	9.4E+01	6.3E+00	6.4E-02	6.4E-02	9.9E+00	9.2E+00	7.5E-01	0.0E+00	0.0E+00

Hour	Adjusted Start Emission outside bus terminus (g) [5]					Start Emission Rate outside bus terminus (g/s)				
	NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP
0000 - 0100	8.5E+01	7.8E+01	6.2E+00	0.0E+00	0.0E+00	2.3E-02	2.2E-02	1.7E-03	0.0E+00	0.0E+00
0100 - 0200	2.0E+01	1.9E+01	1.5E+00	0.0E+00	0.0E+00	5.5E-03	5.1E-03	4.1E-04	0.0E+00	0.0E+00
0200 - 0300	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	8.5E-01	7.5E-01	1.0E-01	0.0E+00	0.0E+00	2.4E-04	2.1E-04	2.8E-05	0.0E+00	0.0E+00
0500 - 0600	2.0E+01	1.9E+01	1.5E+00	0.0E+00	0.0E+00	5.6E-03	5.2E-03	4.2E-04	0.0E+00	0.0E+00
0600 - 0700	2.1E+01	1.9E+01	1.5E+00	0.0E+00	0.0E+00	5.7E-03	5.3E-03	4.1E-04	0.0E+00	0.0E+00
0700 - 0800	3.5E+01	3.3E+01	2.5E+00	0.0E+00	0.0E+00	9.8E-03	9.1E-03	7.0E-04	0.0E+00	0.0E+00
0800 - 0900	2.7E+01	2.5E+01	2.0E+00	0.0E+00	0.0E+00	7.6E-03	7.1E-03	5.5E-04	0.0E+00	0.0E+00
0900 - 1000	7.6E+01	7.1E+01	5.6E+00	0.0E+00	0.0E+00	2.1E-02	2.0E-02	1.5E-03	0.0E+00	0.0E+00
1000 - 1100	4.6E+01	4.3E+01	3.3E+00	0.0E+00	0.0E+00	1.3E-02	1.2E-02	9.2E-04	0.0E+00	0.0E+00
1100 - 1200	5.4E+01	5.0E+01	3.9E+00	0.0E+00	0.0E+00	1.5E-02	1.4E-02	1.1E-03	0.0E+00	0.0E+00
1200 - 1300	3.4E+01	3.1E+01	2.5E+00	0.0E+00	0.0E+00	9.4E-03	8.7E-03	6.9E-04	0.0E+00	0.0E+00
1300 - 1400	2.7E+01	2.5E+01	1.9E+00	0.0E+00	0.0E+00	7.4E-03	6.9E-03	5.4E-04	0.0E+00	0.0E+00
1400 - 1500	3.6E+01	3.3E+01	2.6E+00	0.0E+00	0.0E+00	9.9E-03	9.2E-03	7.1E-04	0.0E+00	0.0E+00
1500 - 1600	3.6E+01	3.3E+01	2.5E+00	0.0E+00	0.0E+00	1.0E-02	9.3E-03	7.1E-04	0.0E+00	0.0E+00
1600 - 1700	4.7E+01	4.3E+01	3.4E+00	0.0E+00	0.0E+00	1.3E-02	1.2E-02	9.3E-04	0.0E+00	0.0E+00
1700 - 1800	5.8E+01	5.3E+01	4.1E+00	0.0E+00	0.0E+00	1.6E-02	1.5E-02	1.1E-03	0.0E+00	0.0E+00
1800 - 1900	3.7E+01	3.4E+01	2.7E+00	0.0E+00	0.0E+00	1.0E-02	9.4E-03	7.5E-04	0.0E+00	0.0E+00
1900 - 2000	4.7E+01	4.3E+01	3.4E+00	0.0E+00	0.0E+00	1.3E-02	1.2E-02	9.4E-04	0.0E+00	0.0E+00
2000 - 2100	4.5E+01	4.1E+01	3.3E+00	0.0E+00	0.0E+00	1.2E-02	1.2E-02	9.1E-04	0.0E+00	0.0E+00
2100 - 2200	2.0E+01	1.9E+01	1.5E+00	0.0E+00	0.0E+00	5.6E-03	5.2E-03	4.1E-04	0.0E+00	0.0E+00
2200 - 2300	1.2E+01	1.1E+01	8.4E-01	0.0E+00	0.0E+00	3.3E-03	3.1E-03	2.3E-04	0.0E+00	0.0E+00
2300 - 2400	1.2E+02	1.1E+02	8.8E+00	0.0E+00	0.0E+00	3.2E-02	3.0E-02	2.4E-03	0.0E+00	0.0E+00

Running Emission - Terminating and Bypass Buses

Average Travelling Distance within bus terminus =	125	m
Average Travelling Speed =	10	km/h

Hour	FBSD										FBDD									
	Frequency	Running Emission Factor (g/km-vehicle)					Running Emission (g)					Frequency	Running Emission Factor (g/km-vehicle)					Running Emission (g)				
	y	NOx	NO	NO2	RSP	FSP	NOx	NO	NO2	RSP	FSP	y	NOx	NO	NO2	RSP	FSP	NOx	NO	NO2	RSP	FSP
0000 - 0100	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	39	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	5.4E+01	5.1E+01	3.4E+00	1.9E+00	1.7E+00
0100 - 0200	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	5	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	7.0E+00	6.5E+00	4.4E-01	2.4E-01	2.2E-01
0200 - 0300	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	2	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	2.8E+00	2.6E+00	1.8E-01	9.5E-02	8.8E-02
0500 - 0600	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	23	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	3.2E+01	3.0E+01	2.0E+00	1.1E+00	1.0E+00
0600 - 0700	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	47	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	6.5E+01	6.1E+01	4.1E+00	2.2E+00	2.1E+00
0700 - 0800	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	99	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	1.4E+02	1.3E+02	8.7E+00	4.7E+00	4.3E+00
0800 - 0900	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	97	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	1.3E+02	1.3E+02	8.5E+00	4.6E+00	4.2E+00
0900 - 1000	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	120	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	1.7E+02	1.6E+02	1.1E+01	5.7E+00	5.3E+00
1000 - 1100	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	89	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	1.2E+02	1.2E+02	7.8E+00	4.2E+00	3.9E+00
1100 - 1200	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	84	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	1.2E+02	1.1E+02	7.4E+00	4.0E+00	3.7E+00
1200 - 1300	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	82	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	1.1E+02	1.1E+02	7.2E+00	3.9E+00	3.6E+00
1300 - 1400	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	71	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	9.9E+01	9.3E+01	6.2E+00	3.4E+00	3.1E+00
1400 - 1500	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	82	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	1.1E+02	1.1E+02	7.2E+00	3.9E+00	3.6E+00
1500 - 1600	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	80	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	1.1E+02	1.0E+02	7.0E+00	3.8E+00	3.5E+00
1600 - 1700	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	102	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	1.4E+02	1.3E+02	8.9E+00	4.9E+00	4.5E+00
1700 - 1800	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	111	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	1.5E+02	1.4E+02	9.7E+00	5.3E+00	4.9E+00
1800 - 1900	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	97	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	1.3E+02	1.3E+02	8.5E+00	4.6E+00	4.2E+00
1900 - 2000	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	99	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	1.4E+02	1.3E+02	8.7E+00	4.7E+00	4.3E+00
2000 - 2100	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	90	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	1.3E+02	1.2E+02	7.9E+00	4.3E+00	3.9E+00
2100 - 2200	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	59	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	8.2E+01	7.7E+01	5.2E+00	2.8E+00	2.6E+00
2200 - 2300	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	40	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	5.6E+01	5.2E+01	3.5E+00	1.9E+00	1.8E+00
2300 - 2400	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	82	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	1.1E+02	1.1E+02	7.2E+00	3.9E+00	3.6E+00
Daily Total	0											1600										

Idling Emission - Bypass Buses

Idling Time for Bypass Buses	1	min

Hour	FBSD										FBDD									
	Frequency	Hot Idling Emission Factor (g/s)					Hot Idling Emission (g)					Frequency	Hot Idling Emission Factor (g/s)					Hot Idling Emission (g)				
	y	NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP	y	NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP
0000 - 0100	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	22	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	4.7E+00	4.4E+00	2.9E-01	3.9E-02	3.9E-02
0100 - 0200	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	3	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	6.4E-01	6.0E-01	4.0E-02	5.3E-03	5.3E-03
0200 - 0300	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.1E-01	2.0E-01	1.3E-02	1.8E-03	1.8E-03
0500 - 0600	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	12	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.5E+00	2.4E+00	1.6E-01	2.1E-02	2.1E-02
0600 - 0700	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	30	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	6.4E+00	6.0E+00	4.0E-01	5.3E-02	5.3E-02
0700 - 0800	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	68	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.4E+01	1.4E+01	9.1E-01	1.2E-01	1.2E-01
0800 - 0900	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	70	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.5E+01	1.4E+01	9.4E-01	1.2E-01	1.2E-01
0900 - 1000	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	82	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.7E+01	1.6E+01	1.1E+00	1.4E-01	1.4E-01
1000 - 1100	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	60	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.3E+01	1.2E+01	8.0E-01	1.1E-01	1.1E-01
1100 - 1200	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	57	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.2E+01	1.1E+01	7.6E-01	1.0E-01	1.0E-01
1200 - 1300	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	54	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.1E+01	1.1E+01	7.2E-01	9.5E-02	9.5E-02
1300 - 1400	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	48	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.0E+01	9.5E+00	6.4E-01	8.5E-02	8.5E-02
1400 - 1500	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	54	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.1E+01	1.1E+01	7.2E-01	9.5E-02	9.5E-02
1500 - 1600	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	56	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.2E+01	1.1E+01	7.5E-01	9.9E-02	9.9E-02
1600 - 1700	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	64	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.4E+01	1.3E+01	8.6E-01	1.1E-01	1.1E-01
1700 - 1800	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	71	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.5E+01	1.4E+01	9.5E-01	1.3E-01	1.3E-01
1800 - 1900	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	66	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.4E+01	1.3E+01	8.8E-01	1.2E-01	1.2E-01
1900 - 2000	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	66	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.4E+01	1.3E+01	8.8E-01	1.2E-01	1.2E-01
2000 - 2100	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	61	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.3E+01	1.2E+01	8.2E-01	1.1E-01	1.1E-01
2100 - 2200	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	42	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	8.9E+00	8.4E+00	5.6E-01	7.4E-02	7.4E-02
2200 - 2300	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	30	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	6.4E+00	6.0E+00	4.0E-01	5.3E-02	5.3E-02
2300 - 2400	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	46	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	9.8E+00	9.1E+00	6.2E-01	8.1E-02	8.1E-02
Daily Total	0											1063										

Total Hourly Emission

Hour	Total Emission inside bus terminus (g) (Running + Idling + Start) [6]					Total Emission Rate (g/s)				
	NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP
0000 - 0100	1.9E+02	1.8E+02	1.2E+01	2.0E+00	1.8E+00	5.2E-02	4.9E-02	3.3E-03	5.5E-04	5.1E-04
0100 - 0200	4.8E+01	4.5E+01	3.0E+00	2.5E-01	2.3E-01	1.3E-02	1.2E-02	8.4E-04	7.1E-05	6.5E-05
0200 - 0300	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	2.2E+01	2.1E+01	1.4E+00	1.0E-01	9.5E-02	6.2E-03	5.8E-03	3.9E-04	2.8E-05	2.6E-05
0500 - 0600	8.0E+01	7.5E+01	5.1E+00	1.2E+00	1.1E+00	2.2E-02	2.1E-02	1.4E-03	3.3E-04	3.0E-04
0600 - 0700	8.4E+01	7.9E+01	5.3E+00	2.4E+00	2.2E+00	2.3E-02	2.2E-02	1.5E-03	6.6E-04	6.1E-04
0700 - 0800	1.7E+02	1.6E+02	1.1E+01	5.0E+00	4.6E+00	4.9E-02	4.6E-02	3.1E-03	1.4E-03	1.3E-03
0800 - 0900	1.9E+02	1.8E+02	1.2E+01	4.9E+00	4.5E+00	5.2E-02	4.9E-02	3.3E-03	1.4E-03	1.3E-03
0900 - 1000	3.1E+02	2.9E+02	1.9E+01	6.1E+00	5.6E+00	8.6E-02	8.0E-02	5.4E-03	1.7E-03	1.6E-03
1000 - 1100	1.8E+02	1.7E+02	1.1E+01	4.5E+00	4.2E+00	4.9E-02	4.6E-02	3.1E-03	1.2E-03	1.2E-03
1100 - 1200	1.9E+02	1.8E+02	1.2E+01	4.2E+00	3.9E+00	5.2E-02	4.9E-02	3.3E-03	1.2E-03	1.1E-03
1200 - 1300	1.8E+02	1.7E+02	1.2E+01	4.1E+00	3.8E+00	5.1E-02	4.8E-02	3.2E-03	1.2E-03	1.1E-03
1300 - 1400	1.4E+02	1.4E+02	9.1E+00	3.6E+00	3.3E+00	4.0E-02	3.8E-02	2.5E-03	1.0E-03	9.2E-04
1400 - 1500	1.6E+02	1.5E+02	1.0E+01	4.1E+00	3.8E+00	4.6E-02	4.3E-02	2.9E-03	1.2E-03	1.1E-03
1500 - 1600	1.4E+02	1.3E+02	8.9E+00	4.0E+00	3.7E+00	3.9E-02	3.7E-02	2.5E-03	1.1E-03	1.0E-03
1600 - 1700	2.0E+02	1.9E+02	1.3E+01	5.2E+00	4.8E+00	5.6E-02	5.3E-02	3.5E-03	1.4E-03	1.3E-03
1700 - 1800	2.2E+02	2.0E+02	1.4E+01	5.6E+00	5.2E+00	6.1E-02	5.7E-02	3.8E-03	1.6E-03	1.4E-03
1800 - 1900	2.3E+02	2.1E+02	1.4E+01	4.9E+00	4.5E+00	6.3E-02	5.9E-02	4.0E-03	1.4E-03	1.3E-03
1900 - 2000	2.1E+02	2.0E+02	1.4E+01	5.0E+00	4.6E+00	5.9E-02	5.6E-02	3.8E-03	1.4E-03	1.3E-03
2000 - 2100	2.2E+02	2.0E+02	1.4E+01	4.5E+00	4.2E+00	6.0E-02	5.6E-02	3.8E-03	1.3E-03	1.2E-03
2100 - 2200	1.2E+02	1.1E+02	7.7E+00	3.0E+00	2.7E+00	3.4E-02	3.2E-02	2.1E-03	8.3E-04	7.6E-04
2200 - 2300	6.9E+01	6.5E+01	4.4E+00	2.0E+00	1.9E+00	1.9E-02	1.8E-02	1.2E-03	5.6E-04	5.2E-04
2300 - 2400	4.4E+02	4.1E+02	2.8E+01	4.2E+00	3.9E+00	1.2E-01	1.1E-01	7.7E-03	1.2E-03	1.1E-03
						max.	1.1E-01	7.7E-03	1.7E-03	1.6E-03

PTI opening hourly emission factor

NO	NO_2	RSP	FSP
0.43	0.43	0.33	0.33
0.11	0.11	0.04	0.04
0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00
0.05	0.05	0.02	0.02
0.18	0.18	0.19	0.19
0.19	0.19	0.39	0.39
0.40	0.40	0.82	0.82
0.43	0.43	0.81	0.81
0.71	0.71	1.00	1.00
0.41	0.41	0.74	0.74
0.43	0.43	0.70	0.70
0.42	0.42	0.68	0.68
0.33	0.33	0.59	0.59
0.38	0.38	0.68	0.68
0.32	0.32	0.67	0.67
0.46	0.46	0.85	0.85
0.50	0.50	0.93	0.93
0.52	0.52	0.81	0.81
0.49	0.49	0.83	0.83
0.50	0.50	0.75	0.75
0.28	0.28	0.49	0.49
0.16	0.16	0.33	0.33
1.00	1.00	0.69	0.69

Remarks:

[1] Idling Emission (g) = Idling Emission Factor (g/s) * Actual Idling time (min) * 60 * Frequency

[2] Total Idling Emission (g) = Cold Idling Emission of FBSD & FBDD (g) + Hot Idling Emission of FBSD & FBDD (g)

[3] If Actual Idling Time ≤ 1 min, Idling Emission for Start Emission Adjustment (g) = Idling rate (g/min) * Actual Idling Time (min)

If Actual Idling Time > 1 min, Idling Emission for Start Emission Adjustment (g) = Idling rate (g/min) * Maximum Duration for Adjusting Start Emission "K" (min)

Where Idling rate (g/min) = Total Idling Emission (g) / Idling Time (min), and "K" = 1 min for Diesel vehicles with SCR

[4] Adjusted Start Emission within bus terminus (g) = [Total Start Emission of FBSD & FBDD (g) - Idling Emission for Start Emission Adjustment (g)] * [Average Distance from Starting Place to Egress (m) / 700m]

Minimum value = 0 g

[5] Adjusted Start Emission outside bus terminus (g) = [Total Start Emission of FBSD & FBDD (g) - Idling Emission for Start Emission Adjustment (g)] * [Average Spread Distance outside bus terminus (m) / 700m]

Minimum value = 0 g

[6] Total Emission Inside bus terminus (g) = Total Running Emission (g) + Idling Emission (g) + Adjusted Start Emission within bus terminus (g)

Exchange Square Bus Terminus

Minimum Hourly Temperature and Relative Humidity for 2nd Quarter

Temperature: 14 ^{o}C

Relative Humidity: 21 %

Start Emission

Single-Deck Franchised Bus (FBSD) Start Emission Factor (g/trip)

NOx	2.0E-01	3.6E-01	4.8E-01	6.8E-01	8.4E-01	1.1E+00	1.6E+00	2.0E+00	3.0E+00	3.9E+00	4.4E+00	5.2E+00	5.7E+00	6.0E+00	6.2E+00	6.3E+00	6.4E+00	6.4E+00
NO	1.7E-01	3.0E-01	4.1E-01	5.8E-01	7.1E-01	9.5E-01	1.4E+00	1.7E+00	2.5E+00	3.3E+00	3.7E+00	4.4E+00	4.8E+00	5.1E+00	5.2E+00	5.4E+00	5.4E+00	5.4E+00
NO2	3.2E-02	5.7E-02	7.6E-02	1.1E-01	1.3E-01	1.8E-01	2.6E-01	3.2E-01	4.7E-01	6.2E-01	6.9E-01	8.2E-01	9.0E-01	9.5E-01	9.7E-01	1.0E+00	1.0E+00	1.0E+00
RSP	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
FSP	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00

No. of Trips of FBSD

Soaking Time (min) / Hour	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
0000 - 0100																		
0100 - 0200																		
0200 - 0300																		
0300 - 0400																		
0400 - 0500																		
0500 - 0600																		
0600 - 0700																		
0700 - 0800																		
0800 - 0900																		
0900 - 1000																		
1000 - 1100																		
1100 - 1200																		
1200 - 1300																		
1300 - 1400																		
1400 - 1500																		
1500 - 1600																		
1600 - 1700																		
1700 - 1800																		
1800 - 1900																		
1900 - 2000																		
2000 - 2100																		
2100 - 2200																		
2200 - 2300																		
2300 - 2400																		

Daily Total 0

Double-Deck Franchised Bus (FBDD) Start Emission Factor (g/trip)

NOx	7.2E-01	1.3E+00	1.7E+00	2.4E+00	3.0E+00	4.0E+00	5.9E+00	7.3E+00	1.1E+01	1.4E+01	1.6E+01	1.9E+01	2.1E+01	2.2E+01	2.2E+01	2.3E+01	2.3E+01	2.3E+01
NO	6.7E-01	1.2E+00	1.6E+00	2.3E+00	2.8E+00	3.7E+00	5.5E+00	6.8E+00	1.0E+01	1.3E+01	1.5E+01	1.7E+01	1.9E+01	2.0E+01	2.1E+01	2.1E+01	2.1E+01	2.1E+01
NO2	5.0E-02	9.1E-02	1.2E-01	1.7E-01	2.1E-01	2.8E-01	4.1E-01	5.1E-01	7.5E-01	9.8E-01	1.1E+00	1.3E+00	1.4E+00	1.5E+00	1.5E+00	1.6E+00	1.6E+00	1.6E+00
RSP	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
FSP	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00

No. of Trips of FBDD

Soaking Time (min) / Hour	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
0000 - 0100	2	1	2	5	0	1	0	0	0	0	2	2	2	0	0	0	0	0
0100 - 0200	0	0	0	0	0	0	0	0	0	0	1	1	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	1	0	0	0	0	0	0	0	0	0	0
0500 - 0600	1	2	1	0	3	2	0	2	0	0	0	0	0	0	0	0	0	0
0600 - 0700	3	4	8	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0700 - 0800	7	12	7	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0800 - 0900	5	11	9	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
0900 - 1000	14	6	8	5	0	0	0	0	2	1	0	0	1	1	0	0	0	0
1000 - 1100	3	4	15	5	1	0	0	0	0	1	0	0	0	0	0	0	0	0
1100 - 1200	2	5	14	3	1	0	0	0	0	1	0	0	1	0	0	0	0	0
1200 - 1300	2	10	12	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0
1300 - 1400	6	7	6	2	0	1	0	1	0	0	0	0	0	0	0	0	0	0
1400 - 1500	3	5	16	3	0	0	0	1	0	0	0	0	0	0	0	0	0	0
1500 - 1600	1	6	9	7	1	0	0	0	0	0	0	0	0	0	0	0	0	0
1600 - 1700	10	5	16	4	0	2	1	0	0	0	0	0	0	0	0	0	0	0
1700 - 1800	1	10	18	8	1	1	1	0	0	0	0	0	0	0	0	0	0	0
1800 - 1900	2	8	16	2	0	0	1	2	0	0	0	0	0	0	0	0	0	0
1900 - 2000	4	6	15	5	1	0	0	1	1	0	0	0	0	0	0	0	0	0
2000 - 2100	1	4	16	3	1	1	0	2	1	0	0	0	0	0	0	0	0	0
2100 - 2200	2	3	11	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
2200 - 2300	2	4	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2300 - 2400	4	7	4	5	0	1	0	9	0	0	0	0	4	1	1	0	0	0

Daily Total 537

Total Start Emission of FBSD & FBDD (g)

NOx	NO	NO2	RSP	FSP
1.3E+02	1.2E+02	9.3E+00	0.0E+00	0.0E+00
3.5E+01	3.2E+01	2.4E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
7.3E+00	6.8E+00	5.1E-01	0.0E+00	0.0E+00
3.7E+01	3.4E+01	2.6E+00	0.0E+00	0.0E+00
2.6E+01	2.4E+01	1.8E+00	0.0E+00	0.0E+00
4.5E+01	4.2E+01	3.1E+00	0.0E+00	0.0E+00
4.2E+01	3.9E+01	2.9E+00	0.0E+00	0.0E+00
1.2E+02	1.1E+02	8.5E+00	0.0E+00	0.0E+00
6.3E+01	5.8E+01	4.4E+00	0.0E+00	0.0E+00
7.7E+01	7.2E+01	5.4E+00	0.0E+00	0.0E+00
5.5E+01	5.1E+01	3.9E+00	0.0E+00	0.0E+00
4.0E+01	3.7E+01	2.8E+00	0.0E+00	0.0E+00
5.1E+01	4.7E+01	3.6E+00	0.0E+00	0.0E+00
4.4E+01	4.1E+01	3.1E+00	0.0E+00	0.0E+00
6.5E+01	6.0E+01	4.5E+00	0.0E+00	0.0E+00
7.7E+01	7.2E+01	5.4E+00	0.0E+00	0.0E+00
6.5E+01	6.0E+01	4.5E+00	0.0E+00	0.0E+00
7.0E+01	6.5E+01	4.9E+00	0.0E+00	0.0E+00
7.3E+01	6.8E+01	5.1E+00	0.0E+00	0.0E+00
3.2E+01	2.9E+01	2.2E+00	0.0E+00	0.0E+00
1.5E+01	1.4E+01	1.0E+00	0.0E+00	0.0E+00
2.3E+02	2.1E+02	1.6E+01	0.0E+00	0.0E+00

Idling Emission - Terminating Buses

Idling Time for Terminating Buses	3	min
Max. Idling Time for Adjusting Start Emission =	1	min

FBSD – Cold Idling

Hour	Frequency	Cold Idling Emission Factor (g/s) NOx	NO	NO_2	RSP	FSP	Cold Idling Emission (g) [1] NOx	NO	NO_2	RSP	FSP
0000 - 0100	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0100 - 0200	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0600 - 0700	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0700 - 0800	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0800 - 0900	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0900 - 1000	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1000 - 1100	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1100 - 1200	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1200 - 1300	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1300 - 1400	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1400 - 1500	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1500 - 1600	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1600 - 1700	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1700 - 1800	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1800 - 1900	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1900 - 2000	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2000 - 2100	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2100 - 2200	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2200 - 2300	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2300 - 2400	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
Daily Total	0										

FBDD – Cold Idling

Hour	Frequency	Cold Idling Emission Factor (g/s) NOx	NO	NO_2	RSP	FSP	Cold Idling Emission (g) [1] NOx	NO	NO_2	RSP	FSP
0000 - 0100	6	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	1.2E+02	1.1E+02	7.3E+00	3.2E-02	3.2E-02
0100 - 0200	2	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	3.8E+01	3.6E+01	2.4E+00	1.1E-02	1.1E-02
0200 - 0300	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	1	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	1.9E+01	1.8E+01	1.2E+00	5.3E-03	5.3E-03
0500 - 0600	2	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	3.8E+01	3.6E+01	2.4E+00	1.1E-02	1.1E-02
0600 - 0700	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0700 - 0800	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0800 - 0900	1	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	1.9E+01	1.8E+01	1.2E+00	5.3E-03	5.3E-03
0900 - 1000	5	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	9.6E+01	9.0E+01	6.1E+00	2.7E-02	2.7E-02
1000 - 1100	1	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	1.9E+01	1.8E+01	1.2E+00	5.3E-03	5.3E-03
1100 - 1200	2	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	3.8E+01	3.6E+01	2.4E+00	1.1E-02	1.1E-02
1200 - 1300	2	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	3.8E+01	3.6E+01	2.4E+00	1.1E-02	1.1E-02
1300 - 1400	1	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	1.9E+01	1.8E+01	1.2E+00	5.3E-03	5.3E-03
1400 - 1500	1	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	1.9E+01	1.8E+01	1.2E+00	5.3E-03	5.3E-03
1500 - 1600	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1600 - 1700	1	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	1.9E+01	1.8E+01	1.2E+00	5.3E-03	5.3E-03
1700 - 1800	1	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	1.9E+01	1.8E+01	1.2E+00	5.3E-03	5.3E-03
1800 - 1900	3	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	5.8E+01	5.4E+01	3.6E+00	1.6E-02	1.6E-02
1900 - 2000	2	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	3.8E+01	3.6E+01	2.4E+00	1.1E-02	1.1E-02
2000 - 2100	3	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	5.8E+01	5.4E+01	3.6E+00	1.6E-02	1.6E-02
2100 - 2200	1	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	1.9E+01	1.8E+01	1.2E+00	5.3E-03	5.3E-03
2200 - 2300	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2300 - 2400	15	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	2.9E+02	2.7E+02	1.8E+01	8.0E-02	8.0E-02
Daily Total	50										

FBSD – Hot Idling

Hour	Frequency	Hot Idling Emission Factor (g/s) NOx	NO	NO_2	RSP	FSP	Hot Idling Emission (g) [1] NOx	NO	NO_2	RSP	FSP
0000 - 0100	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0100 - 0200	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0600 - 0700	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0700 - 0800	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0800 - 0900	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0900 - 1000	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1000 - 1100	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1100 - 1200	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1200 - 1300	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1300 - 1400	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1400 - 1500	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1500 - 1600	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1600 - 1700	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1700 - 1800	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1800 - 1900	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1900 - 2000	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2000 - 2100	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2100 - 2200	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2200 - 2300	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2300 - 2400	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
	0										

FBDD – Hot Idling

Hour	Frequency	Hot Idling Emission Factor (g/s) NOx	NO	NO_2	RSP	FSP	Hot Idling Emission (g) [1] NOx	NO	NO_2	RSP	FSP
0000 - 0100	11	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	7.0E+00	6.6E+00	4.4E-01	5.8E-02	5.8E-02
0100 - 0200	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	9	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	5.7E+00	5.4E+00	3.6E-01	4.8E-02	4.8E-02
0600 - 0700	17	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.1E+01	1.0E+01	6.8E-01	9.0E-02	9.0E-02
0700 - 0800	31	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.0E+01	1.8E+01	1.2E+00	1.6E-01	1.6E-01
0800 - 0900	26	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.7E+01	1.6E+01	1.0E+00	1.4E-01	1.4E-01
0900 - 1000	33	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.1E+01	2.0E+01	1.3E+00	1.7E-01	1.7E-01
1000 - 1100	28	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.8E+01	1.7E+01	1.1E+00	1.5E-01	1.5E-01
1100 - 1200	25	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.6E+01	1.5E+01	1.0E+00	1.3E-01	1.3E-01
1200 - 1300	26	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.7E+01	1.6E+01	1.0E+00	1.4E-01	1.4E-01
1300 - 1400	22	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.4E+01	1.3E+01	8.8E-01	1.2E-01	1.2E-01
1400 - 1500	27	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.7E+01	1.6E+01	1.1E+00	1.4E-01	1.4E-01
1500 - 1600	24	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.5E+01	1.4E+01	9.6E-01	1.3E-01	1.3E-01
1600 - 1700	37	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.4E+01	2.2E+01	1.5E+00	2.0E-01	2.0E-01
1700 - 1800	39	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.5E+01	2.3E+01	1.6E+00	2.1E-01	2.1E-01
1800 - 1900	28	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.8E+01	1.7E+01	1.1E+00	1.5E-01	1.5E-01
1900 - 2000	31	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.0E+01	1.8E+01	1.2E+00	1.6E-01	1.6E-01
2000 - 2100	26	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.7E+01	1.6E+01	1.0E+00	1.4E-01	1.4E-01
2100 - 2200	16	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.0E+01	9.5E+00	6.4E-01	8.5E-02	8.5E-02
2200 - 2300	10	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	6.4E+00	6.0E+00	4.0E-01	5.3E-02	5.3E-02
2300 - 2400	21	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.3E+01	1.3E+01	8.4E-01	1.1E-01	1.1E-01
	487										

Average Distance from Starting Place to Egress =	55	m
Average Distance from PTI Egress to Open Road Network	0	m
Average Spread Distance outside bus terminus =	645	m

Hour	Total Idling Emission (g) [2] NOx	NO	NO_2	RSP	FSP	Idling Emission for Start Emission Adjustment (g) [3] NOx	NO	NO_2	RSP	FSP
0000 - 0100	1.2E+02	1.1E+02	7.7E+00	9.0E-02	9.0E-02	4.1E+01	3.8E+01	2.6E+00	3.0E-02	3.0E-02
0100 - 0200	3.8E+01	3.6E+01	2.4E+00	1.1E-02	1.1E-02	1.3E+01	1.2E+01	8.1E-01	3.5E-03	3.5E-03
0200 - 0300	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	1.9E+01	1.8E+01	1.2E+00	5.3E-03	5.3E-03	6.4E+00	6.0E+00	4.0E-01	1.8E-03	1.8E-03
0500 - 0600	4.4E+01	4.1E+01	2.8E+00	5.8E-02	5.8E-02	1.5E+01	1.4E+01	9.3E-01	1.9E-02	1.9E-02
0600 - 0700	1.1E+01	1.0E+01	6.8E-01	9.0E-02	9.0E-02	3.6E+00	3.4E+00	2.3E-01	3.0E-02	3.0E-02
0700 - 0800	2.0E+01	1.8E+01	1.2E+00	1.6E-01	1.6E-01	6.6E+00	6.2E+00	4.1E-01	5.5E-02	5.5E-02
0800 - 0900	3.6E+01	3.4E+01	2.3E+00	1.4E-01	1.4E-01	1.2E+01	1.1E+01	7.5E-01	4.8E-02	4.8E-02
0900 - 1000	1.2E+02	1.1E+02	7.4E+00	2.0E-01	2.0E-01	3.9E+01	3.7E+01	2.5E+00	6.7E-02	6.7E-02
1000 - 1100	3.7E+01	3.5E+01	2.3E+00	1.5E-01	1.5E-01	1.2E+01	1.2E+01	7.8E-01	5.1E-02	5.1E-02
1100 - 1200	5.4E+01	5.1E+01	3.4E+00	1.4E-01	1.4E-01	1.8E+01	1.7E+01	1.1E+00	4.8E-02	4.8E-02
1200 - 1300	5.5E+01	5.2E+01	3.5E+00	1.5E-01	1.5E-01	1.8E+01	1.7E+01	1.2E+00	4.9E-02	4.9E-02
1300 - 1400	3.3E+01	3.1E+01	2.1E+00	1.2E-01	1.2E-01	1.1E+01	1.0E+01	7.0E-01	4.1E-02	4.1E-02
1400 - 1500	3.6E+01	3.4E+01	2.3E+00	1.5E-01	1.5E-01	1.2E+01	1.1E+01	7.6E-01	4.9E-02	4.9E-02
1500 - 1600	1.5E+01	1.4E+01	9.6E-01	1.3E-01	1.3E-01	5.1E+00	4.8E+00	3.2E-01	4.2E-02	4.2E-02
1600 - 1700	4.3E+01	4.0E+01	2.7E+00	2.0E-01	2.0E-01	1.4E+01	1.3E+01	9.0E-01	6.7E-02	6.7E-02
1700 - 1800	4.4E+01	4.1E+01	2.8E+00	2.1E-01	2.1E-01	1.5E+01	1.4E+01	9.3E-01	7.1E-02	7.1E-02
1800 - 1900	7.6E+01	7.1E+01	4.8E+00	1.6E-01	1.6E-01	2.5E+01	2.4E+01	1.6E+00	5.5E-02	5.5E-02
1900 - 2000	5.8E+01	5.5E+01	3.7E+00	1.7E-01	1.7E-01	1.9E+01	1.8E+01	1.2E+00	5.8E-02	5.8E-02
2000 - 2100	7.4E+01	7.0E+01	4.7E+00	1.5E-01	1.5E-01	2.5E+01	2.3E+01	1.6E+00	5.1E-02	5.1E-02
2100 - 2200	2.9E+01	2.8E+01	1.9E+00	9.0E-02	9.0E-02	9.8E+00	9.2E+00	6.2E-01	3.0E-02	3.0E-02
2200 - 2300	6.4E+00	6.0E+00	4.0E-01	5.3E-02	5.3E-02	2.1E+00	2.0E+00	1.3E-01	1.8E-02	1.8E-02
2300 - 2400	3.0E+02	2.8E+02	1.9E+01	1.9E-01	1.9E-01	1.0E+02	9.4E+01	6.3E+00	6.4E-02	6.4E-02

Hour	Adjusted Start Emission within bus terminus (g) [4] NOx	NO	NO_2	RSP	FSP	Adjusted Start Emission outside bus terminus (g) [5] NOx	NO	NO_2	RSP	FSP	Start Emission Rate outside bus terminus (g/s) NOx	NO	NO_2	RSP	FSP
0000 - 0100	7.2E+00	6.7E+00	5.3E-01	0.0E+00	0.0E+00	8.5E+01	7.8E+01	6.2E+00	0.0E+00	0.0E+00	2.3E-02	2.2E-02	1.7E-03	0.0E+00	0.0E+00
0100 - 0200	1.7E+00	1.6E+00	1.3E-01	0.0E+00	0.0E+00	2.0E+01	1.9E+01	1.5E+00	0.0E+00	0.0E+00	5.5E-03	5.1E-03	4.1E-04	0.0E+00	0.0E+00
0200 - 0300	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	7.2E-02	6.4E-02	8.5E-03	0.0E+00	0.0E+00	8.5E-01	7.5E-01	1.0E-01	0.0E+00	0.0E+00	2.4E-04	2.1E-04	2.8E-05	0.0E+00	0.0E+00
0500 - 0600	1.7E+00	1.6E+00	1.3E-01	0.0E+00	0.0E+00	2.0E+01	1.9E+01	1.5E+00	0.0E+00	0.0E+00	5.6E-03	5.2E-03	4.2E-04	0.0E+00	0.0E+00
0600 - 0700	1.8E+00	1.6E+00	1.3E-01	0.0E+00	0.0E+00	2.1E+01	1.9E+01	1.5E+00	0.0E+00	0.0E+00	5.7E-03	5.3E-03	4.1E-04	0.0E+00	0.0E+00
0700 - 0800	3.0E+00	2.8E+00	2.1E-01	0.0E+00	0.0E+00	3.5E+01	3.3E+01	2.5E+00	0.0E+00	0.0E+00	9.8E-03	9.1E-03	7.0E-04	0.0E+00	0.0E+00
0800 - 0900	2.3E+00	2.2E+00	1.7E-01	0.0E+00	0.0E+00	2.7E+01	2.5E+01	2.0E+00	0.0E+00	0.0E+00	7.6E-03	7.1E-03	5.5E-04	0.0E+00	0.0E+00
0900 - 1000	6.5E+00	6.0E+00	4.7E-01	0.0E+00	0.0E+00	7.6E+01	7.1E+01	5.6E+00	0.0E+00	0.0E+00	2.1E-02	2.0E-02	1.5E-03	0.0E+00	0.0E+00
1000 - 1100	3.9E+00	3.7E+00	2.8E-01	0.0E+00	0.0E+00	4.6E+01	4.3E+01	3.3E+00	0.0E+00	0.0E+00	1.3E-02	1.2E-02	9.2E-04	0.0E+00	0.0E+00
1100 - 1200	4.6E+00	4.3E+00	3.3E-01	0.0E+00	0.0E+00	5.4E+01	5.0E+01	3.9E+00	0.0E+00	0.0E+00	1.5E-02	1.4E-02	1.1E-03	0.0E+00	0.0E+00
1200 - 1300	2.9E+00	2.7E+00	2.1E-01	0.0E+00	0.0E+00	3.4E+01	3.1E+01	2.5E+00	0.0E+00	0.0E+00	9.4E-03	8.7E-03	6.9E-04	0.0E+00	0.0E+00
1300 - 1400	2.3E+00	2.1E+00	1.6E-01	0.0E+00	0.0E+00	2.7E+01	2.5E+01	1.9E+00	0.0E+00	0.0E+00	7.4E-03	6.9E-03	5.4E-04	0.0E+00	0.0E+00
1400 - 1500	3.0E+00	2.8E+00	2.2E-01	0.0E+00	0.0E+00	3.6E+01	3.3E+01	2.6E+00	0.0E+00	0.0E+00	9.9E-03	9.2E-03	7.1E-04	0.0E+00	0.0E+00
1500 - 1600	3.1E+00	2.9E+00	2.2E-01	0.0E+00	0.0E+00	3.6E+01	3.3E+01	2.5E+00	0.0E+00	0.0E+00	1.0E-02	9.3E-03	7.1E-04	0.0E+00	0.0E+00
1600 - 1700	4.0E+00	3.7E+00	2.9E-01	0.0E+00	0.0E+00	4.7E+01	4.3E+01	3.4E+00	0.0E+00	0.0E+00	1.3E-02	1.2E-02	9.3E-04	0.0E+00	0.0E+00
1700 - 1800	4.9E+00	4.6E+00	3.5E-01	0.0E+00	0.0E+00	5.8E+01	5.3E+01	4.1E+00	0.0E+00	0.0E+00	1.6E-02	1.5E-02	1.1E-03	0.0E+00	0.0E+00
1800 - 1900	3.1E+00	2.9E+00	2.3E-01	0.0E+00	0.0E+00	3.7E+01	3.4E+01	2.7E+00	0.0E+00	0.0E+00	1.0E-02	9.4E-03	7.5E-04	0.0E+00	0.0E+00
1900 - 2000	4.0E+00	3.7E+00	2.9E-01	0.0E+00	0.0E+00	4.7E+01	4.3E+01	3.4E+00	0.0E+00	0.0E+00	1.3E-02	1.2E-02	9.4E-04	0.0E+00	0.0E+00
2000 - 2100	3.8E+00	3.5E+00	2.8E-01	0.0E+00	0.0E+00	4.5E+01	4.1E+01	3.3E+00	0.0E+00	0.0E+00	1.2E-02	1.2E-02	9.1E-04	0.0E+00	0.0E+00
2100 - 2200	1.7E+00	1.6E+00	1.3E-01	0.0E+00	0.0E+00	2.0E+01	1.9E+01	1.5E+00	0.0E+00	0.0E+00	5.6E-03	5.2E-03	4.1E-04	0.0E+00	0.0E+00
2200 - 2300	1.0E+00	9.4E-01	7.2E-02	0.0E+00	0.0E+00	1.2E+01	1.1E+01	8.4E-01	0.0E+00	0.0E+00	3.3E-03	3.1E-03	2.3E-04	0.0E+00	0.0E+00
2300 - 2400	9.9E+00	9.2E+00	7.5E-01	0.0E+00	0.0E+00	1.2E+02	1.1E+02	8.8E+00	0.0E+00	0.0E+00	3.2E-02	3.0E-02	2.4E-03	0.0E+00	0.0E+00

Running Emission - Terminating and Bypass Buses

Average Travelling Distance within bus terminus =	125	m
Average Travelling Speed =	10	km/h

Hour	FBSD										FBDD									
	Frequency	Running Emission Factor (g/km-vehicle)					Running Emission (g)					Frequency	Running Emission Factor (g/km-vehicle)					Running Emission (g)				
	y	NOx	NO	NO2	RSP	FSP	NOx	NO	NO2	RSP	FSP	y	NOx	NO	NO2	RSP	FSP	NOx	NO	NO2	RSP	FSP
0000 - 0100	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	39	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	5.4E+01	5.1E+01	3.4E+00	1.9E+00	1.7E+00
0100 - 0200	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	5	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	7.0E+00	6.5E+00	4.4E-01	2.4E-01	2.2E-01
0200 - 0300	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	2	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	2.8E+00	2.6E+00	1.8E-01	9.5E-02	8.8E-02
0500 - 0600	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	23	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	3.2E+01	3.0E+01	2.0E+00	1.1E+00	1.0E+00
0600 - 0700	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	47	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	6.5E+01	6.1E+01	4.1E+00	2.2E+00	2.1E+00
0700 - 0800	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	99	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	1.4E+02	1.3E+02	8.7E+00	4.7E+00	4.3E+00
0800 - 0900	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	97	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	1.3E+02	1.3E+02	8.5E+00	4.6E+00	4.2E+00
0900 - 1000	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	120	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	1.7E+02	1.6E+02	1.1E+01	5.7E+00	5.3E+00
1000 - 1100	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	89	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	1.2E+02	1.2E+02	7.8E+00	4.2E+00	3.9E+00
1100 - 1200	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	84	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	1.2E+02	1.1E+02	7.4E+00	4.0E+00	3.7E+00
1200 - 1300	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	82	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	1.1E+02	1.1E+02	7.2E+00	3.9E+00	3.6E+00
1300 - 1400	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	71	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	9.9E+01	9.3E+01	6.2E+00	3.4E+00	3.1E+00
1400 - 1500	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	82	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	1.1E+02	1.1E+02	7.2E+00	3.9E+00	3.6E+00
1500 - 1600	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	80	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	1.1E+02	1.0E+02	7.0E+00	3.8E+00	3.5E+00
1600 - 1700	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	102	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	1.4E+02	1.3E+02	8.9E+00	4.9E+00	4.5E+00
1700 - 1800	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	111	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	1.5E+02	1.4E+02	9.7E+00	5.3E+00	4.9E+00
1800 - 1900	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	97	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	1.3E+02	1.3E+02	8.5E+00	4.6E+00	4.2E+00
1900 - 2000	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	99	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	1.4E+02	1.3E+02	8.7E+00	4.7E+00	4.3E+00
2000 - 2100	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	90	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	1.3E+02	1.2E+02	7.9E+00	4.3E+00	3.9E+00
2100 - 2200	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	59	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	8.2E+01	7.7E+01	5.2E+00	2.8E+00	2.6E+00
2200 - 2300	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	40	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	5.6E+01	5.2E+01	3.5E+00	1.9E+00	1.8E+00
2300 - 2400	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	82	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	1.1E+02	1.1E+02	7.2E+00	3.9E+00	3.6E+00
Daily Total	0											1600										

Idling Emission - Bypass Buses

Idling Time for Bypass Buses	1	min

Hour	FBSD										FBDD									
	Frequency	Hot Idling Emission Factor (g/s)					Hot Idling Emission (g)					Frequency	Hot Idling Emission Factor (g/s)					Hot Idling Emission (g)				
	y	NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP	y	NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP
0000 - 0100	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	22	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	4.7E+00	4.4E+00	2.9E-01	3.9E-02	3.9E-02
0100 - 0200	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	3	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	6.4E-01	6.0E-01	4.0E-02	5.3E-03	5.3E-03
0200 - 0300	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.1E-01	2.0E-01	1.3E-02	1.8E-03	1.8E-03
0500 - 0600	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	12	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.5E+00	2.4E+00	1.6E-01	2.1E-02	2.1E-02
0600 - 0700	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	30	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	6.4E+00	6.0E+00	4.0E-01	5.3E-02	5.3E-02
0700 - 0800	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	68	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.4E+01	1.4E+01	9.1E-01	1.2E-01	1.2E-01
0800 - 0900	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	70	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.5E+01	1.4E+01	9.4E-01	1.2E-01	1.2E-01
0900 - 1000	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	82	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.7E+01	1.6E+01	1.1E+00	1.4E-01	1.4E-01
1000 - 1100	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	60	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.3E+01	1.2E+01	8.0E-01	1.1E-01	1.1E-01
1100 - 1200	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	57	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.2E+01	1.1E+01	7.6E-01	1.0E-01	1.0E-01
1200 - 1300	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	54	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.1E+01	1.1E+01	7.2E-01	9.5E-02	9.5E-02
1300 - 1400	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	48	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.0E+01	9.5E+00	6.4E-01	8.5E-02	8.5E-02
1400 - 1500	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	54	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.1E+01	1.1E+01	7.2E-01	9.5E-02	9.5E-02
1500 - 1600	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	56	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.2E+01	1.1E+01	7.5E-01	9.9E-02	9.9E-02
1600 - 1700	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	64	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.4E+01	1.3E+01	8.6E-01	1.1E-01	1.1E-01
1700 - 1800	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	71	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.5E+01	1.4E+01	9.5E-01	1.3E-01	1.3E-01
1800 - 1900	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	66	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.4E+01	1.3E+01	8.8E-01	1.2E-01	1.2E-01
1900 - 2000	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	66	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.4E+01	1.3E+01	8.8E-01	1.2E-01	1.2E-01
2000 - 2100	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	61	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.3E+01	1.2E+01	8.2E-01	1.1E-01	1.1E-01
2100 - 2200	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	42	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	8.9E+00	8.4E+00	5.6E-01	7.4E-02	7.4E-02
2200 - 2300	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	30	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	6.4E+00	6.0E+00	4.0E-01	5.3E-02	5.3E-02
2300 - 2400	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	46	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	9.8E+00	9.1E+00	6.2E-01	8.1E-02	8.1E-02
Daily Total	0											1063										

Total Hourly Emission

Hour	Total Emission inside bus terminus (g) (Running + Idling + Start) [6]					Total Emission Rate (g/s)				
	NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP
0000 - 0100	1.9E+02	1.8E+02	1.2E+01	2.0E+00	1.8E+00	5.2E-02	4.9E-02	3.3E-03	5.5E-04	5.1E-04
0100 - 0200	4.8E+01	4.5E+01	3.0E+00	2.5E-01	2.3E-01	1.3E-02	1.2E-02	8.4E-04	7.1E-05	6.5E-05
0200 - 0300	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	2.2E+01	2.1E+01	1.4E+00	1.0E-01	9.5E-02	6.2E-03	5.8E-03	3.9E-04	2.8E-05	2.6E-05
0500 - 0600	8.0E+01	7.5E+01	5.1E+00	1.2E+00	1.1E+00	2.2E-02	2.1E-02	1.4E-03	3.3E-04	3.0E-04
0600 - 0700	8.4E+01	7.9E+01	5.3E+00	2.4E+00	2.2E+00	2.3E-02	2.2E-02	1.5E-03	6.6E-04	6.1E-04
0700 - 0800	1.7E+02	1.6E+02	1.1E+01	5.0E+00	4.6E+00	4.9E-02	4.6E-02	3.1E-03	1.4E-03	1.3E-03
0800 - 0900	1.9E+02	1.8E+02	1.2E+01	4.9E+00	4.5E+00	5.2E-02	4.9E-02	3.3E-03	1.4E-03	1.3E-03
0900 - 1000	3.1E+02	2.9E+02	1.9E+01	6.1E+00	5.6E+00	8.6E-02	8.0E-02	5.4E-03	1.7E-03	1.6E-03
1000 - 1100	1.8E+02	1.7E+02	1.1E+01	4.5E+00	4.2E+00	4.9E-02	4.6E-02	3.1E-03	1.2E-03	1.2E-03
1100 - 1200	1.9E+02	1.8E+02	1.2E+01	4.2E+00	3.9E+00	5.2E-02	4.9E-02	3.3E-03	1.2E-03	1.1E-03
1200 - 1300	1.8E+02	1.7E+02	1.2E+01	4.1E+00	3.8E+00	5.1E-02	4.8E-02	3.2E-03	1.2E-03	1.1E-03
1300 - 1400	1.4E+02	1.4E+02	9.1E+00	3.6E+00	3.3E+00	4.0E-02	3.8E-02	2.5E-03	1.0E-03	9.2E-04
1400 - 1500	1.7E+02	1.5E+02	1.0E+01	4.1E+00	3.8E+00	4.6E-02	4.3E-02	2.9E-03	1.2E-03	1.1E-03
1500 - 1600	1.4E+02	1.3E+02	8.9E+00	4.0E+00	3.7E+00	3.9E-02	3.7E-02	2.5E-03	1.1E-03	1.0E-03
1600 - 1700	2.0E+02	1.9E+02	1.3E+01	5.2E+00	4.8E+00	5.6E-02	5.3E-02	3.5E-03	1.4E-03	1.3E-03
1700 - 1800	2.2E+02	2.0E+02	1.4E+01	5.6E+00	5.2E+00	6.1E-02	5.7E-02	3.8E-03	1.6E-03	1.4E-03
1800 - 1900	2.3E+02	2.1E+02	1.4E+01	4.9E+00	4.5E+00	6.3E-02	5.9E-02	4.0E-03	1.4E-03	1.3E-03
1900 - 2000	2.1E+02	2.0E+02	1.4E+01	5.0E+00	4.6E+00	5.9E-02	5.6E-02	3.8E-03	1.4E-03	1.3E-03
2000 - 2100	2.2E+02	2.0E+02	1.4E+01	4.5E+00	4.2E+00	6.0E-02	5.6E-02	3.8E-03	1.3E-03	1.2E-03
2100 - 2200	1.2E+02	1.1E+02	7.7E+00	3.0E+00	2.7E+00	3.4E-02	3.2E-02	2.1E-03	8.3E-04	7.6E-04
2200 - 2300	6.9E+01	6.5E+01	4.4E+00	2.0E+00	1.9E+00	1.9E-02	1.8E-02	1.2E-03	5.6E-04	5.2E-04
2300 - 2400	4.4E+02	4.1E+02	2.8E+01	4.2E+00	3.9E+00	1.2E-01	1.1E-01	7.7E-03	1.2E-03	1.1E-03
						max.	1.1E-01	7.7E-03	1.7E-03	1.6E-03

PTI opening hourly emission factor

NO	NO_2	RSP	FSP
0.43	0.43	0.33	0.33
0.11	0.11	0.04	0.04
0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00
0.05	0.05	0.02	0.02
0.18	0.18	0.19	0.19
0.19	0.19	0.39	0.39
0.40	0.40	0.82	0.82
0.43	0.43	0.81	0.81
0.71	0.71	1.00	1.00
0.41	0.41	0.74	0.74
0.43	0.43	0.70	0.70
0.42	0.42	0.68	0.68
0.33	0.33	0.59	0.59
0.38	0.38	0.68	0.68
0.32	0.32	0.67	0.67
0.46	0.46	0.85	0.85
0.50	0.50	0.93	0.93
0.52	0.52	0.81	0.81
0.49	0.49	0.83	0.83
0.50	0.50	0.75	0.75
0.28	0.28	0.49	0.49
0.16	0.16	0.33	0.33
1.00	1.00	0.69	0.69

Remarks:

[1] Idling Emission (g) = Idling Emission Factor (g/s) * Actual Idling time (min) * 60 * Frequency

[2] Total Idling Emission (g) = Cold Idling Emission of FBSD & FBDD (g) + Hot Idling Emission of FBSD & FBDD (g)

[3] If Actual Idling Time ≤ 1 min, Idling Emission for Start Emission Adjustment (g) = Idling rate (g/min) * Actual Idling Time (min)

If Actual Idling Time > 1 min, Idling Emission for Start Emission Adjustment (g) = Idling rate (g/min) * Maximum Duration for Adjusting Start Emission "K" (min)

Where Idling rate (g/min) = Total Idling Emission (g) / Idling Time (min), and "K" = 1 min for Diesel vehicles with SCR

[4] Adjusted Start Emission within bus terminus (g) = [Total Start Emission of FBSD & FBDD (g) - Idling Emission for Start Emission Adjustment (g)] * [Average Distance from Starting Place to Egress (m) / 700m]

Minimum value = 0 g

[5] Adjusted Start Emission outside bus terminus (g) = [Total Start Emission of FBSD & FBDD (g) - Idling Emission for Start Emission Adjustment (g)] * [Average Spread Distance outside bus terminus (m) / 700m]

Minimum value = 0 g

[6] Total Emission Inside bus terminus (g) = Total Running Emission (g) + Idling Emission (g) + Adjusted Start Emission within bus terminus (g)

Exchange Square Bus Terminus

Minimum Hourly Temperature and Relative Humidity for 3rd Quarter

Temperature: 24 ^{o}C

Relative Humidity: 38 %

Start Emission

	Single-Deck Franchised Bus (FBSD) Start Emission Factor (g/trip)																	
NOx	2.0E-01	3.6E-01	4.8E-01	6.8E-01	8.4E-01	1.1E+00	1.6E+00	2.0E+00	3.0E+00	3.9E+00	4.4E+00	5.2E+00	5.7E+00	6.0E+00	6.2E+00	6.3E+00	6.4E+00	6.4E+00
NO	1.7E-01	3.0E-01	4.1E-01	5.8E-01	7.1E-01	9.5E-01	1.4E+00	1.7E+00	2.5E+00	3.3E+00	3.7E+00	4.4E+00	4.8E+00	5.1E+00	5.2E+00	5.4E+00	5.4E+00	5.4E+00
NO2	3.2E-02	5.7E-02	7.6E-02	1.1E-01	1.3E-01	1.8E-01	2.6E-01	3.2E-01	4.7E-01	6.2E-01	6.9E-01	8.2E-01	9.0E-01	9.5E-01	9.7E-01	1.0E+00	1.0E+00	1.0E+00
RSP	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
FSP	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00

	Double-Deck Franchised Bus (FBDD) Start Emission Factor (g/trip)																	
NOx	7.2E-01	1.3E+00	1.7E+00	2.4E+00	3.0E+00	4.0E+00	5.9E+00	7.3E+00	1.1E+01	1.4E+01	1.6E+01	1.9E+01	2.1E+01	2.2E+01	2.2E+01	2.3E+01	2.3E+01	2.3E+01
NO	6.7E-01	1.2E+00	1.6E+00	2.3E+00	2.8E+00	3.7E+00	5.5E+00	6.8E+00	1.0E+01	1.3E+01	1.5E+01	1.7E+01	1.9E+01	2.0E+01	2.1E+01	2.1E+01	2.1E+01	2.1E+01
NO2	5.0E-02	9.1E-02	1.2E-01	1.7E-01	2.1E-01	2.8E-01	4.1E-01	5.1E-01	7.5E-01	9.8E-01	1.1E+00	1.3E+00	1.4E+00	1.5E+00	1.5E+00	1.6E+00	1.6E+00	1.6E+00
RSP	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
FSP	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00

	No. of Trips of FBSD																	
Soaking Time (min) / Hour	**5**	**10**	**20**	**30**	**40**	**50**	**60**	**120**	**180**	**240**	**300**	**360**	**420**	**480**	**540**	**600**	**660**	**720**
0000 - 0100																		
0100 - 0200																		
0200 - 0300																		
0300 - 0400																		
0400 - 0500																		
0500 - 0600																		
0600 - 0700																		
0700 - 0800																		
0800 - 0900																		
0900 - 1000																		
1000 - 1100																		
1100 - 1200																		
1200 - 1300																		
1300 - 1400																		
1400 - 1500																		
1500 - 1600																		
1600 - 1700																		
1700 - 1800																		
1800 - 1900																		
1900 - 2000																		
2000 - 2100																		
2100 - 2200																		
2200 - 2300																		
2300 - 2400																		
																	Daily Total	0

	No. of Trips of FBDD																	
Soaking Time (min) / Hour	**5**	**10**	**20**	**30**	**40**	**50**	**60**	**120**	**180**	**240**	**300**	**360**	**420**	**480**	**540**	**600**	**660**	**720**
0000 - 0100	2	1	2	5	0	1	0	0	0	0	2	2	2	0	0	0	0	0
0100 - 0200	0	0	0	0	0	0	0	0	0	0	1	1	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	1	0	0	0	0	0	0	0	0	0	0
0500 - 0600	1	2	1	0	3	2	0	2	0	0	0	0	0	0	0	0	0	0
0600 - 0700	3	4	8	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0700 - 0800	7	12	7	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0800 - 0900	5	11	9	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
0900 - 1000	14	6	8	5	0	0	0	0	2	1	0	0	1	1	0	0	0	0
1000 - 1100	3	4	15	5	1	0	0	0	0	1	0	0	0	0	0	0	0	0
1100 - 1200	2	5	14	3	1	0	0	0	0	1	0	0	1	0	0	0	0	0
1200 - 1300	2	10	12	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0
1300 - 1400	6	7	6	2	0	1	0	1	0	0	0	0	0	0	0	0	0	0
1400 - 1500	3	5	16	3	0	0	0	1	0	0	0	0	0	0	0	0	0	0
1500 - 1600	1	6	9	7	1	0	0	0	0	0	0	0	0	0	0	0	0	0
1600 - 1700	10	5	16	4	0	2	1	0	0	0	0	0	0	0	0	0	0	0
1700 - 1800	1	10	18	8	1	1	1	0	0	0	0	0	0	0	0	0	0	0
1800 - 1900	2	8	16	2	0	0	1	2	0	0	0	0	0	0	0	0	0	0
1900 - 2000	4	6	15	5	1	0	0	1	1	0	0	0	0	0	0	0	0	0
2000 - 2100	1	4	16	3	1	1	0	2	1	0	0	0	0	0	0	0	0	0
2100 - 2200	2	3	11	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
2200 - 2300	2	4	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2300 - 2400	4	7	4	5	0	1	0	9	0	0	0	0	4	1	1	0	0	0
																	Daily Total	537

Total Start Emission of FBSD & FBDD (g)				
NOx	**NO**	**NO2**	**RSP**	**FSP**
1.3E+02	1.2E+02	9.3E+00	0.0E+00	0.0E+00
3.5E+01	3.2E+01	2.4E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
7.3E+00	6.8E+00	5.1E-01	0.0E+00	0.0E+00
3.7E+01	3.4E+01	2.6E+00	0.0E+00	0.0E+00
2.6E+01	2.4E+01	1.8E+00	0.0E+00	0.0E+00
4.5E+01	4.2E+01	3.1E+00	0.0E+00	0.0E+00
4.2E+01	3.9E+01	2.9E+00	0.0E+00	0.0E+00
1.2E+02	1.1E+02	8.5E+00	0.0E+00	0.0E+00
6.3E+01	5.8E+01	4.4E+00	0.0E+00	0.0E+00
7.7E+01	7.2E+01	5.4E+00	0.0E+00	0.0E+00
5.5E+01	5.1E+01	3.9E+00	0.0E+00	0.0E+00
4.0E+01	3.7E+01	2.8E+00	0.0E+00	0.0E+00
5.1E+01	4.7E+01	3.6E+00	0.0E+00	0.0E+00
4.4E+01	4.1E+01	3.1E+00	0.0E+00	0.0E+00
6.5E+01	6.0E+01	4.5E+00	0.0E+00	0.0E+00
7.7E+01	7.2E+01	5.4E+00	0.0E+00	0.0E+00
6.5E+01	6.0E+01	4.5E+00	0.0E+00	0.0E+00
7.0E+01	6.5E+01	4.9E+00	0.0E+00	0.0E+00
7.3E+01	6.8E+01	5.1E+00	0.0E+00	0.0E+00
3.2E+01	2.9E+01	2.2E+00	0.0E+00	0.0E+00
1.5E+01	1.4E+01	1.0E+00	0.0E+00	0.0E+00
2.3E+02	2.1E+02	1.6E+01	0.0E+00	0.0E+00

Idling Emission - Terminating Buses

Idling Time for Terminating Buses	3	min
Max. Idling Time for Adjusting Start Emission =	1	min

Hour	FBSD											FBDD										
	Frequency	Cold Idling Emission Factor (g/s)					Cold Idling Emission (g) [1]					Frequency	Cold Idling Emission Factor (g/s)					Cold Idling Emission (g) [1]				
		NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP		NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP
0000 - 0100	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	6	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	1.2E+02	1.1E+02	7.3E+00	3.2E-02	3.2E-02
0100 - 0200	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	2	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	3.8E+01	3.6E+01	2.4E+00	1.1E-02	1.1E-02
0200 - 0300	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	1.9E+01	1.8E+01	1.2E+00	5.3E-03	5.3E-03
0500 - 0600	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	2	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	3.8E+01	3.6E+01	2.4E+00	1.1E-02	1.1E-02
0600 - 0700	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0700 - 0800	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0800 - 0900	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	1.9E+01	1.8E+01	1.2E+00	5.3E-03	5.3E-03
0900 - 1000	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	5	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	9.6E+01	9.0E+01	6.1E+00	2.7E-02	2.7E-02
1000 - 1100	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	1.9E+01	1.8E+01	1.2E+00	5.3E-03	5.3E-03
1100 - 1200	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	2	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	3.8E+01	3.6E+01	2.4E+00	1.1E-02	1.1E-02
1200 - 1300	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	2	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	3.8E+01	3.6E+01	2.4E+00	1.1E-02	1.1E-02
1300 - 1400	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	1.9E+01	1.8E+01	1.2E+00	5.3E-03	5.3E-03
1400 - 1500	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	1.9E+01	1.8E+01	1.2E+00	5.3E-03	5.3E-03
1500 - 1600	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1600 - 1700	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	1.9E+01	1.8E+01	1.2E+00	5.3E-03	5.3E-03
1700 - 1800	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	1.9E+01	1.8E+01	1.2E+00	5.3E-03	5.3E-03
1800 - 1900	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	3	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	5.8E+01	5.4E+01	3.6E+00	1.6E-02	1.6E-02
1900 - 2000	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	2	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	3.8E+01	3.6E+01	2.4E+00	1.1E-02	1.1E-02
2000 - 2100	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	3	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	5.8E+01	5.4E+01	3.6E+00	1.6E-02	1.6E-02
2100 - 2200	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	1.9E+01	1.8E+01	1.2E+00	5.3E-03	5.3E-03
2200 - 2300	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2300 - 2400	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	15	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	2.9E+02	2.7E+02	1.8E+01	8.0E-02	8.0E-02
Daily Total	0											50										

Hour	FBSD											FBDD										
	Frequency	Hot Idling Emission Factor (g/s)					Hot Idling Emission (g) [1]					Frequency	Hot Idling Emission Factor (g/s)					Hot Idling Emission (g) [1]				
		NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP		NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP
0000 - 0100	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	11	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	7.0E+00	6.6E+00	4.4E-01	5.8E-02	5.8E-02
0100 - 0200	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	9	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	5.7E+00	5.4E+00	3.6E-01	4.8E-02	4.8E-02
0600 - 0700	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	17	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.1E+01	1.0E+01	6.8E-01	9.0E-02	9.0E-02
0700 - 0800	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	31	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.0E+01	1.8E+01	1.2E+00	1.6E-01	1.6E-01
0800 - 0900	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	26	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.7E+01	1.6E+01	1.0E+00	1.4E-01	1.4E-01
0900 - 1000	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	33	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.1E+01	2.0E+01	1.3E+00	1.7E-01	1.7E-01
1000 - 1100	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	28	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.8E+01	1.7E+01	1.1E+00	1.5E-01	1.5E-01
1100 - 1200	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	25	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.6E+01	1.5E+01	1.0E+00	1.3E-01	1.3E-01
1200 - 1300	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	26	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.7E+01	1.6E+01	1.0E+00	1.4E-01	1.4E-01
1300 - 1400	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	22	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.4E+01	1.3E+01	8.8E-01	1.2E-01	1.2E-01
1400 - 1500	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	27	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.7E+01	1.6E+01	1.1E+00	1.4E-01	1.4E-01
1500 - 1600	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	24	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.5E+01	1.4E+01	9.6E-01	1.3E-01	1.3E-01
1600 - 1700	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	37	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.4E+01	2.2E+01	1.5E+00	2.0E-01	2.0E-01
1700 - 1800	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	39	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.5E+01	2.3E+01	1.6E+00	2.1E-01	2.1E-01
1800 - 1900	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	28	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.8E+01	1.7E+01	1.1E+00	1.5E-01	1.5E-01
1900 - 2000	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	31	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.0E+01	1.8E+01	1.2E+00	1.6E-01	1.6E-01
2000 - 2100	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	26	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.7E+01	1.6E+01	1.0E+00	1.4E-01	1.4E-01
2100 - 2200	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	16	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.0E+01	9.5E+00	6.4E-01	8.5E-02	8.5E-02
2200 - 2300	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	10	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	6.4E+00	6.0E+00	4.0E-01	5.3E-02	5.3E-02
2300 - 2400	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	21	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.3E+01	1.3E+01	8.4E-01	1.1E-01	1.1E-01
	0											487										

Average Distance from Starting Place to Egress =	55	m
Average Distance from PTI Egress to Open Road Network	0	m
Average Spread Distance outside bus terminus =	645	m

