Proposed Amendments to the Approved Scheme at Lot Nos. 1856 (Part), 1857 S.A, 1857 RP, 1858, 1859, and Adjoining Government Land in D.D.129, Wan Fau Sin Koon, Lau Fau Shan, New Territories

Environmental Appraisal

Prepared for:
Beamland Limited

Prepared by:
Westwood Hong & Associates Limited

Report No.:
22626-EA1

Date:
14 August 2025

Ir K. K. Iu	FHKIOA, MIOA, MCIBSE, MHKIE, MASA, APEC Engineer FMOIA, MIEAust, MHKIQEP, C Eng, RPE, CPEng
Ms Kit Wong	BEng, MHKIEIA
Mr Samuel Lee	BSc

Westwood Hong & Associates Ltd

2404, Tung Wai Commercial Building
109-111 Gloucester Road
Wanchai, Hong Kong

Tel: 2838 2738 Fax: 2591 6189
Email: wha@wha.com.hk
Website: https://whaacoustics.com

EIA · ACOUSTICS · NOISE · VIBRATION

CONTENTS

FIGURE

1. INTRODUCTION

1.1 Westwood Hong & Associates Ltd (WHA) was commissioned to conduct an environmental appraisal for the proposed development at Wan Fau Sin Koon. Figure 1 shows the location of the proposed Development.

1.2 This environmental appraisal aims to identify and address the major environmental issues of the proposed Development at Lot Nos. 1856 (Part), 1857 S.A, 1857 RP, 1858, 1859, and Adjoining Government Land in D.D. 129, Wan Fau Sin Koon in Lau Fau Shan (the "proposed Development") during construction and operation phases.

1.3 This environmental appraisal aims to support the S16 Planning Application for the proposed Development.

1.4 This environmental appraisal will include the following aspects:-

- Noise Impact Assessment;
- Air Quality Impact Assessment;
- Water Quality Impact Assessment; and
- Waste Management Assessment.

1.5 This environmental appraisal is making reference to the Chapter 9 of Hong Kong Planning Standards and Guidelines. The "Recommended Pollution Control Clauses" (RPCC) will be also referenced to implement suitable mitigation measures and good site practice to minimise the potential environmental impact during construction stage of the proposed Development.

2. SITE LOCATION

Site Location

2.1 The project site is located in Lau Fau Shan, situated between the rural settlement of Fu Tso Tsuen and Lam Hang Shan. The project site is accessible via Deep Bay Road, connected by an unnamed local access road to the north.

Existing Use and Site Condition

2.2 The Site is currently occupied by Wan Fau Sin Koon, used for temple and columbarium purposes. In the southern part of the Site are the main temple with the New Halls (including Columbarium Block A and B). An ancillary block containing facilities and Columbarium Block C of the New Halls are also located in the area. the

northern part of the Site contains the Old Halls – Shing Tak Hall and Yu Hing Hall, along with a lake, pavilion, and an another newly built temple.

2.3 The niches on-site are accommodated within two areas: the Old Halls and the New Halls, with a total of 6 single-storey Columbarium blocks/ halls. The Old Halls consist of 2 single-storey columbarium halls – Shing Tak Hall and 1 single-storey columbaria hall – Yu Hing Hall. The New Halls (known as Flora Terrace) consist of 3 single-storey columbarium blocks, which were approved under Planning Application Nos. A/YL-LFS/54 and A/YL-LFS/77 in 2001. The Site also includes 3 eco-joss paper furnaces, an ancillary toilet block & an office. There are approximately 10,400 niches in total on-site, including about 3,824 unsold niches (including 1,824 from the Old Halls and 2,000 from the New Halls) and about 6,576 pre-cut off sold niches and post-license rented niches.

