

By Hand and Email (tpbsubmission@pland.gov.hk)
Our Ref : HDL4/DM/2552/260343L
28 August 2026

Town Planning Board
15/F North Point Government Offices
333 Java Road
North Point, Hong Kong



Attention: Secretary of Town Planning Board

Dear Sir/Madam,

**Section 16 Application under the Town Planning Ordinance (Cap. 131) for
Proposed Underground Vehicular Tunnel Connecting Lee Garden Three (10 Hysan Avenue) and
Lee Garden Eight (8 Caroline Hill Road) below Leighton Road and Sunning Road, Causeway Bay
A/H6/98 – SUBMISSION OF FURTHER INFORMATION 1**

We are writing with respect to the submission of the captioned application and are pleased to submit herewith Further Information (FI) 1 with regard to that application.

Please kindly find attached the following updated and revised items for your necessary action:

- Replacement Pages of Planning Statement;
- Revised Figure;
- Replacement Pages of Annex A – Traffic Impact Assessment; and
- Response to Comments.

Please kindly note that the items above do not constitute a significant or material change to the proposed scheme, and we therefore request for an exemption from publication and recounting requirements under the provisions of Section 5 of TPB-PG No.32B.

Should you have any queries, please do not hesitate to contact Mr. David MORKEL, Director at URBIS Limited by phone

Yours faithfully,
for and on behalf of URBIS Limited

David Morkel
MRTPI MHKIP MHKIUD RPP
DM/SY/af

Encl.



銅鑼灣

Causeway Bay

Response to Comments

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1.	PLANNING DEPARTMENT HONG KONG DISTRICT PLANNING OFFICE MS. FARICA NG (TP/HK10) Ref. / Date: email dated 11 August 2026, 18:12 Received Date: 11 August 2026 I refer to the captioned planning application. Please find the attached departmental comments. Comments of Chief Engineer/Hong Kong & Islands, Drainage Services Department (contact officer: Mr. Icy TO, tel: 3101 2364) Based on our drainage record, there are several stormwater/sewage drains passing the proposed subject site. It is the developer's responsibility to identify/locate the existing government sewers and stormwater drains to which drainage connections from his site are to be proposed. The AP should verify the existence of any drains/sewers/utilities and also their exact locations, levels and alignments on site in order to ascertain the positions and levels of the proposed manholes and the associated connection works. The AP should also verify that the existing government drains/sewer, to which connections are proposed, are in normal working conditions and capable for taking the discharge from the site. Besides, for any excavation works over or in close vicinity to existing government drains/sewers, the AP should notify DSD in writing at least 14 working days before backfilling the excavation works and arrange joint site inspection with DSD prior to covering up. The PM is also reminded that any person wilfully, except with the permission in writing of the Authority, or negligently damages, alters, disconnects or otherwise interferes with any public sewer or drain or any connection therewith, shall be guilty of an offence under Section 6 of Public Health and Municipal Services Ordinance (Cap 132).	Noted and thank you. Noted and thank you.

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	<u>Comments of Director of Environmental Protection (contact officer: Ms. Virginia WONG, tel: 2835 1109)</u> Please find our advice to the application as below: 1. The applicant is advised to consider using ‘drill and excavation’ method for the tunnel excavation; 2. The applicant is reminded to strictly comply with relevant environmental legislation / guidelines during design, construction and operation of the proposed underground vehicular tunnels. <u>Comments of Chief Estate Surveyor/Development Control (contact officer: Sarah CHEUNG, tel: 3793 4603)</u> With reference to the RtC dated on 30 January 2026, the Applicant agreed that “a further method statement, incorporating the advice of the Independent Tree Expert will be provided prior to the commencement of any construction works”. The Lot Owner is reminded to submit the method statement prior to the construction of tunnel underneath the dripline of the OVT to Lands Department for consideration. <u>Comments on Chief Highway Engineer/Hong Kong (contact officer: Iris CHEUNG, tel: 2231 5618)</u> This office has the following comments from highways maintenance viewpoint: 2(a) It is understood that the proposed two-level tunnel will connect the future basement carpark at Lee Garden Eight with the existing private carpark at Lee Garden Three, which is currently operating under its own clear width and headroom limits. As	The ‘drill and excavation’ method was proposed in the project proposal. Please refer to Section 4.4 of the Planning Statement. The detailed construction method will be reviewed and developed in a future stage. Noted and thank you. Noted and thank you. Noted and thank you.

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	such, the requirements stipulated in the Structure Design Manual for Highways and Railways should not be applicable. (b) We agreed that the tunnel will be constructed entirely underground at approximately -1.35mPD, which is about 10m below the existing ground level of the OVT. Comments of the Executive Secretary (Antiquities & Monuments)1, Antiquities and Monuments Office (AMO): <u>(contact officer: Ms. Phoebe TANG, Tel: 2655 0836)</u> Comments of AMO from the heritage conservation perspective are as follows: 2. The proposed underground vehicular tunnel is underneath the non-graded portion of the masonry wall (Slope Feature No. 11SW-B/FR 190) facing Leighton Road and is in the vicinity of the Masonry Wall and Earthenware Pipes at Caroline Hill Road (with Slope Feature Nos. 11SW-B/FR 193 and 11SW-B/FR 32), a Grade 3 historic structure (collectively as “Graded Masonry Wall”), and Main Building of Po Leung Kuk at No. 66 Leighton Road, a Grade 1 historic building (the Graded Building). 3. We appreciate that the Applicant has supplemented a section of Heritage Impact in the current Planning Statement to assess the potential adverse physical impacts of the proposed development on the Graded Structure and the Graded Building. According the Section 5.7 of the Planning Statement, the Applicant has assessed that the impact on the Graded Structure and the Graded Building is expected to be insignificant, and that regular monitoring and inspection of both the Graded Structure and the Graded Building will be conducted during the construction stage. Should the subject application be approved by the Town Planning Board, AMO will offer comments on the works arising from the proposed development upon receipt of referrals from the respective departments.	Noted and thank you. Noted and thank you. Noted and thank you.

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4.	As for the non-graded portion of the masonry wall which is required to be retained under Special Condition Clause (3) of the land lease of the IL 8945, and which will be directly affected by the proposed development, we shall defer to the relevant authorities, e.g. Lands Department, in providing comments.	Noted and thank you.
2.	PLANNING DEPARTMENT HONG KONG DISTRICT PLANNING OFFICE MS. FARICA NG (TP/HK10) Ref. / Date: email dated 14 August 2026, 17:25 Received Date: 14 August 2026 Please find the attached departmental comments. Comments of Chief Building Surveyor/HKE&H, Buildings Department (contact officer: Ms. Fiona TONG, tel: 2626 1423) <u>Major Comments on the Application/Main Reasons of Objection:*</u> 1. It is noted that the proposed tunnel is for vehicular traffic. In general, if the proposed tunnel to be erected at Government land, it is not accountable for GFA calculation under the Buildings Ordinance (BO). 2. As the proposed tunnel is connected to buildings on private lots and be constructed under streets, exemption under section 31(1) of the BO to permit such structure to project over / under streets will be required. Exemption under section 31(1) of the BO may be given provided that, among others, commercial activities generally are not allowed unless with planning permission and specific justified public benefit acceptable to relevant government departments, and are accountable for GFA calculation under OZP. PNAP APP-38 refers.	Noted and thank you. Noted and thank you.

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	3. Detailed checking for compliance with the BO will be made upon building plans submission stage. 4. My previous reply for the pre-submission enquiry is still pertinent. Comments of Director of Food and Environmental Hygiene (Contact officer: Ms. Stella Kwok, tel: 3141 1229) (i) If any Food and Environmental Hygiene Department's (FEHD) facility is affected by the development, FEHD's prior consent must be obtained. (ii) If provision of cleansing service for new roads, streets, cycle tracks, footpaths, paved areas etc, is required, FEHD should be separately consulted. Prior consent from FEHD must be obtained. (iii) No environmental nuisance should be generated to the surroundings. Also, arrangement shall be made to dispose any waste so generated from commercial / trading activities properly at own expenses. (iv) Proper licence / permit issued by FEHD is required if there is any food business / catering service / activities regulated by the Director of Food and Environmental Hygiene under the Public Health and Municipal Services Ordinance (Cap. 132) and other relevant legislation for the public. Comments of Commissioner of Police (Contact officer: Mr. Raymond LAM, tel: 3660 1887) It is advised that the proposal should not cause adverse traffic impact to the local community and each Temporary Traffic Arrangement (TTA) involving works on footpath and/or carriageway should be submitted to this office and Transport Department for comment before implementation.	Noted and thank you. Building plans submissions will be made at a later stage. Noted and thank you. Noted and thank you. Noted and thank you. Noted and thank you. Noted and thank you. Noted and thank you.

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	District Planning Officer/Hong Kong, Planning Department (contact officer: Ms. Farica NG, tel: 2231 4929) We have the following observations/comments from district planning perspective: (a) Please clarify if the major development parameters in Table 4.2 of the Planning Statement apply to each level of the proposed tunnel (i.e. B3/F and B4/F), or to the tunnel works as a whole. (b) It is noted that the minimum internal clear width of proposed tunnel is 5m (including a minimum clear width of 4m for driveway). Please clarify the purpose of the remaining 1m, such as maintenance access, structural clearance, emergency refuge, service zone or pedestrian movement, etc. Please clarify whether pedestrian access is allowed or prohibited within the tunnel. If any pedestrian footpath is proposed, the driveway and footpath should be clearly annotated on all relevant plans, including the floor plans. (c) Please provide a pedestrian circulation network among the Lee Garden developments and their operation hours.	The minimum internal clear width, gradient and minimum clear headroom as stated in Table 4.2 of the Planning Statement refer to the proposed tunnel at each level, whilst the rest of the parameters refer to the proposed two-level tunnel as a whole. Table 4.2 of the Planning Statement has been updated accordingly. The minimum 5m internal clear width of the proposed tunnel includes 4m clear width of the carriageway and a 500mm horizontal kerb clearance between the edge of the carriageway and the structure / wall on both sides. The proposed tunnel in the subject application will serve vehicular traffic only, and no pedestrian passage will be provided. As discussed in paras. 1.2.10 – 1.2.11 of the Planning Statement, the proposed tunnel forms part of Hysan’s overall plan to enhance vehicular and pedestrian connectivity in Causeway Bay as a whole. The covered footbridges and a walkway cover as gazetted under the Roads (Works, Use and Compensation) Ordinance (Cap. 370) will provide seamless weather-proof pedestrian routes from Causeway Bay Mass Transit Railway (MTR) Station to various commercial developments (Figures 1.3a – 1.3b refer). The existing operation hours of the commercial developments in Lee Gardens Area, including Lee Garden One – Six, are as follows. Shops: Sunday - Thursday: 1000 - 2200 Friday, Saturday, and the Eve of Public Holidays: 1000 - 2300

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	(d) The applicant stated that the proposed tunnel would bring benefit to ingress and egress traffic of Lee Garden One and Lee Garden Three from/to the south (i.e. Link Road) (Para. 4.5.3 of the Planning Statement refers). Understand the opening hours of the car park at Lee Garden Three is currently 24 hours and the opening hours of the future car park at Lee Garden Eight will also be 24 hours. Please supplement the opening hour of the car park at Lee Garden One. (e) In view of the cumulative tunnel proposals within the Lee Garden area, please clarify whether the proposed tunnel would alter queueing patterns at Hysan Avenue, Hoi Ping Road, Pennington Street, Leighton Road, Sunning Road and associated access points, and provide any proposed traffic management / wayfinding measures. Please also provide a full operational picture of the connected carparking system by indicating all ingress/egress, relevant signage or parking guidance arrangements to explain how drivers would be directed at the future underground parking network.	Restaurants: Sunday - Thursday: 1100 - 2300 Friday, Saturday, and the Eve of Public Holidays: 1100 - 2400 The operation hours of Lee Garden Eight will be subject to future operational needs. The proposed tunnel in the subject application will serve vehicular traffic only, and no pedestrian passage will be provided. Therefore, no change to the existing and planned pedestrian circulation network is proposed in the subject application. The Applicant will ensure 24-hour public pedestrian access to the car parks at Lee Garden Three and Lee Garden Eight, which will be open 24 hours. This has been supplemented in para. 4.5.6 of the Planning Statement. The opening hours of the car park at Lee Garden One are 7:30am to 12:30am. This has been supplemented in para. 4.3.2 of the Planning Statement as per your request. With the basement car parks further linked by Tunnel T3, the available car parking spaces within Lee Garden One, Lee Garden Two, Lee Garden Three and Lee Garden Eight can be shared for use by the vehicles. As a result, utilization of available car parking spaces can be maximized while the way-finding to vacant spaces can take place internally. Thus, vehicle queueing at car park entrances and traffic circulation on public roads will be minimized. Regarding the full operational picture, please refer to the revised Figure 4.4 of the Planning Statement, which showcases the overall traffic management strategy and the anticipated traffic re-routing upon completion of the proposed tunnel.

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	(f) Sec. 4.5 – - Please provide a comprehensive summary table of the car parking provision at Lee Garden One, Two, Three and Eight before and after construction of tunnels T1, T2 and T3. The table should also provide detail breakdown of private car parking space, accessible parking spaces, loading/unloading areas, and any temporarily or permanently suspended parking spaces “Link Road” has been mentioned a few times, please annotate it on Figures 4.4a to 4.4c. <i>Traffic and Transport</i> (g) Based on the Traffic Impact Assessment (TIA) submitted, it is noted that 6 car parking spaces in Lee Garden Three and 5 car parking spaces in Lee Garden Eight would be permanently suspended after the construction of Tunnel T3. Based on our recent site visit, it is noted that one of the car parking spaces to be affected on B4/F in Lee Garden Three is an accessible car parking space. Please confirm. (h) Please advise the possible location and timeframe for reprovision of affected 11 parking spaces. <i>Construction and Traffic Management</i> (i) W.r.t. para. 7.2.2 of the TIA submitted, it is noted that “if public good vehicles and/or coach parking spaces are affected during construction stage, the ancillary loading bays would be temporarily converted into the affected public parking spaces to maintain the 24-hour provision for the public needs, if necessary.” Based on Figure 7.1 in the TIA, a public MGV/HGV parking space and 3 coach parking spaces in Lee Garden Eight would be temporarily affected during the construction, please advise the location of the ancillary loading bays that would be temporarily converted into the affected public	The summary of car parking provision at Lee Garden One, Lee Garden Two, Lee Garden Three and Lee Garden Eight has been supplemented in para. 4.5.7 and Table 4.3 of the Planning Statement. “Link Road” has been annotated in the relevant figures. The affected accessible car parking space will be relocated on the same floor in Lee Garden Three by suspending a normal car parking space, as presented in Drawing 7.1 of the TIA. The possible reprovision of the affected spaces will be further reviewed at detailed design stage. If temporary relocation is necessary during construction stage, it would be re-provided at the same floor of Lee Garden Eight by converting the HGV loading bays into the affected parking spaces. The details of temporary relocation will be reviewed at detailed design stage and submitted for approval by TD prior to the construction works.

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	parking spaces to maintain the 24-hour provision for the public needs (within Lee Garden Eight?). (j) Please clarify whether the proposed construction programme for Tunnel T3 would overlap with any construction / fit-out / traffic arrangements associated with Lee Garden Eight and, if so, provide details of the interfacing and mitigation measures. Further Comments of Chief Estate Surveyor/Development Control (contact officer: Sarah CHEUNG, tel: 3793 4603) Regarding public comment concerning the OVT:- it would be desirable if the Applicant can provide the relevant information to address the concerns from the public in the Planning Application.	The construction of proposed Tunnel T3 is anticipated to commence upon completion of Lee Garden Eight. Please refer to section 7 of the Planning Statement. The applicants' response to the concerned public comment is as follows: Thank you for your comment. The Applicants have acknowledged that the tunnel alignment passes below the dripline of the OVT (LANDSD (LEASED) WCH/1). Nevertheless, the tunnel will be constructed entirely underground at a level of approximately -1.35mPD, which is at least 10m below the top of soil of the OVT (approximately +9.30mPD) and approximately 7m below the ground level at Leighton Road (approximately +6.10mPD). In addition, the tunnel is located outside the statutory Tree Protection Zone (TPZ), and no excavation or works at ground level within the dripline are proposed. In addition, the proposed tunnel will pass at least 8m below the 2m deep TPZ (as defined above by DEVB TC 5/2020). Accordingly, direct impacts on the OVT are anticipated to be insignificant. The Applicants recognise the exceptional heritage, landscape and ecological value, as well as the existing Brown Root Rot Disease (BRRD) condition of the concerned OVT. Therefore, notwithstanding the insignificant potential impacts anticipated on the OVT, precautionary tree protection and monitoring measures are proposed. These include strict prohibition of ground-level works within the dripline, control of site access to prevent contamination, implementation of BRRD precautionary measures in accordance

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3.	PLANNING DEPARTMENT HONG KONG DISTRICT PLANNING OFFICE MS. FARICA NG (TP/HK10) Ref. / Date: email dated 18 August 2026, 17:41 Received Date: 18 August 2026 Please find the attached departmental comments. Comments of Head of Geotechnical engineering Office, Civil Engineering and Development Department (contact officer: Ms. Florence KO, tel: 2762 5369)	with GLTMS guidelines, and regular tree monitoring by qualified arboricultural professionals throughout the construction period. On top of these measures, an Independent Tree Expert will be engaged at a later stage once the detailed construction methodology for the tunnel has been developed. A further method statement, incorporating the advice of the Independent Tree Expert will be provided prior to the commencement of any construction works. Regular tree inspections, photographic records, and tree risk assessments will be undertaken as appropriate to ensure the health, stability, and long-term preservation of the OVT during and after the construction works. Details can be found in Annex B – Tree Protection Proposal. Furthermore, one of the Applicants, who is also the project proponent for Lee Garden Eight, has proposed a series of protection and rehabilitation measures for the OVT under a separate S.16 application (No. A/H7/188), which was approved by Town Planning Board on 24 October 2025. These measures are currently being implemented and will not be undermined by the development of Tunnel T3. In view of the above, the potential impact on the OVT is expected to be minimal.

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	Please remind the applicants that the proposed tunnels shall be designed and constructed to the relevant geotechnical standards / guidelines. The construction of the proposed vehicular tunnel shall not impair the safety or cause damage to the adjacent buildings, structures, land, streets or services. Comments of Director of Fire Services, Fire Services Department (contact officer: Mr. QIU Yi, tel: 2733 5845) Detailed fire services requirements will be formulated upon receipt of formal submission of general building plans. The EVA provision in the captioned work shall comply with the standard as stipulated in Section 6, Part D of the Code of Practice for Fire Safety in Buildings 2011, which is administered by the Buildings Department. Nevertheless, shall the proposed work affect any EVA provision of nearby buildings, the consultant should make separate enquiry to this department to ensure work feasibility. Moreover, if the tunnel is constructed using a Tunnel Boring Machine (TBM), this Department shall be notified at least one year prior to the commencement of construction works to facilitate the formation of an Emergency Pressurized Team. District Planning Officer/Hong Kong, Planning Department (contact officer: Ms. Farica NG, tel: 2231 4929) Please make responses to the public comments received under the current planning application in the next submission of further information. <i>Public Comment – 1</i> I have reservations regarding the proposed tunnel alignment passing directly beneath the canopy and dripline area of the existing Old and Valuable Tree (OVT) LANDSD(LEASED) WCH/1. Although the applicant indicates that the proposed works would be located outside the statutory Tree Protection Zone, the OVT is already	Noted and thank you. Noted and thank you. Noted and thank you. Noted and thank you. The Applicants' response to the concerned public comment is as follows: Thank you for your comment. The Applicants have acknowledged that the tunnel alignment passes below the dripline of the OVT (LANDSD (LEASED) WCH/1). Nevertheless, the tunnel will be constructed

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	known to be affected by Brown Root Rot Disease and therefore may be more vulnerable to external disturbances. The planning submission has not sufficiently demonstrated that indirect impacts arising from underground excavation, settlement, groundwater regime changes or vibration can be completely avoided. Given the exceptional heritage, landscape and ecological value of the OVT, the precautionary principle should be adopted. In my view, the application should not be approved unless the applicant can provide robust evidence, verified by an independent tree expert, confirming that the tunnel construction and operation would pose no unacceptable risk to the tree's long-term health, survival and structural stability.	entirely underground at a level of approximately –1.35mPD, which is at least 10m below the top of soil of the OVT (approximately +9.30mPD) and approximately 7m below the ground level at Leighton Road (approximately +6.10mPD). In addition, the tunnel is located outside the statutory Tree Protection Zone (TPZ), and no excavation or works at ground level within the dripline are proposed. In addition, the proposed tunnel will pass at least 8m below the 2m deep TPZ (as defined above by DEVB TC 5/2020). Accordingly, direct impacts on the OVT are anticipated to be insignificant. The Applicants recognise the exceptional heritage, landscape and ecological value, as well as the existing Brown Root Rot Disease (BRRD) condition of the concerned OVT. Therefore, notwithstanding the insignificant potential impacts anticipated on the OVT, precautionary tree protection and monitoring measures are proposed. These include strict prohibition of ground-level works within the dripline, control of site access to prevent contamination, implementation of BRRD precautionary measures in accordance with GLTMS guidelines, and regular tree monitoring by qualified arboricultural professionals throughout the construction period. On top of these measures, an Independent Tree Expert will be engaged at a later stage once the detailed construction methodology for the tunnel has been developed. A further method statement, incorporating the advice of the Independent Tree Expert will be provided prior to the commencement of any construction works. Regular tree inspections, photographic records, and tree risk assessments will be undertaken as appropriate to ensure the health, stability, and long-term preservation of the OVT during and after the construction works. Details can be found in Annex B – Tree Protection Proposal. Furthermore, one of the Applicants, who is also the project proponent for Lee Garden Eight, has proposed a series of protection and rehabilitation measures for the OVT under a separate S.16 application (No. A/H7/188), which was approved by Town Planning Board on 24 October 2025. These measures are currently being implemented and will not be undermined by the development of Tunnel T3.

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	<i>Public Comment – 2</i> Dear TPB Members, Strong Objections. The additional tunnel is a further encroachment and privatization of the ground beneath our streets. The paper waffles on about green bus stops and illegal parking. The proposed tunnel will in no way improve this situation. Public transport passengers will derive zero benefit. As for the illegal parking, this has nothing to do with the provision of parking spaces. This is all about avoiding paying fees and convenience. As my neighbourhood is similar to Causeway Bay with many visitors, I note that there is some form of car hire operations related to the double and triple plate vehicles. These vehicles avoid using off street parking facilities whenever possible and loiter on streets where there is minimal control of illegal parking. They will not be attracted into parking floors down under Lee Garden 8 when the customer is in another mall. Hysan's focus is on maximizing revenue from a combined parking facility and has nothing to do with improving conditions on our streets. There is no mention of what impact additional excavation and filling in of the ground between tall towers has on the natural drainage capacity of the ground beneath the streets that is traditionally less built over. This developer has already robbed the community of the promised 6,000sq.m Open Space at the site and replaced it with covered space, the leftover spaces between the three towers and a lot of footbridges. There is no justification to allow it to further exploit the public realm. Mary Mulvihill	In view of the above, the potential impact on the OVT is expected to be minimal. Thank you for your comment. The Applicants would like to supplement as follows. <i>Traffic Impacts</i> As stated in the Planning Statement (Section 5.2), a Traffic Impact Assessment to assess potential traffic impacts due to the proposed tunnel project during both operational and construction stages has been conducted. The TIA concludes that "the proposed tunnel will not cause adverse traffic impacts on the local road network, and all the assessed junctions will operate within their capacities during peak hours. The proposed tunnel is supported from a traffic engineering point of view as it is considered to be beneficial to the local area, with the following expected benefits: • Overall at-grade traffic volume on some key roads and local roads will be reduced, which would also help to improve the air quality and pedestrian safety in the area; • Accessibility of car parks will be maximized for efficient use of available car parking spaces and way-finding to vacant parking spaces can be taken place internally and thus vehicle queuing at car park entrances and traffic circulation on public roads will be minimized; • Availability of route choices for vehicles will help to achieve a better balanced use of roads/junctions' capacities under different road traffic situations; and • Access and traffic management will be more flexible for car park operators to manage the ingress and egress of vehicles to suit different traffic conditions in the area". Should there be illegal parking, the Applicants assume that enforcement action will be undertaken by relevant law enforcement authorities in accordance with relevant laws and regulations.