Hour	Total Idling Emission (g) [2]					Idling Emission for Start Emission Adjustment (g) [3]					Adjusted Start Emission within bus terminus (g) [4]				
	NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP
0000 - 0100	1.2E+02	1.1E+02	7.7E+00	9.0E-02	9.0E-02	4.1E+01	3.8E+01	2.6E+00	3.0E-02	3.0E-02	7.2E+00	6.7E+00	5.3E-01	0.0E+00	0.0E+00
0100 - 0200	3.8E+01	3.6E+01	2.4E+00	1.1E-02	1.1E-02	1.3E+01	1.2E+01	8.1E-01	3.5E-03	3.5E-03	1.7E+00	1.6E+00	1.3E-01	0.0E+00	0.0E+00
0200 - 0300	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	1.9E+01	1.8E+01	1.2E+00	5.3E-03	5.3E-03	6.4E+00	6.0E+00	4.0E-01	1.8E-03	1.8E-03	7.2E-02	6.4E-02	8.5E-03	0.0E+00	0.0E+00
0500 - 0600	4.4E+01	4.1E+01	2.8E+00	5.8E-02	5.8E-02	1.5E+01	1.4E+01	9.3E-01	1.9E-02	1.9E-02	1.7E+00	1.6E+00	1.3E-01	0.0E+00	0.0E+00
0600 - 0700	1.1E+01	1.0E+01	6.8E-01	9.0E-02	9.0E-02	3.6E+00	3.4E+00	2.3E-01	3.0E-02	3.0E-02	1.8E+00	1.6E+00	1.3E-01	0.0E+00	0.0E+00
0700 - 0800	2.0E+01	1.8E+01	1.2E+00	1.6E-01	1.6E-01	6.6E+00	6.2E+00	4.1E-01	5.5E-02	5.5E-02	3.0E+00	2.8E+00	2.1E-01	0.0E+00	0.0E+00
0800 - 0900	3.6E+01	3.4E+01	2.3E+00	1.4E-01	1.4E-01	1.2E+01	1.1E+01	7.5E-01	4.8E-02	4.8E-02	2.3E+00	2.2E+00	1.7E-01	0.0E+00	0.0E+00
0900 - 1000	1.2E+02	1.1E+02	7.4E+00	2.0E-01	2.0E-01	3.9E+01	3.7E+01	2.5E+00	6.7E-02	6.7E-02	6.5E+00	6.0E+00	4.7E-01	0.0E+00	0.0E+00
1000 - 1100	3.7E+01	3.5E+01	2.3E+00	1.5E-01	1.5E-01	1.2E+01	1.2E+01	7.8E-01	5.1E-02	5.1E-02	3.9E+00	3.7E+00	2.8E-01	0.0E+00	0.0E+00
1100 - 1200	5.4E+01	5.1E+01	3.4E+00	1.4E-01	1.4E-01	1.8E+01	1.7E+01	1.1E+00	4.8E-02	4.8E-02	4.6E+00	4.3E+00	3.3E-01	0.0E+00	0.0E+00
1200 - 1300	5.5E+01	5.2E+01	3.5E+00	1.5E-01	1.5E-01	1.8E+01	1.7E+01	1.2E+00	4.9E-02	4.9E-02	2.9E+00	2.7E+00	2.1E-01	0.0E+00	0.0E+00
1300 - 1400	3.3E+01	3.1E+01	2.1E+00	1.2E-01	1.2E-01	1.1E+01	1.0E+01	7.0E-01	4.1E-02	4.1E-02	2.3E+00	2.1E+00	1.6E-01	0.0E+00	0.0E+00
1400 - 1500	3.6E+01	3.4E+01	2.3E+00	1.5E-01	1.5E-01	1.2E+01	1.1E+01	7.6E-01	4.9E-02	4.9E-02	3.0E+00	2.8E+00	2.2E-01	0.0E+00	0.0E+00
1500 - 1600	1.5E+01	1.4E+01	9.6E-01	1.3E-01	1.3E-01	5.1E+00	4.8E+00	3.2E-01	4.2E-02	4.2E-02	3.1E+00	2.9E+00	2.2E-01	0.0E+00	0.0E+00
1600 - 1700	4.3E+01	4.0E+01	2.7E+00	2.0E-01	2.0E-01	1.4E+01	1.3E+01	9.0E-01	6.7E-02	6.7E-02	4.0E+00	3.7E+00	2.9E-01	0.0E+00	0.0E+00
1700 - 1800	4.4E+01	4.1E+01	2.8E+00	2.1E-01	2.1E-01	1.5E+01	1.4E+01	9.3E-01	7.1E-02	7.1E-02	4.9E+00	4.6E+00	3.5E-01	0.0E+00	0.0E+00
1800 - 1900	7.6E+01	7.1E+01	4.8E+00	1.6E-01	1.6E-01	2.5E+01	2.4E+01	1.6E+00	5.5E-02	5.5E-02	3.1E+00	2.9E+00	2.3E-01	0.0E+00	0.0E+00
1900 - 2000	5.8E+01	5.5E+01	3.7E+00	1.7E-01	1.7E-01	1.9E+01	1.8E+01	1.2E+00	5.8E-02	5.8E-02	4.0E+00	3.7E+00	2.9E-01	0.0E+00	0.0E+00
2000 - 2100	7.4E+01	7.0E+01	4.7E+00	1.5E-01	1.5E-01	2.5E+01	2.3E+01	1.6E+00	5.1E-02	5.1E-02	3.8E+00	3.5E+00	2.8E-01	0.0E+00	0.0E+00
2100 - 2200	2.9E+01	2.8E+01	1.9E+00	9.0E-02	9.0E-02	9.8E+00	9.2E+00	6.2E-01	3.0E-02	3.0E-02	1.7E+00	1.6E+00	1.3E-01	0.0E+00	0.0E+00
2200 - 2300	6.4E+00	6.0E+00	4.0E-01	5.3E-02	5.3E-02	2.1E+00	2.0E+00	1.3E-01	1.8E-02	1.8E-02	1.0E+00	9.4E-01	7.2E-02	0.0E+00	0.0E+00
2300 - 2400	3.0E+02	2.8E+02	1.9E+01	1.9E-01	1.9E-01	1.0E+02	9.4E+01	6.3E+00	6.4E-02	6.4E-02	9.9E+00	9.2E+00	7.5E-01	0.0E+00	0.0E+00

Hour	Adjusted Start Emission outside bus terminus (g) [5]					Start Emission Rate outside bus terminus (g/s)				
	NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP
0000 - 0100	8.5E+01	7.8E+01	6.2E+00	0.0E+00	0.0E+00	2.3E-02	2.2E-02	1.7E-03	0.0E+00	0.0E+00
0100 - 0200	2.0E+01	1.9E+01	1.5E+00	0.0E+00	0.0E+00	5.5E-03	5.1E-03	4.1E-04	0.0E+00	0.0E+00
0200 - 0300	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	8.5E-01	7.5E-01	1.0E-01	0.0E+00	0.0E+00	2.4E-04	2.1E-04	2.8E-05	0.0E+00	0.0E+00
0500 - 0600	2.0E+01	1.9E+01	1.5E+00	0.0E+00	0.0E+00	5.6E-03	5.2E-03	4.2E-04	0.0E+00	0.0E+00
0600 - 0700	2.1E+01	1.9E+01	1.5E+00	0.0E+00	0.0E+00	5.7E-03	5.3E-03	4.1E-04	0.0E+00	0.0E+00
0700 - 0800	3.5E+01	3.3E+01	2.5E+00	0.0E+00	0.0E+00	9.8E-03	9.1E-03	7.0E-04	0.0E+00	0.0E+00
0800 - 0900	2.7E+01	2.5E+01	2.0E+00	0.0E+00	0.0E+00	7.6E-03	7.1E-03	5.5E-04	0.0E+00	0.0E+00
0900 - 1000	7.6E+01	7.1E+01	5.6E+00	0.0E+00	0.0E+00	2.1E-02	2.0E-02	1.5E-03	0.0E+00	0.0E+00
1000 - 1100	4.6E+01	4.3E+01	3.3E+00	0.0E+00	0.0E+00	1.3E-02	1.2E-02	9.2E-04	0.0E+00	0.0E+00
1100 - 1200	5.4E+01	5.0E+01	3.9E+00	0.0E+00	0.0E+00	1.5E-02	1.4E-02	1.1E-03	0.0E+00	0.0E+00
1200 - 1300	3.4E+01	3.1E+01	2.5E+00	0.0E+00	0.0E+00	9.4E-03	8.7E-03	6.9E-04	0.0E+00	0.0E+00
1300 - 1400	2.7E+01	2.5E+01	1.9E+00	0.0E+00	0.0E+00	7.4E-03	6.9E-03	5.4E-04	0.0E+00	0.0E+00
1400 - 1500	3.6E+01	3.3E+01	2.6E+00	0.0E+00	0.0E+00	9.9E-03	9.2E-03	7.1E-04	0.0E+00	0.0E+00
1500 - 1600	3.6E+01	3.3E+01	2.5E+00	0.0E+00	0.0E+00	1.0E-02	9.3E-03	7.1E-04	0.0E+00	0.0E+00
1600 - 1700	4.7E+01	4.3E+01	3.4E+00	0.0E+00	0.0E+00	1.3E-02	1.2E-02	9.3E-04	0.0E+00	0.0E+00
1700 - 1800	5.8E+01	5.3E+01	4.1E+00	0.0E+00	0.0E+00	1.6E-02	1.5E-02	1.1E-03	0.0E+00	0.0E+00
1800 - 1900	3.7E+01	3.4E+01	2.7E+00	0.0E+00	0.0E+00	1.0E-02	9.4E-03	7.5E-04	0.0E+00	0.0E+00
1900 - 2000	4.7E+01	4.3E+01	3.4E+00	0.0E+00	0.0E+00	1.3E-02	1.2E-02	9.4E-04	0.0E+00	0.0E+00
2000 - 2100	4.5E+01	4.1E+01	3.3E+00	0.0E+00	0.0E+00	1.2E-02	1.2E-02	9.1E-04	0.0E+00	0.0E+00
2100 - 2200	2.0E+01	1.9E+01	1.5E+00	0.0E+00	0.0E+00	5.6E-03	5.2E-03	4.1E-04	0.0E+00	0.0E+00
2200 - 2300	1.2E+01	1.1E+01	8.4E-01	0.0E+00	0.0E+00	3.3E-03	3.1E-03	2.3E-04	0.0E+00	0.0E+00
2300 - 2400	1.2E+02	1.1E+02	8.8E+00	0.0E+00	0.0E+00	3.2E-02	3.0E-02	2.4E-03	0.0E+00	0.0E+00

Running Emission - Terminating and Bypass Buses

Average Travelling Distance within bus terminus =	125	m
Average Travelling Speed =	10	km/h

Hour	FBSD										FBDD									
	Frequency	Running Emission Factor (g/km-vehicle)					Running Emission (g)					Frequency	Running Emission Factor (g/km-vehicle)					Running Emission (g)				
	y	NOx	NO	NO2	RSP	FSP	NOx	NO	NO2	RSP	FSP	y	NOx	NO	NO2	RSP	FSP	NOx	NO	NO2	RSP	FSP
0000 - 0100	0	3.2E+00	2.7E+00	4.9E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	39	1.0E+01	9.6E+00	6.4E-01	3.8E-01	3.5E-01	5.0E+01	4.7E+01	3.1E+00	1.9E+00	1.7E+00
0100 - 0200	0	3.2E+00	2.7E+00	4.9E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	5	1.0E+01	9.6E+00	6.4E-01	3.8E-01	3.5E-01	6.4E+00	6.0E+00	4.0E-01	2.4E-01	2.2E-01
0200 - 0300	0	3.2E+00	2.7E+00	4.9E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.0E+01	9.6E+00	6.4E-01	3.8E-01	3.5E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0	3.2E+00	2.7E+00	4.9E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.0E+01	9.6E+00	6.4E-01	3.8E-01	3.5E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0	3.2E+00	2.7E+00	4.9E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	2	1.0E+01	9.6E+00	6.4E-01	3.8E-01	3.5E-01	2.6E+00	2.4E+00	1.6E-01	9.5E-02	8.8E-02
0500 - 0600	0	3.2E+00	2.7E+00	4.9E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	23	1.0E+01	9.6E+00	6.4E-01	3.8E-01	3.5E-01	2.9E+01	2.8E+01	1.9E+00	1.1E+00	1.0E+00
0600 - 0700	0	3.2E+00	2.7E+00	4.9E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	47	1.0E+01	9.6E+00	6.4E-01	3.8E-01	3.5E-01	6.0E+01	5.6E+01	3.8E+00	2.2E+00	2.1E+00
0700 - 0800	0	3.2E+00	2.7E+00	4.9E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	99	1.0E+01	9.6E+00	6.4E-01	3.8E-01	3.5E-01	1.3E+02	1.2E+02	8.0E+00	4.7E+00	4.3E+00
0800 - 0900	0	3.2E+00	2.7E+00	4.9E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	97	1.0E+01	9.6E+00	6.4E-01	3.8E-01	3.5E-01	1.2E+02	1.2E+02	7.8E+00	4.6E+00	4.2E+00
0900 - 1000	0	3.2E+00	2.7E+00	4.9E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	120	1.0E+01	9.6E+00	6.4E-01	3.8E-01	3.5E-01	1.5E+02	1.4E+02	9.7E+00	5.7E+00	5.3E+00
1000 - 1100	0	3.2E+00	2.7E+00	4.9E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	89	1.0E+01	9.6E+00	6.4E-01	3.8E-01	3.5E-01	1.1E+02	1.1E+02	7.2E+00	4.2E+00	3.9E+00
1100 - 1200	0	3.2E+00	2.7E+00	4.9E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	84	1.0E+01	9.6E+00	6.4E-01	3.8E-01	3.5E-01	1.1E+02	1.0E+02	6.8E+00	4.0E+00	3.7E+00
1200 - 1300	0	3.2E+00	2.7E+00	4.9E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	82	1.0E+01	9.6E+00	6.4E-01	3.8E-01	3.5E-01	1.0E+02	9.8E+01	6.6E+00	3.9E+00	3.6E+00
1300 - 1400	0	3.2E+00	2.7E+00	4.9E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	71	1.0E+01	9.6E+00	6.4E-01	3.8E-01	3.5E-01	9.1E+01	8.5E+01	5.7E+00	3.4E+00	3.1E+00
1400 - 1500	0	3.2E+00	2.7E+00	4.9E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	82	1.0E+01	9.6E+00	6.4E-01	3.8E-01	3.5E-01	1.0E+02	9.8E+01	6.6E+00	3.9E+00	3.6E+00
1500 - 1600	0	3.2E+00	2.7E+00	4.9E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	80	1.0E+01	9.6E+00	6.4E-01	3.8E-01	3.5E-01	1.0E+02	9.6E+01	6.4E+00	3.8E+00	3.5E+00
1600 - 1700	0	3.2E+00	2.7E+00	4.9E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	102	1.0E+01	9.6E+00	6.4E-01	3.8E-01	3.5E-01	1.3E+02	1.2E+02	8.2E+00	4.9E+00	4.5E+00
1700 - 1800	0	3.2E+00	2.7E+00	4.9E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	111	1.0E+01	9.6E+00	6.4E-01	3.8E-01	3.5E-01	1.4E+02	1.3E+02	8.9E+00	5.3E+00	4.9E+00
1800 - 1900	0	3.2E+00	2.7E+00	4.9E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	97	1.0E+01	9.6E+00	6.4E-01	3.8E-01	3.5E-01	1.2E+02	1.2E+02	7.8E+00	4.6E+00	4.2E+00
1900 - 2000	0	3.2E+00	2.7E+00	4.9E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	99	1.0E+01	9.6E+00	6.4E-01	3.8E-01	3.5E-01	1.3E+02	1.2E+02	8.0E+00	4.7E+00	4.3E+00
2000 - 2100	0	3.2E+00	2.7E+00	4.9E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	90	1.0E+01	9.6E+00	6.4E-01	3.8E-01	3.5E-01	1.2E+02	1.1E+02	7.3E+00	4.3E+00	3.9E+00
2100 - 2200	0	3.2E+00	2.7E+00	4.9E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	59	1.0E+01	9.6E+00	6.4E-01	3.8E-01	3.5E-01	7.5E+01	7.1E+01	4.8E+00	2.8E+00	2.6E+00
2200 - 2300	0	3.2E+00	2.7E+00	4.9E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	40	1.0E+01	9.6E+00	6.4E-01	3.8E-01	3.5E-01	5.1E+01	4.8E+01	3.2E+00	1.9E+00	1.8E+00
2300 - 2400	0	3.2E+00	2.7E+00	4.9E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	82	1.0E+01	9.6E+00	6.4E-01	3.8E-01	3.5E-01	1.0E+02	9.8E+01	6.6E+00	3.9E+00	3.6E+00
Daily Total	0											1600										

Idling Emission - Bypass Buses

Idling Time for Bypass Buses	1	min

Hour	FBSD										FBDD									
	Frequency	Hot Idling Emission Factor (g/s)					Hot Idling Emission (g)					Frequency	Hot Idling Emission Factor (g/s)					Hot Idling Emission (g)				
	y	NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP	y	NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP
0000 - 0100	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	22	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	4.7E+00	4.4E+00	2.9E-01	3.9E-02	3.9E-02
0100 - 0200	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	3	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	6.4E-01	6.0E-01	4.0E-02	5.3E-03	5.3E-03
0200 - 0300	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.1E-01	2.0E-01	1.3E-02	1.8E-03	1.8E-03
0500 - 0600	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	12	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.5E+00	2.4E+00	1.6E-01	2.1E-02	2.1E-02
0600 - 0700	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	30	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	6.4E+00	6.0E+00	4.0E-01	5.3E-02	5.3E-02
0700 - 0800	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	68	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.4E+01	1.4E+01	9.1E-01	1.2E-01	1.2E-01
0800 - 0900	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	70	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.5E+01	1.4E+01	9.4E-01	1.2E-01	1.2E-01
0900 - 1000	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	82	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.7E+01	1.6E+01	1.1E+00	1.4E-01	1.4E-01
1000 - 1100	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	60	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.3E+01	1.2E+01	8.0E-01	1.1E-01	1.1E-01
1100 - 1200	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	57	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.2E+01	1.1E+01	7.6E-01	1.0E-01	1.0E-01
1200 - 1300	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	54	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.1E+01	1.1E+01	7.2E-01	9.5E-02	9.5E-02
1300 - 1400	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	48	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.0E+01	9.5E+00	6.4E-01	8.5E-02	8.5E-02
1400 - 1500	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	54	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.1E+01	1.1E+01	7.2E-01	9.5E-02	9.5E-02
1500 - 1600	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	56	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.2E+01	1.1E+01	7.5E-01	9.9E-02	9.9E-02
1600 - 1700	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	64	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.4E+01	1.3E+01	8.6E-01	1.1E-01	1.1E-01
1700 - 1800	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	71	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.5E+01	1.4E+01	9.5E-01	1.3E-01	1.3E-01
1800 - 1900	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	66	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.4E+01	1.3E+01	8.8E-01	1.2E-01	1.2E-01
1900 - 2000	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	66	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.4E+01	1.3E+01	8.8E-01	1.2E-01	1.2E-01
2000 - 2100	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	61	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.3E+01	1.2E+01	8.2E-01	1.1E-01	1.1E-01
2100 - 2200	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	42	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	8.9E+00	8.4E+00	5.6E-01	7.4E-02	7.4E-02
2200 - 2300	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	30	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	6.4E+00	6.0E+00	4.0E-01	5.3E-02	5.3E-02
2300 - 2400	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	46	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	9.8E+00	9.1E+00	6.2E-01	8.1E-02	8.1E-02
Daily Total	0											1063										

Total Hourly Emission

Hour	Total Emission inside bus terminus (g) (Running + Idling + Start) [6]					Total Emission Rate (g/s)				
	NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP
0000 - 0100	1.8E+02	1.7E+02	1.2E+01	2.0E+00	1.8E+00	5.1E-02	4.8E-02	3.2E-03	5.5E-04	5.1E-04
0100 - 0200	4.7E+01	4.4E+01	3.0E+00	2.5E-01	2.3E-01	1.3E-02	1.2E-02	8.3E-04	7.1E-05	6.5E-05
0200 - 0300	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	2.2E+01	2.1E+01	1.4E+00	1.0E-01	9.5E-02	6.1E-03	5.7E-03	3.9E-04	2.8E-05	2.6E-05
0500 - 0600	7.8E+01	7.3E+01	4.9E+00	1.2E+00	1.1E+00	2.2E-02	2.0E-02	1.4E-03	3.3E-04	3.0E-04
0600 - 0700	7.9E+01	7.4E+01	5.0E+00	2.4E+00	2.2E+00	2.2E-02	2.1E-02	1.4E-03	6.6E-04	6.1E-04
0700 - 0800	1.6E+02	1.5E+02	1.0E+01	5.0E+00	4.6E+00	4.6E-02	4.3E-02	2.9E-03	1.4E-03	1.3E-03
0800 - 0900	1.8E+02	1.7E+02	1.1E+01	4.9E+00	4.5E+00	4.9E-02	4.6E-02	3.1E-03	1.4E-03	1.3E-03
0900 - 1000	2.9E+02	2.8E+02	1.9E+01	6.1E+00	5.6E+00	8.2E-02	7.7E-02	5.2E-03	1.7E-03	1.6E-03
1000 - 1100	1.7E+02	1.6E+02	1.1E+01	4.5E+00	4.2E+00	4.7E-02	4.4E-02	2.9E-03	1.2E-03	1.2E-03
1100 - 1200	1.8E+02	1.7E+02	1.1E+01	4.2E+00	3.9E+00	5.0E-02	4.6E-02	3.1E-03	1.2E-03	1.1E-03
1200 - 1300	1.7E+02	1.6E+02	1.1E+01	4.1E+00	3.8E+00	4.8E-02	4.5E-02	3.1E-03	1.2E-03	1.1E-03
1300 - 1400	1.4E+02	1.3E+02	8.6E+00	3.6E+00	3.3E+00	3.8E-02	3.6E-02	2.4E-03	1.0E-03	9.2E-04
1400 - 1500	1.6E+02	1.5E+02	9.8E+00	4.1E+00	3.8E+00	4.3E-02	4.1E-02	2.7E-03	1.2E-03	1.1E-03
1500 - 1600	1.3E+02	1.2E+02	8.4E+00	4.0E+00	3.7E+00	3.7E-02	3.5E-02	2.3E-03	1.1E-03	1.0E-03
1600 - 1700	1.9E+02	1.8E+02	1.2E+01	5.2E+00	4.8E+00	5.3E-02	5.0E-02	3.3E-03	1.4E-03	1.3E-03
1700 - 1800	2.1E+02	1.9E+02	1.3E+01	5.6E+00	5.2E+00	5.7E-02	5.4E-02	3.6E-03	1.6E-03	1.4E-03
1800 - 1900	2.2E+02	2.0E+02	1.4E+01	4.9E+00	4.5E+00	6.0E-02	5.6E-02	3.8E-03	1.4E-03	1.3E-03
1900 - 2000	2.0E+02	1.9E+02	1.3E+01	5.0E+00	4.6E+00	5.6E-02	5.3E-02	3.6E-03	1.4E-03	1.3E-03
2000 - 2100	2.1E+02	1.9E+02	1.3E+01	4.5E+00	4.2E+00	5.7E-02	5.4E-02	3.6E-03	1.3E-03	1.2E-03
2100 - 2200	1.2E+02	1.1E+02	7.3E+00	3.0E+00	2.7E+00	3.2E-02	3.0E-02	2.0E-03	8.3E-04	7.6E-04
2200 - 2300	6.5E+01	6.1E+01	4.1E+00	2.0E+00	1.9E+00	1.8E-02	1.7E-02	1.1E-03	5.6E-04	5.2E-04
2300 - 2400	4.3E+02	4.0E+02	2.7E+01	4.2E+00	3.9E+00	1.2E-01	1.1E-01	7.5E-03	1.2E-03	1.1E-03
						max.	1.1E-01	7.5E-03	1.7E-03	1.6E-03

PTI opening hourly emission factor

NO	NO_2	RSP	FSP
0.43	0.43	0.33	0.33
0.11	0.11	0.04	0.04
0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00
0.05	0.05	0.02	0.02
0.18	0.18	0.19	0.19
0.19	0.19	0.39	0.39
0.38	0.38	0.82	0.82
0.42	0.41	0.81	0.81
0.69	0.69	1.00	1.00
0.39	0.39	0.74	0.74
0.42	0.42	0.70	0.70
0.41	0.41	0.68	0.68
0.32	0.32	0.59	0.59
0.37	0.36	0.68	0.68
0.31	0.31	0.67	0.67
0.45	0.45	0.85	0.85
0.48	0.48	0.93	0.93
0.51	0.51	0.81	0.81
0.48	0.47	0.83	0.83
0.48	0.48	0.75	0.75
0.27	0.27	0.49	0.49
0.15	0.15	0.33	0.33
1.00	1.00	0.69	0.69

Remarks:

[1] Idling Emission (g) = Idling Emission Factor (g/s) * Actual Idling time (min) * 60 * Frequency

[2] Total Idling Emission (g) = Cold Idling Emission of FBSD & FBDD (g) + Hot Idling Emission of FBSD & FBDD (g)

[3] If Actual Idling Time ≤ 1 min, Idling Emission for Start Emission Adjustment (g) = Idling rate (g/min) * Actual Idling Time (min)

If Actual Idling Time > 1 min, Idling Emission for Start Emission Adjustment (g) = Idling rate (g/min) * Maximum Duration for Adjusting Start Emission "K" (min)

Where Idling rate (g/min) = Total Idling Emission (g) / Idling Time (min), and "K" = 1 min for Diesel vehicles with SCR

[4] Adjusted Start Emission within bus terminus (g) = [Total Start Emission of FBSD & FBDD (g) - Idling Emission for Start Emission Adjustment (g)] * [Average Distance from Starting Place to Egress (m) / 700m]

Minimum value = 0 g

[5] Adjusted Start Emission outside bus terminus (g) = [Total Start Emission of FBSD & FBDD (g) - Idling Emission for Start Emission Adjustment (g)] * [Average Spread Distance outside bus terminus (m) / 700m]

Minimum value = 0 g

[6] Total Emission Inside bus terminus (g) = Total Running Emission (g) + Idling Emission (g) + Adjusted Start Emission within bus terminus (g)

Exchange Square Bus Terminus

Minimum Hourly Temperature and Relative Humidity for 4th Quarter

Temperature: 10 ^{o}C

Relative Humidity: 22 %

Start Emission

	Single-Deck Franchised Bus (FBSD) Start Emission Factor (g/trip)																	
NOx	2.0E-01	3.6E-01	4.8E-01	6.8E-01	8.4E-01	1.1E+00	1.6E+00	2.0E+00	3.0E+00	3.9E+00	4.4E+00	5.2E+00	5.7E+00	6.0E+00	6.2E+00	6.3E+00	6.4E+00	6.4E+00
NO	1.7E-01	3.0E-01	4.1E-01	5.8E-01	7.1E-01	9.5E-01	1.4E+00	1.7E+00	2.5E+00	3.3E+00	3.7E+00	4.4E+00	4.8E+00	5.1E+00	5.2E+00	5.4E+00	5.4E+00	5.4E+00
NO2	3.2E-02	5.7E-02	7.6E-02	1.1E-01	1.3E-01	1.8E-01	2.6E-01	3.2E-01	4.7E-01	6.2E-01	6.9E-01	8.2E-01	9.0E-01	9.5E-01	9.7E-01	1.0E+00	1.0E+00	1.0E+00
RSP	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
FSP	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00

	Double-Deck Franchised Bus (FBDD) Start Emission Factor (g/trip)																	
NOx	7.2E-01	1.3E+00	1.7E+00	2.4E+00	3.0E+00	4.0E+00	5.9E+00	7.3E+00	1.1E+01	1.4E+01	1.6E+01	1.9E+01	2.1E+01	2.2E+01	2.2E+01	2.3E+01	2.3E+01	2.3E+01
NO	6.7E-01	1.2E+00	1.6E+00	2.3E+00	2.8E+00	3.7E+00	5.5E+00	6.8E+00	1.0E+01	1.3E+01	1.5E+01	1.7E+01	1.9E+01	2.0E+01	2.1E+01	2.1E+01	2.1E+01	2.1E+01
NO2	5.0E-02	9.1E-02	1.2E-01	1.7E-01	2.1E-01	2.8E-01	4.1E-01	5.1E-01	7.5E-01	9.8E-01	1.1E+00	1.3E+00	1.4E+00	1.5E+00	1.5E+00	1.6E+00	1.6E+00	1.6E+00
RSP	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
FSP	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00

	No. of Trips of FBSD																	
Soaking Time (min) / Hour	**5**	**10**	**20**	**30**	**40**	**50**	**60**	**120**	**180**	**240**	**300**	**360**	**420**	**480**	**540**	**600**	**660**	**720**
0000 - 0100																		
0100 - 0200																		
0200 - 0300																		
0300 - 0400																		
0400 - 0500																		
0500 - 0600																		
0600 - 0700																		
0700 - 0800																		
0800 - 0900																		
0900 - 1000																		
1000 - 1100																		
1100 - 1200																		
1200 - 1300																		
1300 - 1400																		
1400 - 1500																		
1500 - 1600																		
1600 - 1700																		
1700 - 1800																		
1800 - 1900																		
1900 - 2000																		
2000 - 2100																		
2100 - 2200																		
2200 - 2300																		
2300 - 2400																		
																	Daily Total	0

	No. of Trips of FBDD																	
Soaking Time (min) / Hour	**5**	**10**	**20**	**30**	**40**	**50**	**60**	**120**	**180**	**240**	**300**	**360**	**420**	**480**	**540**	**600**	**660**	**720**
0000 - 0100	2	1	2	5	0	1	0	0	0	0	2	2	2	0	0	0	0	0
0100 - 0200	0	0	0	0	0	0	0	0	0	0	1	1	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	1	0	0	0	0	0	0	0	0	0	0
0500 - 0600	1	2	1	0	3	2	0	2	0	0	0	0	0	0	0	0	0	0
0600 - 0700	3	4	8	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0700 - 0800	7	12	7	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0800 - 0900	5	11	9	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
0900 - 1000	14	6	8	5	0	0	0	0	2	1	0	0	1	1	0	0	0	0
1000 - 1100	3	4	15	5	1	0	0	0	0	1	0	0	0	0	0	0	0	0
1100 - 1200	2	5	14	3	1	0	0	0	0	1	0	0	1	0	0	0	0	0
1200 - 1300	2	10	12	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0
1300 - 1400	6	7	6	2	0	1	0	1	0	0	0	0	0	0	0	0	0	0
1400 - 1500	3	5	16	3	0	0	0	1	0	0	0	0	0	0	0	0	0	0
1500 - 1600	1	6	9	7	1	0	0	0	0	0	0	0	0	0	0	0	0	0
1600 - 1700	10	5	16	4	0	2	1	0	0	0	0	0	0	0	0	0	0	0
1700 - 1800	1	10	18	8	1	1	1	0	0	0	0	0	0	0	0	0	0	0
1800 - 1900	2	8	16	2	0	0	1	2	0	0	0	0	0	0	0	0	0	0
1900 - 2000	4	6	15	5	1	0	0	1	1	0	0	0	0	0	0	0	0	0
2000 - 2100	1	4	16	3	1	1	0	2	1	0	0	0	0	0	0	0	0	0
2100 - 2200	2	3	11	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
2200 - 2300	2	4	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2300 - 2400	4	7	4	5	0	1	0	9	0	0	0	0	4	1	1	0	0	0
																	Daily Total	537

Total Start Emission of FBSD & FBDD (g)				
NOx	**NO**	**NO2**	**RSP**	**FSP**
1.3E+02	1.2E+02	9.3E+00	0.0E+00	0.0E+00
3.5E+01	3.2E+01	2.4E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
7.3E+00	6.8E+00	5.1E-01	0.0E+00	0.0E+00
3.7E+01	3.4E+01	2.6E+00	0.0E+00	0.0E+00
2.6E+01	2.4E+01	1.8E+00	0.0E+00	0.0E+00
4.5E+01	4.2E+01	3.1E+00	0.0E+00	0.0E+00
4.2E+01	3.9E+01	2.9E+00	0.0E+00	0.0E+00
1.2E+02	1.1E+02	8.5E+00	0.0E+00	0.0E+00
6.3E+01	5.8E+01	4.4E+00	0.0E+00	0.0E+00
7.7E+01	7.2E+01	5.4E+00	0.0E+00	0.0E+00
5.5E+01	5.1E+01	3.9E+00	0.0E+00	0.0E+00
4.0E+01	3.7E+01	2.8E+00	0.0E+00	0.0E+00
5.1E+01	4.7E+01	3.6E+00	0.0E+00	0.0E+00
4.4E+01	4.1E+01	3.1E+00	0.0E+00	0.0E+00
6.5E+01	6.0E+01	4.5E+00	0.0E+00	0.0E+00
7.7E+01	7.2E+01	5.4E+00	0.0E+00	0.0E+00
6.5E+01	6.0E+01	4.5E+00	0.0E+00	0.0E+00
7.0E+01	6.5E+01	4.9E+00	0.0E+00	0.0E+00
7.3E+01	6.8E+01	5.1E+00	0.0E+00	0.0E+00
3.2E+01	2.9E+01	2.2E+00	0.0E+00	0.0E+00
1.5E+01	1.4E+01	1.0E+00	0.0E+00	0.0E+00
2.3E+02	2.1E+02	1.6E+01	0.0E+00	0.0E+00

Idling Emission - Terminating Buses

Idling Time for Terminating Buses	3	min
Max. Idling Time for Adjusting Start Emission =	1	min

Hour	FBSD											FBDD										
	Frequency	Cold Idling Emission Factor (g/s)					Cold Idling Emission (g) [1]					Frequency	Cold Idling Emission Factor (g/s)					Cold Idling Emission (g) [1]				
		NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP		NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP
0000 - 0100	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	6	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	1.2E+02	1.1E+02	7.3E+00	3.2E-02	3.2E-02
0100 - 0200	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	2	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	3.8E+01	3.6E+01	2.4E+00	1.1E-02	1.1E-02
0200 - 0300	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	1.9E+01	1.8E+01	1.2E+00	5.3E-03	5.3E-03
0500 - 0600	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	2	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	3.8E+01	3.6E+01	2.4E+00	1.1E-02	1.1E-02
0600 - 0700	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0700 - 0800	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0800 - 0900	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	1.9E+01	1.8E+01	1.2E+00	5.3E-03	5.3E-03
0900 - 1000	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	5	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	9.6E+01	9.0E+01	6.1E+00	2.7E-02	2.7E-02
1000 - 1100	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	1.9E+01	1.8E+01	1.2E+00	5.3E-03	5.3E-03
1100 - 1200	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	2	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	3.8E+01	3.6E+01	2.4E+00	1.1E-02	1.1E-02
1200 - 1300	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	2	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	3.8E+01	3.6E+01	2.4E+00	1.1E-02	1.1E-02
1300 - 1400	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	1.9E+01	1.8E+01	1.2E+00	5.3E-03	5.3E-03
1400 - 1500	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	1.9E+01	1.8E+01	1.2E+00	5.3E-03	5.3E-03
1500 - 1600	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1600 - 1700	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	1.9E+01	1.8E+01	1.2E+00	5.3E-03	5.3E-03
1700 - 1800	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	1.9E+01	1.8E+01	1.2E+00	5.3E-03	5.3E-03
1800 - 1900	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	3	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	5.8E+01	5.4E+01	3.6E+00	1.6E-02	1.6E-02
1900 - 2000	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	2	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	3.8E+01	3.6E+01	2.4E+00	1.1E-02	1.1E-02
2000 - 2100	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	3	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	5.8E+01	5.4E+01	3.6E+00	1.6E-02	1.6E-02
2100 - 2200	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	1.9E+01	1.8E+01	1.2E+00	5.3E-03	5.3E-03
2200 - 2300	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2300 - 2400	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	15	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	2.9E+02	2.7E+02	1.8E+01	8.0E-02	8.0E-02
Daily Total	0											50										

Hour	FBSD											FBDD										
	Frequency	Hot Idling Emission Factor (g/s)					Hot Idling Emission (g) [1]					Frequency	Hot Idling Emission Factor (g/s)					Hot Idling Emission (g) [1]				
		NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP		NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP
0000 - 0100	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	11	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	7.0E+00	6.6E+00	4.4E-01	5.8E-02	5.8E-02
0100 - 0200	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	9	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	5.7E+00	5.4E+00	3.6E-01	4.8E-02	4.8E-02
0600 - 0700	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	17	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.1E+01	1.0E+01	6.8E-01	9.0E-02	9.0E-02
0700 - 0800	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	31	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.0E+01	1.8E+01	1.2E+00	1.6E-01	1.6E-01
0800 - 0900	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	26	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.7E+01	1.6E+01	1.0E+00	1.4E-01	1.4E-01
0900 - 1000	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	33	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.1E+01	2.0E+01	1.3E+00	1.7E-01	1.7E-01
1000 - 1100	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	28	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.8E+01	1.7E+01	1.1E+00	1.5E-01	1.5E-01
1100 - 1200	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	25	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.6E+01	1.5E+01	1.0E+00	1.3E-01	1.3E-01
1200 - 1300	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	26	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.7E+01	1.6E+01	1.0E+00	1.4E-01	1.4E-01
1300 - 1400	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	22	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.4E+01	1.3E+01	8.8E-01	1.2E-01	1.2E-01
1400 - 1500	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	27	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.7E+01	1.6E+01	1.1E+00	1.4E-01	1.4E-01
1500 - 1600	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	24	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.5E+01	1.4E+01	9.6E-01	1.3E-01	1.3E-01
1600 - 1700	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	37	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.4E+01	2.2E+01	1.5E+00	2.0E-01	2.0E-01
1700 - 1800	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	39	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.5E+01	2.3E+01	1.6E+00	2.1E-01	2.1E-01
1800 - 1900	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	28	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.8E+01	1.7E+01	1.1E+00	1.5E-01	1.5E-01
1900 - 2000	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	31	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.0E+01	1.8E+01	1.2E+00	1.6E-01	1.6E-01
2000 - 2100	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	26	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.7E+01	1.6E+01	1.0E+00	1.4E-01	1.4E-01
2100 - 2200	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	16	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.0E+01	9.5E+00	6.4E-01	8.5E-02	8.5E-02
2200 - 2300	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	10	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	6.4E+00	6.0E+00	4.0E-01	5.3E-02	5.3E-02
2300 - 2400	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	21	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.3E+01	1.3E+01	8.4E-01	1.1E-01	1.1E-01
	0											487										

Average Distance from Starting Place to Egress =	55	m
Average Distance from PTI Egress to Open Road Network	0	m
Average Spread Distance outside bus terminus =	645	m

Hour	Total Idling Emission (g) [2]					Idling Emission for Start Emission Adjustment (g) [3]					Adjusted Start Emission within bus terminus (g) [4]					Adjusted Start Emission outside bus terminus (g) [5]					Start Emission Rate outside bus terminus (g/s)				
	NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP
0000 - 0100	1.2E+02	1.1E+02	7.7E+00	9.0E-02	9.0E-02	4.1E+01	3.8E+01	2.6E+00	3.0E-02	3.0E-02	7.2E+00	6.7E+00	5.3E-01	0.0E+00	0.0E+00	8.5E+01	7.8E+01	6.2E+00	0.0E+00	0.0E+00	2.3E-02	2.2E-02	1.7E-03	0.0E+00	0.0E+00
0100 - 0200	3.8E+01	3.6E+01	2.4E+00	1.1E-02	1.1E-02	1.3E+01	1.2E+01	8.1E-01	3.5E-03	3.5E-03	1.7E+00	1.6E+00	1.3E-01	0.0E+00	0.0E+00	2.0E+01	1.9E+01	1.5E+00	0.0E+00	0.0E+00	5.5E-03	5.1E-03	4.1E-04	0.0E+00	0.0E+00
0200 - 0300	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	1.9E+01	1.8E+01	1.2E+00	5.3E-03	5.3E-03	6.4E+00	6.0E+00	4.0E-01	1.8E-03	1.8E-03	7.2E-02	6.4E-02	8.5E-03	0.0E+00	0.0E+00	8.5E-01	7.5E-01	1.0E-01	0.0E+00	0.0E+00	2.4E-04	2.1E-04	2.8E-05	0.0E+00	0.0E+00
0500 - 0600	4.4E+01	4.1E+01	2.8E+00	5.8E-02	5.8E-02	1.5E+01	1.4E+01	9.3E-01	1.9E-02	1.9E-02	1.7E+00	1.6E+00	1.3E-01	0.0E+00	0.0E+00	2.0E+01	1.9E+01	1.5E+00	0.0E+00	0.0E+00	5.6E-03	5.2E-03	4.2E-04	0.0E+00	0.0E+00
0600 - 0700	1.1E+01	1.0E+01	6.8E-01	9.0E-02	9.0E-02	3.6E+00	3.4E+00	2.3E-01	3.0E-02	3.0E-02	1.8E+00	1.6E+00	1.3E-01	0.0E+00	0.0E+00	2.1E+01	1.9E+01	1.5E+00	0.0E+00	0.0E+00	5.7E-03	5.3E-03	4.1E-04	0.0E+00	0.0E+00
0700 - 0800	2.0E+01	1.8E+01	1.2E+00	1.6E-01	1.6E-01	6.6E+00	6.2E+00	4.1E-01	5.5E-02	5.5E-02	3.0E+00	2.8E+00	2.1E-01	0.0E+00	0.0E+00	3.5E+01	3.3E+01	2.5E+00	0.0E+00	0.0E+00	9.8E-03	9.1E-03	7.0E-04	0.0E+00	0.0E+00
0800 - 0900	3.6E+01	3.4E+01	2.3E+00	1.4E-01	1.4E-01	1.2E+01	1.1E+01	7.5E-01	4.8E-02	4.8E-02	2.3E+00	2.2E+00	1.7E-01	0.0E+00	0.0E+00	2.7E+01	2.5E+01	2.0E+00	0.0E+00	0.0E+00	7.6E-03	7.1E-03	5.5E-04	0.0E+00	0.0E+00
0900 - 1000	1.2E+02	1.1E+02	7.4E+00	2.0E-01	2.0E-01	3.9E+01	3.7E+01	2.5E+00	6.7E-02	6.7E-02	6.5E+00	6.0E+00	4.7E-01	0.0E+00	0.0E+00	7.6E+01	7.1E+01	5.6E+00	0.0E+00	0.0E+00	2.1E-02	2.0E-02	1.5E-03	0.0E+00	0.0E+00
1000 - 1100	3.7E+01	3.5E+01	2.3E+00	1.5E-01	1.5E-01	1.2E+01	1.2E+01	7.8E-01	5.1E-02	5.1E-02	3.9E+00	3.7E+00	2.8E-01	0.0E+00	0.0E+00	4.6E+01	4.3E+01	3.3E+00	0.0E+00	0.0E+00	1.3E-02	1.2E-02	9.2E-04	0.0E+00	0.0E+00
1100 - 1200	5.4E+01	5.1E+01	3.4E+00	1.4E-01	1.4E-01	1.8E+01	1.7E+01	1.1E+00	4.8E-02	4.8E-02	4.6E+00	4.3E+00	3.3E-01	0.0E+00	0.0E+00	5.4E+01	5.0E+01	3.9E+00	0.0E+00	0.0E+00	1.5E-02	1.4E-02	1.1E-03	0.0E+00	0.0E+00
1200 - 1300	5.5E+01	5.2E+01	3.5E+00	1.5E-01	1.5E-01	1.8E+01	1.7E+01	1.2E+00	4.9E-02	4.9E-02	2.9E+00	2.7E+00	2.1E-01	0.0E+00	0.0E+00	3.4E+01	3.1E+01	2.5E+00	0.0E+00	0.0E+00	9.4E-03	8.7E-03	6.9E-04	0.0E+00	0.0E+00
1300 - 1400	3.3E+01	3.1E+01	2.1E+00	1.2E-01	1.2E-01	1.1E+01	1.0E+01	7.0E-01	4.1E-02	4.1E-02	2.3E+00	2.1E+00	1.6E-01	0.0E+00	0.0E+00	2.7E+01	2.5E+01	1.9E+00	0.0E+00	0.0E+00	7.4E-03	6.9E-03	5.4E-04	0.0E+00	0.0E+00
1400 - 1500	3.6E+01	3.4E+01	2.3E+00	1.5E-01	1.5E-01	1.2E+01	1.1E+01	7.6E-01	4.9E-02	4.9E-02	3.0E+00	2.8E+00	2.2E-01	0.0E+00	0.0E+00	3.6E+01	3.3E+01	2.6E+00	0.0E+00	0.0E+00	9.9E-03	9.2E-03	7.1E-04	0.0E+00	0.0E+00
1500 - 1600	1.5E+01	1.4E+01	9.6E-01	1.3E-01	1.3E-01	5.1E+00	4.8E+00	3.2E-01	4.2E-02	4.2E-02	3.1E+00	2.9E+00	2.2E-01	0.0E+00	0.0E+00	3.6E+01	3.3E+01	2.5E+00	0.0E+00	0.0E+00	1.0E-02	9.3E-03	7.1E-04	0.0E+00	0.0E+00
1600 - 1700	4.3E+01	4.0E+01	2.7E+00	2.0E-01	2.0E-01	1.4E+01	1.3E+01	9.0E-01	6.7E-02	6.7E-02	4.0E+00	3.7E+00	2.9E-01	0.0E+00	0.0E+00	4.7E+01	4.3E+01	3.4E+00	0.0E+00	0.0E+00	1.3E-02	1.2E-02	9.3E-04	0.0E+00	0.0E+00
1700 - 1800	4.4E+01	4.1E+01	2.8E+00	2.1E-01	2.1E-01	1.5E+01	1.4E+01	9.3E-01	7.1E-02	7.1E-02	4.9E+00	4.6E+00	3.5E-01	0.0E+00	0.0E+00	5.8E+01	5.3E+01	4.1E+00	0.0E+00	0.0E+00	1.6E-02	1.5E-02	1.1E-03	0.0E+00	0.0E+00
1800 - 1900	7.6E+01	7.1E+01	4.8E+00	1.6E-01	1.6E-01	2.5E+01	2.4E+01	1.6E+00	5.5E-02	5.5E-02	3.1E+00	2.9E+00	2.3E-01	0.0E+00	0.0E+00	3.7E+01	3.4E+01	2.7E+00	0.0E+00	0.0E+00	1.0E-02	9.4E-03	7.5E-04	0.0E+00	0.0E+00
1900 - 2000	5.8E+01	5.5E+01	3.7E+00	1.7E-01	1.7E-01	1.9E+01	1.8E+01	1.2E+00	5.8E-02	5.8E-02	4.0E+00	3.7E+00	2.9E-01	0.0E+00	0.0E+00	4.7E+01	4.3E+01	3.4E+00	0.0E+00	0.0E+00	1.3E-02	1.2E-02	9.4E-04	0.0E+00	0.0E+00
2000 - 2100	7.4E+01	7.0E+01	4.7E+00	1.5E-01	1.5E-01	2.5E+01	2.3E+01	1.6E+00	5.1E-02	5.1E-02	3.8E+00	3.5E+00	2.8E-01	0.0E+00	0.0E+00	4.5E+01	4.1E+01	3.3E+00	0.0E+00	0.0E+00	1.2E-02	1.2E-02	9.1E-04	0.0E+00	0.0E+00
2100 - 2200	2.9E+01	2.8E+01	1.9E+00	9.0E-02	9.0E-02	9.8E+00	9.2E+00	6.2E-01	3.0E-02	3.0E-02	1.7E+00	1.6E+00	1.3E-01	0.0E+00	0.0E+00	2.0E+01	1.9E+01	1.5E+00	0.0E+00	0.0E+00	5.6E-03	5.2E-03	4.1E-04	0.0E+00	0.0E+00
2200 - 2300	6.4E+00	6.0E+00	4.0E-01	5.3E-02	5.3E-02	2.1E+00	2.0E+00	1.3E-01	1.8E-02	1.8E-02	1.0E+00	9.4E-01	7.2E-02	0.0E+00	0.0E+00	1.2E+01	1.1E+01	8.4E-01	0.0E+00	0.0E+00	3.3E-03	3.1E-03	2.3E-04	0.0E+00	0.0E+00
2300 - 2400	3.0E+02	2.8E+02	1.9E+01	1.9E-01	1.9E-01	1.0E+02	9.4E+01	6.3E+00	6.4E-02	6.4E-02	9.9E+00	9.2E+00	7.5E-01	0.0E+00	0.0E+00	1.2E+02	1.1E+02	8.8E+00	0.0E+00	0.0E+00	3.2E-02	3.0E-02	2.4E-03	0.0E+00	0.0E+00

Running Emission - Terminating and Bypass Buses

Average Travelling Distance within bus terminus =	125	m
Average Travelling Speed =	10	km/h

Hour	FBSD										FBDD									
	Frequency	Running Emission Factor (g/km-vehicle)					Running Emission (g)					Frequency	Running Emission Factor (g/km-vehicle)					Running Emission (g)			
	y	NOx	NO	NO2	RSP	FSP	NOx	NO	NO2	RSP	FSP	y	NOx	NO	NO2	RSP	FSP	NOx	NO	NO2	RSP	FSP
0000 - 0100	0	3.5E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	39	1.1E+01	1.0E+01	7.1E-01	3.8E-01	3.5E-01	5.5E+01	5.1E+01	3.4E+00	1.9E+00	1.7E+00
0100 - 0200	0	3.5E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	5	1.1E+01	1.0E+01	7.1E-01	3.8E-01	3.5E-01	7.0E+00	6.6E+00	4.4E-01	2.4E-01	2.2E-01
0200 - 0300	0	3.5E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E+01	1.0E+01	7.1E-01	3.8E-01	3.5E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0	3.5E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E+01	1.0E+01	7.1E-01	3.8E-01	3.5E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0	3.5E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	2	1.1E+01	1.0E+01	7.1E-01	3.8E-01	3.5E-01	2.8E+00	2.6E+00	1.8E-01	9.5E-02	8.8E-02
0500 - 0600	0	3.5E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	23	1.1E+01	1.0E+01	7.1E-01	3.8E-01	3.5E-01	3.2E+01	3.0E+01	2.0E+00	1.1E+00	1.0E+00
0600 - 0700	0	3.5E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	47	1.1E+01	1.0E+01	7.1E-01	3.8E-01	3.5E-01	6.6E+01	6.2E+01	4.1E+00	2.2E+00	2.1E+00
0700 - 0800	0	3.5E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	99	1.1E+01	1.0E+01	7.1E-01	3.8E-01	3.5E-01	1.4E+02	1.3E+02	8.7E+00	4.7E+00	4.3E+00
0800 - 0900	0	3.5E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	97	1.1E+01	1.0E+01	7.1E-01	3.8E-01	3.5E-01	1.4E+02	1.3E+02	8.6E+00	4.6E+00	4.2E+00
0900 - 1000	0	3.5E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	120	1.1E+01	1.0E+01	7.1E-01	3.8E-01	3.5E-01	1.7E+02	1.6E+02	1.1E+01	5.7E+00	5.3E+00
1000 - 1100	0	3.5E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	89	1.1E+01	1.0E+01	7.1E-01	3.8E-01	3.5E-01	1.2E+02	1.2E+02	7.9E+00	4.2E+00	3.9E+00
1100 - 1200	0	3.5E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	84	1.1E+01	1.0E+01	7.1E-01	3.8E-01	3.5E-01	1.2E+02	1.1E+02	7.4E+00	4.0E+00	3.7E+00
1200 - 1300	0	3.5E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	82	1.1E+01	1.0E+01	7.1E-01	3.8E-01	3.5E-01	1.1E+02	1.1E+02	7.2E+00	3.9E+00	3.6E+00
1300 - 1400	0	3.5E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	71	1.1E+01	1.0E+01	7.1E-01	3.8E-01	3.5E-01	9.9E+01	9.3E+01	6.3E+00	3.4E+00	3.1E+00
1400 - 1500	0	3.5E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	82	1.1E+01	1.0E+01	7.1E-01	3.8E-01	3.5E-01	1.1E+02	1.1E+02	7.2E+00	3.9E+00	3.6E+00
1500 - 1600	0	3.5E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	80	1.1E+01	1.0E+01	7.1E-01	3.8E-01	3.5E-01	1.1E+02	1.0E+02	7.1E+00	3.8E+00	3.5E+00
1600 - 1700	0	3.5E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	102	1.1E+01	1.0E+01	7.1E-01	3.8E-01	3.5E-01	1.4E+02	1.3E+02	9.0E+00	4.9E+00	4.5E+00
1700 - 1800	0	3.5E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	111	1.1E+01	1.0E+01	7.1E-01	3.8E-01	3.5E-01	1.6E+02	1.5E+02	9.8E+00	5.3E+00	4.9E+00
1800 - 1900	0	3.5E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	97	1.1E+01	1.0E+01	7.1E-01	3.8E-01	3.5E-01	1.4E+02	1.3E+02	8.6E+00	4.6E+00	4.2E+00
1900 - 2000	0	3.5E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	99	1.1E+01	1.0E+01	7.1E-01	3.8E-01	3.5E-01	1.4E+02	1.3E+02	8.7E+00	4.7E+00	4.3E+00
2000 - 2100	0	3.5E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	90	1.1E+01	1.0E+01	7.1E-01	3.8E-01	3.5E-01	1.3E+02	1.2E+02	7.9E+00	4.3E+00	3.9E+00
2100 - 2200	0	3.5E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	59	1.1E+01	1.0E+01	7.1E-01	3.8E-01	3.5E-01	8.3E+01	7.7E+01	5.2E+00	2.8E+00	2.6E+00
2200 - 2300	0	3.5E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	40	1.1E+01	1.0E+01	7.1E-01	3.8E-01	3.5E-01	5.6E+01	5.2E+01	3.5E+00	1.9E+00	1.8E+00
2300 - 2400	0	3.5E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	82	1.1E+01	1.0E+01	7.1E-01	3.8E-01	3.5E-01	1.1E+02	1.1E+02	7.2E+00	3.9E+00	3.6E+00
Daily Total	0											1600										

Idling Emission - Bypass Buses

Idling Time for Bypass Buses	1	min

Hour	FBSD										FBDD									
	Frequency	Hot Idling Emission Factor (g/s)					Hot Idling Emission (g)					Frequency	Hot Idling Emission Factor (g/s)					Hot Idling Emission (g)				
	y	NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP	y	NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP
0000 - 0100	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	22	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	4.7E+00	4.4E+00	2.9E-01	3.9E-02	3.9E-02
0100 - 0200	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	3	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	6.4E-01	6.0E-01	4.0E-02	5.3E-03	5.3E-03
0200 - 0300	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.1E-01	2.0E-01	1.3E-02	1.8E-03	1.8E-03
0500 - 0600	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	12	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.5E+00	2.4E+00	1.6E-01	2.1E-02	2.1E-02
0600 - 0700	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	30	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	6.4E+00	6.0E+00	4.0E-01	5.3E-02	5.3E-02
0700 - 0800	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	68	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.4E+01	1.4E+01	9.1E-01	1.2E-01	1.2E-01
0800 - 0900	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	70	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.5E+01	1.4E+01	9.4E-01	1.2E-01	1.2E-01
0900 - 1000	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	82	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.7E+01	1.6E+01	1.1E+00	1.4E-01	1.4E-01
1000 - 1100	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	60	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.3E+01	1.2E+01	8.0E-01	1.1E-01	1.1E-01
1100 - 1200	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	57	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.2E+01	1.1E+01	7.6E-01	1.0E-01	1.0E-01
1200 - 1300	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	54	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.1E+01	1.1E+01	7.2E-01	9.5E-02	9.5E-02
1300 - 1400	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	48	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.0E+01	9.5E+00	6.4E-01	8.5E-02	8.5E-02
1400 - 1500	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	54	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.1E+01	1.1E+01	7.2E-01	9.5E-02	9.5E-02
1500 - 1600	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	56	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.2E+01	1.1E+01	7.5E-01	9.9E-02	9.9E-02
1600 - 1700	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	64	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.4E+01	1.3E+01	8.6E-01	1.1E-01	1.1E-01
1700 - 1800	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	71	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.5E+01	1.4E+01	9.5E-01	1.3E-01	1.3E-01
1800 - 1900	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	66	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.4E+01	1.3E+01	8.8E-01	1.2E-01	1.2E-01
1900 - 2000	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	66	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.4E+01	1.3E+01	8.8E-01	1.2E-01	1.2E-01
2000 - 2100	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	61	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.3E+01	1.2E+01	8.2E-01	1.1E-01	1.1E-01
2100 - 2200	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	42	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	8.9E+00	8.4E+00	5.6E-01	7.4E-02	7.4E-02
2200 - 2300	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	30	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	6.4E+00	6.0E+00	4.0E-01	5.3E-02	5.3E-02
2300 - 2400	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	46	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	9.8E+00	9.1E+00	6.2E-01	8.1E-02	8.1E-02
Daily Total	0											1063										

Total Hourly Emission

Hour	Total Emission inside bus terminus (g) (Running + Idling + Start) [6]					Total Emission Rate (g/s)				
	NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP
0000 - 0100	1.9E+02	1.8E+02	1.2E+01	2.0E+00	1.8E+00	5.2E-02	4.9E-02	3.3E-03	5.5E-04	5.1E-04
0100 - 0200	4.8E+01	4.5E+01	3.0E+00	2.5E-01	2.3E-01	1.3E-02	1.2E-02	8.4E-04	7.1E-05	6.5E-05
0200 - 0300	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	2.2E+01	2.1E+01	1.4E+00	1.0E-01	9.5E-02	6.2E-03	5.8E-03	3.9E-04	2.8E-05	2.6E-05
0500 - 0600	8.1E+01	7.6E+01	5.1E+00	1.2E+00	1.1E+00	2.2E-02	2.1E-02	1.4E-03	3.3E-04	3.0E-04
0600 - 0700	8.5E+01	7.9E+01	5.4E+00	2.4E+00	2.2E+00	2.4E-02	2.2E-02	1.5E-03	6.6E-04	6.1E-04
0700 - 0800	1.8E+02	1.6E+02	1.1E+01	5.0E+00	4.6E+00	4.9E-02	4.6E-02	3.1E-03	1.4E-03	1.3E-03
0800 - 0900	1.9E+02	1.8E+02	1.2E+01	4.9E+00	4.5E+00	5.2E-02	4.9E-02	3.3E-03	1.4E-03	1.3E-03
0900 - 1000	3.1E+02	2.9E+02	2.0E+01	6.1E+00	5.6E+00	8.6E-02	8.0E-02	5.4E-03	1.7E-03	1.6E-03
1000 - 1100	1.8E+02	1.7E+02	1.1E+01	4.5E+00	4.2E+00	5.0E-02	4.6E-02	3.1E-03	1.2E-03	1.2E-03
1100 - 1200	1.9E+02	1.8E+02	1.2E+01	4.2E+00	3.9E+00	5.2E-02	4.9E-02	3.3E-03	1.2E-03	1.1E-03
1200 - 1300	1.8E+02	1.7E+02	1.2E+01	4.1E+00	3.8E+00	5.1E-02	4.8E-02	3.2E-03	1.2E-03	1.1E-03
1300 - 1400	1.5E+02	1.4E+02	9.2E+00	3.6E+00	3.3E+00	4.0E-02	3.8E-02	2.5E-03	1.0E-03	9.2E-04
1400 - 1500	1.7E+02	1.6E+02	1.0E+01	4.1E+00	3.8E+00	4.6E-02	4.3E-02	2.9E-03	1.2E-03	1.1E-03
1500 - 1600	1.4E+02	1.3E+02	9.0E+00	4.0E+00	3.7E+00	4.0E-02	3.7E-02	2.5E-03	1.1E-03	1.0E-03
1600 - 1700	2.0E+02	1.9E+02	1.3E+01	5.2E+00	4.8E+00	5.6E-02	5.3E-02	3.6E-03	1.4E-03	1.3E-03
1700 - 1800	2.2E+02	2.1E+02	1.4E+01	5.6E+00	5.2E+00	6.1E-02	5.7E-02	3.9E-03	1.6E-03	1.4E-03
1800 - 1900	2.3E+02	2.1E+02	1.4E+01	4.9E+00	4.5E+00	6.3E-02	5.9E-02	4.0E-03	1.4E-03	1.3E-03
1900 - 2000	2.1E+02	2.0E+02	1.4E+01	5.0E+00	4.6E+00	6.0E-02	5.6E-02	3.8E-03	1.4E-03	1.3E-03
2000 - 2100	2.2E+02	2.0E+02	1.4E+01	4.5E+00	4.2E+00	6.0E-02	5.6E-02	3.8E-03	1.3E-03	1.2E-03
2100 - 2200	1.2E+02	1.1E+02	7.7E+00	3.0E+00	2.7E+00	3.4E-02	3.2E-02	2.2E-03	8.3E-04	7.6E-04
2200 - 2300	7.0E+01	6.5E+01	4.4E+00	2.0E+00	1.9E+00	1.9E-02	1.8E-02	1.2E-03	5.6E-04	5.2E-04
2300 - 2400	4.4E+02	4.1E+02	2.8E+01	4.2E+00	3.9E+00	1.2E-01	1.1E-01	7.7E-03	1.2E-03	1.1E-03
						max.	1.1E-01	7.7E-03	1.7E-03	1.6E-03

PTI opening hourly emission factor

NO	NO_2	RSP	FSP
0.43	0.43	0.33	0.33
0.11	0.11	0.04	0.04
0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00
0.05	0.05	0.02	0.02
0.18	0.18	0.19	0.19
0.19	0.19	0.39	0.39
0.40	0.40	0.82	0.82
0.43	0.43	0.81	0.81
0.71	0.71	1.00	1.00
0.41	0.41	0.74	0.74
0.43	0.43	0.70	0.70
0.42	0.42	0.68	0.68
0.33	0.33	0.59	0.59
0.38	0.38	0.68	0.68
0.33	0.33	0.67	0.67
0.47	0.46	0.85	0.85
0.50	0.50	0.93	0.93
0.52	0.52	0.81	0.81
0.49	0.49	0.83	0.83
0.50	0.50	0.75	0.75
0.28	0.28	0.49	0.49
0.16	0.16	0.33	0.33
1.00	1.00	0.69	0.69

Remarks:

[1] Idling Emission (g) = Idling Emission Factor (g/s) * Actual Idling time (min) * 60 * Frequency

[2] Total Idling Emission (g) = Cold Idling Emission of FBSD & FBDD (g) + Hot Idling Emission of FBSD & FBDD (g)

[3] If Actual Idling Time ≤ 1 min, Idling Emission for Start Emission Adjustment (g) = Idling rate (g/min) * Actual Idling Time (min)

If Actual Idling Time > 1 min, Idling Emission for Start Emission Adjustment (g) = Idling rate (g/min) * Maximum Duration for Adjusting Start Emission "K" (min)

Where Idling rate (g/min) = Total Idling Emission (g) / Idling Time (min), and "K" = 1 min for Diesel vehicles with SCR

[4] Adjusted Start Emission within bus terminus (g) = [Total Start Emission of FBSD & FBDD (g) - Idling Emission for Start Emission Adjustment (g)] * [Average Distance from Starting Place to Egress (m) / 700m]

Minimum value = 0 g

[5] Adjusted Start Emission outside bus terminus (g) = [Total Start Emission of FBSD & FBDD (g) - Idling Emission for Start Emission Adjustment (g)] * [Average Spread Distance outside bus terminus (m) / 700m]

Minimum value = 0 g

[6] Total Emission Inside bus terminus (g) = Total Running Emission (g) + Idling Emission (g) + Adjusted Start Emission within bus terminus (g)

Exchange Square Bus Terminus (PLB)

Minimum Hourly Temperature and Relative Humidity for 1st Quarter

Temperature: 8 °C

Relative Humidity: 32 %

Start Emission

No. of PLB (Diesel) to No. of PLB (LPG) Ratio	3.2

	Public Light Buses (PLB) Start Emission Factor (g/trip)																	
NOx	4.6E-01	7.1E-01	1.1E+00	1.5E+00	1.7E+00	2.0E+00	2.2E+00	2.3E+00	2.5E+00	2.7E+00	2.8E+00	3.0E+00	3.1E+00	3.1E+00	3.1E+00	3.1E+00	3.1E+00	3.1E+00
NO	4.5E-01	6.9E-01	1.1E+00	1.4E+00	1.7E+00	1.9E+00	2.1E+00	2.2E+00	2.3E+00	2.5E+00	2.5E+00	2.6E+00	2.7E+00	2.7E+00	2.7E+00	2.7E+00	2.7E+00	2.7E+00
NO2	1.5E-02	2.6E-02	3.5E-02	4.9E-02	6.1E-02	7.9E-02	1.1E-01	1.4E-01	2.0E-01	2.6E-01	2.9E-01	3.4E-01	3.7E-01	3.9E-01	4.0E-01	4.1E-01	4.1E-01	4.1E-01
RSP	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
FSP	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00

Soaking Time (min) / Hour	No. of Trips of PLB (Diesel)																	
	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	1	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	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0500 - 0600	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0600 - 0700	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0700 - 0800	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0800 - 0900	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0900 - 1000	0	1	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0
1000 - 1100	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
1100 - 1200	0	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0
1200 - 1300	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
1300 - 1400	1	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
1400 - 1500	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
1500 - 1600	1	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
1600 - 1700	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1700 - 1800	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1800 - 1900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1900 - 2000	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2000 - 2100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2100 - 2200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2200 - 2300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2300 - 2400	1	0	0	0	0	0	0	0	0	0	0	0	1	2	1	0	0	0
																Daily Total	34	

Total Start Emission of PLB (Diesel) (g)				
NOx	**NO**	**NO2**	**RSP**	**FSP**
3.0E+00	2.6E+00	3.4E-01	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
4.6E-01	4.5E-01	1.5E-02	0.0E+00	0.0E+00
1.5E+00	1.4E+00	4.9E-02	0.0E+00	0.0E+00
2.6E+00	2.5E+00	8.5E-02	0.0E+00	0.0E+00
7.1E-01	6.9E-01	2.6E-02	0.0E+00	0.0E+00
1.1E+00	1.1E+00	3.5E-02	0.0E+00	0.0E+00
4.8E+00	4.5E+00	2.2E-01	0.0E+00	0.0E+00
3.1E+00	3.0E+00	1.1E-01	0.0E+00	0.0E+00
6.0E+00	5.7E+00	3.0E-01	0.0E+00	0.0E+00
2.2E+00	2.1E+00	1.1E-01	0.0E+00	0.0E+00
5.0E+00	4.8E+00	1.8E-01	0.0E+00	0.0E+00
3.4E+00	3.2E+00	1.5E-01	0.0E+00	0.0E+00
4.1E+00	3.9E+00	1.8E-01	0.0E+00	0.0E+00
4.6E-01	4.5E-01	1.5E-02	0.0E+00	0.0E+00
1.1E+00	1.1E+00	3.5E-02	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
4.6E-01	4.5E-01	1.5E-02	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1.3E+01	1.1E+01	1.6E+00	0.0E+00	0.0E+00

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.
[2] Population ratio of PLB (Diesel) to PLB (LPG) was extracted from Year 2028 data of EMFAC-HK.

