

**Restoration and Repair Works  
of  
House No. 49A and 49B  
at  
Lai Chi Wo Village, Sha Tau Kok  
N.T., Hong Kong  
for  
The Hong Kong Countryside Foundation**

Oct 2023

**Ptah Heritage Ltd**  
Conservation Consultant



## CONDITION OF TENDERING

1. The tender documents issued consist of:
  - (a) One copy of a booklet containing:
    1. Conditions of Tendering
    2. Form of Tender
    3. Terms and Conditions
    4. Particular Specification
    5. Schedule of Rate
    6. Appendix
    7. Probity and Anti-collusion confirmation letter
2. The tender is to be enclosed in a sealed envelope which is to be labelled **"Restoration and Repair of House No. 49A and 49B, Lai Chi Wo Village, Sha Tau Kok, N.T., Hong Kong"** and be addressed to and be deposited in the tender box of:

**The Hong Kong Countryside Foundation,  
Unit A, 17/F, Nathan Commercial Building,  
430-436 Nathan Road, Yau Ma Tei,  
Kowloon, Hong Kong**

on or before 5:00pm, **25 Oct 2023**.

3. The tender submission is to consist of:
  - (a) Form of Tender completed, signed, witnessed, dated and stamped;
  - (b) Schedule of Rates completed with all work items including quantities and rates;
  - (c) Relevant job reference; and
  - (d) Proposed works programme.
4. The Form of Tender, Schedule of Rates will be subject to scrutiny and arithmetical check by the Consultants. The tendered sum will not be amended for errors found in examination of tender. Should the tenderer make any errors in his rates or any errors in his extensions and/or cast or in carrying forward to or in casts of a summary, such errors shall, before the signing of the Contract, be so rectified and the tendered rates will be adjusted as a plus or minus percentage if necessary to agree with the rectification of errors. Details of such adjustments to be made will be notified to the tenderer in writing.
5. No unauthorised alteration or erasure to the text of the tender documents will be permitted. Any tender containing such alteration or erasure may not be considered.
6. The Tenderer shall be required to check the numbers of pages in the tender documents and should he find any missing, in duplicate, or indistinct, he must inform the Conservation Consultant at once and have the same rectified.
7. Should the Tenderer for any reason whatsoever be in doubt about the precise meaning of any item or figure, he must inform the Employer or Conservation Consultant in order that the correct meaning may be decided before the date for submission of tenders.

8. No liability will be admitted, nor claim allowed, in respect of errors in the tender due to mistakes which should have been rectified in the manner described above.
9. Any qualification of tender documents may cause the tender to be disqualified.
10. The offer of an advantage or other inducement by any person with a view to influencing the placing of the Contract may be an offence under the Hong Kong Prevention of Bribery Ordinance but in any event such action will result in the rejection of the tender.
11. The tenderer shall treat all documents or information passed to him by the Employer, the Conservation Consultant for the purpose of submitting a tender as private and confidential.
12. Tenderers are requested to raise any queries with the Conservation Consultant (Ptah Heritage, tel: 2994 3282) (as appropriate) on or before **20 Oct 2023**. Only answers in writing addressed to all tenderers, by the Employer or Conservation Consultant, shall be deemed to affect the Tender Documents in any way. Such letters will be bound in with, and shall become part of the Contract Documents.
13. The Employer reserves the right to reject any tender where these Conditions of Tendering are not complied with.
14. All items and quantities stated in the Schedule of Rates are for reference only and do not form part of the Contract.
15. The Employer is not bound to accept the lowest or any tender he may receive.



## FORM OF TENDER

For  
Restoration and Repair Works  
at House No. 49A and 49B, Lai Chi Wo Village, Sha Tau Kok, N.T., Hong Kong  
for  
The Hong Kong Countryside Foundation

Date

From

Business Registration No.

Expiry Date

### Note:

1. If a tender is being submitted by a partnership or an unincorporated body, the names and residential addresses of all partners should be given in the spaces below.
2. In all cases, the tenderer must give the number and date of their business registration certificate here:

### To: The Hong Kong Countryside Foundation

1. I/ We, having inspected the Site and surroundings, examined the Specification, Drawings and Terms and Conditions of the above named work, do hereby offer to execute, complete and maintain the whole of the Works all in accordance with the Tender Documents for the sum of

HONG KONG DOLLARS

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HK\$

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or such sums as may be ascertained in accordance with the relevant Conditions of Contract.

2. I/ We undertake if my/ our Tender is accepted to commence the Works within 7 days of the Employer's Instruction to commence and to complete and deliver the Works comprised in the Contract within the time limit as set out in the Tender Documents, or such extended date as may be authorized in accordance with the relevant Conditions of Contract.
3. I/ We agree to abide by this Tender for a period of 120 days from the date fixed for receiving it and it shall remain binding upon me/us and may be accepted at any time before the expiration of that period.
4. Unless and until a formal Agreement is prepared and executed, this Tender together with your written acceptance thereof, by the Employer shall constitute a binding contract between us.
5. I/ We understand that the Employer is not bound to accept the lowest or any tender which he may receive.

**Signature** \_\_\_\_\_

**Name in Block Letters** \_\_\_\_\_

**in the capacity of** \_\_\_\_\_

**duly authorized to sign tenders for and on behalf of \*** \_\_\_\_\_

\_\_\_\_\_  
**Registered address of firm** \_\_\_\_\_

\_\_\_\_\_  
**Group of approved contractors/ specialist contractors for public works**

\_\_\_\_\_  
**BD Registration No.** \_\_\_\_\_ **Registration Date** \_\_\_\_\_

**Telephone No.** \_\_\_\_\_ **Fax No.** \_\_\_\_\_

**Signature of Witness** \_\_\_\_\_

**Address** \_\_\_\_\_

**Occupation** \_\_\_\_\_

**Date** \_\_\_\_\_

If a tender is being made by a partnership or an unincorporated body, the names and residential addresses of all partners should be given in the spaces provided below.

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**Name of partners**

**Residential address of Partners**

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\* In the case of Limited Company, insert the name of the Company.

# FORM OF TENDER

## APPENDIX

The following particulars also form part of the Form of Tender

Defects Liability Period	12 months
Date for Possession of the site	7 days after issue of the letter of Acceptance
Date for Substantial Completion	On or before 150 days from the Date for Possession of the site
Liquidated and Ascertained Damages	HK\$3,000 per day
Percentage of Certified Value Retained during Contract Period	Ten percent (10%)
Limit of Retention Fund during Defects Liability Period	Five percent (5%)

Authorized Signature with Company Chop \_\_\_\_\_

Date \_\_\_\_\_

Name of Contractor \_\_\_\_\_

Name of Contractor's Representative \_\_\_\_\_

Position \_\_\_\_\_

Telephone No. \_\_\_\_\_

Fax No. \_\_\_\_\_



## TERMS AND CONDITIONS

### 1. Definition

Employer:	Wherever the term "Employer" is used, it refers to The Hong Kong Countryside Foundation
Authorized Person:	Not used.
Structural Engineer:	Not used.
Conservation Consultant:	Wherever the term "Conservation Consultant" is used, it refers to Ptah Heritage Ltd.
Main Contractor / Contractor:	Wherever the term "Main Contractor" or "Contractor" is used, it refers to the Contractor who will carry out the Works under this Contract.
Works:	Wherever the term "Works" is used, it refers to the Restoration and Repair works of House No. 49A and 49B, Lai Chi Wo Village, Sha Tau Kok, N.T., Hong Kong as shown on the Drawings and specified in the Specification all to the satisfaction of the Conservation Consultant.
Contract Period:	Wherever the term "Contract Period" is used, it refers to the period from the Date for Possession of site instructed by the Conservation Consultant to the Date for Completion of the Works as certified by the Conservation Consultant.
Drawings:	Wherever the term "Drawings" is used, it refers to the drawings issued during the tendering period and any modification thereof or addition thereto such drawings approved in writing by the Conservation Consultant and such other drawings as may from time to time be furnished or approved in writing by the Conservation Consultant.
Specification:	Wherever the term "Specification" is used, it refers to the specifications issued during the tendering period and any modification thereof or addition thereto as may from time to time be furnished or approved in writing by the Conservation Consultant.
Schedule of Rates:	Wherever the term "Schedule of Rates" is used, it refers to the schedule of items of works issued during tendering period and properly priced by the Main Contractor and any modification from time to time approved in writing by the Conservation Consultant such that the total sum carried forward from the schedule of items of works equals to the total Contract Sum under this Contract.
Site:	Wherever the term "Site" is used, it refers to House No. 49A and House No. 49B at Taxlord Lot 286 S.B in DD145, Lai Chi Wo Village, Sha Tau Kok, N.T.



## 2. Scope of Works

The Works to be carried out under this Contract are restoration and repair of the roof, cocklofts and windows at House No. 49A and 49B at Lai Chi Wo Village, Sha Tau Kok, N.T. Hong Kong. The scope of the Works which are specified in the Specification particularly comprise but not limited to the following:

- (a) Supply and install new timber battens and purlins at the roofs;
- (b) Supply and install new timber joists and planking at cocklofts;
- (c) Retore and make good existing timber doors, and supply and install new door to the rear room of 49A;
- (d) Retore and make good existing timber stairs at 49A and supply and install new timber stairs at 49B;
- (e) Make good the timber shelf on wall at 49B;
- (f) Prepare the surface and apply wood preservative primer and protective finish coating to all salvaged and new timber battens, purlins, joists, planking, doors, stairs, shelves;
- (g) Supply and install timber drywall partition, approx. 2.4m high, with doors at cocklofts;
- (h) Lay salvaged and new roof tiles to the roofs;
- (i) Restore, repair and decorate existing plastered main ridge and gable ridges, and form and decorate new plastered main ridge to match with existing;
- (j) Repair the spalling concrete and apply waterproofing treatment at the flat roof and floor slab of balconies;
- (k) Supply and install solid concrete block wall for new washroom in 49B;
- (l) Apply waterproofing treatment to the walls and floor of new washroom in 49B;
- (m) Repair the defective concrete Lintel above the window at the rear façade of 49AB;
- (n) Make good and repair all existing steel windows, including replacement of broken glazing panes;
- (o) Make good and repair existing metal sliding doors at entrance and metal doors at balconies;
- (p) Prepare surfaces and apply paint finishes to metal sliding doors at entrance doors, steel windows, metal balustrades and doors at balconies, metal gills of rear room at 49A;
- (q) Supply and install metal picture rail hanging system with adjustable hanging hooks at G/F;
- (r) Remove debonded plaster and replaster the internal and external walls;
- (s) Prepare the surface and paint all internal and external walls and soffit of flat roof and floor slab of balconies;
- (t) Supply and install mosaic tiles to replace the missing parts the façades to match with original;
- (u) Supply and install tiles to the walls and floors, and aluminium ceiling at the new washroom in 49B;
- (v) Supply and install new electrical and mechanical services to current standard, including MCB distribution board, electricity meter box, tube light, down light, spot light, switch, socket, ceiling fan, wall mounted fan, exhaust fan, etc.;
- (w) Supply and install new sanitary fittings to the new washroom in 49B, including water closet and cistern, toilet paper holder, sink, electric water heater, shower set, shower mixer, etc.;
- (x) Construct a septic tank and soakaway pit in accordance with DLO's standard, including all associated sewage disposal piping and builder's works;
- (y) Prepare submission including all necessary documents by a licensed plumber for the application of water apply to Water Services Department;
- (z) Supply and install water taps at the outdoor space, including new pipework connected to existing water supply system;
- (aa) Supply and install fire service installations to the satisfaction of Director of Fire Services, including smoke detector, exit sign, direct link, emergency lighting, etc.; and
- (bb) Supply and install hose reel system to the satisfaction of Director of Fire Services, including control panel, water meter, cabinet, valves, eater pipes, hose reel, jet nozzle, breakglass unit, alarm bell, flash light, signal connection to alarm panel, etc.

## 3. Possession of Site

The tentative Date for Possession is November 2023. The Main Contractor shall be fully aware of the fact that this Date for Possession is tentative and is given to the Main Contractor for reference only. No monetary compensation will be made to the Main Contractor in the event of delay to the Works caused by delayed handover of the Site. The Main Contractor shall also allow sufficient temporary hoardings to protect and separate the public during the whole construction period.

The Main Contractor shall accept the Site AS FOUND on the Date for Possession and at his own expense clear the Site of any debris which may have been left by the other parties and/or the Employer. Immediately upon taking possession of the Site the Main Contractor is to check and satisfy himself as to the correctness of the setting out, levels, etc., of the Works already carried out on Site before he commences his work. He shall immediately inform the Employer of any discrepancies or faults found in such works otherwise no claim will be considered for costs incurred and / extension of time in respect of such discrepancies or faults. In the event of the Main Contractor failing to observe this requirement, any work under this Contract which incorrectly constructed as a result of such discrepancies or fault shall, if so required by the Employer, be pulled down and re-erected at the Main Contractor's expense.

Every possible opportunity will be given to the Main Contractor by the Employer to take full possession of the Site or such part thereof as is necessary for the execution of any Works but the Employer reserves the right to use for any purpose any part of the Site upon which the Works are in progress at any time. For avoidance of doubt, it is clearly understood by the Main Contractor that no exclusive possession of the Site will be given to him for carrying out of the Works. The Main Contractor must share the possession of the Site with other Separate/Direct Contractors, Suppliers or users from time to time during the Contract Period. No claim for extension of time or extra cost incurred by the Main Contractor will be entertained due to the fact that the normal progress of the Works is disrupted by other Separate/Direct Contractors, Supplier or users. The Main Contractor must proceed commencement of the Works on Site within seven days after the instruction of the Conservation Consultant or Employer who has the sole discretion to decide whether the Site is at the status suitable for carrying out of the Works.

