

Disclaimer

1. To facilitate engagement by procurers/owners of tenderers for the provision of relevant professional services, Hong Kong Building Rehabilitation Facilitation Services Limited (a wholly owned subsidiary of the Urban Renewal Authority) has provided these Tender Documents through the Building Rehabilitation Platform to procurers/owners for their reference.
2. These Tender Documents are provided only as reference documents for procurers/owners to obtain tenders for relevant professional services referred to in such documents or for other professional services to be suggested by tenderers to procurers/owners. These Tender Documents contain the general relevant basic terms only, and procurers/owners shall revise or insert other terms and conditions into these Tender Documents according to their actual needs before they are sent to invite tenderers for submission of tenders.
3. Hong Kong Building Rehabilitation Facilitation Services Limited makes no representation, statement, warranty or guarantee, whether express or implied, as to whether these Tender Documents are suitable for adoption as contract documents for the relevant services or works or use to obtain related tenders. Users choosing to adopt these Tender Documents or any part thereof shall be responsible themselves to determine the meaning, accuracy and appropriateness of their content, and shall seek professional advice where required to adequately and clearly understand the contents of these Tender Documents and any risks and consequences that may arise as a result of using these Tender Documents.
4. Hong Kong Building Rehabilitation Facilitation Services Limited shall not accept any liability arising from any use of or reliance on these Tender Documents or any part thereof and/or be liable for any direct, indirect, special and/or consequential losses or damages incurred therefrom.
5. The content of these Tender Documents will be amended and updated from time to time. Persons using these Tender Documents shall ensure that they are using the latest version of these Tender Documents. The latest version of these Tender Documents are available on and can be downloaded free of charge from the website of Building Rehabilitation Platform at www.brplatform.org.hk.

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Part A: Instructions to Tenderers and Conditions of Tender

Instructions to Tenderers

1. Procurer: _____ (the "Procurer" as defined in the Conditions of Tender)

[Name of Owners' Corporation / Owner(s) of (name of the building)]

Contact person: _____

Contact phone number: _____

Contact email address: _____

Regarding the tender of the lift modernisation/replacement works and lift maintenance services for the Lifts (as defined in the Conditions of Contract) (the "Project") at the building located at _____ (the "Building").

2. The tenderer is invited to submit a tender for the Project subject to and in accordance with the terms of these Instructions to Tenderers and the Conditions of Tender in Part A of these Tender Documents. For details of the works and services required by the Procurer for the Project, please refer to Part D(I) and (II) of these Tender Documents, in particular Part D(I) - Schedule 1(a) (Contract Specification) and Part D(II) - Schedule 1a (Contract Specification) respectively.
3. Set out below are the key dates (and their descriptions) referred to in the Conditions of Tender:

	Key Dates	Date	Description
1.	Clarification request closing day	[day] [month] [year]	Deadline for tenderers to submit written requests to the Procurer for corrections, clarifications or supplementary information
2.	Tender clarification day	[day] [month] [year]	The day on which the Procurer issues in writing clarification information relating to these Tender Documents
3.	Tender submission deadline	_____ a.m./p.m., [day] [month] [year]	Deadline for submission of tender
4.	Tender validity period	[6] months after the date of the tender submission deadline	The period for which the tender remains valid

Conditions of Tender

General Conditions

1. The “**Procurer**” means the party named as the “Procurer” in the Instruction to Tenderers. Where it refers to the owners of the Building, the definition of “Procurer” shall refer to the owners who collectively own the legal title to the Building.
2. The tenderer shall be a registered lift contractor registered under Lifts and Escalators Ordinance (Cap.618) who is a company which possesses a valid Business Registration Certificate and be able to provide sufficient resources to carry out the works and services as required in these Tender Documents.
3. The Procurer takes no responsibility for the completeness or accuracy of these Tender Documents, but the tenderer may submit request(s) in writing to the Procurer for corrections, clarifications or supplementary information to these Tender Documents on or before the clarification request closing day, and the Procurer shall issue in writing corrections, clarifications or supplementary information on or before the tender clarification day. Such corrections, clarifications or supplementary information shall be issued to all tenderers and become part of these Tender Documents. The tenderer shall itself be liable for any errors and misunderstanding in relation to the tender, to which the Procurer takes no responsibility.
4. The Procurer is entitled to, by written notice including any tender addendum to all tenderers, make amendments or changes to any terms of these Tender Documents (for example, reduce the scope of works and services, extend the clarification request closing day or the tender submission deadline) before the tender submission deadline. The tenderer shall confirm whether it agrees and accepts the relevant changes in accordance with the instructions provided in the written notice. The tenderer may not claim for any compensation arising from such amendments or changes to the terms of these Tender Documents.
5. The Tenderer may itself carry out an on-site inspection at the address of the Building. Please contact the contact person set out in paragraph 1 of the Instructions to Tenderers to arrange for such an inspection. For Procurers participating in the “Smart Tender” Scheme, please follow the arrangement specified in the Tender Invitation Letter therein.
6. The tenderer is deemed to have ascertained in the above site visit all relevant particulars relating to and affecting the works and services for the Project, the location of the Building and the means of access.
7. The following information about the conditions of lift shaft, lift pit and lift machine room for each of the Lifts is provided for tenderer’s reference:
 - (a) the survey report on the conditions of lift shaft, lift pit and lift machine room for each of the Lifts (Part F of these Tender Documents);
 - (b) a 360-degree video showing the conditions of lift shaft for each of the Lifts (Part G of these Tender Documents); and
 - (c) the basic dimensions of the lift shaft(s) (Part H of these Tender Documents).

8. The information mentioned in paragraph 7 above is intended to indicate generally the conditions of the lift shaft, lift pit and lift machine room for each of the Lifts and the tenderer shall verify any such information itself independently where it is relevant to its tender price. The tenderer shall be deemed, whether or not it has attended any site visit, to have obtained all necessary information concerning the site conditions which may affect or influence its tender price and to be fully aware of the scope of the works and services for the Project. The Procurer will not entertain any claim for any expenses incurred by the tenderer as a result of lack of information or discrepancies of information about the Project, including but not limited to the existing lift installations at the Building and the site conditions. The tenderer shall verify its execution of Contract against the actual site conditions and dimensions upon or after the Contract Award Date (as defined in the Articles of Agreement in Parts D(I) and D(II) of these Tender Documents.
9. By signing and submitting a tender, the tenderer agrees and undertakes to comply with all terms and conditions set out in these Tender Documents. The tenderer also agrees and undertakes to comply with the terms and conditions of the Urban Renewal Authority's e-tendering platform (as amended by the Urban Renewal Authority from time to time, the current version of which can be accessed here: <https://smarttender.brplatform.org.hk>) (the "**E-Tendering Platform**") in providing the works and services as stated in these Tender Documents.

Confidentiality, Probity and Anti-collusion Clauses

10. Throughout the tendering process, the tenderer shall not offer, solicit or accept an advantage as defined in section 2 of the Prevention of Bribery Ordinance (Cap. 201) or violate any relevant provision under the Prevention of Bribery Ordinance and shall procure that its directors, employees, agents and sub-contractors (where appropriate) comply with this paragraph.
11. Any breach of the provisions under paragraph 10 above by the tenderer or any of its directors, employees, agents or its sub-contractors (where appropriate) may result in the tender of the tenderer being invalidated, and additionally the tenderer may be subjected to legal liabilities for such conducts.
12. The tenderer's holding company or subsidiary of the tenderer's holding company (as defined in sections 13 to 15 of the Companies Ordinance (Cap. 622)) may tender for the Project provided such relationship is disclosed in the Declaration of Affiliates Tendering.
13. Prior to notification of results of the tender to the successful tenderer by the Procurer, and except as provided in paragraph 2 of the sample form of "Non-collusive Tendering Certificate" set out in Part C(I) of these Tender Documents, the tenderer must ensure that the tender is prepared without any agreement, arrangement, communication, understanding, promise or undertaking with any other person, including regarding price, tender submission procedure or any terms of the tender. In the event of any breach of this paragraph, the Procurer reserves the right to invalidate the tender submitted by the tenderer and claim damages.
14. Bid-rigging is inherently anti-competitive and is considered serious anti-competitive conduct under the Competition Ordinance (Cap. 619). Tenderers who engage in bid-rigging conduct may be liable for the imposition of pecuniary penalties and other sanctions under the Competition Ordinance.

15. The tenderer shall submit:
- (i) a Non-collusive Tendering Certificate in the form set out in Part C(I) of these Tender Documents,
 - (ii) (if the tenderer's subsidiary or a subsidiary of the holding company of the tenderer is tendering for the Project) an "Declaration of Affiliates Tendering" in the form set out in Part C(II) of these Tender Documents; and
 - (iii) a "Declaration of Charged and Convicted Dishonesty Related Offices" in the form set out in Part C(III) of these Tender Documents,

duly signed by an authorized person on behalf of the tenderer. By signing and submitting the said certificates and declaration, the tenderer agrees and undertakes to comply with all provisions set out in the said certificates and declaration.

Preparation of tender

16. No alteration to the format and contents of any of the documents contained in these Tender Documents (except where completion of information is required) is allowed and if the tenderer makes any such alteration in its tender, its tender may not be considered.
17. This is a lump sum contract. The rates and prices¹ inserted by the tenderer in the tender shall include any associated works and services necessary to the performance of the works and services for the Project required under the Conditions of Contract but for which no separate quotation is expressly required.
18. The tenderer shall make allowance in its tender for all the works for the Project as specified in these Tender Documents, including all the scope of works, Contract Specification and Reference Drawings (if any) (as defined in the Conditions of Contract in Parts D(I) and D(II) of these Tender Documents). Costs and expenses relating to the performance of any necessary works and services for the Project shall be deemed to be included in the lump sum fee or a rate for such works or services as inserted by the tenderer in the tender. The tenderer shall adequately understand the contents and requirements of these Tender Documents and the works and services for the Project before the submission of the tenders, and shall itself be liable for all losses resulting from any misjudgment.
19. The tenderer must break down and insert the quantities and unit rates in the Schedule of Rates contained in Parts D(I) and D(II) of these Tender Documents in accordance with the Preambles to the Schedule of Rates. For the avoidance of doubt, unless otherwise stated, the tenderer shall insert a unit rate, which is not "zero value" for each item (including Optional Items) in the Schedule of Rates. The quantities as set out in the Schedule of Rates do not form part of Contract.

20. For the Schedule of Rates No. A and B of the Works Tender, the tenderer shall note the following items:-
- (i) The column of "Item Involved" in the Schedule of Rates indicates whether the components and the works are required to be carried out and completed by the tenderer or not. The tenderer must select either "Yes" or "No" in the "Item Involved" column for the related items, in respect of both the Schedule of Rates No. A (Lift Modernization Works) and/or the Schedule of Rates No. B (Lift Replacement Works), at least one or more of the alternatives for each of the essential items.
 - (ii) The tenderer must insert the quantities, unit rates and amounts in the Schedule of Rates for all the items to which the tenderer has selected "Yes" in the "Item Involved" column. Zero "0" value is not allowed.
 - (iii) Whereas, for the Schedule of Rates No. A, if the priced essential item can achieve more than one safety functions, the tenderer does not need to price for a particular alternative for an essential item, and the tenderer can select "No" in the "Item Involved" column. The related items are deemed to be excluded from the scope of works.
21. For The Schedule of Rates No. M1 to M3 of the Maintenance Tender, the tenderer shall note the following items:-
- (i) Except otherwise stated, the tenderer must price for all items under the Schedule of Rates. Zero "0" value is not allowed.
 - (ii) Upon the selection of the tenderer by the Owner as set out in the Letter of Acceptance, the tenderer shall execute either the maintenance works after lift modernisation works (SoR - Section M1) or the lift replacement works (SoR - Section M2) or other maintenance services (SoR – Section M3) in compliance with the Contract.
 - (iii) If the tenderer has priced the Optional item A. O4 of Schedule of Rates No. A, the related item M1.4 is required to be priced. Otherwise, item M1.4 can be left blank.
 - (iv) The monthly rate for provision of routine maintenance works after the resumption of the modernization stated in item M1.1 for the first three (3) years is to be the average of the monthly rates for 1st year to 3rd year inserted in the description of works and priced by the tenderer.
 - (v) The monthly rate for provision of routine maintenance works after the resumption of the replacement stated in item M1.1 for the first three (3) years is to be the average of the monthly rates for 1st year to 3rd year inserted in the description of works and priced by the tenderer.
22. The unit rates or prices in the Schedule of Rates shall be used as a basis for evaluation of Variation in the Works which may be ordered by the Procurer pursuant to the Conditions of Contract.

Tendering submission procedures and timing

23. The tenderer shall duly complete, sign (where applicable) and submit a full set of these Tender Documents, including the original of each of the following documents:
- (i) a tender for the lift modernisation works / lift replacement works in the form set out in Part B(I) of these Tender Documents (“**Works Tender**”);
 - (ii) a tender for the lift maintenance services in the form set out in Part B(II) of these Tender Documents (“**Maintenance Tender**”);
 - (iii) a Non-collusive Tendering Certificate in the form set out in Part C(I) of these Tender Documents;
 - (iv) a "Declaration of Affiliates Tendering" in the form set out in Part C(II) of these Tender Documents (if the tenderer’s subsidiary or a subsidiary of the holding company of the tenderer is tendering for the Project);
 - (v) a “Declaration of Charged and Convicted Dishonesty Related Offences” in the form set out in Part C(III) of these Tender Documents;
 - (vi) Parts D(I) and D(II) of these Tender Documents: Schedule 3 to the Conditions of Contract (Information relating to the Works (to be completed by Tenderer)).
 - (vii) copy of the valid business registration certificate of the tenderer;
 - (viii) background information about the tenderer, including the organization structure and the past **[two]**¹ years auditor’s report or audited financial statements of the tenderer (if companies are newly formed, they shall submit the past **[one]**² year relevant reports);
 - (ix) records of participation in lift related projects in Hong Kong in the past **[three]**^{2’} years (including year of participation, name of the Building and address);
 - (x) copy of the reference letter(s) by employer(s) of previous contracts in the past **[three]**³ years (if any);
 - (xi) copy of the quality assurance certificate;
 - (xii) copy of the tenderer's code of conduct (if any);
 - (xiii) method statement of execution of the Project;
 - (xiv) copy of the type approval certificate for the proposed products; and
 - (xv) tentative program based on the milestone schedule as stated in Schedule 2 of Part D(I) of these Tender Documents.

The tenderer shall submit all the documents as referred to in paragraph 23 above with its tender submission. The Procurer may not consider a submitted tender if it does not comply fully with this provision. In addition, the Procurer or its representative may, but is not obliged

¹ The number in [] is only a suggested figure and can be amended by the Procurer.

² The number in [] is only a suggested figure and can be amended by the Procurer.

^{2’} The number in [] is only a suggested figure and can be amended by the Procurer.

³ The number in [] is only a suggested figure and can be amended by the Procurer.

to, request the tenderer to submit any missing documents. If upon the said request the tenderer still fails to submit the required missing documents within the period specified by the Procurer or its representative, the tenderer's tender will not be considered further and shall be deemed to be non-conforming.

24. The tenderer shall also duly complete the Schedule of Rates in the forms set out in Part D(I) and D(II) of these Tender Documents: Schedule 3 and shall, before the tender submission deadline:

- (i) upload the duly completed Schedule of Rates in format specified by the Urban Renewal Authority to the Urban Renewal Authority's E-Tendering Platform in accordance with the E-Tendering Platform's terms of use; and
- (ii) print a copy of the completed and uploaded Schedule of Rates from the E-Tendering Platform, sign and affix its company chop on it, and replace the original Schedule 3 in these Tender Documents with the printed copy for submission with the other documents referred to in paragraph 23 above.

If the Schedule of Rates is not uploaded to the E-Tendering Platform in accordance with this paragraph and/or if there is any discrepancy between the Schedule of Rates submitted in hard copy format and that as uploaded onto the E-Tendering Platform by the tenderer, the Schedule of Rates submitted to the E-Tendering Platform shall be treated as the tenderer's completed Schedule of Rates.

25. The tenderer must deposit the documents as referred to in above paragraphs 23 and 24 into the tender box located at _____ before the tender submission deadline. Tenderers are reminded that late submission or submission sent to the wrong place shall not be considered by the Procurer. If the tenderer submits more than one tender, the tender submitted later in time shall prevail and supersede its earlier tender(s). If the Owner is unable to ascertain which of the tenderer's tenders is the latest one, all tenders submitted by the tenderer shall be invalidated.

26. In the event of any of the following situations, the tender submission deadline shall be extended to the same time of the following working day (not including Saturday, Sunday and public holiday):

- (i) The Observatory has announced that a Typhoon Signal No. 8 or above or a Black Rainstorm Warning will be hoisted or issued at least 4 hours before the tender submission deadline; or
- (ii) Typhoon Signal No. 8 or above has been hoisted before the tender submission deadline and has been maintained until 4 hours before the tender submission deadline; or
- (iii) The Observatory has issued a Black Rainstorm Warning before the tender submission deadline, and this warning has been maintained until 4 hours before the tender submission deadline.
- (iv) Other unforeseeable incidents (including "Extreme Conditions" announced by the Hong Kong government) that result in the closure of the tender collection place mentioned in paragraph 25 above, 4 hours before the tender submission deadline.

27. Nonetheless, if the Typhoon Signal No. 8 or above, Black Rainstorm Warning, or "Extreme Conditions" announced by the Hong Kong government are lifted or replaced by a lower

warning signal 4 hours or earlier before the tender submission deadline, the tender submission deadline will remain unchanged. Paragraph 24 and 25 also apply on the extended tender submission deadline.