Idling Emission - Terminating Public Light Buses

Idling Time for Terminating Public Light Buses	8	min
Max. Idling Time for Adjusting Start Emission =	1	min

Hour	PLB (Diesel)										PLB (Diesel)									
	Frequency	Cold Idling Emission Factor (g/s)					Cold Idling Emission (g) [1]					Frequency	Hot Idling Emission Factor (g/s)					Hot Idling Emission (g) [1]				
		NOx	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**		**NOx**	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**
0000 - 0100	1	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	4.8E-01	3.9E-01	8.7E-02	3.5E-03	3.5E-03	0	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0100 - 0200	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	2.8E-01	2.3E-01	5.0E-02	3.5E-03	3.5E-03
0500 - 0600	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	2.8E-01	2.3E-01	5.0E-02	3.5E-03	3.5E-03
0600 - 0700	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	2	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	5.6E-01	4.5E-01	1.0E-01	6.9E-03	6.9E-03
0700 - 0800	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	2.8E-01	2.3E-01	5.0E-02	3.5E-03	3.5E-03
0800 - 0900	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	2.8E-01	2.3E-01	5.0E-02	3.5E-03	3.5E-03
0900 - 1000	1	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	4.8E-01	3.9E-01	8.7E-02	3.5E-03	3.5E-03	2	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	5.6E-01	4.5E-01	1.0E-01	6.9E-03	6.9E-03
1000 - 1100	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	2	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	5.6E-01	4.5E-01	1.0E-01	6.9E-03	6.9E-03
1100 - 1200	2	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	9.6E-01	7.9E-01	1.7E-01	6.9E-03	6.9E-03	1	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	2.8E-01	2.3E-01	5.0E-02	3.5E-03	3.5E-03
1200 - 1300	1	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	4.8E-01	3.9E-01	8.7E-02	3.5E-03	3.5E-03	0	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1300 - 1400	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	4	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	1.1E+00	9.1E-01	2.0E-01	1.4E-02	1.4E-02
1400 - 1500	1	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	4.8E-01	3.9E-01	8.7E-02	3.5E-03	3.5E-03	2	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	5.6E-01	4.5E-01	1.0E-01	6.9E-03	6.9E-03
1500 - 1600	1	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	4.8E-01	3.9E-01	8.7E-02	3.5E-03	3.5E-03	2	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	5.6E-01	4.5E-01	1.0E-01	6.9E-03	6.9E-03
1600 - 1700	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	2.8E-01	2.3E-01	5.0E-02	3.5E-03	3.5E-03
1700 - 1800	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	2.8E-01	2.3E-01	5.0E-02	3.5E-03	3.5E-03
1800 - 1900	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1900 - 2000	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	2.8E-01	2.3E-01	5.0E-02	3.5E-03	3.5E-03
2000 - 2100	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2100 - 2200	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2200 - 2300	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2300 - 2400	4	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	1.9E+00	1.6E+00	3.5E-01	1.4E-02	1.4E-02	1	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	2.8E-01	2.3E-01	5.0E-02	3.5E-03	3.5E-03
Daily Total	11											23										

Average Distance from Starting Place to Egress =	45	m
Average Spread Distance outside bus terminus =	655	m

Hour	Total Idling Emission (g) [2]					Idling Emission for Start Emission Adjustment (g) [3]					Adjusted Start Emission within bus terminus (g) [4]					Adjusted Start Emission outside bus terminus (g) [5]					Start Emission Rate outside bus terminus (g/s)				
	NOx	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**
0000 - 0100	4.8E-01	3.9E-01	8.7E-02	3.5E-03	3.5E-03	6.0E-02	4.9E-02	1.1E-02	4.3E-04	4.3E-04	1.9E-01	1.7E-01	2.1E-02	0.0E+00	0.0E+00	2.7E+00	2.4E+00	3.0E-01	0.0E+00	0.0E+00	7.6E-04	6.7E-04	8.4E-05	0.0E+00	0.0E+00
0100 - 0200	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	2.8E-01	2.3E-01	5.0E-02	3.5E-03	3.5E-03	3.5E-02	2.8E-02	6.3E-03	4.3E-04	4.3E-04	2.8E-02	2.7E-02	5.4E-04	0.0E+00	0.0E+00	4.0E-01	3.9E-01	7.9E-03	0.0E+00	0.0E+00	1.1E-04	1.1E-04	2.2E-06	0.0E+00	0.0E+00
0500 - 0600	2.8E-01	2.3E-01	5.0E-02	3.5E-03	3.5E-03	3.5E-02	2.8E-02	6.3E-03	4.3E-04	4.3E-04	9.2E-02	8.9E-02	2.8E-03	0.0E+00	0.0E+00	1.3E+00	1.3E+00	4.0E-02	0.0E+00	0.0E+00	3.7E-04	3.6E-04	1.1E-05	0.0E+00	0.0E+00
0600 - 0700	5.6E-01	4.5E-01	1.0E-01	6.9E-03	6.9E-03	6.9E-02	5.7E-02	1.3E-02	8.7E-04	8.7E-04	1.6E-01	1.6E-01	4.6E-03	0.0E+00	0.0E+00	2.3E+00	2.3E+00	6.7E-02	0.0E+00	0.0E+00	6.5E-04	6.3E-04	1.9E-05	0.0E+00	0.0E+00
0700 - 0800	2.8E-01	2.3E-01	5.0E-02	3.5E-03	3.5E-03	3.5E-02	2.8E-02	6.3E-03	4.3E-04	4.3E-04	4.4E-02	4.2E-02	1.3E-03	0.0E+00	0.0E+00	6.4E-01	6.2E-01	1.8E-02	0.0E+00	0.0E+00	1.8E-04	1.7E-04	5.1E-06	0.0E+00	0.0E+00
0800 - 0900	2.8E-01	2.3E-01	5.0E-02	3.5E-03	3.5E-03	3.5E-02	2.8E-02	6.3E-03	4.3E-04	4.3E-04	6.9E-02	6.8E-02	1.9E-03	0.0E+00	0.0E+00	1.0E+00	9.8E-01	2.7E-02	0.0E+00	0.0E+00	2.8E-04	2.7E-04	7.5E-06	0.0E+00	0.0E+00
0900 - 1000	1.0E+00	8.5E-01	1.9E-01	1.0E-02	1.0E-02	1.3E-01	1.1E-01	2.4E-02	1.3E-03	1.3E-03	3.0E-01	2.8E-01	1.3E-02	0.0E+00	0.0E+00	4.3E+00	4.1E+00	1.9E-01	0.0E+00	0.0E+00	1.2E-03	1.2E-03	5.2E-05	0.0E+00	0.0E+00
1000 - 1100	5.6E-01	4.5E-01	1.0E-01	6.9E-03	6.9E-03	6.9E-02	5.7E-02	1.3E-02	8.7E-04	8.7E-04	1.9E-01	1.9E-01	6.5E-03	0.0E+00	0.0E+00	2.8E+00	2.7E+00	9.5E-02	0.0E+00	0.0E+00	7.8E-04	7.6E-04	2.6E-05	0.0E+00	0.0E+00
1100 - 1200	1.2E+00	1.0E+00	2.2E-01	1.0E-02	1.0E-02	1.5E-01	1.3E-01	2.8E-02	1.3E-03	1.3E-03	3.7E-01	3.6E-01	1.7E-02	0.0E+00	0.0E+00	5.4E+00	5.2E+00	2.5E-01	0.0E+00	0.0E+00	1.5E-03	1.4E-03	7.0E-05	0.0E+00	0.0E+00
1200 - 1300	4.8E-01	3.9E-01	8.7E-02	3.5E-03	3.5E-03	6.0E-02	4.9E-02	1.1E-02	4.3E-04	4.3E-04	1.4E-01	1.3E-01	6.5E-03	0.0E+00	0.0E+00	2.0E+00	1.9E+00	9.5E-02	0.0E+00	0.0E+00	5.5E-04	5.2E-04	2.6E-05	0.0E+00	0.0E+00
1300 - 1400	1.1E+00	9.1E-01	2.0E-01	1.4E-02	1.4E-02	1.4E-01	1.1E-01	2.5E-02	1.7E-03	1.7E-03	3.1E-01	3.0E-01	9.8E-03	0.0E+00	0.0E+00	4.6E+00	4.4E+00	1.4E-01	0.0E+00	0.0E+00	1.3E-03	1.2E-03	4.0E-05	0.0E+00	0.0E+00
1400 - 1500	1.0E+00	8.5E-01	1.9E-01	1.0E-02	1.0E-02	1.3E-01	1.1E-01	2.4E-02	1.3E-03	1.3E-03	2.1E-01	2.0E-01	8.3E-03	0.0E+00	0.0E+00	3.0E+00	2.9E+00	1.2E-01	0.0E+00	0.0E+00	8.4E-04	8.1E-04	3.4E-05	0.0E+00	0.0E+00
1500 - 1600	1.0E+00	8.5E-01	1.9E-01	1.0E-02	1.0E-02	1.3E-01	1.1E-01	2.4E-02	1.3E-03	1.3E-03	2.6E-01	2.5E-01	9.8E-03	0.0E+00	0.0E+00	3.7E+00	3.6E+00	1.4E-01	0.0E+00	0.0E+00	1.0E-03	9.9E-04	4.0E-05	0.0E+00	0.0E+00
1600 - 1700	2.8E-01	2.3E-01	5.0E-02	3.5E-03	3.5E-03	3.5E-02	2.8E-02	6.3E-03	4.3E-04	4.3E-04	2.8E-02	2.7E-02	5.4E-04	0.0E+00	0.0E+00	4.0E-01	3.9E-01	7.9E-03	0.0E+00	0.0E+00	1.1E-04	1.1E-04	2.2E-06	0.0E+00	0.0E+00
1700 - 1800	2.8E-01	2.3E-01	5.0E-02	3.5E-03	3.5E-03	3.5E-02	2.8E-02	6.3E-03	4.3E-04	4.3E-04	6.9E-02	6.8E-02	1.9E-03	0.0E+00	0.0E+00	1.0E+00	9.8E-01	2.7E-02	0.0E+00	0.0E+00	2.8E-04	2.7E-04	7.5E-06	0.0E+00	0.0E+00
1800 - 1900	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1900 - 2000	2.8E-01	2.3E-01	5.0E-02	3.5E-03	3.5E-03	3.5E-02	2.8E-02	6.3E-03	4.3E-04	4.3E-04	2.8E-02	2.7E-02	5.4E-04	0.0E+00	0.0E+00	4.0E-01	3.9E-01	7.9E-03	0.0E+00	0.0E+00	1.1E-04	1.1E-04	2.2E-06	0.0E+00	0.0E+00
2000 - 2100	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2100 - 2200	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2200 - 2300	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2300 - 2400	2.2E+00	1.8E+00	4.0E-01	1.7E-02	1.7E-02	2.7E-01	2.2E-01	5.0E-02	2.2E-03	2.2E-03	8.1E-01	7.1E-01	9.7E-02	0.0E+00	0.0E+00	1.2E+01	1.0E+01	1.4E+00	0.0E+00	0.0E+00	3.3E-03	2.9E-03	3.9E-04	0.0E+00	0.0E+00

Start Emission

No. of PLB (Diesel) to No. of PLB (LPG) Ratio	3.2

	Public Light Buses (PLB) Start Emission Factor (g/trip)																	
NOx	4.6E-01	7.1E-01	1.1E+00	1.5E+00	1.7E+00	2.0E+00	2.2E+00	2.3E+00	2.5E+00	2.7E+00	2.8E+00	3.0E+00	3.1E+00	3.1E+00	3.1E+00	3.1E+00	3.1E+00	3.1E+00
NO	4.5E-01	6.9E-01	1.1E+00	1.4E+00	1.7E+00	1.9E+00	2.1E+00	2.2E+00	2.3E+00	2.5E+00	2.5E+00	2.6E+00	2.7E+00	2.7E+00	2.7E+00	2.7E+00	2.7E+00	2.7E+00
NO2	1.5E-02	2.6E-02	3.5E-02	4.9E-02	6.1E-02	7.9E-02	1.1E-01	1.4E-01	2.0E-01	2.6E-01	2.9E-01	3.4E-01	3.7E-01	3.9E-01	4.0E-01	4.1E-01	4.1E-01	4.1E-01
RSP	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
FSP	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00

Soaking Time (min) / Hour	No. of Trips of PLB (LPG)																	
	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	0
0600 - 0700	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0700 - 0800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0800 - 0900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0900 - 1000	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1000 - 1100	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1100 - 1200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1200 - 1300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1300 - 1400	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1400 - 1500	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1500 - 1600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1600 - 1700	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1700 - 1800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1800 - 1900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1900 - 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2000 - 2100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2100 - 2200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2200 - 2300	0	0	0	0	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	1	1	0	0	0
																Daily Total	7	

Total Start Emission of PLB (LPG) (g)				
NOx	**NO**	**NO2**	**RSP**	**FSP**
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1.1E+00	1.1E+00	3.5E-02	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
7.1E-01	6.9E-01	2.6E-02	0.0E+00	0.0E+00
1.1E+00	1.1E+00	3.5E-02	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1.5E+00	1.4E+00	4.9E-02	0.0E+00	0.0E+00
4.6E-01	4.5E-01	1.5E-02	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
6.2E+00	5.4E+00	7.8E-01	0.0E+00	0.0E+00

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.
[2] Population ratio of PLB (Diesel) to PLB (LPG) was extracted from Year 2028 data of EMFAC-HK.

Idling Emission - Terminating Public Light Buses

Idling Time for Terminating Public Light Buses	8	min
Max. Idling Time for Adjusting Start Emission =	1	min

Hour	PLB (LPG)											PLB (LPG)										
	Frequenc	Cold Idling Emission Factor (g/s)					Cold Idling Emission (g) [1]					Frequenc	Hot Idling Emission Factor (g/s)					Hot Idling Emission (g) [1]				
	y	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**	y	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**
0000 - 0100	0	3.9E-03	3.2E-03	7.1E-04	9.5E-06	9.5E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	5.1E-03	4.1E-03	9.2E-04	9.5E-06	9.5E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0100 - 0200	0	3.9E-03	3.2E-03	7.1E-04	9.5E-06	9.5E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	5.1E-03	4.1E-03	9.2E-04	9.5E-06	9.5E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0	3.9E-03	3.2E-03	7.1E-04	9.5E-06	9.5E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	5.1E-03	4.1E-03	9.2E-04	9.5E-06	9.5E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0	3.9E-03	3.2E-03	7.1E-04	9.5E-06	9.5E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	5.1E-03	4.1E-03	9.2E-04	9.5E-06	9.5E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0	3.9E-03	3.2E-03	7.1E-04	9.5E-06	9.5E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	5.1E-03	4.1E-03	9.2E-04	9.5E-06	9.5E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0	3.9E-03	3.2E-03	7.1E-04	9.5E-06	9.5E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	5.1E-03	4.1E-03	9.2E-04	9.5E-06	9.5E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0600 - 0700	0	3.9E-03	3.2E-03	7.1E-04	9.5E-06	9.5E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	5.1E-03	4.1E-03	9.2E-04	9.5E-06	9.5E-06	2.4E+00	2.0E+00	4.4E-01	4.5E-03	4.5E-03
0700 - 0800	0	3.9E-03	3.2E-03	7.1E-04	9.5E-06	9.5E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	5.1E-03	4.1E-03	9.2E-04	9.5E-06	9.5E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0800 - 0900	0	3.9E-03	3.2E-03	7.1E-04	9.5E-06	9.5E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	5.1E-03	4.1E-03	9.2E-04	9.5E-06	9.5E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0900 - 1000	0	3.9E-03	3.2E-03	7.1E-04	9.5E-06	9.5E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	5.1E-03	4.1E-03	9.2E-04	9.5E-06	9.5E-06	2.4E+00	2.0E+00	4.4E-01	4.5E-03	4.5E-03
1000 - 1100	0	3.9E-03	3.2E-03	7.1E-04	9.5E-06	9.5E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	5.1E-03	4.1E-03	9.2E-04	9.5E-06	9.5E-06	2.4E+00	2.0E+00	4.4E-01	4.5E-03	4.5E-03
1100 - 1200	0	3.9E-03	3.2E-03	7.1E-04	9.5E-06	9.5E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	5.1E-03	4.1E-03	9.2E-04	9.5E-06	9.5E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1200 - 1300	0	3.9E-03	3.2E-03	7.1E-04	9.5E-06	9.5E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	5.1E-03	4.1E-03	9.2E-04	9.5E-06	9.5E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1300 - 1400	0	3.9E-03	3.2E-03	7.1E-04	9.5E-06	9.5E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	5.1E-03	4.1E-03	9.2E-04	9.5E-06	9.5E-06	2.4E+00	2.0E+00	4.4E-01	4.5E-03	4.5E-03
1400 - 1500	0	3.9E-03	3.2E-03	7.1E-04	9.5E-06	9.5E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	5.1E-03	4.1E-03	9.2E-04	9.5E-06	9.5E-06	2.4E+00	2.0E+00	4.4E-01	4.5E-03	4.5E-03
1500 - 1600	0	3.9E-03	3.2E-03	7.1E-04	9.5E-06	9.5E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	5.1E-03	4.1E-03	9.2E-04	9.5E-06	9.5E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1600 - 1700	0	3.9E-03	3.2E-03	7.1E-04	9.5E-06	9.5E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	5.1E-03	4.1E-03	9.2E-04	9.5E-06	9.5E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1700 - 1800	0	3.9E-03	3.2E-03	7.1E-04	9.5E-06	9.5E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	5.1E-03	4.1E-03	9.2E-04	9.5E-06	9.5E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1800 - 1900	0	3.9E-03	3.2E-03	7.1E-04	9.5E-06	9.5E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	5.1E-03	4.1E-03	9.2E-04	9.5E-06	9.5E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1900 - 2000	0	3.9E-03	3.2E-03	7.1E-04	9.5E-06	9.5E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	5.1E-03	4.1E-03	9.2E-04	9.5E-06	9.5E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2000 - 2100	0	3.9E-03	3.2E-03	7.1E-04	9.5E-06	9.5E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	5.1E-03	4.1E-03	9.2E-04	9.5E-06	9.5E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2100 - 2200	0	3.9E-03	3.2E-03	7.1E-04	9.5E-06	9.5E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	5.1E-03	4.1E-03	9.2E-04	9.5E-06	9.5E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2200 - 2300	0	3.9E-03	3.2E-03	7.1E-04	9.5E-06	9.5E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	5.1E-03	4.1E-03	9.2E-04	9.5E-06	9.5E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2300 - 2400	2	3.9E-03	3.2E-03	7.1E-04	9.5E-06	9.5E-06	3.7E+00	3.1E+00	6.8E-01	9.1E-03	9.1E-03	0	5.1E-03	4.1E-03	9.2E-04	9.5E-06	9.5E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
Daily Total	2											5										

Average Distance from Starting Place to Egress =	45	m
Average Spread Distance outside bus terminus =	105	m

Hour	Total Idling Emission (g) [2]					Idling Emission for Start Emission Adjustment (g) [3]					Adjusted Start Emission within bus terminus (g) [6]					Adjusted Start Emission outside bus terminus (g) [7]					Start Emission Rate outside bus terminus (g/s)				
	NOx	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**
0000 - 0100	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0100 - 0200	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0600 - 0700	2.4E+00	2.0E+00	4.4E-01	4.5E-03	4.5E-03	3.0E-01	2.5E-01	5.5E-02	5.7E-04	5.7E-04	2.4E-01	2.5E-01	0.0E+00	0.0E+00	0.0E+00	5.7E-01	5.8E-01	0.0E+00	0.0E+00	0.0E+00	1.6E-04	1.6E-04	0.0E+00	0.0E+00	0.0E+00
0700 - 0800	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0800 - 0900	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0900 - 1000	2.4E+00	2.0E+00	4.4E-01	4.5E-03	4.5E-03	3.0E-01	2.5E-01	5.5E-02	5.7E-04	5.7E-04	1.2E-01	1.3E-01	0.0E+00	0.0E+00	0.0E+00	2.9E-01	3.1E-01	0.0E+00	0.0E+00	0.0E+00	8.0E-05	8.5E-05	0.0E+00	0.0E+00	0.0E+00
1000 - 1100	2.4E+00	2.0E+00	4.4E-01	4.5E-03	4.5E-03	3.0E-01	2.5E-01	5.5E-02	5.7E-04	5.7E-04	2.4E-01	2.5E-01	0.0E+00	0.0E+00	0.0E+00	5.7E-01	5.8E-01	0.0E+00	0.0E+00	0.0E+00	1.6E-04	1.6E-04	0.0E+00	0.0E+00	0.0E+00
1100 - 1200	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1200 - 1300	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1300 - 1400	2.4E+00	2.0E+00	4.4E-01	4.5E-03	4.5E-03	3.0E-01	2.5E-01	5.5E-02	5.7E-04	5.7E-04	3.5E-01	3.5E-01	0.0E+00	0.0E+00	0.0E+00	8.1E-01	8.2E-01	0.0E+00	0.0E+00	0.0E+00	2.3E-04	2.3E-04	0.0E+00	0.0E+00	0.0E+00
1400 - 1500	2.4E+00	2.0E+00	4.4E-01	4.5E-03	4.5E-03	3.0E-01	2.5E-01	5.5E-02	5.7E-04	5.7E-04	4.8E-02	6.0E-02	0.0E+00	0.0E+00	0.0E+00	1.1E-01	1.4E-01	0.0E+00	0.0E+00	0.0E+00	3.1E-05	3.9E-05	0.0E+00	0.0E+00	0.0E+00
1500 - 1600	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1600 - 1700	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1700 - 1800	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1800 - 1900	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1900 - 2000	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2000 - 2100	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2100 - 2200	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2200 - 2300	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2300 - 2400	3.7E+00	3.1E+00	6.8E-01	9.1E-03	9.1E-03	4.7E-01	3.8E-01	8.5E-02	1.1E-03	1.1E-03	1.7E+00	1.5E+00	2.1E-01	0.0E+00	0.0E+00	4.0E+00	3.5E+00	4.9E-01	0.0E+00	0.0E+00	1.1E-03	9.8E-04	1.4E-04	0.0E+00	0.0E+00

Running Emission - Terminating and Bypass Public Light Buses

Average Travelling Distance within bus terminus =	110	m
Average Travelling Speed =	10	km/h

Hour	PLB (Diesel + LPG)											
	Frequency	Running Emission Factor (g/km·vehicle)					Running Emission (g)					
		NOx	NO	NO2	RSP	FSP	NOx	NO	NO2	RSP	FSP
0000 - 0100	2	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	2.8E-01	2.3E-01	5.1E-02	1.1E-02	1.0E-02
0100 - 0200	0	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	2	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	2.8E-01	2.3E-01	5.1E-02	1.1E-02	1.0E-02
0500 - 0600	2	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	2.8E-01	2.3E-01	5.1E-02	1.1E-02	1.0E-02
0600 - 0700	19	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	2.6E+00	2.2E+00	4.8E-01	1.0E-01	9.6E-02
0700 - 0800	33	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	4.6E+00	3.8E+00	8.3E-01	1.8E-01	1.7E-01
0800 - 0900	32	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	4.5E+00	3.6E+00	8.1E-01	1.8E-01	1.6E-01
0900 - 1000	26	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	3.6E+00	3.0E+00	6.6E-01	1.4E-01	1.3E-01
1000 - 1100	17	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	2.4E+00	1.9E+00	4.3E-01	9.4E-02	8.6E-02
1100 - 1200	19	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	2.6E+00	2.2E+00	4.8E-01	1.0E-01	9.6E-02
1200 - 1300	13	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	1.8E+00	1.5E+00	3.3E-01	7.2E-02	6.6E-02
1300 - 1400	24	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	3.3E+00	2.7E+00	6.1E-01	1.3E-01	1.2E-01
1400 - 1500	18	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	2.5E+00	2.0E+00	4.6E-01	9.9E-02	9.1E-02
1500 - 1600	23	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	3.2E+00	2.6E+00	5.8E-01	1.3E-01	1.2E-01
1600 - 1700	22	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	3.1E+00	2.5E+00	5.6E-01	1.2E-01	1.1E-01
1700 - 1800	21	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	2.9E+00	2.4E+00	5.3E-01	1.2E-01	1.1E-01
1800 - 1900	17	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	2.4E+00	1.9E+00	4.3E-01	9.4E-02	8.6E-02
1900 - 2000	14	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	1.9E+00	1.6E+00	3.5E-01	7.7E-02	7.1E-02
2000 - 2100	6	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	8.3E-01	6.8E-01	1.5E-01	3.3E-02	3.0E-02
2100 - 2200	5	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	7.0E-01	5.7E-01	1.3E-01	2.8E-02	2.5E-02
2200 - 2300	3	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	4.2E-01	3.4E-01	7.6E-02	1.7E-02	1.5E-02
2300 - 2400	15	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	2.1E+00	1.7E+00	3.8E-01	8.3E-02	7.6E-02
Daily Total	333										

Idling Emission - Bypass Public Light Buses

No. of PLB (Diesel) to No. of PLB (LPG) Ratio	3.2	
Idling Time for Bypass Public Light Buses	5	min

Hour	PLB (Diesel)											PLB (LPG)										
	Frequency	Hot Idling Emission Factor (g/s)					Hot Idling Emission (g)					Frequency	Hot Idling Emission Factor (g/s)					Hot Idling Emission (g)				
		NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP		NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP
0000 - 0100	1	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	3.3E-01	2.5E-01	7.7E-02	2.3E-03	2.3E-03	0	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	3.3E-01	2.5E-01	7.7E-02	2.3E-03	2.3E-03
0100 - 0200	0	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	1	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	3.3E-01	2.5E-01	7.7E-02	2.3E-03	2.3E-03	0	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	3.3E-01	2.5E-01	7.7E-02	2.3E-03	2.3E-03
0500 - 0600	1	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	3.3E-01	2.5E-01	7.7E-02	2.3E-03	2.3E-03	0	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	3.3E-01	2.5E-01	7.7E-02	2.3E-03	2.3E-03
0600 - 0700	12	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	3.9E+00	3.0E+00	9.3E-01	2.8E-02	2.8E-02	4	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	3.9E+00	3.0E+00	9.3E-01	2.8E-02	2.8E-02
0700 - 0800	24	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	7.8E+00	5.9E+00	1.9E+00	5.5E-02	5.5E-02	8	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	7.8E+00	5.9E+00	1.9E+00	5.5E-02	5.5E-02
0800 - 0900	24	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	7.8E+00	5.9E+00	1.9E+00	5.5E-02	5.5E-02	7	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	7.8E+00	5.9E+00	1.9E+00	5.5E-02	5.5E-02
0900 - 1000	17	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	5.5E+00	4.2E+00	1.3E+00	3.9E-02	3.9E-02	5	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	5.5E+00	4.2E+00	1.3E+00	3.9E-02	3.9E-02
1000 - 1100	11	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	3.6E+00	2.7E+00	8.5E-01	2.5E-02	2.5E-02	3	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	3.6E+00	2.7E+00	8.5E-01	2.5E-02	2.5E-02
1100 - 1200	12	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	3.9E+00	3.0E+00	9.3E-01	2.8E-02	2.8E-02	4	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	3.9E+00	3.0E+00	9.3E-01	2.8E-02	2.8E-02
1200 - 1300	9	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	2.9E+00	2.2E+00	7.0E-01	2.1E-02	2.1E-02	3	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	2.9E+00	2.2E+00	7.0E-01	2.1E-02	2.1E-02
1300 - 1400	14	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	4.6E+00	3.5E+00	1.1E+00	3.2E-02	3.2E-02	5	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	4.6E+00	3.5E+00	1.1E+00	3.2E-02	3.2E-02
1400 - 1500	11	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	3.6E+00	2.7E+00	8.5E-01	2.5E-02	2.5E-02	3	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	3.6E+00	2.7E+00	8.5E-01	2.5E-02	2.5E-02
1500 - 1600	15	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	4.9E+00	3.7E+00	1.2E+00	3.5E-02	3.5E-02	5	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	4.9E+00	3.7E+00	1.2E+00	3.5E-02	3.5E-02
1600 - 1700	16	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	5.2E+00	4.0E+00	1.2E+00	3.7E-02	3.7E-02	5	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	5.2E+00	4.0E+00	1.2E+00	3.7E-02	3.7E-02
1700 - 1800	15	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	4.9E+00	3.7E+00	1.2E+00	3.5E-02	3.5E-02	5	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	4.9E+00	3.7E+00	1.2E+00	3.5E-02	3.5E-02
1800 - 1900	13	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	4.2E+00	3.2E+00	1.0E+00	3.0E-02	3.0E-02	4	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	4.2E+00	3.2E+00	1.0E+00	3.0E-02	3.0E-02
1900 - 2000	10	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	3.3E+00	2.5E+00	7.7E-01	2.3E-02	2.3E-02	3	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	3.3E+00	2.5E+00	7.7E-01	2.3E-02	2.3E-02
2000 - 2100	5	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.6E+00	1.2E+00	3.9E-01	1.2E-02	1.2E-02	1	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.6E+00	1.2E+00	3.9E-01	1.2E-02	1.2E-02
2100 - 2200	4	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.3E+00	9.9E-01	3.1E-01	9.2E-03	9.2E-03	1	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.3E+00	9.9E-01	3.1E-01	9.2E-03	9.2E-03
2200 - 2300	2	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	6.5E-01	5.0E-01	1.5E-01	4.6E-03	4.6E-03	1	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	6.5E-01	5.0E-01	1.5E-01	4.6E-03	4.6E-03
2300 - 2400	6	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	2.0E+00	1.5E+00	4.6E-01	1.4E-02	1.4E-02	2	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	2.0E+00	1.5E+00	4.6E-01	1.4E-02	1.4E-02
Daily Total	223											69										

Total Hourly Emission

Hour	Total Emission inside bus terminus (g) (Running + Idling + Start) [8]					Total Emission Rate (g/s)				
	NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP
0000 - 0100	1.6E+00	1.3E+00	3.1E-01	1.9E-02	1.8E-02	4.4E-04	3.6E-04	8.7E-05	5.3E-06	5.1E-06
0100 - 0200	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	1.2E+00	9.8E-01	2.6E-01	1.9E-02	1.8E-02	3.4E-04	2.7E-04	7.1E-05	5.3E-06	5.1E-06
0500 - 0600	1.3E+00	1.0E+00	2.6E-01	1.9E-02	1.8E-02	3.6E-04	2.9E-04	7.2E-05	5.3E-06	5.1E-06
0600 - 0700	1.4E+01	1.1E+01	2.9E+00	1.7E-01	1.6E-01	3.8E-03	3.0E-03	8.0E-04	4.8E-05	4.5E-05
0700 - 0800	2.1E+01	1.6E+01	4.6E+00	3.0E-01	2.8E-01	5.7E-03	4.4E-03	1.3E-03	8.2E-05	7.8E-05
0800 - 0900	2.0E+01	1.6E+01	4.6E+00	2.9E-01	2.8E-01	5.7E-03	4.4E-03	1.3E-03	8.1E-05	7.7E-05
0900 - 1000	1.9E+01	1.5E+01	3.9E+00	2.4E-01	2.2E-01	5.2E-03	4.1E-03	1.1E-03	6.6E-05	6.2E-05
1000 - 1100	1.3E+01	1.0E+01	2.7E+00	1.6E-01	1.5E-01	3.6E-03	2.9E-03	7.4E-04	4.3E-05	4.1E-05
1100 - 1200	1.2E+01	9.5E+00	2.6E+00	1.7E-01	1.6E-01	3.3E-03	2.6E-03	7.2E-04	4.7E-05	4.5E-05
1200 - 1300	8.3E+00	6.5E+00	1.8E+00	1.2E-01	1.1E-01	2.3E-03	1.8E-03	5.0E-04	3.2E-05	3.1E-05
1300 - 1400	1.7E+01	1.3E+01	3.4E+00	2.2E-01	2.0E-01	4.6E-03	3.7E-03	9.5E-04	6.0E-05	5.7E-05
1400 - 1500	1.3E+01	1.1E+01	2.8E+00	1.6E-01	1.6E-01	3.7E-03	2.9E-03	7.8E-04	4.6E-05	4.4E-05
1500 - 1600	1.4E+01	1.1E+01	3.1E+00	2.1E-01	2.0E-01	4.0E-03	3.1E-03	8.6E-04	5.7E-05	5.4E-05
1600 - 1700	1.4E+01	1.1E+01	3.1E+00	2.0E-01	1.9E-01	3.8E-03	3.0E-03	8.6E-04	5.5E-05	5.2E-05
1700 - 1800	1.3E+01	1.0E+01	2.9E+00	1.9E-01	1.8E-01	3.6E-03	2.8E-03	8.1E-04	5.2E-05	5.0E-05
1800 - 1900	1.1E+01	8.4E+00	2.4E+00	1.5E-01	1.5E-01	3.0E-03	2.3E-03	6.8E-04	4.3E-05	4.1E-05
1900 - 2000	8.8E+00	6.8E+00	1.9E+00	1.3E-01	1.2E-01	2.4E-03	1.9E-03	5.4E-04	3.5E-05	3.3E-05
2000 - 2100	4.1E+00	3.2E+00	9.2E-01	5.6E-02	5.3E-02	1.1E-03	8.8E-04	2.6E-04	1.6E-05	1.5E-05
2100 - 2200	3.3E+00	2.6E+00	7.4E-01	4.6E-02	4.4E-02	9.2E-04	7.1E-04	2.1E-04	1.3E-05	1.2E-05
2200 - 2300	1.7E+00	1.3E+00	3.8E-01	2.6E-02	2.4E-02	4.8E-04	3.7E-04	1.1E-04	7.1E-06	6.8E-06
2300 - 2400	1.4E+01	1.2E+01	2.7E+00	1.4E-01	1.3E-01	4.0E-03	3.3E-03	7.5E-04	3.8E-05	3.6E-05
						max:	4.4E-03	1.3E-03	8.2E-05	7.8E-05

PTI opening hourly emission factor

NO	NO_2	RSP	FSP
0.08	0.07	0.06	0.06
0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00
0.06	0.06	0.06	0.06
0.07	0.06	0.06	0.06
0.69	0.63	0.58	0.58
1.00	1.00	1.00	1.00
0.99	0.99	0.98	0.98
0.92	0.85	0.80	0.80
0.64	0.58	0.53	0.53
0.60	0.56	0.58	0.58
0.41	0.39	0.39	0.39
0.83	0.75	0.73	0.73
0.67	0.61	0.56	0.56
0.70	0.67	0.70	0.70
0.67	0.67	0.67	0.67
0.64	0.63	0.64	0.64
0.53	0.53	0.52	0.52
0.43	0.42	0.43	0.43
0.20	0.20	0.19	0.19
0.16	0.16	0.16	0.16
0.08	0.08	0.09	0.09
0.74	0.59	0.46	0.46

Remarks:

[1] Idling Emission (g) = Idling Emission Factor (g/s) * Actual Idling time (min) * 60 * Frequency

[2] Total Idling Emission (g) = Cold Idling Emission of PLB (g) + Hot Idling Emission of PLB (g)

[3] If Actual Idling Time ≤ 1 min, Idling Emission for Start Emission Adjustment (g) = Idling rate (g/min) * Actual Idling Time (min)

If Actual Idling Time > 1 min, Idling Emission for Start Emission Adjustment (g) = Idling rate (g/min) * Maximum Duration for Adjusting Start Emission "K" (min)

Where Idling rate (g/min) = Total Idling Emission (g) / Idling Time (min), and "K" = 1 min for LPG PLB

[4] Adjusted Start Emission within bus terminus (g) = [Total Start Emission of PLB (Diesel) (g) - Idling Emission for Start Emission Adjustment (g)] * [Average Distance from Starting Place to Egress (m) / 700m]

Minimum value = 0 g

[5] Adjusted Start Emission outside bus terminus (g) = [Total Start Emission of PLB (Diesel) (g) - Idling Emission for Start Emission Adjustment (g)] * [Average Spread Distance outside bus terminus (m) / 700m]

Minimum value = 0 g

[6] Adjusted Start Emission within bus terminus (g) = [Total Start Emission of PLB (LPG) (g) - Idling Emission for Start Emission Adjustment (g)] * [Average Distance from Starting Place to Egress (m) / 150m]

Minimum value = 0 g

[7] Adjusted Start Emission outside bus terminus (g) = [Total Start Emission of PLB (LPG) (g) - Idling Emission for Start Emission Adjustment (g)] * [Average Spread Distance outside bus terminus (m) / 150m]

Minimum value = 0 g

[8] Total Emission Inside bus terminus (g) = Total Running Emission (g) + Idling Emission (g) + Adjusted Start Emission within bus terminus (g)

Exchange Square Bus Terminus (PLB)

Minimum Hourly Temperature and Relative Humidity for 2nd Quarter

Temperature: 14 °C

Relative Humidity: 21 %

Start Emission

No. of PLB (Diesel) to No. of PLB (LPG) Ratio	3.2

	Public Light Buses (PLB) Start Emission Factor (g/trip)																	
NOx	4.4E-01	6.7E-01	1.1E+00	1.4E+00	1.6E+00	1.9E+00	2.1E+00	2.2E+00	2.4E+00	2.6E+00	2.7E+00	2.8E+00	2.9E+00	3.0E+00	3.0E+00	3.0E+00	3.0E+00	2.9E+00
NO	4.2E-01	6.5E-01	1.0E+00	1.3E+00	1.6E+00	1.8E+00	2.0E+00	2.0E+00	2.2E+00	2.3E+00	2.4E+00	2.5E+00	2.6E+00	2.6E+00	2.6E+00	2.6E+00	2.6E+00	2.5E+00
NO2	1.5E-02	2.6E-02	3.5E-02	4.9E-02	6.0E-02	7.9E-02	1.1E-01	1.4E-01	2.0E-01	2.6E-01	2.9E-01	3.4E-01	3.7E-01	3.9E-01	4.0E-01	4.1E-01	4.1E-01	4.1E-01
RSP	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
FSP	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00

Soaking Time (min) / Hour	No. of Trips of PLB (Diesel)																	
	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	1	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	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0500 - 0600	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0600 - 0700	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0700 - 0800	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0800 - 0900	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0900 - 1000	0	1	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0
1000 - 1100	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
1100 - 1200	0	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0
1200 - 1300	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
1300 - 1400	1	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
1400 - 1500	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
1500 - 1600	1	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
1600 - 1700	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1700 - 1800	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1800 - 1900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1900 - 2000	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2000 - 2100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2100 - 2200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2200 - 2300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2300 - 2400	1	0	0	0	0	0	0	0	0	0	0	0	1	2	1	0	0	0
																Daily Total	34	

Total Start Emission of PLB (Diesel) (g)				
NOx	**NO**	**NO2**	**RSP**	**FSP**
2.8E+00	2.5E+00	3.4E-01	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
4.4E-01	4.2E-01	1.5E-02	0.0E+00	0.0E+00
1.4E+00	1.3E+00	4.9E-02	0.0E+00	0.0E+00
2.4E+00	2.4E+00	8.4E-02	0.0E+00	0.0E+00
6.7E-01	6.5E-01	2.6E-02	0.0E+00	0.0E+00
1.1E+00	1.0E+00	3.5E-02	0.0E+00	0.0E+00
4.5E+00	4.3E+00	2.2E-01	0.0E+00	0.0E+00
2.9E+00	2.8E+00	1.1E-01	0.0E+00	0.0E+00
5.6E+00	5.3E+00	3.0E-01	0.0E+00	0.0E+00
2.1E+00	2.0E+00	1.1E-01	0.0E+00	0.0E+00
4.7E+00	4.6E+00	1.8E-01	0.0E+00	0.0E+00
3.2E+00	3.0E+00	1.5E-01	0.0E+00	0.0E+00
3.9E+00	3.7E+00	1.8E-01	0.0E+00	0.0E+00
4.4E-01	4.2E-01	1.5E-02	0.0E+00	0.0E+00
1.1E+00	1.0E+00	3.5E-02	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
4.4E-01	4.2E-01	1.5E-02	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1.2E+01	1.1E+01	1.5E+00	0.0E+00	0.0E+00

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.
[2] Population ratio of PLB (Diesel) to PLB (LPG) was extracted from Year 2028 data of EMFAC-HK.

Idling Emission - Terminating Public Light Buses

Idling Time for Terminating Public Light Buses	8	min
Max. Idling Time for Adjusting Start Emission =	1	min

Hour	PLB (Diesel)										PLB (Diesel)									
	Frequenc y	**Cold Idling Emission Factor (g/s)**					**Cold Idling Emission (g) [1]**					**Frequenc y**	**Hot Idling Emission Factor (g/s)**					**Hot Idling Emission (g) [1]**				
		NOx	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**		**NOx**	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**
0000 - 0100	1	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	4.8E-01	3.9E-01	8.9E-02	3.5E-03	3.5E-03	0	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0100 - 0200	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	2.8E-01	2.3E-01	5.1E-02	3.5E-03	3.5E-03
0500 - 0600	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	2.8E-01	2.3E-01	5.1E-02	3.5E-03	3.5E-03
0600 - 0700	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	2	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	5.6E-01	4.5E-01	1.0E-01	6.9E-03	6.9E-03
0700 - 0800	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	2.8E-01	2.3E-01	5.1E-02	3.5E-03	3.5E-03
0800 - 0900	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	2.8E-01	2.3E-01	5.1E-02	3.5E-03	3.5E-03
0900 - 1000	1	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	4.8E-01	3.9E-01	8.9E-02	3.5E-03	3.5E-03	2	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	5.6E-01	4.5E-01	1.0E-01	6.9E-03	6.9E-03
1000 - 1100	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	2	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	5.6E-01	4.5E-01	1.0E-01	6.9E-03	6.9E-03
1100 - 1200	2	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	9.6E-01	7.8E-01	1.8E-01	6.9E-03	6.9E-03	1	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	2.8E-01	2.3E-01	5.1E-02	3.5E-03	3.5E-03
1200 - 1300	1	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	4.8E-01	3.9E-01	8.9E-02	3.5E-03	3.5E-03	0	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1300 - 1400	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	4	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	1.1E+00	9.1E-01	2.1E-01	1.4E-02	1.4E-02
1400 - 1500	1	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	4.8E-01	3.9E-01	8.9E-02	3.5E-03	3.5E-03	2	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	5.6E-01	4.5E-01	1.0E-01	6.9E-03	6.9E-03
1500 - 1600	1	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	4.8E-01	3.9E-01	8.9E-02	3.5E-03	3.5E-03	2	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	5.6E-01	4.5E-01	1.0E-01	6.9E-03	6.9E-03
1600 - 1700	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	2.8E-01	2.3E-01	5.1E-02	3.5E-03	3.5E-03
1700 - 1800	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	2.8E-01	2.3E-01	5.1E-02	3.5E-03	3.5E-03
1800 - 1900	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1900 - 2000	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	2.8E-01	2.3E-01	5.1E-02	3.5E-03	3.5E-03
2000 - 2100	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2100 - 2200	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2200 - 2300	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2300 - 2400	4	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	1.9E+00	1.6E+00	3.5E-01	1.4E-02	1.4E-02	1	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	2.8E-01	2.3E-01	5.1E-02	3.5E-03	3.5E-03
Daily Total	11											23										

Average Distance from Starting Place to Egress =	45	m
Average Spread Distance outside bus terminus =	655	m

Hour	Total Idling Emission (g) [2]					Idling Emission for Start Emission Adjustment (g) [3]					Adjusted Start Emission within bus terminus (g) [4]					Adjusted Start Emission outside bus terminus (g) [5]					Start Emission Rate outside bus terminus (g/s)				
	NOx	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**
0000 - 0100	4.8E-01	3.9E-01	8.9E-02	3.5E-03	3.5E-03	6.0E-02	4.9E-02	1.1E-02	4.3E-04	4.3E-04	1.8E-01	1.6E-01	2.1E-02	0.0E+00	0.0E+00	2.6E+00	2.3E+00	3.0E-01	0.0E+00	0.0E+00	7.2E-04	6.4E-04	8.4E-05	0.0E+00	0.0E+00
0100 - 0200	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	2.8E-01	2.3E-01	5.1E-02	3.5E-03	3.5E-03	3.5E-02	2.8E-02	6.4E-03	4.3E-04	4.3E-04	2.6E-02	2.5E-02	5.3E-04	0.0E+00	0.0E+00	3.8E-01	3.7E-01	7.7E-03	0.0E+00	0.0E+00	1.1E-04	1.0E-04	2.1E-06	0.0E+00	0.0E+00
0500 - 0600	2.8E-01	2.3E-01	5.1E-02	3.5E-03	3.5E-03	3.5E-02	2.8E-02	6.4E-03	4.3E-04	4.3E-04	8.7E-02	8.4E-02	2.7E-03	0.0E+00	0.0E+00	1.3E+00	1.2E+00	4.0E-02	0.0E+00	0.0E+00	3.5E-04	3.4E-04	1.1E-05	0.0E+00	0.0E+00
0600 - 0700	5.6E-01	4.5E-01	1.0E-01	6.9E-03	6.9E-03	6.9E-02	5.7E-02	1.3E-02	8.7E-04	8.7E-04	1.5E-01	1.5E-01	4.6E-03	0.0E+00	0.0E+00	2.2E+00	2.1E+00	6.6E-02	0.0E+00	0.0E+00	6.1E-04	6.0E-04	1.8E-05	0.0E+00	0.0E+00
0700 - 0800	2.8E-01	2.3E-01	5.1E-02	3.5E-03	3.5E-03	3.5E-02	2.8E-02	6.4E-03	4.3E-04	4.3E-04	4.1E-02	4.0E-02	1.2E-03	0.0E+00	0.0E+00	6.0E-01	5.8E-01	1.8E-02	0.0E+00	0.0E+00	1.7E-04	1.6E-04	5.0E-06	0.0E+00	0.0E+00
0800 - 0900	2.8E-01	2.3E-01	5.1E-02	3.5E-03	3.5E-03	3.5E-02	2.8E-02	6.4E-03	4.3E-04	4.3E-04	6.5E-02	6.4E-02	1.8E-03	0.0E+00	0.0E+00	9.5E-01	9.3E-01	2.7E-02	0.0E+00	0.0E+00	2.6E-04	2.6E-04	7.4E-06	0.0E+00	0.0E+00
0900 - 1000	1.0E+00	8.4E-01	1.9E-01	1.0E-02	1.0E-02	1.3E-01	1.1E-01	2.4E-02	1.3E-03	1.3E-03	2.8E-01	2.7E-01	1.3E-02	0.0E+00	0.0E+00	4.1E+00	3.9E+00	1.9E-01	0.0E+00	0.0E+00	1.1E-03	1.1E-03	5.2E-05	0.0E+00	0.0E+00
1000 - 1100	5.6E-01	4.5E-01	1.0E-01	6.9E-03	6.9E-03	6.9E-02	5.7E-02	1.3E-02	8.7E-04	8.7E-04	1.8E-01	1.8E-01	6.5E-03	0.0E+00	0.0E+00	2.7E+00	2.6E+00	9.4E-02	0.0E+00	0.0E+00	7.4E-04	7.1E-04	2.6E-05	0.0E+00	0.0E+00
1100 - 1200	1.2E+00	1.0E+00	2.3E-01	1.0E-02	1.0E-02	1.5E-01	1.3E-01	2.9E-02	1.3E-03	1.3E-03	3.5E-01	3.3E-01	1.7E-02	0.0E+00	0.0E+00	5.1E+00	4.9E+00	2.5E-01	0.0E+00	0.0E+00	1.4E-03	1.4E-03	7.0E-05	0.0E+00	0.0E+00
1200 - 1300	4.8E-01	3.9E-01	8.9E-02	3.5E-03	3.5E-03	6.0E-02	4.9E-02	1.1E-02	4.3E-04	4.3E-04	1.3E-01	1.2E-01	6.5E-03	0.0E+00	0.0E+00	1.9E+00	1.8E+00	9.4E-02	0.0E+00	0.0E+00	5.2E-04	5.0E-04	2.6E-05	0.0E+00	0.0E+00
1300 - 1400	1.1E+00	9.1E-01	2.1E-01	1.4E-02	1.4E-02	1.4E-01	1.1E-01	2.6E-02	1.7E-03	1.7E-03	3.0E-01	2.9E-01	9.7E-03	0.0E+00	0.0E+00	4.3E+00	4.2E+00	1.4E-01	0.0E+00	0.0E+00	1.2E-03	1.2E-03	3.9E-05	0.0E+00	0.0E+00
1400 - 1500	1.0E+00	8.4E-01	1.9E-01	1.0E-02	1.0E-02	1.3E-01	1.1E-01	2.4E-02	1.3E-03	1.3E-03	2.0E-01	1.9E-01	8.2E-03	0.0E+00	0.0E+00	2.9E+00	2.7E+00	1.2E-01	0.0E+00	0.0E+00	7.9E-04	7.6E-04	3.3E-05	0.0E+00	0.0E+00
1500 - 1600	1.0E+00	8.4E-01	1.9E-01	1.0E-02	1.0E-02	1.3E-01	1.1E-01	2.4E-02	1.3E-03	1.3E-03	2.4E-01	2.3E-01	9.7E-03	0.0E+00	0.0E+00	3.5E+00	3.4E+00	1.4E-01	0.0E+00	0.0E+00	9.8E-04	9.4E-04	3.9E-05	0.0E+00	0.0E+00
1600 - 1700	2.8E-01	2.3E-01	5.1E-02	3.5E-03	3.5E-03	3.5E-02	2.8E-02	6.4E-03	4.3E-04	4.3E-04	2.6E-02	2.5E-02	5.3E-04	0.0E+00	0.0E+00	3.8E-01	3.7E-01	7.7E-03	0.0E+00	0.0E+00	1.1E-04	1.0E-04	2.1E-06	0.0E+00	0.0E+00
1700 - 1800	2.8E-01	2.3E-01	5.1E-02	3.5E-03	3.5E-03	3.5E-02	2.8E-02	6.4E-03	4.3E-04	4.3E-04	6.5E-02	6.4E-02	1.8E-03	0.0E+00	0.0E+00	9.5E-01	9.3E-01	2.7E-02	0.0E+00	0.0E+00	2.6E-04	2.6E-04	7.4E-06	0.0E+00	0.0E+00
1800 - 1900	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1900 - 2000	2.8E-01	2.3E-01	5.1E-02	3.5E-03	3.5E-03	3.5E-02	2.8E-02	6.4E-03	4.3E-04	4.3E-04	2.6E-02	2.5E-02	5.3E-04	0.0E+00	0.0E+00	3.8E-01	3.7E-01	7.7E-03	0.0E+00	0.0E+00	1.1E-04	1.0E-04	2.1E-06	0.0E+00	0.0E+00
2000 - 2100	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2100 - 2200	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2200 - 2300	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2300 - 2400	2.2E+00	1.8E+00	4.1E-01	1.7E-02	1.7E-02	2.7E-01	2.2E-01	5.1E-02	2.2E-03	2.2E-03	7.8E-01	6.8E-01	9.6E-02	0.0E+00	0.0E+00	1.1E+01	9.9E+00	1.4E+00	0.0E+00	0.0E+00	3.1E-03	2.7E-03	3.9E-04	0.0E+00	0.0E+00

Start Emission

No. of PLB (Diesel) to No. of PLB (LPG) Ratio	3.2

	Public Light Buses (PLB) Start Emission Factor (g/trip)																	
NOx	4.4E-01	6.7E-01	1.1E+00	1.4E+00	1.6E+00	1.9E+00	2.1E+00	2.2E+00	2.4E+00	2.6E+00	2.7E+00	2.8E+00	2.9E+00	3.0E+00	3.0E+00	3.0E+00	3.0E+00	2.9E+00
NO	4.2E-01	6.5E-01	1.0E+00	1.3E+00	1.6E+00	1.8E+00	2.0E+00	2.0E+00	2.2E+00	2.3E+00	2.4E+00	2.5E+00	2.6E+00	2.6E+00	2.6E+00	2.6E+00	2.6E+00	2.5E+00
NO2	1.5E-02	2.6E-02	3.5E-02	4.9E-02	6.0E-02	7.9E-02	1.1E-01	1.4E-01	2.0E-01	2.6E-01	2.9E-01	3.4E-01	3.7E-01	3.9E-01	4.0E-01	4.1E-01	4.1E-01	4.1E-01
RSP	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
FSP	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00

Soaking Time (min) / Hour	No. of Trips of PLB (LPG)																	
	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	0
0600 - 0700	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0700 - 0800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0800 - 0900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0900 - 1000	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1000 - 1100	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1100 - 1200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1200 - 1300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1300 - 1400	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1400 - 1500	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1500 - 1600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1600 - 1700	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1700 - 1800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1800 - 1900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1900 - 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2000 - 2100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2100 - 2200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2200 - 2300	0	0	0	0	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	1	1	0	0	0
																Daily Total	7	

Total Start Emission of PLB (LPG) (g)				
NOx	**NO**	**NO2**	**RSP**	**FSP**
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1.1E+00	1.0E+00	3.5E-02	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
6.7E-01	6.5E-01	2.6E-02	0.0E+00	0.0E+00
1.1E+00	1.0E+00	3.5E-02	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1.4E+00	1.3E+00	4.9E-02	0.0E+00	0.0E+00
4.4E-01	4.2E-01	1.5E-02	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
6.0E+00	5.2E+00	7.8E-01	0.0E+00	0.0E+00

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.
[2] Population ratio of PLB (Diesel) to PLB (LPG) was extracted from Year 2028 data of EMFAC-HK.

Idling Emission - Terminating Public Light Buses

Idling Time for Terminating Public Light Buses	8	min
Max. Idling Time for Adjusting Start Emission =	1	min

Hour	PLB (LPG)											PLB (LPG)										
	Frequenc	Cold Idling Emission Factor (g/s)					Cold Idling Emission (g) [1]					Frequenc	Hot Idling Emission Factor (g/s)					Hot Idling Emission (g) [1]				
	y	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**	y	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**
0000 - 0100	0	3.8E-03	3.1E-03	7.0E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	4.9E-03	4.0E-03	9.1E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0100 - 0200	0	3.8E-03	3.1E-03	7.0E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	4.9E-03	4.0E-03	9.1E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0	3.8E-03	3.1E-03	7.0E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	4.9E-03	4.0E-03	9.1E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0	3.8E-03	3.1E-03	7.0E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	4.9E-03	4.0E-03	9.1E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0	3.8E-03	3.1E-03	7.0E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	4.9E-03	4.0E-03	9.1E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0	3.8E-03	3.1E-03	7.0E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	4.9E-03	4.0E-03	9.1E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0600 - 0700	0	3.8E-03	3.1E-03	7.0E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	4.9E-03	4.0E-03	9.1E-04	8.4E-06	8.4E-06	2.4E+00	1.9E+00	4.4E-01	4.0E-03	4.0E-03
0700 - 0800	0	3.8E-03	3.1E-03	7.0E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	4.9E-03	4.0E-03	9.1E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0800 - 0900	0	3.8E-03	3.1E-03	7.0E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	4.9E-03	4.0E-03	9.1E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0900 - 1000	0	3.8E-03	3.1E-03	7.0E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	4.9E-03	4.0E-03	9.1E-04	8.4E-06	8.4E-06	2.4E+00	1.9E+00	4.4E-01	4.0E-03	4.0E-03
1000 - 1100	0	3.8E-03	3.1E-03	7.0E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	4.9E-03	4.0E-03	9.1E-04	8.4E-06	8.4E-06	2.4E+00	1.9E+00	4.4E-01	4.0E-03	4.0E-03
1100 - 1200	0	3.8E-03	3.1E-03	7.0E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	4.9E-03	4.0E-03	9.1E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1200 - 1300	0	3.8E-03	3.1E-03	7.0E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	4.9E-03	4.0E-03	9.1E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1300 - 1400	0	3.8E-03	3.1E-03	7.0E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	4.9E-03	4.0E-03	9.1E-04	8.4E-06	8.4E-06	2.4E+00	1.9E+00	4.4E-01	4.0E-03	4.0E-03
1400 - 1500	0	3.8E-03	3.1E-03	7.0E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	4.9E-03	4.0E-03	9.1E-04	8.4E-06	8.4E-06	2.4E+00	1.9E+00	4.4E-01	4.0E-03	4.0E-03
1500 - 1600	0	3.8E-03	3.1E-03	7.0E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	4.9E-03	4.0E-03	9.1E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1600 - 1700	0	3.8E-03	3.1E-03	7.0E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	4.9E-03	4.0E-03	9.1E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1700 - 1800	0	3.8E-03	3.1E-03	7.0E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	4.9E-03	4.0E-03	9.1E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1800 - 1900	0	3.8E-03	3.1E-03	7.0E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	4.9E-03	4.0E-03	9.1E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1900 - 2000	0	3.8E-03	3.1E-03	7.0E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	4.9E-03	4.0E-03	9.1E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2000 - 2100	0	3.8E-03	3.1E-03	7.0E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	4.9E-03	4.0E-03	9.1E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2100 - 2200	0	3.8E-03	3.1E-03	7.0E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	4.9E-03	4.0E-03	9.1E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2200 - 2300	0	3.8E-03	3.1E-03	7.0E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	4.9E-03	4.0E-03	9.1E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2300 - 2400	2	3.8E-03	3.1E-03	7.0E-04	8.4E-06	8.4E-06	3.6E+00	3.0E+00	6.7E-01	8.0E-03	8.0E-03	0	4.9E-03	4.0E-03	9.1E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
Daily Total	2											5										

Average Distance from Starting Place to Egress =	45	m
Average Spread Distance outside bus terminus =	105	m

Hour	Total Idling Emission (g) [2]					Idling Emission for Start Emission Adjustment (g) [3]					Adjusted Start Emission within bus terminus (g) [6]					Adjusted Start Emission outside bus terminus (g) [7]					Start Emission Rate outside bus terminus (g/s)				
	NOx	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**
0000 - 0100	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0100 - 0200	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0600 - 0700	2.4E+00	1.9E+00	4.4E-01	4.0E-03	4.0E-03	2.9E-01	2.4E-01	5.4E-02	5.0E-04	5.0E-04	2.3E-01	2.3E-01	0.0E+00	0.0E+00	0.0E+00	5.3E-01	5.4E-01	0.0E+00	0.0E+00	0.0E+00	1.5E-04	1.5E-04	0.0E+00	0.0E+00	0.0E+00
0700 - 0800	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0800 - 0900	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0900 - 1000	2.4E+00	1.9E+00	4.4E-01	4.0E-03	4.0E-03	2.9E-01	2.4E-01	5.4E-02	5.0E-04	5.0E-04	1.1E-01	1.2E-01	0.0E+00	0.0E+00	0.0E+00	2.7E-01	2.9E-01	0.0E+00	0.0E+00	0.0E+00	7.4E-05	7.9E-05	0.0E+00	0.0E+00	0.0E+00
1000 - 1100	2.4E+00	1.9E+00	4.4E-01	4.0E-03	4.0E-03	2.9E-01	2.4E-01	5.4E-02	5.0E-04	5.0E-04	2.3E-01	2.3E-01	0.0E+00	0.0E+00	0.0E+00	5.3E-01	5.4E-01	0.0E+00	0.0E+00	0.0E+00	1.5E-04	1.5E-04	0.0E+00	0.0E+00	0.0E+00
1100 - 1200	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1200 - 1300	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1300 - 1400	2.4E+00	1.9E+00	4.4E-01	4.0E-03	4.0E-03	2.9E-01	2.4E-01	5.4E-02	5.0E-04	5.0E-04	3.3E-01	3.3E-01	0.0E+00	0.0E+00	0.0E+00	7.6E-01	7.7E-01	0.0E+00	0.0E+00	0.0E+00	2.1E-04	2.1E-04	0.0E+00	0.0E+00	0.0E+00
1400 - 1500	2.4E+00	1.9E+00	4.4E-01	4.0E-03	4.0E-03	2.9E-01	2.4E-01	5.4E-02	5.0E-04	5.0E-04	4.3E-02	5.5E-02	0.0E+00	0.0E+00	0.0E+00	1.0E-01	1.3E-01	0.0E+00	0.0E+00	0.0E+00	2.8E-05	3.6E-05	0.0E+00	0.0E+00	0.0E+00
1500 - 1600	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1600 - 1700	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1700 - 1800	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1800 - 1900	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1900 - 2000	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2000 - 2100	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2100 - 2200	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2200 - 2300	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2300 - 2400	3.6E+00	3.0E+00	6.7E-01	8.0E-03	8.0E-03	4.5E-01	3.7E-01	8.4E-02	1.0E-03	1.0E-03	1.7E+00	1.4E+00	2.1E-01	0.0E+00	0.0E+00	3.9E+00	3.4E+00	4.9E-01	0.0E+00	0.0E+00	1.1E-03	9.4E-04	1.4E-04	0.0E+00	0.0E+00

Running Emission - Terminating and Bypass Public Light Buses

Average Travelling Distance within bus terminus =	110	m
Average Travelling Speed =	10	km/h

Hour	PLB (Diesel + LPG)										
	Frequency	Running Emission Factor (g/km·vehicle)					Running Emission (g)				
		NOx	NO	NO2	RSP	FSP	NOx	NO	NO2	RSP	FSP
0000 - 0100	2	1.2E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	2.7E-01	2.2E-01	5.1E-02	1.1E-02	1.0E-02
0100 - 0200	0	1.2E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0	1.2E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0	1.2E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	2	1.2E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	2.7E-01	2.2E-01	5.1E-02	1.1E-02	1.0E-02
0500 - 0600	2	1.2E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	2.7E-01	2.2E-01	5.1E-02	1.1E-02	1.0E-02
0600 - 0700	19	1.2E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	2.6E+00	2.1E+00	4.8E-01	1.0E-01	9.6E-02
0700 - 0800	33	1.2E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	4.5E+00	3.7E+00	8.3E-01	1.8E-01	1.7E-01
0800 - 0900	32	1.2E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	4.4E+00	3.6E+00	8.1E-01	1.8E-01	1.6E-01
0900 - 1000	26	1.2E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	3.6E+00	2.9E+00	6.6E-01	1.4E-01	1.3E-01
1000 - 1100	17	1.2E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	2.3E+00	1.9E+00	4.3E-01	9.4E-02	8.6E-02
1100 - 1200	19	1.2E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	2.6E+00	2.1E+00	4.8E-01	1.0E-01	9.6E-02
1200 - 1300	13	1.2E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	1.8E+00	1.5E+00	3.3E-01	7.2E-02	6.6E-02
1300 - 1400	24	1.2E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	3.3E+00	2.7E+00	6.1E-01	1.3E-01	1.2E-01
1400 - 1500	18	1.2E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	2.5E+00	2.0E+00	4.6E-01	9.9E-02	9.1E-02
1500 - 1600	23	1.2E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	3.2E+00	2.6E+00	5.8E-01	1.3E-01	1.2E-01
1600 - 1700	22	1.2E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	3.0E+00	2.5E+00	5.6E-01	1.2E-01	1.1E-01
1700 - 1800	21	1.2E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	2.9E+00	2.3E+00	5.3E-01	1.2E-01	1.1E-01
1800 - 1900	17	1.2E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	2.3E+00	1.9E+00	4.3E-01	9.4E-02	8.6E-02
1900 - 2000	14	1.2E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	1.9E+00	1.6E+00	3.5E-01	7.7E-02	7.1E-02
2000 - 2100	6	1.2E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	8.2E-01	6.7E-01	1.5E-01	3.3E-02	3.0E-02
2100 - 2200	5	1.2E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	6.8E-01	5.6E-01	1.3E-01	2.8E-02	2.5E-02
2200 - 2300	3	1.2E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	4.1E-01	3.4E-01	7.6E-02	1.7E-02	1.5E-02
2300 - 2400	15	1.2E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	2.1E+00	1.7E+00	3.8E-01	8.3E-02	7.6E-02
Daily Total	333										

Idling Emission - Bypass Public Light Buses

No. of PLB (Diesel) to No. of PLB (LPG) Ratio	3.2	
Idling Time for Bypass Public Light Buses	5	min

Hour	PLB (Diesel)											PLB (LPG)										
	Frequency	Hot Idling Emission Factor (g/s)					Hot Idling Emission (g)					Frequency	Hot Idling Emission Factor (g/s)					Hot Idling Emission (g)				
		NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP		NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP
0000 - 0100	1	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	3.3E-01	2.5E-01	7.7E-02	2.3E-03	2.3E-03	0	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	3.3E-01	2.5E-01	7.7E-02	2.3E-03	2.3E-03
0100 - 0200	0	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	1	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	3.3E-01	2.5E-01	7.7E-02	2.3E-03	2.3E-03	0	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	3.3E-01	2.5E-01	7.7E-02	2.3E-03	2.3E-03
0500 - 0600	1	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	3.3E-01	2.5E-01	7.7E-02	2.3E-03	2.3E-03	0	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	3.3E-01	2.5E-01	7.7E-02	2.3E-03	2.3E-03
0600 - 0700	12	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	3.9E+00	3.0E+00	9.3E-01	2.8E-02	2.8E-02	4	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	3.9E+00	3.0E+00	9.3E-01	2.8E-02	2.8E-02
0700 - 0800	24	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	7.8E+00	5.9E+00	1.9E+00	5.5E-02	5.5E-02	8	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	7.8E+00	5.9E+00	1.9E+00	5.5E-02	5.5E-02
0800 - 0900	24	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	7.8E+00	5.9E+00	1.9E+00	5.5E-02	5.5E-02	7	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	7.8E+00	5.9E+00	1.9E+00	5.5E-02	5.5E-02
0900 - 1000	17	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	5.5E+00	4.2E+00	1.3E+00	3.9E-02	3.9E-02	5	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	5.5E+00	4.2E+00	1.3E+00	3.9E-02	3.9E-02
1000 - 1100	11	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	3.6E+00	2.7E+00	8.5E-01	2.5E-02	2.5E-02	3	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	3.6E+00	2.7E+00	8.5E-01	2.5E-02	2.5E-02
1100 - 1200	12	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	3.9E+00	3.0E+00	9.3E-01	2.8E-02	2.8E-02	4	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	3.9E+00	3.0E+00	9.3E-01	2.8E-02	2.8E-02
1200 - 1300	9	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	2.9E+00	2.2E+00	7.0E-01	2.1E-02	2.1E-02	3	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	2.9E+00	2.2E+00	7.0E-01	2.1E-02	2.1E-02
1300 - 1400	14	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	4.6E+00	3.5E+00	1.1E+00	3.2E-02	3.2E-02	5	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	4.6E+00	3.5E+00	1.1E+00	3.2E-02	3.2E-02
1400 - 1500	11	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	3.6E+00	2.7E+00	8.5E-01	2.5E-02	2.5E-02	3	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	3.6E+00	2.7E+00	8.5E-01	2.5E-02	2.5E-02
1500 - 1600	15	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	4.9E+00	3.7E+00	1.2E+00	3.5E-02	3.5E-02	5	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	4.9E+00	3.7E+00	1.2E+00	3.5E-02	3.5E-02
1600 - 1700	16	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	5.2E+00	4.0E+00	1.2E+00	3.7E-02	3.7E-02	5	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	5.2E+00	4.0E+00	1.2E+00	3.7E-02	3.7E-02
1700 - 1800	15	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	4.9E+00	3.7E+00	1.2E+00	3.5E-02	3.5E-02	5	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	4.9E+00	3.7E+00	1.2E+00	3.5E-02	3.5E-02
1800 - 1900	13	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	4.2E+00	3.2E+00	1.0E+00	3.0E-02	3.0E-02	4	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	4.2E+00	3.2E+00	1.0E+00	3.0E-02	3.0E-02
1900 - 2000	10	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	3.3E+00	2.5E+00	7.7E-01	2.3E-02	2.3E-02	3	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	3.3E+00	2.5E+00	7.7E-01	2.3E-02	2.3E-02
2000 - 2100	5	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.6E+00	1.2E+00	3.9E-01	1.2E-02	1.2E-02	1	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.6E+00	1.2E+00	3.9E-01	1.2E-02	1.2E-02
2100 - 2200	4	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.3E+00	9.9E-01	3.1E-01	9.2E-03	9.2E-03	1	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.3E+00	9.9E-01	3.1E-01	9.2E-03	9.2E-03
2200 - 2300	2	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	6.5E-01	5.0E-01	1.5E-01	4.6E-03	4.6E-03	1	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	6.5E-01	5.0E-01	1.5E-01	4.6E-03	4.6E-03
2300 - 2400	6	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	2.0E+00	1.5E+00	4.6E-01	1.4E-02	1.4E-02	2	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	2.0E+00	1.5E+00	4.6E-01	1.4E-02	1.4E-02
Daily Total	223											69										

Total Hourly Emission

Hour	Total Emission inside bus terminus (g) (Running + Idling + Start) [8]					Total Emission Rate (g/s)				
	NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP
0000 - 0100	1.6E+00	1.3E+00	3.1E-01	1.9E-02	1.8E-02	4.4E-04	3.5E-04	8.7E-05	5.3E-06	5.1E-06
0100 - 0200	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	1.2E+00	9.7E-01	2.6E-01	1.9E-02	1.8E-02	3.4E-04	2.7E-04	7.1E-05	5.3E-06	5.1E-06
0500 - 0600	1.3E+00	1.0E+00	2.6E-01	1.9E-02	1.8E-02	3.6E-04	2.9E-04	7.2E-05	5.3E-06	5.1E-06
0600 - 0700	1.4E+01	1.1E+01	2.9E+00	1.7E-01	1.6E-01	3.8E-03	3.0E-03	8.0E-04	4.7E-05	4.5E-05
0700 - 0800	2.0E+01	1.6E+01	4.6E+00	3.0E-01	2.8E-01	5.7E-03	4.4E-03	1.3E-03	8.2E-05	7.8E-05
0800 - 0900	2.0E+01	1.6E+01	4.6E+00	2.9E-01	2.8E-01	5.6E-03	4.4E-03	1.3E-03	8.1E-05	7.7E-05
0900 - 1000	1.8E+01	1.4E+01	3.9E+00	2.4E-01	2.2E-01	5.1E-03	4.0E-03	1.1E-03	6.6E-05	6.2E-05
1000 - 1100	1.3E+01	1.0E+01	2.7E+00	1.6E-01	1.5E-01	3.6E-03	2.8E-03	7.4E-04	4.3E-05	4.1E-05
1100 - 1200	1.2E+01	9.4E+00	2.6E+00	1.7E-01	1.6E-01	3.3E-03	2.6E-03	7.2E-04	4.7E-05	4.5E-05
1200 - 1300	8.2E+00	6.4E+00	1.8E+00	1.2E-01	1.1E-01	2.3E-03	1.8E-03	5.0E-04	3.2E-05	3.1E-05
1300 - 1400	1.6E+01	1.3E+01	3.4E+00	2.1E-01	2.0E-01	4.6E-03	3.6E-03	9.5E-04	6.0E-05	5.7E-05
1400 - 1500	1.3E+01	1.0E+01	2.8E+00	1.6E-01	1.6E-01	3.7E-03	2.9E-03	7.7E-04	4.6E-05	4.3E-05
1500 - 1600	1.4E+01	1.1E+01	3.1E+00	2.1E-01	2.0E-01	3.9E-03	3.1E-03	8.6E-04	5.7E-05	5.4E-05
1600 - 1700	1.4E+01	1.1E+01	3.1E+00	2.0E-01	1.9E-01	3.8E-03	3.0E-03	8.6E-04	5.5E-05	5.2E-05
1700 - 1800	1.3E+01	1.0E+01	2.9E+00	1.9E-01	1.8E-01	3.6E-03	2.8E-03	8.1E-04	5.2E-05	5.0E-05
1800 - 1900	1.1E+01	8.3E+00	2.4E+00	1.5E-01	1.5E-01	3.0E-03	2.3E-03	6.8E-04	4.3E-05	4.1E-05
1900 - 2000	8.7E+00	6.8E+00	2.0E+00	1.3E-01	1.2E-01	2.4E-03	1.9E-03	5.4E-04	3.5E-05	3.3E-05
2000 - 2100	4.1E+00	3.1E+00	9.2E-01	5.6E-02	5.3E-02	1.1E-03	8.7E-04	2.6E-04	1.6E-05	1.5E-05
2100 - 2200	3.3E+00	2.5E+00	7.4E-01	4.6E-02	4.4E-02	9.1E-04	7.1E-04	2.1E-04	1.3E-05	1.2E-05
2200 - 2300	1.7E+00	1.3E+00	3.8E-01	2.6E-02	2.4E-02	4.8E-04	3.7E-04	1.1E-04	7.1E-06	6.8E-06
2300 - 2400	1.4E+01	1.2E+01	2.7E+00	1.4E-01	1.3E-01	3.9E-03	3.2E-03	7.5E-04	3.8E-05	3.6E-05
						max:	4.4E-03	1.3E-03	8.2E-05	7.8E-05

PTI opening hourly emission factor

NO	NO_2	RSP	FSP
0.08	0.07	0.06	0.06
0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00
0.06	0.06	0.06	0.06
0.06	0.06	0.06	0.06
0.68	0.63	0.58	0.58
1.00	1.00	1.00	1.00
0.99	0.99	0.98	0.98
0.91	0.85	0.80	0.80
0.64	0.58	0.52	0.53
0.59	0.56	0.58	0.58
0.41	0.39	0.39	0.39
0.82	0.74	0.73	0.73
0.66	0.61	0.56	0.56
0.70	0.67	0.70	0.70
0.67	0.67	0.67	0.67
0.64	0.63	0.64	0.64
0.53	0.53	0.52	0.52
0.43	0.42	0.43	0.43
0.20	0.20	0.19	0.19
0.16	0.16	0.16	0.16
0.08	0.08	0.09	0.09
0.73	0.58	0.46	0.46

Remarks:

[1] Idling Emission (g) = Idling Emission Factor (g/s) * Actual Idling time (min) * 60 * Frequency

[2] Total Idling Emission (g) = Cold Idling Emission of PLB (g) + Hot Idling Emission of PLB (g)

[3] If Actual Idling Time ≤ 1 min, Idling Emission for Start Emission Adjustment (g) = Idling rate (g/min) * Actual Idling Time (min)

If Actual Idling Time > 1 min, Idling Emission for Start Emission Adjustment (g) = Idling rate (g/min) * Maximum Duration for Adjusting Start Emission "K" (min)

Where Idling rate (g/min) = Total Idling Emission (g) / Idling Time (min), and "K" = 1 min for LPG PLB

[4] Adjusted Start Emission within bus terminus (g) = [Total Start Emission of PLB (Diesel) (g) - Idling Emission for Start Emission Adjustment (g)] * [Average Distance from Starting Place to Egress (m) / 700m]

Minimum value = 0 g

[5] Adjusted Start Emission outside bus terminus (g) = [Total Start Emission of PLB (Diesel) (g) - Idling Emission for Start Emission Adjustment (g)] * [Average Spread Distance outside bus terminus (m) / 700m]

Minimum value = 0 g

[6] Adjusted Start Emission within bus terminus (g) = [Total Start Emission of PLB (LPG) (g) - Idling Emission for Start Emission Adjustment (g)] * [Average Distance from Starting Place to Egress (m) / 150m]

Minimum value = 0 g

[7] Adjusted Start Emission outside bus terminus (g) = [Total Start Emission of PLB (LPG) (g) - Idling Emission for Start Emission Adjustment (g)] * [Average Spread Distance outside bus terminus (m) / 150m]

Minimum value = 0 g

[8] Total Emission Inside bus terminus (g) = Total Running Emission (g) + Idling Emission (g) + Adjusted Start Emission within bus terminus (g)

Exchange Square Bus Terminus (PLB)

Minimum Hourly Temperature and Relative Humidity for 3rd Quarter

Temperature: 24 °C

Relative Humidity: 38 %

Start Emission

No. of PLB (Diesel) to No. of PLB (LPG) Ratio	3.2

	Public Light Buses (PLB) Start Emission Factor (g/trip)																	
NOx	4.0E-01	6.1E-01	9.6E-01	1.3E+00	1.5E+00	1.7E+00	1.9E+00	2.0E+00	2.2E+00	2.4E+00	2.5E+00	2.7E+00	2.8E+00	2.8E+00	2.8E+00	2.8E+00	2.8E+00	2.8E+00
NO	3.8E-01	5.9E-01	9.2E-01	1.2E+00	1.4E+00	1.6E+00	1.8E+00	1.9E+00	2.0E+00	2.1E+00	2.2E+00	2.3E+00	2.4E+00	2.4E+00	2.4E+00	2.4E+00	2.4E+00	2.4E+00
NO2	1.4E-02	2.5E-02	3.4E-02	4.8E-02	5.9E-02	7.8E-02	1.1E-01	1.4E-01	2.0E-01	2.5E-01	2.8E-01	3.3E-01	3.7E-01	3.8E-01	3.9E-01	4.0E-01	4.1E-01	4.1E-01
RSP	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
FSP	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00

	No. of Trips of PLB (Diesel)																	
Soaking Time (min) / Hour	**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	1	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	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0500 - 0600	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0600 - 0700	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0700 - 0800	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0800 - 0900	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0900 - 1000	0	1	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0
1000 - 1100	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
1100 - 1200	0	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0
1200 - 1300	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
1300 - 1400	1	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
1400 - 1500	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
1500 - 1600	1	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
1600 - 1700	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1700 - 1800	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1800 - 1900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1900 - 2000	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2000 - 2100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2100 - 2200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2200 - 2300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2300 - 2400	1	0	0	0	0	0	0	0	0	0	0	0	1	2	1	0	0	0
																Daily Total	34	

Total Start Emission of PLB (Diesel) (g)				
NOx	**NO**	**NO2**	**RSP**	**FSP**
2.7E+00	2.3E+00	3.3E-01	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
4.0E-01	3.8E-01	1.4E-02	0.0E+00	0.0E+00
1.3E+00	1.2E+00	4.8E-02	0.0E+00	0.0E+00
2.2E+00	2.1E+00	8.3E-02	0.0E+00	0.0E+00
6.1E-01	5.9E-01	2.5E-02	0.0E+00	0.0E+00
9.6E-01	9.2E-01	3.4E-02	0.0E+00	0.0E+00
4.1E+00	3.9E+00	2.2E-01	0.0E+00	0.0E+00
2.7E+00	2.5E+00	1.1E-01	0.0E+00	0.0E+00
5.1E+00	4.8E+00	3.0E-01	0.0E+00	0.0E+00
1.9E+00	1.8E+00	1.1E-01	0.0E+00	0.0E+00
4.3E+00	4.1E+00	1.7E-01	0.0E+00	0.0E+00
2.9E+00	2.8E+00	1.5E-01	0.0E+00	0.0E+00
3.6E+00	3.4E+00	1.7E-01	0.0E+00	0.0E+00
4.0E-01	3.8E-01	1.4E-02	0.0E+00	0.0E+00
9.6E-01	9.2E-01	3.4E-02	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
4.0E-01	3.8E-01	1.4E-02	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1.2E+01	1.0E+01	1.5E+00	0.0E+00	0.0E+00

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.
[2] Population ratio of PLB (Diesel) to PLB (LPG) was extracted from Year 2028 data of EMFAC-HK.