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4.	PLANNING DEPARTMENT HONG KONG DISTRICT PLANNING OFFICE MS. FARICA NG (TP/HK10) Ref. / Date: email dated 20 August 2026, 17:51 Received Date: 20 August 2026 Please find the attached departmental comments. Comments of Head of Greening, Landscape and Tree Management Section, Development Bureau (contact officer: Ms. Flora LEUNG, tel: 3509 7367) It is noted that the proposed tunnel will be located at least 10m below the soil surface of the OVT (LANDSD(LEASED)WCH/1(HKP WCH/1)), and routine quarterly monitoring will be conducted by an expertise in tree risk assessment and related tree inspection works (with qualifications stipulated in section 3.6 of Annex B). Considering the OVT is infected by brown root rot disease and the proposed excavation work directly underneath the OVT is of large scale, it is recommended to seek comments from an independent tree expert on the subject proposal and assessment of the potential impacts on the OVT.	<i>Drainage Impacts on Drainage Capacity</i> The tunnel proposals have been circulated to Drainage Services Department, Civil Engineering and Development Department (CEDD) and other relevant Government Departments. None has expressed any concerns regarding adverse impacts on subsurface ground conditions or drainage capacity. Noted and thank you. An Independent Tree Expert will be engaged at a later stage once the detailed construction methodology for the tunnel has been developed. A further method statement, incorporating the advice of the Independent Tree Expert will be provided prior to the commencement of any construction works. Please refer to para. 4.6.2 of the Planning Statement.

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	Besides, close monitoring on the tree health and stability by an independent tree expert is recommended, in addition to the routine quarterly tree assessment, for tree protection and public safety. Comments of Director of Electrical and Mechanical Services (contact officer: Mr. John CHEUNG, Tel: 2808 3113) In the interests of public safety and ensuring the continuity of electricity supply, the parties concerned with planning, designing, organizing and supervising any activity near the underground cable under the mentioned document should approach the electricity supplier (i.e. HK Electric) for the requisition of cable plans to find out whether there is any underground cable within and/or in the vicinity of the concerned site. They should also be reminded to observe the Electricity Supply Lines (Protection) Regulation and the “Code of Practice on Working near Electricity Supply Lines” established under the Regulation when carrying out works in the vicinity of the electricity supply lines. Comments of District Land Officer/Hong Kong East, Lands Department (Contact person: Ms. Phoebe TAI, tel: 2835 1635) <u>Land Status</u> 2. The proposed underground vehicular tunnel (“Proposed T3”) connects Lee Garden Three (IL 29 s.J ss.2 & s.J RP and IL 29 s.J ss.1 RP, “the Lots of Lee Garden Three”) and Lee Garden Eight (IL 8945) via the unleased and unallocated government land underneath Leighton Road and Sunning Road. The relevant conditions under the leases governing the respective lots are summarized as follow: IL 29 s.J ss.2 & s.J RP and IL 29 s.J ss.1 RP (Lee Garden Three) The Lots of Lee Garden Three are held under Government lease of IL 29 as varied or modified by an Agreement dated 7 June 1934, which is virtually unrestricted	This will be addressed in the further method statement mentioned above, which will be provided prior to the commencement of any construction works. Noted and thank you. The Applicant will consult the electricity supplier accordingly and ensure compliance with relevant regulations. Noted and thank you.

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	except the standard rate and range clause and non-offensive trade clause, with a lease term of 982 years commencing from 25.6.1860. A License permitting the five offensive trades (i.e. Oilman, Tavern Keeper, Victualler, Butcher and Sugar-baker) on the Lots was issued on 2 December 1983. A Modification Letter was executed on 10 January 2025 for provision of the footbridge connecting Lee Garden Three and Lee Garden Five. For information, lease modification for the proposed tunnel T1 across Hysan Avenue linking up Lee Garden Three and Lee Garden One is under processing. In addition, it is noted that some of the land status information mentioned in section 1.3 of the PS are not accurate:- (a) the lots of Lee Garden Three shall also include IL 29 s.J ss.1 RP; (b) the lease modification for Tunnel T1 has been completed and the modification letter was executed on 7.5.2026; and (c) the special condition referred in para. 1.3.5 shall be SC(13)(k) instead of SC(13)(j). <u>Preservation of Masonry Walls and Earthenware Pipes</u> 3. By comparing figure 1.1 of the PS and PLAN II annexed to the Conditions of IL 8945 ("PLAN II"), it is noted that the Proposed T3 will pass beneath the existing Masonry Wall and Earthenware Pipes as defined under Special Condition (SC) No. (2)(a)(i) of the Conditions. The Applicant shall observe SC No. (3) of the Conditions regarding the preservation of Masonry Walls and Earthenware Pipes. Comment from AMO should be sought on whether the proposed works would affect the Masonry Walls and Earthenware Pipes. Pursuant to SC No. (3)(b) of the Conditions, the Applicant shall prior to the commencement of any works which may affect the Masonry Walls and Earthenware Pipes at his own expense submit to the AMO a conservation management plan on the	Para. 1.3.2 of the Planning Statement has been revised to include IL 29 s.J ss.1 RP. Para. 1.3.2 of the Planning Statement has been revised accordingly. Para. 1.3.5 of the Planning Statement has been rectified. This application has been circulated to AMO for review and comment. At AMO's suggestion, Section 5.7 on Heritage Impacts was included in the Planning Statement. The Applicant will submit any further information as required for relevant B/Ds' consideration during detailed design.

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	conservation of the Masonry Walls and Earthenware Pipes and obtain the written consent of the Director of Lands ("the Director"). <u>The Cables, the Cable Installations and the Cable Reserve Areas</u> 4. Pursuant to SC No. (8) of the Conditions, there are in existence some electricity transmission cables below the ground level of the Green Areas and the adjacent or adjoining Government land with their approximate alignments shown by green lines, red lines and purple lines (collectively "the Cables") on PLAN II. By comparing figure 1.1 of the PS, PLAN I annexed to the Conditions of IL 8945 ("PLAN I") and PLAN II, it is noted that the Proposed T3 would encroach on the Green Areas as shown on PLAN I and potentially affect the red lines (i.e. 11 kilovolts cable) and green lines (i.e. 132 kilovolts cable) as shown on PLAN II. The Applicant is reminded that according to SC No. (8)(d)(i) & (8)(d)(ii) of the Conditions, no building or structure or support or foundation for any building or structure shall be constructed in those portions of Green Areas within a distance of 1.0 metre in all directions measured from the centre line of the 132 kilovolts cable or 0.3 metre in all direction measured from the centre line of the 11 kilovolts cables and the 22 kilovolts cables or from the outer surface of the cable works, structures, facilities and installations associated with the Cables (collectively "the Cable Reserve Areas"). The Applicant is required to clarify and confirm whether the Proposed T3 would affect the Cables and the Cable Reserve Areas. 5. Besides, the Applicant should also observe SC No. (8)(e) which stipulates that prior to the commencement of any works whatsoever within a distance of 3.0 metres in all directions measured from the centre line of the Cables or the outer surface of the Cable Installations, the lot owner shall consult the Hongkong Electric Company Limited so as to ensure that any such works will not damage, or in any way interfere with or endanger the safe operation and structural integrity of any part or parts of the Cables and the Cable Installations and if required by the Director, the lot owner shall, at the lot owner's own expense take such precautions as may be required by the Power Company to ensure	Noted and thank you. The Applicants will carry out a utilities survey at detailed design stage to ensure that the proposed Tunnel T3 works will not affect the Cables and the Cable Reserve Areas. Noted. The Applicants will consult the Hongkong Electric Company Limited accordingly.

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	the safe operation and structural integrity of the Cables and the Cable Installations or any part or parts thereof. <u>The Existing Water Main</u> 6. Pursuant to SC No. (9) of the Conditions of IL 8945, there are in existence some Government water mains below the ground level of the Green Area and the adjacent or adjoining Government land with their approximate alignments shown by blue lines on PLAN I. According to figure 1.1, it is noted that Proposed T3 may affect the Government water mains as shown on the PLAN I. The Applicant should, in consultation with WSD, clarify whether the Proposed T3 would affect the existing Government water mains. Under SC No. (8)(f) of the Conditions, in the event that any diversion of the existing water mains is required by the lot owner and approved by the Government, the diversion works shall be carried out by the Director at the cost of the lot owner who shall pay to the Government on demand a sum or sums equal to the cost or costs thereof, such sum or sums to be determined by the Director whose determination shall be final and binding on the lot owner. <u>Preservation of Old and Valuable Tree</u> 7. According to the PS, the Proposed T3 will pass beneath the dripline of an Old and Valuable Tree now known as LANDSD (LEASED) WCH/1 ("the OVT") located partly within the Pink Hatched Green Area ("PHGA") of IL 8945 and partly on the adjoining Government land. The Applicant is reminded to observe SC No. (13) of the Conditions concerning preservation of trees. In particular, SC No. (13)(k) of the Conditions stipulates that save with the prior written consent of the Director, no building or structure or support for any building or structure may be erected or constructed on, over, above, under, below or within the PHGA except the works or structures as specified under SC No. (13)(k)(i) to (iv) of the Conditions. If the application is approved by the TPB and to proceed with the Proposed T3, the Applicant is required to obtain the prior	Noted. The Applicants will coordinate with relevant B/Ds on water supply matters during detailed design stage. Noted. The Applicants will seek relevant approvals, if required, should the subject planning application be approved by the TPB.

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	written approval of the Director in accordance with SC No. (13)(k) of the Conditions. 8. According to the PS, the Applicant alleged that direct impacts of the Proposed T3 on the OVT are anticipated to be insignificant as the Proposed T3 will be constructed entirely underground at approximately -1.35mPD, which is at least 10m below the existing ground level of the OVT, and falls outside the statutory Tree Protection Zone. Notwithstanding the above and the precautionary and monitoring measures proposed in the PS, it is noted that the OVT suffers from the Brown Root Rot Disease as mentioned in para 2.2.4 of the PS and therefore the impact on the OVT should be carefully assessed. We defer to the relevant bureaux / departments (B/Ds) to consider and comment on the acceptability of the proposed structures / works underneath the OVT. <u>Parking Spaces</u> 9. According to chapter 7 of the Traffic Impact Assessment at Annex A of the PS, car parking spaces and some goods vehicles and/or coach parking spaces will be temporarily suspended during the tunnel construction stage. Besides, a total of 11 nos. car parking spaces as provided at Lee Garden Three and Lee Garden Eight will be permanently suspended for the opening of tunnel entrances after completion of tunnel work. The Applicant is required to observe the parking requirements at SC No. (43) of the Conditions and demonstrate that the parking provision during and after construction complies with the respective parking requirements. TD should be consulted on the traffic impact during and after the completion of construction.	As stated in Section 4.6 of the Planning Statement and Annex B ‘Tree Protection Proposal’, precautionary tree protection and monitoring measures are proposed given the OVT’s status in order to specifically address its existing Brown Root Rot Disease (BRRD) condition. The proposed number of car parking spaces required under SC No. (43) of the Conditions for IL8945 (Lee Garden Eight) to be suspended falls within the range of flexibility allowed under SC No. (46) of the Conditions (i.e. 5% of the total number of spaces) during and after construction: <table><tr><th></th><th>Total no. of CPS (Required under SC(43))</th><th>Total no. of CPS (Flexibility under SC(46))</th><th>Permanently suspension upon completion</th></tr><tr><td>LG3</td><td>N/A</td><td>N/A</td><td>6</td></tr><tr><td>LG8</td><td>512</td><td>±25</td><td>5 [1%]</td></tr></table> The subject submission has been circulated to TD for review and comment.			Total no. of CPS (Required under SC(43))	Total no. of CPS (Flexibility under SC(46))	Permanently suspension upon completion	LG3	N/A	N/A	6	LG8	512	±25	5 [1%]
	Total no. of CPS (Required under SC(43))	Total no. of CPS (Flexibility under SC(46))	Permanently suspension upon completion												
LG3	N/A	N/A	6												
LG8	512	±25	5 [1%]												

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	10. If the planning application is approved by the Town Planning Board, the applicant is required to apply to LandsD for a lease modification and/or other appropriate land documentation in respect of the affected lots to take forward the proposal. However, there is no guarantee that such application(s) will be approved. Such application(s), if approved, would be subject to such terms and conditions, including payment of administrative fee(s) and premium, as might be imposed by LandsD, in the capacity of the landlord. <u>Other Comments</u> <u>Gazettal under the Roads (Works, Use and Compensation) Ordinance (Cap. 370) ("the Ordinance")</u> 11. According to the PS, the construction of the Proposed T3 will take place solely underground. The Applicant shall clarify whether the construction would involve any road closure. Subject to the clarification from the Applicant and the advice from TLB, the Proposed Tunnel 3 may have implications under the Ordinance. In the event that gazettal for the proposed road works under the Ordinance is required, the Applicant shall be liable to pay the Government all relevant costs including compensation.	The Applicants will proceed with the application for lease modification and/or other appropriate land documentation upon approval of the planning application.
5.	PLANNING DEPARTMENT HONG KONG DISTRICT PLANNING OFFICE MS. FARICA NG (TP/HK10) Ref. / Date: email dated 21 August 2026, 11:28 Received Date: 21 August 2026 Please find the attached comments from WSD. Comments of Chief Engineer/Construction, Water Supplies Department (contact officer: Mr. Terry LAW, tel: 2152 5737)	As discussed in Section 4.4 of the Planning Statement, the "Drill and Excavation Method" with a launching point from Lee Garden Eight has been proposed for the construction of the tunnel in order to avoid any excavation work on at-grade public roads. Thus, no road closure will be required during construction. Please note that according to the TIA, the proposed Tunnel T3 will not cause adverse traffic impact to the local road network. With the proposed Construction Traffic Management Scheme (i.e. Section 7.5 of the TIA refers), impact on the surrounding road conditions will be minimized.

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	Please note that there are some existing fresh water mains within the site and are affected by the proposed tunnel. Free access should be allowed for WSD at any time to carry out operation and maintenance of these water mains. In case the project proponent considers that diversion of these water mains is required, they should study the feasibility of diverting these water mains. If diversion is considered feasible, the project proponent should submit their proposal for WSD's consideration and approval. The water mains diversion work shall be carried out by the project proponent at their own cost to the satisfaction of WSD. WSD will only carry out the connection works to the existing network and the associated connection cost should be borne by the project proponent. Please find attached partprint of our mains record plans showing the existing water mains in the vicinity of the captioned site for your information. Please note that the alignments of the water mains are indicative only. The exact lines and levels of our water mains should be established by hand dug trial pits on site if they are of significance to your works. Some changes might have been made to the information shown on the drawings in the course of time and that digging of trial holes to ascertain the exact alignment and depth of water mains would still be necessary before any road excavation.	Noted. The tunnel level is lower than the water mains, so that WSD access will not be affected.
6.	PLANNING DEPARTMENT HONG KONG DISTRICT PLANNING OFFICE MS. FARICA NG (TP/HK10) Ref. / Date: email dated 26 August 2026, 9:41 RECEIVED DATE: 26 AUGUST 2026 Please find the attached comments from TD. Comments of Commissioner of Transport, Transport Department (contact officer: Ms. Priscilla SUM, tel: 2829 5408)	Noted with thanks.

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	1. The proposed tunnel T3 would inevitably change the existing traffic pattern of the proposed carparks of Lee Garden (LG)8, LG3, LG2 and LG1. Therefore, appropriate traffic management plans for the carparks cluster including the queueing arrangement, signage arrangement, the internal traffic circulation across different carparks, etc. should be developed for effective management of the traffic arriving/leaving the carparks. 2. We have no comment from traffic engineering viewpoint on the proposed minimum internal clear width of driveway (i.e. 4m) and min. clear headroom at tunnel T3 (i.e. 2.4m) subject to compliance with the following: - (i) The driveway shall only be one-way only at each level within the tunnel and complies with relevant requirements at TPDM and PNAP App-111; and (ii) The min. clear headroom of the proposed tunnel shall be in consistent with the min. clear headroom at the carpark floors in both Lee Garden Three and Lee Garden Eight. <u>Planning Statement</u> 4. Refer to Section 6.2 – It is noted that the recommended benefits / reduction on at grade traffic flows are based on the assumptions of the drivers’ patterns, which may vary on different drivers’ behaviour and the information of the driver on hand (i.e. the knowledge of the locations of the tunnels inside carpark, actual road traffic condition, time difference between the travelling within carpark and outside carpark, etc) and the traffic management of the carparks. Besides, the assumed re-routing will also increase the right turn traffic at junction of J1- Caroline Hill Road (West)/ Link Road to LG8. Therefore, there may be negative traffic impact to the local road network induced by the proposed Tunnel T3. Please review and revise the wordings in Planning Statement and TIA Report. <u>Traffic Impact Assessment (TIA) Report</u>	Noted. Please be advised that the overall traffic management strategy has been presented in Chapter 2.5 of TIA. The detailed traffic management plan will be further reviewed before commencement of the tunnel connection. Noted and thank you. Noted. Although the right turn traffic at Junction J1 will be increased due to the diverted access route, the overall traffic volume at the road section will not be greater than the scenario without the proposed Tunnel T3. Therefore, the benefit of “reduction of at-grade traffic demand” is considered valid. Nonetheless, the wording in Section 6.2 of Planning Statement and TIA Report has been amended as appropriate.

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	5. LG3 is in connection to both Tunnel T1 and Tunnel T3, it is also the major access for vehicles coming from the west. Based on our observation, the existing ticket gate is quite close to the entrance, and traffic queues could be observed sometimes along Hoi Ping Road. Although smart “no stop” ticket gate has been adopted and the traffic utilising the access at Hoi Ping Road may varies upon completion of the tunnels, please take this opportunity to review the feasibility in shifting the ticket gate bar towards the basement to increase the queuing space.	Please be advised that the control gate serves as the main access control point for all vehicles entering the basement including the goods vehicles at loading/unloading bays situated at B1/F. Therefore, it is necessary to locate the gate somewhere between G/F and B1/F for access control purposes. Due to layout constraints, shifting the concerned gate further toward the basement would not be feasible, as it would not maintain sufficient turning space for goods vehicles. Nonetheless, the arrangement of loading/unloading activities at Lee Garden Three could be further reviewed and coordinated by the car park operator in order to restrict access by goods vehicles during peak car park traffic hours to alleviate traffic queues. In the event that a traffic queue from Lee Garden Three to Hoi Ping Road forms, the car park operator would deploy staff to guide vehicles to the basement car park via Lee Garden Eight.
	6. Refer to Table 3.2 and Table 5.1, for J1 – Caroline Hill Road (West)/ Link Road, the right turn traffic from Link Road to LG8 is critical with a short queuing space of around 25m. As such, please provide the queue length assessments for the junction to demonstrate no adverse traffic impact for the increased (diverted) traffic flow induced by Tunnel 3 to LG8 for our considerations.	Since the road improvement work at J1 is ongoing with a significantly changed junction layout and method of control, queue length assessment has only been conducted for the future reference and design scenario. As reviewed, the available queue lengths provided at the junction will be sufficient to cater for the anticipated vehicle queues during peak hours in both the reference and design scenarios of year 2036. The assessment has been provided in the Chapter 5 of TIA.
	7. Refer to Drawing No. 4.11 – Please advise why the figures showing the net differences in traffic flows due to Tunnel T3 is not just the addition of Drawing Nos. 3.1 and 3.7. Please review.	It is clarified that the net differences in traffic flows presented in Drawing No. 4.11 are rounded to the nearest 5 and derived with reference to (i) the directional splits of the ingress and egress traffic of Lee Garden One, Lee Garden Three and Lee Garden Eight as presented in Drawing Nos. 3.7, 3.9 and 4.2 respectively; and (ii) the following anticipated diversions from the reference scenario (with Tunnels T1 & T2) to the design scenario (with Tunnels T1, T2 & T3): • Ingress of Lee Garden One from the south via Lee Garden Eight instead of Lee Garden Two

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		- Egress of Lee Garden One to the south via Lee Garden Eight instead of Lee Garden One - Ingress of Lee Garden Three from the south via Lee Garden Eight instead of Lee Garden Three - Egress of Lee Garden Three to the south via Lee Garden Eight instead of Lee Garden Three - Ingress of Lee Garden Eight from the west via Lee Garden Three instead of Lee Garden Eight For easy reference, Drawing No. 4.11 has been revised, presenting the exact traffic flows instead of rounded figures.
	8. Refer to Section 7.2.2 and Drawing No.7.1, it is advised that 5 nos. MGV/HGV parking spaces and 5 nos. of coach parking spaces would be suspended. Please advise why the MGV/ HGV / coaches parking spaces on B2/F level need to be suspended with the tunnel construction on B3/F and B4/F levels. Please consider to suspending PCs parking spaces on B3/F and B4/F instead of suspending the MGV/ HGV/ coaches parking spaces on B2/F, as MGV/ HGV/ coaches parking spaces are the PVP requirements in the OZP.	Since the headroom on B3/F is designated for private cars only, construction vehicles would not be able to access the works area on B3/F and B4/F. Therefore, working space and a floor opening on B2/F would be required for internal lifting and delivering major plant, equipment (e.g. the tunnelling machine) and materials from B2/F to the works area on B3/F. As per the preliminary review, it would potentially affect 3 nos. coach parking spaces and 1 no. HGV parking space on B2/F, as presented in Drawing No. 7.1. As mentioned in Section 7.2.2, if the MGV/HGV/coaches PVP on B2/F will be affected during construction stage, the ancillary loading bays would be temporarily converted into the spaces for re-provisioning of the affected public parking spaces to maintain the 24-hr provisions for the public needs. The details of temporary relocation will be reviewed in the detailed design stage and submitted for TD's review and approval prior to the construction works.
	9. Besides, if the MGV/HGV/ coaches parking spaces are required to be suspended, please show the exact locations of the suspended MGV/ HGV/ coaches parking spaces during construction stage.	The potentially affected 3 nos. coach parking spaces and 1 no. HGV parking space at B2/F are indicated in Drawing No. 7.1.
	10. As mentioned in Section 7.2.2, it is noted that ancillary loading bays may be temporarily converted into parking spaces to address the parking demands.	The temporary conversion will take into account the size of coach parking spaces (additional 1m in length) and manoeuvring requirements. The details of temporary

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	However, the size of coaches parking spaces should be larger than L/UL bay for MGW/HGV. Please review. 11. Refer to Section 8.1.9, the main objective of Tunnel T3 is to enhance the circulation between the carparks of LG3 and LG8, instead of resolving the traffic issues at Hysan Avenue and Hoi Ping Road. Please review and revise the wordings in the TIA report.	relocation will be reviewed at detailed design stage and submitted for TD's review and approval prior to the construction works. Section 8.1.9 has been revised.

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Causeway Bay

Section 16 Application for Proposed Underground Vehicular Tunnel Connecting Lee Garden Three (10 Hysan Avenue) and Lee Garden Eight (8 Caroline Hill Road) below Leighton Road and Sunning Road, Causeway Bay

A/H6/98 Further Information 1

Replacement Pages of Planning Statement



August 2026

Silver Nicety Company Limited and Patchway Holdings (HK) Limited

Section 16 Application for Proposed Underground Vehicular Tunnel Connecting Lee Garden Three (10 Hysan Avenue) and Lee Garden Eight (8 Caroline Hill Road) below Leighton Road and Sunning Road, Causeway Bay

Planning Statement

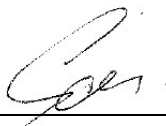
Document No. 001

URBIS Limited

August 2026

In association with
Ronald Lu & Partners (Hong Kong) Ltd.
ARUP
WSP
Otherland Limited
MVA Hong Kong Ltd.
Arcadis Hong Kong Ltd.
Colliers International (HK) Limited

Prepared by :



Samantha Yung MRTPI

28 August 2026

Date

Checked by :

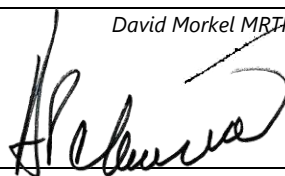


David Morkel MRTPI MHKIP MHKIUD RPP

28 August 2026

Date

Approved for Issue by:



Alan Macdonald MRTPI FHKIP FHKIUD RPP

28 August 2026

Date

Revision Log		
Revision	Issue Date	Description
Rev. 0 Draft	20260130	First Draft Issue
Rev. 1 Draft	20260629	Second Draft Issue
Rev. 2 Draft	20260715	Third Draft Issue
Rev. 0 Final	20260716	First Final Issue
Rev.1 Final	20260828	Second Final Issue (Further Information 1)

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LIST OF ABBREVIATIONS

BRRD	Brown Root Rot Disease
C(2)	Commercial (2)
GFA	Gross Floor Area
GIC	Government, Institution or Community
GMB	Green Mini Bus
MTR	Mass Transit Railway
OVT	Old and Valuable Trees
OZP	Outline Zoning Plan
TPB	Town Planning Board
TPZ	Tree Protection Zone

- 1.2.13 The proposed Tunnel T3 leverages the underground vehicular network established by Tunnel T1 and Tunnel T2 and expands its benefits further south to the vicinity of Leighton Road and Caroline Hill Road by linking the proposed basement car park in the new Lee Garden Eight development with existing basement car parks in Lee Garden One, Lee Garden Two and Lee Garden Three. The integration of basement car parks will enhance the accessibility of this underground vehicular network through multiple entrances across the various commercial developments and will encourage more efficient use of car parking spaces.
- 1.2.14 It is for the reasons noted above that, Tunnel T3 connecting Lee Garden Three and Lee Garden Eight is proposed in this subject application.