Review and acceptance

28. The Procurer may not consider any tender not complying with the Instructions to Tenderers and Conditions of Tender.
29. The Procurer may reject the lowest or any tender. The Procurer will not and is not required to give any explanation for the selection or rejection of any tender. The Procurer may accept the Works Tender for the combinations of any options therein (as described in the form of Letter of Acceptance set out in Part E(I) of these Tender Documents) and at the same time accept or not accept the Maintenance Tender.
30. The Maintenance Tender (including the options and durations) or any scope or items of works in the Works Tender which are not accepted by the Procurer may be awarded to others at the Procurer's absolute discretion. The tenderer shall not be entitled to any compensation as a result of the non-acceptance of any of its tender (and/or any combinations of the options therein) and/or the Procurer's award of any such and/or related works or services to others whether or not they are also tenderers.
31. The Procurer may accept a tender during the validity period (as specified in paragraph 3 of the Instructions to Tenderers) in accordance with these Conditions of Tender.
32. If a tender is accepted by the Procurer, the Procurer shall give notice of acceptance of the relevant tender to the tenderer in the form of the Letter of Acceptance set out in Parts E(I) and/or E(II) of these Tender Documents (as applicable). The tenderer and the Procurer shall then enter into the Articles of Agreement in the form set out in Parts D(I) and/or (II) of these Tender Documents (as applicable to the tender accepted) within **14 days** after the date of receipt of the Letter of Acceptance (or such other time limit as specified by in the Procurer).

Part B(l): Form of Tender for Lift Modernisation Works / Lift Replacement Works

Form of Tender (for lift modernisation / lift replacement works)

To: _____ ("Procurer")

Regarding the lift modernisation/replacement works ("**Works**") for _____]
at the building located at _____] (the "**Building**")

1. Tenderer: _____ ("**Tenderer**")

Business registration number: _____

Business registration expiry date: _____

2. The Tenderer has read and understood the Tender Documents dated _____ issued by the Procurer and has inspected the Building. The Tenderer hereby submits the duly completed and signed Form of Tender together with the following original documents in accordance with these Tender Documents:

- (i) Tender Documents Part C (I): Non-collusive Tendering Certificate;
- (ii) Tender Documents Part C (II): Declaration of Affiliates Tendering;
- (iii) Tender Documents Part C(III): Declaration of Charged and Convicted Dishonesty Related Offences
- (iv) Tender Documents Part D(I): Schedule 3 (Information relating to the Works and Schedule of Rates (to be completed by Contractor)) to the Conditions of Contract ("**Completed Schedule 3**"); and
- (v) Other relevant documents or copies (where applicable) referred to in paragraphs 23 and 24 of the Conditions of Tender.

3. The Tenderer hereby offers to commence, execute and complete all works and services in relation to the Works in accordance with the Contract (as defined in the Articles of Agreement) in consideration thereof for the receipt of the Contract Price (as defined in the Conditions of Contract).

4. The Tenderer agrees that if this tender is accepted by the Procurer, the Tenderer shall within **[14]** days after the date of receipt of the Letter of Acceptance from the Procurer submit to the Procurer the duly completed Schedule 4 (Declaration of Ethical Commitments) to the Conditions of Contract and enter into the Articles of Agreement with the Procurer in accordance with these Tender Documents.

5. The Tenderer agrees and undertakes to abide by the Conditions of Tender and that the Procurer may accept this tender during the tender validity period as specified in the Instructions to Tenderers in Part A of these Tender documents.

6. If this tender is accepted by the Procurer, this tender and the Letter of Acceptance issued by the Procurer shall be a contract between the Tenderer and the Procurer, which shall be legally binding until it is superseded and replaced by the Articles of Agreement.

Seal/Chop of Company	:	
Name of Company	:	
Signature of Company's authorized representative	:	
Name of Company's authorized representative	:	
Title of Company's authorized representative	:	
Signature of Witness	:	
Name of Witness	:	
Title of Witness	:	
Date	:	

Part B(II): Form of Tender for Lift Maintenance Services

Form of Tender (for lift maintenance services)

To: _____ (“Procurer”)

Regarding the lift maintenance services (“Services”) for _____ at the building located at _____ (“Building”)

1. Tenderer: _____ (“Tenderer”)

Business registration number: _____

Business registration expiry date: _____

2. The Tenderer has read and understood the Tender Documents dated _____ issued by the Procurer and has inspected the Building. The Tenderer hereby submits a full set of the Tender Documents which has been duly completed and signed (where applicable) together with the following original documents in accordance with these Tender Documents:

- (i) Tender Documents Part C (I): Non-collusive Tendering Certificate;
- (ii) Tender Documents Part C (II): Declaration of Affiliates Tendering;
- (iii) Tender Documents Part C(III): Declaration of Charged and Convicted Dishonesty Related Offences
- (iv) Tender Documents Part D(II): Schedule 3 (Information relating to the Services and Schedule of Rates (to be completed by Contractor)) to the Conditions of Contract (“**Completed Schedule 3**”); and
- (v) Other relevant documents (where applicable) referred to in paragraphs 23 and 24 of the Conditions of Tender.

3. The Tenderer hereby offers to commence, execute and complete all works and services in relation to the Services in accordance with the Contract (as defined in the Articles of Agreement) in consideration thereof for the receipt of the Contract Price (as defined in the Conditions of Contract).

4. The Tenderer agrees that if this tender is accepted by the Procurer, the Tenderer shall within [14] days after the date of receipt of the Letter of Acceptance from the Procurer submit to the Procurer the duly completed Schedule 4 (Declaration of Ethical Commitments) to the Conditions of Contract and enter into the Articles of Agreement with the Procurer in accordance with these Tender Documents.

5. The Tenderer agrees and undertakes to abide by the Conditions of Tender and that the Procurer may accept this tender during the tender validity period as specified in the Instructions to Tenderers in Part A of these Tender documents.

6. If this tender is accepted by the Procurer, this tender and the Letter of Acceptance issued by the Procurer shall be a contract between the Tenderer and the Procurer, which shall be legally binding until it is superseded and replaced by the Articles of Agreement.

Seal/Chop of Company	:	
Name of Company	:	
Signature of Company's authorized representative	:	
Name of Company's authorized representative	:	
Title of Company's authorized representative	:	
Signature of Witness	:	
Name of Witness	:	
Title of Witness	:	
Date	:	

Part C(l): Non-collusive Tendering Certificate

Non-collusion Tendering Certificate

To: _____ (the "Procurer")
[Name and address of Owner's Corporation / Owner(s) of (name of the building)]

Regarding the tenders of the lift modernisation/replacement works and lift maintenance services for the Lifts (as defined in the Conditions of Contract) (the "**Tenders**") at the building located at _____]

Dear Sir/Madam,

We, _____,
[Name of company]

of _____
[Address of Tenderer]

refer to the Tenders.

1. We represent and warrant in relation to the Tenders:

- (i) Our Tenders were developed genuinely, independently and made with the intention to accept the relevant contract if awarded;
- (ii) Our Tenders were not prepared with any agreement, arrangement, communication, undertaking, promise or undertaking with any person (including any other tenderer or competitor) regarding:
 - (1) prices;
 - (2) methods, factors or formulas used to calculate prices;
 - (3) an intention or decision to submit, or not submit, the Tenders;
 - (4) an intention or decision to withdraw the Tenders;
 - (5) the submission of Tenders that do not conform with the requirements of the Tenders;
 - (6) the quality, quantity, specifications or delivery particulars of the products or works and services to which the Tenders relate; and
 - (7) the terms of the Tenders;

and we undertake that I/we will not, prior to the award of the relevant contract, enter into or engage in any of the foregoing.

2. Paragraph 1(ii) of this certificate shall not apply to agreements, arrangements, communications, undertakings, promises or undertakings with:

- (i) the Procurer;
- (ii) a joint venture partner (where joint venture arrangements relevant to the Tenders exist and which are notified to the Procurer);

- (iii) contractors or sub-contractors, provided that the communications are held in strict confidence and limited to the information required to facilitate consultancy arrangement or sub-contract;
 - (iv) professional advisers, provided that the communications are held in strict confidence and limited to the information required for the adviser to render their professional advice in relation to the Tenders;
 - (v) insurers or brokers for the purpose of obtaining an insurance quote, provided that the communications are held in strict confidence and limited to the information required to facilitate that particular insurance arrangement; and
 - (vi) banks for the purpose of obtaining financing for the relevant contract, provided that the communications are held in strict confidence and limited to the information required to facilitate that financing.
3. We understand that we are required to disclose all intended sub-contracting arrangements relating to the Tenders to the Procurer, including those which are entered into after the relevant contract is awarded. We warrant that we have duly disclosed and will continue to disclose such arrangements to the Procurer.
4. We understand that in the event of any breach or non-compliance with any warranties or undertakings in this certificate, the Procurer may, at its discretion, invalidate our Tenders, exclude us in future tenders, pursue damages or other forms of redress from me/us (including but not limited to damages for delay, costs and expenses of re-tendering and other costs incurred), and/or (in the event that we are awarded the relevant contract) terminate the relevant contract.
5. Under the Competition Ordinance (Cap. 619), bid-rigging is serious anti-competitive conduct. We understand that the Procurer may, at its discretion, report all suspected instances of bid-rigging to the Competition Commission (the "**Commission**") and provide the Commission with any relevant information, including but not limited to information on my/our tenders and my/our personal information.

Tenderer sign and complete the following:

[Signature of the company's authorized representative and seal of the company]

[Name of company, name and title of authorized representative]

[date]

Delete as appropriate

Part C(II): Declaration of Affiliates Tendering

Declaration of Affiliates Tendering

To: _____ (the "Procurer")
[Name and address of Owner's Corporation / Owner(s) of (name of the Building)]

Regarding the tenders of the lift modernisation/replacement works and lift maintenance services for the Lifts (as defined in the Conditions of Contract) (the "Tenders") at the building located at _____]

Dear Sir/Madam,

We, _____ (the "Tenderer"),
[Name of company]

of _____
[Address of Tenderer]

Declares and warrants to the Procurer in relation to the tenders of the Project that:

- (a) a subsidiary or holding company (which are defined in sections 13 to 15 of the Companies Ordinance (Cap. 622) of the Tenderer or subsidiary of the Tenderer's holding company named [_____] has tendered or will be tendering for the Project providing alternate engineering solutions and/or products; and
- (b) our tender was prepared without any agreement, arrangement, communication, understanding, promise or undertaking with such subsidiary or holding company, regarding price, tender submissions procedure, any terms of the tender or any other matters in respect of or concerning the tender or the Project.

[Signature of the company's authorized representative and seal/chop of the company]

[Name of company, name and title of authorized representative]

[date]

Part C(III): Declaration of Charged and Convicted Dishonesty Related Offences

Declaration of Charged and Convicted Dishonesty Related Offences

To: _____ (“the **Procurer**”)
(Name and address of the Owner’s Corporation) / (Owner(s) of [Name of the Building])

Regarding the tenders of lift modernisation/replacement works and lift maintenance services for the Lifts (as defined in the Conditions of Contract) at the building located at

The company hereby declare(s) that:

the key personnel⁴ of the company and the company have not been charged or convicted of any Dishonesty Related Offence(s)⁵ before[#]

OR

the key personnel of the company and the company have been charged or convicted of Dishonesty Related Offence(s) before[#], details are listed out below:

Dishonesty Related Offence	Name of the relevant person	Date of Charge	Details

Dishonesty Related Offence	Name of the relevant person	Date of Conviction	Details

We hereby declare that the information contained in this declaration is true, accurate and complete to the best of my knowledge.

Any information disclosed regarding the key personnel in my company has been obtained and disclosed above with consent from the relevant key personnel.

⁴ “Key personnel” means the site representative as provided by the Contractor under clause 9.7.1 of the Conditions of Contract.
⁵ “Dishonesty related offences” is defined as offences under the Prevention of Bribery Ordinance (Cap. 201) and Theft Ordinance (Cap. 210), offence of conspiracy to defraud and any other offences which put honesty of the Tenderer in question, unless such offences are not required to be disclosed in accordance with Rehabilitation of Offenders Ordinance (Cap. 297).

We hereby give consent to the Procurer to use the above information for the purpose of consideration of the tenders for the Project.

Tenderer sign and complete the following:

[Signature of the company's authorized representative and seal of the company]

[Name of company, name and title of authorized representative]

[Date]

Delete as appropriate

Part D(I): Articles of Agreement and Conditions of Contract and Schedules for lift modernisation works / lift replacement works

Articles of Agreement

This Agreement is made on the _____ day of _____ 20____

Between:

(1) _____ (the "**Owner**" as defined in the Conditions of Contract)
[Name and address of Owner's Corporation / Owner(s) of the building]

and

(2) _____ (the "**Contractor**").
[Name and registered address of Contractor]

Whereas:

The Owner wishes to carry out lift modernisation works / lift replacement works⁶ for the Lifts (as defined in the Conditions of Contract) (the "**Works**") at the building located at _____ (*address of the building*) (the "**Building**") and engage the **Contractor** to carry out such works in accordance with the terms of the Contract.

It is hereby agreed as follows:

1. The "**Contract**" comprises:
 - (i) this Articles of Agreement;
 - (ii) the Conditions of Contract and its Schedules (including the completed Schedule of Rates)⁷ attached hereto; and
 - (iii) Tender Correspondence attached hereto⁸.
2. Unless otherwise specified in the Articles of Agreement, words and expressions used in the Articles of Agreement shall have the same meaning given to such words and expressions in the Conditions of Contract attached hereto.
3. The Contractor shall commence, execute and complete the Works subject and in accordance with the requirements and terms of the Contract.
4. The Owner shall pay the Contract Price of HK\$ _____ to the Contractor in accordance with the Conditions of Contract.

⁶ Delete as applicable.

⁷ To be provided by the Contractor together with its Tenders.

⁸ Please attach correspondence between the parties in relation to any correction, clarification or supplementary information to the Tender Documents issued by the Owner and in relation to the tenders submitted by the Contractor.

This Agreement has been duly executed as a deed by the parties on the date first before set out in the Articles of Agreement.

[Execution by an owners' representative⁹ or the Owners' Corporation]

(Execution by an owners' representative)

Signed, sealed and delivered)
as a deed)
by [name of Owners' representative]) _____
on behalf of all owners of [name of the) [signature of owners' representative]
Building])
in the presence of:)
)
)

Signature of witness:¹⁰

Name:

Address:

Title:

(Execution by Owners' Corporation)

Signed, sealed and delivered)
as a deed)
on behalf of [the Owners' Corporation]) _____
by Chairman and Secretary of the) [signature of the Chairman of Management
Management Committee) Committee]
)
)
)
) _____
) [signature of the Secretary of Management
) Committee]
)
)
)
) _____
) [common seal]

⁹ The owners' representative should be duly authorised to execute this deed by way of a power of attorney.

¹⁰ Witness is not required under Hong Kong law, but it is recommended to execute the deed in the presence of a witness as a matter of good practice.

[Execution by the Contractor]

(Execution by a company using a common seal)

The common seal of [the)
Contractor]) [Common seal of the Contractor]
was affixed to this deed in the)
presence of:)

Director

Director / Secretary

(Execution by a company without using a common seal)

Executed and delivered)
as a deed)
by [Contractor]acting by either) _____
two directors or one director) [signature of director]
and the company secretary)
) _____
) [signature of director / company
secretary]

CONDITIONS OF CONTRACT

FOR LIFT MODERNISATION WORKS / LIFT REPLACEMENT WORKS

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CONDITIONS OF CONTRACT

FOR LIFT MODERNISATION WORKS / LIFT REPLACEMENT WORKS

1. INTERPRETATIONS

1.1 Building

"Building " means the "Building" as defined in the Articles of Agreement.

1.2 Building Manager

"Building Manager" means the person providing estate, property or facility management services to the premises where the Site is.

1.3 Commencement Date

"Commencement Date" means the commencement date for the Works or a Works Section (as applicable), whichever is earlier, as set out in Schedule 2.

1.4 Completion Date

"Completion Date" means the completion date for the Works or a Works Section (as applicable) as set out in Schedule 2.

1.5 Contract

"Contract" has the meaning given in Article 1 of the Articles of Agreement.

1.6 Contract Administrator

1.6.1 "Contract Administrator" means the person named in Schedule 2 who has been appointed by the Owner to supervise, on behalf of the Owner, the Contractor in carrying out the Works. When required by these Conditions of Contract to issue any certificate, the Contract Administrator shall act independently and fairly as between the Contract Parties.

1.6.2 If the person named in Schedule 2 as the Contract Administrator ceases to have authority or capability to act, the Owner shall appoint another person to whose appointment the Contractor has no reasonable objection as a replacement. The replacement Contract Administrator shall not overrule the validity of any certification as to quality or extension of time issued by the previous Contract Administrator to the disadvantage of the Contractor.

1.7 Contract Award Date

"Contract Award Date" means the date of the Letter of Acceptance.

1.8 Contract Documents

"Contract Documents" means the contract documents as set out in Clause 5.1.2.

1.9 Contract Parties

"Contract Parties" means the Owner and the Contractor and each are individually referred to as a "Contract Party".

1.10 Contract Price

“Contract Price” means the contract price as stated in the Articles of Agreement.

1.11 Contract Rates

1.11.1 "Contract Rates" means the rates inserted in the Schedule of Rates as may be modified by the Tender Correspondence.

1.11.2 A Contract Rate shall be inclusive of all labour costs, material costs, plant costs, indirect costs, management costs, overheads, profits, taxes, and costs of all ancillary work and liability indispensably necessary for the item of work to which the Contract Rate applies, and shall not be adjusted for error made by the Contractor in building up the Contract Rate

1.12 Contract Specification

“Contract Specification” means the specification as described or referred to in Schedule 1(a) for the Works.

1.13 Contractor

"Contractor" means the person named in the Articles of Agreement who has been appointed by the Owner to carry out and complete the Works required under the Contract.

1.14 Day and counting of periods

A day means a calendar day unless otherwise stated. When counting days, 1 day means a period of 24 hours expiry at midnight. Within 1 day means within 24 hours, not within the same day. "Commencing or starting from a certain day" means that certain day is day 1 for counting. "Commencing or starting after a certain day" means the day following that certain day is day 1 for counting.

1.15 Defects Liability Period

“Defects Liability Period” for each Works Section or the Works means the period of 12 calendar months from the date of Substantial Completion certified by the Contract Administrator for each Works Section or the Works (as applicable).

1.16 Defects Rectification Certificate

"Defects Rectification Certificate" means the same issued by the Contract Administrator pursuant to Clause 7.6.6.

1.17 EMSD

“EMSD” means the Electrical and Mechanical Services Department of the Government of Hong Kong SAR.