Proposed Scheme

2.4 The Proposed Scheme comprises 4 single-storey columbarium buildings and a new Family Precinct zone with a building height of about 6.9m, which is the max. building height allowed under the prevailing Short-Term Tenancy (STT) and Short-Term Waiver (STW). The built-over area of the proposed buildings/blocks would not exceed 1,772.2m^2 (i.e. 1,570m^2 from the New Halls and 202.2m^2 of the existing Shing Tak Hall). The new Family Precinct zone (i.e. Zone E- Family Precinct) would comprise not more than 32 individual structures with family niches. The Proposed Scheme will provide not more than 3,824 niches. The proposed development is targeted to be completed in 2027.

3. IDENTIFIED SENSITIVE RECEIVERS

3.1 The existing sensitive receivers are identified by means of reviewing topographic maps, aerial photos and land status plans. The nearest sensitive receiver is the residential village house in Fu Tso Tsuen, which is located at 125m to the west of the proposed Development (Figure 1).

4. NOISE IMPACT ASSESSMENT

Noise Criteria

4.1 The relevant legislations, standards and guidelines applicable to the present study for the assessment of noise impacts include:-

- Hong Kong Planning Standards and Guidelines (HKPSG) ;

- Noise Control Ordinance (NCO) (Cap. 400); and
- TM for the Assessment of Noise from Places other than Domestic Premises, Public Places or Construction Sites (IND – TM).

4.2 Fixed noise sources associated with the proposed Development would be controlled under the NCO and IND – TM. The Acceptable Noise Levels (ANL) depends on the type of area within which the NSRs are located, and the degree of the NSRs affected by the influencing factors such as major roads and industrial area. According to the IND – TM, the ANLs for different Area Sensitive Ratings (ASRs) are given in Table 4.1.

Table 4.1 ANLs for Day, Evening and Night Time Periods

Time Period	**ANLs,** Leq (30 mins)		
	ASR "A"	**ASR "B"**	**ASR "C"**
Day (0700 to 1900 hours) and evening (1900 to 2300 hours)	60dB(A)	65dB(A)	70dB(A)
Night (2300 to 0700 hours)	50dB(A)	55dB(A)	60dB(A)

Note: In any event, the ASR and the ANLs adopted in this report are only indicative and are used for assessment only. It should be noted that noise from fixed noise sources is controlled under section 13 of the Noise Control Ordinance. Therefore, the Noise Control Authority shall determine the noise impact of fixed noise sources on the basis of prevailing legislation and practices being in force, and taking account of contemporary conditions/ situations of adjoining land uses. The assessment of noise impacts of fixed noise sources in this report shall not bind the Noise Control Authority in the context of law enforcement against any of the noise from fixed noise sources being assessed.

4.3 The proposed Development and the representative existing NSR in the vicinity are located in an low density residential area and not being affected by any Influencing Factor (IF). With reference to the IND – TM, an ASR of "A" was assumed. The ANLs are shown in Table 4.1.

Noise Impacts from Proposed Development during Operation Phase

4.4 There is no planned fixed noise sources for the proposed Development. The existing 3 eco-joss paper furnaces and ventilation systems of the ancillary toilet block & an office will remain unchanged.

4.5 Any planned fixed noise sources would be designed in accordance with HKPSG standard (i.e. ANL – 5dB(A), 55dB(A) for day & evening times, and 45dB(A) for nighttime).

4.6 The design and acoustic performance of the planned fixed noise sources would be reviewed during detailed design stage. In order to comply with the relevant noise requirements in the HKPSG, acoustic treatments such as provision of acoustic

silencers and acoustic enclosures shall be proposed for the planned fixed noise sources, if necessary.

Noise Impacts from Proposed Development during Construction Phase

4.7 The major construction activities of the proposed Development are minor demolition and superstructure. Due to the small scale of construction site, only small amounts of Powered Mechanical Equipment (PME) will be used. Given that the details of the construction programme and plant inventory are not available at this stage, a qualitative assessment was then conducted.