Idling Emission - Terminating Public Light Buses

Idling Time for Terminating Public Light Buses	8	min
Max. Idling Time for Adjusting Start Emission =	1	min

Hour	PLB (Diesel)											PLB (Diesel)										
	Frequenc	Cold Idling Emission Factor (g/s)					Cold Idling Emission (g) [1]					Frequenc	Hot Idling Emission Factor (g/s)					Hot Idling Emission (g) [1]				
	y	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**	y	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**
0000 - 0100	1	1.0E-03	8.1E-04	1.9E-04	7.2E-06	7.2E-06	4.8E-01	3.9E-01	9.2E-02	3.5E-03	3.5E-03	0	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0100 - 0200	0	1.0E-03	8.1E-04	1.9E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0	1.0E-03	8.1E-04	1.9E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0	1.0E-03	8.1E-04	1.9E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0	1.0E-03	8.1E-04	1.9E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	2.8E-01	2.2E-01	5.4E-02	3.5E-03	3.5E-03
0500 - 0600	0	1.0E-03	8.1E-04	1.9E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	2.8E-01	2.2E-01	5.4E-02	3.5E-03	3.5E-03
0600 - 0700	0	1.0E-03	8.1E-04	1.9E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	2	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	5.6E-01	4.5E-01	1.1E-01	6.9E-03	6.9E-03
0700 - 0800	0	1.0E-03	8.1E-04	1.9E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	2.8E-01	2.2E-01	5.4E-02	3.5E-03	3.5E-03
0800 - 0900	0	1.0E-03	8.1E-04	1.9E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	2.8E-01	2.2E-01	5.4E-02	3.5E-03	3.5E-03
0900 - 1000	1	1.0E-03	8.1E-04	1.9E-04	7.2E-06	7.2E-06	4.8E-01	3.9E-01	9.2E-02	3.5E-03	3.5E-03	2	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	5.6E-01	4.5E-01	1.1E-01	6.9E-03	6.9E-03
1000 - 1100	0	1.0E-03	8.1E-04	1.9E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	2	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	5.6E-01	4.5E-01	1.1E-01	6.9E-03	6.9E-03
1100 - 1200	2	1.0E-03	8.1E-04	1.9E-04	7.2E-06	7.2E-06	9.6E-01	7.8E-01	1.8E-01	6.9E-03	6.9E-03	1	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	2.8E-01	2.2E-01	5.4E-02	3.5E-03	3.5E-03
1200 - 1300	1	1.0E-03	8.1E-04	1.9E-04	7.2E-06	7.2E-06	4.8E-01	3.9E-01	9.2E-02	3.5E-03	3.5E-03	0	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1300 - 1400	0	1.0E-03	8.1E-04	1.9E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	4	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	1.1E+00	9.0E-01	2.1E-01	1.4E-02	1.4E-02
1400 - 1500	1	1.0E-03	8.1E-04	1.9E-04	7.2E-06	7.2E-06	4.8E-01	3.9E-01	9.2E-02	3.5E-03	3.5E-03	2	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	5.6E-01	4.5E-01	1.1E-01	6.9E-03	6.9E-03
1500 - 1600	1	1.0E-03	8.1E-04	1.9E-04	7.2E-06	7.2E-06	4.8E-01	3.9E-01	9.2E-02	3.5E-03	3.5E-03	2	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	5.6E-01	4.5E-01	1.1E-01	6.9E-03	6.9E-03
1600 - 1700	0	1.0E-03	8.1E-04	1.9E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	2.8E-01	2.2E-01	5.4E-02	3.5E-03	3.5E-03
1700 - 1800	0	1.0E-03	8.1E-04	1.9E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	2.8E-01	2.2E-01	5.4E-02	3.5E-03	3.5E-03
1800 - 1900	0	1.0E-03	8.1E-04	1.9E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1900 - 2000	0	1.0E-03	8.1E-04	1.9E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	2.8E-01	2.2E-01	5.4E-02	3.5E-03	3.5E-03
2000 - 2100	0	1.0E-03	8.1E-04	1.9E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2100 - 2200	0	1.0E-03	8.1E-04	1.9E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2200 - 2300	0	1.0E-03	8.1E-04	1.9E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2300 - 2400	4	1.0E-03	8.1E-04	1.9E-04	7.2E-06	7.2E-06	1.9E+00	1.6E+00	3.7E-01	1.4E-02	1.4E-02	1	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	2.8E-01	2.2E-01	5.4E-02	3.5E-03	3.5E-03
Daily Total	11											23										

Average Distance from Starting Place to Egress =	45	m
Average Spread Distance outside bus terminus =	655	m

Hour	Total Idling Emission (g) [2]					Idling Emission for Start Emission Adjustment (g) [3]					Adjusted Start Emission within bus terminus (g) [4]					Adjusted Start Emission outside bus terminus (g) [5]					Start Emission Rate outside bus terminus (g/s)				
	NOx	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**
0000 - 0100	4.8E-01	3.9E-01	9.2E-02	3.5E-03	3.5E-03	6.0E-02	4.8E-02	1.2E-02	4.3E-04	4.3E-04	1.7E-01	1.5E-01	2.1E-02	0.0E+00	0.0E+00	2.4E+00	2.1E+00	3.0E-01	0.0E+00	0.0E+00	6.8E-04	5.9E-04	8.4E-05	0.0E+00	0.0E+00
0100 - 0200	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	2.8E-01	2.2E-01	5.4E-02	3.5E-03	3.5E-03	3.5E-02	2.8E-02	6.7E-03	4.3E-04	4.3E-04	2.3E-02	2.3E-02	5.0E-04	0.0E+00	0.0E+00	3.4E-01	3.3E-01	7.2E-03	0.0E+00	0.0E+00	9.5E-05	9.3E-05	2.0E-06	0.0E+00	0.0E+00
0500 - 0600	2.8E-01	2.2E-01	5.4E-02	3.5E-03	3.5E-03	3.5E-02	2.8E-02	6.7E-03	4.3E-04	4.3E-04	7.9E-02	7.6E-02	2.7E-03	0.0E+00	0.0E+00	1.1E+00	1.1E+00	3.9E-02	0.0E+00	0.0E+00	3.2E-04	3.1E-04	1.1E-05	0.0E+00	0.0E+00
0600 - 0700	5.6E-01	4.5E-01	1.1E-01	6.9E-03	6.9E-03	6.9E-02	5.6E-02	1.3E-02	8.7E-04	8.7E-04	1.4E-01	1.3E-01	4.5E-03	0.0E+00	0.0E+00	2.0E+00	1.9E+00	6.5E-02	0.0E+00	0.0E+00	5.6E-04	5.4E-04	1.8E-05	0.0E+00	0.0E+00
0700 - 0800	2.8E-01	2.2E-01	5.4E-02	3.5E-03	3.5E-03	3.5E-02	2.8E-02	6.7E-03	4.3E-04	4.3E-04	3.7E-02	3.6E-02	1.2E-03	0.0E+00	0.0E+00	5.4E-01	5.3E-01	1.7E-02	0.0E+00	0.0E+00	1.5E-04	1.5E-04	4.8E-06	0.0E+00	0.0E+00
0800 - 0900	2.8E-01	2.2E-01	5.4E-02	3.5E-03	3.5E-03	3.5E-02	2.8E-02	6.7E-03	4.3E-04	4.3E-04	5.9E-02	5.8E-02	1.8E-03	0.0E+00	0.0E+00	8.6E-01	8.4E-01	2.6E-02	0.0E+00	0.0E+00	2.4E-04	2.3E-04	7.2E-06	0.0E+00	0.0E+00
0900 - 1000	1.0E+00	8.4E-01	2.0E-01	1.0E-02	1.0E-02	1.3E-01	1.0E-01	2.5E-02	1.3E-03	1.3E-03	2.6E-01	2.4E-01	1.3E-02	0.0E+00	0.0E+00	3.7E+00	3.5E+00	1.8E-01	0.0E+00	0.0E+00	1.0E-03	9.8E-04	5.1E-05	0.0E+00	0.0E+00
1000 - 1100	5.6E-01	4.5E-01	1.1E-01	6.9E-03	6.9E-03	6.9E-02	5.6E-02	1.3E-02	8.7E-04	8.7E-04	1.7E-01	1.6E-01	6.3E-03	0.0E+00	0.0E+00	2.4E+00	2.3E+00	9.2E-02	0.0E+00	0.0E+00	6.7E-04	6.5E-04	2.6E-05	0.0E+00	0.0E+00
1100 - 1200	1.2E+00	1.0E+00	2.4E-01	1.0E-02	1.0E-02	1.5E-01	1.2E-01	3.0E-02	1.3E-03	1.3E-03	3.2E-01	3.0E-01	1.7E-02	0.0E+00	0.0E+00	4.7E+00	4.4E+00	2.5E-01	0.0E+00	0.0E+00	1.3E-03	1.2E-03	6.9E-05	0.0E+00	0.0E+00
1200 - 1300	4.8E-01	3.9E-01	9.2E-02	3.5E-03	3.5E-03	6.0E-02	4.8E-02	1.2E-02	4.3E-04	4.3E-04	1.2E-01	1.1E-01	6.4E-03	0.0E+00	0.0E+00	1.7E+00	1.6E+00	9.3E-02	0.0E+00	0.0E+00	4.8E-04	4.5E-04	2.6E-05	0.0E+00	0.0E+00
1300 - 1400	1.1E+00	9.0E-01	2.1E-01	1.4E-02	1.4E-02	1.4E-01	1.1E-01	2.7E-02	1.7E-03	1.7E-03	2.7E-01	2.6E-01	9.5E-03	0.0E+00	0.0E+00	3.9E+00	3.8E+00	1.4E-01	0.0E+00	0.0E+00	1.1E-03	1.0E-03	3.8E-05	0.0E+00	0.0E+00
1400 - 1500	1.0E+00	8.4E-01	2.0E-01	1.0E-02	1.0E-02	1.3E-01	1.0E-01	2.5E-02	1.3E-03	1.3E-03	1.8E-01	1.7E-01	8.1E-03	0.0E+00	0.0E+00	2.6E+00	2.5E+00	1.2E-01	0.0E+00	0.0E+00	7.2E-04	6.9E-04	3.3E-05	0.0E+00	0.0E+00
1500 - 1600	1.0E+00	8.4E-01	2.0E-01	1.0E-02	1.0E-02	1.3E-01	1.0E-01	2.5E-02	1.3E-03	1.3E-03	2.2E-01	2.1E-01	9.6E-03	0.0E+00	0.0E+00	3.2E+00	3.1E+00	1.4E-01	0.0E+00	0.0E+00	8.9E-04	8.5E-04	3.9E-05	0.0E+00	0.0E+00
1600 - 1700	2.8E-01	2.2E-01	5.4E-02	3.5E-03	3.5E-03	3.5E-02	2.8E-02	6.7E-03	4.3E-04	4.3E-04	2.3E-02	2.3E-02	5.0E-04	0.0E+00	0.0E+00	3.4E-01	3.3E-01	7.2E-03	0.0E+00	0.0E+00	9.5E-05	9.3E-05	2.0E-06	0.0E+00	0.0E+00
1700 - 1800	2.8E-01	2.2E-01	5.4E-02	3.5E-03	3.5E-03	3.5E-02	2.8E-02	6.7E-03	4.3E-04	4.3E-04	5.9E-02	5.8E-02	1.8E-03	0.0E+00	0.0E+00	8.6E-01	8.4E-01	2.6E-02	0.0E+00	0.0E+00	2.4E-04	2.3E-04	7.2E-06	0.0E+00	0.0E+00
1800 - 1900	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1900 - 2000	2.8E-01	2.2E-01	5.4E-02	3.5E-03	3.5E-03	3.5E-02	2.8E-02	6.7E-03	4.3E-04	4.3E-04	2.3E-02	2.3E-02	5.0E-04	0.0E+00	0.0E+00	3.4E-01	3.3E-01	7.2E-03	0.0E+00	0.0E+00	9.5E-05	9.3E-05	2.0E-06	0.0E+00	0.0E+00
2000 - 2100	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2100 - 2200	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2200 - 2300	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2300 - 2400	2.2E+00	1.8E+00	4.2E-01	1.7E-02	1.7E-02	2.7E-01	2.2E-01	5.3E-02	2.2E-03	2.2E-03	7.3E-01	6.3E-01	9.6E-02	0.0E+00	0.0E+00	1.1E+01	9.2E+00	1.4E+00	0.0E+00	0.0E+00	2.9E-03	2.5E-03	3.9E-04	0.0E+00	0.0E+00

Start Emission

No. of PLB (Diesel) to No. of PLB (LPG) Ratio	3.2

	Public Light Buses (PLB) Start Emission Factor (g/trip)																	
NOx	4.0E-01	6.1E-01	9.6E-01	1.3E+00	1.5E+00	1.7E+00	1.9E+00	2.0E+00	2.2E+00	2.4E+00	2.5E+00	2.7E+00	2.8E+00	2.8E+00	2.8E+00	2.8E+00	2.8E+00	2.8E+00
NO	3.8E-01	5.9E-01	9.2E-01	1.2E+00	1.4E+00	1.6E+00	1.8E+00	1.9E+00	2.0E+00	2.1E+00	2.2E+00	2.3E+00	2.4E+00	2.4E+00	2.4E+00	2.4E+00	2.4E+00	2.4E+00
NO2	1.4E-02	2.5E-02	3.4E-02	4.8E-02	5.9E-02	7.8E-02	1.1E-01	1.4E-01	2.0E-01	2.5E-01	2.8E-01	3.3E-01	3.7E-01	3.8E-01	3.9E-01	4.0E-01	4.1E-01	4.1E-01
RSP	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
FSP	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00

Soaking Time (min) / Hour	No. of Trips of PLB (LPG)																	
	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	0
0600 - 0700	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0700 - 0800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0800 - 0900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0900 - 1000	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1000 - 1100	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1100 - 1200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1200 - 1300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1300 - 1400	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1400 - 1500	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1500 - 1600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1600 - 1700	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1700 - 1800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1800 - 1900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1900 - 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2000 - 2100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2100 - 2200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2200 - 2300	0	0	0	0	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	1	1	0	0	0
																Daily Total	7	

Total Start Emission of PLB (LPG) (g)				
NOx	**NO**	**NO2**	**RSP**	**FSP**
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
9.6E-01	9.2E-01	3.4E-02	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
6.1E-01	5.9E-01	2.5E-02	0.0E+00	0.0E+00
9.6E-01	9.2E-01	3.4E-02	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1.3E+00	1.2E+00	4.8E-02	0.0E+00	0.0E+00
4.0E-01	3.8E-01	1.4E-02	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
5.6E+00	4.8E+00	7.8E-01	0.0E+00	0.0E+00

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.
[2] Population ratio of PLB (Diesel) to PLB (LPG) was extracted from Year 2028 data of EMFAC-HK.

Idling Emission - Terminating Public Light Buses

Idling Time for Terminating Public Light Buses	8	min
Max. Idling Time for Adjusting Start Emission =	1	min

Hour	PLB (LPG)											PLB (LPG)										
	Frequenc	Cold Idling Emission Factor (g/s)					Cold Idling Emission (g) [1]					Frequenc	Hot Idling Emission Factor (g/s)					Hot Idling Emission (g) [1]				
	y	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**	y	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**
0000 - 0100	0	3.8E-03	3.1E-03	7.3E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	4.9E-03	4.0E-03	9.5E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0100 - 0200	0	3.8E-03	3.1E-03	7.3E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	4.9E-03	4.0E-03	9.5E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0	3.8E-03	3.1E-03	7.3E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	4.9E-03	4.0E-03	9.5E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0	3.8E-03	3.1E-03	7.3E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	4.9E-03	4.0E-03	9.5E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0	3.8E-03	3.1E-03	7.3E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	4.9E-03	4.0E-03	9.5E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0	3.8E-03	3.1E-03	7.3E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	4.9E-03	4.0E-03	9.5E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0600 - 0700	0	3.8E-03	3.1E-03	7.3E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	4.9E-03	4.0E-03	9.5E-04	8.4E-06	8.4E-06	2.4E+00	1.9E+00	4.5E-01	4.0E-03	4.0E-03
0700 - 0800	0	3.8E-03	3.1E-03	7.3E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	4.9E-03	4.0E-03	9.5E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0800 - 0900	0	3.8E-03	3.1E-03	7.3E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	4.9E-03	4.0E-03	9.5E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0900 - 1000	0	3.8E-03	3.1E-03	7.3E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	4.9E-03	4.0E-03	9.5E-04	8.4E-06	8.4E-06	2.4E+00	1.9E+00	4.5E-01	4.0E-03	4.0E-03
1000 - 1100	0	3.8E-03	3.1E-03	7.3E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	4.9E-03	4.0E-03	9.5E-04	8.4E-06	8.4E-06	2.4E+00	1.9E+00	4.5E-01	4.0E-03	4.0E-03
1100 - 1200	0	3.8E-03	3.1E-03	7.3E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	4.9E-03	4.0E-03	9.5E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1200 - 1300	0	3.8E-03	3.1E-03	7.3E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	4.9E-03	4.0E-03	9.5E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1300 - 1400	0	3.8E-03	3.1E-03	7.3E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	4.9E-03	4.0E-03	9.5E-04	8.4E-06	8.4E-06	2.4E+00	1.9E+00	4.5E-01	4.0E-03	4.0E-03
1400 - 1500	0	3.8E-03	3.1E-03	7.3E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	4.9E-03	4.0E-03	9.5E-04	8.4E-06	8.4E-06	2.4E+00	1.9E+00	4.5E-01	4.0E-03	4.0E-03
1500 - 1600	0	3.8E-03	3.1E-03	7.3E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	4.9E-03	4.0E-03	9.5E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1600 - 1700	0	3.8E-03	3.1E-03	7.3E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	4.9E-03	4.0E-03	9.5E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1700 - 1800	0	3.8E-03	3.1E-03	7.3E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	4.9E-03	4.0E-03	9.5E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1800 - 1900	0	3.8E-03	3.1E-03	7.3E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	4.9E-03	4.0E-03	9.5E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1900 - 2000	0	3.8E-03	3.1E-03	7.3E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	4.9E-03	4.0E-03	9.5E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2000 - 2100	0	3.8E-03	3.1E-03	7.3E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	4.9E-03	4.0E-03	9.5E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2100 - 2200	0	3.8E-03	3.1E-03	7.3E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	4.9E-03	4.0E-03	9.5E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2200 - 2300	0	3.8E-03	3.1E-03	7.3E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	4.9E-03	4.0E-03	9.5E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2300 - 2400	2	3.8E-03	3.1E-03	7.3E-04	8.4E-06	8.4E-06	3.6E+00	2.9E+00	7.0E-01	8.0E-03	8.0E-03	0	4.9E-03	4.0E-03	9.5E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
Daily Total	2											5										

Average Distance from Starting Place to Egress =	45	m
Average Spread Distance outside bus terminus =	105	m

Hour	Total Idling Emission (g) [2]					Idling Emission for Start Emission Adjustment (g) [3]					Adjusted Start Emission within bus terminus (g) [6]					Adjusted Start Emission outside bus terminus (g) [7]					Start Emission Rate outside bus terminus (g/s)				
	NOx	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**
0000 - 0100	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0100 - 0200	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0600 - 0700	2.4E+00	1.9E+00	4.5E-01	4.0E-03	4.0E-03	2.9E-01	2.4E-01	5.7E-02	5.0E-04	5.0E-04	2.0E-01	2.1E-01	0.0E+00	0.0E+00	0.0E+00	4.6E-01	4.8E-01	0.0E+00	0.0E+00	0.0E+00	1.3E-04	1.3E-04	0.0E+00	0.0E+00	0.0E+00
0700 - 0800	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0800 - 0900	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0900 - 1000	2.4E+00	1.9E+00	4.5E-01	4.0E-03	4.0E-03	2.9E-01	2.4E-01	5.7E-02	5.0E-04	5.0E-04	9.6E-02	1.1E-01	0.0E+00	0.0E+00	0.0E+00	2.2E-01	2.5E-01	0.0E+00	0.0E+00	0.0E+00	6.2E-05	6.8E-05	0.0E+00	0.0E+00	0.0E+00
1000 - 1100	2.4E+00	1.9E+00	4.5E-01	4.0E-03	4.0E-03	2.9E-01	2.4E-01	5.7E-02	5.0E-04	5.0E-04	2.0E-01	2.1E-01	0.0E+00	0.0E+00	0.0E+00	4.6E-01	4.8E-01	0.0E+00	0.0E+00	0.0E+00	1.3E-04	1.3E-04	0.0E+00	0.0E+00	0.0E+00
1100 - 1200	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1200 - 1300	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1300 - 1400	2.4E+00	1.9E+00	4.5E-01	4.0E-03	4.0E-03	2.9E-01	2.4E-01	5.7E-02	5.0E-04	5.0E-04	2.9E-01	2.9E-01	0.0E+00	0.0E+00	0.0E+00	6.7E-01	6.8E-01	0.0E+00	0.0E+00	0.0E+00	1.9E-04	1.9E-04	0.0E+00	0.0E+00	0.0E+00
1400 - 1500	2.4E+00	1.9E+00	4.5E-01	4.0E-03	4.0E-03	2.9E-01	2.4E-01	5.7E-02	5.0E-04	5.0E-04	3.1E-02	4.4E-02	0.0E+00	0.0E+00	0.0E+00	7.3E-02	1.0E-01	0.0E+00	0.0E+00	0.0E+00	2.0E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00
1500 - 1600	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1600 - 1700	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1700 - 1800	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1800 - 1900	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1900 - 2000	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2000 - 2100	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2100 - 2200	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2200 - 2300	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2300 - 2400	3.6E+00	2.9E+00	7.0E-01	8.0E-03	8.0E-03	4.5E-01	3.7E-01	8.7E-02	1.0E-03	1.0E-03	1.5E+00	1.3E+00	2.1E-01	0.0E+00	0.0E+00	3.6E+00	3.1E+00	4.8E-01	0.0E+00	0.0E+00	1.0E-03	8.7E-04	1.3E-04	0.0E+00	0.0E+00

Running Emission - Terminating and Bypass Public Light Buses

Average Travelling Distance within bus terminus =	110	m
Average Travelling Speed =	10	km/h

Hour	PLB (Diesel + LPG)										
	Frequency	Running Emission Factor (g/km·vehicle)					Running Emission (g)				
		NOx	NO	NO2	RSP	FSP	NOx	NO	NO2	RSP	FSP
0000 - 0100	2	1.1E+00	8.8E-01	2.1E-01	5.0E-02	4.6E-02	2.4E-01	1.9E-01	4.6E-02	1.1E-02	1.0E-02
0100 - 0200	0	1.1E+00	8.8E-01	2.1E-01	5.0E-02	4.6E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0	1.1E+00	8.8E-01	2.1E-01	5.0E-02	4.6E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0	1.1E+00	8.8E-01	2.1E-01	5.0E-02	4.6E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	2	1.1E+00	8.8E-01	2.1E-01	5.0E-02	4.6E-02	2.4E-01	1.9E-01	4.6E-02	1.1E-02	1.0E-02
0500 - 0600	2	1.1E+00	8.8E-01	2.1E-01	5.0E-02	4.6E-02	2.4E-01	1.9E-01	4.6E-02	1.1E-02	1.0E-02
0600 - 0700	19	1.1E+00	8.8E-01	2.1E-01	5.0E-02	4.6E-02	2.3E+00	1.8E+00	4.4E-01	1.0E-01	9.6E-02
0700 - 0800	33	1.1E+00	8.8E-01	2.1E-01	5.0E-02	4.6E-02	4.0E+00	3.2E+00	7.7E-01	1.8E-01	1.7E-01
0800 - 0900	32	1.1E+00	8.8E-01	2.1E-01	5.0E-02	4.6E-02	3.9E+00	3.1E+00	7.4E-01	1.8E-01	1.6E-01
0900 - 1000	26	1.1E+00	8.8E-01	2.1E-01	5.0E-02	4.6E-02	3.1E+00	2.5E+00	6.0E-01	1.4E-01	1.3E-01
1000 - 1100	17	1.1E+00	8.8E-01	2.1E-01	5.0E-02	4.6E-02	2.0E+00	1.7E+00	3.9E-01	9.4E-02	8.6E-02
1100 - 1200	19	1.1E+00	8.8E-01	2.1E-01	5.0E-02	4.6E-02	2.3E+00	1.8E+00	4.4E-01	1.0E-01	9.6E-02
1200 - 1300	13	1.1E+00	8.8E-01	2.1E-01	5.0E-02	4.6E-02	1.6E+00	1.3E+00	3.0E-01	7.2E-02	6.6E-02
1300 - 1400	24	1.1E+00	8.8E-01	2.1E-01	5.0E-02	4.6E-02	2.9E+00	2.3E+00	5.6E-01	1.3E-01	1.2E-01
1400 - 1500	18	1.1E+00	8.8E-01	2.1E-01	5.0E-02	4.6E-02	2.2E+00	1.8E+00	4.2E-01	9.9E-02	9.1E-02
1500 - 1600	23	1.1E+00	8.8E-01	2.1E-01	5.0E-02	4.6E-02	2.8E+00	2.2E+00	5.3E-01	1.3E-01	1.2E-01
1600 - 1700	22	1.1E+00	8.8E-01	2.1E-01	5.0E-02	4.6E-02	2.7E+00	2.1E+00	5.1E-01	1.2E-01	1.1E-01
1700 - 1800	21	1.1E+00	8.8E-01	2.1E-01	5.0E-02	4.6E-02	2.5E+00	2.0E+00	4.9E-01	1.2E-01	1.1E-01
1800 - 1900	17	1.1E+00	8.8E-01	2.1E-01	5.0E-02	4.6E-02	2.0E+00	1.7E+00	3.9E-01	9.4E-02	8.6E-02
1900 - 2000	14	1.1E+00	8.8E-01	2.1E-01	5.0E-02	4.6E-02	1.7E+00	1.4E+00	3.3E-01	7.7E-02	7.1E-02
2000 - 2100	6	1.1E+00	8.8E-01	2.1E-01	5.0E-02	4.6E-02	7.2E-01	5.8E-01	1.4E-01	3.3E-02	3.0E-02
2100 - 2200	5	1.1E+00	8.8E-01	2.1E-01	5.0E-02	4.6E-02	6.0E-01	4.9E-01	1.2E-01	2.8E-02	2.5E-02
2200 - 2300	3	1.1E+00	8.8E-01	2.1E-01	5.0E-02	4.6E-02	3.6E-01	2.9E-01	7.0E-02	1.7E-02	1.5E-02
2300 - 2400	15	1.1E+00	8.8E-01	2.1E-01	5.0E-02	4.6E-02	1.8E+00	1.5E+00	3.5E-01	8.3E-02	7.6E-02
Daily Total	333										

Idling Emission - Bypass Public Light Buses

No. of PLB (Diesel) to No. of PLB (LPG) Ratio	3.2	
Idling Time for Bypass Public Light Buses	5	min

Hour	PLB (Diesel)											PLB (LPG)										
	Frequency	Hot Idling Emission Factor (g/s)					Hot Idling Emission (g)					Frequency	Hot Idling Emission Factor (g/s)					Hot Idling Emission (g)				
		NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP		NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP
0000 - 0100	1	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	3.3E-01	2.5E-01	7.7E-02	2.3E-03	2.3E-03	0	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	3.3E-01	2.5E-01	7.7E-02	2.3E-03	2.3E-03
0100 - 0200	0	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	1	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	3.3E-01	2.5E-01	7.7E-02	2.3E-03	2.3E-03	0	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	3.3E-01	2.5E-01	7.7E-02	2.3E-03	2.3E-03
0500 - 0600	1	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	3.3E-01	2.5E-01	7.7E-02	2.3E-03	2.3E-03	0	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	3.3E-01	2.5E-01	7.7E-02	2.3E-03	2.3E-03
0600 - 0700	12	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	3.9E+00	3.0E+00	9.3E-01	2.8E-02	2.8E-02	4	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	3.9E+00	3.0E+00	9.3E-01	2.8E-02	2.8E-02
0700 - 0800	24	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	7.8E+00	5.9E+00	1.9E+00	5.5E-02	5.5E-02	8	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	7.8E+00	5.9E+00	1.9E+00	5.5E-02	5.5E-02
0800 - 0900	24	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	7.8E+00	5.9E+00	1.9E+00	5.5E-02	5.5E-02	7	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	7.8E+00	5.9E+00	1.9E+00	5.5E-02	5.5E-02
0900 - 1000	17	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	5.5E+00	4.2E+00	1.3E+00	3.9E-02	3.9E-02	5	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	5.5E+00	4.2E+00	1.3E+00	3.9E-02	3.9E-02
1000 - 1100	11	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	3.6E+00	2.7E+00	8.5E-01	2.5E-02	2.5E-02	3	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	3.6E+00	2.7E+00	8.5E-01	2.5E-02	2.5E-02
1100 - 1200	12	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	3.9E+00	3.0E+00	9.3E-01	2.8E-02	2.8E-02	4	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	3.9E+00	3.0E+00	9.3E-01	2.8E-02	2.8E-02
1200 - 1300	9	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	2.9E+00	2.2E+00	7.0E-01	2.1E-02	2.1E-02	3	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	2.9E+00	2.2E+00	7.0E-01	2.1E-02	2.1E-02
1300 - 1400	14	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	4.6E+00	3.5E+00	1.1E+00	3.2E-02	3.2E-02	5	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	4.6E+00	3.5E+00	1.1E+00	3.2E-02	3.2E-02
1400 - 1500	11	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	3.6E+00	2.7E+00	8.5E-01	2.5E-02	2.5E-02	3	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	3.6E+00	2.7E+00	8.5E-01	2.5E-02	2.5E-02
1500 - 1600	15	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	4.9E+00	3.7E+00	1.2E+00	3.5E-02	3.5E-02	5	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	4.9E+00	3.7E+00	1.2E+00	3.5E-02	3.5E-02
1600 - 1700	16	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	5.2E+00	4.0E+00	1.2E+00	3.7E-02	3.7E-02	5	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	5.2E+00	4.0E+00	1.2E+00	3.7E-02	3.7E-02
1700 - 1800	15	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	4.9E+00	3.7E+00	1.2E+00	3.5E-02	3.5E-02	5	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	4.9E+00	3.7E+00	1.2E+00	3.5E-02	3.5E-02
1800 - 1900	13	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	4.2E+00	3.2E+00	1.0E+00	3.0E-02	3.0E-02	4	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	4.2E+00	3.2E+00	1.0E+00	3.0E-02	3.0E-02
1900 - 2000	10	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	3.3E+00	2.5E+00	7.7E-01	2.3E-02	2.3E-02	3	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	3.3E+00	2.5E+00	7.7E-01	2.3E-02	2.3E-02
2000 - 2100	5	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.6E+00	1.2E+00	3.9E-01	1.2E-02	1.2E-02	1	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.6E+00	1.2E+00	3.9E-01	1.2E-02	1.2E-02
2100 - 2200	4	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.3E+00	9.9E-01	3.1E-01	9.2E-03	9.2E-03	1	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.3E+00	9.9E-01	3.1E-01	9.2E-03	9.2E-03
2200 - 2300	2	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	6.5E-01	5.0E-01	1.5E-01	4.6E-03	4.6E-03	1	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	6.5E-01	5.0E-01	1.5E-01	4.6E-03	4.6E-03
2300 - 2400	6	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	2.0E+00	1.5E+00	4.6E-01	1.4E-02	1.4E-02	2	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	2.0E+00	1.5E+00	4.6E-01	1.4E-02	1.4E-02
Daily Total	223											69										

Total Hourly Emission

Hour	Total Emission inside bus terminus (g) (Running + Idling + Start) [8]					Total Emission Rate (g/s)				
	NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP
0000 - 0100	1.5E+00	1.2E+00	3.1E-01	1.9E-02	1.8E-02	4.3E-04	3.4E-04	8.7E-05	5.3E-06	5.1E-06
0100 - 0200	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	1.2E+00	9.4E-01	2.5E-01	1.9E-02	1.8E-02	3.3E-04	2.6E-04	7.1E-05	5.3E-06	5.1E-06
0500 - 0600	1.2E+00	9.9E-01	2.6E-01	1.9E-02	1.8E-02	3.5E-04	2.8E-04	7.1E-05	5.3E-06	5.1E-06
0600 - 0700	1.3E+01	1.0E+01	2.9E+00	1.7E-01	1.6E-01	3.7E-03	2.9E-03	7.9E-04	4.7E-05	4.5E-05
0700 - 0800	2.0E+01	1.5E+01	4.5E+00	3.0E-01	2.8E-01	5.5E-03	4.3E-03	1.3E-03	8.2E-05	7.8E-05
0800 - 0900	2.0E+01	1.5E+01	4.5E+00	2.9E-01	2.8E-01	5.5E-03	4.2E-03	1.3E-03	8.1E-05	7.7E-05
0900 - 1000	1.8E+01	1.4E+01	3.9E+00	2.4E-01	2.2E-01	5.0E-03	3.9E-03	1.1E-03	6.6E-05	6.2E-05
1000 - 1100	1.2E+01	9.8E+00	2.7E+00	1.6E-01	1.5E-01	3.5E-03	2.7E-03	7.4E-04	4.3E-05	4.1E-05
1100 - 1200	1.2E+01	9.1E+00	2.6E+00	1.7E-01	1.6E-01	3.2E-03	2.5E-03	7.1E-04	4.7E-05	4.5E-05
1200 - 1300	8.0E+00	6.2E+00	1.8E+00	1.2E-01	1.1E-01	2.2E-03	1.7E-03	5.0E-04	3.2E-05	3.1E-05
1300 - 1400	1.6E+01	1.3E+01	3.4E+00	2.1E-01	2.0E-01	4.5E-03	3.5E-03	9.4E-04	6.0E-05	5.7E-05
1400 - 1500	1.3E+01	1.0E+01	2.8E+00	1.6E-01	1.6E-01	3.6E-03	2.8E-03	7.7E-04	4.6E-05	4.3E-05
1500 - 1600	1.4E+01	1.1E+01	3.1E+00	2.1E-01	2.0E-01	3.8E-03	3.0E-03	8.5E-04	5.7E-05	5.4E-05
1600 - 1700	1.3E+01	1.0E+01	3.0E+00	2.0E-01	1.9E-01	3.7E-03	2.9E-03	8.4E-04	5.5E-05	5.2E-05
1700 - 1800	1.3E+01	9.8E+00	2.9E+00	1.9E-01	1.8E-01	3.5E-03	2.7E-03	7.9E-04	5.2E-05	5.0E-05
1800 - 1900	1.1E+01	8.1E+00	2.4E+00	1.5E-01	1.5E-01	2.9E-03	2.2E-03	6.7E-04	4.3E-05	4.1E-05
1900 - 2000	8.5E+00	6.6E+00	1.9E+00	1.3E-01	1.2E-01	2.4E-03	1.8E-03	5.3E-04	3.5E-05	3.3E-05
2000 - 2100	4.0E+00	3.1E+00	9.1E-01	5.6E-02	5.3E-02	1.1E-03	8.5E-04	2.5E-04	1.6E-05	1.5E-05
2100 - 2200	3.2E+00	2.5E+00	7.3E-01	4.6E-02	4.4E-02	8.9E-04	6.9E-04	2.0E-04	1.3E-05	1.2E-05
2200 - 2300	1.7E+00	1.3E+00	3.8E-01	2.6E-02	2.4E-02	4.6E-04	3.6E-04	1.1E-04	7.1E-06	6.8E-06
2300 - 2400	1.4E+01	1.1E+01	2.7E+00	1.4E-01	1.3E-01	3.8E-03	3.1E-03	7.5E-04	3.8E-05	3.6E-05
						max:	4.3E-03	1.3E-03	8.2E-05	7.8E-05

PTI opening hourly emission factor

NO	NO_2	RSP	FSP
0.08	0.07	0.06	0.06
0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00
0.06	0.06	0.06	0.06
0.06	0.06	0.06	0.06
0.68	0.63	0.58	0.58
1.00	1.00	1.00	1.00
1.00	1.00	0.98	0.98
0.91	0.86	0.80	0.80
0.64	0.59	0.52	0.53
0.59	0.56	0.58	0.58
0.41	0.40	0.39	0.39
0.82	0.75	0.73	0.73
0.66	0.61	0.56	0.56
0.70	0.68	0.70	0.70
0.67	0.67	0.67	0.67
0.64	0.63	0.64	0.64
0.53	0.53	0.52	0.52
0.43	0.42	0.43	0.43
0.20	0.20	0.19	0.19
0.16	0.16	0.16	0.16
0.08	0.08	0.09	0.09
0.72	0.60	0.46	0.46

Remarks:

[1] Idling Emission (g) = Idling Emission Factor (g/s) * Actual Idling time (min) * 60 * Frequency

[2] Total Idling Emission (g) = Cold Idling Emission of PLB (g) + Hot Idling Emission of PLB (g)

[3] If Actual Idling Time ≤ 1 min, Idling Emission for Start Emission Adjustment (g) = Idling rate (g/min) * Actual Idling Time (min)

If Actual Idling Time > 1 min, Idling Emission for Start Emission Adjustment (g) = Idling rate (g/min) * Maximum Duration for Adjusting Start Emission "K" (min)

Where Idling rate (g/min) = Total Idling Emission (g) / Idling Time (min), and "K" = 1 min for LPG PLB

[4] Adjusted Start Emission within bus terminus (g) = [Total Start Emission of PLB (Diesel) (g) - Idling Emission for Start Emission Adjustment (g)] * [Average Distance from Starting Place to Egress (m) / 700m]

Minimum value = 0 g

[5] Adjusted Start Emission outside bus terminus (g) = [Total Start Emission of PLB (Diesel) (g) - Idling Emission for Start Emission Adjustment (g)] * [Average Spread Distance outside bus terminus (m) / 700m]

Minimum value = 0 g

[6] Adjusted Start Emission within bus terminus (g) = [Total Start Emission of PLB (LPG) (g) - Idling Emission for Start Emission Adjustment (g)] * [Average Distance from Starting Place to Egress (m) / 150m]

Minimum value = 0 g

[7] Adjusted Start Emission outside bus terminus (g) = [Total Start Emission of PLB (LPG) (g) - Idling Emission for Start Emission Adjustment (g)] * [Average Spread Distance outside bus terminus (m) / 150m]

Minimum value = 0 g

[8] Total Emission Inside bus terminus (g) = Total Running Emission (g) + Idling Emission (g) + Adjusted Start Emission within bus terminus (g)

Exchange Square Bus Terminus (PLB)

Minimum Hourly Temperature and Relative Humidity for 4th Quarter

Temperature: 10 °C

Relative Humidity: 22 %

Start Emission

No. of PLB (Diesel) to No. of PLB (LPG) Ratio	3.2

	Public Light Buses (PLB) Start Emission Factor (g/trip)																	
NOx	4.6E-01	7.0E-01	1.1E+00	1.4E+00	1.7E+00	1.9E+00	2.1E+00	2.3E+00	2.5E+00	2.7E+00	2.8E+00	2.9E+00	3.0E+00	3.1E+00	3.1E+00	3.1E+00	3.1E+00	3.0E+00
NO	4.4E-01	6.7E-01	1.1E+00	1.4E+00	1.6E+00	1.8E+00	2.0E+00	2.1E+00	2.3E+00	2.4E+00	2.5E+00	2.6E+00	2.7E+00	2.7E+00	2.7E+00	2.7E+00	2.7E+00	2.6E+00
NO2	1.5E-02	2.6E-02	3.5E-02	4.9E-02	6.0E-02	7.9E-02	1.1E-01	1.4E-01	2.0E-01	2.6E-01	2.9E-01	3.4E-01	3.7E-01	3.9E-01	4.0E-01	4.1E-01	4.1E-01	4.1E-01
RSP	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
FSP	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00

Soaking Time (min) / Hour	No. of Trips of PLB (Diesel)																	
	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	1	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	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0500 - 0600	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0600 - 0700	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0700 - 0800	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0800 - 0900	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0900 - 1000	0	1	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0
1000 - 1100	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
1100 - 1200	0	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0
1200 - 1300	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
1300 - 1400	1	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
1400 - 1500	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
1500 - 1600	1	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
1600 - 1700	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1700 - 1800	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1800 - 1900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1900 - 2000	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2000 - 2100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2100 - 2200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2200 - 2300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2300 - 2400	1	0	0	0	0	0	0	0	0	0	0	0	1	2	1	0	0	0
																Daily Total	34	

Total Start Emission of PLB (Diesel) (g)				
NOx	**NO**	**NO2**	**RSP**	**FSP**
2.9E+00	2.6E+00	3.4E-01	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
4.6E-01	4.4E-01	1.5E-02	0.0E+00	0.0E+00
1.4E+00	1.4E+00	4.9E-02	0.0E+00	0.0E+00
2.5E+00	2.4E+00	8.4E-02	0.0E+00	0.0E+00
7.0E-01	6.7E-01	2.6E-02	0.0E+00	0.0E+00
1.1E+00	1.1E+00	3.5E-02	0.0E+00	0.0E+00
4.7E+00	4.4E+00	2.2E-01	0.0E+00	0.0E+00
3.0E+00	2.9E+00	1.1E-01	0.0E+00	0.0E+00
5.8E+00	5.5E+00	3.0E-01	0.0E+00	0.0E+00
2.1E+00	2.0E+00	1.1E-01	0.0E+00	0.0E+00
4.9E+00	4.7E+00	1.8E-01	0.0E+00	0.0E+00
3.3E+00	3.1E+00	1.5E-01	0.0E+00	0.0E+00
4.0E+00	3.9E+00	1.8E-01	0.0E+00	0.0E+00
4.6E-01	4.4E-01	1.5E-02	0.0E+00	0.0E+00
1.1E+00	1.1E+00	3.5E-02	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
4.6E-01	4.4E-01	1.5E-02	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1.3E+01	1.1E+01	1.6E+00	0.0E+00	0.0E+00

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.
[2] Population ratio of PLB (Diesel) to PLB (LPG) was extracted from Year 2028 data of EMFAC-HK.

Idling Emission - Terminating Public Light Buses

Idling Time for Terminating Public Light Buses	8	min
Max. Idling Time for Adjusting Start Emission =	1	min

Hour	PLB (Diesel)										PLB (Diesel)									
	Frequenc	Cold Idling Emission Factor (g/s)					Cold Idling Emission (g) [1]				Frequenc	Hot Idling Emission Factor (g/s)					Hot Idling Emission (g) [1]			
	y	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**	y	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**
0000 - 0100	1	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	4.8E-01	3.9E-01	8.8E-02	3.5E-03	3.5E-03	0	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0100 - 0200	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	2.8E-01	2.3E-01	5.1E-02	3.5E-03	3.5E-03
0500 - 0600	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	2.8E-01	2.3E-01	5.1E-02	3.5E-03	3.5E-03
0600 - 0700	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	2	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	5.6E-01	4.5E-01	1.0E-01	6.9E-03	6.9E-03
0700 - 0800	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	2.8E-01	2.3E-01	5.1E-02	3.5E-03	3.5E-03
0800 - 0900	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	2.8E-01	2.3E-01	5.1E-02	3.5E-03	3.5E-03
0900 - 1000	1	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	4.8E-01	3.9E-01	8.8E-02	3.5E-03	3.5E-03	2	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	5.6E-01	4.5E-01	1.0E-01	6.9E-03	6.9E-03
1000 - 1100	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	2	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	5.6E-01	4.5E-01	1.0E-01	6.9E-03	6.9E-03
1100 - 1200	2	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	9.6E-01	7.8E-01	1.8E-01	6.9E-03	6.9E-03	1	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	2.8E-01	2.3E-01	5.1E-02	3.5E-03	3.5E-03
1200 - 1300	1	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	4.8E-01	3.9E-01	8.8E-02	3.5E-03	3.5E-03	0	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1300 - 1400	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	4	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	1.1E+00	9.1E-01	2.0E-01	1.4E-02	1.4E-02
1400 - 1500	1	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	4.8E-01	3.9E-01	8.8E-02	3.5E-03	3.5E-03	2	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	5.6E-01	4.5E-01	1.0E-01	6.9E-03	6.9E-03
1500 - 1600	1	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	4.8E-01	3.9E-01	8.8E-02	3.5E-03	3.5E-03	2	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	5.6E-01	4.5E-01	1.0E-01	6.9E-03	6.9E-03
1600 - 1700	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	2.8E-01	2.3E-01	5.1E-02	3.5E-03	3.5E-03
1700 - 1800	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	2.8E-01	2.3E-01	5.1E-02	3.5E-03	3.5E-03
1800 - 1900	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1900 - 2000	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	2.8E-01	2.3E-01	5.1E-02	3.5E-03	3.5E-03
2000 - 2100	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2100 - 2200	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2200 - 2300	0	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2300 - 2400	4	1.0E-03	8.2E-04	1.8E-04	7.2E-06	7.2E-06	1.9E+00	1.6E+00	3.5E-01	1.4E-02	1.4E-02	1	5.8E-04	4.7E-04	1.1E-04	7.2E-06	7.2E-06	2.8E-01	2.3E-01	5.1E-02	3.5E-03	3.5E-03
Daily Total	11											23										

Average Distance from Starting Place to Egress =	45	m
Average Spread Distance outside bus terminus =	655	m

Hour	Total Idling Emission (g) [2]					Idling Emission for Start Emission Adjustment (g) [3]					Adjusted Start Emission within bus terminus (g) [4]					Adjusted Start Emission outside bus terminus (g) [5]					Start Emission Rate outside bus terminus (g/s)				
	NOx	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**
0000 - 0100	4.8E-01	3.9E-01	8.8E-02	3.5E-03	3.5E-03	6.0E-02	4.9E-02	1.1E-02	4.3E-04	4.3E-04	1.8E-01	1.6E-01	2.1E-02	0.0E+00	0.0E+00	2.7E+00	2.4E+00	3.0E-01	0.0E+00	0.0E+00	7.5E-04	6.6E-04	8.4E-05	0.0E+00	0.0E+00
0100 - 0200	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	2.8E-01	2.3E-01	5.1E-02	3.5E-03	3.5E-03	3.5E-02	2.8E-02	6.3E-03	4.3E-04	4.3E-04	2.7E-02	2.7E-02	5.3E-04	0.0E+00	0.0E+00	3.9E-01	3.9E-01	7.7E-03	0.0E+00	0.0E+00	1.1E-04	1.1E-04	2.1E-06	0.0E+00	0.0E+00
0500 - 0600	2.8E-01	2.3E-01	5.1E-02	3.5E-03	3.5E-03	3.5E-02	2.8E-02	6.3E-03	4.3E-04	4.3E-04	9.0E-02	8.7E-02	2.8E-03	0.0E+00	0.0E+00	1.3E+00	1.3E+00	4.0E-02	0.0E+00	0.0E+00	3.6E-04	3.5E-04	1.1E-05	0.0E+00	0.0E+00
0600 - 0700	5.6E-01	4.5E-01	1.0E-01	6.9E-03	6.9E-03	6.9E-02	5.7E-02	1.3E-02	8.7E-04	8.7E-04	1.6E-01	1.5E-01	4.6E-03	0.0E+00	0.0E+00	2.3E+00	2.2E+00	6.7E-02	0.0E+00	0.0E+00	6.4E-04	6.2E-04	1.9E-05	0.0E+00	0.0E+00
0700 - 0800	2.8E-01	2.3E-01	5.1E-02	3.5E-03	3.5E-03	3.5E-02	2.8E-02	6.3E-03	4.3E-04	4.3E-04	4.3E-02	4.2E-02	1.2E-03	0.0E+00	0.0E+00	6.2E-01	6.0E-01	1.8E-02	0.0E+00	0.0E+00	1.7E-04	1.7E-04	5.0E-06	0.0E+00	0.0E+00
0800 - 0900	2.8E-01	2.3E-01	5.1E-02	3.5E-03	3.5E-03	3.5E-02	2.8E-02	6.3E-03	4.3E-04	4.3E-04	6.8E-02	6.6E-02	1.8E-03	0.0E+00	0.0E+00	9.9E-01	9.6E-01	2.7E-02	0.0E+00	0.0E+00	2.8E-04	2.7E-04	7.5E-06	0.0E+00	0.0E+00
0900 - 1000	1.0E+00	8.5E-01	1.9E-01	1.0E-02	1.0E-02	1.3E-01	1.1E-01	2.4E-02	1.3E-03	1.3E-03	2.9E-01	2.8E-01	1.3E-02	0.0E+00	0.0E+00	4.3E+00	4.1E+00	1.9E-01	0.0E+00	0.0E+00	1.2E-03	1.1E-03	5.2E-05	0.0E+00	0.0E+00
1000 - 1100	5.6E-01	4.5E-01	1.0E-01	6.9E-03	6.9E-03	6.9E-02	5.7E-02	1.3E-02	8.7E-04	8.7E-04	1.9E-01	1.8E-01	6.5E-03	0.0E+00	0.0E+00	2.8E+00	2.7E+00	9.5E-02	0.0E+00	0.0E+00	7.7E-04	7.4E-04	2.6E-05	0.0E+00	0.0E+00
1100 - 1200	1.2E+00	1.0E+00	2.3E-01	1.0E-02	1.0E-02	1.5E-01	1.3E-01	2.8E-02	1.3E-03	1.3E-03	3.7E-01	3.5E-01	1.7E-02	0.0E+00	0.0E+00	5.3E+00	5.1E+00	2.5E-01	0.0E+00	0.0E+00	1.5E-03	1.4E-03	7.0E-05	0.0E+00	0.0E+00
1200 - 1300	4.8E-01	3.9E-01	8.8E-02	3.5E-03	3.5E-03	6.0E-02	4.9E-02	1.1E-02	4.3E-04	4.3E-04	1.3E-01	1.3E-01	6.5E-03	0.0E+00	0.0E+00	1.9E+00	1.9E+00	9.5E-02	0.0E+00	0.0E+00	5.4E-04	5.1E-04	2.6E-05	0.0E+00	0.0E+00
1300 - 1400	1.1E+00	9.1E-01	2.0E-01	1.4E-02	1.4E-02	1.4E-01	1.1E-01	2.5E-02	1.7E-03	1.7E-03	3.1E-01	3.0E-01	9.8E-03	0.0E+00	0.0E+00	4.5E+00	4.3E+00	1.4E-01	0.0E+00	0.0E+00	1.2E-03	1.2E-03	4.0E-05	0.0E+00	0.0E+00
1400 - 1500	1.0E+00	8.5E-01	1.9E-01	1.0E-02	1.0E-02	1.3E-01	1.1E-01	2.4E-02	1.3E-03	1.3E-03	2.0E-01	2.0E-01	8.3E-03	0.0E+00	0.0E+00	3.0E+00	2.8E+00	1.2E-01	0.0E+00	0.0E+00	8.2E-04	7.9E-04	3.3E-05	0.0E+00	0.0E+00
1500 - 1600	1.0E+00	8.5E-01	1.9E-01	1.0E-02	1.0E-02	1.3E-01	1.1E-01	2.4E-02	1.3E-03	1.3E-03	2.5E-01	2.4E-01	9.8E-03	0.0E+00	0.0E+00	3.7E+00	3.5E+00	1.4E-01	0.0E+00	0.0E+00	1.0E-03	9.7E-04	4.0E-05	0.0E+00	0.0E+00
1600 - 1700	2.8E-01	2.3E-01	5.1E-02	3.5E-03	3.5E-03	3.5E-02	2.8E-02	6.3E-03	4.3E-04	4.3E-04	2.7E-02	2.7E-02	5.3E-04	0.0E+00	0.0E+00	3.9E-01	3.9E-01	7.7E-03	0.0E+00	0.0E+00	1.1E-04	1.1E-04	2.1E-06	0.0E+00	0.0E+00
1700 - 1800	2.8E-01	2.3E-01	5.1E-02	3.5E-03	3.5E-03	3.5E-02	2.8E-02	6.3E-03	4.3E-04	4.3E-04	6.8E-02	6.6E-02	1.8E-03	0.0E+00	0.0E+00	9.9E-01	9.6E-01	2.7E-02	0.0E+00	0.0E+00	2.8E-04	2.7E-04	7.5E-06	0.0E+00	0.0E+00
1800 - 1900	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1900 - 2000	2.8E-01	2.3E-01	5.1E-02	3.5E-03	3.5E-03	3.5E-02	2.8E-02	6.3E-03	4.3E-04	4.3E-04	2.7E-02	2.7E-02	5.3E-04	0.0E+00	0.0E+00	3.9E-01	3.9E-01	7.7E-03	0.0E+00	0.0E+00	1.1E-04	1.1E-04	2.1E-06	0.0E+00	0.0E+00
2000 - 2100	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2100 - 2200	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2200 - 2300	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2300 - 2400	2.2E+00	1.8E+00	4.0E-01	1.7E-02	1.7E-02	2.7E-01	2.2E-01	5.0E-02	2.2E-03	2.2E-03	8.0E-01	7.0E-01	9.6E-02	0.0E+00	0.0E+00	1.2E+01	1.0E+01	1.4E+00	0.0E+00	0.0E+00	3.2E-03	2.8E-03	3.9E-04	0.0E+00	0.0E+00

Start Emission

No. of PLB (Diesel) to No. of PLB (LPG) Ratio	3.2

	Public Light Buses (PLB) Start Emission Factor (g/trip)																	
NOx	4.6E-01	7.0E-01	1.1E+00	1.4E+00	1.7E+00	1.9E+00	2.1E+00	2.3E+00	2.5E+00	2.7E+00	2.8E+00	2.9E+00	3.0E+00	3.1E+00	3.1E+00	3.1E+00	3.1E+00	3.0E+00
NO	4.4E-01	6.7E-01	1.1E+00	1.4E+00	1.6E+00	1.8E+00	2.0E+00	2.1E+00	2.3E+00	2.4E+00	2.5E+00	2.6E+00	2.7E+00	2.7E+00	2.7E+00	2.7E+00	2.7E+00	2.6E+00
NO2	1.5E-02	2.6E-02	3.5E-02	4.9E-02	6.0E-02	7.9E-02	1.1E-01	1.4E-01	2.0E-01	2.6E-01	2.9E-01	3.4E-01	3.7E-01	3.9E-01	4.0E-01	4.1E-01	4.1E-01	4.1E-01
RSP	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
FSP	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00

Soaking Time (min) / Hour	No. of Trips of PLB (LPG)																	
	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	0
0600 - 0700	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0700 - 0800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0800 - 0900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0900 - 1000	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1000 - 1100	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1100 - 1200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1200 - 1300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1300 - 1400	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1400 - 1500	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1500 - 1600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1600 - 1700	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1700 - 1800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1800 - 1900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1900 - 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2000 - 2100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2100 - 2200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2200 - 2300	0	0	0	0	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	1	1	0	0	0
																Daily Total	7	

Total Start Emission of PLB (LPG) (g)				
NOx	**NO**	**NO2**	**RSP**	**FSP**
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1.1E+00	1.1E+00	3.5E-02	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
7.0E-01	6.7E-01	2.6E-02	0.0E+00	0.0E+00
1.1E+00	1.1E+00	3.5E-02	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1.4E+00	1.4E+00	4.9E-02	0.0E+00	0.0E+00
4.6E-01	4.4E-01	1.5E-02	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
6.1E+00	5.4E+00	7.8E-01	0.0E+00	0.0E+00

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.
[2] Population ratio of PLB (Diesel) to PLB (LPG) was extracted from Year 2028 data of EMFAC-HK.