The Contractor's attention is drawn to the occupied private premises adjacent to the Works area. The Contractor must carry out the Works without undue inconvenience, nuisance and danger to the public and occupier of the premises.

#### **4. Specialist Contractor / Sub-Contractor**

Not used.

#### **5. Date for Completion and Liquidated and Ascertained Damages**

The tentative Date for Completion is 150 calendar day upon possession of the site.

The Main Contractor's attention is drawn to the fact that time is of essence to this Contract and the Works must be completed within the time for completion stated above. If the Main Contractor fails to complete the Works by the Date for Completion or any extended period as may be authorized under Clause 17 of these Terms and Conditions, then the Employer may deduct a sum of HK\$3,000.00 per day or part of a day delay for the Works as Liquidated Damages from any monies due or become due to the Main Contractor for the period during which the Works in the opinion of the Conservation Consultant shall remain incomplete. The Employer may employ or pay other persons to execute and complete any parts of the Works thereof and all costs incurred in connection with such employment together with the Liquidated Damages shall also be recoverable from the Main Contractor by the Employer as a debt or may be deducted from any monies due or become due to the Main Contractor.

The normal working hour shall be 9:00am – 6:00pm every day, excluding public holidays, Sundays, and any other dates informed by the Employer, unless otherwise specified by the Conservation Consultant.

#### **6. Site Visit**

Before submitting the tender, the tenderer is strongly recommended to visit the Site to familiarize himself with the existing layout and the conditions that may in any manner affect the Works and to ascertain and satisfy himself as to any incidental works which may affect his tender. The tenderer is deemed to have taken the Site's conditions into consideration in submitting the tender, regardless of whether the tenderer has attended the site visit. No claim for extra payment or extension of the Contract Period will be entertained after the submission of the tender on the grounds of ignorance of the conditions under which the Works are to be carried out.

## **7. Lump Sum Contract**

The tender is for a lump sum fixed priced contract based on Drawings and Specification. The Contract Sum will not be adjusted for any fluctuation in costs of any nature after the date for submission of tender except for variations issued in writing by the Employer or Conservation Consultant during the construction period.

## **8. Insurance**

The Main Contractor shall allow for maintaining the following insurance:

- (a) Insurance against all risk for the Works
- (b) Third party insurance against liability for damage, loss or injury to persons or property with the limit of liability for any one incident at HK\$10,000,000.00 whilst unlimited for the period of the Contract
- (c) Employee's compensation insurance

The Main Contractor shall indemnify the Employer against all claims and damages arisen as a result of carrying out the works by third parties. In this connection, the name of the Employer shall be included as one of the parties insured in the schedule of the policy.

## **9. Nuisance Restriction**

The Main Contractor shall, at his own cost, provide every necessary precautionary measure to mitigate any nuisance caused by the Works. The Main Contractor shall also indemnify the Employer against any claim any parties arisen from nuisance caused by him.

The Main Contractor is fully aware of the fact that he must strictly follow the requirements of the Government Authorities to minimize the nuisance such as noise, smell, dust created during the construction and re-schedule the working hours at the Main Contractor's own cost. Any possible disruption of normal progress of works from time to time due to the requirements of the Government Authorities will not render any claim for extension of time by the Main Contractor.

## **10. Access, Restrictions and Delivery of Materials**

Access to the Site, working areas, and the suitability of such will be the responsibility of the Main Contractor who shall make all necessary arrangement in compliance with all requirements of the Employer and the Conservation Consultant. The Main Contractor will be responsible for ensuring that he is properly authorized to use the access and associated facilities, he must give all notices, pay all fees and reinstate at his own cost all damage caused by him whatsoever occurring.

The Main Contractor is only allowed to use the access routes so directed by the Employer to eject and inject of all labour, material, plant and debris to and away from the Site. The Employer can change the access routes during the Contract Period from time to time. No claim will be considered for costs incurred and / or extension of time in respect of such changes made as required by the Employer.

The Main Contractor shall also be responsible for the protection and reinstatement of the access routes.

The Main Contractor shall clean up any affected areas upon receipt of instructions from the Employer or Conservation Consultant.

The Main Contractor is responsible for cartage of materials and plants to and away from the Site by lorries or other vehicles. In case any special regulations are imposed or special arrangements required by the Relevant Authorities or Police or any responsibilities for payment for making good damage to roads and paths is raised by them or for any work necessary, the Main Contractor must take full responsibilities for compliance with such requirements at his own costs and no responsibility will be accepted in this matter by the Employer.

The Main Contractor is also to take full responsibility for all discussions and meetings etc. with the various authorities concerned in respect of restrictions for cartage of and loading and off-loading of materials and plants for the Works.

## **11. Approval of Sample / Specimen Finishes**

The Contractor shall upon instruction by Conservation Consultant, submit material samples, catalogue, technical data and method statement for removal, installation, cleansing of building fabric and components for the review by the Conservation Consultant and subject to no objection before the ordering of materials and execution of work.

Should the Main Contractor propose other alternative which deviate from the Specification, sample of materials and specimens of finishes of such alternatives must be approved by the Conservation Consultant prior to the order of any materials. The Conservation Consultant can request the Main Contractor from time to time during the Contract Period to submit samples of material and specimens of finishes for approval if so required.

All samples of materials and specimens of finishes as so specified in the Specifications must be submitted within seven days after the acceptance of Tender.

Should the Main Contractor deliver the Works which deviate from the samples, the Conservation Consultant shall have the rights to reject the Works and the Main Contractor shall immediately clear the unsuitable materials away from the Site.

## **12. Shop Drawings**

Shop drawings shall be submitted by the Main Contractor within three (3) days upon request by the Conservation Consultant. The Conservation Consultant may reject, approve or amend such drawings. If the shop drawings are rejected, the Main Contractors shall revise them as necessary and resubmit the revised shop drawings for approval at the times as directed by the Conservation Consultant. No claims for extra payment or extension of time will be accepted for disapproval or amendment so instructed by the Conservation Consultant.

The submission to and approval of the Conservation Consultant of such shop drawings (and revision if applicable) shall not relieve the Main Contractor of any of his duties or responsibilities under the Contract.

## **13. Hoarding, Screens, etc.**

The Main Contractor shall construct necessary hoarding for the site as instructed by the Employer/ Conservation Consultant. The Main Contractor will be required to amend, alter, dismantle and erect or re-erect any new and additional hoarding or protection from time to time during the Contract Period if so required by the Conservation Consultant.

The Main Contractor shall provide, erect and alter if necessary and maintain all necessary hoarding, screens, gates, gangway, fans, gantries and temporary enclosures, barriers, etc., to the satisfaction of the Conservation Consultant and remove on completion and make good all work disturbed within the Site and/or along the access routes so instructed by the Conservation Consultant.

All hoarding, fencing etc. must be erected BEFORE any work commences.

The Main Contractor shall provide all lightings to hoarding, fencing, etc. as may be required by the Employer/ Conservation Consultant.

All surfaces of the hoarding are to be prepared and painted in colors and/or covered with wallpaper if so instructed by the Employer/ Conservation Consultant.

## **14. Temporary Lighting and Power**

The Main Contractor is to provide and remove on completion of the Works all adequate level of temporary lighting and electric power supply and connection including temporary wiring, as required for the proper execution of and in connection with the testing of permanent installation all to the satisfaction of the Employer/ Conservation Consultant.

The whole temporary installation is to comply with the latest edition of the IEE Regulations for Electrical Installation and all requirements of the Electric Supply Company.

The consumption of electricity supply will be charged to the Main Contractor by the Employer. All temporary electricity connections and maintenance of the connection shall be carried out by the Main Contractor at his own cost including removal of the same and making good on completion of the Works. Supply of electricity may be available at the existing premises and the contractor is required to obtain approval from the Employer and relevant Government Authorities on his own.

The Employer/ Conservation Consultant can instruct the Main Contractor to provide adequate level of temporary lighting and power for the Works during the Contract Period to any locations and at any time within the Site if he finds that the lighting and power level is not adequate for the convenient of carrying out the Works by the workers of the Contractor and/or the Separate/Direct Contractor and Suppliers. The Employer can instruct other parties to install extra temporary lighting and power and deduct all costs incurred from monies due or become due to the Main Contractor if he refuses to comply with such instructions by the Employer/ Conservation Consultant.

## **15. Temporary Water Supply**

The Main Contractor is to supply water for the Works in all trades, including other Contractors and Suppliers. The Main Contractor is required to make arrangements with the Employer for the connection to the water supply to the work area under the direction of the Employer. The consumption of temporary water supply will be charged to the Main Contractor by the Employer. All connections and the maintenance of the connection shall be carried out by the Main Contractor at his own costs including removal of the same and making good on completion of the Works.

Supply of water may be available at the existing premises and the contractor is required to obtain approval from the Employer and water authority.

The Conservation Consultant can instruct the Main Contractor to provide adequate level of temporary water supply during the Contract Period to any locations and at any time within the site if he finds that the water supply is not adequate for the convenient of carrying out the Works by the Workers of the Contractor and/or the Separate/Direct Contractor and Suppliers. The Conservation Consultant can instruct other parties to make arrangement to the connection to the water supply and deduct all costs incurred from monies due or become due to the Main Contractor if he refuses to comply with such instructions by the Conservation Consultant.

## **16. Payment Term**

The Conservation Consultant shall issue an Interim Certificate stating the amount due to the Main Contractor from the Employer when the accumulated expenditure of the works has reached one-third and two-third of the contract sum. The Main Contractor shall on presenting any interim certificate to the Employer be entitled to payment therefor within fourteen days.

The amount stated as due in an Interim Certificate shall be the estimated value of the work properly executed and of the materials and goods delivered to or adjacent to the Works for use thereon less retention amounting to 10% of the total estimated value of the work, materials and goods as aforesaid less any installments previously paid under these Terms and Conditions.

Upon issuance of the Certificate of Practical Completion of the Works by the Conservation Consultant, the Conservation Consultant shall issue a certificate for release of half of the total retention so retained under these Terms and Conditions.

Twelve (12) months after the issue of the Certificate of Practical Completion and the Conservation Consultant has certified that any defects have been made good in the Certificate of Making Good Defects. The residue of the retention will be released to the Main Contractor.

## **17. Extension of Time**

If in the opinion of the Conservation Consultant the completion of the Works is likely to be or has been delayed beyond the Date for Completion as specified in Clause 5 of these Terms and Conditions or beyond any extended time previously fixed under this Clause by the Conservation Consultant due to any act of breach or prevention by the Employer, his servants or agents, inclement weather, instruction issued by Employer/ Conservation Consultant, or variation ordered, then the Conservation Consultant shall at his discretion grant in writing a fair and reasonable extension of time for completion of the Works. Provided always that the Main Contractor shall use constantly his best endeavors to prevent delay and shall do all that may reasonably be required to the satisfaction of the Conservation Consultant to proceed with the Works.

## **18. Inspection and Hand Over of the Works**

All works shall be completed to the satisfaction of the Conservation Consultant on or before the Date for Completion as specified in Clause 4 of these Terms and Conditions. A joint inspection shall be arranged by the Main Contractor with the presence of the Conservation Consultant and the Employer to inspect the Works on Site. The Main Contractor shall not be responsible for breakage or missing of the Works discovered after the handover of the Works and the issue of the Certificate of Practice Completion by the Conservation Consultant, and however, the Main Contractor shall remain responsible for any defects of the Works of which is either apparent, inherent or latent due to non-compliance with the Drawings and Specification.

## **19. Tests**

The Main Contractor is deemed to have allowed in the Contract Sum for all tests that are called for in the Specifications and any other tests that is required by the Buildings Department including submission of all materials certificate, testing report, etc. and all costs for carrying out the tests, notwithstanding successful or not, and all other costs and expenses in connection with tests such as additional material and labour, transport to laboratory, reports and other documents, etc.

The Conservation Consultant can instruct other people to carry out the tests and deduct all costs incurred from monies due or become due to the Main Contractor if he refuses to comply with such instructions given by the Conservation Consultant.

## **20. Protection of Public**

The Main Contractor is to take every precaution necessary to protect the public from injury or death during the course of the Works.

## **21. Protection of Works and Materials**

The Main Contractor is to make provision such as hoardings and all temporary works for protecting all Works from damage, weather, etc. and provide casing or covering for the protection of any work requiring the same. Any damage arising in this context shall be made good by the Main Contractor at his own expense.

The Main Contractor shall allow in the Contract Sum all costs for off-site prefabrication and manufacturing of all works from time to time so instructed by the Conservation Consultant during the Contract Period. The Main Contractor must provide adequate storage and provision for all prefabricated items of Works at his own costs and no claim will be considered for costs incurred and / or extension of time in respect of such arrangement by the Conservation Consultant.

## **22. Variation**

The Conservation Consultant may issue written instructions requiring the alteration or modification of the design, quality or quantity of the Works as shown on the Drawings and/or as described in the Specification. The Conservation Consultant may also confirm in writing any verbal instructions made by him. The Main Contractor must proceed with the variation works without agreement on the valuation of variation which will be made by the Conservation Consultant. The value of all variations shall be ascertained by the Conservation Consultant in accordance with the following rules:

- (a) The rates or allowance in the Schedule of Rates shall determine the value of variations of a similar character;
- (b) The rates or allowance in the Schedule of Rates shall act as a basis for the value of variations not of a similar character;
- (c) The Conservation Consultant shall determine a reasonable rate where no such rates have been inserted in the Schedule of Rates;
- (d) The rates inserted in the Schedule of Rates shall determine the valuation of items omitted.