4.8 With the implementation of standard practices recommended in the ProPECC PN 1/24 "Minimizing Noise from Construction Activities", adverse construction noise impact is normally not anticipated. The recommended practices below would be considered in all worksites as good practices to limit noise emissions at the source include:-

- Good site practices to limit noise emissions at the source;
- Use of quality powered mechanical equipment (QPME);
- Use of site hoarding as noise barrier to screen noise at ground level of NSRs;
- Use of temporary noise barriers, noise enclosure and acoustic mat to screen noise from relatively static PMEs; and
- Alternative use of plant items within one worksite, wherever practicable.

4.9 The above recommended practices would need to be implemented in worksites as good practices where appropriate. Reference shall also be made to EPD's recommended pollution control clauses for construction contracts.

5. AIR QUALITY IMPACT ASSESSMENT

Air Quality Impacts from Proposed Development during Operation Phase

5.1 The existing 3 eco-joss paper furnaces will be retained, the location of these furnaces will remain unchanged. The eco-joss paper furnaces are operated by the trained operator(s) to ensure all visitors are only allowed to use the eco-joss paper furnaces. This is also to comply with Condition No. 28 set out of Private Columbaria Licensing Board (PCLB).

5.2 There is no planned air emission sources of the proposed Development. Hence, adverse air quality impact from the proposed Development during operation phase is not anticipated.

Air Quality Impacts from Proposed Development during Construction Phase

5.3 The proposed Development involves minor demolition and superstructure works. Due to the small scale of construction site, the air quality impact during construction is not expected to be significant. Detailed construction programme is not available at this stage. With the implementation of dust suppression measures and good site management, adverse construction air quality impact is not anticipated.

5.4 Apart from the air quality impact during construction phase, there will be exhaust emissions from the construction plants and machineries. Requirements stipulated in the Air Pollution Control (Non-road Mobile Machinery) (Emission) Regulation and Air Pollution Control (Fuel Restriction) Regulations (i.e. using liquid fuel with a Sulphur content of less than 0.001% by weight) will be complied with to control the exhaust emissions from non-road mobile machineries and construction vehicles. The scale of the project is relatively small, the number of construction plants will be limited.

5.5 The proposed Development only involves minor construction works, without any major dusty activities. However, the Contractor is recommended to follow the procedures and requirements given in the Air Pollution Control (Construction Dust) Regulation. The following dust suppression measures should be incorporated by the Contractor to control the dust nuisance throughout the construction phase:-

- Any stockpile of dusty material should be covered entirely by impervious sheeting or sprayed with water to maintain the entire surface wet and then removed where practicable within 24 hours of unloading;
- Any dusty material remaining after a stockpile is removed should be wetted with water and removed where practicable;
- A stockpile of dusty material should not extend beyond the pedestrian barriers, fencing or traffic cones;
- The load of dusty materials on vehicles leaving a construction site should be covered entirely by impervious sheeting to ensure that the dusty materials do not leak from the vehicle;
- Where practicable, vehicles washing facilities including a high pressure water jet should be provided at every designated vehicle exit point. The area where vehicle washing takes place and the road section between the washing facilities and the exit point should be paved with concrete, bituminous materials of hardcores;
- Immediately before leaving a construction site, all vehicles shall be washed to remove any dusty materials from its body and wheels;

6. WATER QUALITY IMPACT ASSESSMENT

Legislations, Standards & Guidelines

- Water Pollution Control Ordinance (Cap. 358)
- Construction Site Drainage (ProPECC PN2/24)
- Drainage Plans (ProPECC PN1/23)
- Environment, Transport and Works Bureau Technical Circular (Works) No. 5/2005 (ETWB TC (Works) No. 5/2005)
- Best Management Practices (BMPs)
- HKPSG Chapter 9

Water Quality Impacts from Proposed Development during Operation Phase

6.1 The proposed Development only involved a change in the location, disposition and form of building blocks, there is no increase of surface runoff. The runoff generated from the project site under the existing condition would not be changed.