1.3.1 The Application Site includes Government land underneath Leighton Road and Sunning Road, and part of Inland Lot No. 29 ("IL29") S.J ss.2 & IL 29 S.J RP where Lee Garden Three is located. The southern end of the Application Site abuts Inland Lot No. 8945 ("IL8945") where Lee Garden Eight is located. All three private lots - as illustrated in **Figure 1.4** below - are held by subsidiary companies of Hysan.

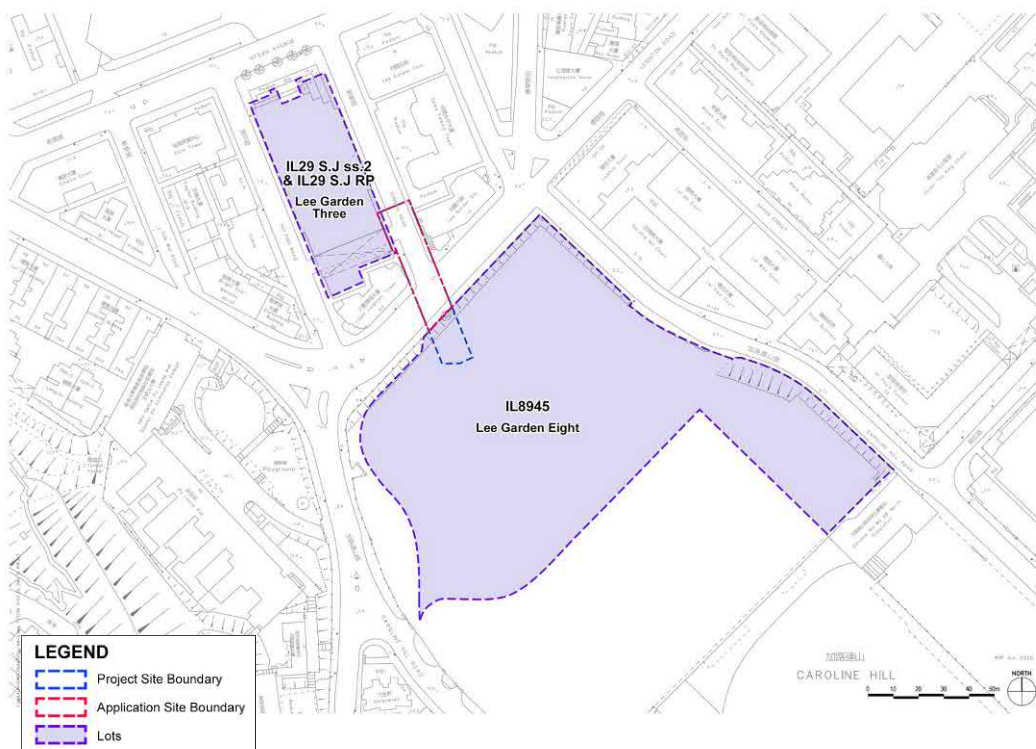


Figure 1.4 - A Plan showing IL29 S.J ss.2 & IL29 S.J RP and IL8945 (Source: GeoinfoMap)

IL 29 S.J ss.2 & S.J RP and IL 29 S.J ss.1 RP (Lee Garden Three)

1.3.2 The Government Lease governing IL 29 S.J ss.2 & S.J RP and IL 29 S.J ss.1 RP is virtually unrestricted except for a rate and range clause and offensive trades clause. The term of the Government Lease is 982 years commencing on 25 June 1860. A Modification Letter was executed on 10 January 2025 to allow erection of a covered footbridge connecting Lee Garden Three and Lee Garden Five. Another lease modification application for the vehicular Tunnel T1 connecting Lee Garden One and Lee Garden Three

has been completed and the modification letter was executed on 7 May 2026.

IL8945 (Proposed Lee Garden Eight)

- 1.3.3 IL 8945 is held under Conditions of Sale No. 20379 (as varied or modified by a Modification Letter dated 7 November 2024). IL8945 was sold by Government tender on 10 June 2021 and is restricted to non-industrial (excluding residential, godown and petrol filling station) uses, and is subject to a total maximum GFA of 102,000m².
- 1.3.4 The proposed Tunnel T3 falls within the Edged Pecked Purple Area and the Pink Hatched Green Area defined in the Conditions of Sale for IL8945. According to Special Conditions No. ("SC")(2)(a)(ii) of the Conditions of Sale, there is a Government-identified Old and Valuable Tree (OVT) (Registration No. LANDSD(LEASED) WCH/1) growing partly within IL8945, with its crown, trunk and roots spreading into the approximate area shown as Edged Pecked Purple on PLAN I of the Conditions of Sale. The Pink Hatched Green Area indicates the area of tree HKP WCH/1 within the boundary of IL8945.
- 1.3.5 Under SC (13)(k), "save with the prior written consent of the Director, no alteration or addition works may be carried out on, over, above, under, below or within the Pink Hatched Green Area" on PLAN I of the Conditions of Sale.
- 1.3.6 Therefore, to proceed with the proposed Tunnel T3, relevant land application(s) will be made to Lands Department accordingly.

1.4 PLANNING HISTORY

Application Site

- 1.4.1 There have been no previous planning applications on the Application Site.

Project Site (i.e. area falling outside the Application Site)
- 1.4.2 However, the southern portion of the Project Site, which falls outside the Application Site and which falls within an area zoned "C(2)" on the Approved Wong Nai Chung OZP No. S/H7/21, has been the subject of multiple planning applications.
- 1.4.3 The development options and development potential of the area were reviewed and assessed in consultancy studies in 2013 commissioned by the Government, followed by a rezoning of the area from "Other Specified Uses" annotated "Sports and Recreation Club" ("OU(SRC)") to "C(2)" as approved by the TPB on 11 September 2020. The OZP incorporating the rezoning of the area was approved by the Chief Executive in Council on 24 November 2020. A requirement was imposed by the OZP for the submission of a Layout Plan to the Board under the Section 16 planning application system of the Town Planning Ordinance (Cap.131).
- 1.4.4 In March 2022, submission of a Layout Plan application was made by Patchway Holdings (HK) Limited (i.e. one of the Applicants of the current application for the proposed Tunnel T3) to the TPB under Section 16 of the Town Planning Ordinance (Application No. A/H7/181). This was for use as proposed permitted commercial development (Office, Eating Place, Shop and Services) with Social Welfare Facility, Public Clinic, Place of Recreation, Sports or Culture, Public Transport Station and Public Vehicle Park (excluding Container Vehicle), and also for minor relaxation of gross floor area restriction (from 100,000m² to 102,000m² (2%) to accommodate 2,000m² of additional PACF on 5/F of Towers 1 and 2). The application was approved on 6 May 2022.
- 1.4.5 Subsequent to this approved Section 16 application, a Section 16A application (No. A/H7/181-2) for amendments to the approved Layout Plan was approved by the Director of Planning, under the delegated authority of the TPB, on 29 May 2025.
- 1.4.6 In September 2025, a Section 16 application (No. A/H7/188) for further amendments to the approved Layout Plan was approved by the TPB on 24 October 2025.

4.3 INDICATIVE DEVELOPMENT PROPOSAL

- 4.3.1 The major features and development parameters of the project are listed in **Table 4.2** below and illustrated in **Figures 4.1 to 4.3**.

Table 4.2: Major Development Parameters

Major Development Parameters	Measurement
Application Site Area*	Approx. 610 m ²
Length of the Proposed Tunnel	Approx. 70 m
Width of the Proposed Tunnel	Approx. 12 m
Minimum Internal Clear Width of the Proposed Tunnel at Each Level	5m (i.e. including a minimum clear width of 4m for driveway)
Elevation	Top of the Proposed Tunnel: Approx. +0.25mPD Base of the Proposed Tunnel: Approx. -14.80mPD
Gradient of the Proposed Tunnel at Each Level	Approx. 1: 10
Minimum Clear Headroom of the Proposed Tunnel at Each Level	2.4 m
Completion year	Q3 2033

Note: The Application Site forms part of the Project Site which is approx. 830 m².

- 4.3.2 The opening hours of the car park at Lee Garden Three are currently 24 hours, whilst the opening hours of the car park at Lee Garden Eight will also be 24 hours. The opening hours of the car park at Lee Garden One are 7:30am to 12:30am.

4.4 METHOD OF CONSTRUCTION

- 4.4.1 The traditional 'cut-and-cover' method of tunnelling (by which a tunnel is excavated from the surface) is considered impractical since the closure of Sunning Road or Leighton Road for tunnelling work will cause substantial disturbance to vehicular and pedestrian traffic and circulation.
- 4.4.2 More appropriately for these circumstances therefore, the 'drill and excavation' method will be used, whereby excavation is carried out horizontally from a starting point below ground.
- 4.4.3 Launching the tunnel excavation from Lee Garden Eight is considered most preferable as it causes less disturbance to existing traffic at Sunning Road and Hoi Ping Road from the ingress and egress of construction vehicles into Lee Garden Three that would otherwise be required. No excavation work will take place at-grade on public roads nor will any road closure be involved. As planned, excavated spoil will be removed via a works yard in the basement of Lee Garden Eight.
- 4.4.4 Preliminary geotechnical investigations show that the tunnel construction will be in soft / mixed ground (namely, fill and alluvium). Excavation in soft ground will generate minimal noise and vibration.
- 4.4.5 As construction works will take place solely underground, noise disruption to nearby sensitive receivers will be significantly reduced and is expected to be insignificant. Existing geotechnical information indicates that rock is not expected to be encountered on the alignment.
- 4.4.6 A section of the proposed tunnel is shown in **Figure 4.3**.

4.5 VEHICULAR / PEDESTRIAN CIRCULATION AND INTERNAL PARKING PROVISION

- 4.5.1 The availability of Tunnel T3 will enable an alternative ingress route for future traffic to access Lee

Garden Eight from Percival Street and Leighton Road eastbound via the existing run-in of Lee Garden Three at Hoi Ping Road. This alternative route will bypass the two signal junctions of Leighton Road / Caroline Hill Road (West) and Caroline Hill Road (West) / Link Road. The anticipated re-routing is illustrated in **Figure 4.4**.

- 4.5.2 In addition, the ingress and egress traffic of Lee Garden One and Lee Garden Three from / to the south (i.e. Link Road) will also benefit from the development of Tunnel T3. With its provision, this traffic will no longer need to travel along Caroline Hill Road (West), Leighton Road, Yun Ping Road, Hysan Avenue, Hoi Ping Road, Lan Fong Road and Lee Garden Road. The re-routing of ingress and egress traffic for Lee Garden One and Lee Garden Three is presented in **Figure 4.4**.
- 4.5.3 After the construction of the proposed Tunnel T3, 6 nos. car parking spaces out of 195 nos. car parking spaces (i.e. approximately 3%) as provided at Lee Garden Three and 5 nos. car parking spaces out of 612 nos. car parking spaces (i.e. approximately 0.8%) as provided at Lee Garden Eight will be permanently suspended to allow for the opening of tunnel entrances. Since the suspension of parking spaces will account for not more than 2% of total provision at Lee Garden Three and Lee Garden Eight, and because the future parking provision rate of Lee Garden Eight is significantly higher than that of surrounding developments, the traffic impact of their suspension will be negligible.
- 4.5.4 Furthermore, the parking provision during and after construction of Tunnel T3 remains compliance with the prevailing lease requirements, including that required for the Public Vehicle Park at Lee Garden Eight. The no. of suspended parking spaces lies within the range of flexibility (i.e. 5% of total number of spaces) allowed for parking space provision under the lease of Lee Garden Eight.
- 4.5.5 Notwithstanding the above, possible reprovisioning of some of the suspended parking spaces will be further reviewed at detailed design stage.
- 4.5.6 The proposed tunnel will serve vehicular traffic only, and no pedestrian passage will be provided. The Applicant will ensure 24-hour public pedestrian access to the car parks at Lee Garden Three and Lee Garden Eight, which will be open 24 hours.
- 4.5.7 The car parking provisions at Lee Garden One, Lee Garden Two, Lee Garden Three and Lee Garden Eight before and after the constructions of proposed Tunnels T1, T2 and T3, which are subject to further review at detailed design stage, are summarised in Table 4.3 below.

Table 4.3: Car Parking Provisions at Lee Garden One, Lee Garden Two, Lee Garden Three and Lee Garden Eight Before and After the Constructions of Proposed Tunnels T1, T2 and T3

Development	Internal Transport Provision	Before construction of Tunnels T1, T2 & T3	After completion of Tunnels T1, T2 & T3	Difference	
				No.	%
Lee Garden One	Private car parking spaces (Accessible parking spaces included)	200 (0)	187 (0)	- 13 (No change)	- 6.5% (No change)
	Loading / unloading bays	4	4	No change	No change
Lee Garden Two	Private car parking spaces (Accessible parking spaces included)	167 (2)	163 (2)	- 4 (No change)	- 2.40% (No change)
	Loading / unloading bays	6	6	No change	No change
Lee Garden Three	Private car parking spaces (Accessible parking spaces included)	201 (3)	189 (3)	- 12 (No change)	- 5.97% (No change)
	Loading / unloading bays	3	3	No change	No change

Development	Internal Transport Provision	Before construction of Tunnels T1, T2 & T3	After completion of Tunnels T1, T2 & T3	Difference	
				No.	%
Lee Garden Eight	Private car parking spaces (Accessible parking spaces included)	612 (11)	607 (11)	- 5 (No change)	- 0.82% (No change)
	Loading / unloading bays	58	58	No change	No change

Note:

- (1) 6 nos. car parking spaces in Lee Garden Three and 24 nos. car parking spaces in Lee Garden Eight will be temporarily suspended for the construction of Tunnel T3. Please refer to details in Annex A – Traffic Impact Assessment.
- (2) Under separate S.16 Applications (No. A/H6/93 & 94) for the proposed Tunnels T1 and T2 as approved by TPB on 14.2.2025, at least 80% of the provision of car parking spaces at Lee Garden One, Lee Garden Two and Lee Garden Three will be maintained at all time.

4.6 TREE PROTECTION PROPOSAL

- 4.6.1 As shown in **Figures 4.5 and 4.6** below, although the tunnel alignment passes below the dripline of the OVT (LANDSD (LEASED) WCH/1), the tunnel will be constructed entirely underground at approximately -1.35mPD, which is at least 10m below the top of soil of the OVT (approximately +9.30mPD) and approximately 7m below the ground level at Leighton Road (approximately +6.10mPD). In accordance with Paragraph 26 of *Development Bureau Technical Circular (Works) No. 5/2020 – Registration and Preservation of Old and Valuable Trees*, “a zone encompassing the tree along its dripline, projecting vertically from the tree canopy and extending 2m below the ground level and 2m above the top of an OVT, shall be designated as the Tree Protection Zone (“TPZ”).” The tunnel is located outside the statutory Tree Protection Zone (TPZ), and no excavation or works at ground level within the dripline are proposed. In addition, the proposed tunnel will pass at least 8m below the 2m deep TPZ (as defined above by DEVB TC 5/2020). Accordingly, direct impacts on the OVT are anticipated to be insignificant.
- 4.6.2 Notwithstanding the above, precautionary tree protection and monitoring measures are proposed given the OVT status and its existing BRRD condition. These include strict prohibition of ground-level works within the dripline, control of site access to prevent contamination, implementation of BRRD precautionary measures in accordance with GLTMS guidelines, and regular tree monitoring by qualified arboricultural professionals throughout the construction period. An Independent Tree Expert will be engaged at a later stage once the detailed construction methodology for the tunnel has been developed. A further method statement, incorporating the advice of the Independent Tree Expert will be provided prior to the commencement of any construction works. Regular tree inspections, photographic records, and tree risk assessments will be undertaken as appropriate to ensure the health, stability, and long-term preservation of the OVT during and after the construction works. Details can be referred to **Annex B – Tree Protection Proposal**.
- 4.6.3 Furthermore, one of the Applicants, who is also the project proponent for Lee Garden Eight, has proposed a series of protection and rehabilitation measures for the OVT under a separate S.16 application (No. A/H7/188), which was approved on 24 October 2025. These measures are currently being implemented and will not be undermined by the development of Tunnel T3.

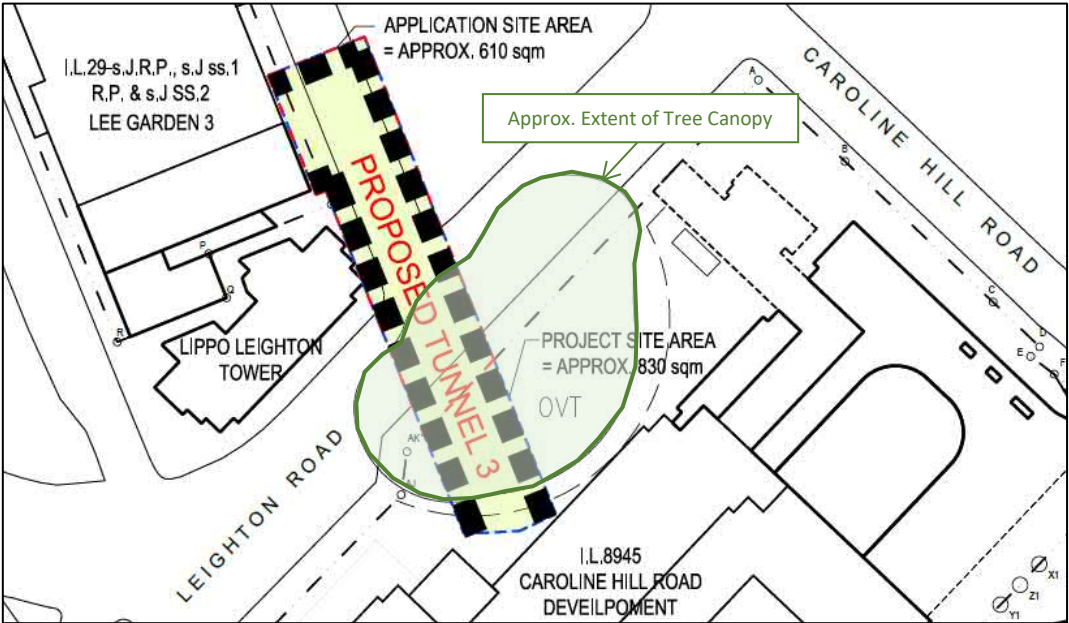


Figure 4.5 – Plan Showing Location of the OVT

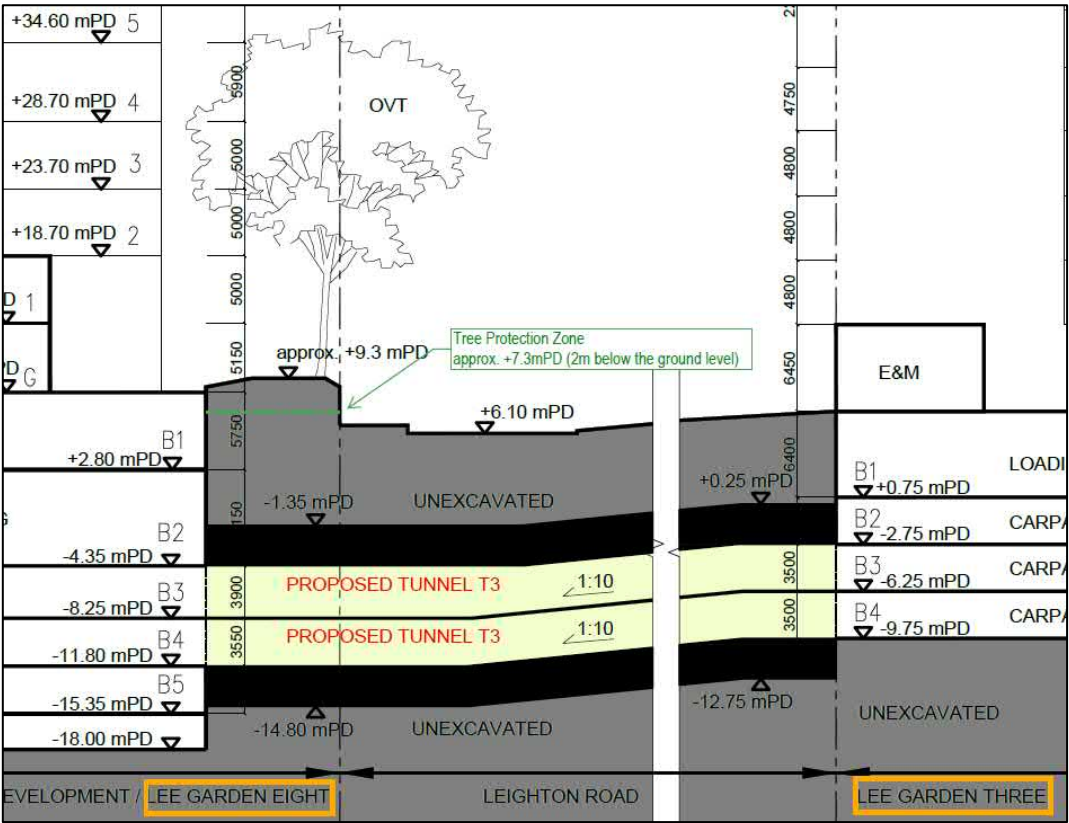


Figure 4.6 – Section Showing the Tree Protection Zone (2m below the Ground Level) of the OVT

5 Technical Assessments

5.1 INTRODUCTION

- 5.1.1 The following is a summary of technical assessments carried out for the proposed underground vehicular tunnel.

5.2 TRAFFIC IMPACTS

- 5.2.1 A Traffic Impact Assessment to assess potential traffic impacts due to the proposed tunnel project during both operational and construction stages has been conducted. It has been concluded that the proposed tunnel will not cause adverse traffic impacts on the local road network, and all the assessed junctions will operate within their capacities during peak hours.
- 5.2.2 The proposed tunnel is supported from a traffic engineering point of view as it is considered to be beneficial to the local area, with the following expected benefits:
- Overall at-grade traffic volume on some key roads and local roads would be reduced, which also help to improve the air quality and pedestrian safety in the area;
 - Accessibility of car parks will be maximized for efficient use of available car parking spaces and way-finding to vacant parking spaces can be taken place internally and thus vehicle queuing at car park entrances and traffic circulation on public roads will be minimized;
 - Availability of route choices for vehicles will help to achieve a better balanced use of roads/junctions' capacities under different road traffic situations; and
 - Access and traffic management will be more flexible for car park operators to manage the ingress and egress of vehicles to suit different traffic conditions in the area.
- 5.2.3 Findings of the Traffic Impact Assessment are contained in **Annex A**.

5.3 TREE IMPACTS

- 5.3.1 While the proposed underground vehicular tunnel will pass beneath the dripline of the OVT, in accordance with Paragraph 26 of *Development Bureau Technical Circular (Works) No. 5/2020 – Registration and Preservation of Old and Valuable Trees*, “a zone encompassing the tree along its dripline, projecting vertically from the tree canopy and extending 2m below the ground level and 2m above the top of an OVT, shall be designated as the Tree Protection Zone (“TPZ”).” The proposed tunnel will be constructed entirely underground at approximately -1.35mPD , which is at least 10m below the top of soil of the OVT (approximately $+9.30\text{mPD}$) and approximately 7m below the ground level at Leighton Road (approximately $+6.10\text{mPD}$), as shown in the floor plan and section in **Figures 4.5 and 4.6**.
- 5.3.2 As all construction works will be carried out entirely underground and no ground-level excavation will take place within the dripline of the OVT, the proposed tunnel is considered to be outside the statutory TPZ. Accordingly, the potential impact on the OVT is expected to be insignificant with the implementation of appropriate precautionary measures (see above).
- 5.3.3 Details of the Tree Protection Proposal are contained in **Annex B**.

5.4 GEOTECHNICAL IMPACTS

- 5.4.1 In accordance with ‘GEO Advice Note for Planning Applications under Town Planning Ordinance (Cap.131): Requirements for a Geotechnical Planning Review Report in support of planning applications’, the proposed tunnel does not require a Geotechnical Planning Review Report under the subject planning application. Nonetheless, the proposed tunnel will not cause damage to the adjacent buildings, structures, land, streets or services. Precautionary measures, such as ground investigations, will be conducted before construction. During construction, regular monitoring of settlement, tilting, vibration

6 Planning Justifications

6.1 IN CONFORMITY WITH OZP INTENTION

- 6.1.1 The proposed Tunnel T3 is situated within the Approved Causeway Bay Outline OZP No. S/H6/17 and the Approved Wong Nai Chung OZP No. S/H7/21.
- 6.1.2 The majority of the Project Site (i.e. Application Site of approximately 610 m² or 73.5%) falls within areas shown as 'Road' on the respective OZPs, whilst the remaining portion of the Project Site (i.e. approximately 220 m² or 26.5%) falls within an area zoned "C(2)" on the Approved Wong Nai Chung OZP No. S/H7/21.