The valuation of all variations made by the Conservation Consultant shall be final and binding for the Main Contractor. The Contract Sum shall be adjusted, by adding or omitting of the total value of all variations so ascertained by the Conservation Consultant.

### **23. Removal of Debris**

The Main Contractor shall clear away all debris and remove off the Site as directed by the Employer. The Removal of debris must be cleared on daily basis. No accumulation of debris for more than a day on Site is allowed. The Employer can instruct other people to clear away the debris within the Site and deduct all costs incurred from monies due or become due to the Main Contractor if he refuses to comply with such instructions given by the Employer.

### **24. Defects Liability Period**

The Main Contractor shall make good all defects in connection with the Works.

The Conservation Consultant can engage other parties to rectify the defects at his discretion and will deduct all costs so incurred from monies due or become due to the Main Contractor.

The Defects Liability Period shall be twelve (12) months after the date of issue of Certificate of Practical Completion by the Conservation Consultant.

### **25. Minor Works Control System**

The Main Contractor is deemed to have allowed in the Contract Sum for all submissions that are required by the Buildings Department under the Minor Works control System including submission of all documents, design drawings, photo record, materials certificate, testing report, etc. and all other prescribed building professionals, costs and expenses in connection with these submissions.



## SPECIFICATION

### 1.0 General

#### 1.1 Site of works

The Site is House No. 49A and House No. 49B at Taxlord Lot 286 S.B in DD145, Lai Chi Wo Village, Sha Tau Kok, N.T., Hong Kong as shown in **Fig. 1**.

#### 1.2 The building

- (a) House No. 49A and 49B were built as individual two-storey house sharing a continuous pitched roof. Each unit has a stair connecting the ground floor and the upper floor. The interior space of the ground floor in each unit can be defined as a front living and cooking space and smaller rooms at the rear.
- (b) It is very likely the building was constructed of concrete masonry commonly found in the rural area in that era. The flooring and cocklofts of upper floors was built by timber planking rested on rectangular joists. The common Chinese-styled pitched roof was laid with pan tiles of two different sizes, locally known as "Hakka roofing", sit on timber battens and purlins.
- (c) The House No. 49A and 49B are not accorded as historic building.

#### 1.3 Specialist contractor / sub-contractor

Not used.

#### 1.4 Extent of works

The Works to be carried out under this Contract are broadly described as follows and in the Schedule of Rates, but not limited to:

- (a) Supply and install new timber battens and purlins at the roofs;
- (b) Supply and install new timber joists and planking at cocklofts;
- (c) Retore and make good existing timber doors, and supply and install new door to the rear room of 49A;
- (d) Retore and make good existing timber stairs at 49A and supply and install new timber stairs at 49B;
- (e) Make good the timber shelf on wall at 49B;
- (f) Prepare the surface and apply wood preservative primer and protective finish coating to all salvaged and new timber battens, purlins, joists, planking, doors, stairs, shelves;
- (g) Supply and install timber drywall partition, approx. 2.4m high, with doors at cocklofts;
- (h) Lay salvaged and new roof tiles to the roofs;
- (i) Restore, repair and decorate existing plastered main ridge and gable ridges, and form and decorate new plastered main ridge to match with existing;
- (j) Repair the spalling concrete and apply waterproofing treatment at the flat roof and floor slab of balconies;
- (k) Supply and install solid concrete block wall for new washroom in 49B;



- (l) Apply waterproofing treatment to the walls and floor of new washroom in 49B;
- (m) Repair the defective concrete Lintel above the window at the rear façade of 49AB;
- (n) Make good and repair all existing steel windows, including replacement of broken glazing panes;
- (o) Make good and repair existing metal sliding doors at entrance and metal doors at balconies;
- (p) Prepare surfaces and apply paint finishes to metal sliding doors at entrance doors, steel windows, metal balustrades and doors at balconies, metal gills of rear room at 49A;
- (q) Supply and install metal picture rail hanging system with adjustable hanging hooks at G/F;
- (r) Remove debonded plaster and replaster the internal and external walls;
- (s) Prepare the surface and paint all internal and external walls and soffit of flat roof and floor slab of balconies;
- (t) Supply and install mosaic tiles to replace the missing parts the façades to match with original;
- (u) Supply and install tiles to the walls and floors, and aluminium ceiling at the new washroom in 49B;
- (v) Supply and install new electrical and mechanical services to current standard, including MCB distribution board, electricity meter box, tube light, down light, spot light, switch, socket, ceiling fan, wall mounted fan, exhaust fan, etc.;
- (w) Supply and install new sanitary fittings to the new washroom in 49B, including water closet and cistern, toilet paper holder, sink, electric water heater, shower set, shower mixer, etc.;
- (x) Construct a septic tank and soakaway pit in accordance with DLO's standard, including all associated sewage disposal piping and builder's works;
- (y) Prepare submission including all necessary documents by a licensed plumber for the application of water apply to Water Services Department;
- (z) Supply and install water taps at the outdoor space, including new pipework connected to existing water supply system;
- (aa) Supply and install fire service installations to the satisfaction of Director of Fire Services, including smoke detector, exit sign, direct link, emergency lighting, etc.; and
- (bb) Supply and install hose reel system to the satisfaction of Director of Fire Services, including control panel, water meter, cabinet, valves, eater pipes, hose reel, jet nozzle, breakglass unit, alarm bell, flash light, signal connection to alarm panel, etc.

## 1.5 General specification

- (a) Unless otherwise stated in this Particular Specification and Schedule of Rates, the materials and workmanship used for the Works shall be in accordance with the "General Specification for Building", 2017 or the latest Edition, Vol. 1 & 2, (G.S) by Architectural Services Departments, the Government of the Hong Kong Special Administrative Region.
- (b) The clauses in this Particular Specification are supplements, amendments and amplifications to the clauses in the "General Specification for Building".

## 1.6 Standard of workmanship

- (a) This project requires special care and attention in order to maintain the cultural significance of the building. All works are to be carried out in a careful and skilled manner by experienced artisans. The works are subject to close supervision by the representatives of the Employer and the Conservation Consultant who will check if all the works are of the highest standard and as required by the Specification.
- (b) Unless otherwise stated, all works to be carried out shall match, as far as possible, the original design and original construction methodology including materials, dimensions, compositions, texture and colours, etc. The contractor shall be responsible to gather information from existing building and other building of similar architectural style regarding the original construction.
- (c) Upon completion of the Works, the new repair works should not appear to be too obvious and for this reason all colours and materials to be employed must be reviewed by the Conservation Consultant before use.
- (d) The idea of conservation and repair shall be deliberately noted. Repair to the original fabric, whenever is possible is preferable to replacement.

- (e) Prior to the commencement of any conservation and restoration work, survey and inspection records/results, method statement, samples of materials, colours for painting and mock up samples, etc shall be first submitted to the Conservation Consultant for approval. Samples of all approved colours, materials and workmanship shall be kept by the Contractor on site for comparison with the actual works. No conservation and restoration works shall be allowed to commence without the approval of Conservation Consultant.
- (f) The Contractor shall appoint a supervisor who has experience on conservation project responsible for supervision of the conservation works, including planning, co-ordination and preparation of method statement of all works as specified.
- (g) All works, including restoration, repair, making good and all conservation process shall be done to the satisfaction of Conservation Consultant and the representatives from Employer and other Consultants where necessary.
- (h) The Contractor shall allow for several trials and mock-up with materials and workmanship to achieve desired result and to the satisfaction of Conservation Consultant. Contractor shall allow for any financial and time obligation imposed in complying with this requirement.
- (i) The purpose of preparing the mock-ups is to ensure the Contractor understands the requirements and sequence of works, and provide the opportunity for the RRHB Sub-contractor's workers to acquaint with the requirements and sequence of work.

## **1.7 Submission**

- (a) The Contractor shall submit the required information, materials samples, catalogue, technical data, method statements and shop drawings before removal, installation, cleansing and restoring of building fabric and components for the review by the Conservation Consultant, and subject to no objection before the ordering of materials and execution of works.
- (b) The Contractor shall include the cost involved and re-submission may be required due to the unsatisfactory samples submitted and no claims will be entertained if resubmission is required.

### **Photographic record**

- (c) A photographic record must be taken by the Contractor before the commencement of any works at any parts of the building. The photos taken should have sufficient details to enable the Works to be restored back to its original condition if required at later date.
- (d) Detail site verification with Conservation Consultant to identify all the special features to be photographic recorded prior to any works to be carried out.
- (e) A digital copy and a hard copy of the photographic record shall be submitted to Conservation Consultant for review or comment prior to any works affecting the features or in the vicinity of the features.
- (f) Photographic records shall be submitted by the Contractor to show the progress of the works at each working stages and the completion of the Works.
- (g) The digital photographs shall be of at least 20 mega pixels in jpeg format and saved in low compression, and no less than 128mm (5 in.) x 1800mm (7in.). All pictures shall be dated, properly captioned, and cross-referenced to the floor plans or relevant drawings.

## **1.8 Salvaged building materials**

- (a) The Conservation Consultant shall reserve the right to decide which of the salvaged materials are to be reused in the works or to be retained by the Employer. The Contractor shall allow for any financial obligation imposed in complying with this requirement.
- (b) The Contractor shall be responsible to clean, pack, protect and deliver any of the salvaged materials to location or location(s) within the site as directed by the Conservation Consultant, or a temporary storage within Hong Kong as agreed by the Conservation Consultant.
- (c) All salvaged material should be washed down and free from vegetation, stain, paint, mortar and the like to the satisfaction of Conservation Consultant before use.
- (d) All salvaged material should be sound, of the correct size, with straight edges and free from defects, and such materials should be reviewed without objection by the Conservation Consultant before use.

- (e) Whenever, possible, the Contractor shall make his best endeavour to reuse salvaged building materials arising from the demolition or down-taking.
- (f) The Contractor shall allow for temporary storage of the salvaged building materials on site or off site. The temporary storage shall be able to maintain the salvaged building materials in good condition, weatherproof, equipped with building services for adequate ventilation to the satisfaction of the Conservation Consultant.

## 1.9 General protection

- (a) The Contractor shall execute the Works in such a manner as to ensure the safety of, and cause as little inconvenience as possible to, existing user of the building, adjoining properties, the public in general, vehicles and workmen. The Contractor shall be liable for any damages arising in consequence of this inadequate protection.
- (b) Adequate protection and precautionary measures should be provided by the Contractor when carrying out the works so as to protect the existing structures and fabrics of the historic building, and all other things to be retained in particular, all plaster works, mural, timber artworks and other decorative works should be well protected against possible damages during the course of the Works. Any damage to the any existing structure and all other things to be retained shall be made good at Contractor's expense and to the satisfaction of the Conservation Consultant.

## 1.10 Protection from weather

- (a) The Contractor shall take all reasonable measures to prevent ingress of water into any part of the building through any damaged or suspect areas. The Contractor shall provide a temporary rain shelter to maintain the building weather-tight during the contract period.
- (b) The Contractor shall submit the proposed design of the rain shelter for the approval of the Conservation Consultant.
- (c) The Contractor shall be liable for the damages arising in consequence of his inadequate protection.

## 1.11 Definition of terms

### Make good

- (a) Make good means to carry out works to return the object or surface to its original form in good condition and serving its original function, with no obvious damage or missing parts and in a neat, straight, controlled and orderly alignment. It must be stressed that certain degree of craft and design is required to achieve the original complete form. It shall include washing down, replacement, supply and fixing of missing parts/components and reconstruction using new or salvaged or original sound materials.
- (b) Make good of an object shall include replacement of damaged/ broken/ deteriorated items.
- (c) Make good plaster works items such as external elevation treatments, decorations, moulding, cornices, shall include removal of damaged/deteriorated portion, cleaning and re-plastering with means of bondage to complete the original form of moulding patterns or to match the original finish etc.
- (d) Make good metal works shall include removal of rust, deteriorated sections and existing finishes, repair and replacement of the removed sections to match the existing and re-finishing all with texture matching the original to the satisfactory of the Conservation Consultant.
- (e) Make good to an opening for window or door in the walls shall include taking down of deteriorated or broken or cracked or loosen brickwork or masonry works within 300mm of the perimeter of the opening and piece in sound bricks or masonry as specified and same as the neighbouring materials in terms of size, colour and joints. Existing joints/courses shall be followed when replacing brickwork or masonry works.
- (f) Make good windows, doors shall include replacement of broken or missing ironmongery and glazing to match the originals, in terms of materials, texture, construction and colour.
- (g) Make good timber items includes cutting out of deteriorated or rotten section and carve in sound materials same as existing to give the original forms to match existing, in terms of materials, texture, construction and colour.

### Make good of affected area

- (a) Any building element being cut into, disturbed or damaged during demolition and dismantlings, repairs, renewals, improvements, or fitting-out works shall be made good at the Contractor's expense in a neat and acceptable manner and shall be finished to match the existing in every aspect.
- (b) "Make good" shall include all labour and materials necessary to bring the disturbed area to the same alignment, colour, texture, appearance, etc., and in the same materials as the surround works.

### Repair

- (a) "Repair" includes making good and involves restoration or reconstruction. Reconstruction means returning a place to a known earlier state and is distinguished from restoration by the introduction of new material into the fabric.