Idling Emission - Terminating Public Light Buses

Idling Time for Terminating Public Light Buses	8	min
Max. Idling Time for Adjusting Start Emission =	1	min

Hour	PLB (LPG)											PLB (LPG)										
	Frequenc	Cold Idling Emission Factor (g/s)					Cold Idling Emission (g) [1]					Frequenc	Hot Idling Emission Factor (g/s)					Hot Idling Emission (g) [1]				
	y	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**	y	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**
0000 - 0100	0	3.8E-03	3.1E-03	6.9E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	4.9E-03	4.0E-03	9.0E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0100 - 0200	0	3.8E-03	3.1E-03	6.9E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	4.9E-03	4.0E-03	9.0E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0	3.8E-03	3.1E-03	6.9E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	4.9E-03	4.0E-03	9.0E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0	3.8E-03	3.1E-03	6.9E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	4.9E-03	4.0E-03	9.0E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0	3.8E-03	3.1E-03	6.9E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	4.9E-03	4.0E-03	9.0E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0	3.8E-03	3.1E-03	6.9E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	4.9E-03	4.0E-03	9.0E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0600 - 0700	0	3.8E-03	3.1E-03	6.9E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	4.9E-03	4.0E-03	9.0E-04	8.4E-06	8.4E-06	2.4E+00	1.9E+00	4.3E-01	4.0E-03	4.0E-03
0700 - 0800	0	3.8E-03	3.1E-03	6.9E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	4.9E-03	4.0E-03	9.0E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0800 - 0900	0	3.8E-03	3.1E-03	6.9E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	4.9E-03	4.0E-03	9.0E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0900 - 1000	0	3.8E-03	3.1E-03	6.9E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	4.9E-03	4.0E-03	9.0E-04	8.4E-06	8.4E-06	2.4E+00	1.9E+00	4.3E-01	4.0E-03	4.0E-03
1000 - 1100	0	3.8E-03	3.1E-03	6.9E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	4.9E-03	4.0E-03	9.0E-04	8.4E-06	8.4E-06	2.4E+00	1.9E+00	4.3E-01	4.0E-03	4.0E-03
1100 - 1200	0	3.8E-03	3.1E-03	6.9E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	4.9E-03	4.0E-03	9.0E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1200 - 1300	0	3.8E-03	3.1E-03	6.9E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	4.9E-03	4.0E-03	9.0E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1300 - 1400	0	3.8E-03	3.1E-03	6.9E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	4.9E-03	4.0E-03	9.0E-04	8.4E-06	8.4E-06	2.4E+00	1.9E+00	4.3E-01	4.0E-03	4.0E-03
1400 - 1500	0	3.8E-03	3.1E-03	6.9E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	4.9E-03	4.0E-03	9.0E-04	8.4E-06	8.4E-06	2.4E+00	1.9E+00	4.3E-01	4.0E-03	4.0E-03
1500 - 1600	0	3.8E-03	3.1E-03	6.9E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	4.9E-03	4.0E-03	9.0E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1600 - 1700	0	3.8E-03	3.1E-03	6.9E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	4.9E-03	4.0E-03	9.0E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1700 - 1800	0	3.8E-03	3.1E-03	6.9E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	4.9E-03	4.0E-03	9.0E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1800 - 1900	0	3.8E-03	3.1E-03	6.9E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	4.9E-03	4.0E-03	9.0E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1900 - 2000	0	3.8E-03	3.1E-03	6.9E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	4.9E-03	4.0E-03	9.0E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2000 - 2100	0	3.8E-03	3.1E-03	6.9E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	4.9E-03	4.0E-03	9.0E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2100 - 2200	0	3.8E-03	3.1E-03	6.9E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	4.9E-03	4.0E-03	9.0E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2200 - 2300	0	3.8E-03	3.1E-03	6.9E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	4.9E-03	4.0E-03	9.0E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2300 - 2400	2	3.8E-03	3.1E-03	6.9E-04	8.4E-06	8.4E-06	3.6E+00	3.0E+00	6.6E-01	8.0E-03	8.0E-03	0	4.9E-03	4.0E-03	9.0E-04	8.4E-06	8.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
Daily Total	2											5										

Average Distance from Starting Place to Egress =	45	m
Average Spread Distance outside bus terminus =	105	m

Hour	Total Idling Emission (g) [2]					Idling Emission for Start Emission Adjustment (g) [3]					Adjusted Start Emission within bus terminus (g) [6]					Adjusted Start Emission outside bus terminus (g) [7]					Start Emission Rate outside bus terminus (g/s)				
	NOx	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**	**NOx**	**NO**	**NO_2**	**RSP**	**FSP**
0000 - 0100	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0100 - 0200	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0600 - 0700	2.4E+00	1.9E+00	4.3E-01	4.0E-03	4.0E-03	2.9E-01	2.4E-01	5.4E-02	5.0E-04	5.0E-04	2.4E-01	2.5E-01	0.0E+00	0.0E+00	0.0E+00	5.6E-01	5.7E-01	0.0E+00	0.0E+00	0.0E+00	1.6E-04	1.6E-04	0.0E+00	0.0E+00	0.0E+00
0700 - 0800	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0800 - 0900	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0900 - 1000	2.4E+00	1.9E+00	4.3E-01	4.0E-03	4.0E-03	2.9E-01	2.4E-01	5.4E-02	5.0E-04	5.0E-04	1.2E-01	1.3E-01	0.0E+00	0.0E+00	0.0E+00	2.8E-01	3.0E-01	0.0E+00	0.0E+00	0.0E+00	7.9E-05	8.4E-05	0.0E+00	0.0E+00	0.0E+00
1000 - 1100	2.4E+00	1.9E+00	4.3E-01	4.0E-03	4.0E-03	2.9E-01	2.4E-01	5.4E-02	5.0E-04	5.0E-04	2.4E-01	2.5E-01	0.0E+00	0.0E+00	0.0E+00	5.6E-01	5.7E-01	0.0E+00	0.0E+00	0.0E+00	1.6E-04	1.6E-04	0.0E+00	0.0E+00	0.0E+00
1100 - 1200	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1200 - 1300	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1300 - 1400	2.4E+00	1.9E+00	4.3E-01	4.0E-03	4.0E-03	2.9E-01	2.4E-01	5.4E-02	5.0E-04	5.0E-04	3.4E-01	3.4E-01	0.0E+00	0.0E+00	0.0E+00	8.0E-01	8.0E-01	0.0E+00	0.0E+00	0.0E+00	2.2E-04	2.2E-04	0.0E+00	0.0E+00	0.0E+00
1400 - 1500	2.4E+00	1.9E+00	4.3E-01	4.0E-03	4.0E-03	2.9E-01	2.4E-01	5.4E-02	5.0E-04	5.0E-04	4.8E-02	6.0E-02	0.0E+00	0.0E+00	0.0E+00	1.1E-01	1.4E-01	0.0E+00	0.0E+00	0.0E+00	3.1E-05	3.9E-05	0.0E+00	0.0E+00	0.0E+00
1500 - 1600	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1600 - 1700	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1700 - 1800	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1800 - 1900	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1900 - 2000	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2000 - 2100	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2100 - 2200	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2200 - 2300	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2300 - 2400	3.6E+00	3.0E+00	6.6E-01	8.0E-03	8.0E-03	4.5E-01	3.7E-01	8.3E-02	1.0E-03	1.0E-03	1.7E+00	1.5E+00	2.1E-01	0.0E+00	0.0E+00	4.0E+00	3.5E+00	4.9E-01	0.0E+00	0.0E+00	1.1E-03	9.7E-04	1.4E-04	0.0E+00	0.0E+00

Running Emission - Terminating and Bypass Public Light Buses

Average Travelling Distance within bus terminus =	110	m
Average Travelling Speed =	10	km/h

Hour	PLB (Diesel + LPG)										
	Frequency	Running Emission Factor (g/km·vehicle)					Running Emission (g)				
		NOx	NO	NO2	RSP	FSP	NOx	NO	NO2	RSP	FSP
0000 - 0100	2	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	2.8E-01	2.3E-01	5.1E-02	1.1E-02	1.0E-02
0100 - 0200	0	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	2	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	2.8E-01	2.3E-01	5.1E-02	1.1E-02	1.0E-02
0500 - 0600	2	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	2.8E-01	2.3E-01	5.1E-02	1.1E-02	1.0E-02
0600 - 0700	19	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	2.7E+00	2.2E+00	4.8E-01	1.0E-01	9.6E-02
0700 - 0800	33	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	4.6E+00	3.8E+00	8.4E-01	1.8E-01	1.7E-01
0800 - 0900	32	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	4.5E+00	3.7E+00	8.1E-01	1.8E-01	1.6E-01
0900 - 1000	26	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	3.6E+00	3.0E+00	6.6E-01	1.4E-01	1.3E-01
1000 - 1100	17	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	2.4E+00	1.9E+00	4.3E-01	9.4E-02	8.6E-02
1100 - 1200	19	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	2.7E+00	2.2E+00	4.8E-01	1.0E-01	9.6E-02
1200 - 1300	13	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	1.8E+00	1.5E+00	3.3E-01	7.2E-02	6.6E-02
1300 - 1400	24	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	3.3E+00	2.7E+00	6.1E-01	1.3E-01	1.2E-01
1400 - 1500	18	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	2.5E+00	2.1E+00	4.6E-01	9.9E-02	9.1E-02
1500 - 1600	23	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	3.2E+00	2.6E+00	5.9E-01	1.3E-01	1.2E-01
1600 - 1700	22	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	3.1E+00	2.5E+00	5.6E-01	1.2E-01	1.1E-01
1700 - 1800	21	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	2.9E+00	2.4E+00	5.3E-01	1.2E-01	1.1E-01
1800 - 1900	17	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	2.4E+00	1.9E+00	4.3E-01	9.4E-02	8.6E-02
1900 - 2000	14	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	2.0E+00	1.6E+00	3.6E-01	7.7E-02	7.1E-02
2000 - 2100	6	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	8.4E-01	6.8E-01	1.5E-01	3.3E-02	3.0E-02
2100 - 2200	5	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	7.0E-01	5.7E-01	1.3E-01	2.8E-02	2.5E-02
2200 - 2300	3	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	4.2E-01	3.4E-01	7.6E-02	1.7E-02	1.5E-02
2300 - 2400	15	1.3E+00	1.0E+00	2.3E-01	5.0E-02	4.6E-02	2.1E+00	1.7E+00	3.8E-01	8.3E-02	7.6E-02
Daily Total	333										

Idling Emission - Bypass Public Light Buses

No. of PLB (Diesel) to No. of PLB (LPG) Ratio	3.2	
Idling Time for Bypass Public Light Buses	5	min

Hour	PLB (Diesel)											PLB (LPG)										
	Frequency	Hot Idling Emission Factor (g/s)					Hot Idling Emission (g)					Frequency	Hot Idling Emission Factor (g/s)					Hot Idling Emission (g)				
		NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP		NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP
0000 - 0100	1	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	3.3E-01	2.5E-01	7.7E-02	2.3E-03	2.3E-03	0	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	3.3E-01	2.5E-01	7.7E-02	2.3E-03	2.3E-03
0100 - 0200	0	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	1	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	3.3E-01	2.5E-01	7.7E-02	2.3E-03	2.3E-03	0	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	3.3E-01	2.5E-01	7.7E-02	2.3E-03	2.3E-03
0500 - 0600	1	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	3.3E-01	2.5E-01	7.7E-02	2.3E-03	2.3E-03	0	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	3.3E-01	2.5E-01	7.7E-02	2.3E-03	2.3E-03
0600 - 0700	12	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	3.9E+00	3.0E+00	9.3E-01	2.8E-02	2.8E-02	4	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	3.9E+00	3.0E+00	9.3E-01	2.8E-02	2.8E-02
0700 - 0800	24	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	7.8E+00	5.9E+00	1.9E+00	5.5E-02	5.5E-02	8	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	7.8E+00	5.9E+00	1.9E+00	5.5E-02	5.5E-02
0800 - 0900	24	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	7.8E+00	5.9E+00	1.9E+00	5.5E-02	5.5E-02	7	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	7.8E+00	5.9E+00	1.9E+00	5.5E-02	5.5E-02
0900 - 1000	17	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	5.5E+00	4.2E+00	1.3E+00	3.9E-02	3.9E-02	5	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	5.5E+00	4.2E+00	1.3E+00	3.9E-02	3.9E-02
1000 - 1100	11	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	3.6E+00	2.7E+00	8.5E-01	2.5E-02	2.5E-02	3	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	3.6E+00	2.7E+00	8.5E-01	2.5E-02	2.5E-02
1100 - 1200	12	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	3.9E+00	3.0E+00	9.3E-01	2.8E-02	2.8E-02	4	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	3.9E+00	3.0E+00	9.3E-01	2.8E-02	2.8E-02
1200 - 1300	9	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	2.9E+00	2.2E+00	7.0E-01	2.1E-02	2.1E-02	3	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	2.9E+00	2.2E+00	7.0E-01	2.1E-02	2.1E-02
1300 - 1400	14	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	4.6E+00	3.5E+00	1.1E+00	3.2E-02	3.2E-02	5	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	4.6E+00	3.5E+00	1.1E+00	3.2E-02	3.2E-02
1400 - 1500	11	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	3.6E+00	2.7E+00	8.5E-01	2.5E-02	2.5E-02	3	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	3.6E+00	2.7E+00	8.5E-01	2.5E-02	2.5E-02
1500 - 1600	15	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	4.9E+00	3.7E+00	1.2E+00	3.5E-02	3.5E-02	5	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	4.9E+00	3.7E+00	1.2E+00	3.5E-02	3.5E-02
1600 - 1700	16	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	5.2E+00	4.0E+00	1.2E+00	3.7E-02	3.7E-02	5	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	5.2E+00	4.0E+00	1.2E+00	3.7E-02	3.7E-02
1700 - 1800	15	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	4.9E+00	3.7E+00	1.2E+00	3.5E-02	3.5E-02	5	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	4.9E+00	3.7E+00	1.2E+00	3.5E-02	3.5E-02
1800 - 1900	13	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	4.2E+00	3.2E+00	1.0E+00	3.0E-02	3.0E-02	4	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	4.2E+00	3.2E+00	1.0E+00	3.0E-02	3.0E-02
1900 - 2000	10	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	3.3E+00	2.5E+00	7.7E-01	2.3E-02	2.3E-02	3	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	3.3E+00	2.5E+00	7.7E-01	2.3E-02	2.3E-02
2000 - 2100	5	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.6E+00	1.2E+00	3.9E-01	1.2E-02	1.2E-02	1	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.6E+00	1.2E+00	3.9E-01	1.2E-02	1.2E-02
2100 - 2200	4	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.3E+00	9.9E-01	3.1E-01	9.2E-03	9.2E-03	1	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	1.3E+00	9.9E-01	3.1E-01	9.2E-03	9.2E-03
2200 - 2300	2	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	6.5E-01	5.0E-01	1.5E-01	4.6E-03	4.6E-03	1	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	6.5E-01	5.0E-01	1.5E-01	4.6E-03	4.6E-03
2300 - 2400	6	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	2.0E+00	1.5E+00	4.6E-01	1.4E-02	1.4E-02	2	1.1E-03	8.3E-04	2.6E-04	7.7E-06	7.7E-06	2.0E+00	1.5E+00	4.6E-01	1.4E-02	1.4E-02
Daily Total	223											69										

Total Hourly Emission

Hour	Total Emission inside bus terminus (g) (Running + Idling + Start) [8]					Total Emission Rate (g/s)				
	NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP
0000 - 0100	1.6E+00	1.3E+00	3.1E-01	1.9E-02	1.8E-02	4.4E-04	3.6E-04	8.7E-05	5.3E-06	5.1E-06
0100 - 0200	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	1.2E+00	9.8E-01	2.6E-01	1.9E-02	1.8E-02	3.4E-04	2.7E-04	7.1E-05	5.3E-06	5.1E-06
0500 - 0600	1.3E+00	1.0E+00	2.6E-01	1.9E-02	1.8E-02	3.6E-04	2.9E-04	7.2E-05	5.3E-06	5.1E-06
0600 - 0700	1.4E+01	1.1E+01	2.9E+00	1.7E-01	1.6E-01	3.8E-03	3.0E-03	8.0E-04	4.7E-05	4.5E-05
0700 - 0800	2.1E+01	1.6E+01	4.6E+00	3.0E-01	2.8E-01	5.7E-03	4.4E-03	1.3E-03	8.2E-05	7.8E-05
0800 - 0900	2.0E+01	1.6E+01	4.6E+00	2.9E-01	2.8E-01	5.7E-03	4.4E-03	1.3E-03	8.1E-05	7.7E-05
0900 - 1000	1.8E+01	1.5E+01	3.9E+00	2.4E-01	2.2E-01	5.1E-03	4.1E-03	1.1E-03	6.6E-05	6.2E-05
1000 - 1100	1.3E+01	1.0E+01	2.7E+00	1.6E-01	1.5E-01	3.6E-03	2.8E-03	7.4E-04	4.3E-05	4.1E-05
1100 - 1200	1.2E+01	9.5E+00	2.6E+00	1.7E-01	1.6E-01	3.3E-03	2.6E-03	7.2E-04	4.7E-05	4.5E-05
1200 - 1300	8.3E+00	6.5E+00	1.8E+00	1.2E-01	1.1E-01	2.3E-03	1.8E-03	5.0E-04	3.2E-05	3.1E-05
1300 - 1400	1.7E+01	1.3E+01	3.4E+00	2.1E-01	2.0E-01	4.6E-03	3.7E-03	9.5E-04	6.0E-05	5.7E-05
1400 - 1500	1.3E+01	1.1E+01	2.8E+00	1.6E-01	1.6E-01	3.7E-03	2.9E-03	7.7E-04	4.6E-05	4.3E-05
1500 - 1600	1.4E+01	1.1E+01	3.1E+00	2.1E-01	2.0E-01	4.0E-03	3.1E-03	8.6E-04	5.7E-05	5.4E-05
1600 - 1700	1.4E+01	1.1E+01	3.1E+00	2.0E-01	1.9E-01	3.8E-03	3.0E-03	8.6E-04	5.5E-05	5.2E-05
1700 - 1800	1.3E+01	1.0E+01	2.9E+00	1.9E-01	1.8E-01	3.6E-03	2.8E-03	8.1E-04	5.2E-05	5.0E-05
1800 - 1900	1.1E+01	8.4E+00	2.4E+00	1.5E-01	1.5E-01	3.0E-03	2.3E-03	6.8E-04	4.3E-05	4.1E-05
1900 - 2000	8.8E+00	6.8E+00	2.0E+00	1.3E-01	1.2E-01	2.4E-03	1.9E-03	5.4E-04	3.5E-05	3.3E-05
2000 - 2100	4.1E+00	3.2E+00	9.3E-01	5.6E-02	5.3E-02	1.1E-03	8.8E-04	2.6E-04	1.6E-05	1.5E-05
2100 - 2200	3.3E+00	2.6E+00	7.5E-01	4.6E-02	4.4E-02	9.2E-04	7.1E-04	2.1E-04	1.3E-05	1.2E-05
2200 - 2300	1.7E+00	1.3E+00	3.9E-01	2.6E-02	2.4E-02	4.8E-04	3.7E-04	1.1E-04	7.1E-06	6.8E-06
2300 - 2400	1.4E+01	1.2E+01	2.7E+00	1.4E-01	1.3E-01	4.0E-03	3.2E-03	7.4E-04	3.8E-05	3.6E-05
						max:	4.4E-03	1.3E-03	8.2E-05	7.8E-05

PTI opening hourly emission factor

NO	NO_2	RSP	FSP
0.08	0.07	0.06	0.06
0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00
0.06	0.06	0.06	0.06
0.07	0.06	0.06	0.06
0.68	0.62	0.58	0.58
1.00	1.00	1.00	1.00
0.99	0.99	0.98	0.98
0.92	0.85	0.80	0.80
0.64	0.58	0.52	0.53
0.59	0.56	0.58	0.58
0.41	0.39	0.39	0.39
0.83	0.74	0.73	0.73
0.66	0.61	0.56	0.56
0.70	0.67	0.70	0.70
0.67	0.67	0.67	0.67
0.64	0.63	0.64	0.64
0.53	0.53	0.52	0.52
0.43	0.42	0.43	0.43
0.20	0.20	0.19	0.19
0.16	0.16	0.16	0.16
0.08	0.08	0.09	0.09
0.73	0.58	0.46	0.46

Remarks:

[1] Idling Emission (g) = Idling Emission Factor (g/s) * Actual Idling time (min) * 60 * Frequency

[2] Total Idling Emission (g) = Cold Idling Emission of PLB (g) + Hot Idling Emission of PLB (g)

[3] If Actual Idling Time ≤ 1 min, Idling Emission for Start Emission Adjustment (g) = Idling rate (g/min) * Actual Idling Time (min)

If Actual Idling Time > 1 min, Idling Emission for Start Emission Adjustment (g) = Idling rate (g/min) * Maximum Duration for Adjusting Start Emission "K" (min)

Where Idling rate (g/min) = Total Idling Emission (g) / Idling Time (min), and "K" = 1 min for LPG PLB

[4] Adjusted Start Emission within bus terminus (g) = [Total Start Emission of PLB (Diesel) (g) - Idling Emission for Start Emission Adjustment (g)] * [Average Distance from Starting Place to Egress (m) / 700m]

Minimum value = 0 g

[5] Adjusted Start Emission outside bus terminus (g) = [Total Start Emission of PLB (Diesel) (g) - Idling Emission for Start Emission Adjustment (g)] * [Average Spread Distance outside bus terminus (m) / 700m]

Minimum value = 0 g

[6] Adjusted Start Emission within bus terminus (g) = [Total Start Emission of PLB (LPG) (g) - Idling Emission for Start Emission Adjustment (g)] * [Average Distance from Starting Place to Egress (m) / 150m]

Minimum value = 0 g

[7] Adjusted Start Emission outside bus terminus (g) = [Total Start Emission of PLB (LPG) (g) - Idling Emission for Start Emission Adjustment (g)] * [Average Spread Distance outside bus terminus (m) / 150m]

Minimum value = 0 g

[8] Total Emission Inside bus terminus (g) = Total Running Emission (g) + Idling Emission (g) + Adjusted Start Emission within bus terminus (g)

Man Kat Street Bus Terminus

Minimum Hourly Temperature and Relative Humidity for 1st Quarter

Temperature: 8 ^{o}C

Relative Humidity: 32 %

Start Emission

	Single-Deck Franchised Bus (FBSD) Start Emission Factor (g/trip)																	
NOx	2.0E-01	3.6E-01	4.8E-01	6.8E-01	8.4E-01	1.1E+00	1.6E+00	2.0E+00	3.0E+00	3.9E+00	4.4E+00	5.2E+00	5.7E+00	6.0E+00	6.2E+00	6.3E+00	6.4E+00	6.4E+00
NO	1.7E-01	3.0E-01	4.1E-01	5.8E-01	7.1E-01	9.5E-01	1.4E+00	1.7E+00	2.5E+00	3.3E+00	3.7E+00	4.4E+00	4.8E+00	5.1E+00	5.2E+00	5.4E+00	5.4E+00	5.4E+00
NO2	3.2E-02	5.7E-02	7.6E-02	1.1E-01	1.3E-01	1.8E-01	2.6E-01	3.2E-01	4.7E-01	6.2E-01	6.9E-01	8.2E-01	9.0E-01	9.5E-01	9.7E-01	1.0E+00	1.0E+00	1.0E+00
RSP	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
FSP	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00

	Double-Deck Franchised Bus (FBDD) Start Emission Factor (g/trip)																	
NOx	7.2E-01	1.3E+00	1.7E+00	2.4E+00	3.0E+00	4.0E+00	5.9E+00	7.3E+00	1.1E+01	1.4E+01	1.6E+01	1.9E+01	2.1E+01	2.2E+01	2.2E+01	2.3E+01	2.3E+01	2.3E+01
NO	6.7E-01	1.2E+00	1.6E+00	2.3E+00	2.8E+00	3.7E+00	5.5E+00	6.8E+00	1.0E+01	1.3E+01	1.5E+01	1.7E+01	1.9E+01	2.0E+01	2.1E+01	2.1E+01	2.1E+01	2.1E+01
NO2	5.0E-02	9.1E-02	1.2E-01	1.7E-01	2.1E-01	2.8E-01	4.1E-01	5.1E-01	7.5E-01	9.8E-01	1.1E+00	1.3E+00	1.4E+00	1.5E+00	1.5E+00	1.6E+00	1.6E+00	1.6E+00
RSP	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
FSP	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00

	No. of Trips of FBSD																	
Soaking Time (min) / Hour	**5**	**10**	**20**	**30**	**40**	**50**	**60**	**120**	**180**	**240**	**300**	**360**	**420**	**480**	**540**	**600**	**660**	**720**
0000 - 0100																		
0100 - 0200																		
0200 - 0300																		
0300 - 0400																		
0400 - 0500																		
0500 - 0600																		
0600 - 0700																		
0700 - 0800																		
0800 - 0900																		
0900 - 1000																		
1000 - 1100																		
1100 - 1200																		
1200 - 1300																		
1300 - 1400																		
1400 - 1500																		
1500 - 1600																		
1600 - 1700																		
1700 - 1800																		
1800 - 1900																		
1900 - 2000																		
2000 - 2100																		
2100 - 2200																		
2200 - 2300																		
2300 - 2400																		
																Daily Total	0	

	No. of Trips of FBDD																	
Soaking Time (min) / Hour	**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	3	1	0	0	0	0	0
0100 - 0200	0	0	0	0	0	0	0	0	0	0	0	1	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	0
0600 - 0700	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0700 - 0800	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0800 - 0900	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0900 - 1000	1	1	1	1	0	0	1	1	0	0	0	0	0	0	1	0	0	0
1000 - 1100	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
1100 - 1200	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
1200 - 1300	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
1300 - 1400	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
1400 - 1500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1500 - 1600	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0
1600 - 1700	0	0	0	0	0	0	1	5	0	0	0	0	0	0	0	0	0	0
1700 - 1800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1800 - 1900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1900 - 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2000 - 2100	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0
2100 - 2200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2200 - 2300	0	0	0	0	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	1	0	1	1	1	0	0
																Daily Total	39	

Total Start Emission of FBSD & FBDD (g)					
Hour	**NOx**	**NO**	**NO2**	**RSP**	**FSP**
0000 - 0100	7.7E+01	7.1E+01	5.4E+00	0.0E+00	0.0E+00
0100 - 0200	1.9E+01	1.7E+01	1.3E+00	0.0E+00	0.0E+00
0200 - 0300	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0600 - 0700	1.3E+00	1.2E+00	9.1E-02	0.0E+00	0.0E+00
0700 - 0800	2.0E+00	1.9E+00	1.4E-01	0.0E+00	0.0E+00
0800 - 0900	1.4E+00	1.3E+00	1.0E-01	0.0E+00	0.0E+00
0900 - 1000	4.2E+01	3.9E+01	2.9E+00	0.0E+00	0.0E+00
1000 - 1100	1.5E+01	1.4E+01	1.0E+00	0.0E+00	0.0E+00
1100 - 1200	3.0E+00	2.8E+00	2.1E-01	0.0E+00	0.0E+00
1200 - 1300	1.5E+01	1.4E+01	1.0E+00	0.0E+00	0.0E+00
1300 - 1400	7.3E+00	6.8E+00	5.1E-01	0.0E+00	0.0E+00
1400 - 1500	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1500 - 1600	2.9E+01	2.7E+01	2.1E+00	0.0E+00	0.0E+00
1600 - 1700	4.3E+01	4.0E+01	3.0E+00	0.0E+00	0.0E+00
1700 - 1800	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1800 - 1900	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1900 - 2000	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2000 - 2100	1.1E+01	1.1E+01	7.9E-01	0.0E+00	0.0E+00
2100 - 2200	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2200 - 2300	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2300 - 2400	8.5E+01	7.9E+01	5.9E+00	0.0E+00	0.0E+00

Idling Emission - Terminating Buses

Idling Time for Terminating Buses	1	min
Max. Idling Time for Adjusting Start Emission =	1	min

Hour	FBSD Frequency	Cold Idling Emission Factor (g/s) NOx	NO	NO_2	RSP	FSP	Cold Idling Emission (g) [1] NOx	NO	NO_2	RSP	FSP
0000 - 0100	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0100 - 0200	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0600 - 0700	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0700 - 0800	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0800 - 0900	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0900 - 1000	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1000 - 1100	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1100 - 1200	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1200 - 1300	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1300 - 1400	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1400 - 1500	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1500 - 1600	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1600 - 1700	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1700 - 1800	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1800 - 1900	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1900 - 2000	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2000 - 2100	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2100 - 2200	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2200 - 2300	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2300 - 2400	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
Daily Total	0										

Hour	FBDD Frequency	Cold Idling Emission Factor (g/s) NOx	NO	NO_2	RSP	FSP	Cold Idling Emission (g) [1] NOx	NO	NO_2	RSP	FSP
0000 - 0100	4	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	2.6E+01	2.4E+01	1.6E+00	7.1E-03	7.1E-03
0100 - 0200	1	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	6.4E+00	6.0E+00	4.0E-01	1.8E-03	1.8E-03
0200 - 0300	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0600 - 0700	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0700 - 0800	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0800 - 0900	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0900 - 1000	3	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	1.9E+01	1.8E+01	1.2E+00	5.3E-03	5.3E-03
1000 - 1100	2	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	1.3E+01	1.2E+01	8.1E-01	3.5E-03	3.5E-03
1100 - 1200	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1200 - 1300	2	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	1.3E+01	1.2E+01	8.1E-01	3.5E-03	3.5E-03
1300 - 1400	1	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	6.4E+00	6.0E+00	4.0E-01	1.8E-03	1.8E-03
1400 - 1500	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1500 - 1600	4	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	2.6E+01	2.4E+01	1.6E+00	7.1E-03	7.1E-03
1600 - 1700	6	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	3.8E+01	3.6E+01	2.4E+00	1.1E-02	1.1E-02
1700 - 1800	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1800 - 1900	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1900 - 2000	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2000 - 2100	1	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	6.4E+00	6.0E+00	4.0E-01	1.8E-03	1.8E-03
2100 - 2200	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2200 - 2300	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2300 - 2400	4	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	2.6E+01	2.4E+01	1.6E+00	7.1E-03	7.1E-03
Daily Total	28										

Hour	FBSD Frequency	Hot Idling Emission Factor (g/s) NOx	NO	NO_2	RSP	FSP	Hot Idling Emission (g) [1] NOx	NO	NO_2	RSP	FSP
0000 - 0100	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0100 - 0200	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0600 - 0700	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0700 - 0800	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0800 - 0900	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0900 - 1000	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1000 - 1100	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1100 - 1200	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1200 - 1300	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1300 - 1400	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1400 - 1500	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1500 - 1600	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1600 - 1700	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1700 - 1800	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1800 - 1900	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1900 - 2000	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2000 - 2100	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2100 - 2200	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2200 - 2300	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2300 - 2400	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
	0										

Hour	FBDD Frequency	Hot Idling Emission Factor (g/s) NOx	NO	NO_2	RSP	FSP	Hot Idling Emission (g) [1] NOx	NO	NO_2	RSP	FSP
0000 - 0100	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0100 - 0200	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0600 - 0700	1	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.1E-01	2.0E-01	1.3E-02	1.8E-03	1.8E-03
0700 - 0800	2	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	4.2E-01	4.0E-01	2.7E-02	3.5E-03	3.5E-03
0800 - 0900	2	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	4.2E-01	4.0E-01	2.7E-02	3.5E-03	3.5E-03
0900 - 1000	4	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	8.5E-01	8.0E-01	5.3E-02	7.1E-03	7.1E-03
1000 - 1100	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1100 - 1200	1	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.1E-01	2.0E-01	1.3E-02	1.8E-03	1.8E-03
1200 - 1300	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1300 - 1400	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1400 - 1500	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1500 - 1600	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1600 - 1700	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1700 - 1800	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1800 - 1900	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1900 - 2000	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2000 - 2100	1	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.1E-01	2.0E-01	1.3E-02	1.8E-03	1.8E-03
2100 - 2200	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2200 - 2300	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2300 - 2400	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
	11										

Average Distance from Starting Place to Egress =	65	m
Average Distance from PTI Egress to Open Road Network	0	m
Average Spread Distance outside bus terminus =	635	m

Hour	Total Idling Emission (g) [2] NOx	NO	NO_2	RSP	FSP	Idling Emission for Start Emission Adjustment (g) [3] NOx	NO	NO_2	RSP	FSP
0000 - 0100	2.6E+01	2.4E+01	1.6E+00	7.1E-03	7.1E-03	2.6E+01	2.4E+01	1.6E+00	7.1E-03	7.1E-03
0100 - 0200	6.4E+00	6.0E+00	4.0E-01	1.8E-03	1.8E-03	6.4E+00	6.0E+00	4.0E-01	1.8E-03	1.8E-03
0200 - 0300	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0600 - 0700	2.1E-01	2.0E-01	1.3E-02	1.8E-03	1.8E-03	2.1E-01	2.0E-01	1.3E-02	1.8E-03	1.8E-03
0700 - 0800	4.2E-01	4.0E-01	2.7E-02	3.5E-03	3.5E-03	4.2E-01	4.0E-01	2.7E-02	3.5E-03	3.5E-03
0800 - 0900	4.2E-01	4.0E-01	2.7E-02	3.5E-03	3.5E-03	4.2E-01	4.0E-01	2.7E-02	3.5E-03	3.5E-03
0900 - 1000	2.0E+01	1.9E+01	1.3E+00	1.2E-02	1.2E-02	2.0E+01	1.9E+01	1.3E+00	1.2E-02	1.2E-02
1000 - 1100	1.3E+01	1.2E+01	8.1E-01	3.5E-03	3.5E-03	1.3E+01	1.2E+01	8.1E-01	3.5E-03	3.5E-03
1100 - 1200	2.1E-01	2.0E-01	1.3E-02	1.8E-03	1.8E-03	2.1E-01	2.0E-01	1.3E-02	1.8E-03	1.8E-03
1200 - 1300	1.3E+01	1.2E+01	8.1E-01	3.5E-03	3.5E-03	1.3E+01	1.2E+01	8.1E-01	3.5E-03	3.5E-03
1300 - 1400	6.4E+00	6.0E+00	4.0E-01	1.8E-03	1.8E-03	6.4E+00	6.0E+00	4.0E-01	1.8E-03	1.8E-03
1400 - 1500	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1500 - 1600	2.6E+01	2.4E+01	1.6E+00	7.1E-03	7.1E-03	2.6E+01	2.4E+01	1.6E+00	7.1E-03	7.1E-03
1600 - 1700	3.8E+01	3.6E+01	2.4E+00	1.1E-02	1.1E-02	3.8E+01	3.6E+01	2.4E+00	1.1E-02	1.1E-02
1700 - 1800	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1800 - 1900	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1900 - 2000	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2000 - 2100	6.6E+00	6.2E+00	4.2E-01	3.5E-03	3.5E-03	6.6E+00	6.2E+00	4.2E-01	3.5E-03	3.5E-03
2100 - 2200	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2200 - 2300	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2300 - 2400	2.6E+01	2.4E+01	1.6E+00	7.1E-03	7.1E-03	2.6E+01	2.4E+01	1.6E+00	7.1E-03	7.1E-03

Hour	Adjusted Start Emission within bus terminus (g) [4] NOx	NO	NO_2	RSP	FSP	Adjusted Start Emission outside bus terminus (g) [5] NOx	NO	NO_2	RSP	FSP	Start Emission Rate outside bus terminus (g/s) NOx	NO	NO_2	RSP	FSP
0000 - 0100	4.7E+00	4.4E+00	3.5E-01	0.0E+00	0.0E+00	4.6E+01	4.3E+01	3.4E+00	0.0E+00	0.0E+00	1.3E-02	1.2E-02	9.4E-04	0.0E+00	0.0E+00
0100 - 0200	1.1E+00	1.1E+00	8.4E-02	0.0E+00	0.0E+00	1.1E+01	1.0E+01	8.2E-01	0.0E+00	0.0E+00	3.1E-03	2.9E-03	2.3E-04	0.0E+00	0.0E+00
0200 - 0300	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0600 - 0700	1.0E-01	9.3E-02	7.2E-03	0.0E+00	0.0E+00	9.8E-01	9.1E-01	7.0E-02	0.0E+00	0.0E+00	2.7E-04	2.5E-04	1.9E-05	0.0E+00	0.0E+00
0700 - 0800	1.5E-01	1.4E-01	1.1E-02	0.0E+00	0.0E+00	1.4E+00	1.3E+00	1.0E-01	0.0E+00	0.0E+00	4.0E-04	3.7E-04	2.9E-05	0.0E+00	0.0E+00
0800 - 0900	9.4E-02	8.7E-02	6.9E-03	0.0E+00	0.0E+00	9.2E-01	8.5E-01	6.7E-02	0.0E+00	0.0E+00	2.6E-04	2.4E-04	1.9E-05	0.0E+00	0.0E+00
0900 - 1000	2.0E+00	1.8E+00	1.5E-01	0.0E+00	0.0E+00	1.9E+01	1.8E+01	1.5E+00	0.0E+00	0.0E+00	5.4E-03	5.0E-03	4.1E-04	0.0E+00	0.0E+00
1000 - 1100	1.7E-01	1.5E-01	2.0E-02	0.0E+00	0.0E+00	1.7E+00	1.5E+00	2.0E-01	0.0E+00	0.0E+00	4.6E-04	4.1E-04	5.5E-05	0.0E+00	0.0E+00
1100 - 1200	2.6E-01	2.4E-01	1.8E-02	0.0E+00	0.0E+00	2.5E+00	2.4E+00	1.8E-01	0.0E+00	0.0E+00	7.1E-04	6.6E-04	5.0E-05	0.0E+00	0.0E+00
1200 - 1300	1.7E-01	1.5E-01	2.0E-02	0.0E+00	0.0E+00	1.7E+00	1.5E+00	2.0E-01	0.0E+00	0.0E+00	4.6E-04	4.1E-04	5.5E-05	0.0E+00	0.0E+00
1300 - 1400	8.5E-02	7.5E-02	1.0E-02	0.0E+00	0.0E+00	8.4E-01	7.4E-01	9.9E-02	0.0E+00	0.0E+00	2.3E-04	2.0E-04	2.7E-05	0.0E+00	0.0E+00
1400 - 1500	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1500 - 1600	3.4E-01	3.0E-01	4.0E-02	0.0E+00	0.0E+00	3.3E+00	2.9E+00	3.9E-01	0.0E+00	0.0E+00	9.3E-04	8.2E-04	1.1E-04	0.0E+00	0.0E+00
1600 - 1700	3.8E-01	3.3E-01	5.1E-02	0.0E+00	0.0E+00	3.7E+00	3.2E+00	5.0E-01	0.0E+00	0.0E+00	1.0E-03	8.9E-04	1.4E-04	0.0E+00	0.0E+00
1700 - 1800	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1800 - 1900	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1900 - 2000	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2000 - 2100	4.4E-01	4.0E-01	3.5E-02	0.0E+00	0.0E+00	4.3E+00	4.0E+00	3.4E-01	0.0E+00	0.0E+00	1.2E-03	1.1E-03	9.5E-05	0.0E+00	0.0E+00
2100 - 2200	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2200 - 2300	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2300 - 2400	5.5E+00	5.1E+00	4.0E-01	0.0E+00	0.0E+00	5.4E+01	5.0E+01	3.9E+00	0.0E+00	0.0E+00	1.5E-02	1.4E-02	1.1E-03	0.0E+00	0.0E+00

Running Emission - Terminating and Bypass Buses

Average Travelling Distance within bus terminus =	100	m
Average Travelling Speed =	10	km/h

Hour	FBSD										FBDD									
	Frequency	Running Emission Factor (g/km-vehicle)					Running Emission (g)					Frequency	Running Emission Factor (g/km-vehicle)					Running Emission (g)				
	y	NOx	NO	NO2	RSP	FSP	NOx	NO	NO2	RSP	FSP	y	NOx	NO	NO2	RSP	FSP	NOx	NO	NO2	RSP	FSP
0000 - 0100	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	8	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	8.9E+00	8.3E+00	5.6E-01	3.0E-01	2.8E-01
0100 - 0200	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	2	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	2.2E+00	2.1E+00	1.4E-01	7.6E-02	7.0E-02
0200 - 0300	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	1.1E+00	1.0E+00	7.0E-02	3.8E-02	3.5E-02
0600 - 0700	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	8	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	8.9E+00	8.3E+00	5.6E-01	3.0E-01	2.8E-01
0700 - 0800	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	12	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	1.3E+01	1.3E+01	8.4E-01	4.6E-01	4.2E-01
0800 - 0900	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	12	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	1.3E+01	1.3E+01	8.4E-01	4.6E-01	4.2E-01
0900 - 1000	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	20	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	2.2E+01	2.1E+01	1.4E+00	7.6E-01	7.0E-01
1000 - 1100	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	9	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	1.0E+01	9.4E+00	6.3E-01	3.4E-01	3.2E-01
1100 - 1200	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	6	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	6.7E+00	6.3E+00	4.2E-01	2.3E-01	2.1E-01
1200 - 1300	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	8	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	8.9E+00	8.3E+00	5.6E-01	3.0E-01	2.8E-01
1300 - 1400	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	6	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	6.7E+00	6.3E+00	4.2E-01	2.3E-01	2.1E-01
1400 - 1500	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	4	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	4.5E+00	4.2E+00	2.8E-01	1.5E-01	1.4E-01
1500 - 1600	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	11	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	1.2E+01	1.1E+01	7.7E-01	4.2E-01	3.9E-01
1600 - 1700	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	14	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	1.6E+01	1.5E+01	9.8E-01	5.3E-01	4.9E-01
1700 - 1800	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	3	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	3.3E+00	3.1E+00	2.1E-01	1.1E-01	1.1E-01
1800 - 1900	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	4	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	4.5E+00	4.2E+00	2.8E-01	1.5E-01	1.4E-01
1900 - 2000	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	1.1E+00	1.0E+00	7.0E-02	3.8E-02	3.5E-02
2000 - 2100	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	5	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	5.6E+00	5.2E+00	3.5E-01	1.9E-01	1.8E-01
2100 - 2200	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	2	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	2.2E+00	2.1E+00	1.4E-01	7.6E-02	7.0E-02
2200 - 2300	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	3	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	3.3E+00	3.1E+00	2.1E-01	1.1E-01	1.1E-01
2300 - 2400	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	8	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	8.9E+00	8.3E+00	5.6E-01	3.0E-01	2.8E-01
Daily Total	0											147										

Idling Emission - Bypass Buses

Idling Time for Bypass Buses	1	min

Hour	FBSD										FBDD									
	Frequency	Hot Idling Emission Factor (g/s)					Hot Idling Emission (g)					Frequency	Hot Idling Emission Factor (g/s)					Hot Idling Emission (g)				
	y	NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP	y	NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP
0000 - 0100	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	4	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	8.5E-01	8.0E-01	5.3E-02	7.1E-03	7.1E-03
0100 - 0200	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.1E-01	2.0E-01	1.3E-02	1.8E-03	1.8E-03
0200 - 0300	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.1E-01	2.0E-01	1.3E-02	1.8E-03	1.8E-03
0600 - 0700	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	7	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.5E+00	1.4E+00	9.4E-02	1.2E-02	1.2E-02
0700 - 0800	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	10	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.1E+00	2.0E+00	1.3E-01	1.8E-02	1.8E-02
0800 - 0900	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	10	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.1E+00	2.0E+00	1.3E-01	1.8E-02	1.8E-02
0900 - 1000	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	13	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.8E+00	2.6E+00	1.7E-01	2.3E-02	2.3E-02
1000 - 1100	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	7	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.5E+00	1.4E+00	9.4E-02	1.2E-02	1.2E-02
1100 - 1200	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	5	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.1E+00	9.9E-01	6.7E-02	8.8E-03	8.8E-03
1200 - 1300	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	6	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.3E+00	1.2E+00	8.0E-02	1.1E-02	1.1E-02
1300 - 1400	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	5	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.1E+00	9.9E-01	6.7E-02	8.8E-03	8.8E-03
1400 - 1500	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	4	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	8.5E-01	8.0E-01	5.3E-02	7.1E-03	7.1E-03
1500 - 1600	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	7	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.5E+00	1.4E+00	9.4E-02	1.2E-02	1.2E-02
1600 - 1700	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	8	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.7E+00	1.6E+00	1.1E-01	1.4E-02	1.4E-02
1700 - 1800	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	3	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	6.4E-01	6.0E-01	4.0E-02	5.3E-03	5.3E-03
1800 - 1900	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	4	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	8.5E-01	8.0E-01	5.3E-02	7.1E-03	7.1E-03
1900 - 2000	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.1E-01	2.0E-01	1.3E-02	1.8E-03	1.8E-03
2000 - 2100	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	3	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	6.4E-01	6.0E-01	4.0E-02	5.3E-03	5.3E-03
2100 - 2200	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	2	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	4.2E-01	4.0E-01	2.7E-02	3.5E-03	3.5E-03
2200 - 2300	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	3	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	6.4E-01	6.0E-01	4.0E-02	5.3E-03	5.3E-03
2300 - 2400	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	4	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	8.5E-01	8.0E-01	5.3E-02	7.1E-03	7.1E-03
Daily Total	0											108										

Total Hourly Emission

Hour	Total Emission inside bus terminus (g) (Running + Idling + Start) [6]					Total Emission Rate (g/s)				
	NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP
0000 - 0100	4.0E+01	3.8E+01	2.6E+00	3.2E-01	2.9E-01	1.1E-02	1.0E-02	7.2E-04	8.9E-05	8.2E-05
0100 - 0200	1.0E+01	9.3E+00	6.4E-01	8.0E-02	7.4E-02	2.8E-03	2.6E-03	1.8E-04	2.2E-05	2.0E-05
0200 - 0300	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	1.3E+00	1.2E+00	8.3E-02	4.0E-02	3.7E-02	3.7E-04	3.4E-04	2.3E-05	1.1E-05	1.0E-05
0600 - 0700	1.1E+01	1.0E+01	6.7E-01	3.2E-01	2.9E-01	3.0E-03	2.8E-03	1.9E-04	8.9E-05	8.2E-05
0700 - 0800	1.6E+01	1.5E+01	1.0E+00	4.8E-01	4.4E-01	4.5E-03	4.2E-03	2.8E-04	1.3E-04	1.2E-04
0800 - 0900	1.6E+01	1.5E+01	1.0E+00	4.8E-01	4.4E-01	4.4E-03	4.2E-03	2.8E-04	1.3E-04	1.2E-04
0900 - 1000	4.7E+01	4.4E+01	3.0E+00	8.0E-01	7.4E-01	1.3E-02	1.2E-02	8.3E-04	2.2E-04	2.0E-04
1000 - 1100	2.4E+01	2.3E+01	1.6E+00	3.6E-01	3.3E-01	6.8E-03	6.4E-03	4.3E-04	1.0E-04	9.2E-05
1100 - 1200	8.2E+00	7.7E+00	5.2E-01	2.4E-01	2.2E-01	2.3E-03	2.1E-03	1.4E-04	6.6E-05	6.1E-05
1200 - 1300	2.3E+01	2.2E+01	1.5E+00	3.2E-01	2.9E-01	6.4E-03	6.0E-03	4.1E-04	8.9E-05	8.2E-05
1300 - 1400	1.4E+01	1.3E+01	9.0E-01	2.4E-01	2.2E-01	4.0E-03	3.7E-03	2.5E-04	6.6E-05	6.1E-05
1400 - 1500	5.3E+00	5.0E+00	3.3E-01	1.6E-01	1.5E-01	1.5E-03	1.4E-03	9.3E-05	4.4E-05	4.1E-05
1500 - 1600	4.0E+01	3.7E+01	2.5E+00	4.4E-01	4.0E-01	1.1E-02	1.0E-02	7.0E-04	1.2E-04	1.1E-04
1600 - 1700	5.6E+01	5.3E+01	3.6E+00	5.6E-01	5.2E-01	1.6E-02	1.5E-02	9.9E-04	1.5E-04	1.4E-04
1700 - 1800	4.0E+00	3.7E+00	2.5E-01	1.2E-01	1.1E-01	1.1E-03	1.0E-03	7.0E-05	3.3E-05	3.1E-05
1800 - 1900	5.3E+00	5.0E+00	3.3E-01	1.6E-01	1.5E-01	1.5E-03	1.4E-03	9.3E-05	4.4E-05	4.1E-05
1900 - 2000	1.3E+00	1.2E+00	8.3E-02	4.0E-02	3.7E-02	3.7E-04	3.4E-04	2.3E-05	1.1E-05	1.0E-05
2000 - 2100	1.3E+01	1.2E+01	8.4E-01	2.0E-01	1.8E-01	3.7E-03	3.5E-03	2.3E-04	5.5E-05	5.1E-05
2100 - 2200	2.6E+00	2.5E+00	1.7E-01	8.0E-02	7.4E-02	7.4E-04	6.9E-04	4.6E-05	2.2E-05	2.0E-05
2200 - 2300	4.0E+00	3.7E+00	2.5E-01	1.2E-01	1.1E-01	1.1E-03	1.0E-03	7.0E-05	3.3E-05	3.1E-05
2300 - 2400	4.1E+01	3.8E+01	2.6E+00	3.2E-01	2.9E-01	1.1E-02	1.1E-02	7.3E-04	8.9E-05	8.2E-05
						max:	1.5E-02	9.9E-04	2.2E-04	2.0E-04

PTI opening hourly emission factor

NO	NO_2	RSP	FSP
0.71	0.72	0.40	0.40
0.18	0.18	0.10	0.10
0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00
0.02	0.02	0.05	0.05
0.19	0.19	0.40	0.40
0.29	0.28	0.60	0.60
0.29	0.28	0.60	0.60
0.84	0.84	1.00	1.00
0.44	0.44	0.45	0.45
0.15	0.15	0.30	0.30
0.41	0.41	0.40	0.40
0.25	0.25	0.30	0.30
0.09	0.09	0.20	0.20
0.71	0.71	0.55	0.55
1.00	1.00	0.70	0.70
0.07	0.07	0.15	0.15
0.09	0.09	0.20	0.20
0.02	0.02	0.05	0.05
0.24	0.24	0.25	0.25
0.05	0.05	0.10	0.10
0.07	0.07	0.15	0.15
0.73	0.74	0.40	0.40

Remarks:

[1] Idling Emission (g) = Idling Emission Factor (g/s) * Actual Idling time (min) * 60 * Frequency

[2] Total Idling Emission (g) = Cold Idling Emission of FBSD & FBDD (g) + Hot Idling Emission of FBSD & FBDD (g)

[3] If Actual Idling Time ≤ 1 min, Idling Emission for Start Emission Adjustment (g) = Idling rate (g/min) * Actual Idling Time (min)

If Actual Idling Time > 1 min, Idling Emission for Start Emission Adjustment (g) = Idling rate (g/min) * Maximum Duration for Adjusting Start Emission "K" (min)

Where Idling rate (g/min) = Total Idling Emission (g) / Idling Time (min), and "K" = 1 min for Diesel vehicles with SCR

[4] Adjusted Start Emission within bus terminus (g) = [Total Start Emission of FBSD & FBDD (g) - Idling Emission for Start Emission Adjustment (g)] * [Average Distance from Starting Place to Egress (m) / 700m]

Minimum value = 0 g

[5] Adjusted Start Emission outside bus terminus (g) = [Total Start Emission of FBSD & FBDD (g) - Idling Emission for Start Emission Adjustment (g)] * [Average Spread Distance outside bus terminus (m) / 700m]

Minimum value = 0 g

[6] Total Emission Inside bus terminus (g) = Total Running Emission (g) + Idling Emission (g) + Adjusted Start Emission within bus terminus (g)

Man Kat Street Bus Terminus

Minimum Hourly Temperature and Relative Humidity for 2nd Quarter

Temperature: 14 °C

Relative Humidity: 21 %

Start Emission

	Single-Deck Franchised Bus (FBSD) Start Emission Factor (g/trip)																	
NOx	2.0E-01	3.6E-01	4.8E-01	6.8E-01	8.4E-01	1.1E+00	1.6E+00	2.0E+00	3.0E+00	3.9E+00	4.4E+00	5.2E+00	5.7E+00	6.0E+00	6.2E+00	6.3E+00	6.4E+00	6.4E+00
NO	1.7E-01	3.0E-01	4.1E-01	5.8E-01	7.1E-01	9.5E-01	1.4E+00	1.7E+00	2.5E+00	3.3E+00	3.7E+00	4.4E+00	4.8E+00	5.1E+00	5.2E+00	5.4E+00	5.4E+00	5.4E+00
NO2	3.2E-02	5.7E-02	7.6E-02	1.1E-01	1.3E-01	1.8E-01	2.6E-01	3.2E-01	4.7E-01	6.2E-01	6.9E-01	8.2E-01	9.0E-01	9.5E-01	9.7E-01	1.0E+00	1.0E+00	1.0E+00
RSP	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
FSP	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00

	Double-Deck Franchised Bus (FBDD) Start Emission Factor (g/trip)																	
NOx	7.2E-01	1.3E+00	1.7E+00	2.4E+00	3.0E+00	4.0E+00	5.9E+00	7.3E+00	1.1E+01	1.4E+01	1.6E+01	1.9E+01	2.1E+01	2.2E+01	2.2E+01	2.3E+01	2.3E+01	2.3E+01
NO	6.7E-01	1.2E+00	1.6E+00	2.3E+00	2.8E+00	3.7E+00	5.5E+00	6.8E+00	1.0E+01	1.3E+01	1.5E+01	1.7E+01	1.9E+01	2.0E+01	2.1E+01	2.1E+01	2.1E+01	2.1E+01
NO2	5.0E-02	9.1E-02	1.2E-01	1.7E-01	2.1E-01	2.8E-01	4.1E-01	5.1E-01	7.5E-01	9.8E-01	1.1E+00	1.3E+00	1.4E+00	1.5E+00	1.5E+00	1.6E+00	1.6E+00	1.6E+00
RSP	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
FSP	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00

	No. of Trips of FBSD																	
Soaking Time (min) / Hour	**5**	**10**	**20**	**30**	**40**	**50**	**60**	**120**	**180**	**240**	**300**	**360**	**420**	**480**	**540**	**600**	**660**	**720**
0000 - 0100																		
0100 - 0200																		
0200 - 0300																		
0300 - 0400																		
0400 - 0500																		
0500 - 0600																		
0600 - 0700																		
0700 - 0800																		
0800 - 0900																		
0900 - 1000																		
1000 - 1100																		
1100 - 1200																		
1200 - 1300																		
1300 - 1400																		
1400 - 1500																		
1500 - 1600																		
1600 - 1700																		
1700 - 1800																		
1800 - 1900																		
1900 - 2000																		
2000 - 2100																		
2100 - 2200																		
2200 - 2300																		
2300 - 2400																		
																	Daily Total	0

	No. of Trips of FBDD																	
Soaking Time (min) / Hour	**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	3	1	0	0	0	0	0
0100 - 0200	0	0	0	0	0	0	0	0	0	0	0	1	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	0
0600 - 0700	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0700 - 0800	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0800 - 0900	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0900 - 1000	1	1	1	1	0	0	1	1	0	0	0	0	0	0	1	0	0	0
1000 - 1100	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
1100 - 1200	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
1200 - 1300	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
1300 - 1400	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
1400 - 1500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1500 - 1600	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0
1600 - 1700	0	0	0	0	0	0	1	5	0	0	0	0	0	0	0	0	0	0
1700 - 1800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1800 - 1900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1900 - 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2000 - 2100	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0
2100 - 2200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2200 - 2300	0	0	0	0	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	1	0	1	1	1	0	0
																Daily Total	39	

Total Start Emission of FBSD & FBDD (g)					
Hour	**NOx**	**NO**	**NO2**	**RSP**	**FSP**
0000 - 0100	7.7E+01	7.1E+01	5.4E+00	0.0E+00	0.0E+00
0100 - 0200	1.9E+01	1.7E+01	1.3E+00	0.0E+00	0.0E+00
0200 - 0300	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0600 - 0700	1.3E+00	1.2E+00	9.1E-02	0.0E+00	0.0E+00
0700 - 0800	2.0E+00	1.9E+00	1.4E-01	0.0E+00	0.0E+00
0800 - 0900	1.4E+00	1.3E+00	1.0E-01	0.0E+00	0.0E+00
0900 - 1000	4.2E+01	3.9E+01	2.9E+00	0.0E+00	0.0E+00
1000 - 1100	1.5E+01	1.4E+01	1.0E+00	0.0E+00	0.0E+00
1100 - 1200	3.0E+00	2.8E+00	2.1E-01	0.0E+00	0.0E+00
1200 - 1300	1.5E+01	1.4E+01	1.0E+00	0.0E+00	0.0E+00
1300 - 1400	7.3E+00	6.8E+00	5.1E-01	0.0E+00	0.0E+00
1400 - 1500	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1500 - 1600	2.9E+01	2.7E+01	2.1E+00	0.0E+00	0.0E+00
1600 - 1700	4.3E+01	4.0E+01	3.0E+00	0.0E+00	0.0E+00
1700 - 1800	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1800 - 1900	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1900 - 2000	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2000 - 2100	1.1E+01	1.1E+01	7.9E-01	0.0E+00	0.0E+00
2100 - 2200	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2200 - 2300	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2300 - 2400	8.5E+01	7.9E+01	5.9E+00	0.0E+00	0.0E+00

Idling Emission - Terminating Buses

Idling Time for Terminating Buses	1	min
Max. Idling Time for Adjusting Start Emission =	1	min

Hour	FBSD											FBDD										
	Frequency	Cold Idling Emission Factor (g/s)					Cold Idling Emission (g) [1]					Frequency	Cold Idling Emission Factor (g/s)					Cold Idling Emission (g) [1]				
		NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP		NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP
0000 - 0100	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	4	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	2.6E+01	2.4E+01	1.6E+00	7.1E-03	7.1E-03
0100 - 0200	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	6.4E+00	6.0E+00	4.0E-01	1.8E-03	1.8E-03
0200 - 0300	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0600 - 0700	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0700 - 0800	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0800 - 0900	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0900 - 1000	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	3	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	1.9E+01	1.8E+01	1.2E+00	5.3E-03	5.3E-03
1000 - 1100	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	2	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	1.3E+01	1.2E+01	8.1E-01	3.5E-03	3.5E-03
1100 - 1200	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1200 - 1300	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	2	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	1.3E+01	1.2E+01	8.1E-01	3.5E-03	3.5E-03
1300 - 1400	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	6.4E+00	6.0E+00	4.0E-01	1.8E-03	1.8E-03
1400 - 1500	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1500 - 1600	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	4	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	2.6E+01	2.4E+01	1.6E+00	7.1E-03	7.1E-03
1600 - 1700	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	6	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	3.8E+01	3.6E+01	2.4E+00	1.1E-02	1.1E-02
1700 - 1800	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1800 - 1900	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1900 - 2000	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2000 - 2100	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	6.4E+00	6.0E+00	4.0E-01	1.8E-03	1.8E-03
2100 - 2200	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2200 - 2300	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2300 - 2400	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	4	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	2.6E+01	2.4E+01	1.6E+00	7.1E-03	7.1E-03
Daily Total	0											28										

Hour	FBSD											FBDD										
	Frequency	Hot Idling Emission Factor (g/s)					Hot Idling Emission (g) [1]					Frequency	Hot Idling Emission Factor (g/s)					Hot Idling Emission (g) [1]				
		NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP		NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP
0000 - 0100	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0100 - 0200	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0600 - 0700	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.1E-01	2.0E-01	1.3E-02	1.8E-03	1.8E-03
0700 - 0800	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	2	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	4.2E-01	4.0E-01	2.7E-02	3.5E-03	3.5E-03
0800 - 0900	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	2	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	4.2E-01	4.0E-01	2.7E-02	3.5E-03	3.5E-03
0900 - 1000	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	4	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	8.5E-01	8.0E-01	5.3E-02	7.1E-03	7.1E-03
1000 - 1100	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1100 - 1200	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.1E-01	2.0E-01	1.3E-02	1.8E-03	1.8E-03
1200 - 1300	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1300 - 1400	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1400 - 1500	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1500 - 1600	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1600 - 1700	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1700 - 1800	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1800 - 1900	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1900 - 2000	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2000 - 2100	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.1E-01	2.0E-01	1.3E-02	1.8E-03	1.8E-03
2100 - 2200	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2200 - 2300	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2300 - 2400	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
	0											11										

Average Distance from Starting Place to Egress =	65	m
Average Distance from PTI Egress to Open Road Network	0	m
Average Spread Distance outside bus terminus =	635	m

Hour	Total Idling Emission (g) [2]					Idling Emission for Start Emission Adjustment (g) [3]					Adjusted Start Emission within bus terminus (g) [4]					Adjusted Start Emission outside bus terminus (g) [5]					Start Emission Rate outside bus terminus (g/s)				
	NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP
0000 - 0100	2.6E+01	2.4E+01	1.6E+00	7.1E-03	7.1E-03	2.6E+01	2.4E+01	1.6E+00	7.1E-03	7.1E-03	4.7E+00	4.4E+00	3.5E-01	0.0E+00	0.0E+00	4.6E+01	4.3E+01	3.4E+00	0.0E+00	0.0E+00	1.3E-02	1.2E-02	9.4E-04	0.0E+00	0.0E+00
0100 - 0200	6.4E+00	6.0E+00	4.0E-01	1.8E-03	1.8E-03	6.4E+00	6.0E+00	4.0E-01	1.8E-03	1.8E-03	1.1E+00	1.1E+00	8.4E-02	0.0E+00	0.0E+00	1.1E+01	1.0E+01	8.2E-01	0.0E+00	0.0E+00	3.1E-03	2.9E-03	2.3E-04	0.0E+00	0.0E+00
0200 - 0300	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0600 - 0700	2.1E-01	2.0E-01	1.3E-02	1.8E-03	1.8E-03	2.1E-01	2.0E-01	1.3E-02	1.8E-03	1.8E-03	1.0E-01	9.3E-02	7.2E-03	0.0E+00	0.0E+00	9.8E-01	9.1E-01	7.0E-02	0.0E+00	0.0E+00	2.7E-04	2.5E-04	1.9E-05	0.0E+00	0.0E+00
0700 - 0800	4.2E-01	4.0E-01	2.7E-02	3.5E-03	3.5E-03	4.2E-01	4.0E-01	2.7E-02	3.5E-03	3.5E-03	1.5E-01	1.4E-01	1.1E-02	0.0E+00	0.0E+00	1.4E+00	1.3E+00	1.0E-01	0.0E+00	0.0E+00	4.0E-04	3.7E-04	2.9E-05	0.0E+00	0.0E+00
0800 - 0900	4.2E-01	4.0E-01	2.7E-02	3.5E-03	3.5E-03	4.2E-01	4.0E-01	2.7E-02	3.5E-03	3.5E-03	9.4E-02	8.7E-02	6.9E-03	0.0E+00	0.0E+00	9.2E-01	8.5E-01	6.7E-02	0.0E+00	0.0E+00	2.6E-04	2.4E-04	1.9E-05	0.0E+00	0.0E+00
0900 - 1000	2.0E+01	1.9E+01	1.3E+00	1.2E-02	1.2E-02	2.0E+01	1.9E+01	1.3E+00	1.2E-02	1.2E-02	2.0E+00	1.8E+00	1.5E-01	0.0E+00	0.0E+00	1.9E+01	1.8E+01	1.5E+00	0.0E+00	0.0E+00	5.4E-03	5.0E-03	4.1E-04	0.0E+00	0.0E+00
1000 - 1100	1.3E+01	1.2E+01	8.1E-01	3.5E-03	3.5E-03	1.3E+01	1.2E+01	8.1E-01	3.5E-03	3.5E-03	1.7E-01	1.5E-01	2.0E-02	0.0E+00	0.0E+00	1.7E+00	1.5E+00	2.0E-01	0.0E+00	0.0E+00	4.6E-04	4.1E-04	5.5E-05	0.0E+00	0.0E+00
1100 - 1200	2.1E-01	2.0E-01	1.3E-02	1.8E-03	1.8E-03	2.1E-01	2.0E-01	1.3E-02	1.8E-03	1.8E-03	2.6E-01	2.4E-01	1.8E-02	0.0E+00	0.0E+00	2.5E+00	2.4E+00	1.8E-01	0.0E+00	0.0E+00	7.1E-04	6.6E-04	5.0E-05	0.0E+00	0.0E+00
1200 - 1300	1.3E+01	1.2E+01	8.1E-01	3.5E-03	3.5E-03	1.3E+01	1.2E+01	8.1E-01	3.5E-03	3.5E-03	1.7E-01	1.5E-01	2.0E-02	0.0E+00	0.0E+00	1.7E+00	1.5E+00	2.0E-01	0.0E+00	0.0E+00	4.6E-04	4.1E-04	5.5E-05	0.0E+00	0.0E+00
1300 - 1400	6.4E+00	6.0E+00	4.0E-01	1.8E-03	1.8E-03	6.4E+00	6.0E+00	4.0E-01	1.8E-03	1.8E-03	8.5E-02	7.5E-02	1.0E-02	0.0E+00	0.0E+00	8.4E-01	7.4E-01	9.9E-02	0.0E+00	0.0E+00	2.3E-04	2.0E-04	2.7E-05	0.0E+00	0.0E+00
1400 - 1500	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1500 - 1600	2.6E+01	2.4E+01	1.6E+00	7.1E-03	7.1E-03	2.6E+01	2.4E+01	1.6E+00	7.1E-03	7.1E-03	3.4E-01	3.0E-01	4.0E-02	0.0E+00	0.0E+00	3.3E+00	2.9E+00	3.9E-01	0.0E+00	0.0E+00	9.3E-04	8.2E-04	1.1E-04	0.0E+00	0.0E+00
1600 - 1700	3.8E+01	3.6E+01	2.4E+00	1.1E-02	1.1E-02	3.8E+01	3.6E+01	2.4E+00	1.1E-02	1.1E-02	3.8E-01	3.3E-01	5.1E-02	0.0E+00	0.0E+00	3.7E+00	3.2E+00	5.0E-01	0.0E+00	0.0E+00	1.0E-03	8.9E-04	1.4E-04	0.0E+00	0.0E+00
1700 - 1800	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1800 - 1900	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1900 - 2000	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2000 - 2100	6.6E+00	6.2E+00	4.2E-01	3.5E-03	3.5E-03	6.6E+00	6.2E+00	4.2E-01	3.5E-03	3.5E-03	4.4E-01	4.0E-01	3.5E-02	0.0E+00	0.0E+00	4.3E+00	4.0E+00	3.4E-01	0.0E+00	0.0E+00	1.2E-03	1.1E-03	9.5E-05	0.0E+00	0.0E+00
2100 - 2200	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2200 - 2300	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2300 - 2400	2.6E+01	2.4E+01	1.6E+00	7.1E-03	7.1E-03	2.6E+01	2.4E+01	1.6E+00	7.1E-03	7.1E-03	5.5E+00	5.1E+00	4.0E-01	0.0E+00	0.0E+00	5.4E+01	5.0E+01	3.9E+00	0.0E+00	0.0E+00	1.5E-02	1.4E-02	1.1E-03	0.0E+00	0.0E+00

Running Emission - Terminating and Bypass Buses

Average Travelling Distance within bus terminus =	100	m
Average Travelling Speed =	10	km/h

Hour	FBSD										FBDD									
	Frequency	Running Emission Factor (g/km-vehicle)					Running Emission (g)					Frequency	Running Emission Factor (g/km-vehicle)					Running Emission (g)				
	y	NOx	NO	NO2	RSP	FSP	NOx	NO	NO2	RSP	FSP	y	NOx	NO	NO2	RSP	FSP	NOx	NO	NO2	RSP	FSP
0000 - 0100	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	8	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	8.9E+00	8.3E+00	5.6E-01	3.0E-01	2.8E-01
0100 - 0200	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	2	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	2.2E+00	2.1E+00	1.4E-01	7.6E-02	7.0E-02
0200 - 0300	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	1.1E+00	1.0E+00	7.0E-02	3.8E-02	3.5E-02
0600 - 0700	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	8	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	8.9E+00	8.3E+00	5.6E-01	3.0E-01	2.8E-01
0700 - 0800	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	12	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	1.3E+01	1.3E+01	8.4E-01	4.6E-01	4.2E-01
0800 - 0900	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	12	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	1.3E+01	1.3E+01	8.4E-01	4.6E-01	4.2E-01
0900 - 1000	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	20	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	2.2E+01	2.1E+01	1.4E+00	7.6E-01	7.0E-01
1000 - 1100	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	9	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	1.0E+01	9.4E+00	6.3E-01	3.4E-01	3.2E-01
1100 - 1200	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	6	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	6.7E+00	6.3E+00	4.2E-01	2.3E-01	2.1E-01
1200 - 1300	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	8	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	8.9E+00	8.3E+00	5.6E-01	3.0E-01	2.8E-01
1300 - 1400	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	6	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	6.7E+00	6.3E+00	4.2E-01	2.3E-01	2.1E-01
1400 - 1500	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	4	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	4.5E+00	4.2E+00	2.8E-01	1.5E-01	1.4E-01
1500 - 1600	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	11	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	1.2E+01	1.1E+01	7.7E-01	4.2E-01	3.9E-01
1600 - 1700	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	14	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	1.6E+01	1.5E+01	9.8E-01	5.3E-01	4.9E-01
1700 - 1800	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	3	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	3.3E+00	3.1E+00	2.1E-01	1.1E-01	1.1E-01
1800 - 1900	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	4	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	4.5E+00	4.2E+00	2.8E-01	1.5E-01	1.4E-01
1900 - 2000	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	1.1E+00	1.0E+00	7.0E-02	3.8E-02	3.5E-02
2000 - 2100	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	5	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	5.6E+00	5.2E+00	3.5E-01	1.9E-01	1.8E-01
2100 - 2200	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	2	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	2.2E+00	2.1E+00	1.4E-01	7.6E-02	7.0E-02
2200 - 2300	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	3	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	3.3E+00	3.1E+00	2.1E-01	1.1E-01	1.1E-01
2300 - 2400	0	3.4E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	8	1.1E+01	1.0E+01	7.0E-01	3.8E-01	3.5E-01	8.9E+00	8.3E+00	5.6E-01	3.0E-01	2.8E-01
Daily Total	0											147										

Idling Emission - Bypass Buses

Idling Time for Bypass Buses	1	min

Hour	FBSD										FBDD									
	Frequency	Hot Idling Emission Factor (g/s)					Hot Idling Emission (g)					Frequency	Hot Idling Emission Factor (g/s)					Hot Idling Emission (g)				
	y	NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP	y	NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP
0000 - 0100	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	4	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	8.5E-01	8.0E-01	5.3E-02	7.1E-03	7.1E-03
0100 - 0200	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.1E-01	2.0E-01	1.3E-02	1.8E-03	1.8E-03
0200 - 0300	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.1E-01	2.0E-01	1.3E-02	1.8E-03	1.8E-03
0600 - 0700	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	7	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.5E+00	1.4E+00	9.4E-02	1.2E-02	1.2E-02
0700 - 0800	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	10	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.1E+00	2.0E+00	1.3E-01	1.8E-02	1.8E-02
0800 - 0900	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	10	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.1E+00	2.0E+00	1.3E-01	1.8E-02	1.8E-02
0900 - 1000	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	13	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.8E+00	2.6E+00	1.7E-01	2.3E-02	2.3E-02
1000 - 1100	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	7	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.5E+00	1.4E+00	9.4E-02	1.2E-02	1.2E-02
1100 - 1200	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	5	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.1E+00	9.9E-01	6.7E-02	8.8E-03	8.8E-03
1200 - 1300	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	6	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.3E+00	1.2E+00	8.0E-02	1.1E-02	1.1E-02
1300 - 1400	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	5	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.1E+00	9.9E-01	6.7E-02	8.8E-03	8.8E-03
1400 - 1500	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	4	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	8.5E-01	8.0E-01	5.3E-02	7.1E-03	7.1E-03
1500 - 1600	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	7	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.5E+00	1.4E+00	9.4E-02	1.2E-02	1.2E-02
1600 - 1700	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	8	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.7E+00	1.6E+00	1.1E-01	1.4E-02	1.4E-02
1700 - 1800	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	3	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	6.4E-01	6.0E-01	4.0E-02	5.3E-03	5.3E-03
1800 - 1900	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	4	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	8.5E-01	8.0E-01	5.3E-02	7.1E-03	7.1E-03
1900 - 2000	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.1E-01	2.0E-01	1.3E-02	1.8E-03	1.8E-03
2000 - 2100	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	3	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	6.4E-01	6.0E-01	4.0E-02	5.3E-03	5.3E-03
2100 - 2200	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	2	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	4.2E-01	4.0E-01	2.7E-02	3.5E-03	3.5E-03
2200 - 2300	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	3	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	6.4E-01	6.0E-01	4.0E-02	5.3E-03	5.3E-03
2300 - 2400	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	4	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	8.5E-01	8.0E-01	5.3E-02	7.1E-03	7.1E-03
Daily Total	0											108										