Area Shown as 'Road'

- 6.1.3 The areas shown as 'Road' on the OZPs are designated for road (including vehicular) transportation purposes. According to the TPB 'Definition of Terms', the definition of "Road":
- "Includes the whole or any part of any square, court or alley, highway, lane, road, road-bridge, flyover, underpass, tunnel, footpath, footbridge, path, pedestrian subway, pedestrian area, travelator or passage whether a thoroughfare or not".*
- 6.1.4 Therefore, the proposed Tunnel T3 is considered to be a development which does not deviate from the purpose of the areas shown as 'Road' on the OZPs.

"C(2)" Zone

- 6.1.5 The planning intention of the "C(2)" zone is primarily for commercial development, which may include uses such as office, shop, services, place of entertainment, eating place and hotel, functioning as territorial business/financial centre(s) and regional or district commercial/shopping centre. The proposed Tunnel T3, together with the Tunnel T1 and Tunnel T2 (proposed elsewhere), form part of an integrated car park network within the commercial development of the Lee Gardens Area. This is considered to be an ancillary use to the commercial development within the "C(2)" zone and can therefore be regarded as permitted as of right.
- 6.1.6 Therefore, the proposed Tunnel T3 project does not require a planning permission from the TPB, nor submission of layout plan for the approval of the TPB in area zoned "C(2)".
- 6.1.7 Since the proposed Tunnel T3 only involves the use of underground space as an alternative to at-grade vehicular routes, no land use incompatibility with the surrounding development context is anticipated.
- 6.1.8 The proposed Tunnel T3 set out in this application contains a number of significant planning merits. These and other considerations are described below.

6.2 REDUCTION OF AT-GRADE TRAFFIC DEMAND

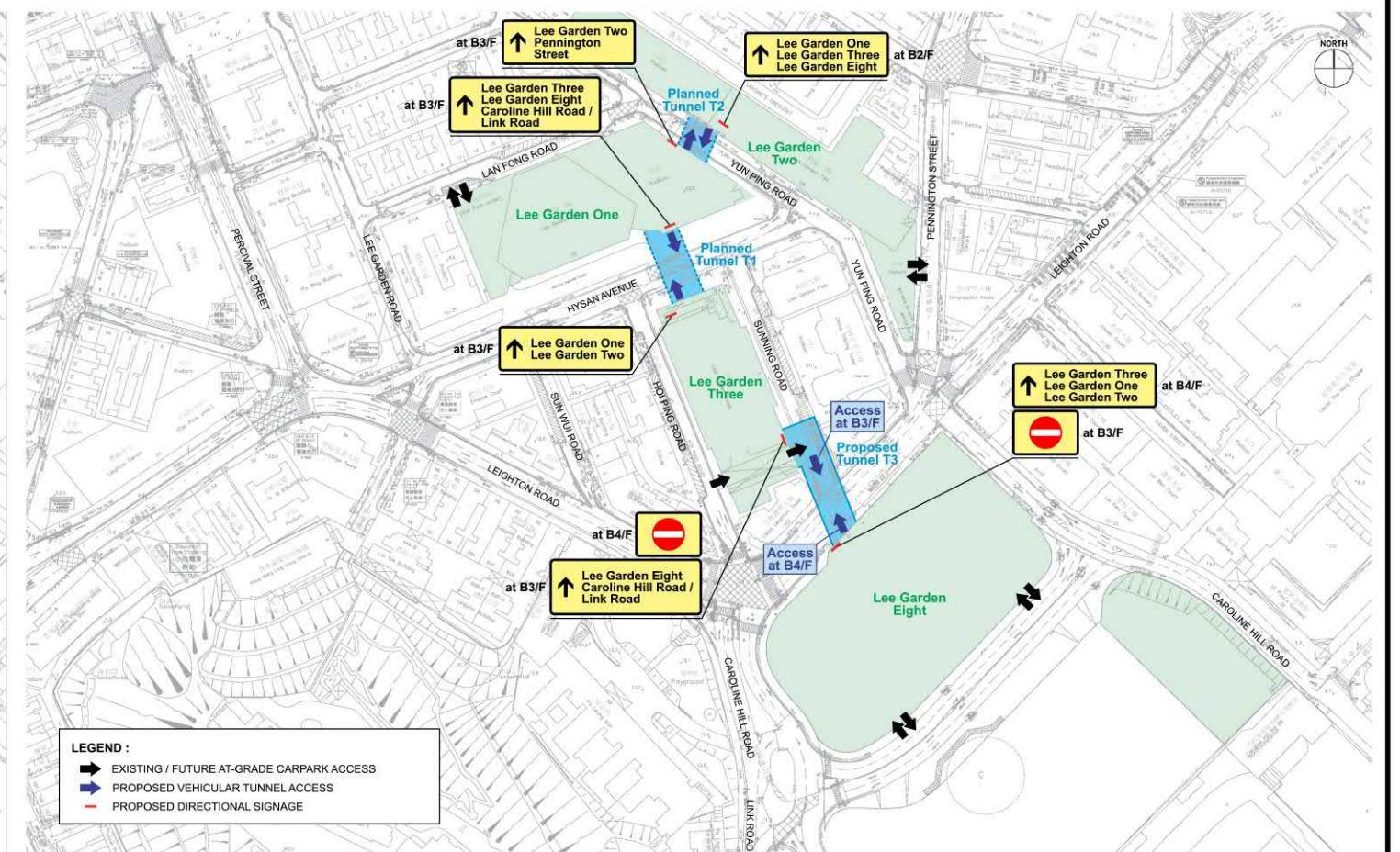
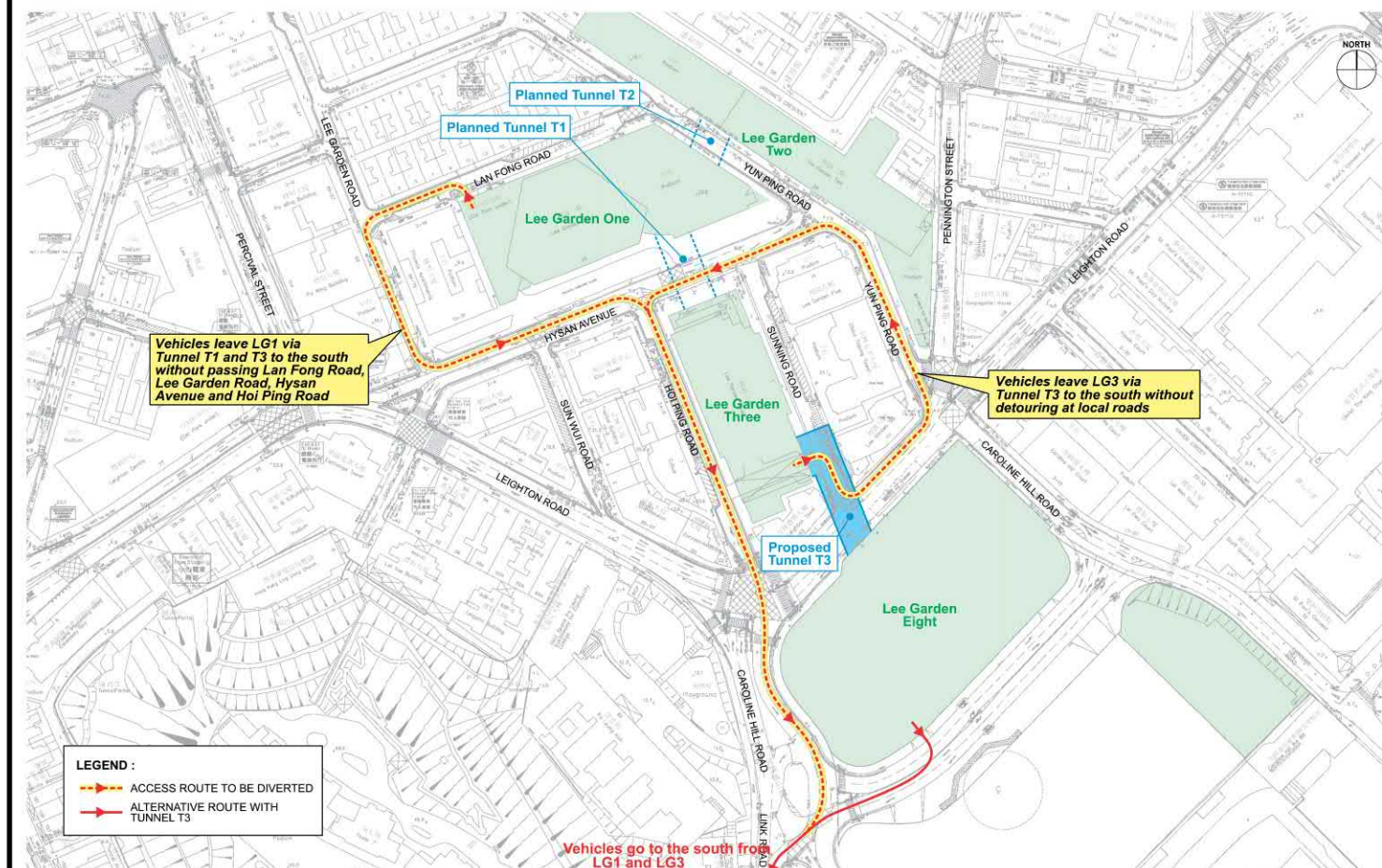
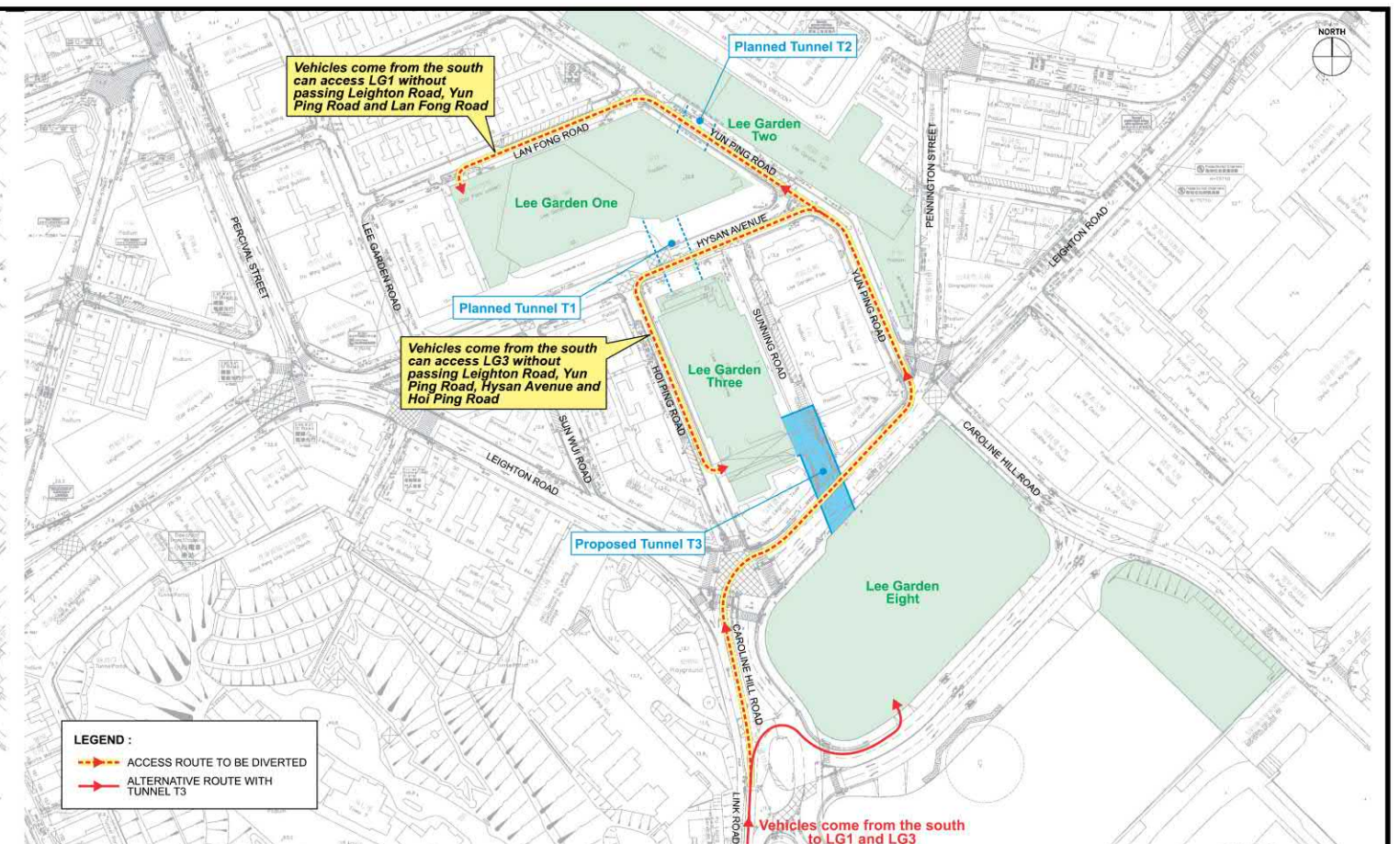
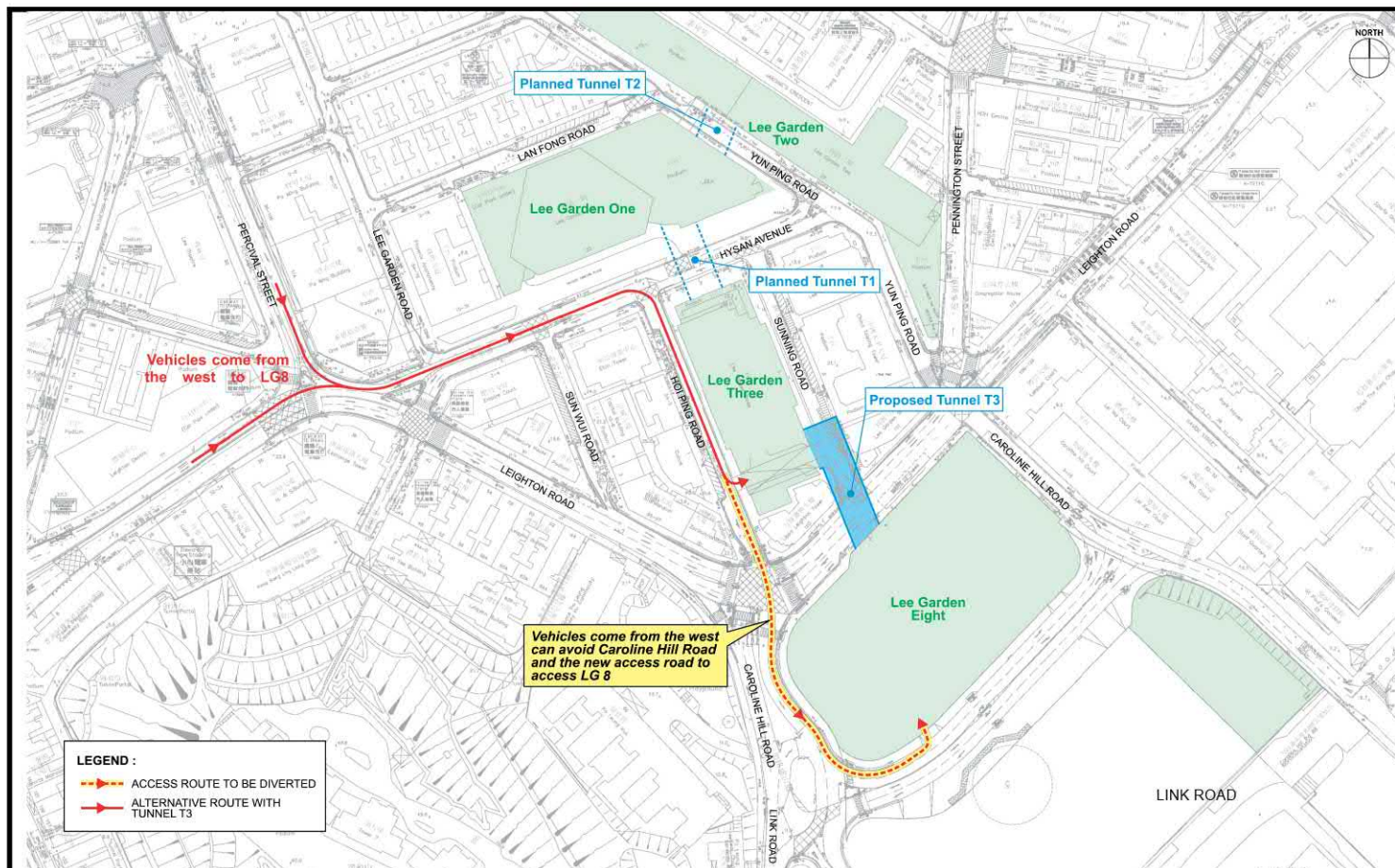
- 6.2.1 The proposed Tunnel T3 will serve as an alternative underground route, diverting vehicles accessing Lee Garden One, Lee Garden Two, Lee Garden Three and Lee Garden Eight from the at-grade to underground level. It is estimated that the traffic flows will be reduced along some key road links, such as Leighton Road, and local roads, including Yun Ping Road, Hoi Ping Road, Sunning Road, Lan Fong Road and Lee Garden Road, as well as their road junctions.
- 6.2.2 With the proposed Tunnel T3 implemented, route choices will be available to help achieve a better balanced use of roads and junctions' capacities under different road traffic situations.
- 6.2.3 The diversion of traffic from the at-grade to underground level will reduce the overall at-grade traffic flow.
- 6.2.4 Upon completion of Lee Garden Eight and other development projects in the vicinity, higher

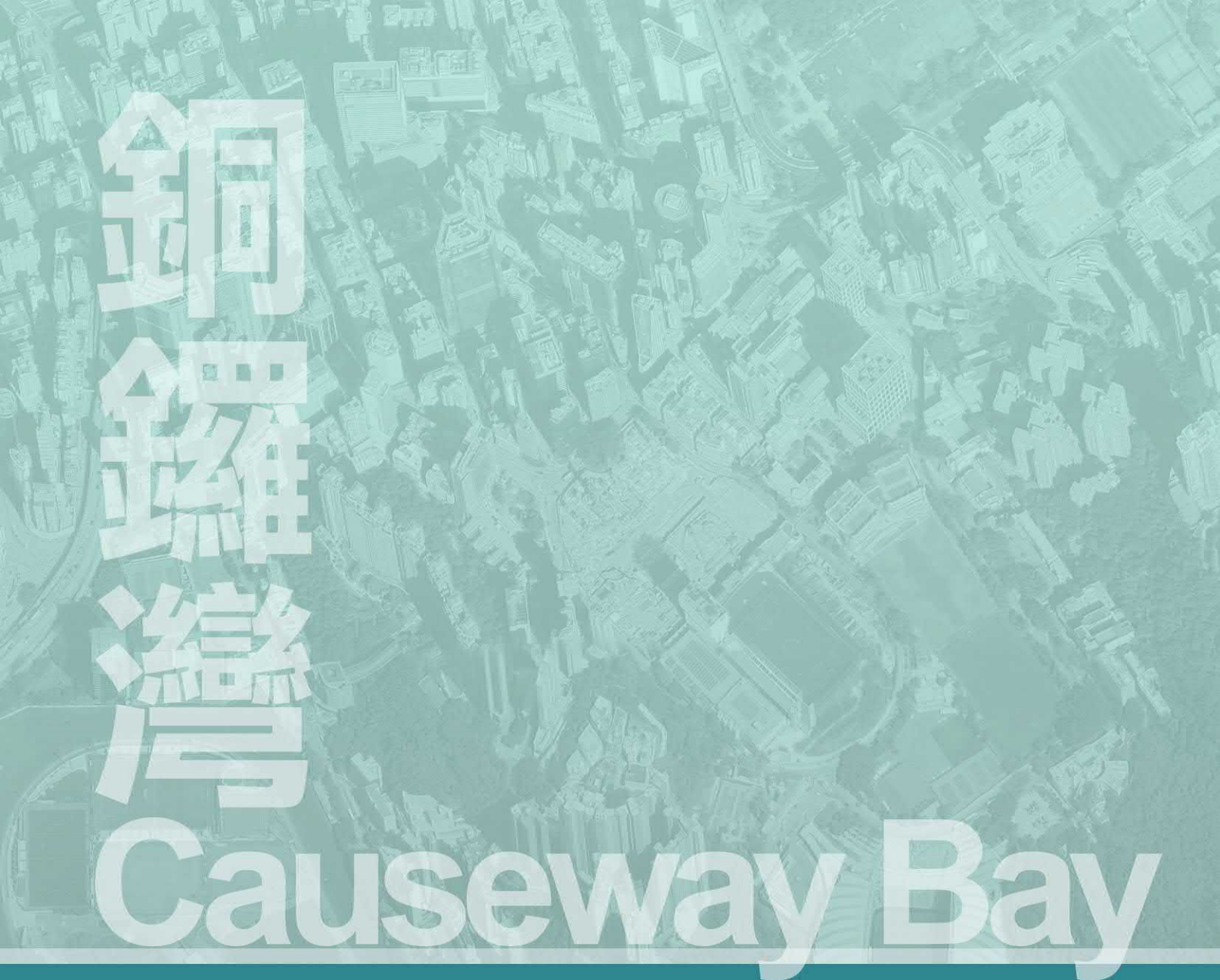


銅鑼灣

Causeway Bay

Revised Figure





銅鑼灣

Causeway Bay

**Replacement Pages of Annex A
Traffic Impact Assessment**

Reference number: CHK50865910/CHC/L2601452/yyi

SECTION 16 PLANNING APPLICATION OF PROPOSED UNDERGROUND VEHICULAR TUNNEL T3 (CONNECTING LEE GARDEN THREE AND LEE GARDEN EIGHT)

TRAFFIC IMPACT ASSESSMENT



IDENTIFICATION TABLE	
Project	Section 16 Planning Application of Proposed Underground Vehicular Tunnel T3 (Connecting Lee Garden Three and Lee Garden Eight)
Study	Traffic Impact Assessment
Type of document	Final Report
Date	27/08/2026
File name	L2601452 T3_TIA (20260827).docx
Reference number	CHK50865910/CHC/L2601452/yyI

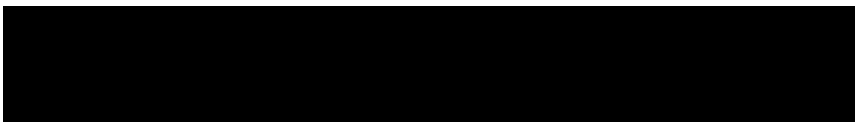


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1. INTRODUCTION

1.1 Background

- 1.1.1 To enhance the traffic condition in the Causeway Bay south area, two vehicle tunnels, namely Tunnel T1 and Tunnel T2 were proposed beneath Hysan Avenue and Yun Ping Road respectively. Tunnel T1 would connect the basement car parks at Lee Garden One (LG1) and Lee Garden Three (LG3), while Tunnel T2 would connect the basement car parks at Lee LG1 and Lee Garden Two (LG2). The latest Section 16 (S16) planning applications (nos. A/H6/93 and A/H6/94) for Tunnels T1 and T2 were approved by the Town Planning Board (TPB) in February 2025. The locations of the planned Tunnel T1 and Tunnel T2 are shown in **Drawing No. 1.1**.
- 1.1.2 A commercial development, namely Lee Garden Eight (LG8), is being constructed on Inland Lot No. 8945 at Caroline Hill Road, and its completion is anticipated in 2026. Given that LG8 is situated at close proximity of LG3, it offers an opportunity to further enhance the accessibility of underground car parks in the area by introducing another vehicular tunnel (Tunnel T3) to link up the basement car parks of LG3 and LG8. The location of Tunnel T3 is indicated in **Drawing No. 1.1**.
- 1.1.3 The improved accessibility to car parks via Tunnel T3 will reduce at-grade traffic circulation, further enhancing future traffic conditions in the area.
- 1.1.4 Since the proposed Tunnel T3 would run on Sunning Road and across Leighton Road, where are zoned as 'Road' in the Causeway Bay Outline Zoning Plan (OZP), S16 planning application for the proposed underground vehicular tunnel is required for obtaining permission from TPB.
- 1.1.5 MVA Hong Kong Limited (MVA) is commissioned as a traffic consultant to conduct a traffic study and prepare a Traffic Impact Assessment (TIA) in support of the proposed Tunnel T3 and the S16 planning application.
- 1.1.6 The purposes of this study are to review the current traffic conditions in the area, assess the traffic impacts and identify potential benefits to the local traffic due to Tunnel T3.

1.2 Study Objectives

- 1.2.1 The main objectives of the traffic review are as follows:
 - to present the proposed scheme of the proposed Tunnel T3;
 - to review the existing traffic arrangement and undertake manual classified count traffic surveys to determine the existing traffic conditions in the vicinity of LG3 and LG8;
 - to identify further potential changes in traffic routing and reductions in at-grade traffic resulting from the proposed vehicle Tunnel T3, accounting for the implementation of planned Tunnels T1 and T2;
 - to estimate the future traffic flows in the design year on the surrounding road network;
 - to assess the traffic impacts and identify benefits to the local traffic due to the tunnel for the design year; and
 - to present the proposed traffic arrangement and measures for the tunnel construction and review if any adverse traffic impact during the tunnel construction.