### Restore

- (b) "Restore" means returning the existing fabrics of a place to a known earlier state by removing accretions or by reassembling existing components without introduction of new material.

### To Match Existing

- (a) The Contractor is required to follow the dimension, design, construction, artworks and dressing of existing features.
- (b) Existing features refer to building components found inside and outside the buildings and shall include components similar in design, construction, artworks, nature and use to the specified features.

### To Match Original

- (a) The Contractor is required to employ experienced craftsmen and artists to reconstruct missing or damaged or deteriorated elements of the building where no similar elements can be found.
- (b) The Contractor is required to submit full size sketches (scale 1:1) and samples of such elements with respect to the nature and decorative elements of the buildings for Conservation Consultant's approval before execution of the Works.

## **2.0 Particular Specification**

### **2.1 Carpentry and joinery**

#### **2.1.1 Scope of works**

- (a) Take down all timber battens and purlins at the roofs;
- (a) Take down all timber joists, planking and flooring at cocklofts;
- (b) Supply and install new timber battens to the roofs;
- (c) Supply and install new timber purlins to the roofs;
- (d) Prepare the surface and apply wood preservative primer and protective finish coating to all timber battens and purlins;
- (e) Supply and install new timber joists to cocklofts;
- (f) Supply and install new timber planking to cocklofts;
- (g) Prepare the surface and apply wood preservative primer and protective finish coating to all timber joists and planking;
- (h) Refore and make good existing timber doors;
- (i) Supply and install new door to the rear room of 49A;
- (j) Refore and make good existing timber stairs at 49A;
- (k) Supply and install new timber stairs at 49B;
- (l) Make good the timber shelf on wall at 49B;
- (m) Prepare the surface and apply wood preservative primer and protective finish coating to all salvaged and new timber doors, stairs, shelf, etc.; and
- (n) Supply and install timber drywall partition, approx. 2.5m high, with doors at cocklofts.

### 2.1.2 Submission and mock-up samples

- (a) The Contractor shall make submissions for timber, ACQ treatment, wood preservative primer, wood protective finish coating, natural wood oil and the method statements for Conservation Consultant's approval.
- (b) The Contractor shall submit samples of new timber to be used for repair, replacement and new timber items, certificate of its species and origin, method and certificate of preservative treatment for Conservation Consultant's approval.
- (c) Upon endorsement of the materials and method statements, the Contractor shall provide mock-ups of the following items for the Conservation Consultant to assess the colour, texture, and the workmanship, etc. The location of the mock-ups shall be approved by the Conservation Consultant.
  - 1. Application of wood preservative primer and wood protective finish coating to timber battens, purlins, joists, planking, doors, stairs, shelf, etc.
- (d) The order for bulk supplies of material shall not be confirmed until formal endorsement for the materials, method statements and mock-ups are obtained from the Conservation Consultant.

### 2.1.3 New timber

- (a) All new timber shall be best of its kind, mature growth, free from worm holes, large loose or dead knots or other defects such as cracks.
- (b) The new timber components shall match the existing in species, colour, texture, quality, design, construction, artwork, nature, unless otherwise approved by Conservation Consultant.
- (c) The test report proving the species of new timber shall be certified by accredited laboratory under China National Accreditation Scheme (CNAS) and state clearly the scientific names, including family 科名, genus 屬名, species name in Latin and Chinese common names.

### 2.1.4 Timber repair

- (a) This involves repairing defective parts by traditional carpentry to match original and replacement of those beyond repair or missing ones by new timber with matching species, sizes, colour and texture.
- (b) The Contractor shall make good holes and cracks (< 3mm) on all timber items by proprietary wood filler to match the colour after the application of the wood finish coating.
- (c) Large holes and cracks shall be repaired by inserting wood strips or plugs, or wood dust mixed with wood glue to the satisfaction of the Conservation Consultant.

### 2.1.5 Nails

- (a) Nails used in battens and purlins shall be bamboo nails employed in traditional Chinese construction methods.
- (b) The bamboo nails shall be traditionally treated with pre-heated "*tung oil*".

### 2.1.6 Timber preservatives

- (a) Apply wood preservative primer with fungicidal and insecticidal treatment to all salvaged timber elements to prevent attack by termites, wood boring insects, fungi, woodrot and decay etc., in accordance with manufacturer's instruction.
- (b) Apply minimum 2 coats of "Bondex" or equivalently approved wood preservative primer to all timber surfaces. If timber elements are dismantled for repair, joints, junctions and concealed areas such as parts that are built into the walls shall be also applied with wood preservative primer.
- (c) Specification of wood preservative primer:
  - 1. Water-based;
  - 2. Contain insecticide, fungicide and anti-termite agents;
  - 3. Colourless; and
  - 4. Compatible with finish coating to be applied on top.
- (d) All new timbers shall be kiln dried and vacuum impregnated in plant with Alkaline Copper Quaternary (ACQ) to American Wood Protection Association (AWPA) Standard, or GB Standard or equivalent.

### 2.1.7 Finish coating

- (a) The Contractor shall prepare the timber surfaces and apply minimum 3 coats of "WoodPlus" or equivalently approved wood protective finish coating by nylon brush and rag uniformly onto the timber surfaces in accordance with the manufacturer's instruction.
- (b) Specification of the protective finish coating:
  - 1. Suitable for application on wood surface;
  - 2. diffusion capable;
  - 3. water repelling;
  - 4. moisture regulating;
  - 5. UV resistant; and
  - 6. Wide range colour collection.

## 2.2 Roofing

### 2.2.1 Scope of works

- (a) Design, erect, alter when required and maintain a temporary rain shelter to the building during construction period and subsequent removal and clear up of such temporary rain shelter upon completion of works;
- (b) Take down and salvage all roof tiles at the roofs;
- (a) Restore, repair and decorate existing plastered main ridge and gable ridges;
- (b) Form and decorate new plastered main ridge to match with existing;
- (c) Supply and install lead flashing over the ridge purlins and at all gable ridges;
- (d) Lay salvaged and new roof tiles to the roofs; and
- (e) Form semi-circular lime sand rendering with *wuyin* finish at the eaves and main ridges at roofs.

### 2.2.2 Submission and mock-up samples

- (a) The Contractor shall submit the design of temporary rain shelter for the Conservation Consultant's acceptance prior to commencement of works.
- (b) The Contractor shall submit photo and drawing record of the construction details of the roof after opening up existing tiles, including laying pattern, junction between tiling and ridges, main ridge, etc.
- (c) The Contractor shall make submissions for roof tiles, mortar materials, lead flashing, paint and method statements for Conservation Consultant's approval.
- (d) Upon endorsement of the materials and method statements, the Contractor shall provide mock-ups of the following items for the Conservation Consultant to assess the colour, texture, and the workmanship, etc. The location of the mock-ups shall be approved by the Conservation Consultant.
  - 1. Laying of roof tiles;
  - 2. Installation of lead flashing; and
  - 3. Forming of semi-circular lime sand rendering with *wuyin* finish at eaves.

### 2.2.3 Tiles

- (a) All Chinese roof tiles are to be sound, well burnt, uniform in colour, texture, size and free from fire cracks and blemishes.
- (b) Chinese roof tiles shall include the following types:
  - 1. Unglazed reddish pan tiles of approximate size 230 x 230 x 10mm (minimum) thick; and
  - 2. Unglazed greyish pan tiles of approximate size 180 x 150 x 6mm (minimum) thick.
- (c) The order for bulk supplies of roof tiles shall not be committed until formal endorsement is obtained from the Conservation Consultant.
- (d) The Contractor shall use salvaged roof tiles as far as possible in retiling the roofs. All salvaged roof tiles shall be sound, of correct size, with even curvature, without chipped arises, properly cleaned and washed, and be free from vegetation, roots, mortar, soot, stains and surface paint, etc.
- (e) New roof tiles shall be of matching colour, size, texture, and quality to the existing roof tiles.
- (f) New roof tiles and salvaged roof tiles of acceptable quality shall be mixed in use subject to Conservation Consultant's approval prior to any re-tiling work.

- (g) Cut and fit tiling at abutments and around chimney, pipes, etc., and finish with a mortar fillet, trowelled smooth.

#### 2.2.4 Lime

Not used.

#### 2.2.5 Mortar

- (a) Mortar for bedding and rendering over tiles shall be lime, sand and earth mixed in a ratio of 1:2:1, and mixed with traditionally prepared *wuyin* as approved by the Conservation Consultant.
- (b) Chopped straw, reed and grass shall be mixed in the lime as reinforcement material. They shall be 25 - 30mm long, soaked in water thoroughly, and free from grease or other impurities before use.
- (c) *Wuyin* shall be traditionally prepared with traditional method and applied while the plaster base is still wet. The rendered surface of *wuyin* finish shall be smooth and in dark grey colour. Stark white colour appearance is not acceptable.

#### 2.2.6 Type of tiling

- (a) The layering of tiles is to be single layer of greyish pan tiles and double layers of reddish pan tiles resting on battens. The lapping of reddish pan tiles shall match existing or more than 70%, whichever is the larger.

#### 2.2.7 Lead flashing

- (a) The width of lead flashing over ridge purlin and along the gable ridges should be 300mm (minimum) or as directed by Conservation Consultant. Flashing shall be a continuous piece as far as practice and lapped at a minimum of 100mm if necessary.
- (b) The sheet lead shall be to BS 1178.

#### 2.2.8 Water tightness test

Not used.

### 2.3 Brickwork and masonry

#### 2.3.1 Scope of works

- (a) Repair the spalling concrete at the flat roofs and floor slab of balconies;
- (b) Apply waterproofing treatment to the flat roofs and floor slab of balconies;
- (c) Demolish existing walls of original toilet cubicles;
- (d) Demolish the partition wall at the rear room of 49B;
- (e) Supply and install solid concrete block wall for new washroom in 49B;
- (f) Apply waterproofing treatment to the walls and floor of new washroom in 49B; and
- (g) Repair the defective concrete Lintel above the window at the rear façade of 49AB.

#### 2.3.2 Submission and mock-up samples

- (a) The Contractor shall make submissions for the concrete repair mortar, waterproofing agent and method statements for Conservation Consultant's approval.

#### 2.3.3 Waterproofing agent

- (a) Apply "Tru-Sealer" or equivalently approved waterproofing agent to the flat roofs and floor slab of balconies in accordance with manufacturer's instruction.
- (b) Specification of waterproofing agent:
  - 1. Designed for waterproofing and deterioration protection for concrete;
  - 2. Penetrate into concrete up to 40mm;
  - 3. Seals the pores in concrete;
  - 4. Effective in negative pressure;
  - 5. Blocks the phenomenon of carbonization and the penetration of chlorides; and
  - 6. Odourless, colourless and non-toxic.

## **2.4 Metalworks and ironmongeries**

### **2.4.1 Scope of works**

- (a) Make good and repair all existing steel windows, including replacement of broken glazing panes;
- (b) Make good and repair existing metal sliding doors at entrance and metal doors at balconies;
- (a) Remove existing paint and rust, prepare surfaces and apply anti-corrosion primer and enamel paint to metal sliding doors at entrance doors, steel windows, metal balustrades and doors at balconies, metal gills of rear room at 49A; and
- (b) Supply and install metal picture rail hanging system with adjustable hanging hooks at G/F.

### **2.4.2 Submission and mock-up samples**

- (a) The Contractor shall make submissions for paint remover, anti-corrosion primer, enamel paint, rail hanging system and method statements for Conservation Consultant's approval.
- (b) Upon endorsement of the materials and method statements, the Contractor shall provide mock-ups of the following items for the Conservation Consultant to assess the colour, texture, and workmanship, etc. The location of the mock-ups shall be approved by the Conservation Consultant:
  - 1. Removal of existing paint and rust on steel window;
  - 2. Application of anti-corrosion primer and enamel paint on steel window.
- (c) The order for bulk supplies of material shall not be confirmed until formal endorsement for the materials, method statements and mock-ups are obtained from the Conservation Consultant.

### **2.4.3 Window repair**

- (a) This involves complete stripping off of exiting paint and rust on all existing steel windows.
- (b) Use wire brush to leave the steel surface bare and clean, which shall be dry and free from grease, rust and loose material that will interfere with the adhesion of the paint to be applied.
- (c) Repair any defects including but not limited to crack, broken or missing parts of steel frame by epoxy adhesive, welding and/ or partial replacement with material of same composition respectively to restore soundness and integrity to the steel frame.
- (d) Replace defective glazing putty that becomes loose, cracks or falls off.
- (e) Apply lubricant to any moving parts of the steel windows, such as the handles, peg stays, hinges, etc., and ensure a full coverage on all moving parts.
- (f) Apply one coat of anti-corrosion primer and minimum two coats of enamel paint in accordance with the manufacturer's instruction.

## **2.5 Finishes**

### **2.5.1 Scope of works**

- (a) Clean, prepare the surface and decorate the parapet wall on flat roofs;
- (b) Remove debonded plaster and replaster the internal and external walls;
- (c) Prepare the surface and paint all internal and external walls and soffit of flat roof and floor slab of balconies;
- (d) Supply and install mosaic tiles to replace the missing parts the façades to match with original;
- (e) Supply and install tiles to the walls and floors at the new washroom in 49B; and
- (f) Supply and install aluminium ceiling at the new washroom in 49B.