6.2 In order to minimise the direct impact from the non-point source surface water pollution to the nearby streams and watercourses, Best Management Practices are proposed as follows:-

- Screening facilities such as standard gully grating and trash grille, with spacing which is capable of screening large substances such as fallen leaves and rubbish should be provided at the inlet of drainage system;
- Road gullies with standard design and silt traps and oil interceptors should be incorporated during the detailed design to remove particles present in stormwater run-off, where appropriate;
- Good management measures such as regular cleaning and sweeping of road surface / open areas are suggested. The road surface / open area cleaning should also be carried out prior to occurrence rainstorm; and
- Manholes, as well as stormwater gullies, ditches provided at the project site should be regularly inspected and cleaned (e.g. monthly). Additional inspection and cleansing should be carried out before forecast heavy rainfall.

6.3 Agrochemicals including pesticides will be used locally for the tree treatment where necessary, only registered pesticides under the Pesticides Ordinance (Cap. 133) shall be used. The instructions of the agrochemicals' manufacturers such as dosage, application method etc. will be followed. The use of agrochemical would be carefully controlled spatially (i.e. only at the required locations) and temporally (i.e. do not use before rainy day(s) and preferably during dry season), and therefore no unacceptable water quality impact associated with the use of agrochemicals is expected.

Water Quality Impacts from Proposed Development during Construction Phase

6.4 Construction activities would inevitably have the potential to generate wastewater. Works should be carried out in such a manner as to minimise adverse impacts on local water bodies. Activities that are likely to cause water pollution include:-

- Construction surface runoff;
- Wastewater from construction site; and
- Accidental spillage of chemcials, e.g. oil, diesel, solvents etc.

6.5 The potential water quality impact during construction stage of the proposed Development will be the potential discharge of construction site runoff and wastewater. Without proper control, these could lead to increase in suspended solids level as a results of sediment-laden surface runoff, as well as increase in turbidity level. Wastewater will be generated from construction workforce, and superstructure works. Also accidental spillage of fuel, oil and lubricants may occur from construction vehicles and other equipment.

6.6 During construction, no direct discharge without treatment of construction site runoff from the construction site will be allowed. The good practice given in the Practice Notes for Professional Persons on "Construction Site Drainage" (ProPECC PN2/24) in controlling water pollution at construction site shall be implemented during the construction phase of the proposed Development. Soil erosion from the construction site can be minimised through good on-site management practices by implementing viable erosion control measures which should be incorporated in contract clauses. Construction site runoff shall be collected and treated through screening facilities before discharge into the nearby storm drains, and the discharge shall comply with the terms and conditions of the discharge licence to be issued under the WPCO.

6.7 The main practices provided in the above-mentioned document (i.e. ProPECC PN2/24) are also summarised in the following paragraphs which should be enforced to prevent unacceptable construction stage impacts and for compliance with the statutory criteria:-

<u>Construction Site Runoff</u>

- Exposed soil surfaces should be protected from rainfall through, for example, by covering temporarily exposed slope surfaces or stockpiles with tarpaulin and protect temporary access roads by crushed stone or gravel;
- Exposed soil areas should be minimised to reduce the potential for increased siltation and contamination of runoff;

- Minimise the time that soil surfaces are exposed;
- Slow down water run-off flowing across exposed soil surfaces;
- Channels, earth bunds or sand bag barriers should be provided on site to properly direct surface runoff through drainage systems;
- Oil interceptors are also recommended to be provided for stormwater drains near plant maintenance/ repair areas, where necessary;
- Manholes (including newly constructed ones) should be adequately covered or temporarily sealed so as to prevent slit, construction materials or debris from getting into the drainage system;
- Construction works should be programmed to minimise soil excavation works where practicable during rainy conditions;
- Drainage facilities must be adequate for the controlled release of storm flows;
- Sedimentation basins and sand traps designed in accordance with the requirements of ProPECC Note PN2/24 should be installed at the construction site for collecting surface runoff. Perimeter channels at site boundaries should be provided where necessary to intercept surface runoff from outside the site. Silt removal facilities, channels and manholes should be maintained and deposited silt and grit should be removed regularly;
- There should be no direct discharge without treatment of construction site runoff into the nearby streams and public drains;
- The Contractor shall prepare a construction site drainage management plan with details of the construction phase drainage system proposed to be constructed; discharge location(s); and screening facilities; and
- The Contractor shall apply for a discharge licence under the WPCO and the discharge shall comply with the terms and conditions of the licence throughout the construction phase.