1.18 Excepted Risks

"Excepted Risks" means:

- (a) any consequence of war (whether war be declared or not) in which Hong Kong is actively engaged, the invasion of Hong Kong, acts of terrorists in Hong Kong, civil war, rebellion, revolution or military or usurped power in Hong Kong, riot, commotion or disorder in Hong Kong other than amongst

the employees of the Contractor or any person for whom the Contractor is responsible;

- (b) any direct consequence of the faulty design provided by the Contract Administrator or other designers engaged by the Owner or the Contract Administrator; and

1.19 Excusable and Compensable Events

1.19.1 "Excusable Events" are events the occurrence of which are at the risk of the Owner in so far as the time to complete the Works is concerned. "Compensable Events" are events the occurrence of which are at the risks of the Owner in so far as the price of the Works is concerned. "Excusable Events" and "Compensable Events" are respectively defined as follows:

Event Code	Delays or disruptions by reason of	Excusable Events	Compensable Events
A	Force majeure	Yes	No
B	Inclement weather conditions, being rainfall in excess of twenty millimetres in a period of 24 consecutive hours (from midnight to midnight) as recorded by the Hong Kong Observatory station nearest to the Site, and/or their consequences adversely affecting the progress of the Works	Yes	No
C	The hoisting of tropical cyclone warning signal No. 8 or above or the announcement of a Black Rainstorm Warning, and/or its consequences adversely affecting the progress of the Works	Yes	No
D	An Excepted Risk	Yes	Yes
E	Fire, lightning, explosion, flood, bursting or overflowing of water tanks, apparatus or pipes, earthquake, aircraft and other aerial devices or articles dropped from them, not caused by the Contract Parties or any person for whom either Contract Party is responsible	Yes	No
F	Late provision of Contract Administrator's instructions expressly required by the Contract to be provided by a specific time or before implementation of the matter being affected	Yes	Yes

G	Late provision by the Contract Administrator of instructions or information (including clarification of any ambiguity, discrepancy in or divergence between documents provided by the Owner or the Contract Administrator, and including outstanding or new information) required for the progressing of the Works, after taking into account any mitigating effect which could have been afforded if the Contractor had requested for such instructions or information reasonably in advance of the occurrence of the delays or disruptions	Yes	Yes
H	The opening up for inspection of work covered up or the testing of materials or work and the consequential making good which are additional to the Contract requirements and instructed by the Contract Administrator, provided that such materials and work are in accordance with the Contract	Yes	Yes
I	The carrying out of a Variation or the happening of an event deemed to be a Variation	Yes	Yes
J	Increase in the work to be carried out pursuant to provisional items in the Contract of sufficient magnitude that the increase was not apparent from the Contract Documents	Yes	Yes
K	A postponement of the Site Access Date to any portion of the Site unless the Contract has provided for such occurrence	Yes	Yes
L	A postponement of the Commencement Date of the Works or a Works Section (as applicable) unless the Contract has provided for such occurrence	Yes	Yes
M	A suspension of the provision of the whole or a portion of the Site as instructed by the Contract Administrator beyond any provided for in the Contract and not being due to a breach of contract or other default by the Contractor or any person for whom the Contractor is responsible	Yes	Yes

N	A suspension of the progress of the Works or the whole or a part of a Works Section (as applicable) as instructed by the Contract Administrator beyond any provided for in the Contract and not being due to a breach of contract or other default by the Contractor or any person for whom the Contractor is responsible	Yes	Yes
O	A delay or disruption caused by a Separate Contractor	Yes	Yes
P	A delay caused by a statutory undertaker or utility company carrying out work in pursuance of its statutory obligations, not having a contractual relationship with the Owner, the Contractor or any person for whom the Owner or the Contractor is responsible, and failing to commence or to carry out its work in due time provided that the Contractor has taken all practicable measures to cause it to commence, carry out and complete its work on time	Yes	No
Q	A failure of the Owner to supply or supply on time materials that he agreed to provide for the Works	Yes	Yes
R	A delay by a Government department in giving an approval or a consent which is not the Contractor's responsibility to obtain	Yes	Yes
S	An unreasonable delay by a Government department in giving an approval or a consent which is the Contractor's responsibility to obtain, provided that any disallowance of approval or consent attributable to the Contractor's lack of adequate submission shall not be considered as unreasonable	Yes	No
T	A special circumstance considered by the Contract Administrator as sufficient grounds to fairly entitle the Contractor to an extension of time	Yes	No
U	An act of prevention, a breach of contract or other default by the Owner or any person for whom the Owner is responsible	Yes	Yes

1.19.2 The scope of each of the above event definitions is mutually exclusive. Any deletion or scope reduction of an event definition above shall not expand the scope of the remaining unchanged event definitions.

1.20 Final Account

“Final Account” means the final account referred to in Clause 6.12.

1.21 Final Certificate

“Final Certificate” means the final certificate issued by the Contract Administrator under Clause 6.13

1.22 Headings

Headings to this Contract shall be for identification purposes only and shall not be read to restrict or enlarge the scope of application of the articles or clauses under the headings.

1.23 Insured Property

“Insured Property” means the property referred to in Clause 10.2.2.

1.24 Letter of Acceptance

“Letter of Acceptance” means the letter issued by the Owner to the Contractor accepting the Contractor’s tender for the lift modernisation works or lift replacement works.

1.25 Lift(s)

"Lift(s)" means the lift(s) as described in Schedule 2.

1.26 Materials

"Materials" means materials and goods, and includes equipment or machinery for incorporation into the Works.

1.27 Milestone Schedule

"Milestone Schedule" means the milestone schedule as set out in Schedule 2.

1.28 Owner

"Owner" means the party named as “Owner” in the Articles of Agreement and where it refers to the owners of the Building, the definition of “Owner” shall refer to the owners who collectively own the legal title to the Building.

1.29 Owner’s Representative

"Owner's Representative" means the company, authorized representative of the owners' corporation or person (including any employee of the Owner) appointed by the Owner as such in relation to the Contract.

1.30 Payment Certificate

“Payment Certificate” means a payment certificate issued by the Contract Administrator in the form set out in Schedule 5.

1.31 Payment Stages

“Payment Stages” means the payment stages as set out in Schedule 2.

1.32 Period for Honouring Payment

“Period for Honouring Payment” means the period for honouring payment as set out in Schedule 2.

1.33 Plant

"Plant" means construction plant, equipment or machinery used for carrying out the Works.

1.34 Project Supervisor

"Project Supervisor" means the person or persons appointed by the Owner or the Contract Administrator on site and acting under the direction of the Contract Administrator to watch, inspect, check, and record the Works, any resources, facilities and activities on the Site.

1.35 Reference Drawings

"Reference Drawings" means the drawings included in Schedule 1(b) for the Works.

1.36 Relevant Date

“Relevant Date” means the date upon which the Owner took possession of a Relevant Part under Clause 4.11.

1.37 Relevant Part

“Relevant Part” means the part of the Works or a part of a Works Section taken possession of by the Owner under Clause 4.11 before Substantial Completion of the Works or that Works Section.

1.38 Schedule of Rates

“Schedule of Rates” means the document called as such and included in Schedule 3 for the Contractor to show its price build-up of the Contract Price and applicable rates.

1.39 Separate Contractor

"Separate Contractor" means a person appointed by the Owner to carry out work, supply goods or provide services in connection with but not forming part of the Works, but excludes any statutory undertaker or utility company carrying out work in pursuance of its statutory obligations and not having a contractual relationship with the Owner, the Contractor or any person for whom the Owner or the Contractor is responsible.

1.40 Site

“Site” means one or more areas or spaces, whether contiguous or not, on plan or at location(s) as described in Schedule 2 as to be made available by the Owner to the Contractor for the Contractor to carry out and complete the permanent portion of the Works or for the Contractor to place its materials and Temporary Site Facilities.

1.41 Statutory Requirements

"Statutory Requirements" means all laws, statutory enactments, permissions, consents, codes, by-laws, rules, orders and regulations and the requirements of the Government, any public authorities, statutory undertakers or utility companies and any planning permission and the provisions of all codes of practices, guidance notes and recommendations for the time being in force on the date of tender submission deadline insofar as the same are relevant and applicable to the Works.

1.42 Substantial Completion Certificate

"Substantial Completion Certificate" means a certificate issued by the Contract Administrator signifying the completion of the Works or a Works Section (as applicable) by the Contractor to the satisfaction of the Contract Administrator.

1.43 Temporary Site Facilities

"Temporary Site Facilities" includes construction plant, tools, implements, safety belts, safety helmets, safety appliances, roads and footpaths, gangways, ladders, working platforms, scaffolding, gondolas, hoardings, covered walkways, screens, gates, enclosures, barriers, safety screens, storage sheds, water and electricity supply, lighting, directory and warning signs, etc. all provided by the Contractor on Site temporarily for the purpose of execution of the Works.

1.44 Tender Correspondence

"Tender Correspondence" means the correspondence including the Letter of Acceptance relating to the tender attached to the Articles of Agreement.

1.45 Tests on Completion

"Tests on Completion" means the tests which are specified in the Contract or agreed or as instructed by the Contract Parties, and which are carried out under Clause 7.5 before the Works or a Works Section (as applicable) shall be considered as substantially completed.

1.46 Variation

"Variation" means a change (addition, omission, substitution, alteration, modification, etc.) as instructed by the Contract Administrator to the design, quality or quantity of the Works or to the time or manner for carrying out the Works from that provided for in the Contract, and includes other events deemed by these Conditions of Contract to be a Variation.

1.47 Working Day

"Working Day" means a calendar day excluding Sunday and public holiday.

1.48 Works

"Works" means the "Works" as defined and described in Clause 3.1.

1.49 Works Section

"Works Section" means a part of the Works identified as such and more particularly described in Schedule 2.

2. **SITE**

2.1 Provision of Site

2.1.1 The Owner shall provide such portions of the Site to the Contractor on such access dates as may be stipulated in Schedule 2. Provision of the Site shall entail the sustained use, but not exclusive possession of the portions of the Site by the Contractor for the carrying out and completion of the Works. The Contractor shall allow and protect legitimate occupiers and users for the time being on the Site to have continued use of such portions of the Site not immediately required by the Contractor for carrying out the Works.

2.1.2 The Contractor shall not obstruct the lawful and continued use by anyone of the land and premises outside but in the vicinity of the Site.

2.1.3 Where exclusive possession of any portion of the Site will be granted to the Contractor pursuant to the Contract, the Contractor shall take over the relevant portion of the Site upon the respective access dates and take responsibility for the care thereof.

2.2 Site access

2.2.1 Where access to the Site is through land or premises which are not under the control of the Owner, the Contractor shall procure at its own costs and expense any necessary right of access.

2.2.2 Where access to the Site is through land or premises which are under the control of the Owner, the Owner shall provide the Contractor with right of access free of charge at such time as reasonably required for the carrying out of the Works and as mutually agreed between the Contract Administrator and the Contractor. For the purposes of this Clause, where the Owner is the landlord or the owner's corporation or the Building Manager of the premises in which the Site is situated, any individual units of the premises which are separately owned or rented (such as residential flats, car parking spaces, offices, shops, workshops, stores, and the like) shall be deemed to be under the control of the Owner.

2.2.3 Physical means of access to the Site and to work locations within the Site by way of roads, footpaths, ladders, catwalks, scaffolding, gondolas, etc. shall be arranged for by the Contractor at its own expense unless otherwise stated in the Contract.

2.2.4 Entry and exit points to the Site shall be at locations shown or described in the Contract or, when no specific locations are shown or described, at such locations determined by the Contract Administrator. Subsequent re-location and re-sizing of the entry and exit points to suit the sequence and progress of the Works shall be approved by the Contract Administrator and made by the Contractor at its own expense.

2.2.5 The Contractor shall comply with all relevant regulations or restrictions of the police, other Government Authorities, and the Building Manager regarding access, usage of roads, parking of lorries and similar, and shall submit all necessary applications and pay any necessary fees and charges.

2.3 House rules of Building Manager

2.3.1 The Contractor shall comply with the requirements, restriction and/or house rules as provided, announced or published by the Building Manager as set out in the Schedule 1(c) from time to time for carrying out the Works including the day to day operation and use of the premises in which the Site is situated and any special restrictions on such Works maintenance or renovation works within the premises.

2.3.2 Any restrictions on access or working hours imposed by the Building Manager which are more stringent than those provided, announced or published by the Building Manager prior to the Contract Award Date and affecting the Works shall be deemed to be a Variation.

2.4 Protection of access routes

The Contractor shall protect all access routes throughout the period of the Contract, and shall remove at its own costs any protection when no longer required and make good any damage and disturbance.

2.5 Off-site areas

The Contractor shall arrange by itself any areas or spaces outside the Site that it requires to prepare for the carrying out of the Works.

2.6 Site visit

2.6.1 The Contractor is deemed to have visited the Site and thoroughly acquainted itself with the location, general site conditions, accessibility, storage space, restrictions for loading and off-loading materials, and any other conditions which may affect its carrying out of the Works prior to entering into the Contract and is deemed to have made due allowance for all such restrictions and factors in the Contract Price.

2.6.2 Any claim for extra payment or extension of the time for completion of a milestone in the Milestone Schedule or a Completion Date shall not be allowed on the grounds of ignorance or misinterpretation of the site conditions.

2.7 Access during Defects Liability Period

2.7.1 The Owner shall provide the Contractor with a right of access to specific locations on the Site for the specific purpose of rectifying defects arising during the Defects Liability Period at those locations. The Contractor shall restrict itself to the specific locations and shall leave the Site as soon as the defects have been rectified.

2.7.2 When existing facilities such as gondolas or lifting platforms are available for day to day use by the Owner or the Building Manager subject to its control, and such existing facilities are useful for rectifying defects, the Owner shall permit the use of such facilities by the Contractor. In other cases, the Contractor shall provide its own Temporary Site Facilities required for rectifying defects.

3. **WORKS**

3.1 Scope of Works

3.1.1 The Contractor shall carry out in accordance with the Contract the works set out below in this Clause 3 for and in connection with the scope and items of works as described in the Schedule of Rates which has been accepted by the Owner in the Letter of Acceptance (the "**Works**").

3.2 Design of Work

3.2.1 Unless otherwise stated in the Contract or unless the Contractor has provided the design, and subject to Clause 3.3 below, the design of the Work shall be the responsibility of the Owner who shall engage the Contract Administrator or other designers to carry out the design work. The Contract Administrator shall be responsible for issuing and explaining the design to the Contractor.

3.3 Documents provided to Contractor

3.3.1 Any documents or information including but not limited to Reference Drawings, further drawings and information and documents provided by the Contract Administrator or the Owner or its consultants or agents regarding the Works and the Site during the tender stage or after the Contract Award Date (as the case may be) are provided to the Contractor without any warranty or representation on the part of the Owner or its consultants or agents including the Contract Administrator as to their accuracy or completeness, and they shall be deemed to be provided for the Contractor's reference only and shall have no contractual effect. The Contractor shall be solely responsible for verifying of any of the said information and contents of the documents provided and for use of correct and appropriate information for the design and execution of the Works in compliance with the Contract.

3.4 Design of temporary work

3.4.1 Unless otherwise stated in the Contract, the design of temporary work required for the Works (no matter whether it has been shown on the Reference Drawings or not) shall be the responsibility of the Contractor.

3.5 Contractor's design responsibilities

3.5.1 Any design for which the Contractor is responsible under the Contract shall be submitted to the Contract Administrator for review and comment. The Contractor shall promptly comply with and address such comments to the satisfaction of the Contract Administrator before implementation.

3.5.2 Except as otherwise expressly provided for in the Contract, the Contractor shall be responsible for the design of the Works. The Contractor's design shall be fit for the purpose for which it is intended. Comments, consent and/or approval provided by the Contract Administrator shall not be taken as acceptance that the work is so fit for the purpose and shall not in any way relieve the Contractor from any liabilities for its design.

3.6 Tests on Completion

3.6.1 Before the Works may be certified as substantially completed, the pre-commissioning test shall be carried out by the contractor ensuring itself of the performance of Works or a Works Section is ready for carrying out the Tests on Completion. Unless otherwise stated in the Contract Specification, the commissioning tests and trial operation of the Tests on

Completion shall include operation tests to demonstrate that the Works or Works Section (as applicable) can be operated safely, satisfactorily and perform reliably, as specified and in accordance with the Statutory Requirement and the Contract, under all available operation conditions. All mechanically, hydraulically, electrically or electronically operated parts of the Works or a Works Section (as applicable) connected by and including, but not limited to, pipes, ducts, conduits, trunking, wiring or cables shall be tested and commissioned in accordance with the requirements of this clause and as otherwise stated in the Contract.

3.6.2 After the Contractor has satisfied itself of the performance of the Works or a Works Section (as applicable), the Contractor shall give to the Contract Administrator not less than 5 days' advance notice for arrangement of Tests on Completion for that Works or a Works Section (as applicable). The Tests on Completion shall be carried out after the inspection and satisfaction by relevant statutory bodies on the performance of that Works or a Works Section (as applicable).

3.6.3 The Contractor shall provide all necessary labour, facilities and instrument as may be required for the witnessing and carrying out of the Tests on Completion in comply with the Contract Specification and Statutory Requirement.

3.6.4 The Contractor shall make complete records of the Tests on Completion as carried out. As soon as the Works or a Works Section (as applicable) has passed each of the Tests on Completion described in sub-clauses 3.6.1 to 3.6.3, the Contractor shall submit a report of the results of these Tests on Completion (including but not limited to those specified in the Buildings Energy Efficiency Ordinance (Cap. 610) and the relevant codes of practice) to the Owner and copy it to Contract Administrator for reference.

3.6.5 If the test results indicate that the Works or a Works Section (as applicable) are not functioning in a satisfactory manner or in accordance with the requirements of the Contract or the Statutory Requirements, the Contractor shall carry out at its own expense any alterations, replacements or adjustments as may be required to correct the faulty or non-compliant works. The Contract Administrator's decision as to what constitutes a satisfactory test shall be final.

3.7 Contractor's alternative proposals

3.7.1 The Contract Administrator may consider alternative design, materials, workmanship and methods that the Contractor may propose but the Contract Administrator's approval of such alternatives shall be at the Contract Administrator's sole discretion and the Contract Administrator shall not be obliged to consider or approve any alternatives nor shall the Contract Administrator be obliged to provide any reasons for disapproval of such alternatives. No such alternatives shall be adopted without the prior written approval by the Contract Administrator. The approval shall have no effect on the Contract Price or the Completion Date unless the effect is specifically stated in the written approval, in which case, the approval shall be deemed to be a Variation instruction. Under no circumstances shall the approval relieve the Contractor of its responsibilities under the Contract.