### **2.5.2 Submission and mock-up samples**

- (a) The Contractor shall make submissions for paint, mosaic tiles, wall tiles, floor tiles, aluminium ceiling and method statements for Conservation Consultant's approval.
- (b) Upon endorsement of the materials and method statements, the Contractor shall provide mock-ups of the following items for the Conservation Consultant to assess the colour, texture, and the workmanship, etc. The location of the mock-ups shall be approved by the Conservation Consultant.
  - 1. Painting of walls;



### 2.5.3 Paint on external walls

- (a) Apply 2 bottom coats and 1 top coat of "i2cool" or equivalently approved passive radiative cooling paint in accordance with manufacturer's instruction.
- (b) Specification of passive radiative cooling paint:
  - 1. Solar Reflectivity > 95%;
  - 2. Medium Infrared Emissivity > 95%;
  - 3. Thickness < 250 µm;
  - 4. Cooling power under HK's climate: 115 W/sqm; and
  - 5. Water-based and non-toxic.

## 2.6 Termite

Not used.

## 2.7 Electrical and mechanical services

### 2.7.1 Scope of works

- (a) Supply and install new MCB distribution boards;
- (b) Supply and install new stainless-steel electricity meter boxes and coordinate with CLP for meter installation;
- (c) Supply and install new LED tube light, LED down light, LED spot light, switch, socket, ceiling fan, wall mounted fan, exhaust fan to current standard;
- (d) Submit Form WR1 by Registered Electrician upon completion of electrical works.
- (e) Supply and install new sanitary fittings to the new washroom in 49B, including water closet and cistern, toilet paper holder, sink, electric water heater, shower set, shower mixer, etc.;
- (f) Construct a septic tank and soakaway pit in accordance with DLO's standard, including all associated sewage disposal piping and builder's works;
- (g) Prepare submission including all necessary documents by a licensed plumber for the application of water apply to Water Services Department;
- (h) Supply and install water taps at the outdoor space, including new pipework connected to existing water supply system.;
- (i) Supply and install fire service installations to the satisfaction of Director of Fire Services, including smoke detector, exit sign, direct link, emergency lighting, etc.; and
- (j) Supply and install hose reel system to the satisfaction of Director of Fire Services, including control panel, water meter, cabinet, valves, water pipes, hose reel, jet nozzle, breakglass unit, alarm bell, flash light, signal connection to alarm panel, etc.

### 2.7.2 Submission and mock-up samples

- (a) The Contractor shall make submissions for record on existing electrical provision and routing and proposal for new electrical sockets and conduit for Conservation Consultant's approval.

### 2.7.3 Regulations

- (a) The materials and workmanship used for the Works shall be in accordance with the Code of Practice for the electricity (Wiring) Regulations, Latest Edition; and BS 7671 Requirements for Electrical Installations, (I.E.E. Wiring Regulations for Electrical Installations, 18<sup>th</sup> Edition).



## SCHEDULE OF RATE

- (a) The quantities contained in the Schedule of Rates shall not form part of the Contract and no adjustment to the Contract Sum will be allowed for the errors in the quantities in the Schedule of Rates, but the rates and the notes and description contained in the Schedule of Rates shall apply to the valuation of variations and interim payments or other purposes as required by the Contract.
- (b) All descriptions in the Schedule of Rates shall be deemed to read in conjunction with the Specification and Drawings.

Item	Description	Quantity	Unit	Rate	Amount HK\$
<b>1.0</b>	<b><u>Preliminaries</u></b>				
<b>A</b>	Allow for all preliminaries, but not limited to insurance, transport, safety facilities, scaffolding, working platforms, safety signage, electricity and supervision, etc., and all items for proper execution of the Works.  Clear and remove all debris, protect existing historical items within the works area.	1	item		
<b>B</b>	Provide, modify and maintain fence boards, safety facilities and signage throughout the construction period and clear away on completion of Works, including make good any work disturbed.	1	item		
<b>C</b>	Provide, erect, alter when required and maintain temporary rain shelter to the building during construction period to the satisfaction of the Conservation Consultant and clear up of such temporary rain shelter upon completion.	1	item		
<b>D</b>	Prepare submission including all necessary documents and drawings signed by Prescribed Building Professionals to the Minor Works Control System under Buildings Department, and to obtain approval from the Lands Department where appropriate and requested.	1	item		
<b>E</b>	Provide documentation for disposal of construction waste at landfills, sorting facilities and public fill reception facilities.	1	item		
<b>2.0</b>	<b><u>General Clearance and Demolition</u></b>				
<b>A</b>	Take down and salvage all roof tiles at the roofs	1	item		
<b>B</b>	Take down all timber battens and purlins at the roofs	1	item		
<b>C</b>	Take down all timber joists, planking and flooring at cocklofts	1	Item		
<b>D</b>	Demolish existing walls of original toilet cubicles	1	item		
<b>E</b>	Demolish the partition wall at the rear room of 49B	1	item		
<b>F</b>	Demolish the concrete mass at the forecourt	1	item		
<b>To Collection</b>					

Item	Description	Quantity	Unit	Rate	Amount HK\$
<b>3.0</b>	<b><u>Carpentry and joinery</u></b>				
<b>A</b>	Supply and install new timber battens to the roof	253	M		
<b>B</b>	Supply and install new timber purlins to the roof	133	M		
<b>C</b>	Prepare the surface and apply wood preservative primer and protective finish coating to all timber battens and purlins	1	item		
<b>D</b>	Supply and install new timber joists to cocklofts	117	M		
<b>E</b>	Supply and install new timber planking to cocklofts	45	Sq. M		
<b>F</b>	Prepare the surface and apply wood preservative primer and protective finish coating to all timber joists and planking	1	item		
<b>G</b>	Retore and make good existing timber doors	2	Nr		
<b>H</b>	Supply and install new door to the rear room of 49A	1	Nr		
<b>I</b>	Retore and make good existing timber stairs at 49A	1	Nr		
<b>J</b>	Supply and install new timber stairs at 49B	1	Nr		
<b>K</b>	Make good the timber shelf on wall at 49B	1	Nr		
<b>L</b>	Prepare the surface and apply wood preservative primer and protective finish coating to all timber doors, stairs, shelves	1	item		
<b>M</b>	Supply and install timber drywall partition, approx. 2.4m high, with doors at cocklofts	18	M		
<b>4.0</b>	<b><u>Roofing</u></b>				
<b>A</b>	Restore, repair and decorate the plastered main ridge and gable ridges	21	M		
<b>B</b>	Form and decorate new plastered main ridge to match with existing	4	M		
<b>C</b>	Supply and install lead flashing over the ridge purlins and at all gable ridges	25	M		
<b>D</b>	Lay salvaged and new roof tiles to the roof	74	Sq. M		
<b>E</b>	Form semi-circular lime sand rendering with <i>wuyin</i> finish at the eaves and main ridges at roof	1	item		
<b>To Collection</b>					

Item	Description	Quantity	Unit	Rate	Amount HK\$
<b>5.0</b>	<b><u>Brickwork and masonry</u></b>				
A	Repair the spalling concrete at the flat roofs and floor slab of balconies	1	item		
B	Apply waterproofing treatment to the flat roofs and floor slab of balconies	1	item		
C	Supply and install solid concrete block wall for new washrooms (approx. 2.9m high)	6	M		
D	Apply waterproofing treatment to the walls and floor of new washroom in 49B	1	item		
E	Repair the defective concrete Lintel above the window at the rear façade of 49AB	2	Nr		
<b>6.0</b>	<b><u>Metalworks and ironmongeries</u></b>				
A	Make good and repair all existing steel windows	13	Nr		
B	Prepare surfaces and apply anti-corrosion primer and enamel paint to windows	13	Nr		
C	Make good and repair all existing metal sliding doors at entrance	2	Nr		
D	Make good and repair existing metal doors at balconies	2	Nr		
E	Remove existing paint and rust, prepare surfaces and apply anti-corrosion primer and enamel paint to metal sliding doors at entrance doors and doors at balconies	4	Nr		
F	Remove existing paint and rust, prepare surfaces and apply anti-corrosion primer and enamel paint to metal balustrades and metal gills of rear room at 49A	1	item		
<b>7.0</b>	<b><u>Finishes</u></b>				
A	Clean, prepare the surface and decorate the parapet wall on flat roofs	1	item		
B	Remove debonded plaster and replaster the internal and external walls	80	Sq. M		
C	Prepare the surface and paint all internal walls, soffit of flat roof and floor slab of balconies	240	Sq. M		
D	Prepare the surface and paint all external walls with passive radiative cooling paint	100	Sq. M		
E	Supply and install mosaic tiles to replace the missing parts the façades to match with original	1	item		
F	Supply and install tiles to the walls at the new washroom in 49B	14	Sq. M		
G	Supply and install tiles to the floors at the new washroom in 49B	2	Sq. M		
H	Supply and install aluminium ceiling at the new washroom in 49B	1	Sq. M		
<b>To Collection</b>					

Item	Description	Quantity	Unit	Rate	Amount HK\$
<b>8.0</b>	<b><u>Electrical and mechanical services</u></b>				
<b>A</b>	Supply and install new MCB distribution boards (three-phase) for 49A	1	Nr		
<b>B</b>	Supply and install new MCB distribution boards (single-phase) for 49B	1	Nr		
<b>C</b>	Supply and install new stainless-steel electricity meter boxes with necessary accessories and coordinate with CLP for meter installation				
	Single-phase	1	Nr		
	Three-phase	1	Nr		
<b>D</b>	Supply and install the following to current standard				
	LED single tube light (1200mm, 4000k)	25	Nr		
	LED single tube light (1200mm, 4000k, waterproofed)	2	Nr		
	LED down light (4000k, waterproofed)	6	Nr		
	LED down light (4000k, waterproofed, motion sensor)	2	Nr		
	track light	15	M		
	LED spot light on track light (12W, 4000k)	20	Nr		
	lighting switch points	17	Nr		
	twin socket points	17	Nr		
	3-phase socket point	1	Nr		
	ceiling fan with necessary accessories	4	Nr		
	wall mounted fan with necessary accessories	4	Nr		
	exhaust fan with necessary accessories	2	Nr		
<b>E</b>	Submit Form WR1 upon completion of electrical works by technical competent person	1	item		
<b>F</b>	Supply and install sanitary fittings to new washroom in 49B				
	Water closet and cistern with flush valve	1	Nr		
	Toilet paper holder	1	Nr		
	Table-top sink	1	Nr		
	Wall mounted Countertop (approx. 0.3 x 1m)	1	Nr		
	Electric water heater with socket, switch, water supply pipework and all builder's works	1	Nr		
	Shower set with shower holder	1	Nr		
	Wall mounted single level shower mixer	1	Nr		
	Floor drain	1	Nr		
	Shower curtain and curtain rods	1	Nr		
<b>G</b>	Construct a septic tank (3 x 0.8 x 1.2m) and soakaway pit (1.5 x 1.5 x 1.8m) in accordance with DLO's standard, including all associated sewage disposal piping and builder's works	1	item		
<b>H</b>	Prepare submission including all necessary documents by a licensed plumber for the application of water apply to Water Services Department	1	item		
<b>I</b>	Supply and install water tap at the outdoor space, including new pipework connected to existing water supply system.	2	Nr		
<b>To Collection</b>					

Item	Description	Quantity	Unit	Rate	Amount HK\$
<b>9.0</b>	<b><u>Fire service installations and hose reel system</u></b>				
<b>A</b>	Supply and install Fire Service installations to the satisfaction of Director of Fire Services: smoke detector exit sign direct link emergency lighting	4 2 1 8	Nr Nr Nr Nr		
<b>B</b>	Supply and install Hose Reel System to the satisfaction of Director of Fire Services: control panel water meter, cabinet, valves, water pipes hose reel, jet nozzle, breakglass unit, alarm bell, and flash light signal connection to alarm panel	1 1 1 1	Nr item item item		
<b>C</b>	Prepare submission including all necessary documents by a registered Building Services Engineer / registered FSI sub-contractor and arrange workshop inspection for the approval by Fire Services Department	1	item		
<b>To Collection</b>					

Item	Description	Total Amount HK\$
	<u>Restoration and repair works of House No. 49A and 49B, Lai Chi Wo Village, Sha Tau Kok, N.T., Hong Kong</u> <u>Collection</u>	
	Brought forward from page SOR / 2	
	Brought forward from page SOR / 3	
	Brought forward from page SOR / 4	
	Brought forward from page SOR / 5	
	Brought forward from page SOR / 6	
	Contingency to be expended as directed by Employer / Conservation Consultant or else left as an unspent balance.	<b>50,000.00</b>
	<b>To Form of Tender</b>	

Item	Description	Quantity	Unit	Rate	Amount HK\$
	<u>Optional items that shall be executed and included in the contract sum upon direction by Client or Conservation Consultant</u>				
	<u>Provide the rate and amount only</u>				
<b>A</b>	Supply and install new timber shelves under the stairs at G/F	2	Nr		
<b>B</b>	Restore and make good brick stoves	2	Nr		



Item	Description	Quantity	Unit	Rate	Amount HK\$
	<u>Provision of a new washroom in House No. 49A, Lai Chi Wo Village, Sha Tau Kok, N.T., Hong Kong</u>				
	<u>Provide the rate and amount only</u>				
A	Supply and install solid concrete block wall for new washroom in 49A (approx. 2.9m high)	3	M		
B	Apply waterproofing treatment to the walls and floor of new washroom in 49A	1	item		
C	Supply and install tiles to the walls at the new washroom in 49A	14	Sq. M		
D	Supply and install tiles to the floors at the new washroom in 49A	2	Sq. M		
E	Supply and install aluminium ceiling at the new washroom in 49A	1	Sq. M		
F	Supply and install sanitary fittings to new washroom in 49A				
	Water closet and cistern with flush valve	1	Nr		
	Toilet paper holder	1	Nr		
	Table-top sink	1	Nr		
	Wall mounted Countertop (approx. 0.3 x 1m)	1	Nr		
	Electric water heater with socket, switch, water supply pipework and all builder's works	1	Nr		
	Shower set with shower holder	1	Nr		
	Wall mounted single level shower mixer	1	Nr		
	Floor drain	1	Nr		
	Shower curtain and curtain rods	1	Nr		