<u>Wastewater from Construction Site</u>

- Sewage generated from the construction workforce should be contained by chemical toilets before connection to public foul sewer can be provided. The number of chemical toilets required would be subject to the capacity of the chemical toilets, and contractor's practices/ work programme. The Contractor(s) will be required to provide an estimation on the amount of sewage to be generated and to provide sufficient number of chemical toilets for construction workers. The chemical toilets should be serviced and cleaned by a specialist contractor at regular intervals. No discharge of sewage into nearby environment will be allowed during construction stage;

- Canteen facilities are not expected. However, in case canteen is required, foul water from canteens on-site, if any, should also be contained by sewage holding tank before connection to public foul sewer can be provided. Wastewater collected from canteen kitchens, should be treated via grease traps and contained by sewage holding tanks, and collected by a licensed contractor regularly;

- Vehicle wheel washing facilities should be provided at site exit such that mud, debris, etc. deposited onto the vehicle wheels or body can be washed off before leaving the site area;

- Section of construction road between the wheel washing bay and public road should be paved with backfill to reduce vehicle tracking of soil and to prevent site run-off from entering public road drains; and

- If bentonite is used, bentonite slurry should be reconditioned and reused as far as practicable. Spent bentonite should be kept in a separate slurry collection system for disposal at a marine spoil grounds subject to obtaining a marine dumping licence from EPD. If used bentonite slurry is to be disposed of through public drainage system, it should be treated to the respective effluent standards applicable to foul sewers, storm drains or the receiving waters as set out in the WPCO Technical Memorandum on Effluent Standards in accordance with ProPECC PN2/24.

Oils and Solvents

- Spillage of fuel oils or other polluting fluids should be prevented at source. It is recommended that all stocks should be stored inside proper containers and sited on sealed area, preferably surrounded by berms, and

- Regular site inspections to ensure the proper implementation of the above measures shall be carried out.

- The contractor should register as a chemical waste producer if chemical wastes would be produced from the construction activities and the Waste Disposal (Chemical Waste) (General) Regulation should be observed and complied.

6.8 With the above proposed construction phase drainage system and recommended pollution control measures in place, no adverse water quality impact during construction phase will be expected.

7. WASTE MANAGEMENT ASSESSMENT

7.1 The principal legislation controlling waste materials in Hong Kong which are relevant to this proposed Conversion are:

- Waste Disposal Ordinance (WDO) (Cap. 354);

- Waste Disposal (Chemical Waste) (General) Regulation; and
- Waste Disposal (Charges for Disposal of Construction Waste) Regulation.

Waste Management during Operation Phase

7.2 It is anticipated that general refuse will be generated during operation of the proposed Development. General refuse will be generated by guests during the operation of the proposed Development.

7.3 With the commercial nature and small scale of the proposed Development, the amount of general refuse to be generated during operation phase is estimated to be minimal. Standard refuse handling approach that is widely adopted in other residential development and commercial sites that is required by the government e.g. provision of refuse collection and storage facility as required under the Building Ordinance, will be adopted for the provision of facility for handling and disposal of collected waste. Refuse should be properly collected and stored at a designated location, and collection of waste will be arranged by a licensed contractor on regular basis. Other measures for instance, set up of recycling bins and recycling point shall be adopted to encourage segregation and recycling of aluminum and plastic wastes, and wastepaper in order to reduce general refuse generation.

Waste Management during Construction Phase

7.4 Due to the small scale of construction site, the construction activities are minimal and the generated waste would be limited. The construction activities will generate waste materials requiring appropriate management and disposal. Likely range of waste types includes:-

- C&D materials due to demolition;
- General refuse generated by the workforce; and
- Chemical and oily wastes due to maintenance of equipment.