3.7.2 For a material permitted under the Contract to be the subject of a proposal in regard to "equal and approved" or "approved equal" brands or models or a number of choices of brands or models, the Contractor may propose a brand or model of the same kind of material equal in performance and quality to those originally specified or proposed in the Contract for the approval by the Contract Administrator.

4. TIME

4.1 Contract commencement

The Contract shall be deemed to take effect and commence on the Contract Award Date, irrespective of when the Articles of Agreement is signed.

4.2 Consent to commencement

Prior to the commencement of the Works or a Works Section (as applicable), the Contractor shall coordinate with and obtain the consent of the Owner, Building Manager and relevant statutory bodies necessary for commencement of the Works or a Works Section (as applicable) and submit a detailed plan and schedule for carrying out the Works or a Works Section (as applicable) while maintaining the normal operation of the Lift(s) as far as practicable to the Contract Administrator for approval. The Contractor shall also submit all applications required by the Statutory Requirements to be submitted by the Contractor and shall pay all associated charges prior to the commencement of the Works or a Works Section (as applicable) on Site or as and when the same fall due, whichever is the later.

4.3 Commencement and progress of Works

4.3.1 The Contractor shall commence and proceed with the Works or each Works Section (as applicable) on the Commencement Date stated in Schedule 2, and shall complete the Works or each Works Section (as applicable) on or before its Completion Date stated in Schedule 2.

4.3.2 The Contractor shall complete all the milestones by the time for completion specified in the Milestone Schedule set out in Schedule 2.

4.3.3 The Contractor shall give notice in writing together with proof of completion to the Contract Administrator once the Contractor is of the view that a milestone has been completed. If the Contract Administrator is reasonably satisfied that such milestone has been completed, the Contract Administrator shall issue a milestone completion certificate in respect of such milestone and shall state the actual Completion Date of the relevant milestone on such certificate.

4.3.4 The Contractor shall regularly and diligently commence and complete all the Works in accordance with the terms of the Contract. The Contractor shall provide and perform the Works in the most expeditious and economical manner consistent with the best interests of the Owner. The Contractor shall also provide the Owner with advice and assistance reasonably required for carrying out the Works which may be needed from time to time.

4.4 Working hours

The Contractor shall observe any working days and working hours restrictions which may be imposed under the Contract (including any such restrictions as stated in Schedule 2) and at law, and shall apply to the Contract Administrator, the Building Manager and the relevant Government authority for working outside the legally restricted time at its own expense.

4.5 Notices and claims

4.5.1 As soon as practicable and in any event within 21 days after the date of commencement of an event causing or likely to cause delay or disruption to the regular progress of the Works or delay to the completion of any milestone under the Milestone Schedule by the specified time for completion (or the time as adjusted pursuant to this Clause 4) or the Works or Works Section (as applicable) beyond its Completion Date becoming apparent, the Contractor shall give written notice to the Contract Administrator of such a delay or disruption.

4.5.2 The written notice shall state in full detail (illustrated with diagrammatic programmes as necessary):

- (i) the event and material circumstances causing or likely to cause the delay or disruption, the estimated extent of the delay or disruption to the progress, the estimated length of the delay to the completion, and whether the Contractor considers that it is or may become entitled to an extension of time due to the event being an Excusable Event listed in Clause 1.19; and
- (ii) to reimbursement for direct loss and/or expense due to the event being a Compensable Event listed in Clause 1.19. If direct loss and/or expense is expected to be incurred, the written notice shall give an estimate of the likely amount.

If the delay or disruption is of continuing or repetitive nature, the Contractor shall submit updated written notices at bi-weekly intervals.

4.5.3 The Contractor shall submit its monetary claim for reimbursement for direct loss and/or expense with evidence of the direct loss and/or expense as soon as the direct loss and/or expense are fully known and reasonably calculable.

4.5.4 In any case, the notice under Clause 4.5.1 and the updated notices under Clause 4.5.2 shall not be submitted later than the specified time for completion of the relevant milestone in the Milestone Schedule (or the time as adjusted pursuant to this Clause) or Completion Date of the Works or relevant Works Section (as applicable) or its extended Completion Date previously claimed by the Contractor, and the Contractor's monetary claim under Clause 4.5.3 shall not be submitted later than **2 months** after the direct loss and/or expense having been incurred, progressive submission permitted.

4.5.5 It shall be a condition precedent to the Contractor's entitlement to any extension of time or loss and/or expense claim that the Contractor shall have fully complied with the provisions of Clauses 4.5.1 to 4.5.4. If the Contractor fails to fully comply with these provisions in respect of any claim, that claim shall be deemed to have been waived by the Contractor.

4.5.6 When considering the Contractor's entitlement to the amount of any extension of time or loss and/or expense, the Contract Administrator may only take into account the information already submitted by the Contractor without an obligation to demand for further information from the Contractor. For the avoidance of doubt, the Contractor shall bear the consequence of its own non-submission, late submission or insufficient submission of notices or information.

4.6 Mitigation of delay or disruption

The Contractor shall continuously use its best endeavours and take immediate remedial measures if necessary to prevent or mitigate delay or disruption to the progress of the Works however caused by the Contractor, and to prevent the completion of the Works from being delayed or further delayed including increasing manpower and other resources and working overtime at its own costs. The Contractor shall make no claim of whatsoever nature in relation to such remedial measures. The use of best endeavours by the Contractor shall not require the Contractor to accelerate the carrying out of the Works to recover delay caused by an Excusable Event. The Contractor shall however do all that may reasonably be required to proceed with the Works expeditiously and review its manpower and other resources regularly and ensure that adequate and qualified manpower and resources are provided for the efficient and timely completion of the Works.

4.7 Determining time effect

- 4.7.1 Within **14 days** after the date of receipt of the Contractor's notice of delay or disruption under Clause 4.5 and subject to Clause 4.5.5, the Contract Administrator shall notify the Contractor its opinion on the extent of delay or disruption to progress or delay to completion that the Excusable Event or Compensable Event specified by the Contractor in its notice has caused or is likely to cause to the Works or the relevant Works Section (as applicable). If there is a delay to completion due to an Excusable Event, the Contract Administrator shall give an extension of time to the Contractor by fixing a later time for completion of the relevant milestone or Completion Date for the Works or the relevant Works Section (as applicable) to compensate the working time lost. If the Contract Administrator instructs a Variation pursuant to Clause 6.6 and reasonably considers that the time for completion of any milestone or Completion Date for the Works or the relevant Works Section (as applicable) will be shortened as a result, the Contract Administrator shall be entitled to require the Contractor to provide information relating to the effect on the progress of the Works and reasonably shorten the time for completion of the relevant milestone in the Milestone Schedule or Completion Date for the Works or the relevant Works Section (as applicable), provided however that the time for completion so shortened may not be earlier than the relevant original time for completion (i.e. before the adjustment) specified in the Milestone Schedule or Completion Date.
- 4.7.2 If the Contract Administrator gives an extension of time to the Contractor because of an Excusable Event that occurs in the period of delay after the Completion Date but before the substantial completion of the Works or a Works Section (as applicable), he shall add this extension of time to the total of any extensions of time previously granted when fixing a new Completion Date, even though the Excusable Event may have occurred later than the date that the Contract Administrator fixes as the new Completion Date.
- 4.7.3 The Contract Administrator may review his opinion on the time effect under Clause 4.7.1 and adjust any extension of time previously granted in light of further evidence at any time before issuing the Final Certificate, but shall not reduce the extension of time previously granted unless any previous extension has been based upon incorrect information provided by the Contractor.

4.8 Valuing cost effect

4.8.1 Within **14 days** after the date of receipt of both the Contractor's monetary claim and the opinion of the Contract Administrator on the time effect, the Contract Administrator shall assess and certify the value of any direct loss and/or expense compensable to the Contractor. Any such value which may be assessed from time to time shall be added to the Contract Price and included in the next Payment Certificate.

4.8.2 The Contract Administrator may review his valuation of the cost effect under Clause 4.8.1 in light of further evidence at any time before issuing the Final Certificate. Any adjustment so resulted shall be accounted for in the next Payment Certificate.

4.9 Damages for delayed completion

If the Contract Administrator issues a delayed completion notice in the form set out in Schedule 5 certifying that the Works or a Works Section (as applicable) is not completed by the Completion Date or the currently extended Completion Date, then subject to Clause 4.11.3, the Owner may recover from the Contractor liquidated damages calculated by applying the respective daily rate of liquidated damages for delayed completion stated in Schedule 2 for every day during which the Works or Works Section (as applicable) remains incomplete. However, the total amount of liquidated damages due under this Clause 4.9 shall not exceed the maximum of liquidated damages stated in Schedule 2. Where no rate is specifically stated, the Owner may claim for general damages for delayed completion. The Owner may treat such liquidated damages for delayed completion or the losses suffered or incurred by the Owner as a result of such delay as a debt owed by the Contractor to the Owner and claim against the Contractor for payment, and shall be entitled to deduct such debt from any amount payable by the Owner to the Contractor under the Contract, without prejudice to its right to recover such damages from the Contractor by any other means.

4.10 Substantial completion

4.10.1 The Works or a Works Section (as applicable)) shall be considered as substantially completed when the Works or the whole of the works within a Works Section (as applicable) has passed the Tests on Completion and has been completed in accordance with the Contract and the place is clean and tidy with the Contractor's Temporary Site Facilities demobilized to the satisfaction of the Contract Administrator and is ready for handover to the Owner, excluding only work or services specifically required by the Contract to be carried out after substantial completion, and minor work which is not essential for the occupation, use or functioning of the Works or a Works Section (as applicable).

4.10.2 After the Contract Administrator have carried out Tests on Completion, the Contractor shall complete any outstanding work, invite the Contract Administrator to re-inspect if appropriate, demobilize from the Site of the Works or a Works Section (as applicable) (subject to Clause 4.10.3), and make the place clean, tidy and ready for handover to the Owner. If the Contract Administrator is satisfied that the state of substantial completion has been achieved for each Works Section (except for the last one) or the Works, he shall issue a Substantial Completion Certificate to the Contractor in the form set out in Schedule 5 to confirm the fact and the date of Substantial Completion of the relevant Works Section or the Works. The Contractor shall hand over the Works or a Works Section (as applicable) not later than **3 days** thereafter to the Owner or the Owner's Representative.

4.10.3 The Contractor may stay after substantial completion at such portion of the Site which has been designated for the Contractor's placement of Temporary Site Facilities and which are not immediately required for the occupation or use by the Owner until **7 days** after the Contract Administrator's instruction to demobilize from such portion of the Site.

4.11 Partial possession

4.11.1 The Owner may, with the Contractor's consent, take possession of a part of the Works or where sectional completion is provided for in the Contract a part of a Works Section before Substantial Completion and that part of the Works or part of a Works Section shall be referred to as a "**Relevant Part**".

4.11.2 If the Owner takes possession of a Relevant Part, the Contract Administrator shall issue a certificate to that effect:

- (a) identifying the Relevant Part being taken into possession;
- (b) giving the Relevant Date when the Owner took possession of the Relevant Part; and
- (c) stating his assessment of the estimated amount contained in the Contract Price in respect of the Relevant Part.

4.11.3 Where the Owner requires the Contractor to pay or allow liquidated damages under Clause 4.9 for the Works or a Works Section and the Owner has taken possession of a Relevant Part under Clause 4.11 then:

- (a) where sectional completion is not contemplated under the Contract, rate of liquidated damages in respect of the Works shall be reduced, during the period when the Works remain incomplete after the Relevant Date, by the same proportion as the estimated amount contained in the Contract Sum for the Relevant Part bears to the Contract Price; or
- (b) where sectional completion is contemplated under the Contract, the rate of liquidated and ascertained damages in respect of the relevant Works Section shall be reduced, during the period when the Works Section remains incomplete after the Relevant Date by the same proportion as the estimated amount contained in the Contract Price for the Relevant Part bears to the estimated amount contained in the Contract Price for the Works Section.

4.12 Postponement or suspension

The Contract Administrator may forthwith by notice in writing to the Contractor to postpone or suspend the whole or any part of the Works.

5. **CONTRACT BASIS**

5.1 Interpretation of Contract Documents

5.1.1 The various parts of the Contract Documents are complementary to each other and shall be interpreted as a whole as far as possible.

5.1.2 The Contract Documents shall mean the following and in case of any contradiction or discrepancy between the various parts of the Contract Documents, the order of precedence for interpretation shall be in the following descending order:

- (a) Articles of Agreement;
- (b) Letter of Acceptance;
- (c) Tender Correspondence;
- (d) Special Conditions of Contract (if applicable);
- (e) Amendment to Schedules (if applicable);
- (f) Contract Specification;
- (g) Schedule of Rates; and
- (h) Conditions of Contract.

5.1.3 No other documents exchanged prior to the Contract Award Date shall form part of the Contract, or affect the meaning and interpretation of the Contract Documents, unless otherwise agreed in writing by the Contract Parties.

5.2 Clarification of discrepancy or divergence

If the Contractor shall find any discrepancy in or divergence between the various parts of the Contract Documents, it shall immediately give a written notice specifying the discrepancy or divergence to the Contract Administrator who shall issue instructions to clarify. Any such instructions to clarify issued by Contract Administrator shall not be considered as a Variation and shall not entitle the Contractor to additional time or money.

5.3 Supplementary information

The Contract Administrator shall, if so requested by the Contractor, or may on his own initiative, issue supplementary drawings or specifications to amplify the Contract Documents.

5.4 Number of copies of Contract Documents

5.4.1 The Contractor shall be entitled free of charge to one signed copy and one unsigned copy of the Contract Documents.

5.5 Instructions

5.5.1 The Contract Administrator may issue instructions in the form set out in Schedule 5 in regard to any matter in connection with the Works to the Contractor, including but not limited to security measures, progress and conditions of the Works. Subject to Clause 6.6.1, the Contractor shall forthwith comply with all instructions issued to it by the Contract Administrator. If the Contractor fails to comply with an instruction of the Contract Administrator, then the Contract Administrator may issue a notice in writing requiring the Contractor to comply with the instruction. If the Contractor does not comply with the instruction within **7 days** of receipt of a written notice from the Contract Administrator requiring compliance with an instruction, then the Owner may without further notice employ and pay other

persons to carry out any work whatsoever to give effect to such instruction and all extra costs incurred in connection with such employment shall be recoverable from the Contractor by the Owner.

5.5.2 All instructions issued by the Contract Administrator shall be issued in writing. Any instruction issued orally shall be confirmed in writing by the Contract Administrator within **2 days**, otherwise the oral instruction shall have no effect.

5.5.3 The Contractor shall maintain an efficient organization so that all instructions issued by the Contract Administrator are communicated immediately to the Site. The Contractor shall take instructions only from the Contract Administrator or persons authorised by the Contract Administrator in writing to give them.

6. PRICES

6.1 The Contract Price

The Contractor agrees and confirms that the Contract Price stated in the Articles of Agreement shall include all costs necessary for the completion of the Works described in the Contract. The Contract Price shall not be adjusted except for Variations or other adjustments permitted under or required by the Contract.

6.2 No adjustment for rises or falls in costs of labour and materials

The Contract Price shall not be adjusted for rises or falls in the costs of labour and materials or exchange rates of currencies.

6.3 Arithmetical errors

Any arithmetical errors in multiplying the quantities and rates for the extensions, casting the extensions to page or section totals or carrying or bringing forward figures when calculating the original Contract Price stated in the Articles of Agreement shall be deemed to have been accepted by the Contract Parties with no adjustment to the Contract Price.

6.4 Quantities

6.4.1 No matter whether the quantities of the Works stated in the Schedule of Rates or other parts of the Contract Documents are estimated by the Owner or the Contractor, the quantities are deemed to be estimated by the Contractor according to the Reference Drawings and the Contract Specification;

6.4.2 The Contractor has allowed in the Contract Price for all quantities required for the carrying out of the Works as shown on the Reference Drawings or as described in the Contract Specification.

6.4.3 Both the quantities and the Contract Price are not subject to adjustment for the situation where the quantities and the descriptions have any discrepancy from the Reference Drawings and/or the Contract Specification in accordance with the method of measurement defined below.

6.5 Method of measurement

6.5.1 The quantities in the Schedule of Rates or other build-up of the Contract Price as included in the Tender Correspondence shall be deemed to have been measured

in accordance with the Contact Specification or in the Preambles to the Schedules of Rates. The same method of measurement shall be used in the settlement of the Final Account.

6.5.2 If the various documents referred to in Clause 6.5.1 are silent as to the method of measurement used, the method of measurement which is stated or reasonably apparent from the tender documents shall be used, subject to the conditions that:

- (a) all quantities shall be measured the net quantities as fixed in position with no allowance for wastage or, for work measured superficially, for laps; and
- (b) ancillary items shown on the Reference Drawings or described in the Contract Specification but not measured separately in the documents shall not be measured separately when valuing variations, unless the proportion of the ancillary items to the principal items have been varied by Variations.

6.6 Variations

6.6.1 The Contract Administrator may issue instructions under Clause 5.5 from time to time requiring a Variation (for omission, variation or additional works). No Variation changing the time or costs of the Works shall be valid unless the instruction is issued in the form set out in Schedule 5 and is signed by the Owner or the Owner's Representative. The parties shall attempt to agree in writing the scope and price of any valid Variation within **7 days** of the date of the instruction requiring the Variation. Upon an agreement being reached or if no agreement is reached within the time stipulated under this clause, the Contractor shall proceed to comply with the instruction. Where no agreement is reached on the price, the Variation shall be valued based on the valuation rules stated below. The Contract Price shall be adjusted in accordance with any agreed price or valuation as applicable for the Variation under this clause.

6.6.2 Subject to Clauses 6.6.3 and 6.6.4, the following shall not be Variations and shall not have any time and cost effect:

- (a) changes made to the Contractor's submissions such as drawings, samples or catalogues in consequence of any comments made by the Contract Administrator; or
- (b) any written instruction of the Contract Administrator specifically stating that there should be no cost addition.