# 6

## APPENDIX

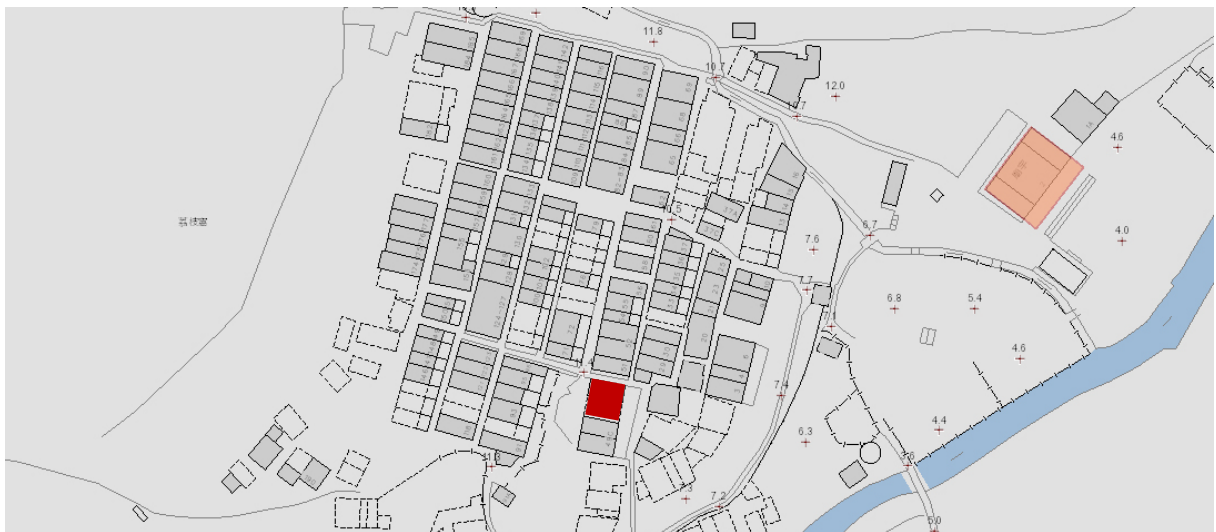


Fig. 1. Location of No. 49A and 49B, Lai Chi Wo Village, Sha Tau Kok, N.T..



Fig. 2. Front view of No. 49A and 49B, Lai Chi Wo Village, Sha Tau Kok, N.T..



Fig. 3. General view of No. 49A, Lai Chi Wo Village, Sha Tau Kok, N.T..



Fig. 4. General view of No. 49B, Lai Chi Wo Village, Sha Tau Kok, N.T..



## PROBITY AND ANTI-COLLUSION CLAUSES



# **The Hong Kong Countryside Foundation**

## **Probity and Anti-collusion Clauses in Tender Documents the restoration and repair works of 2 houses in Lai Chi Wo Village (Jul 2023)**

### **Offering Gratuities**

- (1) The tenderer shall not, and shall procure that his employees and agents/employees, agents and sub-contractors shall not, offer, solicit or accept an advantage as defined in the Prevention of Bribery Ordinance (Cap 201) in connection with the tendering and execution of this Work Contract for Documents the restoration and repair works of 2 houses in Lai Chi Wo Village.
- (2) Failure to so procure or any act of offering, soliciting or accepting advantage referred to in (1) above committed by the tenderer or by an employee, agent or sub-contractor of the tenderer shall, without affecting the tenderer's liability for such failure and act, result in his tender being invalidated.

### **Anti-collusion**

- (1) (a) Subject to sub-clause (2) of this Clause, the tenderer shall not communicate to any person other than **the Hong Kong Countryside Foundation** (hereafter referred to as the Employer) the amount of the tender price or any part thereof until the tenderer is notified by the Employer of the outcome of the tender exercise.  
  
(b) Further to paragraph (a) of this sub-clause, the tenderer shall not fix the amount of the tender price or any part thereof by arrangement with any other person, make any arrangement with any person about whether or not he or that other person will or will not submit a tender or otherwise collude with any person in any manner whatsoever in the tendering process.  
  
(c) Any breach of or non-compliance with this sub-clause by the tenderer shall, without affecting the tenderer's liability for such breach or non-compliance, invalidate his tender.
- (2) Sub-clause (1)(a) of this Clause shall have no application to the tenderer's communications in strict confidence with:  
  
(a) his own insurers or brokers to obtain an insurance quotation for computation of tender price;

- (b) his sub-contractors to solicit their assistance in preparation of tender submission; and
  - (c) his bankers in relation to financial resources for the Contract.
- (3) The tenderer shall submit with his tender a duly signed and witnessed letter in the form set out in the Appendix [*see Appendix*]. The signatory to the letter shall be a person authorized to sign the Contract on the tenderer's behalf.
- (4) The tenderer shall indemnify and keep indemnified the Employer against all losses, damages, costs or expenses arising out of or in relation to any breach of or non-compliance with sub-clause (1) of this Clause by the tenderer, including but not limited to additional costs due to price escalation, costs and expenses of re-tendering and other costs incurred.

## ***Appendix – Confirmation Letter***

To: The Hong Kong Countryside Foundation

Dear Sir/Madam,

### **Confirmation Letter for Contract**

[I/We]<sup>1</sup>, \_\_\_\_\_ of the address:

\_\_\_\_\_

refer to [my/our]<sup>1</sup> tender for the above Contract.

[I/We]<sup>1</sup> confirm that, before [I/we]<sup>1</sup> sign this letter, [I/we]<sup>1</sup> have read and fully understand this letter and the anti-collusion clause.

[I/We]<sup>1</sup>, represent and warrant that in relation to the tender for the above Contract:

- (i) [I/We]<sup>1</sup>, other than the Excepted Communications referred to in the last paragraph of this letter, have not communicated and will not communicate to any person other than the Employer the amount of the tender price or any part thereof until [I/we]<sup>1</sup> have been notified by the Employer of the outcome of the tender exercise;
- (ii) [I/We]<sup>1</sup> have not fixed and will not fix the amount of the tender price or any part thereof by arrangement with any person;
- (iii) [I/We]<sup>1</sup> have not made and will not make any arrangement with any person as to whether [I/we]<sup>1</sup> or that other person will or will not submit a tender; and
- (iv) [I/We]<sup>1</sup> have not otherwise colluded and will not otherwise collude with any person in any manner whatsoever in the tendering process.

[I/We]<sup>1</sup> shall indemnify and keep indemnified the Employer against all losses, damages, costs or expenses arising out of or in relation to any breach of any of the representations and/or warranties above, including but not limited to damages for delay, costs and expenses of re-tendering and other costs incurred.

In this letter, the expression “Excepted Communications” means [my/our]<sup>1</sup> communications in strict confidence with:

- (i) [my/our]<sup>1</sup> own insurers or brokers to obtain an insurance quotation for computation of tender price;
- (ii) [my/our]<sup>1</sup> [sub-consultants/consultants or sub-contractors]<sup>2</sup> to solicit their assistance in preparation of tender submission; and
- (iii) [my/our]<sup>1</sup> bankers in relation to financial resources for the [Consultancy Agreement/Contract]<sup>1</sup>.

Signed for and on behalf of \_\_\_\_\_ by [*name and position of the signatory*]<sup>3</sup>:

\_\_\_\_\_

Name of Witness: \_\_\_\_\_

Signature of Witness: \_\_\_\_\_

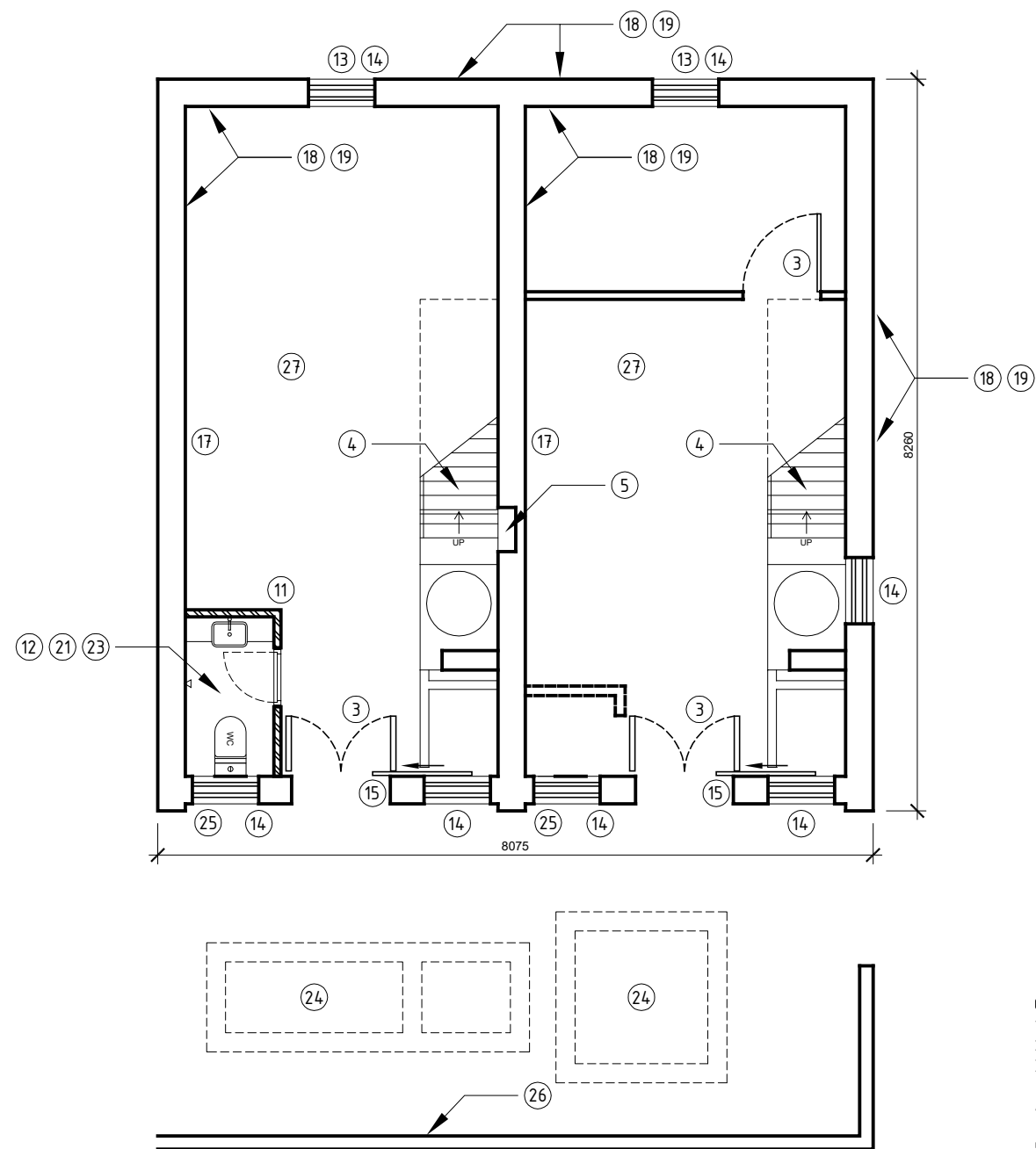
Occupation: \_\_\_\_\_

*1. Delete as appropriate*

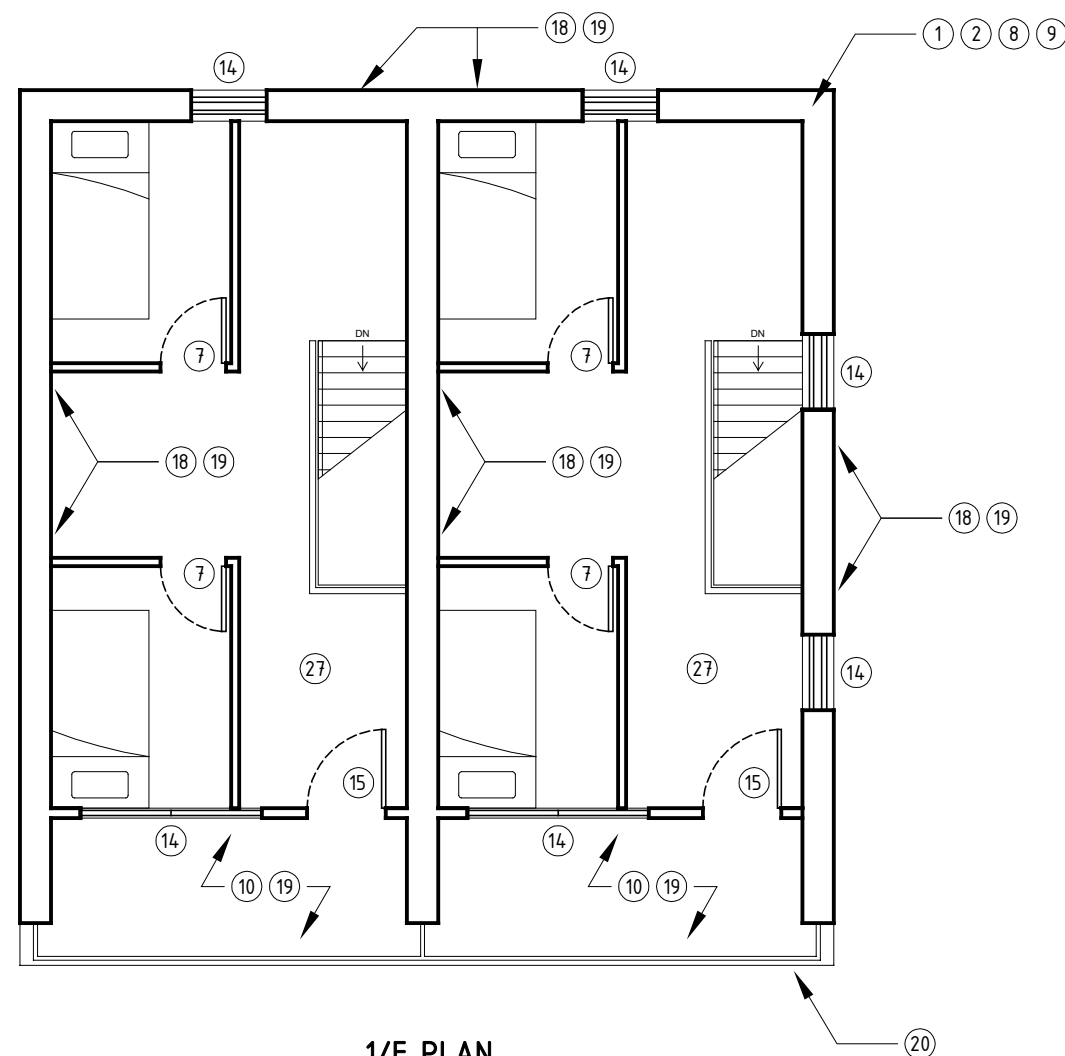
*2. Where the tenderer comprises two or more persons or companies acting in partnership, joint venture or otherwise, this part in square brackets should be expanded to include the respective names and addresses of such persons or as the case may be companies.*

*3. Where the tenderer comprises two or more persons or companies acting in partnership, joint venture or otherwise, all such persons or as the case may be companies must sign. The signatory for each of such persons or companies shall be a person authorized to sign the Consultancy Agreement/Contract on behalf of that person or as the case may be company.*





G/F PLAN



1/F PLAN

#### CARPENTRY AND JOINERY

1. Supply and install new timber battens and purlins at the roofs
2. Supply and install new timber joists and planking at cocklofts
3. Refore and make good existing timber doors, and supply and install new door to the rear room of 49A
4. Refore and make good existing timber stairs at 49A and supply and install new timber stairs at 49B
5. Make good the timber shelf on wall at 49B
6. Prepare the surface and apply wood preservative primer and protective finish coating to all salvaged and new timber battens, purlins, joists, planking, doors, stairs, shelves
7. Supply and install timber drywall partition, approx. 2.4m high, with doors at cocklofts

#### ROOFING

8. Lay salvaged and new roof tiles to the roofs
9. Restore, repair and decorate existing plastered main ridge and gable ridges, and form and decorate new plastered main ridge to match with existing

#### MASONRY AND BLOCKWORK

10. Repair the spalling concrete and apply waterproofing treatment at the flat roof and floor slab of balconies
11. Supply and install solid concrete block wall for new washroom in 49B
12. Apply waterproofing treatment to the walls and floor of new washroom in 49B
13. Repair the defective concrete Lintel above the window at the rear façade of 49AB

#### METALWORK

14. Make good and repair all existing steel windows, including replacement of broken glazing panes
15. Make good and repair existing metal sliding doors at entrance and metal doors at balconies
16. Prepare surfaces and apply paint finishes to metal sliding doors at entrance doors, steel windows, metal balustrades and doors at balconies, metal gills of rear room at 49A
17. Supply and install metal picture rail hanging system with adjustable hanging hooks at G/F

#### FINISHES

18. Remove debonded plaster and replaster the internal and external walls
19. Prepare the surface and paint all internal and external walls and soffit of flat roof and floor slab of balconies
20. Supply and install mosaic tiles to replace the missing parts the façades to match with original
21. Supply and install tiles to the walls and floors, and aluminium ceiling at the new washroom in 49B

#### ELECTRICAL AND MECHANICAL SERVICES

22. Supply and install new electrical and mechanical services to current standard, including MCB distribution board, electricity meter box, tube light, down light, spot light, switch, socket, ceiling fan, wall mounted fan, exhaust fan, etc.
23. Supply and install new sanitary fittings to the new washroom in 49B, including water closet and cistern, toilet paper holder, sink, electric water heater, shower set, shower mixer, etc.
24. Construct a septic tank and soakaway pit in accordance with DLO's standard, including all associated sewage disposal piping and builder's works
25. Prepare submission including all necessary documents by a licensed plumber for the application of water apply to Water Services Department
26. Supply and install water taps at the outdoor space, including new pipework connected to existing water supply system

#### FIRE SERVICE INSTALLATIONS AND HOSE REEL SYSTEM

27. Supply and install fire service installations to the satisfaction of Director of Fire Services, including smoke detector, exit sign, direct link, emergency lighting, etc.
28. Supply and install hose reel system to the satisfaction of Director of Fire Services, including control panel, water meter, cabinet, valves, eater pipes, hose reel, jet nozzle, breakglass unit, alarm bell, flash light, signal connection to alarm panel, etc.

#### note

1. The copyright of this drawing / schedule remains with Ptah Heritage. No part of this drawing / schedule may be reproduced in any form or by any means without the written permission from Ptah Heritage Ltd.
2. Figured dimensions are to be taken in preference to scaled. All dimensions should be checked by the contractors, and any discrepancies should be referred to Ptah Heritage before the work commences on site. Do not scale drawing.

#### revision

C	RE-TENDER DRAWING	OCT 2023
B	TENDER DRAWING	MAY 2023
A	FIRST DRAFT FOR COMMENT	13 MAR 2023



**RESTORATION AND REPAIR WORKS OF HOUSE NO. 49A AND 49B AT LAI CHI WO VILLAGE, SHA TAU KOK, N.T.**

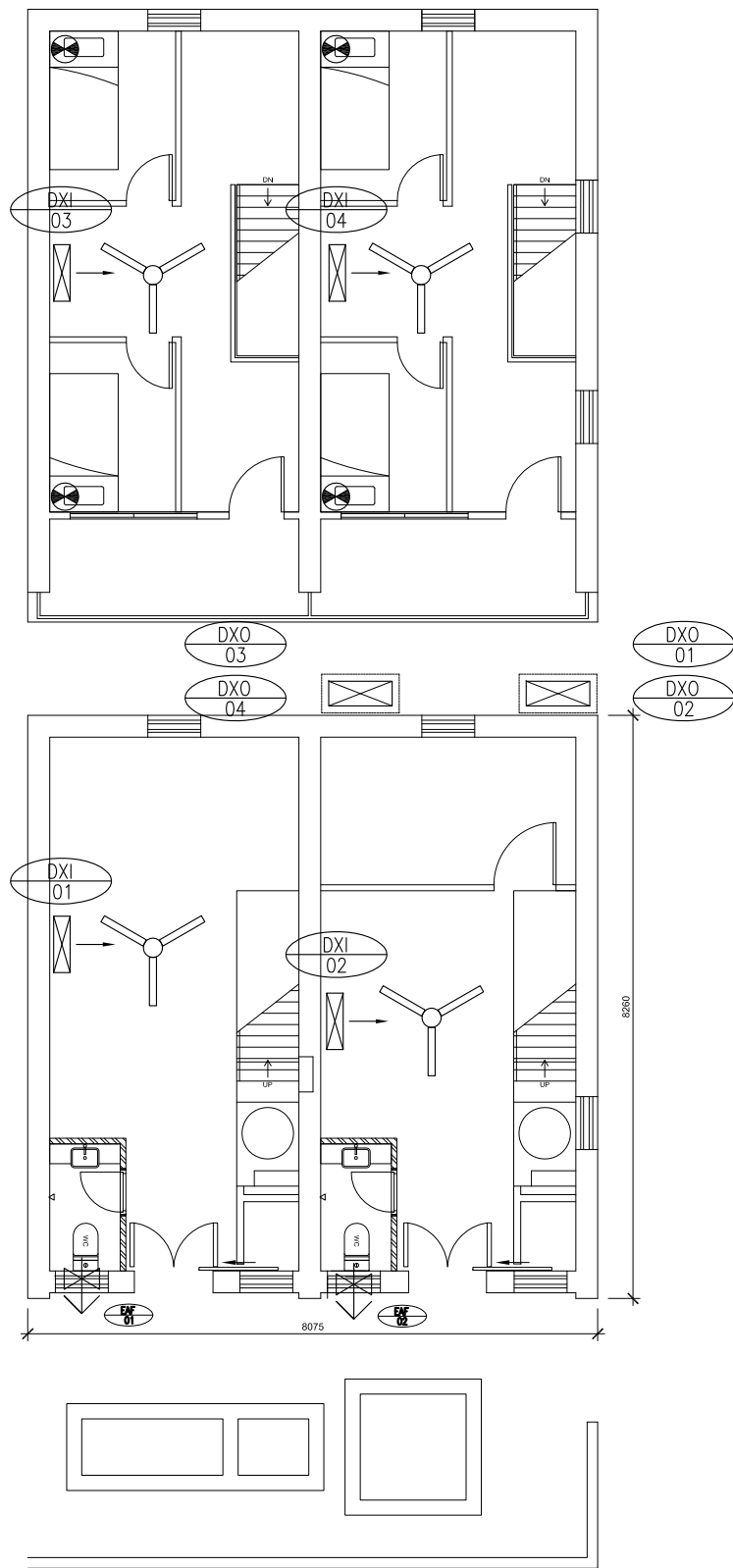
**SCOPE OF RESTORATION AND REPAIR WORKS**

scale	<b>1 : 75 @a3</b>	drawn	<b>KY</b>
no.	<b>49LCW-001</b>	checked	<b>HL</b>



P.O. Box #465  
Ma On Shan Post Office  
t 2994 3282 f 2994 3238

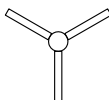
TENDER  
DRAWING



AIR-CONDITIONING UNIT (OUTDOOR UNIT)



AIR-CONDITIONING UNIT (INDOOR UNIT)



CEILING FAN 1200mm DIA. WITH 3-SPEED CONTROLLER



WINDOW-MOUNTED VENTILATION FAN



300mm DIA. WALL-MOUNTED OSCILLATING FAN C/W 3-SPEED SELECTION

SCHEDULE OF SPLIT-TYPE A/C UNIT




SCHEDULE FOR SPLIT-TYPE A/C UNIT								
FLOOR	INDOOR UNIT	COOLING CAPACITY TOTAL LOAD (kW)	HEATING CAPACITY TOTAL LOAD (kW)	SUPPLY AIR FLOW RATE AT LOW SPEED (L/S)	POWER CONSUMPTION (kW)	TYPE OF INDOOR UNIT	INTERLOCK W/RY OUTDOOR UNIT	POWER SUPPLY (V/Ph/Hz)
G/F	DXI 01	6.6	8.0	362	1.95	WALL-MOUNTED INVERTER TYPE	DXO 01	220/1/50
G/F	DXI 02	6.6	8.0	362	1.95	WALL-MOUNTED INVERTER TYPE	DXO 02	220/1/50
1/F	DXI 03	6.6	8.0	362	1.95	WALL-MOUNTED INVERTER TYPE	DXO 03	220/1/50
1/F	DXI 04	6.6	8.0	362	1.95	WALL-MOUNTED INVERTER TYPE	DXO 04	220/1/50