7.5 The general waste management strategy is to avoid waste generation in the first place. If that is unavoidable, source reduction and segregation should be exercised as far as practicable and at the same time, recycling and reuse should be adopted to salvage as much as possible all the recyclable and reusable materials. The following paragraphs provide a general waste management approach as well as good practices for waste management.

<u>Construction and Demolition (C&D) Materials</u>

7.6 On-site sorting of construction wastes will be recommended. On-site sorting can be

achieved by avoiding the generation of "mixed waste" through good site control.

7.7 Waste generated by construction activities should be sorted into inert C&D materials and non-inert C&D materials. The inert C&D materials which usually comprises soil, rock, concrete, brick, cement plaster/ mortar, inert building debris, aggregates shall be reused in earth filling, reclamation or site formation works as far as possible. The non-inert C&D materials which comprises metal, timber, paper, glass, junk and general garbage shall be reused or recycled as far as practicable and, as the last resort, disposal of at landfills. On the other hand, it should explore other disposal method such as the timber and woody materials to the Yard Waste Recycling Centre in Y-Park for recycling prior to disposal at the designated landfill site, to minimise the quantity sent to landfill disposal.

7.8 Construction wastes shall be sorted, with the inert C&D materials broken up into small pieces for disposal at public fill, reception facility, and the non-inert C&D materials should be disposal of at landfill.

General Refuse

7.9 The workforce during construction phase would generate general refuse comprising food scraps, wastepaper, empty containers, etc. As the proposed Development only involves minor demolition and superstructural works, it has been estimated that the quantity of general refuse would be limited. The exact number of construction workers and quantity of general refuse to be generated will be subject to later detailed design stage. The following general waste management practices are proposed to minimise the amount of general refuse generated during construction phase.

7.10 Release of general refuse into the nearby storm drain should not be permitted. Effective collection of site wastes would be required to prevent waste materials being blown around by wind, flushed or leached into the surrounding environment.

7.11 Recyclable materials (i.e. paper, plastic bottles and aluminum cans) should be separated from other materials for recycling, in order to reduce the amount of general refuse to be disposed of at landfill. Adequate number of enclosed waste containers should be provided to avoid over-spillage of waste. The non-recyclable refuse should be placed in bags, stored in enclosed containers, and disposed of at designated landfill on a daily basis.

Chemical Waste

7.12 Chemical and oily wastes generated from the construction activities, vehicle and plant maintenance should be handled and disposed as chemical waste in strict compliance

with the Waste Disposal (Chemical Waste) (General) Regulations and the Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes. The Contractor should be required to register with the EPD as a Chemical Waste Producer. It is recommended to avoid undertaking maintenance of equipment on-site as far as possible in order to avoid generation of chemical waste. In case chemical waste is generated, the quantity of chemical waste arising from the project site is expected to be a few litres per month. The chemical waste should be collected by licensed chemical waste collectors and disposal of at licensed waste disposal facilities such as Chemical Waste Treatment Centre (CWTC). Provided that the handling, storage and disposal of chemical wastes are in accordance with these requirements, adverse environmental impacts are not expected.