1.3 Structure of the Report

1.3.1 Following this introductory chapter, there are four further chapters.

- **Chapter 2 – Proposed Tunnel T3**, which describes the details of Tunnel T3 and identifies its role in further diverting at-grade traffic underground.
- **Chapter 3 – Existing Traffic Situation**, which reviews the existing road network and traffic arrangement in the vicinity of the proposed Tunnel T3, presents the findings from traffic count surveys and assesses the existing traffic conditions.
- **Chapter 4 – Future Traffic Forecast**, which discusses the design year and the future scenarios for assessment in this study and presents the methodology for traffic forecasts.
- **Chapter 5 – Traffic Impact Assessment**, which presents the assessment results and summarises the findings of the assessments.
- **Chapter 6 – Expected Benefits**, which discusses the benefits to the local traffic due to the proposed Tunnel T3.
- **Chapter 7 – Traffic Arrangement and Impact During Construction Stage**, which discusses the proposed traffic arrangement and the associated measures to facilitate the tunnel construction and review if any traffic impact during the tunnel construction.
- **Chapter 8 – Summary and Conclusion**, which summarizes the study findings and presents the conclusion for this TIA report.

2. PROPOSED TUNNEL T3

2.1 Tunnel Alignment

- 2.1.1 Tunnel T3 will branch from the southeast corner of LG3 underneath Sunning Road and run across Leighton Road. To avoid any encroachment into the adjoining private lots at Sunning Road while allowing the connection to serve both traffic directions, the tunnel is proposed with two levels serving private cars in one traffic direction at each level. The proposed alignment of Tunnel T3 is shown in **Drawing No. 1.1**.
- 2.1.2 The double-deck tunnel will connect from the south-east corner of basement levels 3 and 4 car park of LG3 to the northern side of basement levels 3 and 4 car park of LG8.

2.2 Traffic Arrangement

- 2.2.1 As mentioned in the above **Section 2.1**, the Tunnel T3 is proposed with two levels serving one traffic direction at each level for private cars use only. For compliance of the relevant standards/requirement, a minimum 4m clear width of driveway and a minimum clear headroom of 2.4m will be provided for the one-way driveway at each level within the tunnel. The B3/F and B4/F plans as well as the sectional design of Tunnel T3 are presented in **Drawing Nos. 2.1 and 2.2**. Swept path analysis has been conducted and demonstrated in **Appendix A**.
- 2.2.2 Tunnel T3 is proposed for vehicular traffic only, and no pedestrian passage will be provided at the entire Tunnel T3.

2.3 Tunnel Construction

- 2.3.1 To avoid excavation works on public roads and hence minimizing disturbance to the at-grade vehicular and pedestrian traffic of Sunning Road and Leighton Road during the construction, "Drill and Excavation Method" with launching from LG8 will be adopted.
- 2.3.2 In addition, construction of Tunnel T3 will be commenced not earlier than the construction works for the planned Tunnels T1 and T2.
- 2.3.3 Appropriate internal temporary traffic arrangement will be implemented within the car parks at LG3 and LG8 to maintain the operation during the construction works. Details of the proposed traffic arrangement during the construction stage of the tunnel are presented in **Chapter 7** of this report.

2.4 Further Diversion of At-grade Traffic to Underground by Tunnel T3

- 2.4.1 With the planned Tunnels T1 and T2, the availability of Tunnel T3 will further expand the connectivity of underground car parks and enable at-grade traffic to access the car parks via alternative underground routes, given that the diverted route would be shorter. Travel distances and travel time between the original at-grade access routes and some identified traffic diversion routes due to the proposed Tunnel T3 has been reviewed.

Ingress Route of LG8 Car Park from the West

- 2.4.2 Without the proposed Tunnel T3, traffic from the West, i.e. Percival Street and Leighton Road eastbound, will access LG8 with passing through Hysan Avenue, Hoi Ping Road and Caroline Hill Road (west), including two at-grade signalised junctions with Leighton Road and Link Road.
- 2.4.3 With the proposed tunnel, LG8 traffic can access via the existing run-in of LG3 at Hoi Ping Road. Although the travel distance of underground route (680m) would be slightly longer than the at-grade route (600m), vehicles would potentially wait for the green signals at the two at-grade signalised junctions, and increase the travelling time upto about 6 mins, compared with about 4 mins for the underground route. Therefore, diverting this ingress route to the underground is considered reasonable. The anticipated re-routing is illustrated in **Drawing No. 2.3**.

Ingress Route of LG8 Car Park from the East

- 2.4.4 Traffic from the East, i.e. Leighton Road westbound, will access LG8 with either passing through Caroline Hill Road (East) or Caroline Hill Road (West) without the planned tunnels.
- 2.4.5 Although the vehicular access of LG2 will provide the nearest entrance to the underground network, the travelling distance of this underground ingress route will be increased from 450m to 550m while drivers will spend more travelling time from 3 mins to 4 mins. Therefore, it is assumed that the route choice will not to be affected by the proposed Tunnel T3.

Ingress Route of LG3 Car Park from the South

- 2.4.6 Ingress traffic of LG3 from the Link Road or Caroline Hill Road (West) will pass through Leighton Road, Yun Ping Road, Hysan Avenue and Hoi Ping Road where the run-in situates, including three at-grade signalised junctions along the route. The approximate travelling distance and potential maximum travel time to the car park are 900m and 7.5 mins respectively.
- 2.4.7 The proposed Tunnel T3 will offer an alternative underground route for this ingress traffic via New Access Road, LG8 and Tunnel T3 at B4/F of the LG8's car park. The travelling distance and travelling time will be shorter with 520m and 4 mins respectively. Additionally, the underground route will bypass the two at-grade signalised junctions along Leighton Road, avoiding potential waiting time at the junctions. Therefore, diverting this ingress route to the underground has been taken into account in the study. The anticipated re-routing is illustrated in **Drawing No. 2.4**.

Ingress Route of LG1 Car Park from the South

- 2.4.8 Ingress traffic to LG1 originating from the South will route via Leighton Road, Yun Ping Road and Lan Fong Road to the run-in, passing through three at-grade signalised junctions. The approximate travel distance to the car park is 700m, with a potential maximum travel time of 6.5 mins.
- 2.4.9 Similar to the ingress traffic route of LG3, the proposed Tunnel T3 will enable this ingress traffic demand to access LG1 car park without passing through the at-grade signalised junctions. Although the travelling distance via underground route would be slightly longer with about 750m, drivers would spend less travelling time (6 mins) to access the car park.

Thus, it is still worth for LG1 car park traffic to access via LG8. The anticipated re-routing is also illustrated in **Drawing No. 2.4.**

Ingress Route of LG2 Car Park from the South

- 2.4.10 Ingress traffic route of LG2 from the South is relatively direct, with just passing Leighton Road and access at Pennington Street. Travelling distance will be doubled and travelling time will be significantly increased by 2 mins via the underground access route since it is necessary to traverse the proposed Tunnel T3 as well as the planned Tunnels T1 and T2. Therefore, the underground route choice may not be attractive for the concerned users.

Egress Route of LG8 Car Park to the West

- 2.4.11 Without the proposed Tunnel T3, LG8 traffic leaving the car park to the West will route through New Access Road, Caroline Hill Road (West) and Leighton Road beyond Percival Street with travelling distance of about 630m and travelling time upto 6.5 mins.
- 2.4.12 Although the underground tunnel connections will enable the westbound LG8 traffic to leave the car park via LG1 vehicular access at Lan Fong Road, this underground egress route will not be direct as compared with the at-grade route from drivers' perspective. Also, it is less attractive to travel a longer distance (860m) with similar travelling time (6.5 mins). In view of that, it is considered LG8 exiting traffic will follow their original route toward the West.

Egress Route of LG8 Car Park to the East

- 2.4.13 LG8 egress traffic to the East could route through Caroline Hill Road (East), Cotton Path, Eastern Hospital Road, Tung Lo Wan Road, Moreton Terrace and turning right at the junction with Causeway Road. Alternatively, the egress traffic could pass through Caroline Hill Road (West), Leighton Road, Pennington Street and Yee Wo Street to reach Causeway Road. Both routes will travel around 1km with 7.5 mins.
- 2.4.14 Although vehicles may possibly leave the car park via Tunnel T3 and LG3's exit, this underground route would need additional travelling distance (about 100m) without significant improvement in terms of travelling time. In view of that, the egress route of LG8 will be remained original as this would not be attractive for drivers.

Egress Route of LG3 Car Park to the South

- 2.4.15 For egress traffic of LG3 to the South, it has to circulate around via Leighton Road and local roads including Yun Ping Road, Hysan Avenue and Hoi Ping Road before approaching Caroline Hill Road (West). The approximate travelling distance is 720m and the journey time is about 7 mins.
- 2.4.16 Nevertheless, the proposed Tunnel T3 will allow a more direct route to bypass the at-grade local roads and junctions. It would reduce the travelling distance by about 260m and spend less travelling time by about 3 mins. Thus, this egress traffic is considered to be diverted via the underground route. The anticipated re-routing is shown in **Drawing No. 2.5.**

Egress Route of LG1 Car Park to the South

- 2.4.17 Egress traffic of LG1 to the South needs to route through local roads Lan Fong Road, Lee Garden Road, Hysan Avenue and Hoi Ping Road before reaching Caroline Hill Road (West). It could require approximate 720m travelling distance and 7 mins travelling time.

- 2.4.18 Once the proposed Tunnel T3 becomes available, together with the planned Tunnel T1, the southbound underground route will enable this egress traffic to bypass the local roads and the signalised junction at Leighton Road / Caroline Hill Road (West). Taken into account that the travelling distance (570m) and travelling time (4.5 mins) would be reduced, it is assumed that the egress traffic will be diverted as shown in **Drawing No. 2.5**.

Egress Route of LG2 Car Park to the South

- 2.4.19 Similar to the ingress route of LG2 from the South as mentioned in **paragraph 2.4.10**, the travelling distance of underground egress route via the three tunnels (approx. 650m) will be longer than that of the at-grade route (approx. 570m). Moreover, the travelling time will not be shorter even though the underground route will bypass the signalised junctions. Therefore, it is considered that this underground egress route will not be preferable for drivers.
- 2.4.20 To summarize, the identified ingress / egress routes to be diverted due to the proposed Tunnel T3 in this study will be:
- a) Ingress route of LG8 car park from the West (**Drawing No. 2.3**)
 - b) Ingress route of LG3 car park from the South (**Drawing No. 2.4**)
 - c) Ingress route of LG1 car park from the South (**Drawing No. 2.4**)
 - d) Egress route of LG3 car park to the South (**Drawing No. 2.5**)
 - e) Egress route of LG1 car park to the South (**Drawing No. 2.5**)

2.5 Overall Traffic Management Strategy

- 2.5.1 Based on the findings from the traffic route analysis as discussed in **Section 2.4**, an overall traffic management strategy is formulated.
- 2.5.2 In order to clearly guide drivers on the routes to the other connected car parks via the corresponding tunnels and avoid any unreasonable traffic diversion, appropriate directional signages will be provided in the connected car parks and entrances of the tunnels. For example, names of the LG1, LG2, LG3 and LG8 would be provided on the directional signs at the entrances of the tunnels.
- 2.5.3 Apart from providing directions of the original exits of each car parks, new directional signages will provide destinations to guide drivers to exit the car parks via the identified underground egress routes as discussed in **Section 2.4**, which includes:
- i. Vehicles leaving from LG3 heading the south via Tunnel T3 and LG8's western exit at the New Access Road; and
 - ii. Vehicles leaving from LG1 heading the south via Tunnel T1, LG3, Tunnel T3 and LG8's exit at the New Access Road.
- 2.5.4 Additionally, since the planned Tunnel T2 will facilitate the egress traffic of LG1 toward the East via LG2's exit, appropriate destinations will be provided in the new directional signages. Overall traffic management strategy is illustrated in **Drawing No. 2.6**.
- 2.5.5 With the proposed traffic management strategy, vehicles should leave the car parks via its original exit route or the anticipated diverted route, which will not cause adverse traffic impact in terms of traffic re-routing. Detailed traffic management plan will be further reviewed at a later stage before the commencement of the tunnel connection.

3. EXISTING TRAFFIC SITUATION

3.1 Existing Road Network

- 3.1.1 LG3 is bounded by Hysan Avenue to the north, Sunning Road to the east, Lippo Leighton Tower to the south and Hoi Ping Road to the west. It is served by the separated run-in and run-out at Hoi Ping Road and Sunning Road respectively. Besides, LG8 is served by the district distributor Leighton Road, the local distributor Caroline Hill Road and Link Road.
- 3.1.2 Hysan Avenue is a two-way road with a total carriageway width of some 9m wide. It connects Yun Ping Road to the east and Percival Street to the west, and it also provides the only access to Sun Wui Road, Hoi Ping Road and Sunning Road.
- 3.1.3 Both Sunning Road and Hoi Ping Road are one-way local roads in southbound traffic direction. The latter is also a key access route for traffic access to Caroline Hill Road from the west such as via Percival Street and Leighton Road eastbound.
- 3.1.4 Leighton Road serves the southern part of Causeway Bay as a major east-west connection. It connects Causeway Road and Tung Lo Wan Road to the east and Morrison Hill Road to the west. Leighton Road is generally a two-way road with one to three traffic lanes in each direction, except that the road section between Tung Lo Wan Road and Caroline Hill Road (East) is a one-way carriageway running along southbound direction.
- 3.1.5 Caroline Hill Road is a U-shaped local distributor serving the developments near Hong Kong Stadium. Its western section, i.e. road section connecting the junction of Leighton Road / Hoi Ping Road, is a single 2-lane carriageway running in north-south direction. Its eastern section, i.e. road section connecting the junction of Leighton Road / Pennington Street / Yun Ping Road, is mainly a one-way northbound road between Stadium Path and Cotton Path.
- 3.1.6 Link Road is a single-2 carriageway connecting Caroline Hill Road (West) with Broadwood Road to the south. It mainly serves the local residential developments and is one of the corridors leading to the Jardine's Lookout area.
- 3.1.7 The existing road network in the vicinity of the subject site is shown in **Drawing No. 3.1**.

3.2 Existing Traffic Conditions

- 3.2.1 As discussed in **Section 2.4**, ingress and egress routes for LG1, LG3 and LG8 would be further changed by the proposed Tunnel T3. The junctions with anticipated changes in traffic pattern due to Tunnel T3 are identified and indicated in **Drawing No. 3.1**.
- 3.2.2 To obtain the updated traffic flows for the review on the existing traffic condition, traffic count surveys have been conducted at the identified junctions for this study. The surveys were carried out during hours of 08:00 – 10:00, 11:30 - 13:30 and 17:30 - 19:30 on a typical weekday and 11:30 - 13:30 on a weekend (Saturday) in mid-October 2025. The surveyed road junctions are identified in **Drawing No. 3.1** and listed in below **Table 3.1**.

Table 3.1 Surveyed Junctions

Ref No.	Junctions	Method of Control	Drawing No.
J1	Caroline Hill Road (West) / Link Road	Priority	3.2
J2	Leighton Road / Caroline Hill Road (West) / Hoi Ping Road	Signal	3.3
J3	Leighton Road / Sunning Road	Priority	3.4
J4	Leighton Road / Yun Ping Road / Pennington Street / Caroline Hill Road (East)	Signal	3.4
J5	Hysan Avenue / Hoi Ping Road	Priority	3.5
J6	Hysan Avenue / Sunning Road	Priority	3.5
J7	Hysan Avenue / Hoi Ping Road	Priority	3.5

- 3.2.3 Observed traffic data indicated that the AM, Noon and PM peak hour flows occurred during hours of 08:15-09:15, 12:00-13:00 and 17:45-18:45 respectively on a typical weekday, and the weekend peak hour flows occurred during the hours of 11:45-12:45. The observed weekday and weekend peak hour traffic flows are shown in **Drawing No. 3.6**.
- 3.2.4 Apart from the traffic survey at junctions, vehicular Origin-Destination (O-D) surveys have also been conducted for the existing car parks at LG1, LG2 and LG3. The surveyed weekday and weekend peak hours O-D distributions of the car park related traffic of LG1, LG2 and LG3 are presented in **Drawing Nos. 3.7 – 3.9** correspondingly.
- 3.2.5 The operational performance of the identified road junctions was assessed with the observed traffic flows and existing layouts. The assessment results are summarised in **Table 3.2**.

Table 3.2 Year 2025 Operational Performance of Identified Road Junctions

Ref No.	Junctions	Method of Control	Year 2025 RC ⁽¹⁾ / DFC ⁽²⁾			
			Weekday			Weekend
			AM Peak	Noon Peak	PM Peak	Noon Peak
J1	Caroline Hill Road (West) / Link Road	Priority	0.36	0.44	0.29	0.38
J2	Leighton Road / Caroline Hill Road (West) / Hoi Ping Road	Signal	35%	36%	26%	29%
J3	Leighton Road / Sunning Road	Priority	0.25	0.36	0.32	0.36
J4	Leighton Road / Yun Ping Road / Pennington Street / Caroline Hill Road (East)	Signal	64%	38%	41%	22%
J5	Hysan Avenue / Yun Ping Road	Priority	0.23	0.50	0.40	0.50
J6	Hysan Avenue / Sunning Road	Priority	0.16	0.22	0.21	0.20
J7	Hysan Avenue / Hoi Ping Road	Priority	0.53	0.59	0.58	0.57

Notes: (1) RC = Reserve Capacity for Signal Junction
(2) DFC = Ratio of Flow to Capacity for Priority Junction

- 3.2.6 The above results indicated that all identified junctions are currently operating with adequate reserve capacities during the peak hours on weekdays and weekends.
- 3.2.7 Although surveyed traffic flows and junction assessments indicate that all road junctions are currently operating within capacity, it was frequently observed that the existing GMB termini and the on-street loading/unloading areas along Lan Fong Road were fully occupied by GMBs and illegally parked vehicles during peak hours. Consequently, necessary pick-up/drop-off activities for private cars and taxis had to occur on the carriageway. Together with the

weaving of GMB traffic in and out of the termini, this led to traffic queues extending from Lan Fong Road to Yun Ping Road.

- 3.2.8 Meanwhile, it was observed that illegal parking and prolonged vehicle waiting frequently occupy the nearside lane of Hysan Avenue during peak hours, reducing the effective road capacity. Combined with vehicle conflicts at the junctions along the road, traffic queues on Hysan Avenue extended to its junction with Percival Street during the critical peak periods.
- 3.2.9 Furthermore, traffic queues were also occasionally found on Hoi Ping Road, extending from the key access road junction heading Caroline Hill Road, i.e., the junction of Leighton Road and Caroline Hill Road (West). This further exacerbated the traffic issues along Hysan Avenue.
- 3.2.10 While the planned Tunnels T1 and T2 are measures proposed to reduce traffic circulation on the above-mentioned local roads and improve traffic conditions to a certain extent, it is worthwhile to explore other opportunities for further improvement. Consequently, Tunnel T3 is proposed.

4. FUTURE TRAFFIC FORECAST

4.1 Design Year and Future Scenarios to be Assessed

Design Year

- 4.1.1 Taking in consideration the necessary government submission/consultation procedures and the required construction periods, it is anticipated that Tunnel T3 would be completed by the end of 2033. Therefore, a design year of 2036 is adopted for assessment in this study.
- 4.1.2 According to the latest project programme of the planned Tunnels T1 and T2, their construction works would be completed by 2029. Therefore, the construction period of proposed Tunnel T3 will not overlap with that of Tunnels T1 and T2.

Future Scenarios to be Assessed

- 4.1.3 To evaluate the effect to the surrounding road conditions due to the proposed Tunnel T3, the below future scenarios will be assessed:
- Reference Scenario in Year 2036 – Future scenario under the planned traffic arrangement with the planned Tunnels T1 and T2 in place; and
 - Design Scenario in Year 2036 – Future scenario under the planned traffic arrangement with the planned Tunnels T1 and T2 as well as the proposed Tunnel T3 in place.

4.2 Traffic Forecasts for Reference Scenario

- 4.2.1 To derive the year 2036 reference traffic flows, the background growth in traffic should be reviewed and identified for the area, which are made reference to the historical growth trend and the population and employment projections from Planning Department.

Historical Trend

- 4.2.2 Transport Department has traffic count stations on the road sections in the vicinity of the subject site. The Average Annual Daily Traffic (A.A.D.T.) data from year 2019 to 2024 as reported in the Annual Traffic Census (ATC) are summarized in **Table 4.1**.

Table 4.1 Average Annual Daily Traffic (A.A.D.T.) Data from ATC

Stn. No.	Road	AADT (Vehicle/Day)						Annual Growth Rate (% p.a.)
		2019	2020	2021	2022	2023	2024	
1212	Irving Street and Pennington Street (Leighton Rd – Yee Wo St)	12,290	11,730	12,250	11,690	10,590	11,620	-1.11%
1436	Percival Street (Hennessy Rd – Leighton Rd)	12,180	12,170	12,410	11,760	12,340	12,990	1.30%
1819	Hennessy Road and Yee Wo Street (Percival St – Pennington St)	18,530	16,700	17,240	16,980	17,910	17,740	-0.87%
2016	Yee Wo Street (Pennington St – Tung Lo Wan Rd)	16,390	14,770	15,240	14,820	15,870	15,720	-0.83%

Table 4.1 Average Annual Daily Traffic (A.A.D.T.) Data from ATC (cont'd)

Stn. No.	Road	AADT (Vehicle/Day)						Annual Growth Rate (% p.a.)
		2019	2020	2021	2022	2023	2024	
2035	Leighton Road (Wong Nai Chung Rd – Percival St)	27,830	26,470	27,000	21,860	23,770	23,550	-3.28%
2036	Leighton Road (Irving St – Percival St)	14,950	14,220	14,510	13,940	16,170	16,020	1.39%
2608	Caroline Hill Road (Leighton Rd – Yun Ping Rd)	4,550	4,800	4,610	4,890	5,330	5,780	4.90%
2623	Lee Garden Road (Hennessy Rd – Hysan Ave)	3,470	2,870	2,980	2,540	2,730	2,680	-5.04%
Total		110,190	103,730	106,240	98,480	104,710	106,100	-0.75%

Source: The Annual Traffic Census 2019 – 2024 as available on TD's website.

- 4.2.3 The A.A.D.T. flows in **Table 4.1** show that the overall average traffic growth on the road sections in the vicinity of the subject site decreased at the rate of -0.75% per annum for year 2019 to 2024.

Planning Data

- 4.2.4 Other than the historical trend, the population and employment estimates from Territorial Population and Employment Data Matrix (TPEDM) as available on Planning Department's website are also referred for the review on the background traffic growth. The population and employment estimates for Wan Chai in years 2026 and 2031 are presented in **Table 4.2**.

Table 4.2 Population and Employment Estimates from TPEDM

Planning Data for Wan Chai District	Year		Growth Rate (% p.a.)
	2026	2031	2031/2026
Population	156,000	145,700	-1.36%
Employment	301,700	287,250	-0.98%
Population + Employment	457,700	432,950	-1.11%

Source: 2021-based Territorial Population and Employment Data Matrix as available on Planning Department's website.

- 4.2.5 As presented in **Table 4.2**, the growth rates as derived from TPEDM estimates for Wan Chai District from year 2026 to 2031 are ranged from -1.36% to -0.98% p.a.

Adopted Background Growth Factor

- 4.2.6 Although both the historical trend and planning data have reflected the negative growths for the area, a nominal traffic growth rate of +0.1% is adopted in this review to reflect the background traffic growth in the area from year 2025 to 2036 for a conservative approach.

Planned / Potential Future Developments

- 4.2.7 Other than the background traffic growth, the potential traffic induced by the planned future developments in the vicinity of the tunnels are also taken into account in the traffic forecast.

The planning parameters of the identified planned developments are shown in the below **Table 4.3**.

Table 4.3 Planning Parameter for Planned Future Developments

Site Ref. No.	Planned Future Developments ⁽¹⁾	Use	Details
1	Lee Garden Eight ⁽²⁾	Commercial	Total GFA: 102,000 m ²
2	District Court Building ⁽³⁾	District Court	Total GFA: 70,000 m ²
3	Commercial Development in 8 Leighton Road ⁽⁴⁾ (A/H7/183)	Commercial	Total GFA: 14,945 m ²
4	Redevelopment of Po Leung Kuk Headquarters ⁽⁵⁾	Social Services	The service quotas for social services will be increased by about 140 upon the completion of the redevelopment
5	SCAA Sports Link ⁽⁶⁾	Recreation	Total GFA: 31,327.12 m ²

Notes: (1) Locations are indicated in **Drawing No. 4.1**.