6.6.3 If the Contractor considers that compliance with Clauses 6.6.2 (a) or (b) constitutes a Variation, then the Contractor shall within **7 days** after the date of receipt of the relevant comment or instruction submit a written notice to the Contract Administrator with reasons and substantiation to justify that the relevant comment (or consequential changes) or instruction should be treated as a Variation.

If the Contractor does not give a written notice in respect of any such comment or instruction by the Contract Administrator in accordance with Clause 6.6.3, the Contractor shall be deemed to accept that the relevant comment (or consequential changes) or instruction is not a Variation and to have waived any claim in respect thereof.

6.6.4 The Contract Administrator shall determine upon receipt of the Contractor's written notice with reasons and substantiation whether the relevant comment (or consequential changes) or instruction is a Variation.

6.7 Valuation of Variations

6.7.1 The valuation of Variations shall be made by the Contract Administrator in accordance with the following "valuation rules":

- (a) The Contract Rates shall be used for valuing work of the same or similar character to, and carried out under the same or similar conditions to the work to which the Contract Rates apply.
- (b) If the work is not of the same or similar character to or not carried out under the same or similar conditions to the work to which the Contract Rates apply, "pro-rata rates" shall be used. A pro-rata rate shall use the Contract Rates for comparable items as the base with adjustment for the net difference in costs due to the difference in character or conditions plus the same percentage for profits and overheads as used in the relevant Contract Rates.
- (c) The Contract Rates shall be used for valuing work omitted from the Contract.
- (d) If the omission of work substantially varies the character of, or the conditions under which any remaining items of work are carried out, then such remaining items of work shall be valued in accordance with sub-clause (b) above.
- (e) If there are no Contract Rates which can reasonably form a basis for valuing work, "star rates" shall be used. Star rates shall be derived from market rates including rates used on other comparable projects fairly adjusted to take into consideration the nature and conditions under which the work is carried out under the Contract based on actual costs plus the percentage for profits and overheads generally used in the Contract Rates.
- (f) If there is any disagreement as to the percentage for profits and overheads generally used in the Contract Rates, a percentage not exceeding 20% shall be used for mark-up on the costs of direct labour, materials, plant and the subcontract prices.
- (g) If it is foreseen that it may not be possible to properly measure or value at Contract Rates the work to be carried out, then the Contract Administrator may and the Contractor shall propose that the work shall be valued on a daywork basis whereby the time of labour and plant engaged or properly left idling and the quantities of materials used or properly wasted shall be recorded by the Contractor and endorsed by the Project Supervisor or other authorized representative of the Owner or the Contract Administrator on site. Notwithstanding any such proposal, the work shall be valued on a daywork basis only if there is an agreement between the Contract Administrator and the Contractor to that effect.
- (h) The labour and plant to be valued on a daywork basis shall be valued at daywork rates stated in the Contract or, in the absence of such rates, at fair rates determined by the Contract Administrator. Materials to be valued on

daywork basis shall be valued at the net cost incurred by the Contractor until being fixed plus 15% for profits and overheads.

6.8 Money recoverable from Contractor

6.8.1 If the Owner has any right (whether according to the Contract or pursuant to other legal rights) to recover money due from the Contractor under the Contract, the Owner may deduct or instruct the Contract Administrator to deduct such money from the Contract Price and deduct it from the next or further payment(s) until the amount is fully deducted. If the remaining balance of the final Contract Price is inadequate to cover the amount not yet deducted, the residue amount may be recovered from the Contractor by the Owner as a debt which may be set-off against any payment which the Owner is liable to pay to the Contractor under other contracts.

6.9 Money recoverable from Owner

6.9.1 If the Contractor has any right (whether according to the Contract or pursuant to other legal obligations) to recover money due from the Owner under the Contract, such money, subject to Clause 6.11 below, shall be added to the Contract Price and added to the next or further Payment Certificates issued after the amount is ascertained, unless the Owner requests to settle and settles the payment separately without adjustment to the Contract Price.

6.10 Invoices, receipts, etc.

6.10.1 The Contractor shall produce all original invoices, vouchers or receipted accounts with a photocopy of such documents for any materials or sub-contract labour charges to the Contract Administrator, the Owner or Owner's Representative when called upon to do so by the Contract Administrator. Upon verifying the photocopies of the invoices, receipts, etc., the originals shall be returned to the Contractor.

6.11 Payment

6.11.1 The Owner agrees to pay to the Contractor as full remuneration for the Works and its other obligations under the Contract the Contract Price (subject to adjustment in accordance with Clause 6.11.3 below).

6.11.2 Subject to Clause 11, the Contract Price shall be invoiced and paid in instalments according to the Payment Stages set out in Schedule 2 and in accordance with the provisions of this Clause 6.11.

6.11.3 If in the opinion of the Contractor it has completed the works in relation to any Payment Stage, the Contractor shall give notice in writing to the Contract Administrator, and if the Contract Administrator is reasonably satisfied with the Contractor's works up to that Payment Stage, the Contract Administrator shall issue a Payment Certificate in the form set out in Schedule 5 for that Payment Stage within **14 days** after the date of receipt of the Contractor's written notice. The completion of a Payment Stage means the completion, in accordance with the terms of the Contract, of all Works referred to in such Payment Stage and those that are necessary and should be provided by the Contractor by the time of completion of such Payment Stage. The Contractor may, based on any Payment Certificate, submit a payment notification to the Owner for the amount payable in respect of the corresponding completed Payment Stage. The Owner shall, after making any deduction or adjustment in accordance with the Contract, pay the amount which the Contractor is entitled to within the Period for Honouring Payment from the date of receipt of the Contractor's payment notification.

6.11.4 In the event of a Variation instructed pursuant to Clause 6.6.1 and 6.6.4, the Contract Administrator shall adjust the Contract Price in accordance with Clause 6.7.

6.11.5 Unless otherwise specified in Schedule 1(a), the Contract Price shall be inclusive of all of the following:

- (a) all facilities, materials, instruments, tools and labour the Contractor considers necessary in relation to the provision of the Works;
- (b) all expenses and disbursements incurred by the Contractor in relation to the provision of the Works, except for disbursements which the Owner has agreed in advance in writing to be reimbursable;
- (c) submission of testing, inspection and progress reports to the Owner or the Owner's Representative in accordance with the provisions of the Contract and actual needs and attendance of meetings including meetings with the Owner / management committee meetings and owners' general meetings as set out in the Contract Specification;
- (d) all taxes related to the Works, except where stated otherwise;
- (e) corresponding adjustments and variations required to be made to the Works (regardless whether completed or ongoing) for compliance with Statutory Requirements or as a result of changes in the policy or procedures of government departments;
- (f) associated works required to perform the Contract but for which no separate quotation is expressly required, and costs and fees relating to the performance of such associated works.

6.11.6 Payment to the Contractor by the Owner shall not:

- (a) relieve the Contractor of any obligation or liability under and/or in connection with the Contract or the Works; nor
- (b) constitute a waiver of any right of the Owner to claim against the Contractor arising from:
 - (i) unsettled liens;
 - (ii) any fault or deficiency in the Works, including non-compliance of the Works with the requirements of the Contract (whether apparent before or after completion of the Works); and
 - (iii) any breach of the terms of the Contract by the Contractor or any other legal obligation of the Contractor.

6.12 Final Account

6.12.1 A Final Account is a statement of the computation of the final Contract Price payable to the Contractor taking into account the following:

- (a) adjustment for Variations as Clause 6.7;
- (b) addition for the value of any direct loss and expense as Clause 4.8;
- (c) deduction for failure to rectify defects as Clauses 7.6.3 and 7.6.4;

- (d) adjustment due to failure to pay statutory fees, charges or taxes as Clause 9.1.1;
- (e) deduction for the Contractor's failure to insure or addition for the Owner's failure to insure as Clause 10.6;
- (f) deduction for liquidated damages as Clause 4.9 if the Owner so instructs; and
- (g) other additions to or deductions from the Contract Price required by the Contract.

6.12.2 The Contractor shall submit its proposed Final Account calculated in accordance with the Contract with all factual evidence and relevant calculation details to the Contract Administrator for checking within **1 month** from the completion of the whole of the Works. The Contract Administrator shall be entitled to consult the Owner for any factual evidence which may affect the computation of the Final Account, and shall send his draft Final Account to the Contractor for agreement as soon as practicable. In the absence of a submission by the Contractor, the Contract Administrator may compute the Final Account based on the information that is available to him and send it to the Contractor for agreement. The Contractor and the Contract Administrator shall discuss and agree the details of the Final Account from time to time and shall agree the whole Final Account as soon as possible not later than **1 month** after the issue of the Substantial Completion Certificate of the Works or last Works Section (as applicable).

6.12.3 The agreed Final Account shall be deemed to have taken into account all factors affecting the computation of the Final Account and known at the time of agreement but shall not prejudice the Contractor's liability for making good defects not considered in Clause 6.12.1(c) and the Contractor's responsibility to complete work valued in the Final Account but not yet done at the time of agreement.

6.12.4 If the Contract Administrator considers that he has taken into account all the representation of the Contractor but still fails to obtain the Contractor's agreement, he may issue an unilateral Final Account to the Contractor and declare it as such.

6.12.5 The cost incurred by the Contractor in preparing the Final Account shall be deemed to have been included in the Contract Price.

6.13 Final Certificate

6.13.1 The Contract Administrator shall issue the Final Certificate in the form set out in Schedule 5 within **14 days** after the issue of the Defects Rectification Certificate of the Works or the last Works Section (as applicable).

6.13.2 The Final Certificate shall state:

- (a) the final Contract Price (stated in the agreed or unilateral Final Account in accordance with Clause 6.12) subject to adjustments authorized by the Contract based on factors known after the agreement of the Final Account or the issue of the unilateral Final Account;
- (b) the amount previously paid to the Contractor; and

- (c) the amount of the difference between the sums expressed in Clause 6.13.2(a) and Clause 6.13.2(b) as the amount due to the Contractor or due to the Owner, as the case may be.

6.13.3 The amount referred to in Clause 6.13.2(c) shall be a debt payable by the Owner to the Contractor or by the Contractor to the Owner, as the case may be, within the Period for Honouring Payment calculated from the date of the Final Certificate, unless either of the Contract Parties has expressed its disagreement to the Final Certificate and notified the other party not later than the due date for payment to resolve the disagreement in accordance with Clause 12.

6.13.4 Except for the matters related to the disagreement notified by either of the Contract Parties in accordance with Clause 6.13.3, the issue of the Final Certificate shall mean that the Owner has accepted the Works carried out by the Contractor as being to its satisfaction and the contractual liabilities of both Contract Parties shall cease upon issuance of such Final Certificate except for the payment of the amount certified as finally due, liabilities for any latent defects not discovered at the time of the Final Account, or matters affected by any bribery offence, fraud, dishonesty or fraudulent concealment.

7. **QUALITY**

7.1 Quality liability

7.1.1 The Contractor shall be fully liable for the site operations, construction methods and the stability, safety and quality of all of the Works, whether completed or not, except for loss or damage arising from the Excepted Risks.

7.2 Materials, workmanship and method to comply with Contract

7.2.1 The Works shall be carried out, tested and inspected using the materials, workmanship and methods described in the Contract Specification or the Schedule of Rates, in conformity with the whole of the Contract.

7.2.2 If any of the specified materials are not procurable, then the Contractor shall submit proposed alternatives in compliance with the Contract and the Contract Specification for the approval by the Contract Administrator.

7.2.3 The Contract Administrator shall have the right to request the Contractor to remove all equipment which is not in compliance with the Contract from the Site and replace them with equipment that is in full compliance with the Contract and the Contractor shall promptly do so using its best endeavours without any entitlement to claim any additional time and cost incurred as a result under the Contract or otherwise at law.

7.3 Approval

7.3.1 All items stated by the Contract to require the checking, comments or approval by the Contract Administrator shall be submitted by the Contractor in good time before they are required for use to the Contract Administrator for such checking or approval, and shall not be used in the Works until after the checking, comments or approval by the Contract Administrator, which is to be confirmed in writing within **7 days** from the date of Contractor's submission. No approval, disapproval, comments or amendment proposal made by the Contract Administrator, the Owner,

the Owner's Representatives or agents shall in any way reduce the Contractor's liability under the Contract.

7.4 Samples

7.4.1 If on the Contract Award Date, the Contractor has already submitted samples (or photographs of the samples) which have been approved by the Contract Administrator, those samples (or photographs of the samples) shall be used as the standard for subsequent acceptance of the materials or workmanship.

7.4.2 If samples have not been approved on the Contract Award Date, the Contractor shall submit free of charge samples (or photographs of the samples) and catalogues for approval purposes before ordering materials or commencing work. Approved samples (or photographs of the samples) shall be kept on Site to serve as the standard for subsequent acceptance of the materials or workmanship.

7.5 Testing and inspection

7.5.1 The Contractor shall carry out all tests and inspections required by the Contract including the Tests on Completion to be carried out or arrange for them to be carried out by independent parties if so required, all at the Contractor's expense.

7.5.2 The Contract Administrator may issue instructions requiring the Contractor to carry out tests and inspections additional to those required by the Contract on work already carried out, and the relevant costs (including the cost of subsequent making good) shall be borne by the Owner. Provided that if the additional testing or inspection shows that the work is not in accordance with the requirements of the Contract, then the relevant costs (including the cost of subsequent making good and cost of rectification of other work) shall be borne by the Contractor.

7.5.3 The Contractor shall inform the Contract Administrator not less than **3 Working Days** before work is to be covered up to allow the Contract Administrator to inspect such work. If the Contract Administrator fails to inspect, the Contractor may carry out its own inspection and cover up. If the Contract Administrator requires work to be uncovered for inspection after it has been covered up, the Contractor shall so uncover the work. All costs of such an inspection shall be borne by the Owner, unless the inspection reveals that the work is not in accordance with this Contract, in which case the costs shall be borne by the Contractor.

7.5.4 If the Contractor fails to give the notice required by Clause 7.5.3, then the Contract Administrator may nevertheless require the inspection of any relevant work, and the cost of any such inspection shall be borne by the Contractor.

7.6 Defects liability

7.6.1 Upon the issuance of the Substantial Completion Certificate of each Works Section or Relevant Part, the Defects Liability Period with respect to that Works Section for Relevant shall begin to run.

7.6.2 Before the expiry of the Defects Liability Period, the Contractor shall replace or rectify at its own cost any materials or work which are found at any time not in accordance with the Contract on its own initiative or as and when instructed by the Contract Administrator to do so.

7.6.3 At any time not later than **7 days** after the expiry of the Defects Liability Period, the Contract Administrator may issue an outstanding list of defects in the form set out in

Schedule 5 to the Contractor for the Contractor to rectify. The Contractor shall rectify all defects on the list as soon as practicable or within the time as directed by the Contract Administrator.

- 7.6.4 If the Contractor fails to rectify defects within the aforesaid reasonable time, then the Contract Administrator may issue a notice to the Contractor informing him of the Owner's intention to employ others to rectify the defects specified in the notice at the expense of the Contractor or, at its absolute discretion and without prejudice to the Owner's other rights and remedies under the Contract and/or at law, to extend the Defects Liability Period by a period reflecting the delay by the Contractor in rectifying the defects. If the Contractor continues to fail to proceed to rectify the defects for a further period of **7 days** or if the Contractor fails to carry on diligently thereafter, then the Owner shall be entitled to employ others to rectify the defects and to recover the extra cost of so doing from the Contractor, at its absolute discretion and without prejudice to the Owner's other rights and remedies under the Contract and/or at law, or to extend the Defects Liability Period by a period reflecting the delay by the Contractor in rectifying the defects.
- 7.6.5 The Contract Administrator may instruct the Contractor not to rectify some or all of the defects specified on the lists which have been issued by the Contract Administrator, in which case a reasonable deduction from the Contract Price shall be made in respect of such defects.
- 7.6.6 After the expiry of the Defects Liability Period and within **7 days** after the completion of rectification of defects on the lists of defects to his satisfaction, the Contract Administrator shall issue to the Contractor a Defects Rectification Certificate in the form set out in Schedule 5 to that effect. Each Works Section (as applicable) shall have its own separate Defects Rectification Certificate.
- 7.6.7 The issue of a Defects Rectification Certificate for the Works or a Works Section (as applicable) shall discharge the Contractor from any further obligation to carry out the work of rectifying defects in the Works or a Works Section (as applicable) which were patent before the issue of the Defects Rectification Certificate, but it shall not prejudice the Contractor's obligations under a warranty or guarantee or the Owner's other rights and remedies either under the Contract or at law regarding defective work or other breaches of contract.
- 7.6.8 The Contractor shall address any enquiries, fault calls and deal with any problems and provide all necessary assistance to the maintenance contractor (if applicable) to address such problems that are solely related to the Works until the issue of Defects Rectification Certificate for all Lift(s) as instructed by the Owner.

8. **CONTRACTOR'S DOCUMENTS**

8.1 Shop drawings

- 8.1.1 The Contractor shall submit all such shop drawings and other drawings as it is required to prepare under the Contract to the Contract Administrator for review and comment in sufficient time as to ensure that no delay to the Works are caused. The Contractor shall promptly comply with and address any comments by the Contract Administrator to its satisfaction before proceeding with the relevant works.

8.2 Construction method statement and programme

- 8.2.1 Within **14 days** after the Contract Award Date (or **21 days** if the number of Lifts is 20 or more), the Contractor shall submit its proposed method statement and programme showing its intended time, method, stages and order of proceeding with the Works for checking and comment by the Contract Administrator. The Contractor shall carry out the Works in accordance with the approved method statement and programme which have satisfactorily addressed the Contract Administrator's comments.
- 8.2.2 If during the course of the Contract special circumstances should arise which in the opinion of the Contract Administrator warrant or necessitate a revision of the commented method statement and programme, then the Contractor shall accordingly so revise its method statement and programme as the Contract Administrator may require and submit the revised method statement and programme to the Contract Administrator for comments within **7 days** of being notified by the Contract Administrator that such a revision is required. Clause 8.2.1 applies in relation to any comments made by the Contract Administrator.
- 8.2.3 The submission to and commentary by the Contract Administrator of the method statement and programme (including revisions) shall not relieve the Contractor of any of its duties or responsibilities under the Contract.