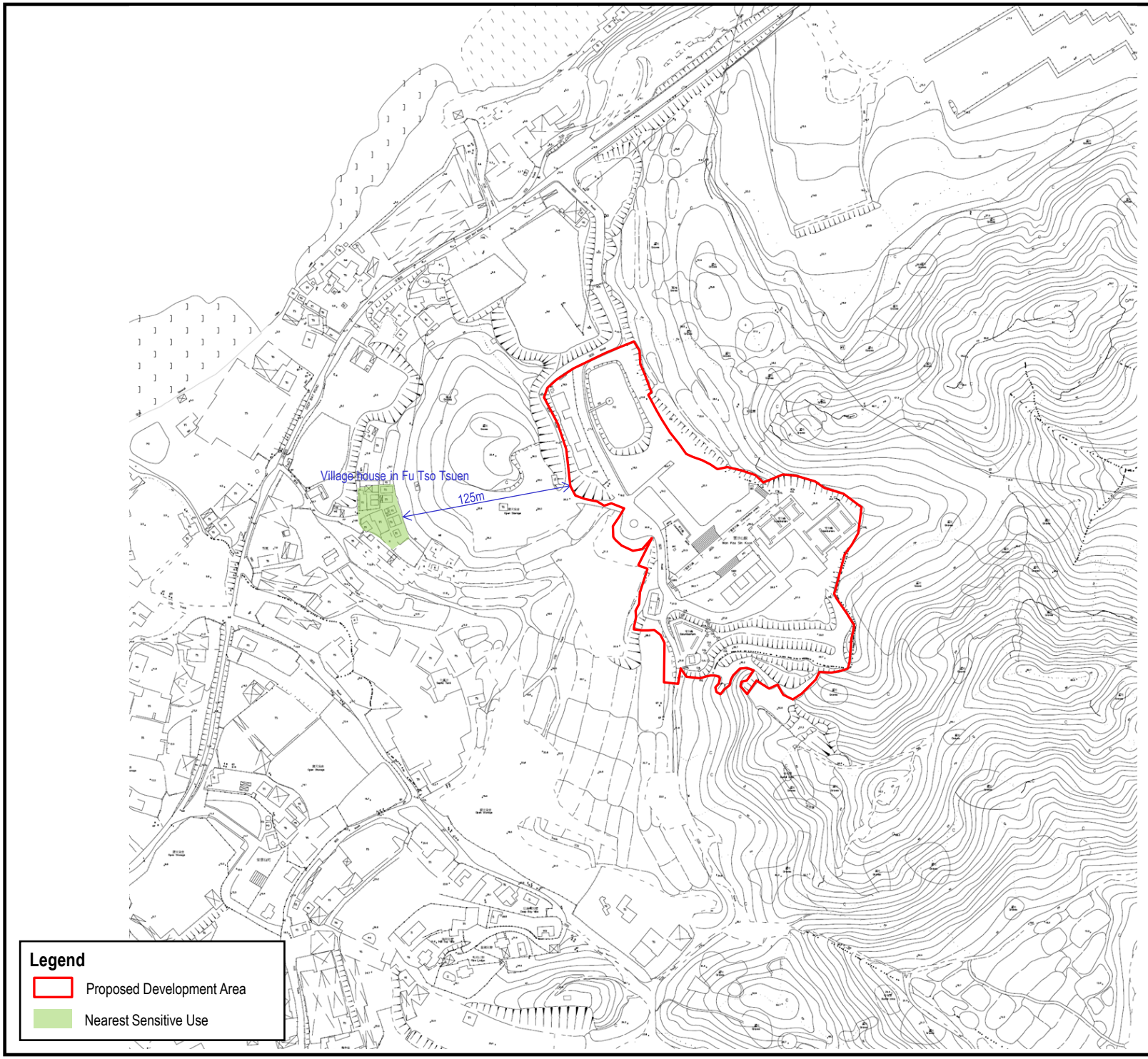
8. CONCLUSION

8.1 The proposed Development would not have planned fixed noise sources and air emission sources, adverse noise and air impacts during operation phase are not anticipated. With the implementation of the relevant guidelines, adverse noise and air impacts during construction phase are not anticipated.

8.2 With the implementation of recommended measures, no adverse water quality impacts would rise due to the proposed Development.

8.3 With the implementation of control measures of waste management, adverse waste management implication is not anticipated during construction and operation phases.

8.4 The RPCC will be referenced to implement suitable mitigation measures and good site practice to minimize the potential environmental impact during construction stage of the proposed Development.



Westwood Hong & Associates Ltd

PROJECT: 22626

Proposed Amendments to the Approved Scheme at Lot Nos. 1857 S.A, 1857 RP, 1858, 1859, and Adjoining Government Land in D.D.129, Wan Fau Sin Koon, Lau Fau Shan, New Territories

TITLE:

Site Location and Nearest Sensitive Receiver

FIGURE

1