(2) Refer to the latest development parameters in the approved GBP submission

(3) Refer to MPC Paper No.5/19 as available on Town Planning Board's website

(4) Refer to information on the approved application no. A/H7/183 as available from the Statutory Planning Portal 3 by Town Planning Board

(5) Refer to information in Po Leung Kuk Annual Report 2025 – 2026 as available from Po Leung Kuk's website

(6) Refer to the TIA of the approved application no. A/H7/189

4.2.8 The trip generations from the future developments as listed in **Table 4.3** are estimated with reference to the adopted trip rates in Traffic Review Report for LG8 with the latest development parameters. The adopted trip rates and estimated traffic generations of these future developments are summarized in **Tables 4.4** and **4.5**. The estimated car park related traffic flows and its distribution is shown in **Drawing No. 4.2**.

Table 4.4 Traffic Generation and Attraction of Future Developments at Caroline Hill Road

Development Component	Weekday						Weekend	
	AM Peak		Noon Peak		PM Peak		Noon Peak	
	GEN	ATT	GEN	ATT	GEN	ATT	GEN	ATT
<u>Adopted Trip Rates</u>								
Office ^{(1) (2)} (pcu/hr/100 m ²)	0.1703	0.2452	0.1835	0.1748	0.1573	0.1175	0.1431	0.1589
Retail ^{(3) (4)} (pcu/hr/100 m ²)	0.2296	0.2434	0.3617	0.5302	0.3100	0.3563	0.2821	0.4817
GIC - Performing Arts and Cultural Facilities ⁽⁵⁾ (pcu/hr/100 m ²)	0.0600	0.0920	0.0626	0.1024	0.1644	0.0569	0.1492	0.1723
Child Care Centre ⁽⁶⁾ (pcu/hr/100 m ²)	0.9434	1.0377	0.5660	0.6604	0.2830	0.2830	0.0943	0.0943
Day Care Centre for the Elderly ⁽⁷⁾ (pcu/hr/100 m ²)	1.5094	0.5660	0.2830	1.1321	1.1321	1.3208	0.3774	0.5660
District Health Centre ⁽⁸⁾ (pcu/hr/100 m ²)	0.1770	0.3540	0.5310	0.7965	0.0973	0.0973	0.0885	0.0885
Public Vehicle Park ⁽⁹⁾ (pcu/hr/parking space)	0.0929	0.5897	0.2340	0.2000	0.4619	0.1500	0.6000	0.3220
Lay-bys for Light Bus ⁽¹⁰⁾ (pcu/hr/layby)	21.50	21.50	15.75	15.75	16.50	16.50	15.00	15.00
District Court ⁽¹¹⁾ (pcu/hr/100 m ²)	0.0606	0.0918	0.0483	0.0450	0.0466	0.0437	N/A ⁽¹²⁾	N/A ⁽¹²⁾

Table 4.4 Traffic Generation and Attraction of Future Developments at Caroline Hill Road (cont'd)

<i>Estimated Traffic Generation and Attraction (pcu/hr)</i>								
1. Lee Garden Eight – 102,000m² GFA								
Office (85,281.276 m ²)	146	210	157	150	135	101	123	136
Retail (9,999.788 m ²)	23	25	37	54	31	36	29	49
GIC - Performing Arts and Cultural Facilities (2,000 m ²)	2	2	2	3	4	2	3	4
Child Care Centre (877.336 m ²)	9	10	5	6	3	3	1	1
Day Care Centre for the Elderly (657.990 m ²)	10	4	2	8	8	9	3	4
District Health Centre (1566.551 m ²)	3	6	9	13	2	2	2	2
Public Vehicle Park – Private Car Parking Spaces (100 spaces)	10	59	24	20	47	15	60	33
Public Vehicle Park – Goods Vehicle & Coach Parking Spaces (25 spaces)	3	15	6	5	12	4	15	9
Lay-bys for Light Bus (4 Nos.)	86	86	63	63	66	66	60	60
Car Park Related Traffic ⁽¹³⁾	203	316	236	254	230	168	221	229
Sub-total	292	417	305	322	308	238	296	298
2. District Court Building – 70,000m² GFA								
District Court (70,000m ² GFA)	43	65	34	32	33	31	5 ⁽¹²⁾	5 ⁽¹²⁾
Grand Total	335	482	339	354	341	269	301	303

- Notes: (1) TPDM mean trip rates for office adopted for Weekday AM and PM Peaks
 (2) Trip rates for weekday and weekend noon peaks are derived from the surveyed variance to the weekday PM peak trips of office development and applied onto the TPDM trip rates for office
 (3) TPDM mean trip rates for retail/shopping complex
 (4) Trip rates for weekday and weekend noon peaks are derived from the surveyed variance to the weekday PM peak trips of retail development and applied onto the TPDM trip rates for retail/shopping complex
 (5) Trip rates derived from the consultant's surveyed highest trip rates from Yao Tsung-I Academy, Kwai Tsing Theatre and M+
 (6) Trip rates derived from the consultant's surveyed trip rates from SIA Shaukiwan Day Creche
 (7) Trip rates derived from the consultant's surveyed trip rates from T.W.G.Hs. Anita Mui Day Care Centre for the Elderly
 (8) Trip rates derived from the consultant's surveyed trip rates from Central District Health Centre General Outpatient Clinic
 (9) Trip rates derived from the consultant's surveyed trip rates from ex-Murray Road Multi-storey Car Park
 (10) Trip rates derived from the consultant's surveyed average actual peak frequencies of green mini-bus services at Lan Fong Road.
 (11) Trip rates derived from the consultant's surveyed trip rates from Wanchai Tower and Lands Tribunal
 (12) Since the existing Wanchai Tower and Lands Tribunal are closed in weekend, a nominal trips of 5 pcu/hr is adopted
 (13) For conservative assessment, LG8's car park related traffic includes all the traffic generation and attraction of the development excluding 25 nos. provisions of public vehicle park and lay-bys for light bus.

Table 4.5 Adopted Trip Rates and Estimated Traffic Generation of Other Planned Future Developments in the Vicinity

Other Planned Future Developments	Weekday						Weekend	
	AM Peak		Noon Peak		PM Peak		Noon Peak	
	GEN	ATT	GEN	ATT	GEN	ATT	GEN	ATT
3. Commercial Development in 8 Leighton Road – 14,945 m² GFA ⁽¹⁾								
Adopted Trip Rates ^{(3) (4)} (pcu/hr/100 m ²)	0.1703	0.2452	0.1835	0.1748	0.1573	0.1175	0.1431	0.1589
Estimated Trips (pcu/hr)	26	37	28	27	24	18	22	24
4. Redevelopment of Po Leung Kuk Headquarters – Additional 140 Service Quotas ⁽²⁾								
Adopted Trip Rates ⁽⁵⁾ (pcu/hr/quota)	0.0487	0.0200	0.0200	0.0243	0.0177	0.0222	0.0155	0.0200
Estimated Trips (pcu/hr)	7	3	3	4	3	4	3	3
5. SCAA Sports Link ⁽⁶⁾								
Estimated Trips (pcu/hr)	13	28	34 ⁽⁷⁾	25 ⁽⁷⁾	34	25	22	26

- Notes: (1) Refer to information on the approved application no. A/H7/183 as available from the Statutory Planning Portal 3 by Town Planning Board
- (2) Refer to information in Po Leung Kuk Annual Report 2025 – 2026 as available from Po Leung Kuk's website
- (3) TPDM mean trip rates for office adopted for Weekday AM and PM Peaks
- (4) Trip rates for weekday and weekend noon peaks are derived from the surveyed variance to the weekday PM peak trips of office development and applied onto the TPDM trip rates for office
- (5) Trip rates derived from the consultant's surveyed trip rates from the existing Po Leung Kuk
- (6) Refer to the adopted traffic generation and attraction in the TIA of the approved application no. A/H7/189
- (7) Since a scenario during weekday noon peak has not been assessed in the TIA of the approved application no. A/H7/189, trip generation during the most critical peak (i.e. the weekday PM peak) is adopted for conservative assessment

Re-routing of Traffic due to the Planned Tunnels T1 and T2

- 4.2.9 The planned Tunnels T1 and T2 will enable alternative ingress routes for LG1 via the existing vehicular entrances of LG2 and LG3 on Pennington Street and Hoi Ping Road respectively. As a result, vehicles coming from Percival Street, Leighton Road, Caroline Hill Road can avoid entering the busy road sections of Yun Ping Road and Lan Fong Road.
- 4.2.10 Besides, the existing vehicular access of LG2 will allow egress traffic of LG1 to the east directly with the proposed Tunnel T2. In other words, traffic circulation at Lan Fong Road, Lee Garden Road, Hysan Avenue and Sunning Road can be avoided.
- 4.2.11 The above-mentioned re-routing of traffic with the proposed Tunnels T1 and T2 are shown in **Drawing Nos. 4.3, 4.4 and 4.5.**
- 4.2.12 As mentioned in **Section 4.1**, the Tunnels T1 and T2 will be available before the construction works of the proposed Tunnel T3. Therefore, the traffic re-routing due to Tunnels T1 and T2 will be taken into account in the reference scenario. The estimated net differences of traffic due to these two tunnels are shown in **Drawing No. 4.6.**

Planned Road Scheme at Leighton Road and Caroline Hill Road

- 4.2.13 To support the new developments in Caroline Hill Road, including LG8 and the future District Court Building, a road scheme with improvement works at Caroline Hill Road, Link Road, Hoi Ping Road and Leighton Road will be implemented. It has included the conversion of existing priority to the proposed signal control arrangement at the junction of Link Road / Caroline Hill Road (West).
- 4.2.14 In addition, a new access road to connect both the eastern and western section of Caroline Hill Road will be formed to facilitate accesses to the CHR Developments. The overall road improvement scheme is presented in **Drawing No. 4.7**. The future junction layouts of Junctions J1 and J2 are shown in **Drawing Nos. 4.8** and **4.9** respectively.

Year 2036 Reference Traffic Flows

- 4.2.15 Given that there is no plan for any major road infrastructure in the vicinity by the design year 2036, the 2036 reference traffic flows are derived by:
- (i) Applying a growth rate of 0.1% p.a. on the 2025 observed flows upto the design year 2036;
 - (ii) Superimposing the potential additional traffic as induced by the planned future developments in the vicinity of the subject site (**Table 4.3**); and
 - (iii) Superimposing the estimated net differences of traffic due to the planned Tunnels T1 and T2 (**Drawing No. 4.6**).
- 4.2.16 The anticipated year 2036 weekday and weekend reference traffic flows are presented in **Drawing No. 4.10**.

4.3 Traffic Forecasts for Design Scenario

- 4.3.1 To derive the year 2036 traffic flows for Design Scenario (i.e. with Tunnel T3), the changes in traffic flows in the local road network due to the proposed Tunnel T3 are quantified with reference to the anticipated re-routing of traffic as illustrated in **Drawing Nos. 2.3 – 2.5** and the demands and patterns of the car park related traffic of LG1, LG2, LG3 (**Drawing Nos. 3.7 – 3.9**) and LG8 (**Drawing No. 4.2**). For a conservative assessment on potential impact due to the diversions, it is assumed that all the traffic flows of identified routes would be diverted. The overall estimated net difference of car park related traffic flows in the local network is presented in **Drawing No. 4.11**.
- 4.3.2 By superimposing the estimated net differences of traffic due to the proposed Tunnel T3 (**Drawing No. 4.11**) onto the year 2036 reference traffic flows (**Drawing No. 4.10**), the year 2036 future traffic flows for Design Scenario can be derived and presented in **Drawing No. 4.12**.

5. TRAFFIC IMPACT ASSESSMENT

5.1 Assessment for Year 2036 Reference Scenario and Design Scenario

- 5.1.1 The operational performances of the affected junctions identified in **Section 3.2** are assessed with the derived year 2036 reference and design traffic flows under the existing/planned junction layouts and method of control. The assessment results are summarised in **Table 5.1**, and the details of junction assessments are attached in **Appendix B**.

Table 5.1 Year 2036 Operational Performance of Affected Road Junctions

Ref No.	Junctions	Method of Control	Year 2036 RC ⁽¹⁾ /DFC ⁽²⁾							
			Reference Scenario (with Tunnels T1 & T2)				Design Scenario (with Tunnels T1, T2 & T3)			
			Weekday			Weekend	Weekday			Weekend
			AM Peak	Noon Peak	PM Peak	Noon Peak	AM Peak	Noon Peak	PM Peak	Noon Peak
J1	Caroline Hill Rd (West) / Link Rd	Signal	36%	54%	44%	38%	36%	54%	44%	38%
J2	Leighton Rd / Caroline Hill Rd (West) / Hoi Ping Rd	Signal	26%	33%	34%	32%	35%	41%	41%	41%
J3	Leighton Rd / Sunning Rd	Priority	0.26	0.37	0.32	0.36	0.25	0.35	0.30	0.35
J4	Leighton Rd / Yun Ping Rd / Pennington St / Caroline Hill Rd (East)	Signal	56%	34%	37%	19%	58%	37%	39%	21%
J5	Hysan Ave / Yun Ping Rd	Priority	0.21	0.44	0.34	0.45	0.21	0.44	0.34	0.45
J6	Hysan Ave / Sunning Rd	Priority	0.16	0.21	0.21	0.19	0.16	0.21	0.20	0.19
J7	Hysan Ave / Hoi Ping Rd	Priority	0.78	0.83	0.80	0.79	0.78	0.82	0.78	0.78

Notes: (1) RC = Reserve Capacity for Signal Junction
(2) DFC = Ratio of Flow to Capacity for Priority Junction

- 5.1.2 Assessment results in **Table 5.1** show that Tunnel T3 will not cause any **adverse** impact to the local road network, and all the assessed junctions would operate within capacities during peak hours on both weekday and weekend in both Reference and Design Scenarios.
- 5.1.3 Even though the magnitude of the traffic diversion due to the proposed Tunnel T3 is less than the estimated, the traffic conditions will only tend to the Reference Scenario (i.e. the scenario without the proposed Tunnel T3). Therefore, no adverse traffic impact will be caused.
- 5.1.4 In the contrary, improvements in operational performances of all the identified junctions would be witnessed since the proposed Tunnel T3 would further divert traffic away from the at-grade roads to the underground levels.
- 5.1.5 As discussed in **Section 3.2.8**, the existing illegal parking and prolonged vehicle waiting on Hysan Avenue have reduced the effective road capacity. If this issue persists, the DFC of Junction J7, as presented in **Table 5.1**, would potentially increase. This potential issue would, however, be subject to further traffic improvement or management measures. Nevertheless, the assessment results indicate that the proposed Tunnel T3 would help reduce traffic on the concerned road section, thereby improving conditions compared to the reference scenario.

5.2 Queue Length Analysis for Junction J1

5.2.1 As discussed in **Section 2.4**, the ingress and egress routes of LG1 and LG3 to and from the south would be diverted to access via LG8 due to the proposed Tunnel T3. As a results, those ingress traffic would be diverted from the Caroline Hill Road northbound at Junction J2 to the right-turn lane to Caroline Hill Road southbound at J1, and those egress traffic would be diverted from Hoi Ping Road and Caroline Hill Road southbound to the new access road westbound at Junction J1.

5.2.2 To evaluate the effects on queue lengths in the planned layout of Junction J1 due to the above traffic diversions, queue length analysis is conducted to assess with the derived year 2036 reference and design traffic flows. The assessment results are summarised in **Table 5.2**, and the details of assessment are attached in **Appendix C**.

Table 5.2 Average Queue Length of Junction J1 in Year 2036 Reference and Design Scenarios

Junction Approach	Capacity (m)	Average Queue Length (m)							
		Reference Scenario (with Tunnels T1 & T2)				Design Scenario (with Tunnels T1, T2 & T3)			
		Weekday		Weekend		Weekday		Weekend	
		AM Peak	Noon Peak	PM Peak	Noon Peak	AM Peak	Noon Peak	PM Peak	Noon Peak
Link Road Northbound	100	44	39	42	43	44	39	42	43
New Access Road Westbound (farside lane)	140	60	57	53	46	64	62	62	53
New Access Road Westbound (nearside lane)	140	4	6	6	5	4	6	6	5
Caroline Hill Road Southbound (farside lane)	40	33	32	33	32	28	28	29	28
Caroline Hill Road Southbound (nearside lane)	40	30	29	30	29	25	26	27	26
Right-turn Lane	25	25	19	18	20	25	21	20	22

5.2.3 As shown in **Table 5.2**, the results have indicated that available queue lengths provided at the junction under the planned layout will be sufficient to cater for average vehicle queues during the peak hours in both the reference and design scenarios of year 2036.

6. EXPECTED BENEFITS

6.1 Further Reduce At-grade Traffic on Local Roads

- 6.1.1 As discussed in **Section 2.3**, Tunnel T3 will enable an alternative underground ingress route for LG8 from Percival Street and Leighton Road eastbound via the existing run-in of LG3 at Hoi Ping Road. Additionally, ingress and egress traffic of LG1 and LG3 from / to the south would enter the basement level via LG8 and Tunnel T3.
- 6.1.2 It was estimated that the traffic flows on Hoi Ping Road at Junction J2 would be reduced upto 103 pcu/hr (about 32% of existing traffic flows on Hoi Ping Road), while the traffic flows on Caroline Hill Road (West) would be reduced upto 23 pcu/hr (about 4% of existing traffic flows on northbound of Caroline Hill Road (West)). The RC of this junction would be improved as shown in **Table 5.1**.
- 6.1.3 Apart from the Junction J2, majority of the identified junctions would be improved with the Tunnel T3. It will not only help on reduction of at-grade traffic on **some** key road links such as Leighton Road (reduced upto 29 pcu/hr, about 3% of existing eastbound traffic flows), but also divert away the car park related traffic from the local roads including Yun Ping Road (reduced upto 18 pcu/hr, about 3% of existing traffic flows), Hysan Avenue (reduced upto 18 pcu/hr, about 10% of existing westbound traffic flows), Hoi Ping Road, Sunning Road, Lan Fong Road and Lee Garden Road.
- 6.1.4 Furthermore, the air quality and pedestrian safety in the area will be improved with minimizing unnecessary vehicle circulation.

6.2 Maximize Accessibility of Car Parks for Efficient Use of Available Parking Spaces

- 6.2.1 With the basement car parks further linked by the Tunnel T3, the available car parking spaces within LG1, LG2, LG3 and LG8 can be shared used for the vehicles. The accessibility of the car parks will be improved without the need of any additional vehicular access points. As a result, utilizations of available car parking spaces can be maximized while the way-finding of vacant spaces can take place internally. Thus, vehicle queuing at car park entrances and traffic circulation on public roads will be minimized.

6.3 Better Balanced Use of Roads/Junctions' Capacities

- 6.3.1 The Tunnel T3 will further provide more route choices for drivers to enter or leave the car parks in different traffic situation on the surrounding roads, and hence a more balanced use of spare capacities of the surrounding roads and junctions can be achieved.

6.4 More Flexible for Access and Traffic Management

- 6.4.1 With the Tunnel T3, alternative ingress and egress points can be available for the car parks, which allows flexibility for the car park operators to manage ingress and egress of vehicles to suit with different traffic conditions in the area. Besides, the proposed vehicle tunnels will provide opportunities to implement short-term or temporary traffic management schemes for special events without affecting the vehicular accesses.

7. TRAFFIC ARRANGEMENT AND IMPACT DURING CONSTRUCTION STAGE

7.1 No Excavation Work on Public Road for Tunnel Construction

- 7.1.1 As discussed in **Section 2.3**, “Drill and Excavation Method” with launching from LG8 is proposed for the construction in order to avoid any excavation work on the at-grade public roads and hence minimize disturbance to the at-grade vehicular and pedestrian traffic. The works areas for the tunnel construction will be situated at the basements of LG3 and LG8.

7.2 Suspension of Parking Spaces during and after the Construction

- 7.2.1 With the proposed tunnelling construction method to avoid any work to be carried out on the public roads, it is unavoidable that some of the existing car parking spaces have to be temporarily suspended to facilitate tunnel construction works at the basement levels. Nevertheless, the extents of the works areas at the car parks will be well planned to ensure the daily operation of the car parks can be maintained throughout the construction period and to minimize the impact to parking provision.
- 7.2.2 LG8 will provide 612 nos. car parking spaces, 5 nos. public medium/heavy goods vehicles parking spaces and 5 nos. public coach parking spaces. It is preliminarily reviewed that about 24 nos. car parking spaces would be temporarily suspended (approx. 4% of total LG8 provision) for the working areas and equipment storage on B3/F and B4/F. Meanwhile, working space and a floor opening on B2/F would be required for internal lifting and delivering the major plant, equipment (e.g. the tunnelling machine) and materials from B2/F to B3/F, since the headroom on B3/F is designated for private cars only and is insufficient for construction vehicles to access the works area on B3/F and B4/F. If the public goods vehicles and/or coach parking spaces on B2/F are affected during construction stage, the ancillary loading bays would be temporarily converted into the spaces for re-provisioning of the affected public parking spaces to maintain the 24-hr provision for the public needs, if necessary. On the other hand, 6 nos. car parking spaces in LG3 (approx. 3% of LG3 provision) will be temporarily suspended for the working areas. The indicative works area and the affected parking spaces at the tunnel connection points at LG3 and LG8 are shown in **Drawing No. 7.1**. Besides, the car park provision rates are summarized in **Table 7.1**.

Table 7.1 Car Park Provision Rates in Lee Gardens Area

Commercial Development	GFA (m ²)	Private Car Parking Space ⁽¹⁾	Provision Rate (1 space per GFA)
LG1	83,600	187	447
LG2	58,200	163	357
LG3	43,300	195	222
LG3 (During T3 construction)		195 – 6 = 189	229
LG8	102,000	612	167
LG8 (During T3 construction)		612 – 24 = 588	173

Note: (1) Car parking provision upon the completion of works for Tunnels T1 and T2

- 7.2.3 As shown in **Table 7.1**, the provision rate of LG8 is much higher than the existing car parks in Lee Gardens Area, even though the temporary suspension of parking spaces during the construction stage of Tunnel T3 has been considered. Therefore, the temporary reduction is considered acceptable.
- 7.2.4 Furthermore, as reviewed the latest car park utilization rates of LG3, it would be 94% for weekdays and 96% for weekends during the most peak period upon completion of Tunnels T1 and T2 (i.e. 195 nos. private car parking spaces). Therefore, the remaining surplus can still be able to absorb the temporary suspension of parking spaces. Together with the high car park provision rates in LG8, the temporary suspension will not affect the operation of LG3 car park.
- 7.2.5 In addition, the car park operators would dedicate staffs for patrolling traffic at the car park entrances and guiding the motorists to park their cars at other car parks in the vicinity with vacant spaces when necessary.
- 7.2.6 After the completion of tunnel construction, the temporarily suspended car parking spaces will be reinstated except for 6 spaces in LG3 and 5 spaces in LG8 which are considered necessary to be permanently suspended for the opening of accesses for the tunnels.
- 7.2.7 As the suspended car parking spaces, including those in LG3, account for not more than 2% of the total provision at LG8, the traffic impact of their suspension should be negligible. This is especially the case as the future parking provision rate of LG8 is already significantly higher than that in the surrounding developments. Nevertheless, the possible reprovision of these affected spaces will be reviewed further at the detailed design stage.
- 7.2.8 On the other hand, the available car parking spaces within the LG1, LG2, LG3 and LG8 can be shared used for the vehicles upon the car parks to be linked by the tunnels, and the accessibility of the car parks will also be improved without the need of any additional car park ingress and egress points. As a result, the utilizations of available car parking spaces can be maximised while the way-finding of vacant spaces can be taken place internally, therefore minimizing queuing at car park entrances.

7.3 Access Arrangement and Management during Construction

- 7.3.1 Given that the works areas required for the tunnel construction are all within the basement car park of LG3 and LG8, it is proposed that the accesses of construction traffic to the works areas will be via the vehicular accesses of LG3 and LG8 which can avoid any new opening of construction access on the public roads. The access routes of construction traffic would be similar to the those of the car park traffic. The proposed access arrangement for construction traffic is shown in **Drawing No. 7.2**.
- 7.3.2 To avoid traffic queueing for car park at public road, car park vacancy information signs will be erected at the car park entrances of LG1, LG2, LG3 and LG8 to guide the drivers to use the adjacent car parks with vacant parking spaces.
- 7.3.3 Furthermore, as mentioned in **paragraph 7.2.5**, the car park operators would dedicate staffs for patrolling traffic at the car park entrances and guiding the motorists to park their cars at other car parks in the vicinity with vacant spaces when necessary to prevent any obstruction at the car park entrances leading to adverse impact to the operation of public transportation and the traffic on public roads. Besides, the loading/unloading activities for the buildings would be well coordinated and managed by the car park operators to avoid such activities to

be carried out during the peaks of the car parks and/or during the access periods of construction traffic.

7.4 Review on Construction Traffic Impact

- 7.4.1 To minimize traffic impact, the overall construction traffic (including dump trucks) demand of the two tunnels will be kept minimal and limited to 20 vehicles per day only. Taking into consideration the necessity of maintaining the daily operation of the car parks as well as the headroom constraints at the car park floors, it is planned that only small-sized trucks will be adopted for the tunnel construction.
- 7.4.2 Besides, time management for construction traffic will be implemented, by which the access of construction traffic will only be arranged outside the communal weekday's peak periods of 08:00-10:00, 12:00-14:00 and 16:00-20:00 except General Holidays in order to further minimize traffic impact to the surrounding road network during the communal peak periods.
- 7.4.3 With the above proposed time management for accesses of construction traffic, the hourly construction traffic demand will be kept at 5 vehicles per hour only. Therefore, the traffic impact to the surrounding roads caused by the construction traffic of the proposed tunnel would be very minimal.