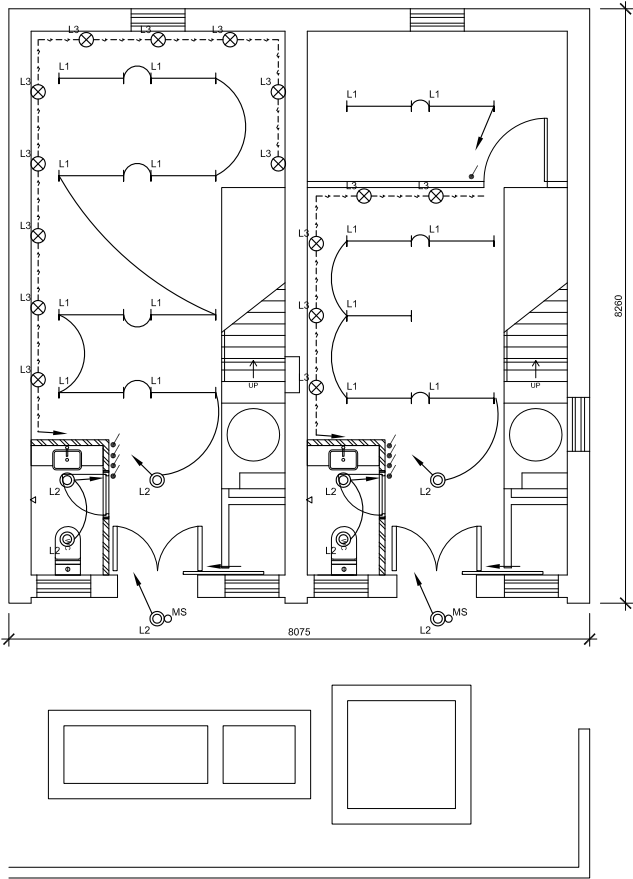
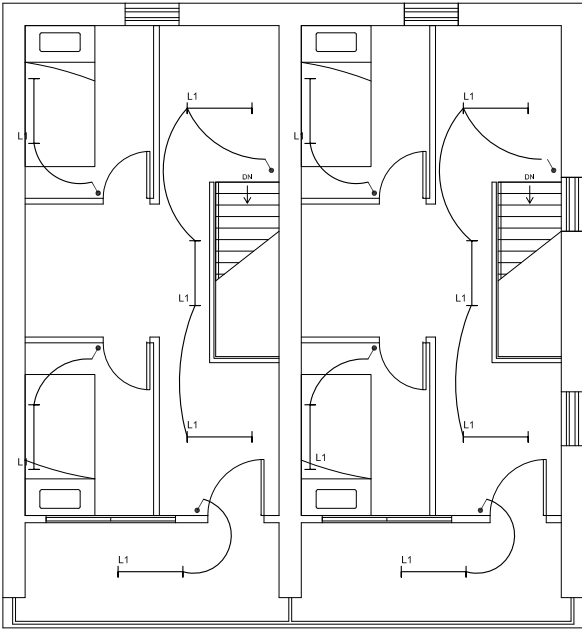
SCHEDULE FOR EXHAUST AIR FAN									
FLOOR	FAN REFERENCE NO.	SERVED AREA	FAN TYPE	APPROX. IMPELLER DIA. (mm)	MAX. SPEED (RPM)	AIR QUANTITY (L/S)	STATIC PRESSURE (Pa)	POWER CONSUMPTION (kW)	POWER SUPPLY (V/Ph/Hz)
G/F	EXF 01	TOILET	WINDOW-MOUNTED FAN	#150	1450	58	-	0.0077	220/1/50
G/F	EXF 02	TOILET	WINDOW-MOUNTED FAN	#150	1450	58	-	0.0077	220/1/50

REV.	DESCRIPTION	DATE
CLIENT		
DESIGNER		
BUILDING SERVICES ENGINEER		
PROJECT		
RESTORATION AND REPAIR OF HOUSE NO. 49A AND 49B, LAI CHI WO VILLAGE, SHA TAU KOK, N.T., HONG KONG		
DRAWING TITLE		
MVAC INSTALLATION – G/F AND 1/F LAYOUT PLAN		
DRAWING NO		REVISION
BS-01		0
DRAWN BY		
JC		
CHECKED BY		DATE
TW		MAR-2023
APPROVED BY		SCALE
WW		1:100

TENDER  
DRAWING



LIGHTING SCHEDULE

SYMBOL	INDEX	DESCRIPTION
	L1	1 X 12W, T8 LED TUBE, C/W WHITE CASING & SURFACE MOUNT TYPE.
	L2	12W LED IP65 RECESSED MOUNT DOWNLIGHT C/W MOTION SENSOR "MS".
	L3	12W LED TRACKLIGHT



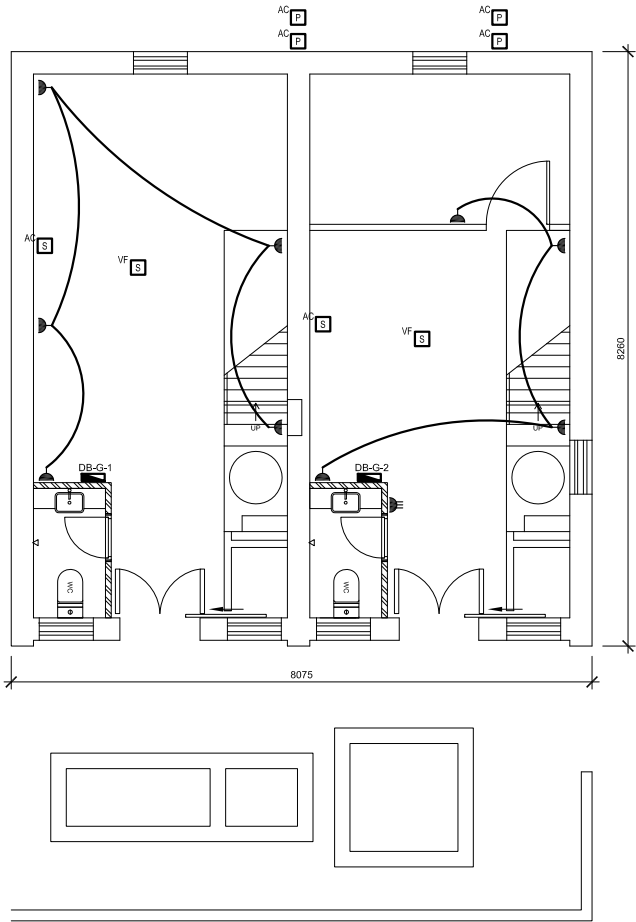
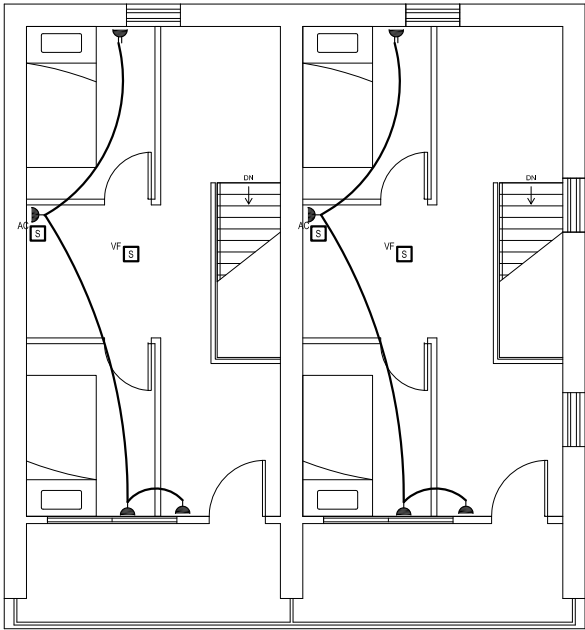
REV.	DESCRIPTION	DATE
CLIENT	 香港鄉郊基金	
DESIGNER		
BUILDING SERVICES ENGINEER	 諾進機電工程顧問有限公司 Top Prof M&E Consultants Ltd.	
PROJECT	RESTORATION AND REPAIR OF HOUSE NO. 49A AND 49B, LAI CHI WO VILLAGE, SHA TAU KOK, N.T., HONG KONG	
DRAWING TITLE	LIGHTING INSTALLATION – G/F AND 1/F LAYOUT PLAN	
DRAWING NO	BS-02	REVISION 0
DRAWN BY JC		
CHECKED BY W	DATE	MAR-2023
APPROVED BY WW	SCALE	1:100

LEGENDS

-  13A 1-PHASE TWIN SOCKET OUTLET
-  32A 3-PHASE SOCKET OUTLET (5 PINS)
- P

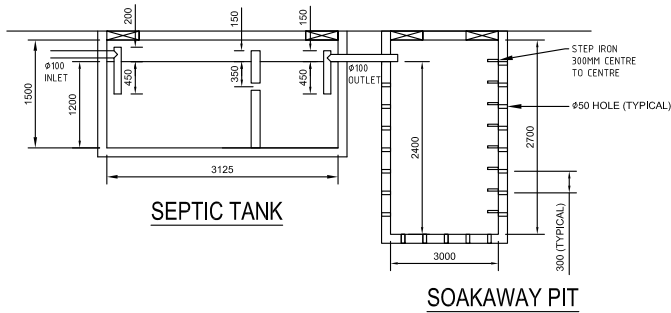
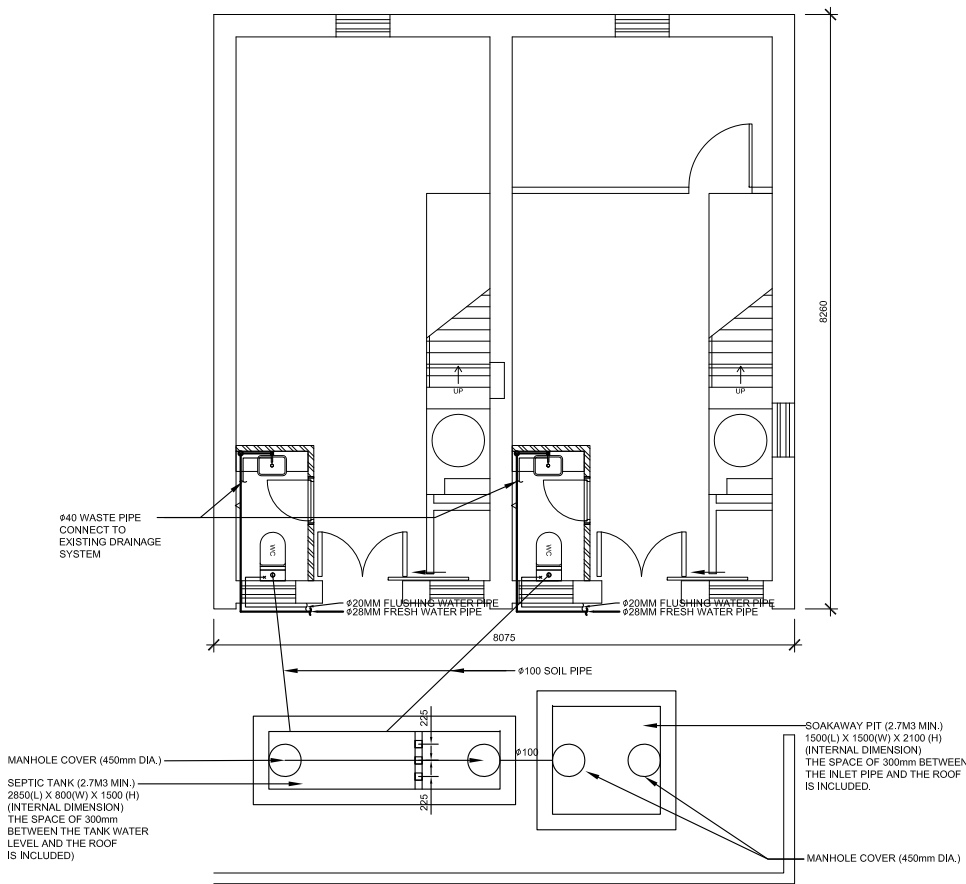
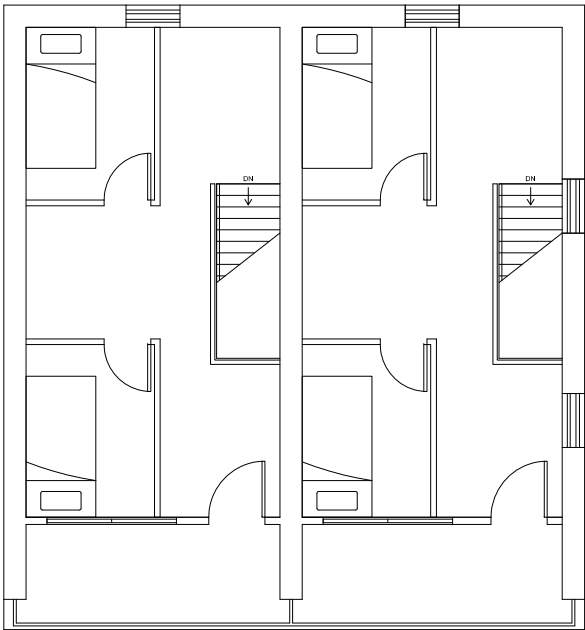
 20A CONNECTION UNIT W/PILOT LIGHT
- S

 13A FUSE SPUR UNIT
- AC AIR-CONDITIONING UNIT
- VF VENTILATION FAN



TENDER  
DRAWING

REV.	DESCRIPTION	DATE
CLIENT		
 The Hong Kong Countryside Foundation 香港鄉郊基金		
DESIGNER		
 ptah heritage ltd		
BUILDING SERVICES ENGINEER		
 諾進機電工程顧問有限公司 Top Prof M&E Consultants Ltd.		
PROJECT		
RESTORATION AND REPAIR OF HOUSE NO. 49A AND 49B, LAI CHI WO VILLAGE, SHA TAU KOK, N.T., HONG KONG		
DRAWING TITLE		
ELECTRICAL INSTALLATION – G/F AND 1/F LAYOUT PLAN		
DRAWING NO		REVISION
BS-03		0
DRAWN BY		DATE
JC		MAR-202
CHECKED BY		SCALE
TW		1:100
APPROVED BY		
WW		



## TENDER DRAWING

REV.	DESCRIPTION	DATE
CLIENT		
<div><p>The Hong Kong Countryside Foundation 香港鄉郊基金</p></div>		
DESIGNER		
<div><p>ptah heritage ltd</p></div>		
BUILDING SERVICES ENGINEER		
<div><p>諾進機電工程顧問有限公司 <u>Top Prof M&amp;E Consultants Ltd.</u></p></div>		
PROJECT		
RESTORATION AND REPAIR OF HOUSE NO. 49A AND 49B, LAI CHI WO VILLAGE, SHA TAU KOK, N.T., HONG KONG		
DRAWING TITLE		
PLUMBING & DRAINAGE INSTALLATION – G/F AND 1/F LAYOUT PLAN		
DRAWING NO		REVISION
BS-04		0
DRAWN BY		DATE
JC		
CHECKED BY		MAR-2023
TW		
APPROVED BY		SCALE
WW		1:100