Total Hourly Emission

Hour	Total Emission inside bus terminus (g) (Running + Idling + Start) [6]					Total Emission Rate (g/s)				
	NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP
0000 - 0100	4.0E+01	3.8E+01	2.6E+00	3.2E-01	2.9E-01	1.1E-02	1.0E-02	7.2E-04	8.9E-05	8.2E-05
0100 - 0200	1.0E+01	9.3E+00	6.4E-01	8.0E-02	7.4E-02	2.8E-03	2.6E-03	1.8E-04	2.2E-05	2.0E-05
0200 - 0300	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	1.3E+00	1.2E+00	8.3E-02	4.0E-02	3.7E-02	3.7E-04	3.5E-04	2.3E-05	1.1E-05	1.0E-05
0600 - 0700	1.1E+01	1.0E+01	6.8E-01	3.2E-01	2.9E-01	3.0E-03	2.8E-03	1.9E-04	8.9E-05	8.2E-05
0700 - 0800	1.6E+01	1.5E+01	1.0E+00	4.8E-01	4.4E-01	4.5E-03	4.2E-03	2.8E-04	1.3E-04	1.2E-04
0800 - 0900	1.6E+01	1.5E+01	1.0E+00	4.8E-01	4.4E-01	4.4E-03	4.2E-03	2.8E-04	1.3E-04	1.2E-04
0900 - 1000	4.7E+01	4.4E+01	3.0E+00	8.0E-01	7.4E-01	1.3E-02	1.2E-02	8.3E-04	2.2E-04	2.0E-04
1000 - 1100	2.5E+01	2.3E+01	1.6E+00	3.6E-01	3.3E-01	6.8E-03	6.4E-03	4.3E-04	1.0E-04	9.2E-05
1100 - 1200	8.2E+00	7.7E+00	5.2E-01	2.4E-01	2.2E-01	2.3E-03	2.1E-03	1.4E-04	6.6E-05	6.1E-05
1200 - 1300	2.3E+01	2.2E+01	1.5E+00	3.2E-01	2.9E-01	6.4E-03	6.0E-03	4.1E-04	8.9E-05	8.2E-05
1300 - 1400	1.4E+01	1.3E+01	9.0E-01	2.4E-01	2.2E-01	4.0E-03	3.7E-03	2.5E-04	6.6E-05	6.1E-05
1400 - 1500	5.3E+00	5.0E+00	3.3E-01	1.6E-01	1.5E-01	1.5E-03	1.4E-03	9.3E-05	4.4E-05	4.1E-05
1500 - 1600	4.0E+01	3.7E+01	2.5E+00	4.4E-01	4.0E-01	1.1E-02	1.0E-02	7.0E-04	1.2E-04	1.1E-04
1600 - 1700	5.6E+01	5.3E+01	3.6E+00	5.6E-01	5.2E-01	1.6E-02	1.5E-02	9.9E-04	1.5E-04	1.4E-04
1700 - 1800	4.0E+00	3.7E+00	2.5E-01	1.2E-01	1.1E-01	1.1E-03	1.0E-03	7.0E-05	3.3E-05	3.1E-05
1800 - 1900	5.3E+00	5.0E+00	3.3E-01	1.6E-01	1.5E-01	1.5E-03	1.4E-03	9.3E-05	4.4E-05	4.1E-05
1900 - 2000	1.3E+00	1.2E+00	8.3E-02	4.0E-02	3.7E-02	3.7E-04	3.5E-04	2.3E-05	1.1E-05	1.0E-05
2000 - 2100	1.3E+01	1.2E+01	8.4E-01	2.0E-01	1.8E-01	3.7E-03	3.5E-03	2.3E-04	5.5E-05	5.1E-05
2100 - 2200	2.7E+00	2.5E+00	1.7E-01	8.0E-02	7.4E-02	7.4E-04	6.9E-04	4.6E-05	2.2E-05	2.0E-05
2200 - 2300	4.0E+00	3.7E+00	2.5E-01	1.2E-01	1.1E-01	1.1E-03	1.0E-03	7.0E-05	3.3E-05	3.1E-05
2300 - 2400	4.1E+01	3.8E+01	2.6E+00	3.2E-01	2.9E-01	1.1E-02	1.1E-02	7.3E-04	8.9E-05	8.2E-05
						max:	1.5E-02	9.9E-04	2.2E-04	2.0E-04

PTI opening hourly emission factor

NO	NO_2	RSP	FSP
0.71	0.72	0.40	0.40
0.18	0.18	0.10	0.10
0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00
0.02	0.02	0.05	0.05
0.19	0.19	0.40	0.40
0.29	0.28	0.60	0.60
0.29	0.28	0.60	0.60
0.84	0.84	1.00	1.00
0.44	0.44	0.45	0.45
0.15	0.15	0.30	0.30
0.41	0.41	0.40	0.40
0.25	0.25	0.30	0.30
0.09	0.09	0.20	0.20
0.71	0.71	0.55	0.55
1.00	1.00	0.70	0.70
0.07	0.07	0.15	0.15
0.09	0.09	0.20	0.20
0.02	0.02	0.05	0.05
0.24	0.24	0.25	0.25
0.05	0.05	0.10	0.10
0.07	0.07	0.15	0.15
0.73	0.74	0.40	0.40

Remarks:

[1] Idling Emission (g) = Idling Emission Factor (g/s) * Actual Idling time (min) * 60 * Frequency

[2] Total Idling Emission (g) = Cold Idling Emission of FBSD & FBDD (g) + Hot Idling Emission of FBSD & FBDD (g)

[3] If Actual Idling Time ≤ 1 min, Idling Emission for Start Emission Adjustment (g) = Idling rate (g/min) * Actual Idling Time (min)

If Actual Idling Time > 1 min, Idling Emission for Start Emission Adjustment (g) = Idling rate (g/min) * Maximum Duration for Adjusting Start Emission "K" (min)

Where Idling rate (g/min) = Total Idling Emission (g) / Idling Time (min), and "K" = 1 min for Diesel vehicles with SCR

[4] Adjusted Start Emission within bus terminus (g) = [Total Start Emission of FBSD & FBDD (g) - Idling Emission for Start Emission Adjustment (g)] * [Average Distance from Starting Place to Egress (m) / 700m]

Minimum value = 0 g

[5] Adjusted Start Emission outside bus terminus (g) = [Total Start Emission of FBSD & FBDD (g) - Idling Emission for Start Emission Adjustment (g)] * [Average Spread Distance outside bus terminus (m) / 700m]

Minimum value = 0 g

[6] Total Emission Inside bus terminus (g) = Total Running Emission (g) + Idling Emission (g) + Adjusted Start Emission within bus terminus (g)

Man Kat Street Bus Terminus

Minimum Hourly Temperature and Relative Humidity for 3rd Quarter

Temperature: 24 °C

Relative Humidity: 38 %

Start Emission

Single-Deck Franchised Bus (FBSD) Start Emission Factor (g/trip)																		
NOx	2.0E-01	3.6E-01	4.8E-01	6.8E-01	8.4E-01	1.1E+00	1.6E+00	2.0E+00	3.0E+00	3.9E+00	4.4E+00	5.2E+00	5.7E+00	6.0E+00	6.2E+00	6.3E+00	6.4E+00	6.4E+00
NO	1.7E-01	3.0E-01	4.1E-01	5.8E-01	7.1E-01	9.5E-01	1.4E+00	1.7E+00	2.5E+00	3.3E+00	3.7E+00	4.4E+00	4.8E+00	5.1E+00	5.2E+00	5.4E+00	5.4E+00	5.4E+00
NO2	3.2E-02	5.7E-02	7.6E-02	1.1E-01	1.3E-01	1.8E-01	2.6E-01	3.2E-01	4.7E-01	6.2E-01	6.9E-01	8.2E-01	9.0E-01	9.5E-01	9.7E-01	1.0E+00	1.0E+00	1.0E+00
RSP	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
FSP	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00

	No. of Trips of FBSD																	
Soaking Time (min) / Hour	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
0000 - 0100																		
0100 - 0200																		
0200 - 0300																		
0300 - 0400																		
0400 - 0500																		
0500 - 0600																		
0600 - 0700																		
0700 - 0800																		
0800 - 0900																		
0900 - 1000																		
1000 - 1100																		
1100 - 1200																		
1200 - 1300																		
1300 - 1400																		
1400 - 1500																		
1500 - 1600																		
1600 - 1700																		
1700 - 1800																		
1800 - 1900																		
1900 - 2000																		
2000 - 2100																		
2100 - 2200																		
2200 - 2300																		
2300 - 2400																		
																	Daily Total	0

Double-Deck Franchised Bus (FBDD) Start Emission Factor (g/trip)																		
NOx	7.2E-01	1.3E+00	1.7E+00	2.4E+00	3.0E+00	4.0E+00	5.9E+00	7.3E+00	1.1E+01	1.4E+01	1.6E+01	1.9E+01	2.1E+01	2.2E+01	2.2E+01	2.3E+01	2.3E+01	2.3E+01
NO	6.7E-01	1.2E+00	1.6E+00	2.3E+00	2.8E+00	3.7E+00	5.5E+00	6.8E+00	1.0E+01	1.3E+01	1.5E+01	1.7E+01	1.9E+01	2.0E+01	2.1E+01	2.1E+01	2.1E+01	2.1E+01
NO2	5.0E-02	9.1E-02	1.2E-01	1.7E-01	2.1E-01	2.8E-01	4.1E-01	5.1E-01	7.5E-01	9.8E-01	1.1E+00	1.3E+00	1.4E+00	1.5E+00	1.5E+00	1.6E+00	1.6E+00	1.6E+00
RSP	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
FSP	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00

	No. of Trips of FBDD																	
Soaking Time (min) / Hour	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	3	1	0	0	0	0	0
0100 - 0200	0	0	0	0	0	0	0	0	0	0	0	1	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	0
0600 - 0700	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0700 - 0800	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0800 - 0900	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0900 - 1000	1	1	1	1	0	0	1	1	0	0	0	0	0	0	1	0	0	0
1000 - 1100	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
1100 - 1200	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
1200 - 1300	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
1300 - 1400	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
1400 - 1500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1500 - 1600	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0
1600 - 1700	0	0	0	0	0	0	1	5	0	0	0	0	0	0	0	0	0	0
1700 - 1800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1800 - 1900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1900 - 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2000 - 2100	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0
2100 - 2200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2200 - 2300	0	0	0	0	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	1	0	1	1	1	0	0
																	Daily Total	39

Total Start Emission of FBSD & FBDD (g)				
NOx	NO	NO2	RSP	FSP
7.7E+01	7.1E+01	5.4E+00	0.0E+00	0.0E+00
1.9E+01	1.7E+01	1.3E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1.3E+00	1.2E+00	9.1E-02	0.0E+00	0.0E+00
2.0E+00	1.9E+00	1.4E-01	0.0E+00	0.0E+00
1.4E+00	1.3E+00	1.0E-01	0.0E+00	0.0E+00
4.2E+01	3.9E+01	2.9E+00	0.0E+00	0.0E+00
1.5E+01	1.4E+01	1.0E+00	0.0E+00	0.0E+00
3.0E+00	2.8E+00	2.1E-01	0.0E+00	0.0E+00
1.5E+01	1.4E+01	1.0E+00	0.0E+00	0.0E+00
7.3E+00	6.8E+00	5.1E-01	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2.9E+01	2.7E+01	2.1E+00	0.0E+00	0.0E+00
4.3E+01	4.0E+01	3.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1.1E+01	1.1E+01	7.9E-01	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
8.5E+01	7.9E+01	5.9E+00	0.0E+00	0.0E+00

Idling Emission - Terminating Buses

Idling Time for Terminating Buses	1	min
Max. Idling Time for Adjusting Start Emission =	1	min

FBSD

Hour	Frequency	Cold Idling Emission Factor (g/s) NOx	NO	NO_2	RSP	FSP	Cold Idling Emission (g) [1] NOx	NO	NO_2	RSP	FSP
0000 - 0100	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0100 - 0200	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0600 - 0700	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0700 - 0800	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0800 - 0900	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0900 - 1000	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1000 - 1100	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1100 - 1200	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1200 - 1300	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1300 - 1400	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1400 - 1500	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1500 - 1600	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1600 - 1700	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1700 - 1800	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1800 - 1900	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1900 - 2000	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2000 - 2100	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2100 - 2200	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2200 - 2300	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2300 - 2400	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
Daily Total	0										

FBDD

Hour	Frequency	Cold Idling Emission Factor (g/s) NOx	NO	NO_2	RSP	FSP	Cold Idling Emission (g) [1] NOx	NO	NO_2	RSP	FSP
0000 - 0100	4	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	2.6E+01	2.4E+01	1.6E+00	7.1E-03	7.1E-03
0100 - 0200	1	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	6.4E+00	6.0E+00	4.0E-01	1.8E-03	1.8E-03
0200 - 0300	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0600 - 0700	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0700 - 0800	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0800 - 0900	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0900 - 1000	3	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	1.9E+01	1.8E+01	1.2E+00	5.3E-03	5.3E-03
1000 - 1100	2	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	1.3E+01	1.2E+01	8.1E-01	3.5E-03	3.5E-03
1100 - 1200	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1200 - 1300	2	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	1.3E+01	1.2E+01	8.1E-01	3.5E-03	3.5E-03
1300 - 1400	1	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	6.4E+00	6.0E+00	4.0E-01	1.8E-03	1.8E-03
1400 - 1500	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1500 - 1600	4	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	2.6E+01	2.4E+01	1.6E+00	7.1E-03	7.1E-03
1600 - 1700	6	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	3.8E+01	3.6E+01	2.4E+00	1.1E-02	1.1E-02
1700 - 1800	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1800 - 1900	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1900 - 2000	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2000 - 2100	1	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	6.4E+00	6.0E+00	4.0E-01	1.8E-03	1.8E-03
2100 - 2200	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2200 - 2300	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2300 - 2400	4	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	2.6E+01	2.4E+01	1.6E+00	7.1E-03	7.1E-03
Daily Total	28										

FBSD

Hour	Frequency	Hot Idling Emission Factor (g/s) NOx	NO	NO_2	RSP	FSP	Hot Idling Emission (g) [1] NOx	NO	NO_2	RSP	FSP
0000 - 0100	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0100 - 0200	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0600 - 0700	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0700 - 0800	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0800 - 0900	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0900 - 1000	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1000 - 1100	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1100 - 1200	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1200 - 1300	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1300 - 1400	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1400 - 1500	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1500 - 1600	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1600 - 1700	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1700 - 1800	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1800 - 1900	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1900 - 2000	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2000 - 2100	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2100 - 2200	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2200 - 2300	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2300 - 2400	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
	0										

FBDD

Hour	Frequency	Hot Idling Emission Factor (g/s) NOx	NO	NO_2	RSP	FSP	Hot Idling Emission (g) [1] NOx	NO	NO_2	RSP	FSP
0000 - 0100	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0100 - 0200	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0600 - 0700	1	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.1E-01	2.0E-01	1.3E-02	1.8E-03	1.8E-03
0700 - 0800	2	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	4.2E-01	4.0E-01	2.7E-02	3.5E-03	3.5E-03
0800 - 0900	2	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	4.2E-01	4.0E-01	2.7E-02	3.5E-03	3.5E-03
0900 - 1000	4	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	8.5E-01	8.0E-01	5.3E-02	7.1E-03	7.1E-03
1000 - 1100	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1100 - 1200	1	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.1E-01	2.0E-01	1.3E-02	1.8E-03	1.8E-03
1200 - 1300	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1300 - 1400	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1400 - 1500	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1500 - 1600	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1600 - 1700	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1700 - 1800	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1800 - 1900	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1900 - 2000	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2000 - 2100	1	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.1E-01	2.0E-01	1.3E-02	1.8E-03	1.8E-03
2100 - 2200	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2200 - 2300	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2300 - 2400	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
	11										

Average Distance from Starting Place to Egress =	65	m
Average Distance from PTI Egress to Open Road Network	0	m
Average Spread Distance outside bus terminus =	635	m

Hour	Total Idling Emission (g) [2] NOx	NO	NO_2	RSP	FSP	Idling Emission for Start Emission Adjustment (g) [3] NOx	NO	NO_2	RSP	FSP
0000 - 0100	2.6E+01	2.4E+01	1.6E+00	7.1E-03	7.1E-03	2.6E+01	2.4E+01	1.6E+00	7.1E-03	7.1E-03
0100 - 0200	6.4E+00	6.0E+00	4.0E-01	1.8E-03	1.8E-03	6.4E+00	6.0E+00	4.0E-01	1.8E-03	1.8E-03
0200 - 0300	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0600 - 0700	2.1E-01	2.0E-01	1.3E-02	1.8E-03	1.8E-03	2.1E-01	2.0E-01	1.3E-02	1.8E-03	1.8E-03
0700 - 0800	4.2E-01	4.0E-01	2.7E-02	3.5E-03	3.5E-03	4.2E-01	4.0E-01	2.7E-02	3.5E-03	3.5E-03
0800 - 0900	4.2E-01	4.0E-01	2.7E-02	3.5E-03	3.5E-03	4.2E-01	4.0E-01	2.7E-02	3.5E-03	3.5E-03
0900 - 1000	2.0E+01	1.9E+01	1.3E+00	1.2E-02	1.2E-02	2.0E+01	1.9E+01	1.3E+00	1.2E-02	1.2E-02
1000 - 1100	1.3E+01	1.2E+01	8.1E-01	3.5E-03	3.5E-03	1.3E+01	1.2E+01	8.1E-01	3.5E-03	3.5E-03
1100 - 1200	2.1E-01	2.0E-01	1.3E-02	1.8E-03	1.8E-03	2.1E-01	2.0E-01	1.3E-02	1.8E-03	1.8E-03
1200 - 1300	1.3E+01	1.2E+01	8.1E-01	3.5E-03	3.5E-03	1.3E+01	1.2E+01	8.1E-01	3.5E-03	3.5E-03
1300 - 1400	6.4E+00	6.0E+00	4.0E-01	1.8E-03	1.8E-03	6.4E+00	6.0E+00	4.0E-01	1.8E-03	1.8E-03
1400 - 1500	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1500 - 1600	2.6E+01	2.4E+01	1.6E+00	7.1E-03	7.1E-03	2.6E+01	2.4E+01	1.6E+00	7.1E-03	7.1E-03
1600 - 1700	3.8E+01	3.6E+01	2.4E+00	1.1E-02	1.1E-02	3.8E+01	3.6E+01	2.4E+00	1.1E-02	1.1E-02
1700 - 1800	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1800 - 1900	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1900 - 2000	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2000 - 2100	6.6E+00	6.2E+00	4.2E-01	3.5E-03	3.5E-03	6.6E+00	6.2E+00	4.2E-01	3.5E-03	3.5E-03
2100 - 2200	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2200 - 2300	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2300 - 2400	2.6E+01	2.4E+01	1.6E+00	7.1E-03	7.1E-03	2.6E+01	2.4E+01	1.6E+00	7.1E-03	7.1E-03

Hour	Adjusted Start Emission within bus terminus (g) [4] NOx	NO	NO_2	RSP	FSP	Adjusted Start Emission outside bus terminus (g) [5] NOx	NO	NO_2	RSP	FSP	Start Emission Rate outside bus terminus (g/s) NOx	NO	NO_2	RSP	FSP
0000 - 0100	4.7E+00	4.4E+00	3.5E-01	0.0E+00	0.0E+00	4.6E+01	4.3E+01	3.4E+00	0.0E+00	0.0E+00	1.3E-02	1.2E-02	9.4E-04	0.0E+00	0.0E+00
0100 - 0200	1.1E+00	1.1E+00	8.4E-02	0.0E+00	0.0E+00	1.1E+01	1.0E+01	8.2E-01	0.0E+00	0.0E+00	3.1E-03	2.9E-03	2.3E-04	0.0E+00	0.0E+00
0200 - 0300	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0600 - 0700	1.0E-01	9.3E-02	7.2E-03	0.0E+00	0.0E+00	9.8E-01	9.1E-01	7.0E-02	0.0E+00	0.0E+00	2.7E-04	2.5E-04	1.9E-05	0.0E+00	0.0E+00
0700 - 0800	1.5E-01	1.4E-01	1.1E-02	0.0E+00	0.0E+00	1.4E+00	1.3E+00	1.0E-01	0.0E+00	0.0E+00	4.0E-04	3.7E-04	2.9E-05	0.0E+00	0.0E+00
0800 - 0900	9.4E-02	8.7E-02	6.9E-03	0.0E+00	0.0E+00	9.2E-01	8.5E-01	6.7E-02	0.0E+00	0.0E+00	2.6E-04	2.4E-04	1.9E-05	0.0E+00	0.0E+00
0900 - 1000	2.0E+00	1.8E+00	1.5E-01	0.0E+00	0.0E+00	1.9E+01	1.8E+01	1.5E+00	0.0E+00	0.0E+00	5.4E-03	5.0E-03	4.1E-04	0.0E+00	0.0E+00
1000 - 1100	1.7E-01	1.5E-01	2.0E-02	0.0E+00	0.0E+00	1.7E+00	1.5E+00	2.0E-01	0.0E+00	0.0E+00	4.6E-04	4.1E-04	5.5E-05	0.0E+00	0.0E+00
1100 - 1200	2.6E-01	2.4E-01	1.8E-02	0.0E+00	0.0E+00	2.5E+00	2.4E+00	1.8E-01	0.0E+00	0.0E+00	7.1E-04	6.6E-04	5.0E-05	0.0E+00	0.0E+00
1200 - 1300	1.7E-01	1.5E-01	2.0E-02	0.0E+00	0.0E+00	1.7E+00	1.5E+00	2.0E-01	0.0E+00	0.0E+00	4.6E-04	4.1E-04	5.5E-05	0.0E+00	0.0E+00
1300 - 1400	8.5E-02	7.5E-02	1.0E-02	0.0E+00	0.0E+00	8.4E-01	7.4E-01	9.9E-02	0.0E+00	0.0E+00	2.3E-04	2.0E-04	2.7E-05	0.0E+00	0.0E+00
1400 - 1500	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1500 - 1600	3.4E-01	3.0E-01	4.0E-02	0.0E+00	0.0E+00	3.3E+00	2.9E+00	3.9E-01	0.0E+00	0.0E+00	9.3E-04	8.2E-04	1.1E-04	0.0E+00	0.0E+00
1600 - 1700	3.8E-01	3.3E-01	5.1E-02	0.0E+00	0.0E+00	3.7E+00	3.2E+00	5.0E-01	0.0E+00	0.0E+00	1.0E-03	8.9E-04	1.4E-04	0.0E+00	0.0E+00
1700 - 1800	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1800 - 1900	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1900 - 2000	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2000 - 2100	4.4E-01	4.0E-01	3.5E-02	0.0E+00	0.0E+00	4.3E+00	4.0E+00	3.4E-01	0.0E+00	0.0E+00	1.2E-03	1.1E-03	9.5E-05	0.0E+00	0.0E+00
2100 - 2200	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2200 - 2300	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2300 - 2400	5.5E+00	5.1E+00	4.0E-01	0.0E+00	0.0E+00	5.4E+01	5.0E+01	3.9E+00	0.0E+00	0.0E+00	1.5E-02	1.4E-02	1.1E-03	0.0E+00	0.0E+00

Running Emission - Terminating and Bypass Buses

Average Travelling Distance within bus terminus =	100	m
Average Travelling Speed =	10	km/h

Hour	FBSD										FBDD									
	Frequency	Running Emission Factor (g/km-vehicle)					Running Emission (g)					Frequency	Running Emission Factor (g/km-vehicle)					Running Emission (g)				
	y	NOx	NO	NO2	RSP	FSP	NOx	NO	NO2	RSP	FSP	y	NOx	NO	NO2	RSP	FSP	NOx	NO	NO2	RSP	FSP
0000 - 0100	0	3.2E+00	2.7E+00	4.9E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	8	1.0E+01	9.6E+00	6.4E-01	3.8E-01	3.5E-01	8.2E+00	7.7E+00	5.2E-01	3.0E-01	2.8E-01
0100 - 0200	0	3.2E+00	2.7E+00	4.9E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	2	1.0E+01	9.6E+00	6.4E-01	3.8E-01	3.5E-01	2.0E+00	1.9E+00	1.3E-01	7.6E-02	7.0E-02
0200 - 0300	0	3.2E+00	2.7E+00	4.9E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.0E+01	9.6E+00	6.4E-01	3.8E-01	3.5E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0	3.2E+00	2.7E+00	4.9E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.0E+01	9.6E+00	6.4E-01	3.8E-01	3.5E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0	3.2E+00	2.7E+00	4.9E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.0E+01	9.6E+00	6.4E-01	3.8E-01	3.5E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0	3.2E+00	2.7E+00	4.9E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	1.0E+01	9.6E+00	6.4E-01	3.8E-01	3.5E-01	1.0E+00	9.6E-01	6.4E-02	3.8E-02	3.5E-02
0600 - 0700	0	3.2E+00	2.7E+00	4.9E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	8	1.0E+01	9.6E+00	6.4E-01	3.8E-01	3.5E-01	8.2E+00	7.7E+00	5.2E-01	3.0E-01	2.8E-01
0700 - 0800	0	3.2E+00	2.7E+00	4.9E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	12	1.0E+01	9.6E+00	6.4E-01	3.8E-01	3.5E-01	1.2E+01	1.2E+01	7.7E-01	4.6E-01	4.2E-01
0800 - 0900	0	3.2E+00	2.7E+00	4.9E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	12	1.0E+01	9.6E+00	6.4E-01	3.8E-01	3.5E-01	1.2E+01	1.2E+01	7.7E-01	4.6E-01	4.2E-01
0900 - 1000	0	3.2E+00	2.7E+00	4.9E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	20	1.0E+01	9.6E+00	6.4E-01	3.8E-01	3.5E-01	2.0E+01	1.9E+01	1.3E+00	7.6E-01	7.0E-01
1000 - 1100	0	3.2E+00	2.7E+00	4.9E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	9	1.0E+01	9.6E+00	6.4E-01	3.8E-01	3.5E-01	9.2E+00	8.6E+00	5.8E-01	3.4E-01	3.2E-01
1100 - 1200	0	3.2E+00	2.7E+00	4.9E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	6	1.0E+01	9.6E+00	6.4E-01	3.8E-01	3.5E-01	6.1E+00	5.8E+00	3.9E-01	2.3E-01	2.1E-01
1200 - 1300	0	3.2E+00	2.7E+00	4.9E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	8	1.0E+01	9.6E+00	6.4E-01	3.8E-01	3.5E-01	8.2E+00	7.7E+00	5.2E-01	3.0E-01	2.8E-01
1300 - 1400	0	3.2E+00	2.7E+00	4.9E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	6	1.0E+01	9.6E+00	6.4E-01	3.8E-01	3.5E-01	6.1E+00	5.8E+00	3.9E-01	2.3E-01	2.1E-01
1400 - 1500	0	3.2E+00	2.7E+00	4.9E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	4	1.0E+01	9.6E+00	6.4E-01	3.8E-01	3.5E-01	4.1E+00	3.8E+00	2.6E-01	1.5E-01	1.4E-01
1500 - 1600	0	3.2E+00	2.7E+00	4.9E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	11	1.0E+01	9.6E+00	6.4E-01	3.8E-01	3.5E-01	1.1E+01	1.1E+01	7.1E-01	4.2E-01	3.9E-01
1600 - 1700	0	3.2E+00	2.7E+00	4.9E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	14	1.0E+01	9.6E+00	6.4E-01	3.8E-01	3.5E-01	1.4E+01	1.3E+01	9.0E-01	5.3E-01	4.9E-01
1700 - 1800	0	3.2E+00	2.7E+00	4.9E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	3	1.0E+01	9.6E+00	6.4E-01	3.8E-01	3.5E-01	3.1E+00	2.9E+00	1.9E-01	1.1E-01	1.1E-01
1800 - 1900	0	3.2E+00	2.7E+00	4.9E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	4	1.0E+01	9.6E+00	6.4E-01	3.8E-01	3.5E-01	4.1E+00	3.8E+00	2.6E-01	1.5E-01	1.4E-01
1900 - 2000	0	3.2E+00	2.7E+00	4.9E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	1.0E+01	9.6E+00	6.4E-01	3.8E-01	3.5E-01	1.0E+00	9.6E-01	6.4E-02	3.8E-02	3.5E-02
2000 - 2100	0	3.2E+00	2.7E+00	4.9E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	5	1.0E+01	9.6E+00	6.4E-01	3.8E-01	3.5E-01	5.1E+00	4.8E+00	3.2E-01	1.9E-01	1.8E-01
2100 - 2200	0	3.2E+00	2.7E+00	4.9E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	2	1.0E+01	9.6E+00	6.4E-01	3.8E-01	3.5E-01	2.0E+00	1.9E+00	1.3E-01	7.6E-02	7.0E-02
2200 - 2300	0	3.2E+00	2.7E+00	4.9E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	3	1.0E+01	9.6E+00	6.4E-01	3.8E-01	3.5E-01	3.1E+00	2.9E+00	1.9E-01	1.1E-01	1.1E-01
2300 - 2400	0	3.2E+00	2.7E+00	4.9E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	8	1.0E+01	9.6E+00	6.4E-01	3.8E-01	3.5E-01	8.2E+00	7.7E+00	5.2E-01	3.0E-01	2.8E-01
Daily Total	0											147										

Idling Emission - Bypass Buses

Idling Time for Bypass Buses	1	min

Hour	FBSD										FBDD									
	Frequency	Hot Idling Emission Factor (g/s)					Hot Idling Emission (g)					Frequency	Hot Idling Emission Factor (g/s)					Hot Idling Emission (g)				
	y	NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP	y	NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP
0000 - 0100	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	4	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	8.5E-01	8.0E-01	5.3E-02	7.1E-03	7.1E-03
0100 - 0200	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.1E-01	2.0E-01	1.3E-02	1.8E-03	1.8E-03
0200 - 0300	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.1E-01	2.0E-01	1.3E-02	1.8E-03	1.8E-03
0600 - 0700	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	7	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.5E+00	1.4E+00	9.4E-02	1.2E-02	1.2E-02
0700 - 0800	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	10	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.1E+00	2.0E+00	1.3E-01	1.8E-02	1.8E-02
0800 - 0900	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	10	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.1E+00	2.0E+00	1.3E-01	1.8E-02	1.8E-02
0900 - 1000	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	13	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.8E+00	2.6E+00	1.7E-01	2.3E-02	2.3E-02
1000 - 1100	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	7	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.5E+00	1.4E+00	9.4E-02	1.2E-02	1.2E-02
1100 - 1200	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	5	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.1E+00	9.9E-01	6.7E-02	8.8E-03	8.8E-03
1200 - 1300	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	6	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.3E+00	1.2E+00	8.0E-02	1.1E-02	1.1E-02
1300 - 1400	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	5	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.1E+00	9.9E-01	6.7E-02	8.8E-03	8.8E-03
1400 - 1500	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	4	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	8.5E-01	8.0E-01	5.3E-02	7.1E-03	7.1E-03
1500 - 1600	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	7	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.5E+00	1.4E+00	9.4E-02	1.2E-02	1.2E-02
1600 - 1700	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	8	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.7E+00	1.6E+00	1.1E-01	1.4E-02	1.4E-02
1700 - 1800	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	3	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	6.4E-01	6.0E-01	4.0E-02	5.3E-03	5.3E-03
1800 - 1900	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	4	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	8.5E-01	8.0E-01	5.3E-02	7.1E-03	7.1E-03
1900 - 2000	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.1E-01	2.0E-01	1.3E-02	1.8E-03	1.8E-03
2000 - 2100	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	3	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	6.4E-01	6.0E-01	4.0E-02	5.3E-03	5.3E-03
2100 - 2200	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	2	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	4.2E-01	4.0E-01	2.7E-02	3.5E-03	3.5E-03
2200 - 2300	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	3	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	6.4E-01	6.0E-01	4.0E-02	5.3E-03	5.3E-03
2300 - 2400	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	4	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	8.5E-01	8.0E-01	5.3E-02	7.1E-03	7.1E-03
Daily Total	0											108										

Total Hourly Emission

Hour	Total Emission inside bus terminus (g) (Running + Idling + Start) [6]					Total Emission Rate (g/s)				
	NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP
0000 - 0100	3.9E+01	3.7E+01	2.5E+00	3.2E-01	2.9E-01	1.1E-02	1.0E-02	7.0E-04	8.9E-05	8.2E-05
0100 - 0200	9.8E+00	9.2E+00	6.3E-01	8.0E-02	7.4E-02	2.7E-03	2.6E-03	1.8E-04	2.2E-05	2.0E-05
0200 - 0300	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	1.2E+00	1.2E+00	7.8E-02	4.0E-02	3.7E-02	3.4E-04	3.2E-04	2.2E-05	1.1E-05	1.0E-05
0600 - 0700	1.0E+01	9.4E+00	6.3E-01	3.2E-01	2.9E-01	2.8E-03	2.6E-03	1.7E-04	8.9E-05	8.2E-05
0700 - 0800	1.5E+01	1.4E+01	9.4E-01	4.8E-01	4.4E-01	4.2E-03	3.9E-03	2.6E-04	1.3E-04	1.2E-04
0800 - 0900	1.5E+01	1.4E+01	9.4E-01	4.8E-01	4.4E-01	4.1E-03	3.9E-03	2.6E-04	1.3E-04	1.2E-04
0900 - 1000	4.5E+01	4.2E+01	2.9E+00	8.0E-01	7.4E-01	1.3E-02	1.2E-02	8.0E-04	2.2E-04	2.0E-04
1000 - 1100	2.4E+01	2.2E+01	1.5E+00	3.6E-01	3.3E-01	6.6E-03	6.2E-03	4.2E-04	1.0E-04	9.2E-05
1100 - 1200	7.7E+00	7.2E+00	4.9E-01	2.4E-01	2.2E-01	2.1E-03	2.0E-03	1.3E-04	6.6E-05	6.1E-05
1200 - 1300	2.2E+01	2.1E+01	1.4E+00	3.2E-01	2.9E-01	6.2E-03	5.8E-03	4.0E-04	8.9E-05	8.2E-05
1300 - 1400	1.4E+01	1.3E+01	8.7E-01	2.4E-01	2.2E-01	3.8E-03	3.6E-03	2.4E-04	6.6E-05	6.1E-05
1400 - 1500	4.9E+00	4.6E+00	3.1E-01	1.6E-01	1.5E-01	1.4E-03	1.3E-03	8.6E-05	4.4E-05	4.1E-05
1500 - 1600	3.9E+01	3.6E+01	2.5E+00	4.4E-01	4.0E-01	1.1E-02	1.0E-02	6.8E-04	1.2E-04	1.1E-04
1600 - 1700	5.5E+01	5.1E+01	3.5E+00	5.6E-01	5.2E-01	1.5E-02	1.4E-02	9.7E-04	1.5E-04	1.4E-04
1700 - 1800	3.7E+00	3.5E+00	2.3E-01	1.2E-01	1.1E-01	1.0E-03	9.6E-04	6.5E-05	3.3E-05	3.1E-05
1800 - 1900	4.9E+00	4.6E+00	3.1E-01	1.6E-01	1.5E-01	1.4E-03	1.3E-03	8.6E-05	4.4E-05	4.1E-05
1900 - 2000	1.2E+00	1.2E+00	7.8E-02	4.0E-02	3.7E-02	3.4E-04	3.2E-04	2.2E-05	1.1E-05	1.0E-05
2000 - 2100	1.3E+01	1.2E+01	8.1E-01	2.0E-01	1.8E-01	3.6E-03	3.3E-03	2.3E-04	5.5E-05	5.1E-05
2100 - 2200	2.5E+00	2.3E+00	1.6E-01	8.0E-02	7.4E-02	6.9E-04	6.4E-04	4.3E-05	2.2E-05	2.0E-05
2200 - 2300	3.7E+00	3.5E+00	2.3E-01	1.2E-01	1.1E-01	1.0E-03	9.6E-04	6.5E-05	3.3E-05	3.1E-05
2300 - 2400	4.0E+01	3.8E+01	2.6E+00	3.2E-01	2.9E-01	1.1E-02	1.0E-02	7.2E-04	8.9E-05	8.2E-05
						max:	1.4E-02	9.7E-04	2.2E-04	2.0E-04

PTI opening hourly emission factor

NO	NO_2	RSP	FSP
0.72	0.73	0.40	0.40
0.18	0.18	0.10	0.10
0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00
0.02	0.02	0.05	0.05
0.18	0.18	0.40	0.40
0.27	0.27	0.60	0.60
0.27	0.27	0.60	0.60
0.83	0.83	1.00	1.00
0.43	0.43	0.45	0.45
0.14	0.14	0.30	0.30
0.41	0.41	0.40	0.40
0.25	0.25	0.30	0.30
0.09	0.09	0.20	0.20
0.71	0.71	0.55	0.55
1.00	1.00	0.70	0.70
0.07	0.07	0.15	0.15
0.09	0.09	0.20	0.20
0.02	0.02	0.05	0.05
0.23	0.23	0.25	0.25
0.05	0.04	0.10	0.10
0.07	0.07	0.15	0.15
0.73	0.74	0.40	0.40

Remarks:

[1] Idling Emission (g) = Idling Emission Factor (g/s) * Actual Idling time (min) * 60 * Frequency

[2] Total Idling Emission (g) = Cold Idling Emission of FBSD & FBDD (g) + Hot Idling Emission of FBSD & FBDD (g)

[3] If Actual Idling Time ≤ 1 min, Idling Emission for Start Emission Adjustment (g) = Idling rate (g/min) * Actual Idling Time (min)

If Actual Idling Time > 1 min, Idling Emission for Start Emission Adjustment (g) = Idling rate (g/min) * Maximum Duration for Adjusting Start Emission "K" (min)

Where Idling rate (g/min) = Total Idling Emission (g) / Idling Time (min), and "K" = 1 min for Diesel vehicles with SCR

[4] Adjusted Start Emission within bus terminus (g) = [Total Start Emission of FBSD & FBDD (g) - Idling Emission for Start Emission Adjustment (g)] * [Average Distance from Starting Place to Egress (m) / 700m]

Minimum value = 0 g

[5] Adjusted Start Emission outside bus terminus (g) = [Total Start Emission of FBSD & FBDD (g) - Idling Emission for Start Emission Adjustment (g)] * [Average Spread Distance outside bus terminus (m) / 700m]

Minimum value = 0 g

[6] Total Emission Inside bus terminus (g) = Total Running Emission (g) + Idling Emission (g) + Adjusted Start Emission within bus terminus (g)

Man Kat Street Bus Terminus

Minimum Hourly Temperature and Relative Humidity for 4th Quarter

Temperature: 10 °C

Relative Humidity: 22 %

Start Emission

	Single-Deck Franchised Bus (FBSD) Start Emission Factor (g/trip)																	
NOx	2.0E-01	3.6E-01	4.8E-01	6.8E-01	8.4E-01	1.1E+00	1.6E+00	2.0E+00	3.0E+00	3.9E+00	4.4E+00	5.2E+00	5.7E+00	6.0E+00	6.2E+00	6.3E+00	6.4E+00	6.4E+00
NO	1.7E-01	3.0E-01	4.1E-01	5.8E-01	7.1E-01	9.5E-01	1.4E+00	1.7E+00	2.5E+00	3.3E+00	3.7E+00	4.4E+00	4.8E+00	5.1E+00	5.2E+00	5.4E+00	5.4E+00	5.4E+00
NO2	3.2E-02	5.7E-02	7.6E-02	1.1E-01	1.3E-01	1.8E-01	2.6E-01	3.2E-01	4.7E-01	6.2E-01	6.9E-01	8.2E-01	9.0E-01	9.5E-01	9.7E-01	1.0E+00	1.0E+00	1.0E+00
RSP	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
FSP	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00

	Double-Deck Franchised Bus (FBDD) Start Emission Factor (g/trip)																	
NOx	7.2E-01	1.3E+00	1.7E+00	2.4E+00	3.0E+00	4.0E+00	5.9E+00	7.3E+00	1.1E+01	1.4E+01	1.6E+01	1.9E+01	2.1E+01	2.2E+01	2.2E+01	2.3E+01	2.3E+01	2.3E+01
NO	6.7E-01	1.2E+00	1.6E+00	2.3E+00	2.8E+00	3.7E+00	5.5E+00	6.8E+00	1.0E+01	1.3E+01	1.5E+01	1.7E+01	1.9E+01	2.0E+01	2.1E+01	2.1E+01	2.1E+01	2.1E+01
NO2	5.0E-02	9.1E-02	1.2E-01	1.7E-01	2.1E-01	2.8E-01	4.1E-01	5.1E-01	7.5E-01	9.8E-01	1.1E+00	1.3E+00	1.4E+00	1.5E+00	1.5E+00	1.6E+00	1.6E+00	1.6E+00
RSP	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
FSP	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00

	No. of Trips of FBSD																	
Soaking Time (min) / Hour	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
0000 - 0100																		
0100 - 0200																		
0200 - 0300																		
0300 - 0400																		
0400 - 0500																		
0500 - 0600																		
0600 - 0700																		
0700 - 0800																		
0800 - 0900																		
0900 - 1000																		
1000 - 1100																		
1100 - 1200																		
1200 - 1300																		
1300 - 1400																		
1400 - 1500																		
1500 - 1600																		
1600 - 1700																		
1700 - 1800																		
1800 - 1900																		
1900 - 2000																		
2000 - 2100																		
2100 - 2200																		
2200 - 2300																		
2300 - 2400																		
																Daily Total	0	

	No. of Trips of FBDD																	
Soaking Time (min) / Hour	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	3	1	0	0	0	0	0
0100 - 0200	0	0	0	0	0	0	0	0	0	0	0	1	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	0
0600 - 0700	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0700 - 0800	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0800 - 0900	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0900 - 1000	1	1	1	1	0	0	1	1	0	0	0	0	0	0	1	0	0	0
1000 - 1100	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
1100 - 1200	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
1200 - 1300	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
1300 - 1400	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
1400 - 1500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1500 - 1600	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0
1600 - 1700	0	0	0	0	0	0	1	5	0	0	0	0	0	0	0	0	0	0
1700 - 1800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1800 - 1900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1900 - 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2000 - 2100	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0
2100 - 2200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2200 - 2300	0	0	0	0	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	1	0	1	1	1	0	0
																Daily Total	39	

Total Start Emission of FBSD & FBDD (g)				
NOx	NO	NO2	RSP	FSP
7.7E+01	7.1E+01	5.4E+00	0.0E+00	0.0E+00
1.9E+01	1.7E+01	1.3E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1.3E+00	1.2E+00	9.1E-02	0.0E+00	0.0E+00
2.0E+00	1.9E+00	1.4E-01	0.0E+00	0.0E+00
1.4E+00	1.3E+00	1.0E-01	0.0E+00	0.0E+00
4.2E+01	3.9E+01	2.9E+00	0.0E+00	0.0E+00
1.5E+01	1.4E+01	1.0E+00	0.0E+00	0.0E+00
3.0E+00	2.8E+00	2.1E-01	0.0E+00	0.0E+00
1.5E+01	1.4E+01	1.0E+00	0.0E+00	0.0E+00
7.3E+00	6.8E+00	5.1E-01	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2.9E+01	2.7E+01	2.1E+00	0.0E+00	0.0E+00
4.3E+01	4.0E+01	3.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1.1E+01	1.1E+01	7.9E-01	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
8.5E+01	7.9E+01	5.9E+00	0.0E+00	0.0E+00

Idling Emission - Terminating Buses

Idling Time for Terminating Buses	1	min
Max. Idling Time for Adjusting Start Emission =	1	min

Hour	FBSD											FBDD										
	Frequency	Cold Idling Emission Factor (g/s)					Cold Idling Emission (g) [1]					Frequency	Cold Idling Emission Factor (g/s)					Cold Idling Emission (g) [1]				
		NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP		NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP
0000 - 0100	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	4	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	2.6E+01	2.4E+01	1.6E+00	7.1E-03	7.1E-03
0100 - 0200	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	6.4E+00	6.0E+00	4.0E-01	1.8E-03	1.8E-03
0200 - 0300	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0600 - 0700	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0700 - 0800	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0800 - 0900	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0900 - 1000	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	3	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	1.9E+01	1.8E+01	1.2E+00	5.3E-03	5.3E-03
1000 - 1100	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	2	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	1.3E+01	1.2E+01	8.1E-01	3.5E-03	3.5E-03
1100 - 1200	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1200 - 1300	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	2	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	1.3E+01	1.2E+01	8.1E-01	3.5E-03	3.5E-03
1300 - 1400	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	6.4E+00	6.0E+00	4.0E-01	1.8E-03	1.8E-03
1400 - 1500	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1500 - 1600	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	4	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	2.6E+01	2.4E+01	1.6E+00	7.1E-03	7.1E-03
1600 - 1700	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	6	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	3.8E+01	3.6E+01	2.4E+00	1.1E-02	1.1E-02
1700 - 1800	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1800 - 1900	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1900 - 2000	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2000 - 2100	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	6.4E+00	6.0E+00	4.0E-01	1.8E-03	1.8E-03
2100 - 2200	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2200 - 2300	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2300 - 2400	0	1.5E-02	1.3E-02	2.4E-03	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	4	1.1E-01	1.0E-01	6.7E-03	2.9E-05	2.9E-05	2.6E+01	2.4E+01	1.6E+00	7.1E-03	7.1E-03
Daily Total	0											28										

Hour	FBSD											FBDD										
	Frequency	Hot Idling Emission Factor (g/s)					Hot Idling Emission (g) [1]					Frequency	Hot Idling Emission Factor (g/s)					Hot Idling Emission (g) [1]				
		NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP		NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP
0000 - 0100	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0100 - 0200	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0200 - 0300	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0600 - 0700	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.1E-01	2.0E-01	1.3E-02	1.8E-03	1.8E-03
0700 - 0800	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	2	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	4.2E-01	4.0E-01	2.7E-02	3.5E-03	3.5E-03
0800 - 0900	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	2	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	4.2E-01	4.0E-01	2.7E-02	3.5E-03	3.5E-03
0900 - 1000	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	4	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	8.5E-01	8.0E-01	5.3E-02	7.1E-03	7.1E-03
1000 - 1100	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1100 - 1200	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.1E-01	2.0E-01	1.3E-02	1.8E-03	1.8E-03
1200 - 1300	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1300 - 1400	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1400 - 1500	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1500 - 1600	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1600 - 1700	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1700 - 1800	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1800 - 1900	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1900 - 2000	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2000 - 2100	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.1E-01	2.0E-01	1.3E-02	1.8E-03	1.8E-03
2100 - 2200	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2200 - 2300	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2300 - 2400	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
	0											11										

Average Distance from Starting Place to Egress =	65	m
Average Distance from PTI Egress to Open Road Network	0	m
Average Spread Distance outside bus terminus =	635	m

Hour	Total Idling Emission (g) [2]					Idling Emission for Start Emission Adjustment (g) [3]					Adjusted Start Emission within bus terminus (g) [4]					Adjusted Start Emission outside bus terminus (g) [5]					Start Emission Rate outside bus terminus (g/s)				
	NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP
0000 - 0100	2.6E+01	2.4E+01	1.6E+00	7.1E-03	7.1E-03	2.6E+01	2.4E+01	1.6E+00	7.1E-03	7.1E-03	4.7E+00	4.4E+00	3.5E-01	0.0E+00	0.0E+00	4.6E+01	4.3E+01	3.4E+00	0.0E+00	0.0E+00	1.3E-02	1.2E-02	9.4E-04	0.0E+00	0.0E+00
0100 - 0200	6.4E+00	6.0E+00	4.0E-01	1.8E-03	1.8E-03	6.4E+00	6.0E+00	4.0E-01	1.8E-03	1.8E-03	1.1E+00	1.1E+00	8.4E-02	0.0E+00	0.0E+00	1.1E+01	1.0E+01	8.2E-01	0.0E+00	0.0E+00	3.1E-03	2.9E-03	2.3E-04	0.0E+00	0.0E+00
0200 - 0300	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0600 - 0700	2.1E-01	2.0E-01	1.3E-02	1.8E-03	1.8E-03	2.1E-01	2.0E-01	1.3E-02	1.8E-03	1.8E-03	1.0E-01	9.3E-02	7.2E-03	0.0E+00	0.0E+00	9.8E-01	9.1E-01	7.0E-02	0.0E+00	0.0E+00	2.7E-04	2.5E-04	1.9E-05	0.0E+00	0.0E+00
0700 - 0800	4.2E-01	4.0E-01	2.7E-02	3.5E-03	3.5E-03	4.2E-01	4.0E-01	2.7E-02	3.5E-03	3.5E-03	1.5E-01	1.4E-01	1.1E-02	0.0E+00	0.0E+00	1.4E+00	1.3E+00	1.0E-01	0.0E+00	0.0E+00	4.0E-04	3.7E-04	2.9E-05	0.0E+00	0.0E+00
0800 - 0900	4.2E-01	4.0E-01	2.7E-02	3.5E-03	3.5E-03	4.2E-01	4.0E-01	2.7E-02	3.5E-03	3.5E-03	9.4E-02	8.7E-02	6.9E-03	0.0E+00	0.0E+00	9.2E-01	8.5E-01	6.7E-02	0.0E+00	0.0E+00	2.6E-04	2.4E-04	1.9E-05	0.0E+00	0.0E+00
0900 - 1000	2.0E+01	1.9E+01	1.3E+00	1.2E-02	1.2E-02	2.0E+01	1.9E+01	1.3E+00	1.2E-02	1.2E-02	2.0E+00	1.8E+00	1.5E-01	0.0E+00	0.0E+00	1.9E+01	1.8E+01	1.5E+00	0.0E+00	0.0E+00	5.4E-03	5.0E-03	4.1E-04	0.0E+00	0.0E+00
1000 - 1100	1.3E+01	1.2E+01	8.1E-01	3.5E-03	3.5E-03	1.3E+01	1.2E+01	8.1E-01	3.5E-03	3.5E-03	1.7E-01	1.5E-01	2.0E-02	0.0E+00	0.0E+00	1.7E+00	1.5E+00	2.0E-01	0.0E+00	0.0E+00	4.6E-04	4.1E-04	5.5E-05	0.0E+00	0.0E+00
1100 - 1200	2.1E-01	2.0E-01	1.3E-02	1.8E-03	1.8E-03	2.1E-01	2.0E-01	1.3E-02	1.8E-03	1.8E-03	2.6E-01	2.4E-01	1.8E-02	0.0E+00	0.0E+00	2.5E+00	2.4E+00	1.8E-01	0.0E+00	0.0E+00	7.1E-04	6.6E-04	5.0E-05	0.0E+00	0.0E+00
1200 - 1300	1.3E+01	1.2E+01	8.1E-01	3.5E-03	3.5E-03	1.3E+01	1.2E+01	8.1E-01	3.5E-03	3.5E-03	1.7E-01	1.5E-01	2.0E-02	0.0E+00	0.0E+00	1.7E+00	1.5E+00	2.0E-01	0.0E+00	0.0E+00	4.6E-04	4.1E-04	5.5E-05	0.0E+00	0.0E+00
1300 - 1400	6.4E+00	6.0E+00	4.0E-01	1.8E-03	1.8E-03	6.4E+00	6.0E+00	4.0E-01	1.8E-03	1.8E-03	8.5E-02	7.5E-02	1.0E-02	0.0E+00	0.0E+00	8.4E-01	7.4E-01	9.9E-02	0.0E+00	0.0E+00	2.3E-04	2.0E-04	2.7E-05	0.0E+00	0.0E+00
1400 - 1500	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1500 - 1600	2.6E+01	2.4E+01	1.6E+00	7.1E-03	7.1E-03	2.6E+01	2.4E+01	1.6E+00	7.1E-03	7.1E-03	3.4E-01	3.0E-01	4.0E-02	0.0E+00	0.0E+00	3.3E+00	2.9E+00	3.9E-01	0.0E+00	0.0E+00	9.3E-04	8.2E-04	1.1E-04	0.0E+00	0.0E+00
1600 - 1700	3.8E+01	3.6E+01	2.4E+00	1.1E-02	1.1E-02	3.8E+01	3.6E+01	2.4E+00	1.1E-02	1.1E-02	3.8E-01	3.3E-01	5.1E-02	0.0E+00	0.0E+00	3.7E+00	3.2E+00	5.0E-01	0.0E+00	0.0E+00	1.0E-03	8.9E-04	1.4E-04	0.0E+00	0.0E+00
1700 - 1800	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1800 - 1900	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1900 - 2000	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2000 - 2100	6.6E+00	6.2E+00	4.2E-01	3.5E-03	3.5E-03	6.6E+00	6.2E+00	4.2E-01	3.5E-03	3.5E-03	4.4E-01	4.0E-01	3.5E-02	0.0E+00	0.0E+00	4.3E+00	4.0E+00	3.4E-01	0.0E+00	0.0E+00	1.2E-03	1.1E-03	9.5E-05	0.0E+00	0.0E+00
2100 - 2200	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2200 - 2300	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2300 - 2400	2.6E+01	2.4E+01	1.6E+00	7.1E-03	7.1E-03	2.6E+01	2.4E+01	1.6E+00	7.1E-03	7.1E-03	5.5E+00	5.1E+00	4.0E-01	0.0E+00	0.0E+00	5.4E+01	5.0E+01	3.9E+00	0.0E+00	0.0E+00	1.5E-02	1.4E-02	1.1E-03	0.0E+00	0.0E+00

Running Emission - Terminating and Bypass Buses

Average Travelling Distance within bus terminus =	100	m
Average Travelling Speed =	10	km/h

Hour	FBSD										FBDD									
	Frequency	Running Emission Factor (g/km-vehicle)					Running Emission (g)					Frequency	Running Emission Factor (g/km-vehicle)					Running Emission (g)				
	y	NOx	NO	NO2	RSP	FSP	NOx	NO	NO2	RSP	FSP	y	NOx	NO	NO2	RSP	FSP	NOx	NO	NO2	RSP	FSP
0000 - 0100	0	3.5E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	8	1.1E+01	1.0E+01	7.1E-01	3.8E-01	3.5E-01	9.0E+00	8.4E+00	5.6E-01	3.0E-01	2.8E-01
0100 - 0200	0	3.5E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	2	1.1E+01	1.0E+01	7.1E-01	3.8E-01	3.5E-01	2.2E+00	2.1E+00	1.4E-01	7.6E-02	7.0E-02
0200 - 0300	0	3.5E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E+01	1.0E+01	7.1E-01	3.8E-01	3.5E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0	3.5E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E+01	1.0E+01	7.1E-01	3.8E-01	3.5E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0	3.5E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	1.1E+01	1.0E+01	7.1E-01	3.8E-01	3.5E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0	3.5E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	1.1E+01	1.0E+01	7.1E-01	3.8E-01	3.5E-01	1.1E+00	1.0E+00	7.1E-02	3.8E-02	3.5E-02
0600 - 0700	0	3.5E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	8	1.1E+01	1.0E+01	7.1E-01	3.8E-01	3.5E-01	9.0E+00	8.4E+00	5.6E-01	3.0E-01	2.8E-01
0700 - 0800	0	3.5E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	12	1.1E+01	1.0E+01	7.1E-01	3.8E-01	3.5E-01	1.3E+01	1.3E+01	8.5E-01	4.6E-01	4.2E-01
0800 - 0900	0	3.5E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	12	1.1E+01	1.0E+01	7.1E-01	3.8E-01	3.5E-01	1.3E+01	1.3E+01	8.5E-01	4.6E-01	4.2E-01
0900 - 1000	0	3.5E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	20	1.1E+01	1.0E+01	7.1E-01	3.8E-01	3.5E-01	2.2E+01	2.1E+01	1.4E+00	7.6E-01	7.0E-01
1000 - 1100	0	3.5E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	9	1.1E+01	1.0E+01	7.1E-01	3.8E-01	3.5E-01	1.0E+01	9.4E+00	6.4E-01	3.4E-01	3.2E-01
1100 - 1200	0	3.5E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	6	1.1E+01	1.0E+01	7.1E-01	3.8E-01	3.5E-01	6.7E+00	6.3E+00	4.2E-01	2.3E-01	2.1E-01
1200 - 1300	0	3.5E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	8	1.1E+01	1.0E+01	7.1E-01	3.8E-01	3.5E-01	9.0E+00	8.4E+00	5.6E-01	3.0E-01	2.8E-01
1300 - 1400	0	3.5E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	6	1.1E+01	1.0E+01	7.1E-01	3.8E-01	3.5E-01	6.7E+00	6.3E+00	4.2E-01	2.3E-01	2.1E-01
1400 - 1500	0	3.5E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	4	1.1E+01	1.0E+01	7.1E-01	3.8E-01	3.5E-01	4.5E+00	4.2E+00	2.8E-01	1.5E-01	1.4E-01
1500 - 1600	0	3.5E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	11	1.1E+01	1.0E+01	7.1E-01	3.8E-01	3.5E-01	1.2E+01	1.2E+01	7.8E-01	4.2E-01	3.9E-01
1600 - 1700	0	3.5E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	14	1.1E+01	1.0E+01	7.1E-01	3.8E-01	3.5E-01	1.6E+01	1.5E+01	9.9E-01	5.3E-01	4.9E-01
1700 - 1800	0	3.5E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	3	1.1E+01	1.0E+01	7.1E-01	3.8E-01	3.5E-01	3.4E+00	3.1E+00	2.1E-01	1.1E-01	1.1E-01
1800 - 1900	0	3.5E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	4	1.1E+01	1.0E+01	7.1E-01	3.8E-01	3.5E-01	4.5E+00	4.2E+00	2.8E-01	1.5E-01	1.4E-01
1900 - 2000	0	3.5E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	1.1E+01	1.0E+01	7.1E-01	3.8E-01	3.5E-01	1.1E+00	1.0E+00	7.1E-02	3.8E-02	3.5E-02
2000 - 2100	0	3.5E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	5	1.1E+01	1.0E+01	7.1E-01	3.8E-01	3.5E-01	5.6E+00	5.2E+00	3.5E-01	1.9E-01	1.8E-01
2100 - 2200	0	3.5E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	2	1.1E+01	1.0E+01	7.1E-01	3.8E-01	3.5E-01	2.2E+00	2.1E+00	1.4E-01	7.6E-02	7.0E-02
2200 - 2300	0	3.5E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	3	1.1E+01	1.0E+01	7.1E-01	3.8E-01	3.5E-01	3.4E+00	3.1E+00	2.1E-01	1.1E-01	1.1E-01
2300 - 2400	0	3.5E+00	2.9E+00	5.3E-01	8.3E-02	7.7E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	8	1.1E+01	1.0E+01	7.1E-01	3.8E-01	3.5E-01	9.0E+00	8.4E+00	5.6E-01	3.0E-01	2.8E-01
Daily Total	0											147										

Idling Emission - Bypass Buses

Idling Time for Bypass Buses	1	min

Hour	FBSD										FBDD									
	Frequency	Hot Idling Emission Factor (g/s)					Hot Idling Emission (g)					Frequency	Hot Idling Emission Factor (g/s)					Hot Idling Emission (g)				
	y	NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP	y	NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP
0000 - 0100	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	4	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	8.5E-01	8.0E-01	5.3E-02	7.1E-03	7.1E-03
0100 - 0200	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.1E-01	2.0E-01	1.3E-02	1.8E-03	1.8E-03
0200 - 0300	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.1E-01	2.0E-01	1.3E-02	1.8E-03	1.8E-03
0600 - 0700	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	7	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.5E+00	1.4E+00	9.4E-02	1.2E-02	1.2E-02
0700 - 0800	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	10	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.1E+00	2.0E+00	1.3E-01	1.8E-02	1.8E-02
0800 - 0900	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	10	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.1E+00	2.0E+00	1.3E-01	1.8E-02	1.8E-02
0900 - 1000	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	13	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.8E+00	2.6E+00	1.7E-01	2.3E-02	2.3E-02
1000 - 1100	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	7	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.5E+00	1.4E+00	9.4E-02	1.2E-02	1.2E-02
1100 - 1200	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	5	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.1E+00	9.9E-01	6.7E-02	8.8E-03	8.8E-03
1200 - 1300	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	6	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.3E+00	1.2E+00	8.0E-02	1.1E-02	1.1E-02
1300 - 1400	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	5	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.1E+00	9.9E-01	6.7E-02	8.8E-03	8.8E-03
1400 - 1500	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	4	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	8.5E-01	8.0E-01	5.3E-02	7.1E-03	7.1E-03
1500 - 1600	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	7	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.5E+00	1.4E+00	9.4E-02	1.2E-02	1.2E-02
1600 - 1700	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	8	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	1.7E+00	1.6E+00	1.1E-01	1.4E-02	1.4E-02
1700 - 1800	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	3	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	6.4E-01	6.0E-01	4.0E-02	5.3E-03	5.3E-03
1800 - 1900	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	4	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	8.5E-01	8.0E-01	5.3E-02	7.1E-03	7.1E-03
1900 - 2000	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	2.1E-01	2.0E-01	1.3E-02	1.8E-03	1.8E-03
2000 - 2100	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	3	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	6.4E-01	6.0E-01	4.0E-02	5.3E-03	5.3E-03
2100 - 2200	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	2	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	4.2E-01	4.0E-01	2.7E-02	3.5E-03	3.5E-03
2200 - 2300	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	3	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	6.4E-01	6.0E-01	4.0E-02	5.3E-03	5.3E-03
2300 - 2400	0	1.3E-03	1.1E-03	2.0E-04	9.9E-06	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	4	3.5E-03	3.3E-03	2.2E-04	2.9E-05	2.9E-05	8.5E-01	8.0E-01	5.3E-02	7.1E-03	7.1E-03
Daily Total	0											108										

Total Hourly Emission

Hour	Total Emission inside bus terminus (g) (Running + Idling + Start) [6]					Total Emission Rate (g/s)				
	NOx	NO	NO_2	RSP	FSP	NOx	NO	NO_2	RSP	FSP
0000 - 0100	4.0E+01	3.8E+01	2.6E+00	3.2E-01	2.9E-01	1.1E-02	1.0E-02	7.2E-04	8.9E-05	8.2E-05
0100 - 0200	1.0E+01	9.4E+00	6.4E-01	8.0E-02	7.4E-02	2.8E-03	2.6E-03	1.8E-04	2.2E-05	2.0E-05
0200 - 0300	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0300 - 0400	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0400 - 0500	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
0500 - 0600	1.3E+00	1.2E+00	8.4E-02	4.0E-02	3.7E-02	3.7E-04	3.5E-04	2.3E-05	1.1E-05	1.0E-05
0600 - 0700	1.1E+01	1.0E+01	6.8E-01	3.2E-01	2.9E-01	3.0E-03	2.8E-03	1.9E-04	8.9E-05	8.2E-05
0700 - 0800	1.6E+01	1.5E+01	1.0E+00	4.8E-01	4.4E-01	4.5E-03	4.2E-03	2.8E-04	1.3E-04	1.2E-04
0800 - 0900	1.6E+01	1.5E+01	1.0E+00	4.8E-01	4.4E-01	4.5E-03	4.2E-03	2.8E-04	1.3E-04	1.2E-04
0900 - 1000	4.7E+01	4.4E+01	3.0E+00	8.0E-01	7.4E-01	1.3E-02	1.2E-02	8.3E-04	2.2E-04	2.0E-04
1000 - 1100	2.5E+01	2.3E+01	1.6E+00	3.6E-01	3.3E-01	6.8E-03	6.4E-03	4.3E-04	1.0E-04	9.2E-05
1100 - 1200	8.3E+00	7.7E+00	5.2E-01	2.4E-01	2.2E-01	2.3E-03	2.1E-03	1.5E-04	6.6E-05	6.1E-05
1200 - 1300	2.3E+01	2.2E+01	1.5E+00	3.2E-01	2.9E-01	6.5E-03	6.0E-03	4.1E-04	8.9E-05	8.2E-05
1300 - 1400	1.4E+01	1.3E+01	9.0E-01	2.4E-01	2.2E-01	4.0E-03	3.7E-03	2.5E-04	6.6E-05	6.1E-05
1400 - 1500	5.3E+00	5.0E+00	3.4E-01	1.6E-01	1.5E-01	1.5E-03	1.4E-03	9.3E-05	4.4E-05	4.1E-05
1500 - 1600	4.0E+01	3.7E+01	2.5E+00	4.4E-01	4.0E-01	1.1E-02	1.0E-02	7.0E-04	1.2E-04	1.1E-04
1600 - 1700	5.6E+01	5.3E+01	3.6E+00	5.6E-01	5.2E-01	1.6E-02	1.5E-02	9.9E-04	1.5E-04	1.4E-04
1700 - 1800	4.0E+00	3.7E+00	2.5E-01	1.2E-01	1.1E-01	1.1E-03	1.0E-03	7.0E-05	3.3E-05	3.1E-05
1800 - 1900	5.3E+00	5.0E+00	3.4E-01	1.6E-01	1.5E-01	1.5E-03	1.4E-03	9.3E-05	4.4E-05	4.1E-05
1900 - 2000	1.3E+00	1.2E+00	8.4E-02	4.0E-02	3.7E-02	3.7E-04	3.5E-04	2.3E-05	1.1E-05	1.0E-05
2000 - 2100	1.3E+01	1.2E+01	8.5E-01	2.0E-01	1.8E-01	3.7E-03	3.5E-03	2.3E-04	5.5E-05	5.1E-05
2100 - 2200	2.7E+00	2.5E+00	1.7E-01	8.0E-02	7.4E-02	7.4E-04	6.9E-04	4.7E-05	2.2E-05	2.0E-05
2200 - 2300	4.0E+00	3.7E+00	2.5E-01	1.2E-01	1.1E-01	1.1E-03	1.0E-03	7.0E-05	3.3E-05	3.1E-05
2300 - 2400	4.1E+01	3.8E+01	2.6E+00	3.2E-01	2.9E-01	1.1E-02	1.1E-02	7.3E-04	8.9E-05	8.2E-05
						max:	1.5E-02	9.9E-04	2.2E-04	2.0E-04

PTI opening hourly emission factor

NO	NO_2	RSP	FSP
0.71	0.72	0.40	0.40
0.18	0.18	0.10	0.10
0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00
0.02	0.02	0.05	0.05
0.19	0.19	0.40	0.40
0.29	0.29	0.60	0.60
0.29	0.28	0.60	0.60
0.84	0.84	1.00	1.00
0.44	0.44	0.45	0.45
0.15	0.15	0.30	0.30
0.41	0.41	0.40	0.40
0.25	0.25	0.30	0.30
0.09	0.09	0.20	0.20
0.71	0.71	0.55	0.55
1.00	1.00	0.70	0.70
0.07	0.07	0.15	0.15
0.09	0.09	0.20	0.20
0.02	0.02	0.05	0.05
0.24	0.24	0.25	0.25
0.05	0.05	0.10	0.10
0.07	0.07	0.15	0.15
0.73	0.74	0.40	0.40

Remarks:

[1] Idling Emission (g) = Idling Emission Factor (g/s) * Actual Idling time (min) * 60 * Frequency

[2] Total Idling Emission (g) = Cold Idling Emission of FBSD & FBDD (g) + Hot Idling Emission of FBSD & FBDD (g)

[3] If Actual Idling Time ≤ 1 min, Idling Emission for Start Emission Adjustment (g) = Idling rate (g/min) * Actual Idling Time (min)

If Actual Idling Time > 1 min, Idling Emission for Start Emission Adjustment (g) = Idling rate (g/min) * Maximum Duration for Adjusting Start Emission "K" (min)

Where Idling rate (g/min) = Total Idling Emission (g) / Idling Time (min), and "K" = 1 min for Diesel vehicles with SCR

[4] Adjusted Start Emission within bus terminus (g) = [Total Start Emission of FBSD & FBDD (g) - Idling Emission for Start Emission Adjustment (g)] * [Average Distance from Starting Place to Egress (m) / 700m]

Minimum value = 0 g

[5] Adjusted Start Emission outside bus terminus (g) = [Total Start Emission of FBSD & FBDD (g) - Idling Emission for Start Emission Adjustment (g)] * [Average Spread Distance outside bus terminus (m) / 700m]

Minimum value = 0 g

[6] Total Emission Inside bus terminus (g) = Total Running Emission (g) + Idling Emission (g) + Adjusted Start Emission within bus terminus (g)