8.3 Progress reports

- 8.3.1 The Contractor shall submit the following progress reports in reasonable number of copies in the pre-approved format to the Contract Administrator regularly until **14 days** after substantial completion of the whole of the Works:
- (a) **bi-weekly** reports to be submitted on the first working day following the week recorded and describing in detail the progress of the Works, any deviations from programme, reasons for actual or expected delays or disruptions, proposed actions to overcome the delays or disruptions, any claim for extension of time, testing and inspection carried out, list of Contract Administrator's instructions received, list of confirmations of oral instructions issued, outstanding information required, and other information as may be instructed by the Contract Administrator; and
 - (b) progress photographs attached to the bi-weekly reports.

8.4 As-built records

- 8.4.1 Within **14 days** after the completion of the Works or a Works Section (as applicable), the Contractor shall submit three sets of prints and one electronic file in suitable media of as-built records for use by the Owner, and shall additionally submit as-built records in accordance with any relevant statutory or other requirements. If there is any Variation during the Defects Liability Period, revisions to the as-built records shall be made and submitted as soon as the Variation is carried out.

8.5 Operation and Maintenance Manuals

- 8.5.1 Within **14 days** after the completion of the Works or a Works Section (as applicable), the Contractor shall submit two sets of prints and one electronic file in suitable media of the operation and maintenance manuals in sufficient detail for the Owner / Owner's Representative to operate, maintain, adjust and repair the Lift.

9. GENERAL OBLIGATIONS

9.1 Statutory obligations

- 9.1.1 The Contractor shall comply with, give all notices and make all applications on behalf of the Owner required by, the Statutory Requirements and shall, at the Contractor's cost, provide to the Contract Administrator a copy of all submissions and applications made. The Contractor shall pay any fees, charges or taxes for all statutory submissions, inspections and certificates in relation to the Works except for the fee for the "Application for a Use Permit Permitting a Lift to Continue to be Used and Operated" (Form LE11 of Lifts and Escalators Ordinance). Any cost arising from the Contractor's non-compliance with any Statutory Requirements shall be fully borne by the Contractor and shall be deemed to be included in the Contract Price.
- 9.1.2 Without prejudice to the generality of Clause 9.1.1, the Works including all equipment supplied and installed under the Contract shall comply with the latest edition of all relevant ordinances and regulations together with any amendments made thereto as well as the relevant standards, codes and memoranda, including but not limited to those more particularly set out in the Contract Specification.
- 9.1.3 If the Contractor considers that a change to the Works is necessary to comply with any change in Statutory Requirements, the Contractor shall give a written notice specifying the change to the Contract Administrator for approval. If the Contractor does not receive any instructions from the Contract Administrator within **7 days** of having given such a written notice, the Contractor shall proceed with the change, which shall be deemed to be a Variation.

9.2 Intellectual property

- 9.2.1 The Contract Price for all work shall be deemed to include all royalties, license fees or other sums legally demandable for the use of intellectual property in respect of the design or design development for which the Contractor is responsible, materials, plant, methods or anything whatsoever used in carrying out the Works.
- 9.2.2 The Contractor undertakes to indemnify and keep fully and effectively indemnified for a period of 12 years from the date of Substantial Completion of the Works the Owner, its officers, agents and employees (together referred to in this Clause as the "**Indemnitees**"), and each of them, from and against any and all claims, losses, costs, damages and expenses (including reasonable legal fees and fees of counsel of the Owner's choice) that may be incurred by any of the Indemnitees as a result of, or in connection with, or as a consequence of, or by virtue of the infringement or alleged infringement of any copyright, patent, registered design, trade mark, trade name or other intellectual property right arising out of the use of any materials prepared by the Contractor.

9.3 Assignment and sub-contract

- 9.3.1 The Contractor shall not without the written consent of the Owner or the Owner's Representative, assign the whole or part of this Contract or sub-contract any obligations under this Contract
- 9.3.2 Notwithstanding that the Owner or the Owner's Representative has consented in writing for the Contractor to assign or sub-contract any obligations under the Contract, the Contractor shall ensure that the assignee or sub-contractor understands

and agrees to observe the same obligations and responsibilities the Contractor is required to observe under the Contract and the relevant Statutory Requirements.

9.3.3 The Contractor shall remain liable to the Owner for the performance and observance of the obligations under the Contract notwithstanding that such obligations are to be performed on behalf of the Contractor by any sub-contractor or assignee.

9.4 Care of Works

9.4.1 The Contractor shall take full responsibility for the care of the work within the Works or a Works Section (as applicable), materials supplied by the Contractor or persons for whom it is responsible for incorporation into the Works, and materials supplied by the Owner and handed over to the Contractor or persons for whom it is responsible for incorporation into the Works, except for loss or damage arising from the Excepted Risks from commencement of the Works or a Works Section (as applicable) until **3 days** after substantial completion of the Works or a Works Section (as applicable) or **3 days** after the termination of the appointment of the Contractor, whether valid or not, whichever is the earlier.

9.5 Injury to persons and property and indemnity to Owner

9.5.1 Without prejudice to Clause 9.4, the Contractor shall be liable for and shall indemnify the Owner against any damage, expense, liability or loss in respect of any claims or proceedings for:

- (a) bodily injury to, disease contracted by or the death of any person arising out of, or in the course of, or by reason of the carrying out of the Works and whether arising on or off the Site, except to the extent that the injury, disease or death of that person is due to any act or neglect of the Owner or any person for whom the Owner is responsible; and
- (b) injury or damage to real or personal property arising out of, or in the course of, or by reason of the carrying out of the Works and whether arising on or off the Site, to the extent that the injury or damage is due to a breach of the Contract or other default of the Contractor or any person for whom the Contractor is responsible. The Contractor shall make good any such injury or damage at its own costs.

9.6 Provision of all things necessary

9.6.1 The Contractor shall provide at its own cost all labour, materials, Temporary Site Facilities, site and head office management necessary for the completion of the Works.

9.7 Labour and site management team

9.7.1 The labour provided by the Contractor shall be adequate in number, of the appropriate trades, skilful and competent in their respective callings, and managed by a site representative on site (with competent engineering knowledge, necessary qualifications and adequate work experience on lift systems) authorized and able to communicate with and take instructions from the Contract Administrator and capable of managing and supervising the Works to ensure that the Works are carried out in accordance with the Contract.

9.7.2 The persons employed upon the Works shall be lawfully employable in Hong Kong. They shall not live on the Site, except for watchmen approved by the Contract Administrator. They shall be properly equipped with tools, safety belts, safety

helmets, safety appliances, and shall wear proper uniforms and bear identification cards. The Contractor shall take reasonable steps to ensure that the persons employed upon the Works make full and proper use of the safety protective devices, equipment or tools provided. Illegal immigrants shall not be allowed to enter the Site.

9.7.3 The Contract Administrator may require, following a written warning issued to the Contractor, the replacement of any person employed upon the Works who in the opinion of the Contract Administrator misconducts himself or is incompetent or negligent in the proper performance of his duties with a suitable substitute at no extra cost and time to the Contract.

9.8 Temporary Site Facilities

9.8.1 The Temporary Site Facilities provided by the Contractor shall be adequate and appropriate for the intended purposes, safe and secured, causing minimum nuisance, placed at positions approved by the Contract Administrator, up-kept and maintained regularly in good conditions with minimum downtime, relocated as necessary to suit the progress and need of the Works, and removed from the Site when no longer required. The Contractor shall remain responsible for the Temporary Site Facilities from their installation until their removal from the Site.

9.9 Setting out

9.9.1 The Contractor shall ensure that the Works are constructed at the correct positions in accordance with the Contract and its design or further information issued by the Contract Administrator after the Contract Award Date. The Contractor shall properly set out lines and levels for the Works.

9.10 Cleanliness and tidiness

9.10.1 The Contractor shall keep the Site and the Works clean and tidy with minimum accumulated rubbish at all times. The Contractor shall immediately cart away from the Site all scraps, debris, rubbish and dismantled installations generated from the Works at the end of every week and whenever instructed by the Contract Administrator, Building Manager or the Owner to do so.

9.11 Protection

9.11.1 Without prejudice to Clauses 9.4 and 9.5, the Contractor shall take every care and health, safety and environmental precaution necessary to protect all persons and properties on or adjacent to the Site, including but not limited to the following, from injury, disease, death, loss, damage, nuisance, fire hazard, etc. caused by reason of the carrying out of the Works:

- (a) all workers or other persons on the Site;
- (b) all occupiers or users in the vicinity of the Site;
- (c) the public;
- (d) the Works, materials for incorporation into the Works, construction plant or temporary buildings used for the Works;
- (e) existing building construction, finishes, fittings, services within the Site which are not to be modified under the Contract, keeping interruption to the operation of the existing installations to a minimum;

- (f) roads, loading and unloading points, temporary parking spaces, footpaths, corridors, staircases and lifts for travel within the Site or within the premises in which the Site is situated;
- (g) the premises where the Site is situated;
- (h) adjoining properties;
- (i) public properties, public roads and footpaths;
- (j) properties of the Public Utility Service Companies; and
- (k) existing trees and shrubs.

9.12 Visitors

9.12.1 The Contractor shall not allow any unauthorised visitors on the Site. The Contractor shall keep a visitor book for persons authorised to visit the Site and provide safety helmets for such visitors.

9.13 Prevention of bribery offences

9.13.1 The Contractor's directors, employees, agents or its sub-contractor (where appropriate) shall not offer, give or agree to give to any person any bribe, commission, gift, loan or advantage of any kind as defined in the Prevention of Bribery Ordinance (Cap 201) as an inducement or reward for doing or forbearing to do or for having done or forborne to do any action in relation to the execution of the Contract or any other contract with the Owner, or for showing or forbearing to show favour or disfavour to any person in relation to the Contract or other contract with the Owner. The Contractor shall take all necessary measures (including by way of a code of conduct or contractual provisions where appropriate) to ensure that its directors, employees, agents and sub-contractor (where appropriate) are aware of the aforesaid provisions and shall not offer, solicit or accept any advantage and excessive hospitality when conducting business in connection with the Contract. Any commitment of the aforesaid offences by any person with the Contractor's prior authorization or subsequent acquiescence shall be deemed to be the Contractor's fault. The Contractor shall take all necessary measures to ensure that its employees, agents, sub-contractors, suppliers, or other persons for whom the Contractor is responsible comply with the foregoing provisions.

9.14 Conflict of interest

9.14.1 Upon or prior to the execution of the Contract, the Contractor shall submit to the Owner or Owner's Representative a duly signed Declaration of Ethical Commitments in the form set out in Schedule 4. If the Contractor fails to submit the duly signed Declaration of Ethical Commitments required above, the Owner or Owner's Representative shall be entitled to withhold the Contract Price or any payment until such Declaration of Ethical Commitments is submitted, and the Contractor shall not be entitled to any interest associated with any delay in such payment.

9.14.2 The Contractor shall prohibit its directors and employees involved in the Contract to engage in any project or work, other than in the performance of the Contract (with or without remuneration), which could create or potentially give rise to a conflict between their personal / financial interests and their duties. The Contractor shall also require its agents and sub-contractors (where appropriate) to impose similar restrictions on its employees by way of a code of conduct.

9.14.3 The Contractor shall take all necessary measures (including by way of a code of conduct or contractual provisions (where appropriate)) to ensure that its directors, employees, agents and sub-contractors (where applicable) are aware of the restrictions contained in Clause 9.14 and shall not offer, solicit or accept any advantage and excessive hospitality in the performance of any matter in connection with the Contract.

9.15 Meetings

9.15.1 The Contractor shall upon the request of the Owner or the Owner's Representative attend meetings with the Owner in compliance with the Contract and the Contract Specification, including but not limited to management committee meetings, regular meetings, special meetings and general meetings of owners, to explain to and discuss with the Owner issues relating to the Works and to respond to any queries.

10. **INSURANCES**

10.1 Employees' Compensation Insurance

10.1.1 The Contractor shall effect and maintain and cause any sub-contractor(s) of all tiers to effect and maintain employees' compensation insurance in compliance with the provisions of the Employees' Compensation Ordinance (Cap.282) in the name of the Contractor or any sub-contractor(s) (whichever is applicable) as "the insured contractor" and the Owner and the Building Manager as "the principals" to cover the legal liabilities, costs and claims against any or all of the insured contractors in respect of death or bodily injury by accident or disease sustained by any employees employed by any of the insured contractors arising out of and in the course of their employment on the Works or in connection with the Contract whether on site or off-site, for the full period of construction, Defects Liability Period and/or maintenance.

10.1.2 As soon as the Contractor becomes aware of any employees, self-employed persons or sole proprietors employed or engaged upon the Works or in connection with the Contract sustaining death or bodily injury by accident or disease, it shall notify the Commissioner for Labour in the manner prescribed by the Employees' Compensation Ordinance (Cap.282), with a copy of the notice to the Contract Administrator and the insurers, irrespective of whether the death or bodily injury gives rise to any liability to pay compensation.

10.2 Contractors' All Risks and Third Party Liability Insurance

10.2.1 The Contractor shall at its own costs and expenses take out the Contractors' All Risks and Third Party Liability Insurance and shall effect and maintain the said insurance in the joint names of the Contractor and those Separate Contractors as may be specified in the Contract Specification and their respective sub-contractors of all tiers as "the insured contractors" and the Owner and the Building Manager as "the principals".

10.2.2 The Material Damage section of the said insurance shall comply with the following requirements:

- (a) The Insured Property shall consist of the Works under the Contract, the works of the Separate Contractors and the materials supplied by the Owner for incorporation into the Works and shall include temporary work and all unfixed materials and goods delivered to, placed on or adjacent to the

Insured Property and intended therefor (excluding construction plant and temporary buildings which are owned or hired by the insured contractors).

- (b) It shall cover physical loss of or damage to any part of the Insured Property during the period of construction until **14 days** after substantial completion of that part notwithstanding any use or occupation by the principals or others prior to substantial completion, and also cover loss of or damage to such property arising during the Defects Liability Period and/or maintenance from a cause occurring during construction prior to completion or occasioned by any of the insured in the course of their carrying out of remedial work or outstanding work.
- (c) The sum insured shall be equal to the full reinstatement value of the Insured Property plus:
 - (i) in case of reinstatement the percentage of professional fees as stated in Schedule 2 to cover the costs and expenses in respect of architects', surveyors' and engineers' fees necessarily incurred in the reinstatement of the Insured Property consequent upon its loss or damage but not for preparing any claim; and
 - (ii) an amount not less than the amount for the removal of debris as stated in Schedule 2 to cover the costs and expenses necessarily incurred by the Insured with the consent of the Insurers in dismantling and removing debris of the portion or portions of the Insured Property destroyed or damaged by any peril thereby insured against.
- (d) It shall contain an escalation clause to cover the possible increase in the reinstatement value of the Insured Property by the percentage as stated in Schedule 2.

10.2.3 The Third Party Liability section of the said insurance shall comply with the following requirements:

- (a) It shall cover the legal liability, costs and claims against any or all of the insured contractors in respect of:
 - (i) accidental death, bodily injury, illness or disease suffered by any person, other than employees of the insured contractors;
 - (ii) accidental loss or damage to physical property, other than those insured under the Material Damage section until **14 days** after substantial completion;
 - (iii) loss of or damage to property real or personal including damage to property, land or buildings due to collapse, subsidence, vibration, weakening or removal of support or lowering of ground water;
 - (iv) loss of or damage to any building, structure or property belonging to the principals in the care, custody or control of the insured contractors (alternatively, this paragraph (iv) may be covered by the Material Damage section of the insurance); and
 - (v) accidental death, bodily injury, illness or disease suffered by any employee of the principals visiting the Site on occasional basis, arising

out of the performance of the Works and the works of Separate Contractors.

- (b) There shall be a "cross-liability" clause to cover the insured contractors as separate and distinct parties with stipulation that the insurers agree to waive any right of subrogation rights which the insurers may have against any of the insured contractors.
 - (c) The limit of indemnity shall not be less than the amounts stated in Schedule 2.
- 10.2.4 The amount of excess in respect of each and every occurrence of loss or damage shall not be more than the respective amounts or the percentages of loss or damage stated in Schedule 2, whichever is greater.
- 10.2.5 If the Contractor considers that the above-mentioned insurance coverage is inadequate to cover its contractual or legal liabilities and requires that the coverage be increased or the amounts of excesses be reduced then the additional premium so payable shall be solely for the account of the Contractor.
- 10.2.6 In the event of loss or damage covered by the Material Damage section of the insurance, the Contractor shall remove and dispose of any debris, repair or replace any materials damaged, destroyed, lost or stolen, restore work destroyed, damaged or lost, and proceed with the carrying out and completion of the Works with due diligence immediately after any inspection required by the insurers has been carried out. The Contractor shall not be entitled to any payment in respect of the replacement, repair or restoration of the loss or damage and the removal and disposal of debris other than the amount received under the insurance (less the amount to cover professional fees) unless and to the extent that the loss or damage was caused or contributed to by a breach of contract or other default by the Owner or any person for whom the Owner is responsible.
- 10.3 Taking out insurances
- 10.3.1 The policies of the aforesaid insurances shall contain the usual terms and conditions, subject only to non-negotiable exclusions imposed by the insurance market. They shall remain in force for the full period of construction of the Works including the Defects Liability Period.
- 10.3.2 For insurances to be taken out by the Contractor or its sub-contractor(s), the terms and conditions of the policies and the insurers shall be reviewed and accepted (such acceptance shall not be unreasonably withheld or delayed) by the Contract Administrator, and evidence of insurance cover shall be submitted to the Contract Administrator as a condition precedent to the commencement of any physical work. The policies and premium receipts shall be deposited with the Contract Administrator as soon as practicable afterwards.
- 10.3.3 For insurances to be taken out by the Owner, evidence of insurance cover shall be provided to the Contractor before commencement of any physical work. Copies of the policies and premium receipts shall be provided to the Contractor as soon as practicable afterwards.
- 10.4 Company master policy or annual policy

If the party responsible for taking out the aforesaid insurances maintains a company master policy or an annual policy, and endorses the policy to specifically include the

Contract and the required parties as the insured and provide cover no less than that required under the Contract, then this shall be a discharge of the party's obligations to take out the insurance separately for the Contract. The party shall produce a copy of the policy, the specific endorsement and premium receipt for the inspection by the other party prior to commencement of any physical work.