7.5 Construction Traffic Management Scheme

- 7.5.1 To minimize traffic impact on the surrounding road network, a Construction Traffic Management Scheme (CTMS) which to be reviewed and approved by Transport Department will be implemented during the tunnel construction.
- 7.5.2 The CTMS shall include but not limited to:
- The tunnel construction works shall only be carried out underground without at-grade excavation works leading to any closure of public road;
 - The overall construction traffic demand shall be kept minimal and limited to 20 vehicles per day. The construction vehicles shall access to/from the underground construction site via the existing vehicular access of LG3 and future vehicular access of LG8;
 - The access of construction traffic shall only be arranged outside peak period of 08:00-10:00, 12:00-14:00 and 16:00-20:00 during weekdays except General Holidays;
 - The car park operators of LG3 and LG8 shall deploy staff for patrolling traffic at the car park entrance and guiding the motorists to park their cars at other car parks in the vicinity with vacant spaces when necessary;
 - The suspension of car parking spaces at LG3 and LG8 shall be minimised as far as possible;
 - Loading/unloading activities of LG3 and LG8 shall be well coordinated and managed by the car park operators to avoid carry out during access period of construction traffic;
 - Adequate car park vacancy information signs shall be erected at the car park entrance to alert motorists;
 - The tunnel construction works for Tunnel T3 shall not commence earlier than the construction of Tunnels T1 and T2, provision of covered walkway and footbridge at the area and full provision of private car parking spaces of LG8; and
 - Such other measures as stipulated in the approved CTMS.

8. SUMMARY AND CONCLUSION

8.1 Summary

- 8.1.1 In order to enhance the traffic condition in the Causeway Bay south area, Tunnels T1 and T2 were proposed beneath Hysan Avenue and Yun Ping Road respectively. Tunnel T1 would connect the basement car parks at LG1 and LG3, while Tunnel T2 would connect the basement car parks at Lee LG1 and LG2.
- 8.1.2 With the completion of LG8 in 2026, it offers opportunities to further enhance the accessibility of underground car parks in the area by introducing Tunnel T3 running on Sunning Road and across Leighton Road to link up LG3 and LG8.
- 8.1.3 Since the proposed Tunnel T3 would run on 'Road' zone in the Causeway Bay OZP, S16 Planning Application for the proposed underground vehicular tunnel is required for obtaining permission from TPB. MVA was commissioned as a traffic consultant to conduct a traffic study and prepare a TIA in support of the proposed Tunnel T3 and the S16 planning application.
- 8.1.4 Tunnel T3 will branch from the southeast corner of LG3. To avoid any encroachment into the adjoining private lots at Sunning Road while allowing the connection to serve both traffic directions, the tunnel is proposed with two levels serving private cars in one traffic direction at each level.
- 8.1.5 The availability of Tunnel T3 will enable an alternative underground ingress route for LG8 from Percival Street and Leighton Road eastbound via the existing run-in of LG3 at Hoi Ping Road. In addition, the ingress and egress traffic of LG1 and LG3 from/to the South would also benefit from Tunnel T3.
- 8.1.6 As a traffic management strategy, appropriate directional signages will be provided in the connected car parks and entrances of the tunnels to clearly guide drivers on the routes to the other connected car parks as well as the exits via a shorter and more direct alternative routes as enabled by the tunnels.
- 8.1.7 To obtain the updated traffic flows for the review on the existing traffic condition, traffic count surveys and O-D surveys at the identified junctions have been conducted.
- 8.1.8 The identified junctions under existing traffic conditions have been assessed and the results indicated that they are currently operating with adequate reserve capacities during the peak hours on weekdays and weekends.
- 8.1.9 Although the assessment results showed adequate reserve capacities at the surrounding road junctions under existing conditions, and Tunnels T1 and T2 were planned for traffic enhancement, exploring measures to further improve nearby car-park circulation and minimize at-grade road traffic is worthwhile, given the opportunity offered by the development of LG8. Consequently, Tunnel T3 is proposed.
- 8.1.10 Taking in consideration the Tunnel T3 would be completed by the end of 2033, a design year of 2036 was adopted for assessment in this study. Two future scenarios were reviewed: (i) Reference Scenario – with the planned Tunnels T1 and T2; (ii) Design Scenario – with the planned Tunnels T1 and T2 and the proposed Tunnel T3.

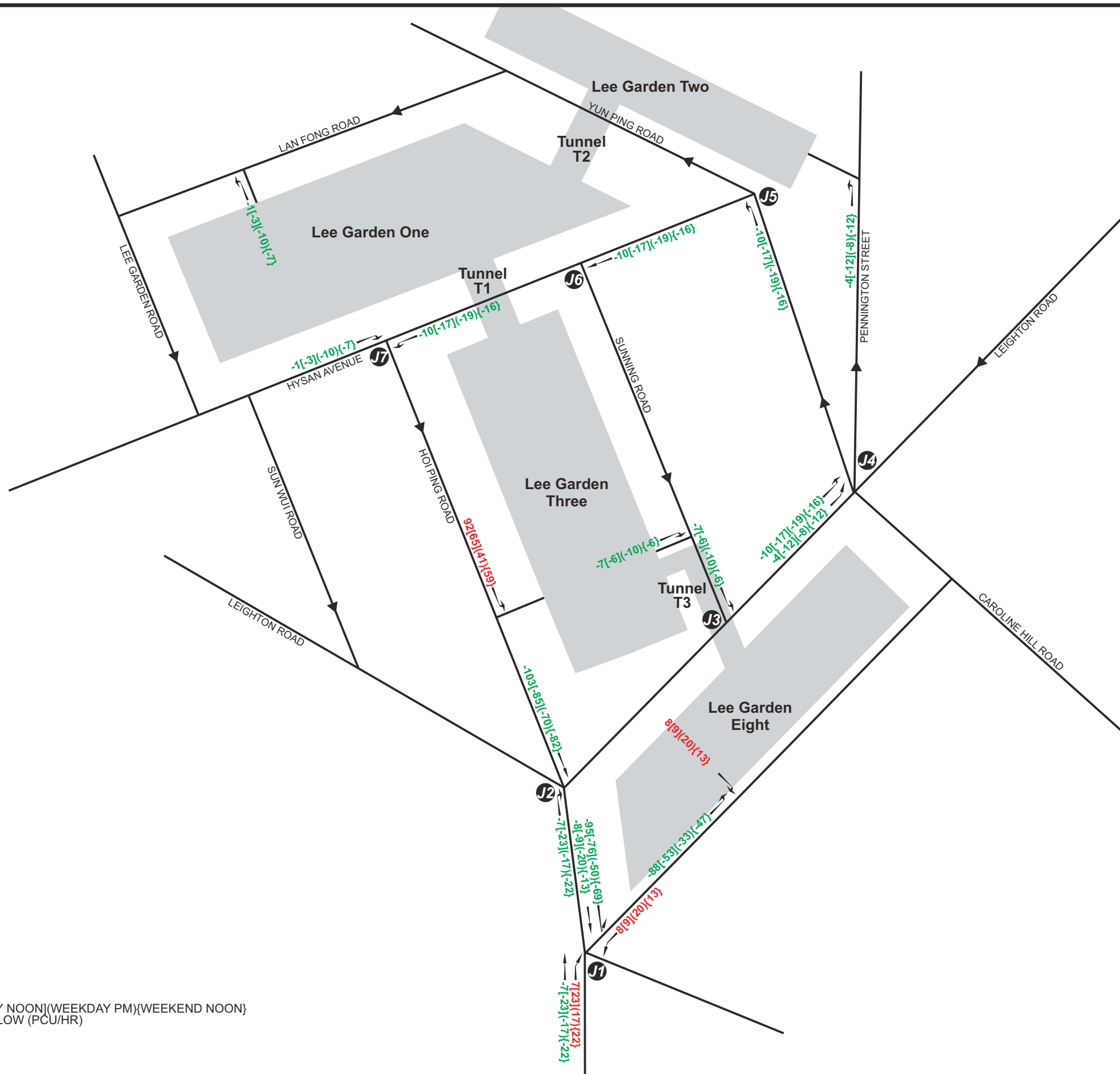
- 8.1.11 Traffic forecasts for Reference Scenario in the design year 2036 were derived with reference to the historical traffic data and planning data, future traffic induced by the future developments in the vicinity as well as the anticipated traffic re-routing due to the planned Tunnels T1 and T2.
- 8.1.12 Traffic forecasts for Design Scenario in the design year 2036 were derived by superimposing the estimated net differences of traffic due to the proposed Tunnel T3 onto the year 2036 reference traffic flows.
- 8.1.13 Operational traffic impact assessments have been conducted for the two forecasted scenarios, and the results demonstrated that the Tunnel T3 would not cause **adverse** traffic impact to the local road network, and all the assessed junctions would operate within capacities during peak hours.
- 8.1.14 Even though the magnitude of the traffic diversion due to the proposed Tunnel T3 is less than the estimated, the traffic conditions will only tend to the Reference Scenario. Therefore, no adverse traffic impact will be caused.
- 8.1.15 Apart from the operational assessment, the traffic arrangement and impact during the construction stage of the tunnels were also reviewed. To avoid any excavation work on the at-grade public roads and hence minimize disturbance to the at-grade vehicular and pedestrian traffic, "Drill and Excavation Method" with launching from LG8 was proposed. The works areas for the tunnel construction would be situated at the basements of LG3 and LG8. The accesses of construction traffic to the works areas would be via the vehicular accesses of LG3 and LG8.
- 8.1.16 It would be unavoidable that some of the existing car parking spaces would be temporarily suspended to facilitate tunnel construction works at the basement levels; however, the extents of the works areas at the car parks would be well planned and minimized for the daily operation throughout the construction period. Besides, the ancillary provision would be temporarily converted into public vehicle park for the affected parking spaces, if necessary, during the construction of the tunnels so that the 24-hr provision for the public can be maintained.
- 8.1.17 Besides, the overall construction traffic demand of the two tunnels would be kept minimal, and time management for construction traffic would be implemented, by which the access of construction traffic would only be arranged outside the communal weekday's peak periods of 08:00-10:00, 12:00-14:00 and 16:00-20:00 except General Holidays. With the proposed time management, the hourly construction traffic demand would be kept at 5 vehicles per hour only. Therefore, the traffic impact to the surrounding roads caused by the construction traffic of the tunnel would be very minimal.
- 8.1.18 Furthermore, a CTMS which to be reviewed and approved by Transport Department would be implemented during the tunnel construction to ensure minimized traffic impact on the surrounding road network.

8.2 Conclusion

- 8.2.1 In conclusion, the proposed Tunnel T3 will not cause adverse traffic impact to the local road network. With the proposed CTMS, impact on the surrounding road conditions will also be minimized.

8.2.2 Besides, the proposed Tunnel T3 is supported from a traffic engineering point of view as it is considered beneficial to the local area with the following expected benefits:

- Overall at-grade traffic volume on some key roads and local roads would be reduced, which also help to improve the air quality and pedestrian safety in the area;
- Accessibility of car parks would be maximized for efficient use of available car parking spaces, and the wayfinding of vacant parking spaces can be taken place internally, and thus vehicle queuing at car park entrances and traffic circulation on public roads would be minimized;
- Available of route choices for vehicles would help to achieve better balanced use of roads/junctions' capacities under different road traffic situations; and
- Access and traffic management would be more flexible for car park operators to manage the ingress and egress of vehicles to suit different traffic conditions in the area.



LEGEND :
-10[-15](-20){-15} WEEKDAY AM[WEEKDAY NOON](WEEKDAY PM){WEEKEND NOON}
PEAK HOUR TRAFFIC FLOW (PCU/HR)

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-	-	-	-
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A	RESPONSE TO TD'S COMMENTS	CHC	27AUG26
Rev.	Description	Checked	Date

Project Title

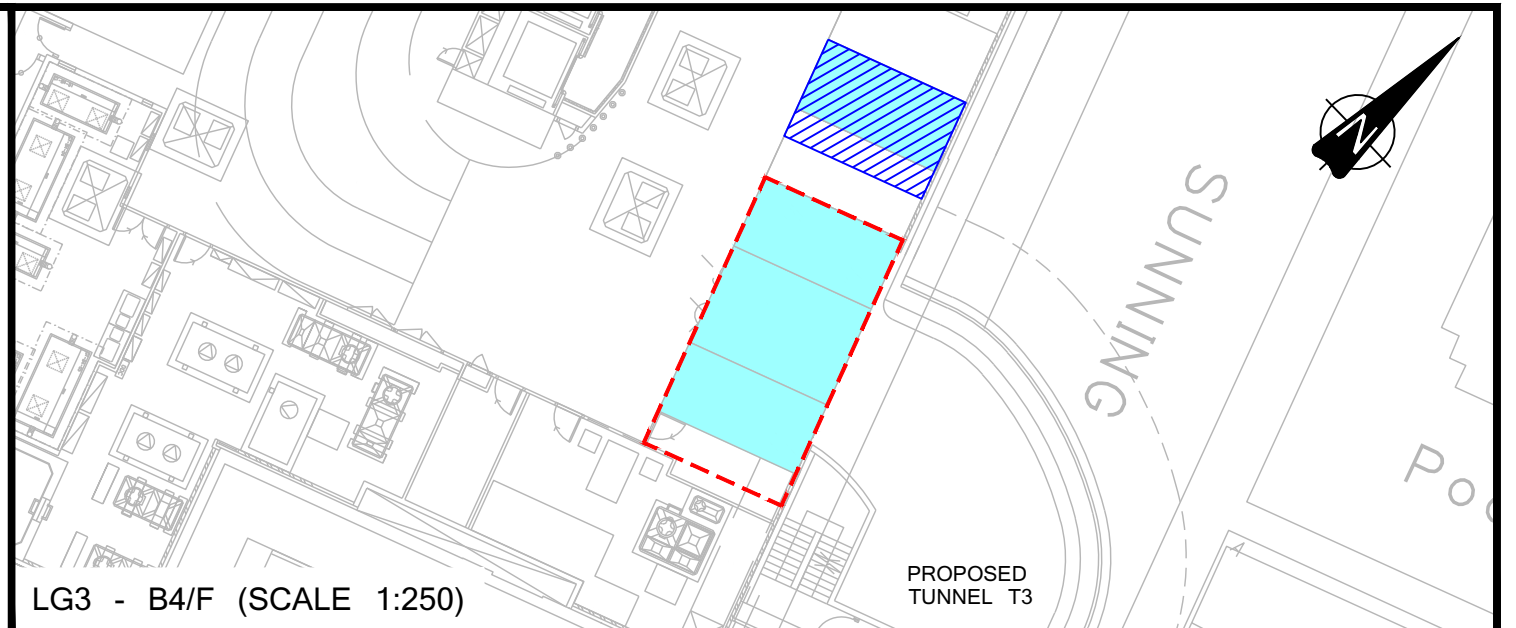
SECTION 16 PLANNING APPLICATION OF
PROPOSED UNDERGROUND VEHICULAR TUNNEL T3
(CONNECTING LEE GARDEN THREE AND LEE GARDEN EIGHT)
- TRAFFIC IMPACT ASSESSMENT

Drawing Title							
NET DIFFERENCES IN TRAFFIC FLOWS DUE TO TUNNELS T3							
Designed	CNM	Checked	CHC	Scale	NTS	Date	APR 2026
Drawing No.						4.11	Rev. A

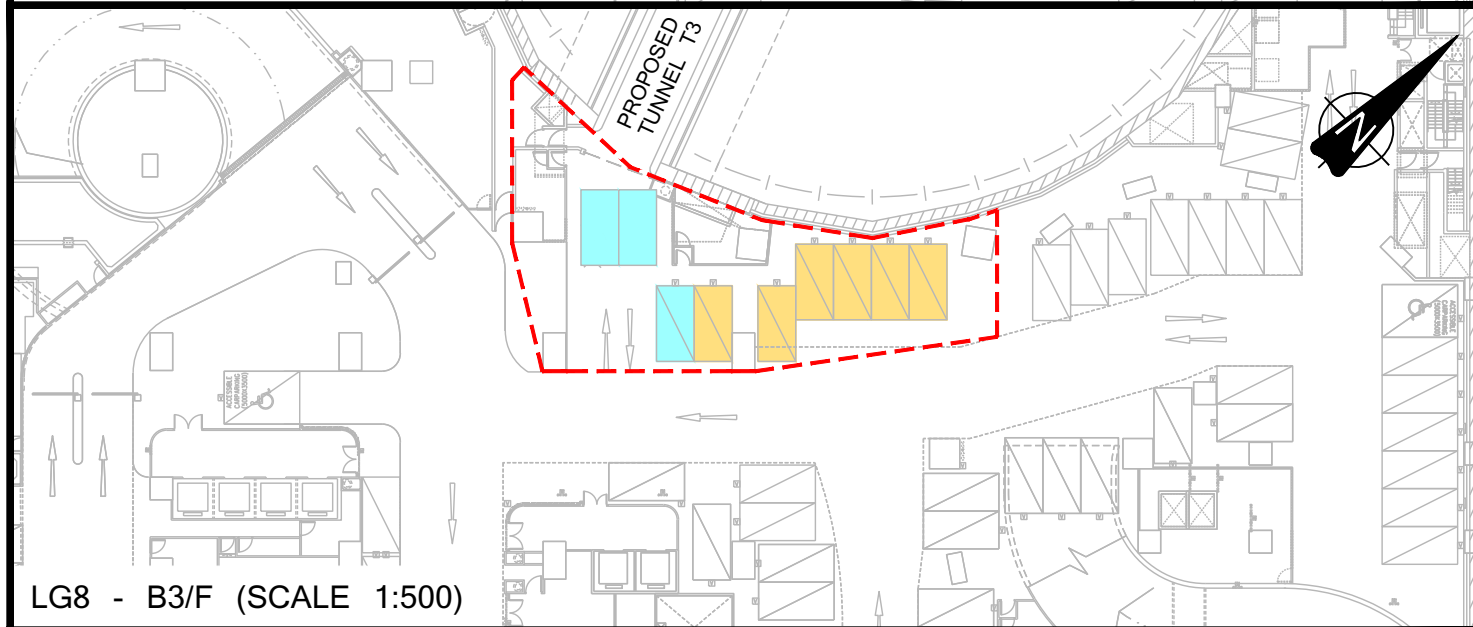
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LG8 - B4/F (SCALE 1:500)



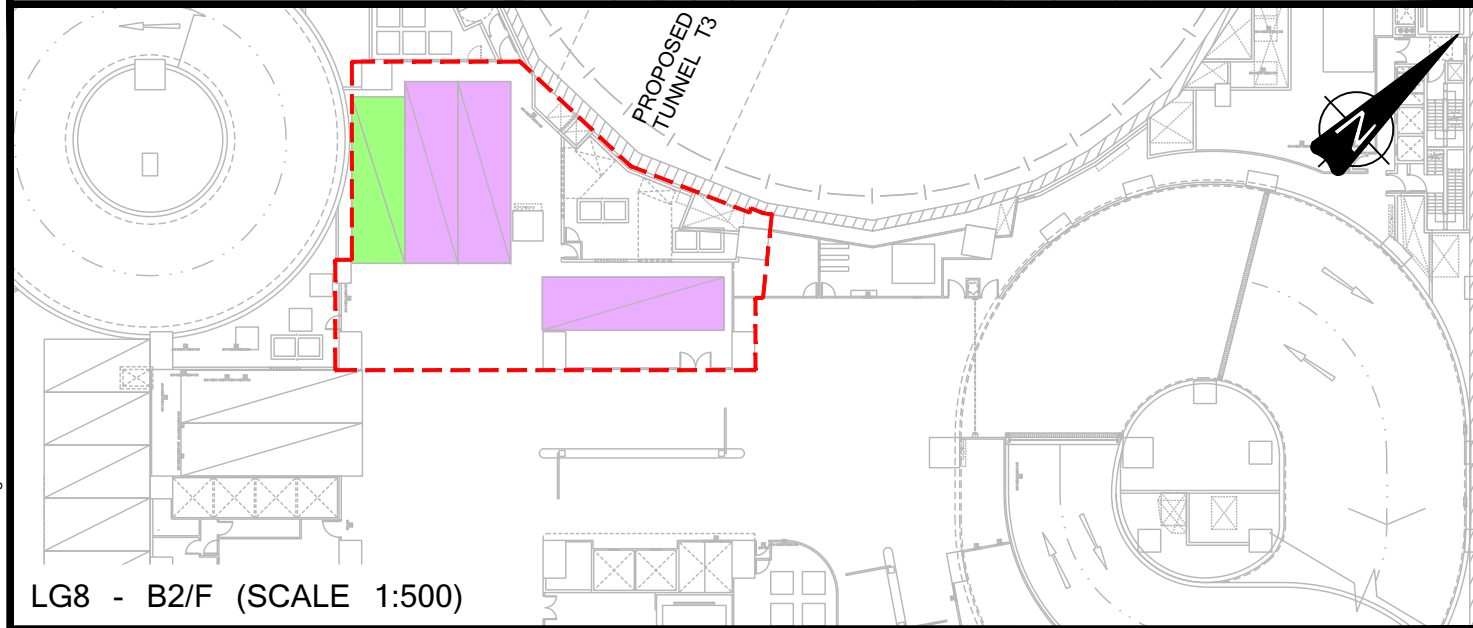
LG3 - B4/F (SCALE 1:250)



LG8 - B3/F (SCALE 1:500)



LG3 - B3/F (SCALE 1:250)



LG8 - B2/F (SCALE 1:500)

- LEGEND:
- WORK AREA (INDICATIVE ONLY)
 - CAR PARKING SPACE TO BE PERMANENTLY REMOVED
 - CAR PARKING SPACE TO BE TEMPORARILY SUSPENDED DURING CONSTRUCTION
 - CAR PARKING SPACE TO BE PERMANENTLY RE-PROVIDED
 - CAR PARKING SPACE TO BE TEMPORARILY RE-PROVIDED DURING CONSTRUCTION
 - PUBLIC MG/V / HGV PARKING SPACE TO BE TEMPORARILY RELOCATED DURING CONSTRUCTION
 - PUBLIC COACH PARKING SPACE TO BE TEMPORARILY RELOCATED DURING CONSTRUCTION
- NOTE:
EXTENT OF WORK AREA AND AFFECTED PARKING SPACES
ARE SUBJECT TO FURTHER REVIEW AT DETAILED DESIGN.