Appendix 4-12 Derivation of Emission Rates of Portals

Calculation of Portal Emission - 1st Quarter

						NO_2					NO					RSP					FSP				
Road No.	Portal Description	Portal ID	Tunnel Length (km)	Hour	Total Vehicle [1] (veh/hr)	Composite Emission Factors [1] (g/veh/km)	Total Emission Rate (g/s)	% of the maximum emission rate [3]	Nearest 50m - 2/3 emission rate for each emission source (g/s)	Farest 50m - 1/3 emission rate for each emission source (g/s)	Composite Emission Factors [1] (g/veh/km)	Total Emission Rate (g/s)	% of the maximum emission rate [3]	Nearest 50m - 2/3 emission rate for each emission source (g/s)	Farest 50m - 1/3 emission rate for each emission source (g/s)	Composite Emission Factors [1] (g/veh/km)	Total Emission Rate (g/s)	% of the maximum emission rate [3]	Nearest 50m - 2/3 emission rate for each emission source (g/s)	Farest 50m - 1/3 emission rate for each emission source (g/s)	Composite Emission Factors [1] (g/veh/km)	Total Emission Rate (g/s)	% of the maximum emission rate [3]	Nearest 50m - 2/3 emission rate for each emission source (g/s)	Farest 50m - 1/3 emission rate for each emission source (g/s)
L1D	Man Cheung Street (WB)	MCSWB01-12	0.090	1	340	3.36E-02	2.85E-04	23%	3.17E-05	1.59E-05	3.61E-01	3.07E-03	23%	3.41E-04	1.70E-04	1.25E-02	5.33E-05	21%	5.92E-06	2.96E-06	1.15E-02	4.90E-05	21%	5.44E-06	2.72E-06
				2	230	3.40E-02	1.96E-04	16%	2.17E-05	1.09E-05	3.72E-01	2.14E-03	16%	2.37E-04	1.19E-04	1.28E-02	3.69E-05	15%	4.10E-06	2.05E-06	1.18E-02	3.39E-05	15%	3.77E-06	1.88E-06
				3	160	3.20E-02	1.28E-04	10%	1.42E-05	7.11E-06	3.71E-01	1.49E-03	11%	1.65E-04	8.25E-05	1.24E-02	2.47E-05	10%	2.75E-06	1.37E-06	1.14E-02	2.27E-05	10%	2.53E-06	1.26E-06
				4	100	3.23E-02	8.07E-05	7%	8.97E-06	4.48E-06	3.78E-01	9.44E-04	7%	1.05E-04	5.24E-05	1.26E-02	1.58E-05	6%	1.75E-06	8.77E-07	1.16E-02	1.45E-05	6%	1.61E-06	8.07E-07
				5	80	2.80E-02	5.59E-05	5%	6.21E-06	3.11E-06	3.61E-01	7.22E-04	5%	8.02E-05	4.01E-05	1.10E-02	1.10E-05	4%	1.23E-06	6.14E-07	1.02E-02	1.02E-05	4%	1.13E-06	5.64E-07
				6	150	3.43E-02	1.29E-04	10%	1.43E-05	7.14E-06	3.73E-01	1.40E-03	11%	1.56E-04	7.78E-05	1.16E-02	2.17E-05	9%	2.41E-06	1.21E-06	1.07E-02	2.00E-05	9%	2.22E-06	1.11E-06
				7	390	3.54E-02	3.46E-04	28%	3.84E-05	1.92E-05	3.92E-01	3.82E-03	29%	4.24E-04	2.12E-04	1.21E-02	5.91E-05	24%	6.57E-06	3.28E-06	1.12E-02	5.44E-05	24%	6.04E-06	3.02E-06
				8	710	3.63E-02	6.44E-04	52%	7.16E-05	3.58E-05	4.05E-01	7.18E-03	54%	7.98E-04	3.99E-04	1.21E-02	1.08E-04	43%	1.20E-05	5.99E-06	1.12E-02	9.92E-05	43%	1.10E-05	5.51E-06
				9	700	3.78E-02	6.61E-04	54%	7.35E-05	3.67E-05	4.21E-01	7.36E-03	56%	8.18E-04	4.09E-04	1.17E-02	1.02E-04	41%	1.14E-05	5.68E-06	1.07E-02	9.41E-05	41%	1.05E-05	5.23E-06
				10	1040	3.24E-02	8.43E-04	69%	9.36E-05	4.68E-05	3.58E-01	9.30E-03	70%	1.03E-03	5.17E-04	1.35E-02	1.75E-04	70%	1.95E-05	9.74E-06	1.24E-02	1.61E-04	71%	1.79E-05	8.97E-06
				11	990	3.35E-02	8.30E-04	68%	9.23E-05	4.61E-05	3.68E-01	9.10E-03	69%	1.01E-03	5.05E-04	1.35E-02	1.67E-04	67%	1.85E-05	9.27E-06	1.24E-02	1.54E-04	67%	1.71E-05	8.54E-06
				12	950	3.43E-02	8.14E-04	66%	9.05E-05	4.52E-05	3.73E-01	8.87E-03	67%	9.86E-04	4.93E-04	1.33E-02	1.58E-04	63%	1.76E-05	8.79E-06	1.23E-02	1.46E-04	64%	1.62E-05	8.10E-06
				13	930	3.48E-02	8.10E-04	66%	9.00E-05	4.50E-05	3.82E-01	8.88E-03	67%	9.86E-04	4.93E-04	1.33E-02	1.54E-04	62%	1.71E-05	8.56E-06	1.22E-02	1.42E-04	62%	1.58E-05	7.89E-06
				14	910	3.49E-02	7.95E-04	65%	8.83E-05	4.41E-05	3.85E-01	8.75E-03	66%	9.72E-04	4.86E-04	1.28E-02	1.46E-04	59%	1.62E-05	8.12E-06	1.18E-02	1.35E-04	59%	1.50E-05	7.48E-06
				15	830	3.58E-02	7.43E-04	60%	8.25E-05	4.13E-05	3.96E-01	8.21E-03	62%	9.13E-04	4.56E-04	1.29E-02	1.34E-04	54%	1.49E-05	7.43E-06	1.19E-02	1.23E-04	54%	1.37E-05	6.85E-06
				16	770	3.63E-02	6.99E-04	57%	7.77E-05	3.88E-05	4.02E-01	7.73E-03	58%	8.59E-04	4.29E-04	1.25E-02	1.21E-04	48%	1.34E-05	6.70E-06	1.16E-02	1.11E-04	49%	1.24E-05	6.18E-06
				17	720	3.62E-02	6.51E-04	53%	7.23E-05	3.62E-05	4.01E-01	7.21E-03	54%	8.01E-04	4.01E-04	1.21E-02	1.09E-04	44%	1.21E-05	6.06E-06	1.12E-02	1.00E-04	44%	1.12E-05	5.58E-06
				18	720	3.68E-02	6.62E-04	54%	7.35E-05	3.68E-05	4.08E-01	7.34E-03	55%	8.16E-04	4.08E-04	1.18E-02	1.06E-04	43%	1.18E-05	5.89E-06	1.08E-02	9.76E-05	43%	1.08E-05	5.42E-06
				19	1000	3.25E-02	8.12E-04	66%	9.03E-05	4.51E-05	3.54E-01	8.86E-03	67%	9.85E-04	4.92E-04	1.36E-02	1.70E-04	68%	1.89E-05	9.47E-06	1.26E-02	1.57E-04	69%	1.75E-05	8.73E-06
				20	1400	**3.51E-02**	**1.23E-03**	**100%**	**1.37E-04**	**6.83E-05**	**3.79E-01**	**1.33E-02**	**100%**	**1.47E-03**	**7.36E-04**	**1.42E-02**	**2.49E-04**	**100%**	**2.77E-05**	**1.39E-05**	**1.31E-02**	**2.29E-04**	**100%**	**2.54E-05**	**1.27E-05**
				21	1130	3.42E-02	9.65E-04	79%	1.07E-04	5.36E-05	3.73E-01	1.05E-02	79%	1.17E-03	5.85E-04	1.38E-02	1.95E-04	78%	2.17E-05	1.09E-05	1.27E-02	1.79E-04	78%	1.99E-05	9.95E-06
				22	940	3.37E-02	7.92E-04	64%	8.80E-05	4.40E-05	3.66E-01	8.60E-03	65%	9.56E-04	4.78E-04	1.34E-02	1.57E-04	63%	1.74E-05	8.72E-06	1.23E-02	1.45E-04	63%	1.61E-05	8.04E-06
				23	810	3.42E-02	6.92E-04	56%	7.68E-05	3.84E-05	3.73E-01	7.56E-03	57%	8.40E-04	4.20E-04	1.34E-02	1.36E-04	55%	1.51E-05	7.55E-06	1.24E-02	1.25E-04	55%	1.39E-05	6.96E-06
				24	600	3.32E-02	4.98E-04	41%	5.53E-05	2.77E-05	3.68E-01	5.51E-03	42%	6.13E-04	3.06E-04	1.30E-02	9.73E-05	39%	1.08E-05	5.41E-06	1.19E-02	8.96E-05	39%	9.95E-06	4.98E-06
L42J	Connaught Road Central Underpass (WB)	CRCUWB01-12	0.130	1	770	1.93E-02	5.36E-04	25%	5.95E-05	2.98E-05	2.01E-01	5.58E-03	28%	6.20E-04	3.10E-04	5.77E-03	1.61E-04	27%	1.78E-05	8.92E-06	5.29E-03	1.47E-04	27%	1.64E-05	8.18E-06
				2	450	1.88E-02	3.05E-04	14%	3.39E-05	1.70E-05	1.98E-01	3.22E-03	16%	3.58E-04	1.79E-04	5.64E-03	9.17E-05	16%	1.02E-05	5.09E-06	5.22E-03	8.48E-05	16%	9.43E-06	4.71E-06
				3	320	1.96E-02	2.26E-04	11%	2.51E-05	1.26E-05	2.02E-01	2.33E-03	12%	2.59E-04	1.30E-04	5.83E-03	6.73E-05	12%	7.48E-06	3.74E-06	5.39E-03	6.23E-05	12%	6.92E-06	3.46E-06
				4	240	2.11E-02	1.83E-04	9%	2.03E-05	1.02E-05	2.04E-01	1.77E-03	9%	1.97E-04	9.84E-05	6.00E-03	5.20E-05	9%	5.77E-06	2.89E-06	5.55E-03	4.81E-05	9%	5.34E-06	2.67E-06
				5	250	2.15E-02	1.94E-04	9%	2.15E-05	1.08E-05	2.14E-01	1.93E-03	10%	2.14E-04	1.07E-04	6.56E-03	5.92E-05	10%	6.58E-06	3.29E-06	6.07E-03	5.48E-05	10%	6.09E-06	3.04E-06
				6	370	2.21E-02	2.96E-04	14%	3.29E-05	1.64E-05	2.15E-01	2.87E-03	14%	3.19E-04	1.60E-04	6.60E-03	8.81E-05	15%	9.79E-06	4.90E-06	6.10E-03	8.15E-05	15%	9.05E-06	4.53E-06
				7	740	2.22E-02	5.93E-04	28%	6.58E-05	3.29E-05	2.17E-01	5.79E-03	29%	6.44E-04	3.22E-04	6.53E-03	1.75E-04	30%	1.94E-05	9.70E-06	5.99E-03	1.60E-04	30%	1.78E-05	8.90E-06
				8	1450	2.42E-02	1.27E-03	60%	1.41E-04	7.04E-05	2.27E-01	1.19E-02	59%	1.32E-03	6.61E-04	6.88E-03	3.60E-04	62%	4.00E-05	2.00E-05	6.32E-03	3.31E-04	61%	3.67E-05	1.84E-05
				9	2150	**2.73E-02**	**2.12E-03**	**100%**	**2.35E-04**	**1.18E-04**	2.51E-01	1.95E-02	96%	2.17E-03	1.08E-03	**7.53E-03**	**5.85E-04**	**100%**	**6.50E-05**	**3.25E-05**	**6.93E-03**	**5.38E-04**	**100%**	**5.98E-05**	**2.99E-05**
				10	2370	2.07E-02	1.77E-03	83%	1.96E-04	9.82E-05	2.25E-01	1.93E-02	95%	2.14E-03	1.07E-03	6.22E-03	5.33E-04	91%	5.92E-05	2.96E-05	5.74E-03	4.91E-04	91%	5.45E-05	2.73E-05
				11	2180	2.06E-02	1.62E-03	77%	1.81E-04	9.03E-05	2.22E-01	1.75E-02	87%	1.95E-03	9.73E-04	6.18E-03	4.86E-04	83%	5.41E-05	2.70E-05	5.69E-03	4.48E-04	83%	4.97E-05	2.49E-05
				12	2200	2.17E-02	1.73E-03	81%	1.92E-04	9.59E-05	2.28E-01	1.81E-02	89%	2.01E-03	1.00E-03	6.44E-03	5.11E-04	87%	5.68E-05	2.84E-05	5.93E-03	4.71E-04	87%	5.23E-05	2.62E-05
				13	2170	2.25E-02	1.77E-03	83%	1.96E-04	9.81E-05	2.31E-01	1.81E-02	90%	2.01E-03	1.01E-03	6.58E-03	5.16E-04	88%	5.73E-05	2.87E-05	6.06E-03	4.75E-04	88%	5.28E-05	2.64E-05
				14	1880	2.18E-02	1.48E-03	70%	1.64E-04	8.20E-05	2.21E-01	1.50E-02	74%	1.67E-03	8.33E-04	6.41E-03	4.35E-04	74%	4.84E-05	2.42E-05	5.89E-03	4.00E-04	74%	4.45E-05	2.22E-05
				15	2090	2.41E-02	1.82E-03	86%	2.02E-04	1.01E-04	2.36E-01	1.78E-02	88%	1.98E-03	9.91E-04	6.87E-03	5.19E-04	89%	5.76E-05	2.88E-05	6.32E-03	4.77E-04	89%	5.30E-05	2.65E-05
				16	1930	2.42E-02	1.68E-03	80%	1.87E-04	9.36E-05	2.33E-01	1.62E-02	80%	1.81E-03	9.03E-04	6.92E-03	4.82E-04	82%	5.36E-05	2.68E-05	6.36E-03	4.43E-04	82%	4.92E-05	2.46E-05
				17	1740	2.45E-02	1.54E-03	73%	1.71E-04	8.55E-05	2.30E-01	1.45E-02	72%	1.61E-03	8.03E-04	6.94E-03	4.36E-04	75%	4.85E-05	2.42E-05	6.38E-03	4.01E-04	74%	4.45E-05	2.23E-05
				18	1800	2.55E-02	1.66E-03	78%	1.84E-04	9.22E-05	2.35E-01	1.53E-02	76%	1.70E-03	8.49E-04	7.17E-03	4.66E-04	80%	5.18E-05	2.59E-05	6.59E-03	4.28E-04	80%	4.76E-05	2.38E-05
				19	2450	2.05E-02	1.82E-03	86%	2.02E-04	1.01E-04	**2.29E-01**	**2.02E-02**	**100%**	**2.25E-03**	**1.12E-03**	6.26E-03	5.54E-04	95%	6.16E-05	3.08E-05	5.78E-03	5.11E-04	95%	5.68E-05	2.84E-05
				20	2200	1.96E-02	1.56E-03	74%	1.73E-04	8.67E-05	2.18E-01	1.73E-02	86%	1.93E-03	9.63E-04	6.00E-03	4.77E-04	82%	5.30E-05	2.65E-05	5.53E-03	4.39E-04	82%	4.88E-05	2.44E-05
				21	1730	1.83E-02	1.14E-03	54%	1.27E-04	6.34E-05	2.03E-01	1.27E-02	63%	1.41E-03	7.03E-04	5.67E-03	3.54E-04	61%	3.93E-05	1.97E-05	5.20E-03	3.25E-04	60%	3.61E-05	1.81E-05
				22	1530	1.83E-02	1.01E-03	48%	1.12E-04	5.61E-05	2.01E-01	1.11E-02	55%	1.23E-03	6.17E-04	5.62E-03	3.11E-04	53%	3.45E-05	1.73E-05	5.16E-03	2.85E-04	53%	3.17E-05	1.58E-05
				23	1450	1.89E-02	9.90E-04	47%	1.10E-04	5.50E-05	2.04E-01	1.07E-02	53%	1.19E-03	5.94E-04	5.79E-03	3.03E-04	52%	3.37E-05	1.69E-05	5.31E-03	2.78E-04	52%	3.09E-05	1.55E-05
				24	1100	1.89E-02	7.50E-04	35%	8.33E-05	4.16E-05	2.03E-01	8.08E-03	40%	8.97E-04	4.49E-04	5.78E-03	2.30E-04	39%	2.55E-05	1.28E-05	5.36E-03	2.13E-04	40%	2.37E-05	1.18E-05

Note:

[1] Total vehicle and Calculation of composite emission factors of each pollutants are based on the year with the maximum total emission, i.e. Year 2030.

[2] For the emission rate other than the maximum emission rate, % of the maximum emission rate inputted in the AERMOD model.

[3] Bolded means the maximum emission rate.

Calculation of Portal Emission - 2nd Quarter

						NO_2					NO					RSP					FSP				
Road No.	Portal Description	Portal ID	Tunnel Length (km)	Hour	Total Vehicle [1] (veh/hr)	Composite Emission Factors [1] (g/veh/km)	Total Emission Rate (g/s)	% of the maximum emission rate [3]	Nearest 50m - 2/3 emission rate for each emission source (g/s)	Farest 50m - 1/3 emission rate for each emission source (g/s)	Composite Emission Factors [1] (g/veh/km)	Total Emission Rate (g/s)	% of the maximum emission rate [3]	Nearest 50m - 2/3 emission rate for each emission source (g/s)	Farest 50m - 1/3 emission rate for each emission source (g/s)	Composite Emission Factors [1] (g/veh/km)	Total Emission Rate (g/s)	% of the maximum emission rate [3]	Nearest 50m - 2/3 emission rate for each emission source (g/s)	Farest 50m - 1/3 emission rate for each emission source (g/s)	Composite Emission Factors [1] (g/veh/km)	Total Emission Rate (g/s)	% of the maximum emission rate [3]	Nearest 50m - 2/3 emission rate for each emission source (g/s)	Farest 50m - 1/3 emission rate for each emission source (g/s)
L1D	Man Cheung Street (WB)	MCSWB01-12	0.090	1	340	3.32E-02	2.82E-04	23%	3.13E-05	1.57E-05	3.47E-01	2.95E-03	23%	3.28E-04	1.64E-04	1.25E-02	5.33E-05	21%	5.92E-06	2.96E-06	1.15E-02	4.90E-05	21%	5.44E-06	2.72E-06
				2	230	3.36E-02	1.93E-04	16%	2.15E-05	1.07E-05	3.58E-01	2.06E-03	16%	2.29E-04	1.14E-04	1.28E-02	3.69E-05	15%	4.10E-06	2.05E-06	1.18E-02	3.39E-05	15%	3.77E-06	1.88E-06
				3	160	3.16E-02	1.26E-04	10%	1.40E-05	7.02E-06	3.57E-01	1.43E-03	11%	1.59E-04	7.93E-05	1.24E-02	2.47E-05	10%	2.75E-06	1.37E-06	1.14E-02	2.27E-05	10%	2.53E-06	1.26E-06
				4	100	3.19E-02	7.96E-05	7%	8.85E-06	4.42E-06	3.63E-01	9.07E-04	7%	1.01E-04	5.04E-05	1.26E-02	1.58E-05	6%	1.75E-06	8.77E-07	1.16E-02	1.45E-05	6%	1.61E-06	8.07E-07
				5	80	2.75E-02	5.50E-05	5%	6.11E-06	3.06E-06	3.45E-01	6.91E-04	5%	7.67E-05	3.84E-05	1.10E-02	1.10E-05	4%	1.23E-06	6.14E-07	1.02E-02	1.02E-05	4%	1.13E-06	5.64E-07
				6	150	3.38E-02	1.27E-04	10%	1.41E-05	7.05E-06	3.58E-01	1.34E-03	10%	1.49E-04	7.45E-05	1.16E-02	2.17E-05	9%	2.41E-06	1.21E-06	1.07E-02	2.00E-05	9%	2.22E-06	1.11E-06
				7	390	3.50E-02	3.41E-04	28%	3.79E-05	1.89E-05	3.76E-01	3.66E-03	29%	4.07E-04	2.03E-04	1.21E-02	5.91E-05	24%	6.57E-06	3.28E-06	1.12E-02	5.44E-05	24%	6.04E-06	3.02E-06
				8	710	3.58E-02	6.35E-04	52%	7.06E-05	3.53E-05	3.88E-01	6.88E-03	54%	7.65E-04	3.82E-04	1.21E-02	1.08E-04	43%	1.20E-05	5.99E-06	1.12E-02	9.92E-05	43%	1.10E-05	5.51E-06
				9	700	3.72E-02	6.52E-04	54%	7.24E-05	3.62E-05	4.02E-01	7.04E-03	55%	7.82E-04	3.91E-04	1.17E-02	1.02E-04	41%	1.14E-05	5.68E-06	1.07E-02	9.41E-05	41%	1.05E-05	5.23E-06
				10	1040	3.20E-02	8.33E-04	69%	9.26E-05	4.63E-05	3.46E-01	8.99E-03	70%	9.99E-04	4.99E-04	1.35E-02	1.75E-04	70%	1.95E-05	9.74E-06	1.24E-02	1.61E-04	71%	1.79E-05	8.97E-06
				11	990	3.32E-02	8.21E-04	68%	9.12E-05	4.56E-05	3.55E-01	8.78E-03	69%	9.76E-04	4.88E-04	1.35E-02	1.67E-04	67%	1.85E-05	9.27E-06	1.24E-02	1.54E-04	67%	1.71E-05	8.54E-06
				12	950	3.39E-02	8.05E-04	66%	8.94E-05	4.47E-05	3.60E-01	8.55E-03	67%	9.50E-04	4.75E-04	1.33E-02	1.58E-04	63%	1.76E-05	8.79E-06	1.23E-02	1.46E-04	64%	1.62E-05	8.10E-06
				13	930	3.44E-02	8.00E-04	66%	8.89E-05	4.45E-05	3.68E-01	8.55E-03	67%	9.50E-04	4.75E-04	1.33E-02	1.54E-04	62%	1.71E-05	8.56E-06	1.22E-02	1.42E-04	62%	1.58E-05	7.89E-06
				14	910	3.45E-02	7.85E-04	65%	8.72E-05	4.36E-05	3.70E-01	8.41E-03	66%	9.35E-04	4.67E-04	1.28E-02	1.46E-04	59%	1.62E-05	8.12E-06	1.18E-02	1.35E-04	59%	1.50E-05	7.48E-06
				15	830	3.53E-02	7.33E-04	60%	8.15E-05	4.07E-05	3.80E-01	7.89E-03	62%	8.77E-04	4.38E-04	1.29E-02	1.34E-04	54%	1.49E-05	7.43E-06	1.19E-02	1.23E-04	54%	1.37E-05	6.85E-06
				16	770	3.58E-02	6.90E-04	57%	7.66E-05	3.83E-05	3.85E-01	7.42E-03	58%	8.24E-04	4.12E-04	1.25E-02	1.21E-04	48%	1.34E-05	6.70E-06	1.16E-02	1.11E-04	49%	1.24E-05	6.18E-06
				17	720	3.57E-02	6.42E-04	53%	7.13E-05	3.57E-05	3.84E-01	6.91E-03	54%	7.68E-04	3.84E-04	1.21E-02	1.09E-04	44%	1.21E-05	6.06E-06	1.12E-02	1.00E-04	44%	1.12E-05	5.58E-06
				18	720	3.62E-02	6.52E-04	54%	7.24E-05	3.62E-05	3.90E-01	7.02E-03	55%	7.80E-04	3.90E-04	1.18E-02	1.06E-04	43%	1.18E-05	5.89E-06	1.08E-02	9.76E-05	43%	1.08E-05	5.42E-06
				19	1000	3.21E-02	8.04E-04	66%	8.93E-05	4.47E-05	3.43E-01	8.57E-03	67%	9.52E-04	4.76E-04	1.36E-02	1.70E-04	68%	1.89E-05	9.47E-06	1.26E-02	1.57E-04	69%	1.75E-05	8.73E-06
				20	1400	**3.47E-02**	**1.22E-03**	**100%**	**1.35E-04**	**6.75E-05**	**3.66E-01**	**1.28E-02**	**100%**	**1.42E-03**	**7.12E-04**	**1.42E-02**	**2.49E-04**	**100%**	**2.77E-05**	**1.39E-05**	**1.31E-02**	**2.29E-04**	**100%**	**2.54E-05**	**1.27E-05**
				21	1130	3.38E-02	9.55E-04	79%	1.06E-04	5.31E-05	3.60E-01	1.02E-02	79%	1.13E-03	5.65E-04	1.38E-02	1.95E-04	78%	2.17E-05	1.09E-05	1.27E-02	1.79E-04	78%	1.99E-05	9.95E-06
				22	940	3.33E-02	7.83E-04	64%	8.70E-05	4.35E-05	3.53E-01	8.30E-03	65%	9.22E-04	4.61E-04	1.34E-02	1.57E-04	63%	1.74E-05	8.72E-06	1.23E-02	1.45E-04	63%	1.61E-05	8.04E-06
				23	810	3.38E-02	6.84E-04	56%	7.60E-05	3.80E-05	3.60E-01	7.29E-03	57%	8.10E-04	4.05E-04	1.34E-02	1.36E-04	55%	1.51E-05	7.55E-06	1.24E-02	1.25E-04	55%	1.39E-05	6.96E-06
				24	600	3.28E-02	4.92E-04	40%	5.46E-05	2.73E-05	3.54E-01	5.31E-03	41%	5.90E-04	2.95E-04	1.30E-02	9.73E-05	39%	1.08E-05	5.41E-06	1.19E-02	8.96E-05	39%	9.95E-06	4.98E-06
L42J	Connaught Road Central Underpass (WB)	CRCUWB01-12	0.130	1	770	1.90E-02	5.27E-04	25%	5.86E-05	2.93E-05	1.91E-01	5.31E-03	28%	5.89E-04	2.95E-04	5.77E-03	1.61E-04	27%	1.78E-05	8.92E-06	5.29E-03	1.47E-04	27%	1.64E-05	8.18E-06
				2	450	1.85E-02	3.00E-04	14%	3.34E-05	1.67E-05	1.88E-01	3.06E-03	16%	3.40E-04	1.70E-04	5.64E-03	9.17E-05	16%	1.02E-05	5.09E-06	5.22E-03	8.48E-05	16%	9.43E-06	4.71E-06
				3	320	1.92E-02	2.22E-04	11%	2.47E-05	1.24E-05	1.92E-01	2.22E-03	12%	2.46E-04	1.23E-04	5.83E-03	6.73E-05	12%	7.48E-06	3.74E-06	5.39E-03	6.23E-05	12%	6.92E-06	3.46E-06
				4	240	2.08E-02	1.80E-04	9%	2.00E-05	1.00E-05	1.95E-01	1.69E-03	9%	1.87E-04	9.37E-05	6.00E-03	5.20E-05	9%	5.77E-06	2.89E-06	5.55E-03	4.81E-05	9%	5.34E-06	2.67E-06
				5	250	2.12E-02	1.91E-04	9%	2.12E-05	1.06E-05	2.04E-01	1.84E-03	10%	2.05E-04	1.02E-04	6.56E-03	5.92E-05	10%	6.58E-06	3.29E-06	6.07E-03	5.48E-05	10%	6.09E-06	3.04E-06
				6	370	2.18E-02	2.92E-04	14%	3.24E-05	1.62E-05	2.05E-01	2.74E-03	14%	3.04E-04	1.52E-04	6.60E-03	8.81E-05	15%	9.79E-06	4.90E-06	6.10E-03	8.15E-05	15%	9.05E-06	4.53E-06
				7	740	2.19E-02	5.85E-04	28%	6.50E-05	3.25E-05	2.07E-01	5.53E-03	29%	6.15E-04	3.07E-04	6.53E-03	1.75E-04	30%	1.94E-05	9.70E-06	5.99E-03	1.60E-04	30%	1.78E-05	8.90E-06
				8	1450	2.39E-02	1.25E-03	60%	1.39E-04	6.95E-05	2.17E-01	1.14E-02	59%	1.26E-03	6.31E-04	6.88E-03	3.60E-04	62%	4.00E-05	2.00E-05	6.32E-03	3.31E-04	61%	3.67E-05	1.84E-05
				9	2150	**2.70E-02**	**2.09E-03**	**100%**	**2.33E-04**	**1.16E-04**	2.40E-01	1.86E-02	97%	2.07E-03	1.04E-03	**7.53E-03**	**5.85E-04**	**100%**	**6.50E-05**	**3.25E-05**	**6.93E-03**	**5.38E-04**	**100%**	**5.98E-05**	**2.99E-05**
				10	2370	2.03E-02	1.74E-03	83%	1.93E-04	9.64E-05	2.14E-01	1.83E-02	95%	2.03E-03	1.02E-03	6.22E-03	5.33E-04	91%	5.92E-05	2.96E-05	5.74E-03	4.91E-04	91%	5.45E-05	2.73E-05
				11	2180	2.03E-02	1.60E-03	76%	1.78E-04	8.88E-05	2.11E-01	1.66E-02	87%	1.85E-03	9.23E-04	6.18E-03	4.86E-04	83%	5.41E-05	2.70E-05	5.69E-03	4.48E-04	83%	4.97E-05	2.49E-05
				12	2200	2.14E-02	1.70E-03	81%	1.89E-04	9.44E-05	2.16E-01	1.72E-02	90%	1.91E-03	9.55E-04	6.44E-03	5.11E-04	87%	5.68E-05	2.84E-05	5.93E-03	4.71E-04	87%	5.23E-05	2.62E-05
				13	2170	2.22E-02	1.74E-03	83%	1.93E-04	9.67E-05	2.20E-01	1.72E-02	90%	1.92E-03	9.58E-04	6.58E-03	5.16E-04	88%	5.73E-05	2.87E-05	6.06E-03	4.75E-04	88%	5.28E-05	2.64E-05
				14	1880	2.14E-02	1.45E-03	69%	1.62E-04	8.08E-05	2.10E-01	1.43E-02	74%	1.59E-03	7.93E-04	6.41E-03	4.35E-04	74%	4.84E-05	2.42E-05	5.89E-03	4.00E-04	74%	4.45E-05	2.22E-05
				15	2090	2.37E-02	1.79E-03	86%	1.99E-04	9.95E-05	2.25E-01	1.70E-02	89%	1.89E-03	9.45E-04	6.87E-03	5.19E-04	89%	5.76E-05	2.88E-05	6.32E-03	4.77E-04	89%	5.30E-05	2.65E-05
				16	1930	2.38E-02	1.66E-03	79%	1.85E-04	9.23E-05	2.23E-01	1.55E-02	81%	1.72E-03	8.62E-04	6.92E-03	4.82E-04	82%	5.36E-05	2.68E-05	6.36E-03	4.43E-04	82%	4.92E-05	2.46E-05
				17	1740	2.42E-02	1.52E-03	73%	1.69E-04	8.45E-05	2.20E-01	1.38E-02	72%	1.53E-03	7.67E-04	6.94E-03	4.36E-04	75%	4.85E-05	2.42E-05	6.38E-03	4.01E-04	74%	4.45E-05	2.23E-05
				18	1800	2.52E-02	1.64E-03	78%	1.82E-04	9.12E-05	2.25E-01	1.46E-02	76%	1.62E-03	8.12E-04	7.17E-03	4.66E-04	80%	5.18E-05	2.59E-05	6.59E-03	4.28E-04	80%	4.76E-05	2.38E-05
				19	2450	2.02E-02	1.78E-03	85%	1.98E-04	9.91E-05	**2.17E-01**	**1.92E-02**	**100%**	**2.13E-03**	**1.06E-03**	6.26E-03	5.54E-04	95%	6.16E-05	3.08E-05	5.78E-03	5.11E-04	95%	5.68E-05	2.84E-05
				20	2200	1.93E-02	1.53E-03	73%	1.70E-04	8.51E-05	2.07E-01	1.64E-02	86%	1.83E-03	9.13E-04	6.00E-03	4.77E-04	82%	5.30E-05	2.65E-05	5.53E-03	4.39E-04	82%	4.88E-05	2.44E-05
				21	1730	1.79E-02	1.12E-03	54%	1.25E-04	6.23E-05	1.92E-01	1.20E-02	63%	1.33E-03	6.67E-04	5.67E-03	3.54E-04	61%	3.93E-05	1.97E-05	5.20E-03	3.25E-04	60%	3.61E-05	1.81E-05
				22	1530	1.80E-02	9.92E-04	47%	1.10E-04	5.51E-05	1.91E-01	1.05E-02	55%	1.17E-03	5.85E-04	5.62E-03	3.11E-04	53%	3.45E-05	1.73E-05	5.16E-03	2.85E-04	53%	3.17E-05	1.58E-05
				23	1450	1.86E-02	9.72E-04	46%	1.08E-04	5.40E-05	1.94E-01	1.02E-02	53%	1.13E-03	5.64E-04	5.79E-03	3.03E-04	52%	3.37E-05	1.69E-05	5.31E-03	2.78E-04	52%	3.09E-05	1.55E-05
				24	1100	1.86E-02	7.39E-04	35%	8.22E-05	4.11E-05	1.93E-01	7.67E-03	40%	8.52E-04	4.26E-04	5.78E-03	2.30E-04	39%	2.55E-05	1.28E-05	5.36E-03	2.13E-04	40%	2.37E-05	1.18E-05

Note:

[1] Total vehicle and Calculation of composite emission factors of each pollutants are based on the year with the maximum total emission, i.e. Year 2030.

[2] For the emission rate other than the maximum emission rate, % of the maximum emission rate inputted in the AERMOD model.

[3] Bolded means the maximum emission rate.

Calculation of Portal Emission - 3rd Quarter

						NO_2					NO					RSP					FSP				
Road No.	Portal Description	Portal ID	Tunnel Length (km)	Hour	Total Vehicle [1] (veh/hr)	Composite Emission Factors [1] (g/veh/km)	Total Emission Rate (g/s)	% of the maximum emission rate [3]	Nearest 50m - 2/3 emission rate for each emission source (g/s)	Farest 50m - 1/3 emission rate for each emission source (g/s)	Composite Emission Factors [1] (g/veh/km)	Total Emission Rate (g/s)	% of the maximum emission rate [3]	Nearest 50m - 2/3 emission rate for each emission source (g/s)	Farest 50m - 1/3 emission rate for each emission source (g/s)	Composite Emission Factors [1] (g/veh/km)	Total Emission Rate (g/s)	% of the maximum emission rate [3]	Nearest 50m - 2/3 emission rate for each emission source (g/s)	Farest 50m - 1/3 emission rate for each emission source (g/s)	Composite Emission Factors [1] (g/veh/km)	Total Emission Rate (g/s)	% of the maximum emission rate [3]	Nearest 50m - 2/3 emission rate for each emission source (g/s)	Farest 50m - 1/3 emission rate for each emission source (g/s)
L1D	Man Cheung Street (WB)	MCSWB01-12	0.090	1	340	3.00E-02	2.55E-04	23%	2.83E-05	1.42E-05	3.01E-01	2.56E-03	23%	2.85E-04	1.42E-04	1.25E-02	5.33E-05	21%	5.92E-06	2.96E-06	1.15E-02	4.90E-05	21%	5.44E-06	2.72E-06
				2	230	3.04E-02	1.75E-04	16%	1.94E-05	9.71E-06	3.11E-01	1.79E-03	16%	1.98E-04	9.92E-05	1.28E-02	3.69E-05	15%	4.10E-06	2.05E-06	1.18E-02	3.39E-05	15%	3.77E-06	1.88E-06
				3	160	2.85E-02	1.14E-04	10%	1.27E-05	6.34E-06	3.09E-01	1.24E-03	11%	1.37E-04	6.87E-05	1.24E-02	2.47E-05	10%	2.75E-06	1.37E-06	1.14E-02	2.27E-05	10%	2.53E-06	1.26E-06
				4	100	2.87E-02	7.18E-05	7%	7.98E-06	3.99E-06	3.14E-01	7.85E-04	7%	8.73E-05	4.36E-05	1.26E-02	1.58E-05	6%	1.75E-06	8.77E-07	1.16E-02	1.45E-05	6%	1.61E-06	8.07E-07
				5	80	2.47E-02	4.94E-05	4%	5.49E-06	2.75E-06	2.97E-01	5.94E-04	5%	6.60E-05	3.30E-05	1.10E-02	1.10E-05	4%	1.23E-06	6.14E-07	1.02E-02	1.02E-05	4%	1.13E-06	5.64E-07
				6	150	3.05E-02	1.14E-04	10%	1.27E-05	6.36E-06	3.08E-01	1.16E-03	10%	1.29E-04	6.43E-05	1.16E-02	2.17E-05	9%	2.41E-06	1.21E-06	1.07E-02	2.00E-05	9%	2.22E-06	1.11E-06
				7	390	3.16E-02	3.08E-04	28%	3.42E-05	1.71E-05	3.24E-01	3.16E-03	28%	3.51E-04	1.76E-04	1.21E-02	5.91E-05	24%	6.57E-06	3.28E-06	1.12E-02	5.44E-05	24%	6.04E-06	3.02E-06
				8	710	3.23E-02	5.73E-04	52%	6.36E-05	3.18E-05	3.34E-01	5.93E-03	53%	6.59E-04	3.30E-04	1.21E-02	1.08E-04	43%	1.20E-05	5.99E-06	1.12E-02	9.92E-05	43%	1.10E-05	5.51E-06
				9	700	3.36E-02	5.87E-04	53%	6.52E-05	3.26E-05	3.45E-01	6.04E-03	54%	6.71E-04	3.36E-04	1.17E-02	1.02E-04	41%	1.14E-05	5.68E-06	1.07E-02	9.41E-05	41%	1.05E-05	5.23E-06
				10	1040	2.89E-02	7.52E-04	68%	8.36E-05	4.18E-05	3.02E-01	7.85E-03	70%	8.72E-04	4.36E-04	1.35E-02	1.75E-04	70%	1.95E-05	9.74E-06	1.24E-02	1.61E-04	71%	1.79E-05	8.97E-06
				11	990	3.00E-02	7.41E-04	67%	8.24E-05	4.12E-05	3.09E-01	7.66E-03	68%	8.51E-04	4.25E-04	1.35E-02	1.67E-04	67%	1.85E-05	9.27E-06	1.24E-02	1.54E-04	67%	1.71E-05	8.54E-06
				12	950	3.06E-02	7.27E-04	66%	8.08E-05	4.04E-05	3.13E-01	7.45E-03	66%	8.27E-04	4.14E-04	1.33E-02	1.58E-04	63%	1.76E-05	8.79E-06	1.23E-02	1.46E-04	64%	1.62E-05	8.10E-06
				13	930	3.11E-02	7.22E-04	66%	8.03E-05	4.01E-05	3.20E-01	7.43E-03	66%	8.26E-04	4.13E-04	1.33E-02	1.54E-04	62%	1.71E-05	8.56E-06	1.22E-02	1.42E-04	62%	1.58E-05	7.89E-06
				14	910	3.11E-02	7.08E-04	64%	7.87E-05	3.93E-05	3.21E-01	7.30E-03	65%	8.11E-04	4.05E-04	1.28E-02	1.46E-04	59%	1.62E-05	8.12E-06	1.18E-02	1.35E-04	59%	1.50E-05	7.48E-06
				15	830	3.19E-02	6.61E-04	60%	7.35E-05	3.67E-05	3.29E-01	6.84E-03	61%	7.59E-04	3.80E-04	1.29E-02	1.34E-04	54%	1.49E-05	7.43E-06	1.19E-02	1.23E-04	54%	1.37E-05	6.85E-06
				16	770	3.23E-02	6.22E-04	56%	6.91E-05	3.46E-05	3.33E-01	6.41E-03	57%	7.12E-04	3.56E-04	1.25E-02	1.21E-04	48%	1.34E-05	6.70E-06	1.16E-02	1.11E-04	49%	1.24E-05	6.18E-06
				17	720	3.22E-02	5.79E-04	53%	6.43E-05	3.22E-05	3.31E-01	5.96E-03	53%	6.62E-04	3.31E-04	1.21E-02	1.09E-04	44%	1.21E-05	6.06E-06	1.12E-02	1.00E-04	44%	1.12E-05	5.58E-06
				18	720	3.26E-02	5.88E-04	53%	6.53E-05	3.26E-05	3.36E-01	6.04E-03	54%	6.71E-04	3.36E-04	1.18E-02	1.06E-04	43%	1.18E-05	5.89E-06	1.08E-02	9.76E-05	43%	1.08E-05	5.42E-06
				19	1000	2.90E-02	7.26E-04	66%	8.07E-05	4.03E-05	3.00E-01	7.49E-03	67%	8.32E-04	4.16E-04	1.36E-02	1.70E-04	68%	1.89E-05	9.47E-06	1.26E-02	1.57E-04	69%	1.75E-05	8.73E-06
				20	1400	**3.15E-02**	**1.10E-03**	**100%**	**1.22E-04**	**6.12E-05**	**3.20E-01**	**1.12E-02**	**100%**	**1.24E-03**	**6.22E-04**	**1.42E-02**	**2.49E-04**	**100%**	**2.77E-05**	**1.39E-05**	**1.31E-02**	**2.29E-04**	**100%**	**2.54E-05**	**1.27E-05**
				21	1130	3.05E-02	8.63E-04	78%	9.58E-05	4.79E-05	3.14E-01	8.88E-03	79%	9.86E-04	4.93E-04	1.38E-02	1.95E-04	78%	2.17E-05	1.09E-05	1.27E-02	1.79E-04	78%	1.99E-05	9.95E-06
				22	940	3.01E-02	7.07E-04	64%	7.86E-05	3.93E-05	3.08E-01	7.23E-03	65%	8.04E-04	4.02E-04	1.34E-02	1.57E-04	63%	1.74E-05	8.72E-06	1.23E-02	1.45E-04	63%	1.61E-05	8.04E-06
				23	810	3.05E-02	6.17E-04	56%	6.86E-05	3.43E-05	3.14E-01	6.35E-03	57%	7.06E-04	3.53E-04	1.34E-02	1.36E-04	55%	1.51E-05	7.55E-06	1.24E-02	1.25E-04	55%	1.39E-05	6.96E-06
				24	600	2.96E-02	4.44E-04	40%	4.94E-05	2.47E-05	3.08E-01	4.62E-03	41%	5.13E-04	2.57E-04	1.30E-02	9.73E-05	39%	1.08E-05	5.41E-06	1.19E-02	8.96E-05	39%	9.95E-06	4.98E-06
L42J	Connaught Road Central Underpass (WB)	CRCUWB01-12	0.130	1	770	1.71E-02	4.75E-04	25%	5.28E-05	2.64E-05	1.62E-01	4.51E-03	28%	5.01E-04	2.51E-04	5.77E-03	1.61E-04	27%	1.78E-05	8.92E-06	5.29E-03	1.47E-04	27%	1.64E-05	8.18E-06
				2	450	1.66E-02	2.71E-04	14%	3.01E-05	1.50E-05	1.60E-01	2.60E-03	16%	2.89E-04	1.44E-04	5.64E-03	9.17E-05	16%	1.02E-05	5.09E-06	5.22E-03	8.48E-05	16%	9.43E-06	4.71E-06
				3	320	1.74E-02	2.00E-04	11%	2.23E-05	1.11E-05	1.63E-01	1.89E-03	12%	2.10E-04	1.05E-04	5.83E-03	6.73E-05	12%	7.48E-06	3.74E-06	5.39E-03	6.23E-05	12%	6.92E-06	3.46E-06
				4	240	1.88E-02	1.63E-04	9%	1.81E-05	9.05E-06	1.66E-01	1.44E-03	9%	1.60E-04	8.00E-05	6.00E-03	5.20E-05	9%	5.77E-06	2.89E-06	5.55E-03	4.81E-05	9%	5.34E-06	2.67E-06
				5	250	1.91E-02	1.73E-04	9%	1.92E-05	9.59E-06	1.75E-01	1.58E-03	10%	1.75E-04	8.76E-05	6.56E-03	5.92E-05	10%	6.58E-06	3.29E-06	6.07E-03	5.48E-05	10%	6.09E-06	3.04E-06
				6	370	1.97E-02	2.64E-04	14%	2.93E-05	1.47E-05	1.76E-01	2.35E-03	14%	2.61E-04	1.30E-04	6.60E-03	8.81E-05	15%	9.79E-06	4.90E-06	6.10E-03	8.15E-05	15%	9.05E-06	4.53E-06
				7	740	1.98E-02	5.29E-04	28%	5.87E-05	2.94E-05	1.77E-01	4.74E-03	29%	5.26E-04	2.63E-04	6.53E-03	1.75E-04	30%	1.94E-05	9.70E-06	5.99E-03	1.60E-04	30%	1.78E-05	8.90E-06
				8	1450	2.16E-02	1.13E-03	60%	1.26E-04	6.28E-05	1.86E-01	9.76E-03	60%	1.08E-03	5.42E-04	6.88E-03	3.60E-04	62%	4.00E-05	2.00E-05	6.32E-03	3.31E-04	61%	3.67E-05	1.84E-05
				9	2150	**2.44E-02**	**1.89E-03**	**100%**	**2.11E-04**	**1.05E-04**	2.07E-01	1.60E-02	99%	1.78E-03	8.91E-04	**7.53E-03**	**5.85E-04**	**100%**	**6.50E-05**	**3.25E-05**	**6.93E-03**	**5.38E-04**	**100%**	**5.98E-05**	**2.99E-05**
				10	2370	1.82E-02	1.56E-03	82%	1.73E-04	8.65E-05	1.81E-01	1.55E-02	95%	1.72E-03	8.61E-04	6.22E-03	5.33E-04	91%	5.92E-05	2.96E-05	5.74E-03	4.91E-04	91%	5.45E-05	2.73E-05
				11	2180	1.82E-02	1.43E-03	75%	1.59E-04	7.95E-05	1.79E-01	1.41E-02	87%	1.57E-03	7.84E-04	6.18E-03	4.86E-04	83%	5.41E-05	2.70E-05	5.69E-03	4.48E-04	83%	4.97E-05	2.49E-05
				12	2200	1.92E-02	1.52E-03	80%	1.69E-04	8.46E-05	1.84E-01	1.46E-02	90%	1.63E-03	8.13E-04	6.44E-03	5.11E-04	87%	5.68E-05	2.84E-05	5.93E-03	4.71E-04	87%	5.23E-05	2.62E-05
				13	2170	1.99E-02	1.56E-03	82%	1.74E-04	8.68E-05	1.88E-01	1.47E-02	91%	1.63E-03	8.17E-04	6.58E-03	5.16E-04	88%	5.73E-05	2.87E-05	6.06E-03	4.75E-04	88%	5.28E-05	2.64E-05
				14	1880	1.93E-02	1.31E-03	69%	1.46E-04	7.28E-05	1.79E-01	1.22E-02	75%	1.35E-03	6.77E-04	6.41E-03	4.35E-04	74%	4.84E-05	2.42E-05	5.89E-03	4.00E-04	74%	4.45E-05	2.22E-05
				15	2090	2.14E-02	1.62E-03	85%	1.80E-04	8.98E-05	1.93E-01	1.46E-02	90%	1.62E-03	8.09E-04	6.87E-03	5.19E-04	89%	5.76E-05	2.88E-05	6.32E-03	4.77E-04	89%	5.30E-05	2.65E-05
				16	1930	2.15E-02	1.50E-03	79%	1.67E-04	8.33E-05	1.91E-01	1.33E-02	82%	1.48E-03	7.39E-04	6.92E-03	4.82E-04	82%	5.36E-05	2.68E-05	6.36E-03	4.43E-04	82%	4.92E-05	2.46E-05
				17	1740	2.19E-02	1.37E-03	72%	1.53E-04	7.63E-05	1.89E-01	1.19E-02	73%	1.32E-03	6.59E-04	6.94E-03	4.36E-04	75%	4.85E-05	2.42E-05	6.38E-03	4.01E-04	74%	4.45E-05	2.23E-05
				18	1800	2.28E-02	1.48E-03	78%	1.65E-04	8.24E-05	1.94E-01	1.26E-02	77%	1.40E-03	6.99E-04	7.17E-03	4.66E-04	80%	5.18E-05	2.59E-05	6.59E-03	4.28E-04	80%	4.76E-05	2.38E-05
				19	2450	1.81E-02	1.60E-03	84%	1.78E-04	8.88E-05	**1.83E-01**	**1.62E-02**	**100%**	**1.80E-03**	**9.02E-04**	6.26E-03	5.54E-04	95%	6.16E-05	3.08E-05	5.78E-03	5.11E-04	95%	5.68E-05	2.84E-05
				20	2200	1.72E-02	1.37E-03	72%	1.52E-04	7.61E-05	1.75E-01	1.39E-02	86%	1.55E-03	7.74E-04	6.00E-03	4.77E-04	82%	5.30E-05	2.65E-05	5.53E-03	4.39E-04	82%	4.88E-05	2.44E-05
				21	1730	1.61E-02	1.00E-03	53%	1.12E-04	5.58E-05	1.63E-01	1.02E-02	63%	1.13E-03	5.65E-04	5.67E-03	3.54E-04	61%	3.93E-05	1.97E-05	5.20E-03	3.25E-04	60%	3.61E-05	1.81E-05
				22	1530	1.61E-02	8.90E-04	47%	9.89E-05	4.94E-05	1.62E-01	8.93E-03	55%	9.93E-04	4.96E-04	5.62E-03	3.11E-04	53%	3.45E-05	1.73E-05	5.16E-03	2.85E-04	53%	3.17E-05	1.58E-05
				23	1450	1.67E-02	8.73E-04	46%	9.70E-05	4.85E-05	1.65E-01	8.63E-03	53%	9.58E-04	4.79E-04	5.79E-03	3.03E-04	52%	3.37E-05	1.69E-05	5.31E-03	2.78E-04	52%	3.09E-05	1.55E-05
				24	1100	1.67E-02	6.64E-04	35%	7.38E-05	3.69E-05	1.64E-01	6.52E-03	40%	7.24E-04	3.62E-04	5.78E-03	2.30E-04	39%	2.55E-05	1.28E-05	5.36E-03	2.13E-04	40%	2.37E-05	1.18E-05

Note:

[1] Total vehicle and Calculation of composite emission factors of each pollutants are based on the year with the maximum total emission, i.e. Year 2030.

[2] For the emission rate other than the maximum emission rate, % of the maximum emission rate inputted in the AERMOD model.

[3] Bolded means the maximum emission rate.

Calculation of Portal Emission - 4th Quarter

						NO_2					NO					RSP					FSP				
Road No.	Portal Description	Portal ID	Tunnel Length (km)	Hour	Total Vehicle [1] (veh/hr)	Composite Emission Factors [1] (g/veh/km)	Total Emission Rate (g/s)	% of the maximum emission rate [3]	Nearest 50m - 2/3 emission rate for each emission source (g/s)	Farest 50m - 1/3 emission rate for each emission source (g/s)	Composite Emission Factors [1] (g/veh/km)	Total Emission Rate (g/s)	% of the maximum emission rate [3]	Nearest 50m - 2/3 emission rate for each emission source (g/s)	Farest 50m - 1/3 emission rate for each emission source (g/s)	Composite Emission Factors [1] (g/veh/km)	Total Emission Rate (g/s)	% of the maximum emission rate [3]	Nearest 50m - 2/3 emission rate for each emission source (g/s)	Farest 50m - 1/3 emission rate for each emission source (g/s)	Composite Emission Factors [1] (g/veh/km)	Total Emission Rate (g/s)	% of the maximum emission rate [3]	Nearest 50m - 2/3 emission rate for each emission source (g/s)	Farest 50m - 1/3 emission rate for each emission source (g/s)
L1D	Man Cheung Street (WB)	MCSWB01-12	0.090	1	340	3.37E-02	2.87E-04	23%	3.18E-05	1.59E-05	3.59E-01	3.05E-03	23%	3.39E-04	1.70E-04	1.25E-02	5.33E-05	21%	5.92E-06	2.96E-06	1.15E-02	4.90E-05	21%	5.44E-06	2.72E-06
				2	230	3.42E-02	1.96E-04	16%	2.18E-05	1.09E-05	3.70E-01	2.13E-03	16%	2.37E-04	1.18E-04	1.28E-02	3.69E-05	15%	4.10E-06	2.05E-06	1.18E-02	3.39E-05	15%	3.77E-06	1.88E-06
				3	160	3.21E-02	1.29E-04	10%	1.43E-05	7.14E-06	3.70E-01	1.48E-03	11%	1.64E-04	8.22E-05	1.24E-02	2.47E-05	10%	2.75E-06	1.37E-06	1.14E-02	2.27E-05	10%	2.53E-06	1.26E-06
				4	100	3.24E-02	8.10E-05	7%	9.00E-06	4.50E-06	3.76E-01	9.40E-04	7%	1.04E-04	5.22E-05	1.26E-02	1.58E-05	6%	1.75E-06	8.77E-07	1.16E-02	1.45E-05	6%	1.61E-06	8.07E-07
				5	80	2.80E-02	5.61E-05	5%	6.23E-06	3.12E-06	3.59E-01	7.18E-04	5%	7.98E-05	3.99E-05	1.10E-02	1.10E-05	4%	1.23E-06	6.14E-07	1.02E-02	1.02E-05	4%	1.13E-06	5.64E-07
				6	150	3.44E-02	1.29E-04	10%	1.43E-05	7.17E-06	3.71E-01	1.39E-03	11%	1.55E-04	7.74E-05	1.16E-02	2.17E-05	9%	2.41E-06	1.21E-06	1.07E-02	2.00E-05	9%	2.22E-06	1.11E-06
				7	390	3.56E-02	3.47E-04	28%	3.85E-05	1.93E-05	3.90E-01	3.80E-03	29%	4.22E-04	2.11E-04	1.21E-02	5.91E-05	24%	6.57E-06	3.28E-06	1.12E-02	5.44E-05	24%	6.04E-06	3.02E-06
				8	710	3.64E-02	6.45E-04	52%	7.17E-05	3.59E-05	4.03E-01	7.15E-03	54%	7.94E-04	3.97E-04	1.21E-02	1.08E-04	43%	1.20E-05	5.99E-06	1.12E-02	9.92E-05	43%	1.10E-05	5.51E-06
				9	700	3.78E-02	6.62E-04	54%	7.36E-05	3.68E-05	4.18E-01	7.32E-03	55%	8.14E-04	4.07E-04	1.17E-02	1.02E-04	41%	1.14E-05	5.68E-06	1.07E-02	9.41E-05	41%	1.05E-05	5.23E-06
				10	1040	3.25E-02	8.46E-04	69%	9.40E-05	4.70E-05	3.57E-01	9.28E-03	70%	1.03E-03	5.15E-04	1.35E-02	1.75E-04	70%	1.95E-05	9.74E-06	1.24E-02	1.61E-04	71%	1.79E-05	8.97E-06
				11	990	3.37E-02	8.33E-04	68%	9.26E-05	4.63E-05	3.66E-01	9.07E-03	69%	1.01E-03	5.04E-04	1.35E-02	1.67E-04	67%	1.85E-05	9.27E-06	1.24E-02	1.54E-04	67%	1.71E-05	8.54E-06
				12	950	3.44E-02	8.17E-04	66%	9.08E-05	4.54E-05	3.72E-01	8.84E-03	67%	9.82E-04	4.91E-04	1.33E-02	1.58E-04	63%	1.76E-05	8.79E-06	1.23E-02	1.46E-04	64%	1.62E-05	8.10E-06
				13	930	3.50E-02	8.13E-04	66%	9.03E-05	4.52E-05	3.80E-01	8.85E-03	67%	9.83E-04	4.91E-04	1.33E-02	1.54E-04	62%	1.71E-05	8.56E-06	1.22E-02	1.42E-04	62%	1.58E-05	7.89E-06
				14	910	3.50E-02	7.97E-04	65%	8.86E-05	4.43E-05	3.83E-01	8.71E-03	66%	9.68E-04	4.84E-04	1.28E-02	1.46E-04	59%	1.62E-05	8.12E-06	1.18E-02	1.35E-04	59%	1.50E-05	7.48E-06
				15	830	3.59E-02	7.45E-04	60%	8.28E-05	4.14E-05	3.94E-01	8.18E-03	62%	9.09E-04	4.54E-04	1.29E-02	1.34E-04	54%	1.49E-05	7.43E-06	1.19E-02	1.23E-04	54%	1.37E-05	6.85E-06
				16	770	3.64E-02	7.01E-04	57%	7.79E-05	3.90E-05	4.00E-01	7.69E-03	58%	8.55E-04	4.27E-04	1.25E-02	1.21E-04	48%	1.34E-05	6.70E-06	1.16E-02	1.11E-04	49%	1.24E-05	6.18E-06
				17	720	3.62E-02	6.52E-04	53%	7.24E-05	3.62E-05	3.99E-01	7.17E-03	54%	7.97E-04	3.99E-04	1.21E-02	1.09E-04	44%	1.21E-05	6.06E-06	1.12E-02	1.00E-04	44%	1.12E-05	5.58E-06
				18	720	3.68E-02	6.62E-04	54%	7.36E-05	3.68E-05	4.06E-01	7.30E-03	55%	8.11E-04	4.06E-04	1.18E-02	1.06E-04	43%	1.18E-05	5.89E-06	1.08E-02	9.76E-05	43%	1.08E-05	5.42E-06
				19	1000	3.26E-02	8.16E-04	66%	9.06E-05	4.53E-05	3.54E-01	8.84E-03	67%	9.82E-04	4.91E-04	1.36E-02	1.70E-04	68%	1.89E-05	9.47E-06	1.26E-02	1.57E-04	69%	1.75E-05	8.73E-06
				20	1400	**3.53E-02**	**1.23E-03**	**100%**	**1.37E-04**	**6.86E-05**	**3.78E-01**	**1.32E-02**	**100%**	**1.47E-03**	**7.35E-04**	**1.42E-02**	**2.49E-04**	**100%**	**2.77E-05**	**1.39E-05**	**1.31E-02**	**2.29E-04**	**100%**	**2.54E-05**	**1.27E-05**
				21	1130	3.43E-02	9.69E-04	79%	1.08E-04	5.39E-05	3.72E-01	1.05E-02	79%	1.17E-03	5.83E-04	1.38E-02	1.95E-04	78%	2.17E-05	1.09E-05	1.27E-02	1.79E-04	78%	1.99E-05	9.95E-06
				22	940	3.38E-02	7.95E-04	64%	8.84E-05	4.42E-05	3.65E-01	8.57E-03	65%	9.53E-04	4.76E-04	1.34E-02	1.57E-04	63%	1.74E-05	8.72E-06	1.23E-02	1.45E-04	63%	1.61E-05	8.04E-06
				23	810	3.43E-02	6.94E-04	56%	7.71E-05	3.86E-05	3.72E-01	7.54E-03	57%	8.37E-04	4.19E-04	1.34E-02	1.36E-04	55%	1.51E-05	7.55E-06	1.24E-02	1.25E-04	55%	1.39E-05	6.96E-06
				24	600	3.33E-02	4.99E-04	40%	5.54E-05	2.77E-05	3.66E-01	5.49E-03	42%	6.11E-04	3.05E-04	1.30E-02	9.73E-05	39%	1.08E-05	5.41E-06	1.19E-02	8.96E-05	39%	9.95E-06	4.98E-06
L42J	Connaught Road Central Underpass (WB)	CRCUWB01-12	0.130	1	770	1.93E-02	5.37E-04	25%	5.97E-05	2.98E-05	1.99E-01	5.54E-03	28%	6.16E-04	3.08E-04	5.77E-03	1.61E-04	27%	1.78E-05	8.92E-06	5.29E-03	1.47E-04	27%	1.64E-05	8.18E-06
				2	450	1.88E-02	3.06E-04	14%	3.40E-05	1.70E-05	1.97E-01	3.20E-03	16%	3.55E-04	1.78E-04	5.64E-03	9.17E-05	16%	1.02E-05	5.09E-06	5.22E-03	8.48E-05	16%	9.43E-06	4.71E-06
				3	320	1.96E-02	2.27E-04	11%	2.52E-05	1.26E-05	2.00E-01	2.31E-03	12%	2.57E-04	1.29E-04	5.83E-03	6.73E-05	12%	7.48E-06	3.74E-06	5.39E-03	6.23E-05	12%	6.92E-06	3.46E-06
				4	240	2.12E-02	1.84E-04	9%	2.04E-05	1.02E-05	2.03E-01	1.76E-03	9%	1.96E-04	9.78E-05	6.00E-03	5.20E-05	9%	5.77E-06	2.89E-06	5.55E-03	4.81E-05	9%	5.34E-06	2.67E-06
				5	250	2.15E-02	1.94E-04	9%	2.16E-05	1.08E-05	2.12E-01	1.92E-03	10%	2.13E-04	1.07E-04	6.56E-03	5.92E-05	10%	6.58E-06	3.29E-06	6.07E-03	5.48E-05	10%	6.09E-06	3.04E-06
				6	370	2.22E-02	2.97E-04	14%	3.30E-05	1.65E-05	2.14E-01	2.85E-03	14%	3.17E-04	1.59E-04	6.60E-03	8.81E-05	15%	9.79E-06	4.90E-06	6.10E-03	8.15E-05	15%	9.05E-06	4.53E-06
				7	740	2.23E-02	5.95E-04	28%	6.61E-05	3.30E-05	2.15E-01	5.76E-03	29%	6.40E-04	3.20E-04	6.53E-03	1.75E-04	30%	1.94E-05	9.70E-06	5.99E-03	1.60E-04	30%	1.78E-05	8.90E-06
				8	1450	2.42E-02	1.27E-03	60%	1.41E-04	7.05E-05	2.26E-01	1.18E-02	59%	1.31E-03	6.57E-04	6.88E-03	3.60E-04	62%	4.00E-05	2.00E-05	6.32E-03	3.31E-04	61%	3.67E-05	1.84E-05
				9	2150	**2.74E-02**	**2.13E-03**	**100%**	**2.36E-04**	**1.18E-04**	2.50E-01	1.94E-02	97%	2.15E-03	1.08E-03	**7.53E-03**	**5.85E-04**	**100%**	**6.50E-05**	**3.25E-05**	**6.93E-03**	**5.38E-04**	**100%**	**5.98E-05**	**2.99E-05**
				10	2370	2.07E-02	1.77E-03	83%	1.97E-04	9.85E-05	2.23E-01	1.91E-02	95%	2.12E-03	1.06E-03	6.22E-03	5.33E-04	91%	5.92E-05	2.96E-05	5.74E-03	4.91E-04	91%	5.45E-05	2.73E-05
				11	2180	2.06E-02	1.62E-03	76%	1.81E-04	9.03E-05	2.21E-01	1.74E-02	87%	1.93E-03	9.66E-04	6.18E-03	4.86E-04	83%	5.41E-05	2.70E-05	5.69E-03	4.48E-04	83%	4.97E-05	2.49E-05
				12	2200	2.17E-02	1.73E-03	81%	1.92E-04	9.59E-05	2.26E-01	1.80E-02	90%	2.00E-03	9.98E-04	6.44E-03	5.11E-04	87%	5.68E-05	2.84E-05	5.93E-03	4.71E-04	87%	5.23E-05	2.62E-05
				13	2170	2.26E-02	1.77E-03	83%	1.96E-04	9.82E-05	2.30E-01	1.80E-02	90%	2.00E-03	1.00E-03	6.58E-03	5.16E-04	88%	5.73E-05	2.87E-05	6.06E-03	4.75E-04	88%	5.28E-05	2.64E-05
				14	1880	2.18E-02	1.48E-03	70%	1.65E-04	8.23E-05	2.19E-01	1.49E-02	74%	1.65E-03	8.27E-04	6.41E-03	4.35E-04	74%	4.84E-05	2.42E-05	5.89E-03	4.00E-04	74%	4.45E-05	2.22E-05
				15	2090	2.41E-02	1.82E-03	86%	2.02E-04	1.01E-04	2.35E-01	1.77E-02	88%	1.97E-03	9.85E-04	6.87E-03	5.19E-04	89%	5.76E-05	2.88E-05	6.32E-03	4.77E-04	89%	5.30E-05	2.65E-05
				16	1930	2.43E-02	1.69E-03	79%	1.88E-04	9.39E-05	2.32E-01	1.62E-02	81%	1.79E-03	8.97E-04	6.92E-03	4.82E-04	82%	5.36E-05	2.68E-05	6.36E-03	4.43E-04	82%	4.92E-05	2.46E-05
				17	1740	2.46E-02	1.55E-03	73%	1.72E-04	8.58E-05	2.29E-01	1.44E-02	72%	1.60E-03	7.99E-04	6.94E-03	4.36E-04	75%	4.85E-05	2.42E-05	6.38E-03	4.01E-04	74%	4.45E-05	2.23E-05
				18	1800	2.56E-02	1.67E-03	78%	1.85E-04	9.26E-05	2.34E-01	1.52E-02	76%	1.69E-03	8.44E-04	7.17E-03	4.66E-04	80%	5.18E-05	2.59E-05	6.59E-03	4.28E-04	80%	4.76E-05	2.38E-05
				19	2450	2.06E-02	1.82E-03	86%	2.02E-04	1.01E-04	**2.27E-01**	**2.01E-02**	**100%**	**2.23E-03**	**1.11E-03**	6.26E-03	5.54E-04	95%	6.16E-05	3.08E-05	5.78E-03	5.11E-04	95%	5.68E-05	2.84E-05
				20	2200	1.96E-02	1.56E-03	73%	1.73E-04	8.66E-05	2.17E-01	1.72E-02	86%	1.91E-03	9.56E-04	6.00E-03	4.77E-04	82%	5.30E-05	2.65E-05	5.53E-03	4.39E-04	82%	4.88E-05	2.44E-05
				21	1730	1.83E-02	1.14E-03	54%	1.27E-04	6.35E-05	2.01E-01	1.26E-02	63%	1.40E-03	6.98E-04	5.67E-03	3.54E-04	61%	3.93E-05	1.97E-05	5.20E-03	3.25E-04	60%	3.61E-05	1.81E-05
				22	1530	1.83E-02	1.01E-03	47%	1.12E-04	5.61E-05	2.00E-01	1.10E-02	55%	1.22E-03	6.12E-04	5.62E-03	3.11E-04	53%	3.45E-05	1.73E-05	5.16E-03	2.85E-04	53%	3.17E-05	1.58E-05
				23	1450	1.89E-02	9.90E-04	47%	1.10E-04	5.50E-05	2.03E-01	1.06E-02	53%	1.18E-03	5.90E-04	5.79E-03	3.03E-04	52%	3.37E-05	1.69E-05	5.31E-03	2.78E-04	52%	3.09E-05	1.55E-05
				24	1100	1.89E-02	7.51E-04	35%	8.35E-05	4.17E-05	2.02E-01	8.02E-03	40%	8.91E-04	4.45E-04	5.78E-03	2.30E-04	39%	2.55E-05	1.28E-05	5.36E-03	2.13E-04	40%	2.37E-05	1.18E-05

Note:

[1] Total vehicle and Calculation of composite emission factors of each pollutants are based on the year with the maximum total emission, i.e. Year 2030.

[2] For the emission rate other than the maximum emission rate, % of the maximum emission rate inputted in the AERMOD model.

[3] Bolded means the maximum emission rate.

Appendix 4-13 Traffic Forecast for Air Quality Impact Assessment (Traffic Forecast for Years 2030, 2037 and 2045) (provided in CD)

Appendix 4-14 EMFAC-HK Information (EMFAC-HK Information for Years 2030, 2037 and 2045) (provided in CD)

Appendix 4-15 Summary of Total Pollutant Emission (from EMFAC-HK)

Summary of Total Pollutant Emissions (from EMFAC-HK)

Annual Minimum Hourly Temperature and Relative Humidity

Temperature: 8 °C

Relative Humidity 21 %

Total Emission per day

	NO2 (g)	NO (g)	NOx (g)	RSP (g)	FSP (g)
Year 2030	4522.2	49878.4	54400.6	1689.4	1549.2
Year 2037	3972.8	29875.7	33848.5	764.5	703.8
Year 2045	4310.8	31982.1	36292.9	785.6	725.1

Total Emission per year

	NO2 (g)	NO (g)	NOx (g)	RSP (g)	FSP (g)
Year 2030	1,650,595.84	18,205,608.93	19,856,204.77	616,617.48	565,446.65
Year 2037	1,450,080.55	10,904,613.25	12,354,693.80	279,052.89	256,894.48
Year 2045	1,573,428.52	11,673,472.20	13,246,900.72	286,740.79	264,673.52

Appendix 4-16 Calculation of Surface Roughness for CALINE4

Estimation of Area-weighted Surface Roughness		
Nature of Use	**Typical Surface Roughness (cm)**	**% of Area within Study Area**
Sea	0.1	3%
Medium/low-rise Development Area	100	0%
Urban Area	370	97%
Area-weighted surface roughness, z_0 (cm) =		359
Surface roughness factor		1.89

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Appendix 4-17 Derivation of Cumulative Annual Average NO_x to NO_2 Conversion Equation Using Jenkin Method

DERIVATION OF CUMULATIVE ANNUAL AVERAGE NO_X TO NO_2 CONVERSION EQUATION USING JENKIN METHOD

Introduction

In order not to overestimate the NO_2 emissions during the conversion of NO_x to NO_2, besides Ozone Limiting Method (OLM) and Discrete Parcel Method (DPM), an alternative method using the Jenkin Method[1] is proposed. This method can estimate annual NO_2 based on a project-specific empirical relationship of NO_x to NO_2 derived from a fitted curve by making reference to the monitoring data of annual NO_2 and NO_x.

Jenkin Method

With reference to "*Review of Methods for NO to NO_2 Conversion in Plumes at Short Ranges*" published by Environment Agency of UK in 2007[2], the annual NO_2 concentrations can be estimated by adopting Jenkin Method with the derived project-specific empirical relationship of NO_x to NO_2 and the latest available and representative data from EPD's air quality monitoring stations (AQMSs). The empirical relationship can be described by selected monitoring data of annual average NO_2 & NO_x concentrations and fitted curve[1]. The annual average NO_2 concentrations can then be determined from the functional form curve by using the total annual average NO_x concentrations. The functional form is presented as below[1]:

$$[NO_2] = \frac{\left([NO_x] + [O_x] + \frac{J}{k}\right) - \sqrt{\left([NO_x] + [O_x] + \frac{J}{k}\right)^2 - 4 \times [NO_x] \times [O_x]}}{2}$$

where

$[NO_2]$ is Annual Average NO_2 Concentration;

$[NO_x]$ is Annual Average NO_x Concentration;

$[O_x]$ is the Sum of Annual Average NO_2 Concentration and Annual Average O_3 Concentration (i.e. $[O_x] = [NO_2] + [O_3]$;

J is the Photolysis Rate of NO_2;

k is the Rate Coefficient for the Reaction between NO and O_3.