10.5 Maintaining insurances

10.5.1 The party responsible for taking out the aforesaid insurances shall maintain and extend as necessary the insurances to be in full force for the required periods of insurance. Extension endorsement, renewal policy (in the case of annual policy) and premium receipt shall be produced to the other party for inspection within **14 days** after each extension or renewal date.

10.5.2 If the period of insurance shall be extended as a result of an extension of time granted by reason of any default of part of the Contractor or parties for whom the Contractor is responsible, the Contractor shall be responsible for any additional premiums for the extension of the insurance, otherwise, the Owner shall be responsible.

10.6 Remedy for failure to insure

If the party responsible for taking out the aforesaid insurances shall at any time fail upon request to produce any receipt showing that any of the insurances is in full force then the other party may without prejudice to other rights and remedies in the joint name and on behalf of both Contract Parties insure against any risk, loss or damage with respect to which the default shall have occurred, and shall be entitled to recover the premium paid plus 15% administrative charges from the party responsible upon production of the premium receipt, without further adjustment to prices allowed in the Contract for insurance.

10.7 Compliance with insurance conditions

The Contractor shall with all due diligence and at its own cost conform to the terms and conditions of the aforesaid insurances and all reasonable requirements of the insurers in connection with the prevention of accidents, the submission and settlement of claims, the recovery of losses and shall bear at its own cost the consequences of any failure to do so.

10.8 Reporting incidents

In the event of the occurrence of the perils covered by the aforesaid insurances, the Contractor shall notify the insurers and the Contract Administrator of the details of the incident immediately upon the Contractor becomes aware of it.

10.9 Insurances not affecting Contractor's liability

10.9.1 The presence of the aforesaid insurances shall not prejudice or reduce the Contractor's liability or responsibility under the Contract.

10.9.2 The Contractor shall bear the costs of all excesses, exclusions or limitations applying under the aforesaid insurances in so far as they concern risks or liabilities for which the Contractor is responsible under the terms of the Contract.

11. DETERMINATION

11.1 Determination by Owner

11.1.1 The Owner may but not unreasonably or vexatiously by notice by registered post or recorded delivery to the Contractor forthwith determine the appointment of the Contractor under the Contract in any one or more of the following events:

- (a) the Contractor without reasonable cause fails to proceed regularly and diligently with the Works (including rectifying defects) or completely or substantially suspends the carrying out of the Works (including rectifying defects) before substantial completion of the whole of the Works;
- (b) the Contractor without reasonable cause fails persistently to rectify defects after substantial completion of the whole of the Works and the Owner pursuant to Clause 7.6.4 employs others to rectify the defects for 5 times or more and the total cost of rectifying defects exceeds HK\$100,000;
- (c) the Contractor without the written consent of the Owner assigns or sub-contracts the Contract;
- (d) the Contractor without reasonable cause fails to submit evidence of the Employees' Compensation Insurance under Clause 10.1 and the Contractors' All Risks and Third Party Liability Insurance under Clause 10.2 in the manner stated in Clause 10.3.2 within **2 months** after the Contract Award Date;
- (e) the Contractor becomes bankrupt or makes a composition or arrangement with its creditors or has a petition for compulsory winding-up presented or made against it or enters into compulsory or voluntary liquidation except for the purpose of reconstruction or has a provisional liquidator or receiver appointed, unless the Owner, the Contractor and its trustee in bankruptcy, liquidator or receiver, as the case may be, agree in writing before or after the notice of determination to the continuation or reinstatement of the Contractor's appointment; or
- (f) the Contractor (or any person for whom the Contractor is responsible with or without the knowledge of the Contractor) is convicted of a bribery offence described in Clause 9.13.

Provided that the appointment of the Contractor shall not be determined due to Clauses 11.1.1(a) to (d) unless the event either has continued for **7 days** after receipt by registered post or recorded delivery of a warning notice of determination from the Contract Administrator specifying such event or, except for sub-clause (d), at any time thereafter has repeated, and the Contract Administrator has certified this during the continuation or resumption of the event not more than **14 days** before the notice of determination.

11.1.2 In the event of the Owner determining the appointment of the Contractor as aforesaid:

- (a) the Contractor shall reimburse the Owner all additional costs and direct loss and/or expense caused to the Owner by the determination. Provided always that the right of determination shall be without prejudice to any other rights or remedies which the Owner may possess;

- (b) the Contractor shall not without the consent of the Contract Administrator remove from the Site any materials;
- (c) the balance of payment from one Contract Party to the other shall be computed by calculating the expenses at item (i) below and then making the deductions or additions at items (ii) to (v) below:
 - (i) the expenses incurred by the Owner in completing the Works, excluding the costs of Variations instructed after determination, but including the additional costs of employment of consultants and site staff for the necessary period of time until the settlement of the final payment under the Contract and the completion of the Works;
 - (ii) addition for the total amount previously paid to the Contractor;
 - (iii) addition for the additional costs and direct loss and/or expense caused to the Owner by the determination, including damages for delayed completion of the Works or any Works Section (as applicable) for the period until the original completion date of the Contract for completion; and
 - (iv) deduction for the total amount that would have been payable for completing the Works calculated in accordance with the Contract if the determination had not occurred; and
 - (v) any other deduction to which the Owner is entitled to make under the Contract.

11.1.3 If the Owner does not employ other persons to commence the Works left outstanding within **12 months** after determination, the expenses, costs, direct loss and/or expense, and period of delay for the purpose of Clause 11.1.2 shall be assessed on the assumption that the employment of such persons had commenced by the end of the said **12 months**.

11.2 Determination by Contractor

11.2.1 The Contractor may but not unreasonably or vexatiously forthwith determine its appointment under the Contract by notice by registered post or recorded delivery to the Owner in any one or more of the following events:

- (a) the Owner fails to make any payment due under the Contract within **14 days** of such payment being due;
- (b) the Owner interferes with or obstructs the issue of any certificate due under the Contract;
- (c) the commencement or carrying out of the whole or substantially the whole of the Works has been postponed or suspended as instructed by the Owner or the Contract Administrator due to no breach or default of the Contractor or postponed or suspended due to any combination of the Compensable Events for a continuous period of more than **3 months** beyond any stipulated periods of postponement or suspension in the Contract; or
- (d) the Owner becomes bankrupt or makes a composition or arrangement with its creditors or has a petition for compulsory winding-up presented or made against it or enters into compulsory or voluntary liquidation except for the purpose of reconstruction or has a provisional liquidator or receiver appointed, unless the Contractor, the Owner and its trustee in bankruptcy, liquidator or receiver, as the case may be, agree in writing before or after the notice of determination to the continuation or reinstatement of the Contractor's appointment.

Provided that the appointment of the Contractor shall not be determined due to Clauses 11.2.1(a) to (c) unless the event has continued for **14 days** after receipt by registered post or recorded delivery of a warning notice of determination from the Contractor specifying such event or, except for sub-clause (c), at any time thereafter has repeated, and the notice of determination is issued during the continuation or resumption of the event.

11.2.2 In the event of the Contractor determining its appointment as aforesaid:

- (a) the Owner shall reimburse the Contractor all additional costs and direct loss and/or expense caused to the Contractor by the determination. Provided always that the right of determination shall be without prejudice to any other rights or remedies which the Contractor may possess;
- (b) the Contractor may after informing the Contract Administrator remove from the Site any materials, plant and facilities;
- (c) the balance of payment from one Contract Party to the other shall be computed by calculating the gross valuation at item (i) below and then making the deductions or additions at items (ii) to (v) below:
 - (i) the gross valuation of the Works in accordance with Clause 6.5, excluding materials removed by the Contractor after determination, but including materials that the Contractor has paid for, or is legally bound to pay for, and has or will transfer these materials with proper ownership to the Owner;
 - (ii) deduction for liquidated damages which may accrue up to the date of determination;
 - (iii) addition for the additional costs and direct loss and/or expense caused to the Contractor by the determination;
 - (iv) deduction for the total amount previously paid to the Contractor; and
 - (v) any other deduction to which the Owner is entitled to make under the Contract.

11.3 Consequences of determination

11.3.1 In the event of determination of the appointment of the Contractor under Clause 11.1 or 11.2, this Clause 11.3 shall apply in addition to Clause 11.1.2 or 11.2.2.

11.3.2 The Contractor shall immediately give up possession of the Site and demobilize its people from the Site except those necessary to attend to site security, site survey and handover but only for the time specified by the Contract Administrator as being reasonably required for that purpose.

11.3.3 Any removal by the Contractor of materials, plant and facilities shall be carried out with due care and with suitable safety provisions provided so as not to affect the safety and stability of work and other objects remaining on Site or endanger personal safety.

11.3.4 The Owner may provide site security to prevent improper removal and unauthorised access from happening and provide safety measures to protect the Works, people and adjoining properties.

- 11.3.5 The Contractor and the Contract Administrator shall jointly take records of the status and quantities of the work done and materials, plant and facilities on Site.
- 11.3.6 The Owner may employ and pay other persons to carry out and complete the Works and use or dispose of the materials, plant and facilities left on the Site pursuant to Clause 11.1.2(b) or 11.2.2(b).
- 11.3.7 If instructed to do so by the Contract Administrator, the Contractor shall as far as possible and without payment from the Owner terminate or assign its contracts with suppliers and sub-contractors to the Owner or its nominee to enable the Owner or its nominee to employ and pay those suppliers and sub-contractors to continue to provide their service, warranties, guarantees on similar terms to their existing contracts.
- 11.3.8 The additional costs incurred in implementing the above procedures and measures shall be part of the additional costs due to determination.
- 11.3.9 The Contractor and the Contract Administrator shall as soon as practicable exchange their computations of the balance of payment in Clause 11.1.2(c) or Clause 11.2.2(c) with supporting documentation, discuss and agree the balance of payment. Upon agreement, the Contract Administrator shall issue a Final Account (in lieu of that under Clause 6.12) showing a summary computation of the balance of payment. If the Contract Administrator considers that he has taken into account all the representation of the Contractor but still fails to obtain the Contractor's agreement, he may issue a unilateral Final Account to the Contractor and declare it as such.
- 11.3.10 The Contract Administrator shall issue the Final Certificate (in lieu of that under Clause 6.13.1) certifying the balance of payment due to the Contractor or due to the Owner as the case may be within **14 days** after the agreement of the Final Account or after **1 month** has lapsed after the issue of the unilateral Final Account, whichever is later. The amount stated as due in the Final Certificate shall be a debt payable as the case may be by the Owner to the Contractor or by the Contractor to the Owner within the Period for Honouring Payment calculated from the date of the Final Certificate, and Clause 6.13.4 shall still apply, unless either of the Contract Parties has expressed its disagreement to the Final Certificate and notified the other party no later than the due date for payment to resolve the dispute in accordance with Clause 12.
- 11.3.11 Before the agreement of the Final Account, the liable Contract Party shall pay the undisputed portion of the up-to-date balance of payment once every **2 months**.

12. DISPUTE RESOLUTION

- 12.1 Any dispute, controversy, difference or claim arising out of or relating to the Contract, including the existence, validity, interpretation, performance, breach or termination thereof, or any dispute regarding non-contractual obligations arising out of or relating to the Contract (the "**Dispute**"), shall first be referred to mediation at the Hong Kong International Arbitration Centre ("**HKIAC**") and in accordance with its then current Mediation Rules of the HKIAC (the "**Mediation Rules**").
- 12.2 The Contract Parties may commence legal proceedings in respect of the Dispute but no further steps may be taken by either Contract Party in such proceedings

which shall be stayed (unless otherwise directed by the relevant court or tribunal having jurisdiction over the Dispute) pending the termination of the mediation under the Mediation Rules. If the mediation is terminated without the Dispute being resolved, then the stay shall be lifted (unless otherwise directed by the aforesaid court or tribunal) and either Contract Party may take further steps in and proceed with the legal proceedings in respect of the Dispute.

- 12.3 Save and except for Disputes concerning claims which are within the jurisdiction of the Small Claims Tribunal established under the Small Claims Tribunal Ordinance (Cap.338) which claims shall be actionable in the Small Claims Tribunal, all Disputes shall be referred to and finally resolved by arbitration pursuant to the Domestic Arbitration Rules of the HKIAC in force when the notice of arbitration is submitted.
- 12.4 The law of this arbitration clause shall be Hong Kong law. The seat of arbitration shall be Hong Kong. The number of arbitrators shall be one.
- 12.5 All the provisions in Schedule 2 to the Arbitration Ordinance (Cap. 609) shall apply to any arbitration referred under the provisions of this Clause 12.
- 12.6 Each Contract Party irrevocably:
- (a) accepts that the award of the arbitration shall be final and legally binding; and
 - (b) undertakes to fully and promptly execute and perform the award of the arbitration.
- 12.7 Notwithstanding the existence of any dispute, controversy, difference, claim, mediation or arbitration, the Contract Parties shall continue to perform their respective obligations under the Contract except in relation to rights and obligations related to the dispute.

13. **OTHER CONTRACT DISPUTES**

- 13.1 If any dispute, controversy, difference or claim arises between the Owner and the Contractor or any other contractor or consultant under or in connection with any other contract relating to the Project or the Works or its maintenance, and the Owner is of the view that such dispute, controversy, difference or claim concerns the Project or the Contractor (referred to in this Clause as a "**Related Dispute**"), the Owner or the Owner's Representative may by notice in writing to the Contractor require either:
- (a) that any dispute in connection with the Contract be referred to any arbitrator or arbitral tribunal (as the case may be) to whom any Related Dispute is referred, and in such case the provisions on appointment of arbitrator or arbitral tribunal under the Domestic Arbitration Rules of the Hong Kong International Arbitration Centre referred to in Clause 12.2 above shall not apply; or
 - (b) that any Related Dispute be referred to any arbitrator or arbitral tribunal to whom any dispute in connection with the Contract is referred pursuant to the Contract, and if such arbitrator or arbitral tribunal is willing to act in connection with the Related Dispute, such disputes shall be resolved by arbitration by such arbitrator or arbitral tribunal in accordance with the Contract or the arbitration procedures applicable to the Related Dispute (as decided by the Owner).

14. **NOTICES**

- 14.1 Any notice to be given by any party shall be in writing and shall be sent to the addresses, email addresses or fax numbers (where applicable) for receipt of notices set out in Schedules 2 and 3. Where a notice is sent by email, it shall be deemed to have been received **1 day** after the time sent (as recorded on the device from which the sender sent the email) unless the sender receives an automated message that the email has not been delivered. Where a notice is sent by facsimile, it shall be deemed to have been received at the time shown in the transmission report as the time that the whole fax was sent.
- 14.2 Any notice may be sent by hand or prepaid post. Where a notice is sent by post, it shall be deemed to have been received **3 days** after being posted (subject to proof by postmark); and if it is delivered by hand, it shall be deemed to have been received when delivered (subject to proof of delivery).
- 14.3 If any party wishes to change its address, email address or fax number for receiving notices, it shall give notice thereof in writing to the other party **14 days** in advance.

15. **SCOPE OF CONTRACT**

- 15.1 The Contract shall constitute the entire agreement between the Contract Parties in respect of the Works and shall supersede and extinguish any previous agreements, representations and undertakings.

16. **SEVERABILITY**

- 16.1 If any provision of the Contract is considered ineffective or unenforceable, the remaining provisions of the Contract shall continue to have effect.

17. **GOVERNING LAW**

- 17.1 The Contract shall be governed by and construed according to the laws for the time being in force in Hong Kong and subject to Clause 12 the Contract Parties submit to the non-exclusive jurisdiction of the courts of the Hong Kong Special Administrative Region.

18. **THIRD PARTY RIGHTS**

- 18.1 The terms of the Contract do not confer any right or benefit on any third party under the Contracts (Rights of Third Parties) Ordinance (Cap. 623) and are not intended to be enforceable by any third party. The Contract may be rescinded or varied without the consent of any third party.

Special Conditions of Contract (if applicable)
(As a separate attachment)

Schedule 1(a)

Contract Specification

- General Specification
- Annex 1 - Lift modernisation works
- Annex 2 - Lift replacement works

Contract Specification

General Specification

Introduction

1. This Contract calls for
 - (a) the modernisation of Lift(s); **OR**
 - (b) the replacement of Lift(s)

to be completed with all associated works necessary for the safe execution, operation and completion of the Works.

The Lifts

2. The safety devices for which the Lift(s) have been equipped with are shown in **Schedule 2** for reference.

Statutory Requirements and Regulations

3. The Works including relevant equipment supplied and installed under this Contract shall comply with all relevant Ordinances and Regulations together with any amendments made thereto as well as the relevant standards, codes and memoranda in an edition being at the date of tender closing, in particular: -
 - (a) Lifts and Escalators Ordinance (Cap.618);
 - (b) Factories & Industrial Undertakings Ordinance and its subsidiary Regulations;
 - (c) Occupation Safety and Health Ordinance;
 - (d) Noise Control Ordinance and its subsidiary Regulations;
 - (e) Waste Disposal Ordinance and its subsidiary Regulations;
 - (f) Water Pollution Control Ordinance and its subsidiary Regulations;
 - (g) Air Pollution Control Ordinance and its subsidiary Regulations;
 - (h) Buildings Ordinance and its subsidiary Regulations;
 - (i) Electricity Ordinance (Cap. 406);
 - (j) Code of Practice on the Design and Construction of Lifts and Escalators issued by Electrical and Mechanical Services Department (“EMSD”) (“Lift & Escalator Design CoP”);
 - (k) Code of Practice for Lift Works and Escalator Works issued by EMSD (“Lift & Escalator Works CoP”);
 - (l) Code of Practice for Building Works for Lifts and Escalators issued by the Building Authority (“Lift Building Works CoP”);
 - (m) Code of Practice for Fire Safety in Building issued by Buildings Department (“FS Building CoP”);
 - (n) Circular Letters relating to lifts issued by EMSD;
 - (o) Codes of Practice for Minimum Fire Services Installations and Equipment and Inspection, Testing and Maintenance of Installations and Equipment together with Memoranda, circulars and letters issued by Fire Services Department (FSD) (“FS CoP”);

- (p) Code of Practice for the Electricity (Wiring) Regulations issued by EMSD;
 - (q) Code of Practice for Safety at Work (Lift and Escalator) issued by Labour Department (LD);
 - (r) Code of Practice for Energy Efficiency of Building Services Installation issued by EMSD (“BEC”);
 - (s) Code of Practice for Metal Scaffolding Safety issued by LD; and
 - (t) Guidelines on Safety of Lift Shaft Works issued by Construction Industry Council (CIC).
4. Valid type approval(s), in accordance with Cap. 618 S16 (1)(e)&(f), for all safety components supplied and installed under this Contract must be obtained at the time of tender deadline.