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Rev.	Description	Checked	Date

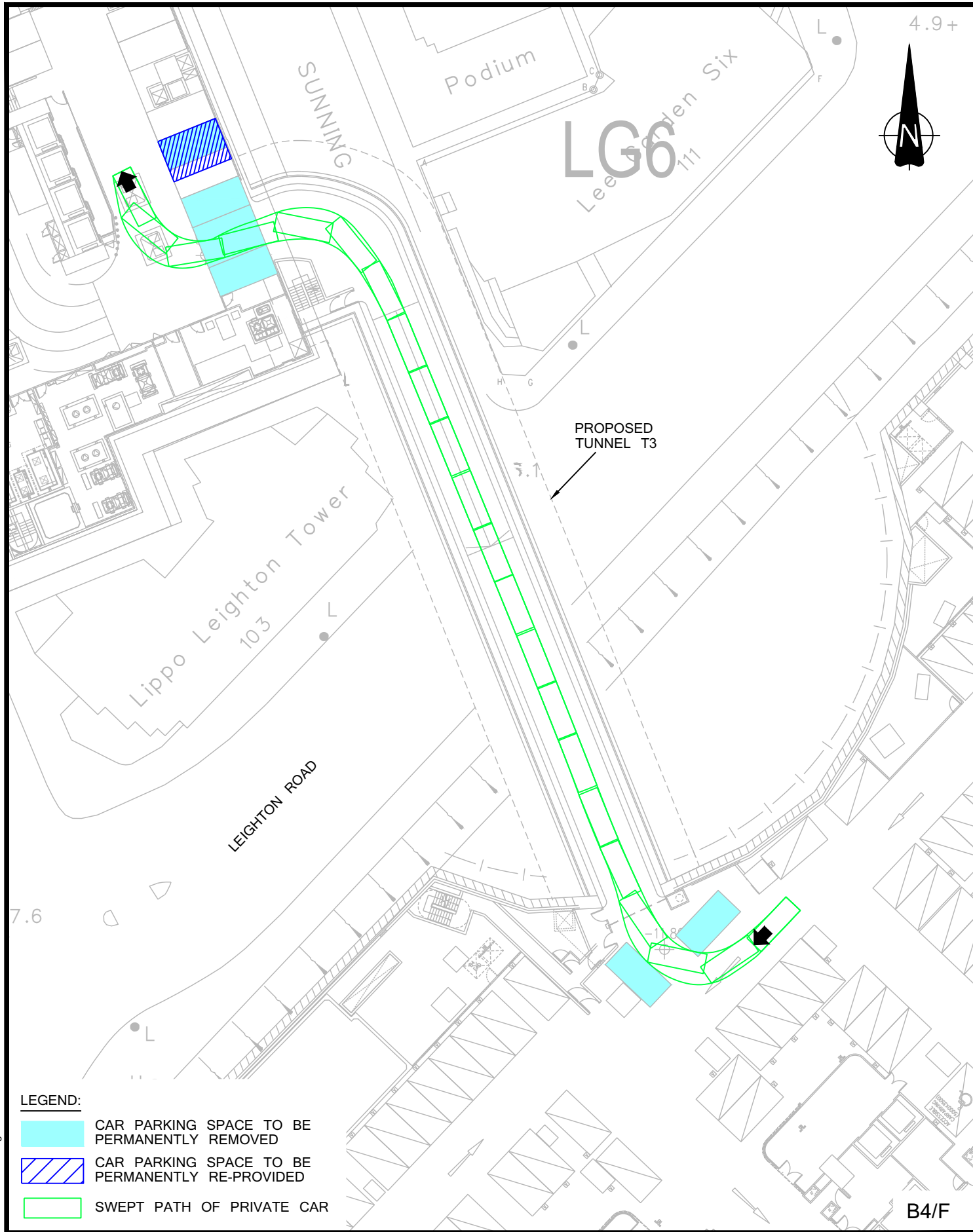
Project Title

SECTION 16 PLANNING APPLICATION OF
PROPOSED UNDERGROUND VEHICULAR TUNNEL T3
(CONNECTION LEE GARDEN THREE AND LEE GARDEN EIGHT)
- TRAFFIC IMPACT ASSESSMENT

Drawing Title			
INDICATIVE WORKS AREA FOR TUNNEL CONSTRUCTION AT LEE GARDEN EIGHT AND LEE GARDEN THREE			
Designed	MHC	Checked	TCW
Scale	As Shown(A3)	Date	JUL 2026
Drawing No.	7.1	Rev.	A



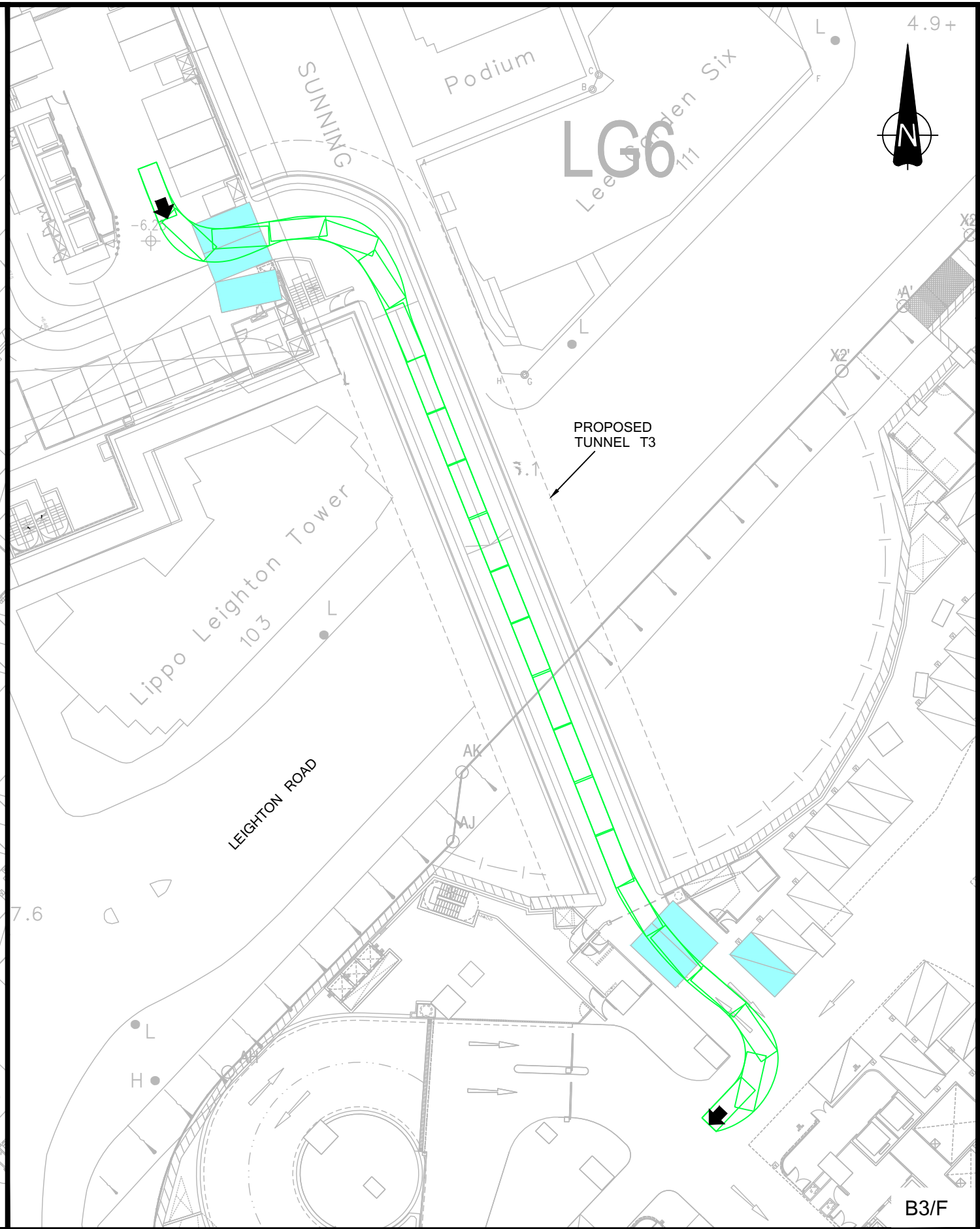
APPENDIX A – Swept Path Analysis



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A	RESPONSE TO TD'S COMMENT	TCW	28AUG26
Rev.	Description	Checked	Date

Project Title

SECTION 16 PLANNING APPLICATION OF
PROPOSED UNDERGROUND VEHICULAR TUNNEL T3
(CONNECTION LEE GARDEN THREE AND LEE GARDEN EIGHT)
- TRAFFIC IMPACT ASSESSMENT



Drawing Title				
SWEPT PATH AT BASEMENT LEVEL 3 AND 4 WITH TUNNEL T3				
Designed	MHC	Checked	TCW	Scale
1:500 (A3)		Date	JUL 2026	Drawing No.
A1		Rev.	A	



Queue Length Analysis



MVA Hong Kong Ltd.

Job No.	CHK50603110
Job Title	ed Commercial Development on Inland Lot No. 8945, Causeway Bay, Hor
Junction Name	Caroline Hill Road (West) / Link Road / New Access Road (J1)
Approach	
Probability(1% / 5%)?	5%

Description	2036 Reference Flows
Design Year	2031
Designed By	TCW
Checked By	CHC

Unit			Weekday AM						Weekday Noon					
			Link Road NB	New Access Rd WB (farside lane)	New Access Rd WB (nearside lane)	CHR SB (farside lane)	CHR SB (nearside lane)	U-turn NB	Link Road NB	New Access Rd WB (farside lane)	New Access Rd WB (nearside lane)	CHR SB (farside lane)	CHR SB (nearside lane)	U-turn NB
Cycle time	c	sec	105	105	105	105	105	105	105	105	105	105	105	105
Effective green time	g	sec	61	12	12	35	35	36	61	12	12	35	35	36
		pcu/hr	775	275	30	371	329	280	685	270	50	361	324	215
Design flow	q	veh/sec	0.166	0.059	0.006	0.079	0.070	0.060	0.146	0.058	0.011	0.077	0.069	0.046
		pcu/hr	1980	2120	1800	2120	1915	1625	1980	2120	1800	2120	1945	1625
Saturation flow	Q	veh/sec	0.423	0.453	0.385	0.453	0.409	0.347	0.423	0.453	0.385	0.453	0.416	0.347
PCU factor	f	pcu/veh	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
No. of lanes	n	lane	1	1	1	1	1	1	1	1	1	1	1	1
Length of a vehicle	L	metre	6	6	6	6	6	6	6	6	6	6	6	6
Queue duration	t	hr	0.1667	0.1667	0.1667	0.1667	0.1667	0.1667	0.1667	0.1667	0.1667	0.1667	0.1667	0.1667
Ratio of effective green	g/c		0.581	0.114	0.114	0.333	0.333	0.343	0.581	0.114	0.114	0.333	0.333	0.343
Degree of saturation	x		0.674	1.135	0.146	0.525	0.515	0.503	0.596	1.114	0.243	0.511	0.500	0.386
	M		17.388	6.170	0.673	8.324	7.381	6.282	15.369	6.058	1.122	8.099	7.269	4.824
	y		0.391	0.130	0.017	0.175	0.172	0.172	0.346	0.127	0.028	0.170	0.167	0.132
	Qt	veh/sec	147.473	31.062	26.374	90.598	81.838	71.429	147.473	31.062	26.374	90.598	83.120	71.429
	x<1													
	A	sec/veh	0.144	0.451	0.399	0.269	0.268	0.261	0.134	0.449	0.403	0.268	0.267	0.249
	B	sec/veh	0.696	-4.771	0.012	0.290	0.274	0.254	0.438	-5.428	0.039	0.267	0.250	0.121
	C	sec/veh	1.466	28.099	0.629	1.565	1.584	1.557	0.869	27.134	1.664	1.442	1.429	0.696
Average Queue Delay	D	sec/veh	18	-62	43	30	30	30	16	-74	44	30	30	28
	x>x'													
	Z		-0.326	0.135	-0.854	-0.475	-0.485	-0.497	-0.404	0.114	-0.757	-0.489	-0.500	-0.614
	X'		0.713	0.679	0.678	0.696	0.694	0.691	0.713	0.679	0.678	0.696	0.694	0.691
	No	veh	-0.182	4.472	-1.028	-0.556	-0.569	-0.587	-0.442	4.194	-0.952	-0.584	-0.601	-0.772
Average Queue Delay	D	sec/veh	14	134	19	25	24	22	12	128	21	24	24	20
Average Delay	sec/veh		18	134	43	30	30	30	16	128	44	30	30	28
Average Queue	N = q(r/2+d)	veh	6.605	-0.909	0.575	5.183	4.604	3.864	5.594	-1.588	0.971	5.025	4.512	2.875
Average Queue Length	NL/n	metre	40	-5	3	31	28	23	34	-10	6	30	27	17
Average Queue	N=qr	veh	7.286	5.465	0.596	5.549	4.921	4.128	6.440	5.365	0.994	5.400	4.846	3.170
Average Queue Length	NL/n	metre	44	33	4	33	30	25	39	32	6	32	29	19
Average Queue	N=qr+No	veh	7.104	9.937	-0.432	4.993	4.352	3.541	5.998	9.560	0.041	4.815	4.246	2.398
Average Queue Length	NL/n	metre	43	60	-3	30	26	21	36	57	0	29	25	14
Average Queue Length	metre		44	60	4	33	30	25	39	57	6	32	29	19

*Note SG = Signal Group

Queue Length Analysis



MVA Hong Kong Ltd.

Job No.	CHK50603110
Job Title	ed Commercial Development on Inland Lot No. 8945, Causeway Bay, Hor
Junction Name	Caroline Hill Road (West) / Link Road / New Access Road (J1)
Approach	
Probability(1% / 5%)?	5%

Description	2036 Reference Flows
Design Year	2031
Designed By	TCW
Checked By	CHC

Unit			Weekday PM						Weekend Noon					
			Link Road NB	New Access Rd WB (farside lane)	New Access Rd WB (nearside lane)	CHR SB (farside lane)	CHR SB (nearside lane)	U-turn NB	Link Road NB	New Access Rd WB (farside lane)	New Access Rd WB (nearside lane)	CHR SB (farside lane)	CHR SB (nearside lane)	U-turn NB
Cycle time	c	sec	105	105	105	105	105	105	105	105	105	105	105	105
Effective green time	g	sec	60	13	13	33	33	37	61	12	12	35	35	36
		pcu/hr	730	275	50	356	324	210	760	245	40	357	323	230
Design flow	q	veh/sec	0.156	0.059	0.011	0.076	0.069	0.045	0.162	0.052	0.009	0.076	0.069	0.049
		pcu/hr	1980	2120	1800	2120	1915	1625	1980	2120	1800	2120	1945	1625
Saturation flow	Q	veh/sec	0.423	0.453	0.385	0.453	0.409	0.347	0.423	0.453	0.385	0.453	0.416	0.347
PCU factor	f	pcu/veh	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
No. of lanes	n	lane	1	1	1	1	1	1	1	1	1	1	1	1
Length of a vehicle	L	metre	6	6	6	6	6	6	6	6	6	6	6	6
Queue duration	t	hr	0.1667	0.1667	0.1667	0.1667	0.1667	0.1667	0.1667	0.1667	0.1667	0.1667	0.1667	0.1667
Ratio of effective green	g/c		0.571	0.124	0.124	0.314	0.314	0.352	0.581	0.114	0.114	0.333	0.333	0.343
Degree of saturation	x		0.645	1.048	0.224	0.534	0.538	0.367	0.661	1.011	0.194	0.505	0.498	0.413
	M		16.378	6.170	1.122	7.987	7.269	4.712	17.051	5.497	0.897	8.010	7.247	5.160
	y		0.369	0.130	0.028	0.168	0.169	0.129	0.384	0.116	0.022	0.168	0.166	0.142
	Qt	veh/sec	145.055	33.651	28.571	85.421	77.161	73.413	147.473	31.062	26.374	90.598	83.120	71.429
	x<1													
	A	sec/veh	0.145	0.441	0.395	0.283	0.283	0.241	0.142	0.443	0.401	0.267	0.266	0.252
	B	sec/veh	0.587	-11.503	0.032	0.307	0.314	0.106	0.643	-45.637	0.023	0.258	0.247	0.145
	C	sec/veh	1.260	22.923	1.262	1.821	1.992	0.558	1.349	22.550	1.088	1.394	1.416	0.855
Average Queue Delay	D	sec/veh	18	-172	43	32	32	27	18	-848	44	30	30	29
	x>x'													
	Z		-0.355	0.048	-0.776	-0.466	-0.462	-0.633	-0.339	0.011	-0.806	-0.495	-0.502	-0.587
	X'		0.712	0.680	0.678	0.695	0.693	0.691	0.713	0.679	0.678	0.696	0.694	0.691
	No	veh	-0.287	3.475	-0.961	-0.532	-0.516	-0.796	-0.233	2.870	-0.993	-0.596	-0.603	-0.736
Average Queue Delay	D	sec/veh	14	108	21	26	26	19	14	102	20	24	24	20
Average Delay	sec/veh		18	108	43	32	32	27	18	102	44	30	30	29
Average Queue	N = q(r/2+d)	veh	6.282	-7.426	0.953	5.163	4.725	2.741	6.427	-41.946	0.772	4.962	4.496	3.097
Average Queue Length	NL/n	metre	38	-45	6	31	28	16	39	-252	5	30	27	19
Average Queue	N=qr	veh	7.019	5.406	0.983	5.477	4.985	3.051	7.145	4.869	0.795	5.340	4.831	3.391
Average Queue Length	NL/n	metre	42	32	6	33	30	18	43	29	5	32	29	20
Average Queue	N=qr+No	veh	6.732	8.881	0.022	4.945	4.469	2.255	6.912	7.739	-0.198	4.744	4.228	2.655
Average Queue Length	NL/n	metre	40	53	0	30	27	14	41	46	-1	28	25	16
Average Queue Length	metre		42	53	6	33	30	18	43	46	5	32	29	20

*Note SG = Signal Group

Queue Length Analysis



MVA Hong Kong Ltd.

Job No.	CHK50603110
Job Title	ed Commercial Development on Inland Lot No. 8945, Causeway Bay, Hor
Junction Name	Caroline Hill Road (West) / Link Road / New Access Road (J1)
Approach	
Probability(1% / 5%)?	5%

Description	2036 Design Flows
Design Year	2031
Designed By	TCW
Checked By	CHC

Unit			Weekday AM						Weekday Noon					
			Link Road NB	New Access Rd WB (farside lane)	New Access Rd WB (nearside lane)	CHR SB (farside lane)	CHR SB (nearside lane)	U-turn NB	Link Road NB	New Access Rd WB (farside lane)	New Access Rd WB (nearside lane)	CHR SB (farside lane)	CHR SB (nearside lane)	U-turn NB
Cycle time	c	sec	105	105	105	105	105	105	105	105	105	105	105	105
Effective green time	g	sec	61	12	12	35	35	36	61	12	12	35	35	36
		pcu/hr	775	285	30	313	282	285	685	280	50	314	286	240
Design flow	q	veh/sec	0.166	0.061	0.006	0.067	0.060	0.061	0.146	0.060	0.011	0.067	0.061	0.051
		pcu/hr	1980	2120	1800	2120	1915	1625	1980	2120	1800	2120	1945	1625
Saturation flow	Q	veh/sec	0.423	0.453	0.385	0.453	0.409	0.347	0.423	0.453	0.385	0.453	0.416	0.347
PCU factor	f	pcu/veh	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
No. of lanes	n	lane	1	1	1	1	1	1	1	1	1	1	1	1
Length of a vehicle	L	metre	6	6	6	6	6	6	6	6	6	6	6	6
Queue duration	t	hr	0.1667	0.1667	0.1667	0.1667	0.1667	0.1667	0.1667	0.1667	0.1667	0.1667	0.1667	0.1667
Ratio of effective green	g/c		0.581	0.114	0.114	0.333	0.333	0.343	0.581	0.114	0.114	0.333	0.333	0.343
Degree of saturation	x		0.674	1.176	0.146	0.443	0.442	0.512	0.596	1.156	0.243	0.444	0.441	0.431
	M		17.388	6.394	0.673	7.022	6.327	6.394	15.369	6.282	1.122	7.045	6.417	5.385
	y		0.391	0.134	0.017	0.148	0.147	0.175	0.346	0.132	0.028	0.148	0.147	0.148
	Qt	veh/sec	147.473	31.062	26.374	90.598	81.838	71.429	147.473	31.062	26.374	90.598	83.120	71.429
x<1														
	A	sec/veh	0.144	0.453	0.399	0.261	0.261	0.262	0.134	0.452	0.403	0.261	0.261	0.253
	B	sec/veh	0.696	-3.924	0.012	0.176	0.175	0.268	0.438	-4.290	0.039	0.178	0.174	0.163
	C	sec/veh	1.466	30.077	0.629	0.940	0.998	1.643	0.869	29.080	1.664	0.949	0.983	0.973
Average Queue Delay	D	sec/veh	18	-47	43	29	29	30	16	-53	44	29	29	29
x>x'														
	Z		-0.326	0.176	-0.854	-0.557	-0.558	-0.488	-0.404	0.156	-0.757	-0.556	-0.559	-0.569
	X'		0.713	0.679	0.678	0.696	0.694	0.691	0.713	0.679	0.678	0.696	0.694	0.691
	No	veh	-0.182	5.038	-1.028	-0.702	-0.699	-0.569	-0.442	4.753	-0.952	-0.700	-0.700	-0.710
Average Queue Delay	D	sec/veh	14	145	19	23	22	23	12	139	21	23	22	21
Average Delay	sec/veh		18	145	43	29	29	30	16	139	44	29	29	29
Average Queue	N = q(r/2+d)	veh	6.605	-0.027	0.575	4.285	3.872	3.943	5.594	-0.409	0.971	4.300	3.925	3.246
Average Queue Length	NL/n	metre	40	0	3	26	23	24	34	-2	6	26	24	19
Average Queue	N=qr	veh	7.286	5.663	0.596	4.682	4.218	4.202	6.440	5.564	0.994	4.697	4.278	3.538
Average Queue Length	NL/n	metre	44	34	4	28	25	25	39	33	6	28	26	21
Average Queue	N=qr+No	veh	7.104	10.701	-0.432	3.980	3.519	3.633	5.998	10.318	0.041	3.997	3.577	2.828
Average Queue Length	NL/n	metre	43	64	-3	24	21	22	36	62	0	24	21	17
Average Queue Length	metre		44	64	4	28	25	25	39	62	6	28	26	21

*Note SG = Signal Group

Queue Length Analysis



MVA Hong Kong Ltd.

Job No.	CHK50603110
Job Title	ed Commercial Development on Inland Lot No. 8945, Causeway Bay, Hor
Junction Name	Caroline Hill Road (West) / Link Road / New Access Road (J1)
Approach	
Probability(1% / 5%)?	5%

Description	2036 Design Flows
Design Year	2031
Designed By	TCW
Checked By	CHC

Unit			Weekday PM						Weekend Noon					
			Link Road NB	New Access Rd WB (farside lane)	New Access Rd WB (nearside lane)	CHR SB (farside lane)	CHR SB (nearside lane)	U-turn NB	Link Road NB	New Access Rd WB (farside lane)	New Access Rd WB (nearside lane)	CHR SB (farside lane)	CHR SB (nearside lane)	U-turn NB
Cycle time	c	sec	105	105	105	105	105	105	105	105	105	105	105	105
Effective green time	g	sec	60	13	13	33	33	37	61	12	12	35	35	36
		pcu/hr	730	295	50	318	292	225	760	260	40	313	287	250
Design flow	q	veh/sec	0.156	0.063	0.011	0.068	0.062	0.048	0.162	0.056	0.009	0.067	0.061	0.053
		pcu/hr	1980	2120	1800	2120	1930	1625	1980	2120	1800	2120	1940	1625
Saturation flow	Q	veh/sec	0.423	0.453	0.385	0.453	0.412	0.347	0.423	0.453	0.385	0.453	0.415	0.347
PCU factor	f	pcu/veh	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
No. of lanes	n	lane	1	1	1	1	1	1	1	1	1	1	1	1
Length of a vehicle	L	metre	6	6	6	6	6	6	6	6	6	6	6	6
Queue duration	t	hr	0.1667	0.1667	0.1667	0.1667	0.1667	0.1667	0.1667	0.1667	0.1667	0.1667	0.1667	0.1667
Ratio of effective green	g/c		0.571	0.124	0.124	0.314	0.314	0.352	0.581	0.114	0.114	0.333	0.333	0.343
Degree of saturation	x		0.645	1.124	0.224	0.477	0.481	0.393	0.661	1.073	0.194	0.443	0.444	0.449
	M		16.378	6.619	1.122	7.135	6.551	5.048	17.051	5.833	0.897	7.022	6.439	5.609
	y		0.369	0.139	0.028	0.150	0.151	0.138	0.384	0.123	0.022	0.148	0.148	0.154
	Qt	veh/sec	145.055	33.651	28.571	85.421	77.766	73.413	147.473	31.062	26.374	90.598	82.906	71.429
	x<1													
	A	sec/veh	0.145	0.446	0.395	0.277	0.277	0.243	0.142	0.447	0.401	0.261	0.261	0.255
	B	sec/veh	0.587	-5.097	0.032	0.218	0.223	0.127	0.643	-7.875	0.023	0.176	0.177	0.183
	C	sec/veh	1.260	26.290	1.262	1.312	1.432	0.691	1.349	25.252	1.088	0.940	1.003	1.102
Average Queue Delay	D	sec/veh	18	-60	43	31	31	28	18	-120	44	29	29	29
	x>x'													
	Z		-0.355	0.124	-0.776	-0.523	-0.519	-0.607	-0.339	0.073	-0.806	-0.557	-0.556	-0.551
	X'		0.712	0.680	0.678	0.695	0.693	0.691	0.713	0.679	0.678	0.696	0.694	0.691
	No	veh	-0.287	4.549	-0.961	-0.643	-0.631	-0.764	-0.233	3.650	-0.993	-0.702	-0.696	-0.682
Average Queue Delay	D	sec/veh	14	128	21	25	24	19	14	117	20	23	22	21
Average Delay	sec/veh		18	128	43	31	31	28	18	117	44	29	29	29
Average Queue	N = q(r/2+d)	veh	6.282	-0.903	0.953	4.548	4.195	2.957	6.427	-4.087	0.772	4.285	3.941	3.398
Average Queue Length	NL/n	metre	38	-5	6	27	25	18	39	-25	5	26	24	20
Average Queue	N=qr	veh	7.019	5.799	0.983	4.892	4.492	3.269	7.145	5.167	0.795	4.682	4.293	3.686
Average Queue Length	NL/n	metre	42	35	6	29	27	20	43	31	5	28	26	22
Average Queue	N=qr+No	veh	6.732	10.348	0.022	4.249	3.861	2.506	6.912	8.817	-0.198	3.980	3.596	3.003
Average Queue Length	NL/n	metre	40	62	0	25	23	15	41	53	-1	24	22	18
Average Queue Length	metre		42	62	6	29	27	20	43	53	5	28	26	22

*Note SG = Signal Group