Derivation Process

<u>Adoption of Representative Data from EPD's AQMSs</u>

Three AQMSs are selected to analyse the relationship between the annual average NO_x and NO_2 concentrations, including Central/Western & Tap Mun General Stations, and Central Roadside Stations. The latest five years (i.e. 2018 to 2022) annual average data of NO_2, NO_x and O_3 are extracted from "*Annual Quality in Hong Kong*" published by EPD and presented in **Table 1** below. Besides, the annual average O_x (i.e. $[NO_2] + [O_3]$) is also presented in **Table 1**.

[1] J. M. E., "*Analysis of Sources and Partitioning of Oxidant in the UK – Park 1: The NO_x-dependence of Annual Mean Concentrations of Nitrogen Dioxide and Ozone*", Atmospheric Environment, 2004.

[2] "*Review of Methods for NO to NO_2 Conversion in Plumes at Short Ranges*", Environment Agent of UK, UK, 2007.

Table 1 Annual Average of NO_2, NO_x and O_3 Concentrations in Latest Five Years at Selected EPD's AQMSs

Year	Location	Annual Average NO_2	Annual Average NO_x	Annual Average O_3	Annual Average O_x
2018	Tap Mun	11	13	72	83
2019	Tap Mun	10	12	80	90
2020	Tap Mun	9	11	71	80
2021	Tap Mun	10	12	75	85
2022	Tap Mun	8	13	76	84
2018	Central/Western	39	56	53	92
2019	Central/Western	37	48	65	102
2020	Central/Western	32	41	53	85
2021	Central/Western	33	41	61	94
2022	Central/Western	30	38	70	100
2018	Central	80	186	25	105
2019	Central	80	172	36	116
2020	Central	68	151	35	103
2021	Central	68	150	32	100
2022	Central	62	132	37	99

Plotting and Fitting Functional Form Curve

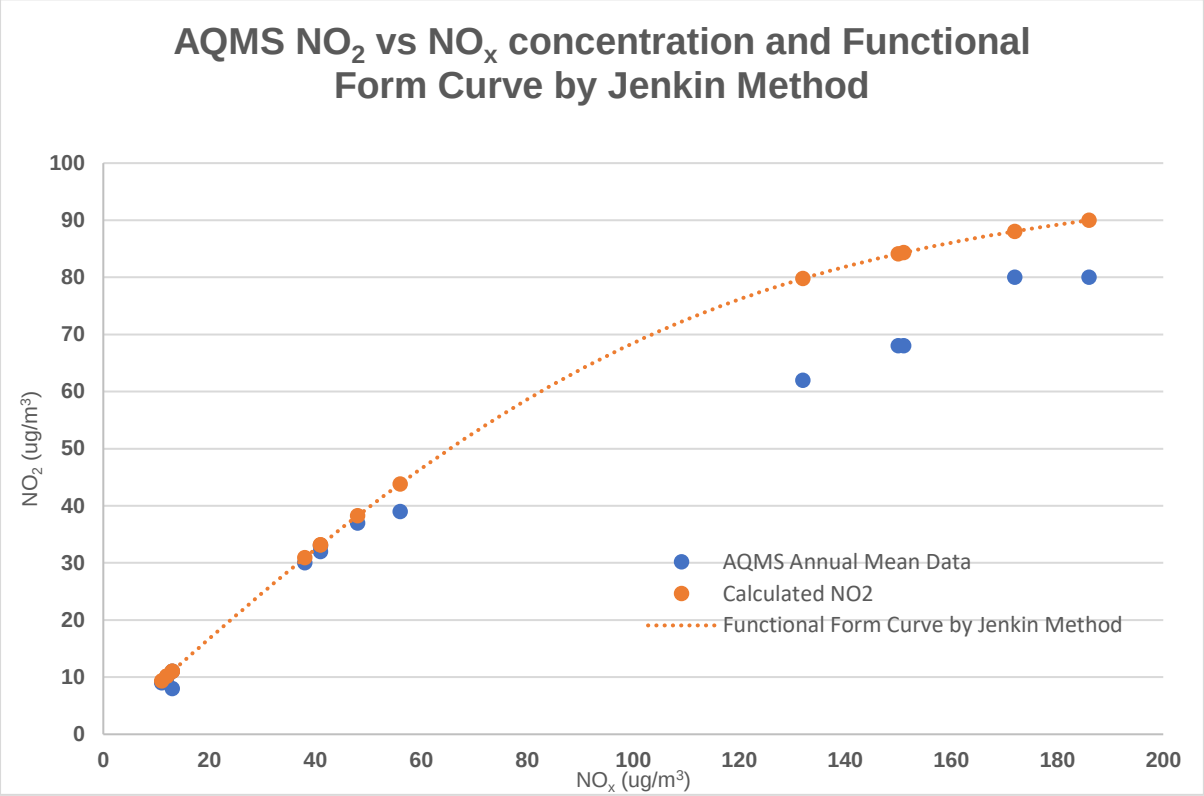
With the use of $[O_x]$ = 106.2mg/m^3 and 17.3 mg/m^3, annual average NO_2 concentrations can be calculated from the functional form based on the measured annual average NO_x concentrations shown in **Table 1** above. The calculated annual average NO_2 concentrations are shown in **Table 2**. The value of $[O_x]$ and J/k are considered reasonable as they are within typical value range for Hong Kong. The range of $[O_x]$ from the selected AQMSs is 80 mg/m^3 to 116 mg/m^3.

Table 2 Calculated Annual Average NO_2 Concentration Using Functional Form based on Annual Average NO_x Concentrations Measured at Selected EPD's AQMSs

Year	Location	Calculated Annual Average NO2
2018	Tap Mun	11.001
2019	Tap Mun	10.168
2020	Tap Mun	9.333
2021	Tap Mun	10.168
2022	Tap Mun	11.001
2018	Central/Western	43.839
2019	Central/Western	38.259
2020	Central/Western	33.150
2021	Central/Western	33.150
2022	Central/Western	30.901

2018	Central	89.989
2019	Central	88.057
2020	Central	84.325
2021	Central	84.117
2022	Central	79.777

A plot for annual average NO_2 versus annual average NO_x obtained from selected EPD's AQMSs from the latest 5 years is plotted in **Graph 1** below. The functional form curve, adopting $[O_x]$ of 106.2mg/m^3 and J/k of 17.3 mg/m^3, would fit with all annual average data from the selected EPD's AQMSs. Underestimation of the annual average NO_2 concentration is not expected.



Graph 1 AQMS NO_2 vs NO_x Concentration and Functional Form Curve by Jenkin Method

<u>Conversion of Predicted Cumulative Annual Average NO_x results to Cumulative Annual Average NO_2 Results</u>

The functional form curve would be adopted for NO_x to NO_2 conversion, where the predicted cumulative annual average NO_x results could be converted to the predicted cumulative annual average NO_2 results. The equation for the conversion is as below:

$$[NO_2]_p = \frac{\left([NO_x]_p + 106.2 + 17.3\right) - \sqrt{\left([NO_x]_p + 106.2 + 17.3\right)^2 - 4 \times [NO_x]_p \times 106.2}}{2}$$

where

$[NO_2]_p$ is the Predicted Cumulative Annual Average NO_2 Concentration;

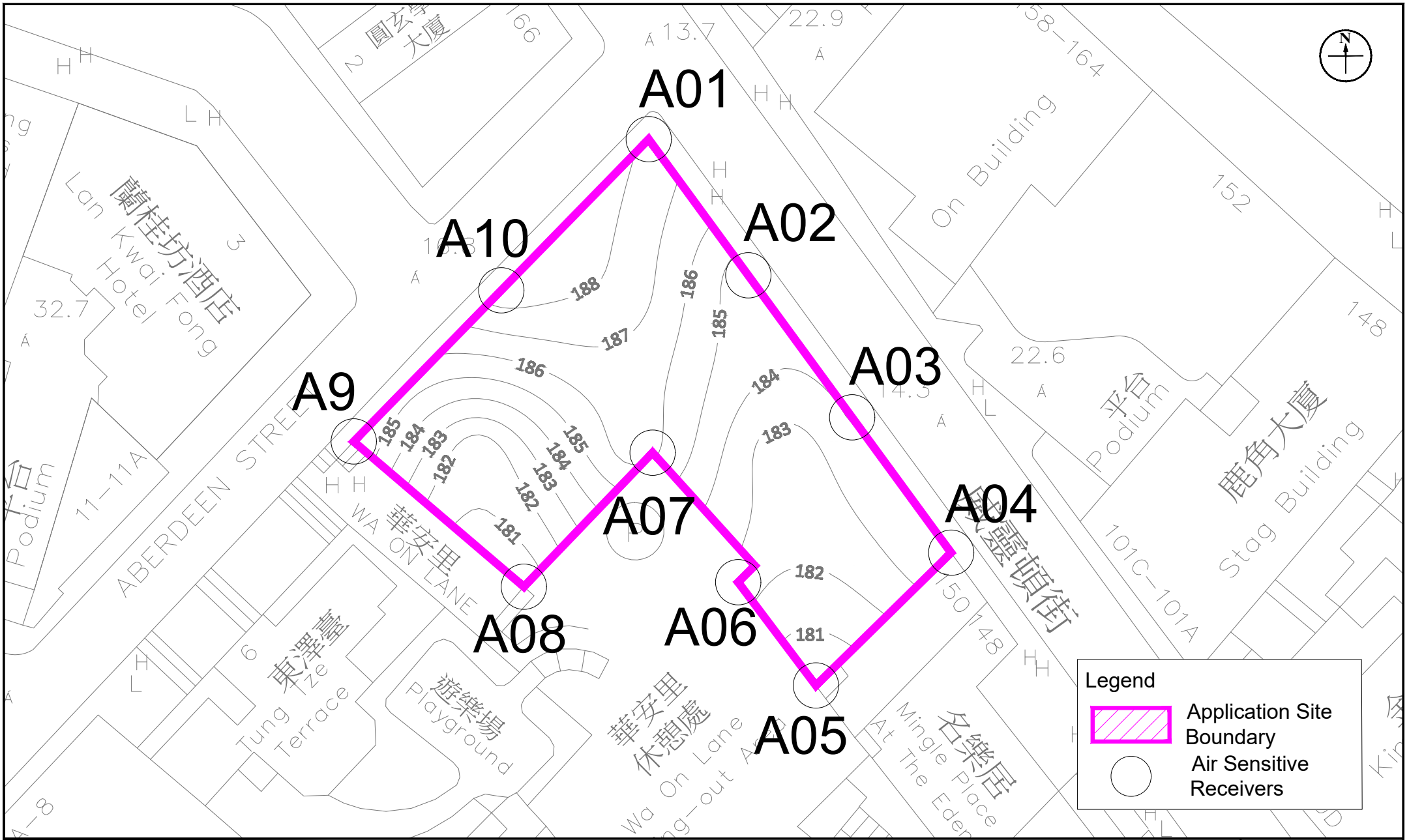
$[NO_x]_p$ is the Predicted Cumulative Annual Average NO_x Concentration.

Appendix 4-18 Predicted Air Quality Impact Assessment Results

ASRs ID	PATH Grid	ASR Coordinates		Floor	Flag Pole Receiver Height, mPD	Flag Pole Receiver Height, mAG	Predicted Cumulative Impacts (µg/m^3) in Year 2030							
							NO_2		RSP		FSP		SO_2	
		x	y				1-h (AQO=200)	Annual (AQO=40)	24-h (AQO=100)	Annual (AQO=50)	24-h (AQO=50)	Annual (AQO=25)	10-min (AQO=500)	24-h (AQO=50)
		Easting	Northing				19th highest		10th highest		36th highest		4th highest	4th highest
A1-1	38,29	833851	816166	GF	13.90	1.50	187.4	32.3	67.9	29.0	33.7	22.2	39.6	10.0
A1-2	38,29	833851	816166	1F	20.30	6.40	188.3	27.8	67.6	28.9	33.4	22.0	39.5	9.9
A1-3	38,29	833851	816166	Clubhouse_1F	25.15	11.25	177.9	25.9	67.5	28.8	33.3	21.9	39.5	9.9
A1-4	38,29	833851	816166	Clubhouse_2F	30.15	16.25	164.9	24.3	67.4	28.7	33.2	21.9	39.5	9.9
A1-5	38,29	833851	816166	Transfer Plate	35.15	21.25	149.8	23.0	67.5	28.6	33.1	21.8	39.7	9.9
A1-6	38,29	833851	816166	R_1F	38.15	24.25	139.7	22.3	67.5	28.6	33.1	21.8	39.8	9.9
A1-7	38,29	833851	816166	R_2F	41.40	27.50	130.3	21.6	67.5	28.6	33.1	21.8	40.0	9.9
A1-8	38,29	833851	816166	R_3F	44.65	30.75	126.1	21.1	67.6	28.6	33.1	21.7	40.2	9.9
A1-9	38,29	833851	816166	R_4F	47.90	34.00	124.4	20.6	67.6	28.5	33.0	21.7	40.4	9.8
A1-10	38,29	833851	816166	R_5F	51.15	37.25	120.6	20.2	67.5	28.5	33.0	21.7	40.7	9.8
A1-11	38,29	833851	816166	R_6F	54.40	40.50	120.1	19.9	67.5	28.5	33.0	21.7	44.3	9.8
A1-12	38,29	833851	816166	R_7F	57.65	43.75	118.9	19.7	67.5	28.5	33.0	21.7	47.9	9.9
A1-13	38,29	833851	816166	R_8F	60.90	47.00	119.7	19.5	67.5	28.5	33.0	21.7	51.2	10.0
A1-14	38,29	833851	816166	R_11F	70.65	56.75	120.3	19.0	67.5	28.5	33.0	21.7	57.1	10.3
A1-15	38,29	833851	816166	R_14F	80.40	66.50	119.6	18.7	67.5	28.5	33.0	21.7	59.7	10.4
A1-16	38,29	833851	816166	R_17F	90.15	76.25	119.0	18.4	67.5	28.5	32.9	21.7	58.2	9.9
A1-17	38,29	833851	816166	R_20F	99.90	86.00	115.2	18.1	67.5	28.4	32.8	21.6	51.8	9.8
A1-18	38,29	833851	816166	R_23F	109.65	95.75	114.6	17.8	67.4	28.4	32.7	21.6	44.2	9.8
A1-19	38,29	833851	816166	RF	119.90	106.00	113.0	17.6	67.2	28.4	32.7	21.6	42.9	9.7
A2-1	38,29	833858	816157	GF	13.90	1.50	184.3	30.3	67.7	28.9	33.5	22.1	39.3	9.9
A2-2	38,29	833858	816157	1F	20.30	6.40	185.3	27.5	67.6	28.8	33.4	22.0	39.2	9.9
A2-3	38,29	833858	816157	Clubhouse_1F	25.15	11.25	177.5	25.8	67.5	28.8	33.3	21.9	39.1	9.9
A2-4	38,29	833858	816157	Clubhouse_2F	30.15	16.25	164.9	24.2	67.4	28.7	33.2	21.9	39.2	9.9
A2-5	38,29	833858	816157	Transfer Plate	35.15	21.25	148.5	22.9	67.5	28.6	33.1	21.8	39.3	9.9
A2-6	38,29	833858	816157	R_1F	38.15	24.25	139.5	22.2	67.5	28.6	33.1	21.8	39.4	9.9
A2-7	38,29	833858	816157	R_2F	41.40	27.50	130.1	21.6	67.5	28.6	33.1	21.8	39.6	9.9
A2-8	38,29	833858	816157	R_3F	44.65	30.75	125.7	21.0	67.6	28.5	33.0	21.7	39.8	9.8
A2-9	38,29	833858	816157	R_4F	47.90	34.00	124.2	20.6	67.6	28.5	33.0	21.7	40.0	9.8
A2-10	38,29	833858	816157	R_5F	51.15	37.25	120.6	20.2	67.5	28.5	33.0	21.7	40.5	9.8
A2-11	38,29	833858	816157	R_6F	54.40	40.50	120.3	19.9	67.5	28.5	33.0	21.7	44.3	9.8
A2-12	38,29	833858	816157	R_7F	57.65	43.75	118.6	19.6	67.5	28.5	33.0	21.7	47.9	9.8
A2-13	38,29	833858	816157	R_8F	60.90	47.00	119.4	19.4	67.5	28.5	33.0	21.7	51.1	10.0
A2-14	38,29	833858	816157	R_11F	70.65	56.75	120.0	19.0	67.5	28.5	33.0	21.7	57.2	10.3
A2-15	38,29	833858	816157	R_14F	80.40	66.50	119.5	18.7	67.5	28.5	33.0	21.7	60.8	10.3
A2-16	38,29	833858	816157	R_17F	90.15	76.25	119.3	18.4	67.5	28.5	32.9	21.7	59.2	9.9
A2-17	38,29	833858	816157	R_20F	99.90	86.00	115.2	18.1	67.4	28.4	32.8	21.6	52.7	9.8
A2-18	38,29	833858	816157	R_23F	109.65	95.75	114.6	17.8	67.4	28.4	32.7	21.6	43.6	9.8
A2-19	38,29	833858	816157	RF	119.90	106.00	112.5	17.6	67.3	28.4	32.7	21.6	42.2	9.7
A3-1	38,29	833865	816147	GF	13.90	1.50	184.1	29.7	67.7	28.9	33.5	22.1	38.9	9.9
A3-2	38,29	833865	816147	1F	20.30	6.40	182.2	27.2	67.5	28.8	33.4	22.0	38.8	9.9
A3-3	38,29	833865	816147	Clubhouse_1F	25.15	11.25	175.4	25.6	67.5	28.7	33.3	21.9	38.7	9.9
A3-4	38,29	833865	816147	Clubhouse_2F	30.15	16.25	165.2	24.1	67.4	28.7	33.2	21.8	38.8	9.9
A3-5	38,29	833865	816147	Transfer Plate	35.15	21.25	150.8	22.8	67.5	28.6	33.1	21.8	38.9	9.9
A3-6	38,29	833865	816147	R_1F	38.15	24.25	138.4	22.1	67.5	28.6	33.1	21.8	39.0	9.9
A3-7	38,29	833865	816147	R_2F	41.40	27.50	129.9	21.5	67.5	28.6	33.1	21.7	39.1	9.8
A3-8	38,29	833865	816147	R_3F	44.65	30.75	126.1	20.9	67.6	28.5	33.0	21.7	39.3	9.8
A3-9	38,29	833865	816147	R_4F	47.90	34.00	124.0	20.5	67.5	28.5	33.0	21.7	39.5	9.8
A3-10	38,29	833865	816147	R_5F	51.15	37.25	120.6	20.1	67.5	28.5	33.0	21.7	40.9	9.8
A3-11	38,29	833865	816147	R_6F	54.40	40.50	120.3	19.8	67.5	28.5	33.0	21.7	44.1	9.8
A3-12	38,29	833865	816147	R_7F	57.65	43.75	119.5	19.6	67.5	28.5	33.0	21.7	47.6	9.8
A3-13	38,29	833865	816147	R_8F	60.90	47.00	119.9	19.4	67.5	28.5	33.0	21.7	50.8	10.0
A3-14	38,29	833865	816147	R_11F	70.65	56.75	119.9	18.9	67.5	28.5	33.0	21.7	58.1	10.2
A3-15	38,29	833865	816147	R_14F	80.40	66.50	119.4	18.6	67.5	28.5	33.0	21.7	61.8	10.2
A3-16	38,29	833865	816147	R_17F	90.15	76.25	119.3	18.3	67.5	28.5	32.9	21.7	60.2	9.8
A3-17	38,29	833865	816147	R_20F	99.90	86.00	115.2	18.1	67.4	28.4	32.8	21.6	53.5	9.8
A3-18	38,29	833865	816147	R_23F	109.65	95.75	114.6	17.8	67.4	28.4	32.7	21.6	43.6	9.8
A3-19	38,29	833865	816147	RF	119.90	106.00	113.0	17.5	67.3	28.4	32.7	21.6	41.5	9.7
A4-1	38,29	833871	816138	GF	13.90	1.50	184.0	29.4	67.7	28.9	33.5	22.0	38.5	9.9
A4-2	38,29	833871	816138	1F	20.30	6.40	181.0	26.9	67.5	28.8	33.3	22.0	38.4	9.9
A4-3	38,29	833871	816138	Clubhouse_1F	25.15	11.25	175.1	25.4	67.5	28.7	33.2	21.9	38.3	9.9
A4-4	38,29	833871	816138	Clubhouse_2F	30.15	16.25	163.1	24.0	67.4	28.7	33.2	21.8	38.3	9.9
A4-5	38,29	833871	816138	Transfer Plate	35.15	21.25	149.8	22.7	67.5	28.6	33.1	21.8	38.4	9.9
A4-6	38,29	833871	816138	R_1F	38.15	24.25	138.8	22.0	67.5	28.6	33.1	21.8	38.5	9.8
A4-7	38,29	833871	816138	R_2F	41.40	27.50	129.6	21.4	67.5	28.6	33.0	21.7	38.7	9.8
A4-8	38,29	833871	816138	R_3F	44.65	30.75	125.9	20.9	67.6	28.5	33.0	21.7	38.9	9.8
A4-9	38,29	833871	816138	R_4F	47.90	34.00	123.9	20.4	67.5	28.5	33.0	21.7	39.1	9.8
A4-10	38,29	833871	816138	R_5F	51.15	37.25	120.6	20.1	67.5	28.5	33.0	21.7	41.4	9.8
A4-11	38,29	833871	816138	R_6F	54.40	40.50	120.3	19.8	67.5	28.5	33.0	21.7	44.7	9.8
A4-12	38,29	833871	816138	R_7F	57.65	43.75	120.3	19.5	67.5	28.5	33.0	21.7	47.9	9.8
A4-13	38,29	833871	816138	R_8F	60.90	47.00	119.9	19.4	67.5	28.5	33.0	21.7	51.0	9.9
A4-14	38,29	833871	816138	R_11F	70.65	56.75	119.7	18.9	67.5	28.5	33.0	21.7	58.9	10.2
A4-15	38,29	833871	816138	R_14F	80.40	66.50	119.4	18.6	67.5	28.5	33.0	21.7	62.6	10.1
A4-16	38,29	833871	816138	R_17F	90.15	76.25	119.3	18.3	67.5	28.5	32.9	21.7	61.0	9.8
A4-17	38,29	833871	816138	R_20F	99.90	86.00	115.6	18.0	67.4	28.4	32.8	21.6	54.2	9.8
A4-18	38,29	833871	816138	R_23F	109.65	95.75	114.4	17.8	67.4	28.4	32.7	21.6	44.2	9.7
A4-19	38,29	833871	816138	RF	119.90	106.00	113.0	17.5	67.3	28.4	32.7	21.6	40.9	9.7
A5-1	38,29	833862	816129	GF	13.90	1.50	180.0	28.0	67.6	28.8	33.4	22.0	38.3	9.9
A5-2	38,29	833862	816129	1F	20.30	6.40	181.0	26.8	67.5	28.8	33.3	22.0	38.2	9.9
A5-3	38,29	833862	816129	Clubhouse_1F	25.15	11.25	177.0	25.3	67.5	28.7	33.2	21.9	38.2	9.9
A5-4	38,29	833862	816129	Clubhouse_2F	30.15	16.25	163.5	23.9	67.4	28.7	33.1	21.8	38.2	9.9
A5-5	38,29	833862	816129	Transfer Plate	35.15	21.25	148.4	22.6	67.5	28.6	33.1	21.8	38.3	9.8
A5-6	38,29	833862	816129	R_1F	38.15	24.25	139.2	22.0	67.5	28.6	33.1	21.8	38.4	9.8
A5-7	38,29	833862	816129	R_2F	41.40	27.50	130.7	21.4	67.5	28.6	33.0	21.7	38.5	9.8
A5-8	38,29	833862	816129	R_3F	44.65	30.75	126.7	20.8	67.6	28.5	33.0	21.7	38.7	9.8
A5-9	38,29	833862	816129	R_4F	47.90	34.00	124.5	20.4	67.5	28.5	33.0	21.7	38.9	9.8
A5-10	38,29	833862	816129	R_5F	51.15	37.25	120.9	20.1	67.5	28.5	33.0	21.7	41.2	9.8
A5-11	38,29	833862	816129	R_6F	54.40	40.50	120.3	19.8	67.5	28.5	33.0	21.7	44.4	9.8
A5-12	38,29	833862	816129	R_7F	57.65	43.75	120.3	19.5	67.5	28.5	33.0	21.7	47.6	9.8
A5-13	38,29	833862	816129	R_8F	60.90	47.00	119.8	19.3	67.5	28.5	33.0	21.7	50.7	9.8
A5-14	38,29	833862	816129	R_11F	70.65	56.75	119.7	18.9	67.5	28.5	33.0	21.7	58.4	10.1
A5-15	38,29	833862	816129	R_14F	80.40	66.50	119.4	18.6	67.5	28.5	33.0	21.7	62.1	10.1
A5-16	38,29	833862	816129	R_17F	90.15	76.25	119.3	18.3	67.5	28.5	32.9	21.7	60.5	9.8
A5-17	38,29	833862	816129	R_20F	99.90	86.00	115.2	18.0	67.4	28.4	32.8	21.6	53.8	9.8
A5-18	38,29	833862	816129	R_23F	109.65	95.75	114.3	17.8	67.4	28.4	32.7	21.6	43.9	9.7
A5-19	38,29	833862	816129	RF	119.90	106.00	113.0	17.5	67.3	28.4	32.7	21.6	40.5	9.7
A6-1	38,29	833857	816136	GF	13.90	1.50	182.8	28.3	67.6	28.9	33.4	22.0	38.6	9.9
A6-2	38,29	833857	816136	1F	20.30	6.40	185.3	27.0	67.5	28.8	33.3	22.0	38.5	9.9
A6-3	38,29	833857	816136	Clubhouse_1F	25.15	11.25	175.9	25.5	67.5	28.7	33.2	21.9	38.5	9.9
A6-4	38,29	833857	816136	Clubhouse_2F	30.15	16.25	163.4	24.0	67.4	28.7	33.1	21.8	38.5	9.9
A6-5	38,29	833857	816136	Transfer Plate	35.15	21.25	149.0	22.7	67.5	28.6	33.1	21.8	38.6	9.9
A6-6	38,29	833857	816136	R_1F	38.15	24.25	138.4	22.0	67.5	28.6	33.1	21.8	38.7	9.8
A6-7	38,29	833857	816136	R_2F	41.40	27.50	130.5	21.4	67.5	28.6	33.0	21.7	38.8	9.8
A6-8	38,29	833857	816136	R_3F	44.65	30.75	126.9	20.9	67.6	28.5	33.0	21.7	39.0	9.8
A6-9	38,29	833857	816136	R_4F	47.90	34.00	124.6	20.5	67.5	28.5	33.0	21.7	39.2	9.8
A6-10	38,29	833857	816136	R_5F	51.15	37.25	120.9	20.1	67.5	28.5	33.0	21.7	40.8	9.8
A6-11	38,29	833857	816136	R_6F	54.40	40.50	120.3	19.8	67.5	28.5	33.0	21.7	44.0	9.8
A6-12	38,29	833857	816136	R_7F	57.65	43.75	119.7	19.6	67.5	28.5	33.0	21.7	47.2	9.8
A6-13	38,29	833857	816136	R_8F	60.90	47.00	119.6	19.4	67.5	28.5	33.0	21.7	50.3	9.9
A6-14	38,29	833857	816136	R_11F	70.65	56.75	119.6	18.9	67.5	28.5	33.0	21.7	57.8	10.2
A6-15	38,29	833857	816136	R_14F	80.40	66.50	119.5	18.6	67.5	28.5	33.0	21.7	61.5	10.1
A6-16	38,29	833857	816136	R_17F	90.15	76.25	119.3	18.3	67.5	28.5	32.9	21.7	59.9	9.8
A6-17	38,29	833857	816136	R_20F	99.90	86.00	114.9	18.0	67.4	28.4	32.8	21.6	53.3	9.8
A6-18	38,29	833857	816136	R_23F	109.65	95.75	114.6	17.8	67.4	28.4	32.7	21.6	43.5	9.7
A6-19	38,29	833857	816136	RF	119.90	106.00	113.0	17.5	67.3	28.4	32.7	21.6	41.0	9.7

ASRs ID	PATH Grid	ASR Coordinates		Floor	Flag Pole Receiver Height, mPD	Flag Pole Receiver Height, mAG	Predicted Cumulative Impacts (µg/m^3) in Year 2030							
							NO_2		RSP		FSP		SO_2	
		x	y				1-h (AQO=200)	Annual (AQO=40)	24-h (AQO=100)	Annual (AQO=50)	24-h (AQO=50)	Annual (AQO=25)	10-min (AQO=500)	24-h (AQO=50)
		Easting	Northing				19th highest		10th highest		36th highest		4th highest	4th highest
A7-1	38,29	833852	816145	GF	13.90	1.50	186.2	28.8	67.7	28.9	33.5	22.0	39.0	9.9
A7-2	38,29	833852	816145	1F	20.30	6.40	185.1	27.3	67.6	28.8	33.4	22.0	38.9	9.9
A7-3	38,29	833852	816145	Clubhouse_1F	25.15	11.25	176.8	25.6	67.5	28.7	33.2	21.9	38.8	9.9
A7-4	38,29	833852	816145	Clubhouse_2F	30.15	16.25	165.1	24.1	67.4	28.7	33.2	21.8	38.9	9.9
A7-5	38,29	833852	816145	Transfer Plate	35.15	21.25	148.4	22.8	67.5	28.6	33.1	21.8	39.0	9.9
A7-6	38,29	833852	816145	R_1F	38.15	24.25	138.8	22.1	67.5	28.6	33.1	21.8	39.1	9.9
A7-7	38,29	833852	816145	R_2F	41.40	27.50	130.6	21.5	67.5	28.6	33.1	21.7	39.2	9.8
A7-8	38,29	833852	816145	R_3F	44.65	30.75	126.4	20.9	67.6	28.5	33.0	21.7	39.4	9.8
A7-9	38,29	833852	816145	R_4F	47.90	34.00	124.8	20.5	67.5	28.5	33.0	21.7	39.6	9.8
A7-10	38,29	833852	816145	R_5F	51.15	37.25	120.6	20.1	67.5	28.5	33.0	21.7	40.4	9.8
A7-11	38,29	833852	816145	R_6F	54.40	40.50	120.3	19.8	67.5	28.5	33.0	21.7	43.9	9.8
A7-12	38,29	833852	816145	R_7F	57.65	43.75	118.6	19.6	67.5	28.5	33.0	21.7	47.4	9.8
A7-13	38,29	833852	816145	R_8F	60.90	47.00	119.3	19.4	67.5	28.5	33.0	21.7	50.6	9.9
A7-14	38,29	833852	816145	R_11F	70.65	56.75	119.6	18.9	67.5	28.5	33.0	21.7	57.1	10.2
A7-15	38,29	833852	816145	R_14F	80.40	66.50	119.6	18.6	67.5	28.5	33.0	21.7	60.7	10.2
A7-16	38,29	833852	816145	R_17F	90.15	76.25	119.3	18.3	67.5	28.5	32.9	21.7	59.1	9.8
A7-17	38,29	833852	816145	R_20F	99.90	86.00	115.2	18.1	67.4	28.4	32.8	21.6	52.6	9.8
A7-18	38,29	833852	816145	R_23F	109.65	95.75	114.6	17.8	67.4	28.4	32.7	21.6	43.0	9.7
A7-19	38,29	833852	816145	RF	119.90	106.00	112.8	17.5	67.3	28.4	32.7	21.6	41.7	9.7
A8-1	38,29	833843	816136	GF	13.90	1.50	180.2	28.2	67.7	28.9	33.4	22.0	38.8	9.9
A8-2	38,29	833843	816136	1F	20.30	6.40	184.6	27.1	67.6	28.8	33.3	22.0	38.7	9.9
A8-3	38,29	833843	816136	Clubhouse_1F	25.15	11.25	178.4	25.5	67.5	28.7	33.2	21.9	38.6	9.9
A8-4	38,29	833843	816136	Clubhouse_2F	30.15	16.25	164.9	24.0	67.4	28.7	33.1	21.8	38.7	9.9
A8-5	38,29	833843	816136	Transfer Plate	35.15	21.25	150.5	22.7	67.5	28.6	33.1	21.8	38.8	9.9
A8-6	38,29	833843	816136	R_1F	38.15	24.25	140.6	22.0	67.5	28.6	33.1	21.8	38.9	9.8
A8-7	38,29	833843	816136	R_2F	41.40	27.50	131.9	21.4	67.5	28.6	33.0	21.7	39.0	9.8
A8-8	38,29	833843	816136	R_3F	44.65	30.75	126.9	20.9	67.6	28.5	33.0	21.7	39.2	9.8
A8-9	38,29	833843	816136	R_4F	47.90	34.00	125.0	20.5	67.5	28.5	33.0	21.7	39.4	9.8
A8-10	38,29	833843	816136	R_5F	51.15	37.25	121.7	20.1	67.5	28.5	33.0	21.7	40.2	9.8
A8-11	38,29	833843	816136	R_6F	54.40	40.50	120.3	19.8	67.5	28.5	33.0	21.7	43.6	9.8
A8-12	38,29	833843	816136	R_7F	57.65	43.75	118.6	19.6	67.5	28.5	33.0	21.7	47.0	9.8
A8-13	38,29	833843	816136	R_8F	60.90	47.00	119.0	19.4	67.5	28.5	33.0	21.7	50.1	9.9
A8-14	38,29	833843	816136	R_11F	70.65	56.75	119.6	18.9	67.5	28.5	33.0	21.7	56.7	10.2
A8-15	38,29	833843	816136	R_14F	80.40	66.50	119.9	18.6	67.5	28.5	33.0	21.7	60.2	10.2
A8-16	38,29	833843	816136	R_17F	90.15	76.25	119.3	18.3	67.5	28.5	32.9	21.7	58.7	9.8
A8-17	38,29	833843	816136	R_20F	99.90	86.00	115.2	18.0	67.4	28.4	32.8	21.6	52.3	9.8
A8-18	38,29	833843	816136	R_23F	109.65	95.75	114.6	17.8	67.4	28.4	32.7	21.6	42.8	9.7
A8-19	38,29	833843	816136	RF	119.90	106.00	112.8	17.5	67.2	28.4	32.7	21.6	41.3	9.7
A9-1	38,29	833832	816146	GF	13.90	1.50	186.2	30.6	67.8	29.0	33.6	22.1	39.2	9.9
A9-2	38,29	833832	816146	1F	20.30	6.40	183.6	27.4	67.6	28.8	33.3	22.0	39.1	9.9
A9-3	38,29	833832	816146	Clubhouse_1F	25.15	11.25	181.7	25.7	67.5	28.7	33.2	21.9	39.1	9.9
A9-4	38,29	833832	816146	Clubhouse_2F	30.15	16.25	167.8	24.2	67.5	28.7	33.2	21.9	39.1	9.9
A9-5	38,29	833832	816146	Transfer Plate	35.15	21.25	152.7	22.8	67.5	28.6	33.1	21.8	39.2	9.9
A9-6	38,29	833832	816146	R_1F	38.15	24.25	141.0	22.1	67.5	28.6	33.1	21.8	39.3	9.9
A9-7	38,29	833832	816146	R_2F	41.40	27.50	131.7	21.5	67.5	28.6	33.1	21.8	39.5	9.8
A9-8	38,29	833832	816146	R_3F	44.65	30.75	126.7	21.0	67.6	28.5	33.0	21.7	39.7	9.8
A9-9	38,29	833832	816146	R_4F	47.90	34.00	124.1	20.5	67.6	28.5	33.0	21.7	39.9	9.8
A9-10	38,29	833832	816146	R_5F	51.15	37.25	121.3	20.2	67.5	28.5	33.0	21.7	40.1	9.8
A9-11	38,29	833832	816146	R_6F	54.40	40.50	119.9	19.9	67.5	28.5	33.0	21.7	43.6	9.8
A9-12	38,29	833832	816146	R_7F	57.65	43.75	118.7	19.6	67.5	28.5	33.0	21.7	47.1	9.8
A9-13	38,29	833832	816146	R_8F	60.90	47.00	119.2	19.4	67.5	28.5	33.0	21.7	50.2	9.9
A9-14	38,29	833832	816146	R_11F	70.65	56.75	120.0	19.0	67.5	28.5	33.0	21.7	55.9	10.2
A9-15	38,29	833832	816146	R_14F	80.40	66.50	119.7	18.6	67.5	28.5	33.0	21.7	58.8	10.2
A9-16	38,29	833832	816146	R_17F	90.15	76.25	119.3	18.4	67.5	28.5	32.9	21.7	57.3	9.8
A9-17	38,29	833832	816146	R_20F	99.90	86.00	115.2	18.1	67.5	28.4	32.8	21.6	51.1	9.8
A9-18	38,29	833832	816146	R_23F	109.65	95.75	114.6	17.8	67.4	28.4	32.7	21.6	43.3	9.7
A9-19	38,29	833832	816146	RF	119.90	106.00	112.7	17.6	67.2	28.4	32.7	21.6	42.0	9.7
A10-1	38,29	833842	816156	GF	13.90	1.50	188.7	31.1	67.9	29.0	33.6	22.1	39.4	9.9
A10-2	38,29	833842	816156	1F	20.30	6.40	188.5	27.6	67.6	28.8	33.4	22.0	39.3	9.9
A10-3	38,29	833842	816156	Clubhouse_1F	25.15	11.25	179.8	25.8	67.5	28.8	33.3	21.9	39.3	9.9
A10-4	38,29	833842	816156	Clubhouse_2F	30.15	16.25	167.0	24.2	67.5	28.7	33.2	21.9	39.3	9.9
A10-5	38,29	833842	816156	Transfer Plate	35.15	21.25	148.5	22.9	67.5	28.6	33.1	21.8	39.4	9.9
A10-6	38,29	833842	816156	R_1F	38.15	24.25	139.8	22.2	67.5	28.6	33.1	21.8	39.6	9.9
A10-7	38,29	833842	816156	R_2F	41.40	27.50	131.0	21.6	67.5	28.6	33.1	21.8	39.7	9.9
A10-8	38,29	833842	816156	R_3F	44.65	30.75	126.7	21.0	67.6	28.5	33.0	21.7	39.9	9.8
A10-9	38,29	833842	816156	R_4F	47.90	34.00	124.8	20.6	67.6	28.5	33.0	21.7	40.2	9.8
A10-10	38,29	833842	816156	R_5F	51.15	37.25	120.6	20.2	67.5	28.5	33.0	21.7	40.4	9.8
A10-11	38,29	833842	816156	R_6F	54.40	40.50	120.1	19.9	67.5	28.5	33.0	21.7	44.0	9.8
A10-12	38,29	833842	816156	R_7F	57.65	43.75	118.8	19.7	67.5	28.5	33.0	21.7	47.5	9.8
A10-13	38,29	833842	816156	R_8F	60.90	47.00	119.4	19.4	67.5	28.5	33.0	21.7	50.7	10.0
A10-14	38,29	833842	816156	R_11F	70.65	56.75	120.5	19.0	67.5	28.5	33.0	21.7	56.5	10.3
A10-15	38,29	833842	816156	R_14F	80.40	66.50	119.9	18.7	67.5	28.5	33.0	21.7	59.2	10.3
A10-16	38,29	833842	816156	R_17F	90.15	76.25	119.2	18.4	67.5	28.5	32.9	21.7	57.7	9.9
A10-17	38,29	833842	816156	R_20F	99.90	86.00	115.2	18.1	67.5	28.4	32.8	21.6	51.4	9.8
A10-18	38,29	833842	816156	R_23F	109.65	95.75	114.6	17.8	67.4	28.4	32.7	21.6	43.7	9.8
A10-19	38,29	833842	816156	RF	119.90	106.00	113.0	17.6	67.2	28.4	32.7	21.6	42.4	9.7

Appendix 4-19 Contour Map of NO_2, RSP, FSP



Appendix: 4.19

Title: Contour Map of the 19th Highest Hourly Average Concentration of NO_2 in μgm^{-3} (Assessment Level: 1.5m Above Ground) (AQO standard: $200\mu gm^{-3}$)

Project: S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central

RAMBOLL

Drawn by:	AW
Checked by:	SC
Rev.:	1.0
Date:	Nov 2023

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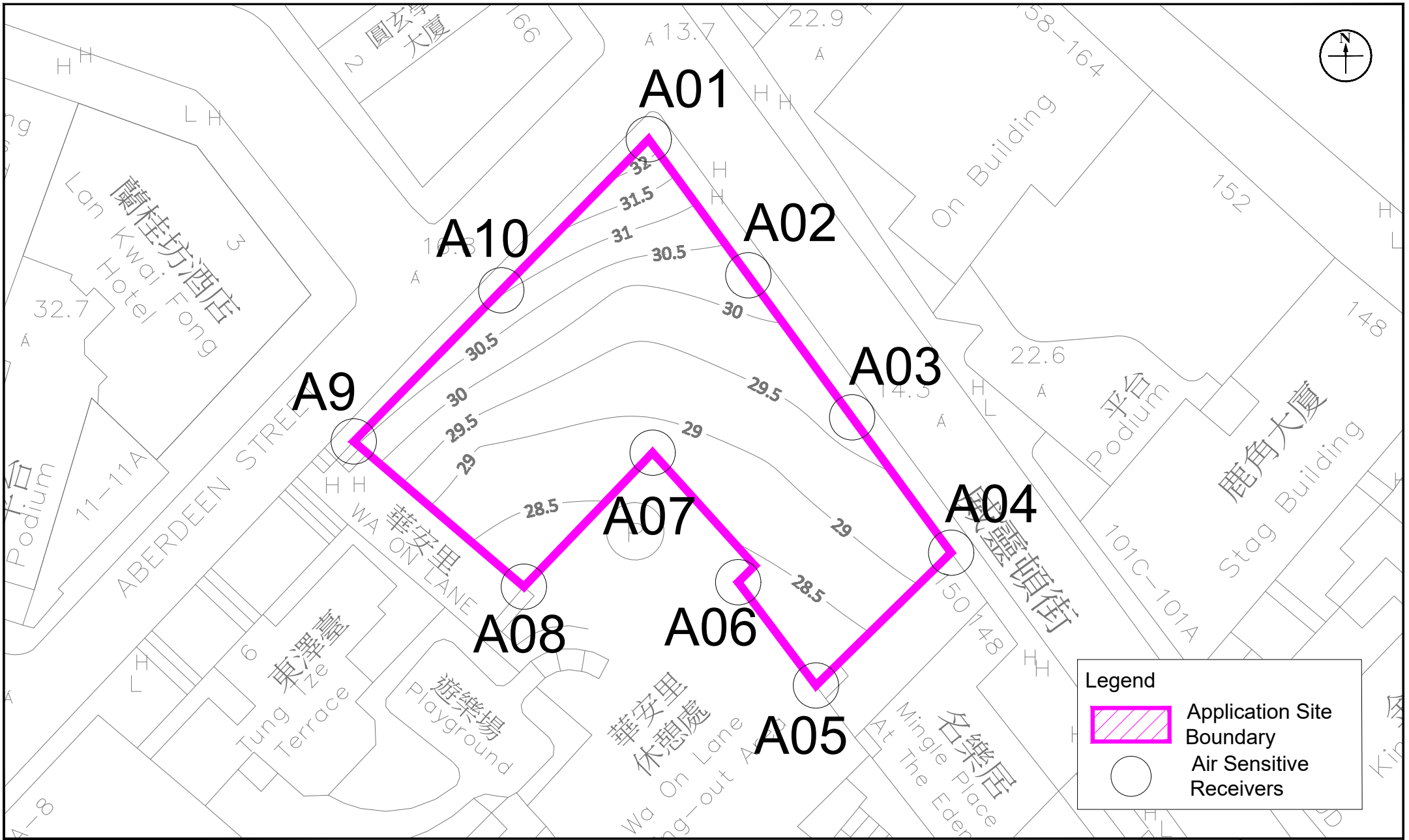

Appendix: 4.19

Title: Contour Map of Annual Average Concentration of NO_2 in μgm^{-3} (Assessment Level: 1.5m Above Ground) (AQO standard: $40\mu gm^{-3}$)

Project: S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central

RAMBOLL

Drawn by:	AW
Checked by:	SC
Rev.:	1.0
Date:	Nov 2023

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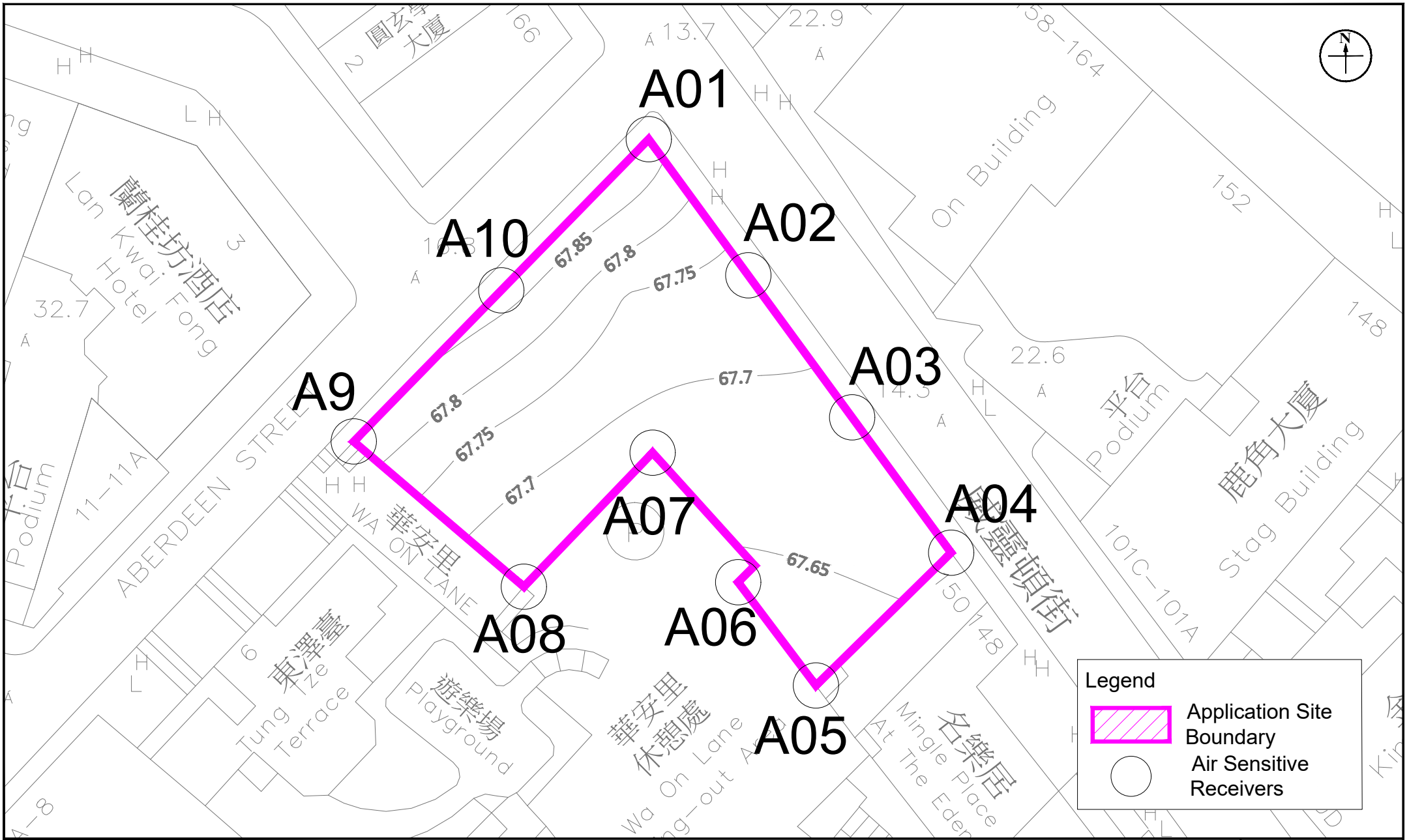

Appendix: 4.19	RAMBOLL
Title: Contour Map of the 10th Highest Daily Average Concentration of RSP in μgm^{-3} (Assessment Level: 1.5m Above Ground) (AQO standard: $100\mu gm^{-3}$)	Drawn by: AW Checked by: SC
Project: S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central	Rev.: 1.0 Date: Nov 2023

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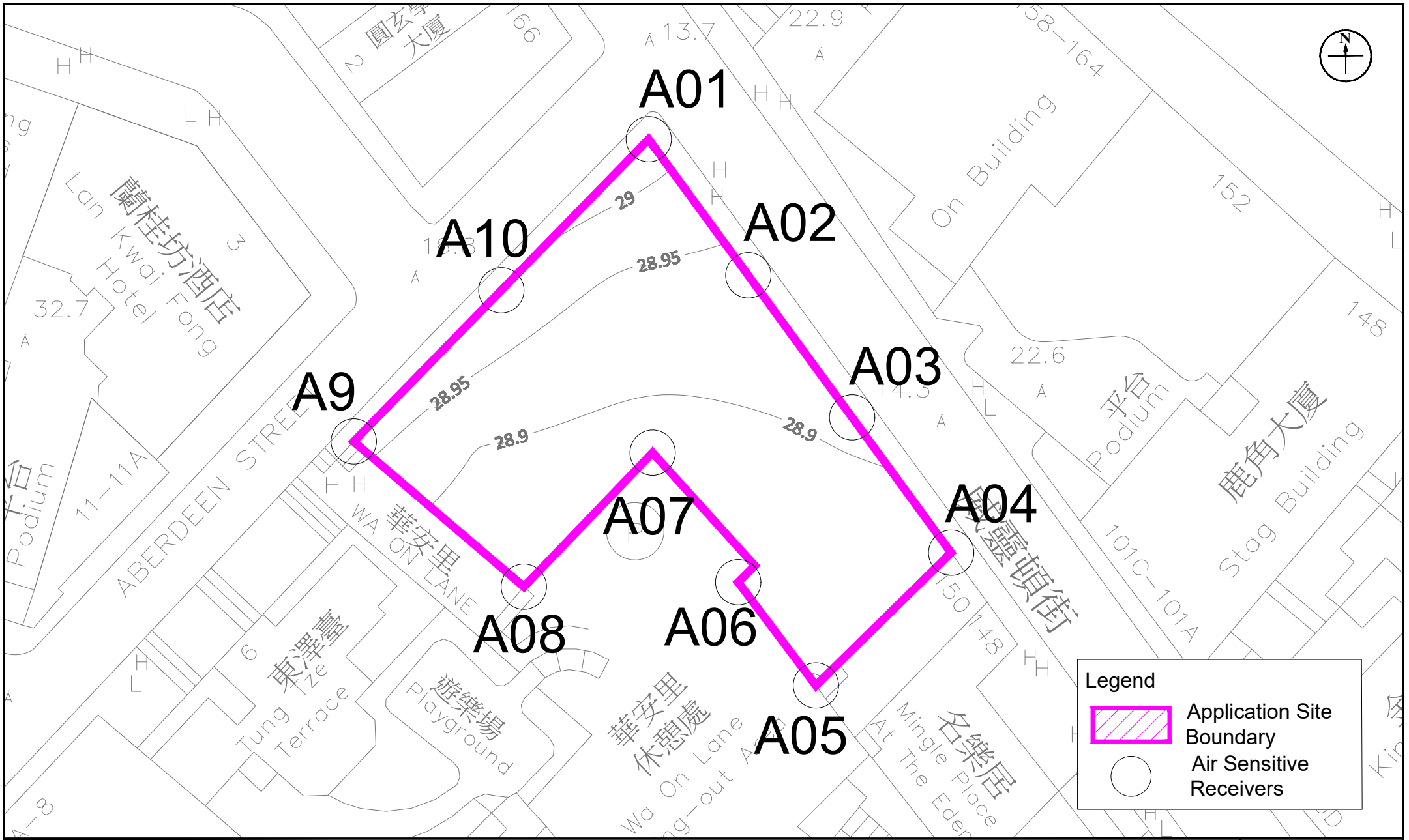

Appendix: 4.19

Title: Contour Map of the Annual Average Concentration of RSP in μgm^{-3}
(Assessment Level: 1.5m Above Ground) (AQO standard: $50\mu gm^{-3}$)

Project: S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central

RAMBOLL

Drawn by:	AW
Checked by:	SC
Rev.:	1.0
Date:	Nov 2023

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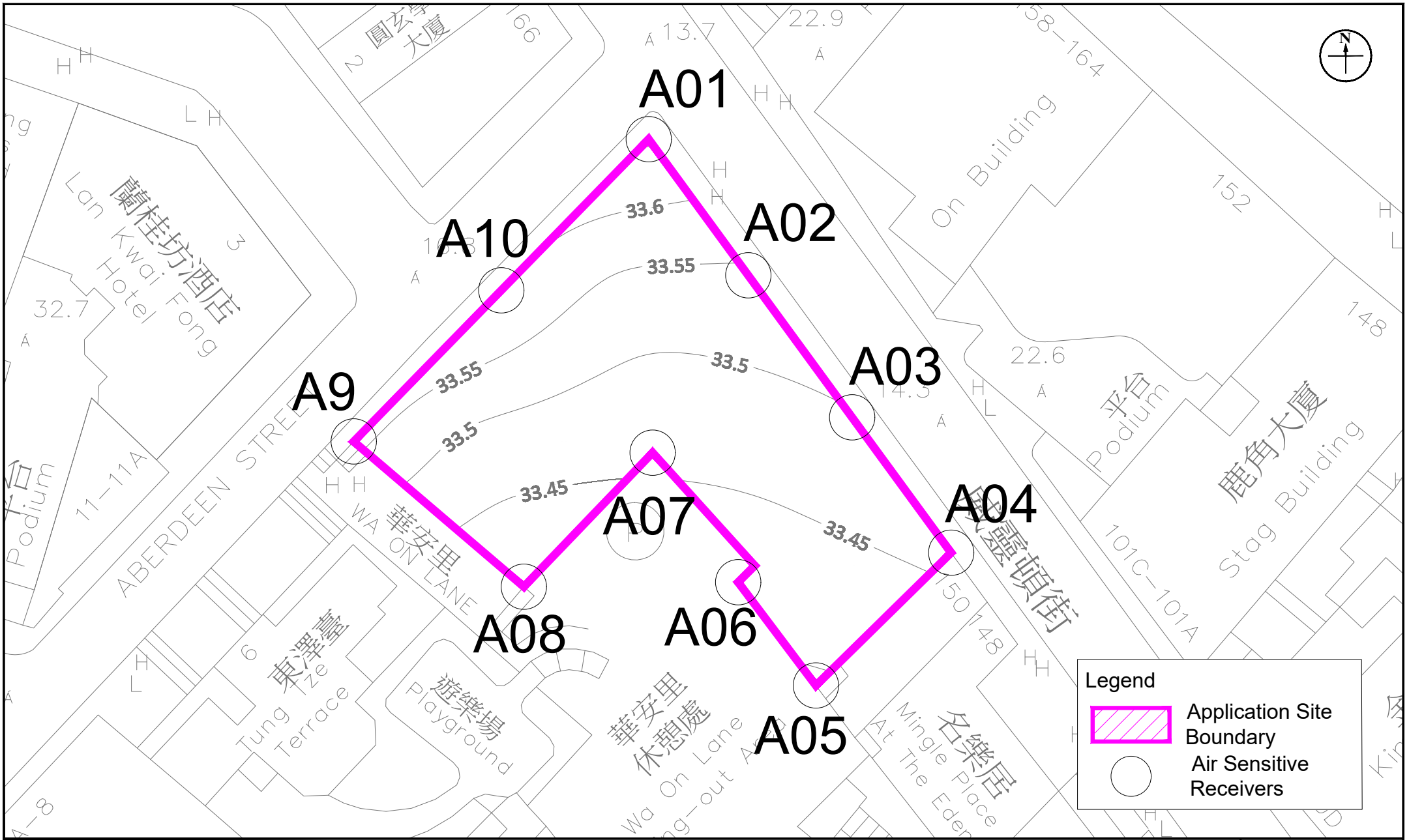

Appendix: 4.19	RAMBOLL
Title: Contour Map of the 36th Highest Daily Average Concentration of FSP in μgm^{-3} (Assessment Level: 1.5m Above Ground) (AQO standard: $50\mu gm^{-3}$)	Drawn by: AW Checked by: SC
Project: S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central	Rev.: 1.0 Date: Nov 2023

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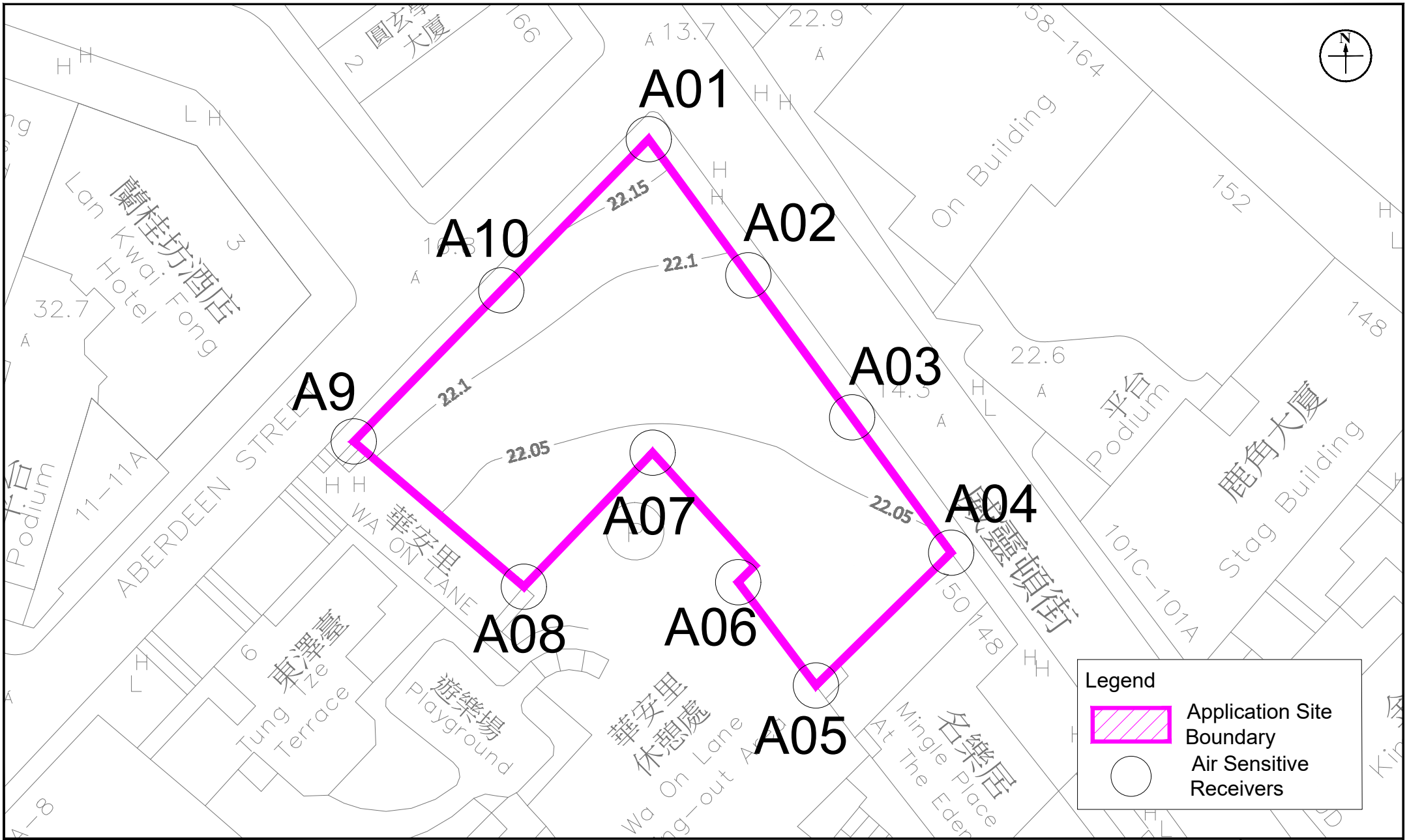

Appendix: 4.19

Title: Contour Map of the Annual Average Concentration of FSP in μgm^{-3}
(Assessment Level: 1.5m Above Ground) (AQO standard: $25\mu gm^{-3}$)

Project: S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central

RAMBOLL

Drawn by:	AW
Checked by:	SC
Rev.:	1.0
Date:	Nov 2023

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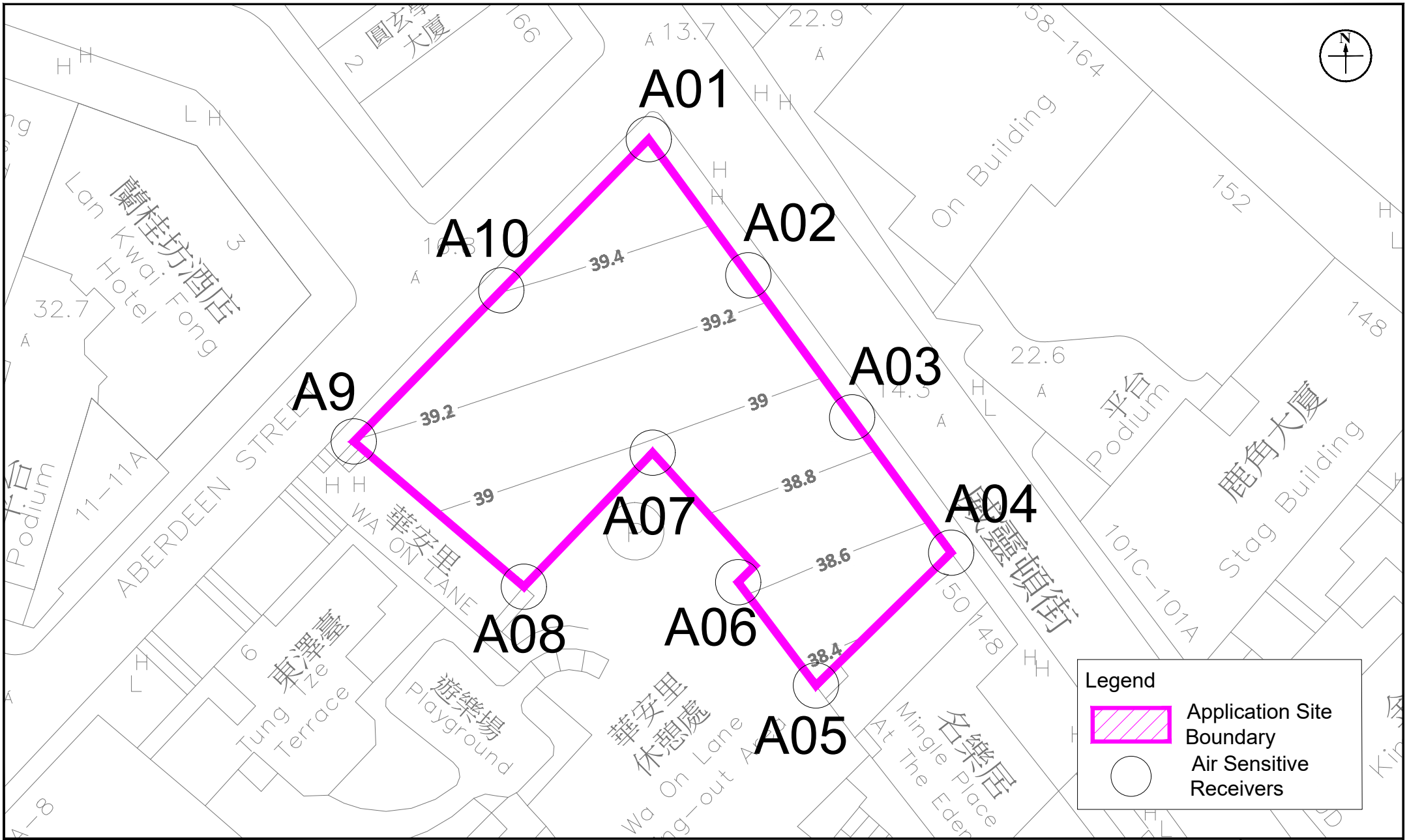

Appendix: 4.19

Title: Contour Map of the 4th Highest 10-minute Average Concentration of SO2 in μgm^{-3}
(Assessment Level: 1.5m Above Ground) (AQO standard: $500\mu gm^{-3}$)

Project: S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central

RAMBOLL

Drawn by:	AW
Checked by:	SC
Rev.:	1.0
Date:	Nov 2023

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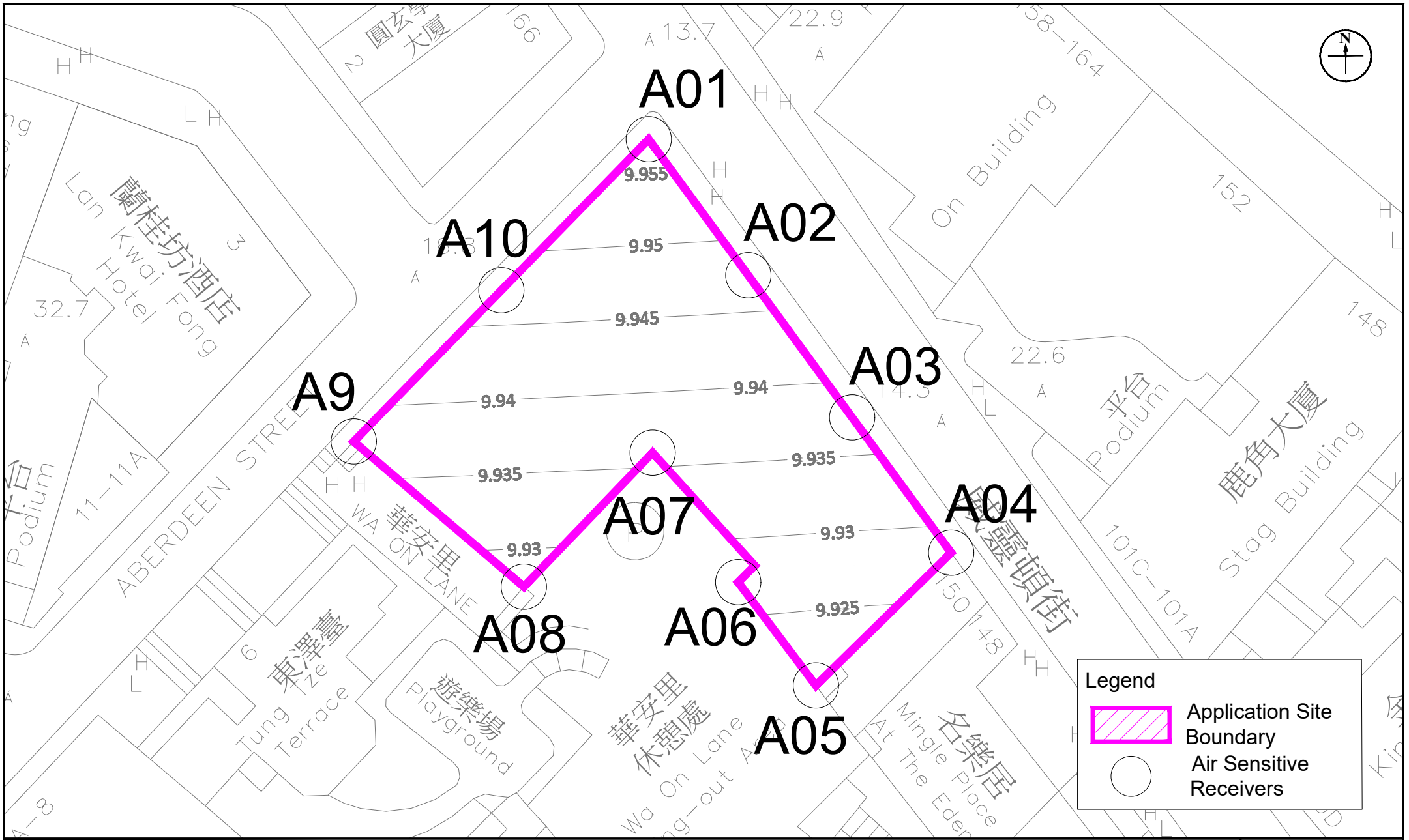

Appendix: 4.19

Title: Contour Map of the 4th Highest Daily Average Concentration of SO2 in μgm^{-3} (Assessment Level: 1.5m Above Ground) (AQO standard: $50\mu gm^{-3}$)

Project: S16 Planning Application for Proposed Composite Redevelopment at 152-164 Wellington Street, Central

RAMBOLL

Drawn by:	AW
Checked by:	SC
Rev.:	1.0
Date:	Nov 2023

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