Restriction and Working Conditions on Site

5. The Contractor shall seek the consent of the Owner / Owner’s Representative and the Contract Administrator for the temporary usage of electricity and water supply on Site. All the associated temporary works involved to suit for the available supply, if any, shall be arranged by the Contractor at his own expenses. In case electricity or water supply is not available on Site, the Contractor shall liaise with the Owner / Owner’s Representative and the Contract Administrator in arranging the temporary electricity and water supply necessary for the execution of the Works at the cost of the Contractor.
6. The Contractor shall liaise with the Owner / Owner’s Representative and the Contract Administrator for the temporary storage arrangement of materials during the Works on Site. The Contractor shall bear the full responsibilities in taking care of their installation, tools and materials on site before the completion of the Works at the cost of the Contractor.
7. The Contractor shall ensure that the noise emitted in execution of the Works shall be kept at minimal and shall comply with the requirements stipulated by Environmental Protection Department.
8. The interruption of the operation of the existing installations during the Works shall be kept at minimal.

Health, Safety and Environmental Protection Measures

9. The Contractor shall take all health, safety and environmental protection measures/precautions that shall be in compliance with all the relevant statutory requirements throughout this Contract. Any cost arises from the compliance with the requirements shall be fully borne by the Contractor and shall be deemed to be included under this Contract.
10. The Contractor shall implement necessary precautionary measures, including provision of appropriate and adequate personal protective devices / equipment / tools and a safe and healthy environment, to ensure the safety and health of persons working on Site in accordance with all relevant statutory requirements such as the Factories and Industrial Undertakings Ordinance (Cap.59) and the Occupational Safety and Health Ordinance (Cap.509). The Contractor shall also take reasonable steps to ensure that persons working on Site make full and proper use of the personal protective devices / equipment / tools.

Requirements of the Works

11. In execution of the Lift Modernisation Works, the Contractor shall comply with all the requirements as set out in **Annex 1**.
12. In execution of the Lift Replacement Works, the Contractor shall comply with all the requirements as set out in **Annex 2**.
13. In addition to complying with the requirements set out in **Annex 1** or **Annex 2**, the Contractor shall also be responsible for the following items of works without additional cost to the Owner: –
 - (a) To co-ordinate the site works with Owners, Owner’s Representative, Building Manager, Contract Administrator or his Representatives, as well as other contractors and other consultants, and submits detailed plans and schedule to carry out the Works while maintaining normal operation of the lifts in the building as far as practicable;
 - (b) To separate the control system of the lift to be modernised / replaced from that of the existing lift-group and maintain the normal operation of the other lift(s) in the lift-group;
 - (c) To arrange and attend not exceeding four (4) meetings and inspections every month as and when notified by the Owner, Owner’s Representative at least two (2) working days prior to the meetings or inspections;
 - (d) To provide necessary information of the parts / materials / equipment of the Works at the Contractor’s expenses upon requested by the Contract Administrator, for the purpose of validation of Works including but not limited to the design, validity of type-approval and devices / components compatibility;
 - (e) To provide necessary work to keep the entire lift system(s) in a condition that the Lift(s) could be put back into normal operation after completion of the Works. The said work shall include all labour, materials, spare parts and tests necessary for safe resumption of lift services;
 - (f) To allow sufficient access for the installed equipment so as to facilitate its future operation and maintenance. In addition, the Works shall not obstruct the access for undertaking normal routine maintenance and inspection of others lifts;
 - (g) To issue the “Application for A Resumption Permit For Resuming The Use And Operation Of A Lift Or An Escalator After Major Alteration (Form LE7)” to EMSD;
 - (h) To obtain the Resumption Permit (Form LE8) from EMSD for resuming the use and operation of the concerned lifts;
 - (i) To arrange the resumption of lift services; and
 - (j) To provide two (2) sets of hardcopies and softcopies of examination reports with format specified in the Lift & Escalator Works CoP, as-fitted drawings and Operation and Maintenance manuals (if applicable) for the Works.

14. Excluding the lifts suspended for site work, in case that the Use Permit or the load tests for the Lift(s) would be expired within 2 months within the duration of this Contract, the Contractor shall, at the Contractor's own cost, arrange Registered Lift Engineer(s) to carry out thorough examination to the lifts as specified in Cap. 618, prepare the Safety Certificate for lift(s) and remind the Owner to apply for a Use Permit permitting a lift to continue to be used and operated (Form LE11). The application fee for the Use Permit (Form LE11) shall be borne by the Owner; however, the Contractor shall be responsible to replace the existing Use Permit with the new Use Permit and securely fix in the holder of Use Permit. The replacement of Use Permit and their return to the Owner, Owner's Representative or the Building Manager of the Lift(s) is the responsibility of the Contractor.

Maintenance Services

15. The scope of the Maintenance Services (if so selected by the Owner) after the completion of lift modernization works or lift replacement are set out in the **Lift Maintenance Services Specification**.

Site Representative

16. The Contractor's site representative shall be a staff of the Contractor having sufficient engineering knowledge and working experiences on the lift systems. The site representative shall be reachable by telephone from 9:00 am to 6:00 pm starting from 14 calendar days after the commencement of the Contract to the completion of the Contract. If the site representative takes leave within the above period, the Contractor shall arrange a replacement site representative also having sufficient engineering knowledge and working experiences on the lift systems to execute the Contract during the leave period of the original site representative. The Contractor's site representative shall be able to communicate both in Chinese and English. The name, qualification and experience of the Contractor's site representative shall be submitted by the Contractor for the Contract Administrator's record within two (2) weeks from the date of the commencement of the Contract.

Contract Specification

Annex 1 – Lift Modernisation Works Specification

(I) Scope of Works

1. The Works shall comprise the provision of labour, materials, equipment, transportation and all necessary resources for the design, manufacture, supply, transportation, delivery to Site, installation, testing, commissioning, provision of Operation and Maintenance manuals, and subsequent one (1) year Defects Liability Period (“DLP”) of the following items of Works and their associated works: -

The modernisation items to be added and installed to the corresponding lifts at the Site are shown in **Schedule 2**.

(II) Programme of Works

2. The Works shall be completed, properly tested, commissioned and handed-over for operation within the programme set out in **Schedule 2**.

(III) Requirements of Lift Modernisation Works

3. All the modernisation items to be supplied and installed under this Contract shall be in full compliance with the requirements as stipulated in the Lift & Escalator Design CoP in an edition being at the date of tender submission deadline. In addition, the following components, if involved in the Works, shall also comply with the Contract requirements as stipulated below –

(a) Double Brake System

- i. The double brake system, or redundant braking system, shall have two independent braking systems, each of which shall be electrically monitored.
- ii. All the mechanical components of the brake which take part in the application of the braking action on the drum or disc shall be installed in two sets and be of dimensions such that if one of the components was not working on the brake drum or disc, a sufficient braking effort to slow down the car when containing the rated load would continue to be exercised.
- iii. The double brake system to be installed shall replace the existing single brake system. Addition of brake components to existing single brake system to achieve double brake shall NOT be allowed.

(b) Unintended Car Movement Protection (UCMP) Device

- i. The UCMP shall stop unintended car movement away from the landing position with the landing door not in the locked position and the car door not in the closed position, as a result of failure in any single component of the lift machine or drive control system upon which the safe movement of the car depends, except failure of the suspension ropes or chains and the traction sheave or drum or sprockets of the machine.
- ii. The UCMP device supplied and installed under this Contract shall have valid type approval from EMSD. The construction and performance requirements

of the UCMP device shall be in full compliance with the latest version of Lift & Escalator Design CoP.

(c) Ascending Car Overspeed Protection (ACOP) Device

- i. The ACOP device, comprising speed monitoring and speed reducing elements, shall detect uncontrolled movement of the ascending car as defined in the Design Code, and shall cause the car to stop, or at least reduce its speed to that for which the counterweight buffer is designed.
- ii. The ACOP device supplied and installed under this Contract shall have valid type approval from EMSD. The construction and performance requirements of the ACOP device shall be in full compliance with the latest version of Lift & Escalator Design CoP.

(d) Door Safety Edges

- i. 2-in-1 mechanical safety edge (i.e. multi-beam embedded in safety edge) or multi-beam door re-opening detection device complete with not less than 90 infrared beams or other approved technology shall be provided for lifts. The detection field of the light curtain shall cover the entire car opening width and extend from not more than 25mm above the sill to a minimum height of 1600mm above the sill. The multi-beam door re-opening detection device shall be inoperative when the fireman mode of fireman's lift and / or home landing operation (if required) is activated.

(e) Car Doors and Landing Doors

i. GENERAL REQUIREMENTS

Unless alternatives are approved by the Owner, Owner's Representative and the Contract Administrator, Car Doors and Landing Doors replaced shall be horizontal sliding doors. All panels of car doors and landing doors on all floors shall be constructed of at least 1.5 mm thick stainless steel of *EN 10088-1 grade 1.4301 (grade 304)* or equivalent.

Doors shall be with fully automatic power opening and closing. The speed of the door panels shall be reduced when approaching the ends of their travels during closing. The car door shall be re-opened upon actuation of the landing call button and before the car door has fully closed.

Any projections or recesses in the exposed parts of the car doors or landing doors shall not exceed 3 mm in order to avoid shearing and the clearance between sliding parts of the door and any fixed part of the car or landing entrance shall not exceed 6 mm to avoid trapping that may cause bodily injury;

Sliding car doors and landing doors shall be guided on two parallel edges of the door. The distance between the car and landing sills shall not exceed 30 mm;

The clear height of all car doors and landing doors shall be not less than 2000 mm unless otherwise specified due to site constraint;

Under normal circumstances, lift car doors shall not be opened automatically unless the car has attained the levelling accuracy of less than 10 mm;

Door hangers and tracks together with their fixing for car and landing door shall be of steel or approved material of equivalent strength and be of robust

construction. Means shall be provided to prevent the hangers from misaligning, jumping the tracks and jamming or displacement at the extremities of their travel;

Two guide blocks shall be fitted at the bottom of each door panel at appropriate positions to prevent twisting of door panel even after wear. Each guide block unit shall incorporate a robust safety flange extending downwards in the event of the collapse or breaking a drift of the normal rubbing surface of the guide block, the safety flange will prevent the bottom of the door panel from being pushed into the lift well;

Rollers shall be constructed of steel with sealed ball or roller bearings. An outer plastic lining on roller is acceptable;

Ropes shall be steel wire ropes to BS EN 12385-4 or equal and approved;

The Contractor shall provide documentary evidence, upon request, to verify the place of manufacture and authenticity of the car doors and landing doors delivered to the site or installed.

ii. CAR DOOR

Each car entrance shall be provided with a car door which shall extend the full height and width of the car opening. The top track of the door shall not obstruct the car entrance. The stainless steel car door finishes shall be of hairline, satin, random embossed or wavy line pattern, unless otherwise stated in the Schedule of Rates;

Anti-hand/Anti-finger trapping device for minimizing the risk of dragging children's hands/fingers into the gaps between the car door panels and uprights shall be provided unless the lift is subjected to the physical constrain and the proposed alternative solution is approved by the Contract Administrator. The device shall immediately send a signal to stop the car door operation when it detects an obstacle in the door opening operation.

In order to facilitate the smooth operation of fireman's lift in an emergency, the anti-finger trapping device should be disabled when the fireman's lift mode is in operation according to FSD's requirement.

iii. LANDING DOOR

All landing openings in lift well enclosures shall be protected by doors which shall extend the full height and width of the landing opening. The top track of landing door shall not obstruct the entrance to the lift car. Every such door shall have a fire resistance rating of not less than 120 minutes with regard to integrity;

The landing doors on all floors, including G/F, shall be constructed of at least 1.5 mm thick stainless steel. The finishes of the stainless steel landing door shall be of hairline, satin, random embossed or wavy line pattern, or similar finishes as approved by Contract Administrator. Mild steel sheet lined with stainless steel shall not be acceptable. Sample of stainless steel shall be submitted to the Contract Administrator for approval prior to manufacture. The landing doors shall be adequately stiffened by stainless steel ribs where required to provide a robust mechanical construction for heavy and rugged usage.

iv. CAR DOOR LOCKING DEVICE

Every set of car door shall be provided with electrical safety device(s) which shall prevent the lift car from being started or kept in motion unless all car door panels are closed. It shall not be possible under normal operation to open a car door whilst the car is in motion. Operation of the lift with car door open is permitted under the conditions laid down in the Lift & Escalator Design CoP, Section E, Part 1;

For centre-opening 2-panel car doors, each car door panel shall be provided with a separate door closed proving device;

Every set of car door shall be provided with an effective mechanical locking device and mechanically locked by at least 7 mm so that the door cannot be opened from inside the car unless the car is within the levelling zone (i.e. stopped or is levelling);

The positive locking of the mechanical car door lock shall be proved by an electrical safety device in conformity with the Lift & Escalator Design CoP, Section E, Part 1 and shall precede the movement of the car;

The car door locking device shall be protected against deliberate misuse. The locking elements and their fixings shall be resistant to shock and shall be made of, or reinforced with, metal;

The engagement of the locking elements shall be achieved in such a way that a force in the opening direction of the door shall not diminish the effectiveness of locking. In the event that the locking action is effected by the action of spring, the spring shall act by compression and shall be guided and of such dimension that the coil is not compressed solid at the moment of unlocking. In the event of the spring no longer fulfilling its function, gravity shall not cause unlocking;

The locking device shall be protected against the risk of accumulation of dust, and tampering by external objects from below which could hinder its proper functioning;

The car door locking device shall comply with the minimum mechanical strength requirement as detailed in the Lift & Escalator Design CoP, Section E, Part 1 such that at its locked position, the car door cannot be opened by itself, or by forcing open the door panels at any position by hands from inside the car, and/or by shaking of car door.

v. LANDING DOOR LOCKING DEVICE

Landing door locking device shall be provided as detailed in the Lift & Escalator Design CoP, Section E, Part 1;

The locking device shall be protected against the risk of accumulation of dust, and tampering by external objects from below which could hinder its proper functioning.

vi. DOOR LOCKING DEVICES TO BE INACCESSIBLE FROM LANDING AND CAR

All door locking devices and door switches, together with any associated actuating rods, levers or contacts, shall be so situated or protected as to be reasonably inaccessible from the landing and the car.

vii. LANDING DOOR KEY

The Contractor shall supply two landing door keys for each block upon completion of the installation.

viii. EMERGENCY LANDING OPENING IN LIFT WELL

The following warning notice in English and Chinese characters not less than 25 mm high shall be embossed onto a 1 mm thick stainless steel plate which shall be fixed onto the door by strong adhesive, with the lower edge of the notice plate at least 1500 mm above finished floor level:

“DANGER
UNAUTHORIZED ACCESS PROHIBITED
LIFT WELL RESCUE DOOR
CLOSE AND LOCK THIS DOOR”

「危險
不得擅進
升降機槽救生門
請關閉並緊鎖此門」

Where emergency landing openings are required in the lift well, these openings shall:

- be equipped with dual key-operated locks requiring the simultaneous operation of two designated keys for opening from the outside and capable of being reclosed and relocked without a key;
- be capable of being opened from inside the well without a key even when locked; and
- except for doors in the form of lift landing doors, bear on its outside face a prominent figure-type warning sign of size not less than 100 mm high and immediately above or next to the keyholes of such doors as shown below:-



- be electrically interlocked with the lift safety circuit;

Where the design and disposition of lift well inspection and emergency doors can reduce the likelihood of inadvertent entry, the above four (4) items are not applicable and a single locking device operated by a designated key is acceptable. Typical examples are:

- lift landing doors serving as the lift well inspection and emergency doors; or
- lift well inspection and emergency doors with their sills being 1 m or more above the adjoining floor.

ix. ARCHITRAVES

The Contractor shall provide installation method (either by replacement or overlay) on all landing entrances, unless otherwise specified, architrave fabricated from at least 1.5 mm thick stainless steel sheet. Finishes of the landing architrave shall be of hairline, satin, random embossed or wavy line pattern, or similar finishes as approved by the Owner and the Contract Administrator within one month from submission;

All surfaces of architrave shall be formed true and gaps between sections shall not be allowed. Bolts shall not be visible on the exposed surfaces of the architraves;

A stainless steel tactile-braille plate for the blind people shall be provided and fixed on both sides of the architraves on all floors at 1200 mm above finished floor level. The tactile markings shall be Arabic numerals of minimum 60 mm high and raised 1 mm. The tactile-braille plates shall be at least 100 mm square with raised letter or numeral and corresponding Braille. The Braille messages provided on the tactile-braille plates at the architraves on each floor shall also tally with those provided on the lift push buttons. The tactile-braille plates shall be fixed by both strong adhesive and spot-welding or stainless steel rivet at four corners of the plate;

The design and construction of the architrave shall have no sharp edges or projections which will cause bodily injury to passengers.

x. APRON SHEET BELOW EACH LANDING

The Contractor shall provide a galvanized steel sheet of at least 1.5 mm thick below each landing threshold to comply with the Lift & Escalator Design CoP and the Lift & Escalator Works CoP;

A 150 mm high black and yellow warning stripe by spray painting shall be provided at the top edge of apron sheet.

xi. DOOR SILLS

Door sills shall be of robust construction and shall be rigidly fixed to withstand the passage of loads to be introduced into the car. The thickness of any section of the sill shall be not less than 3 mm;

Car door sills shall be constructed of stainless steel;

Landing door sills for passenger lifts shall be constructed of extruded aluminum except the ones at ground floor or at main entrance access which shall be constructed of stainless steel;

xii. TYPE TEST

The landing door locking device shall have valid type approval by EMSD. The landing door shall be certified in accordance with the FS Building CoP. In addition, fire test report / assessment report for at least 1.5 mm thick landing door of 1100 mm wide by 2100 mm high stainless steel shall be provided. Documentary evidence on the above certification shall be submitted upon request.

xiii. APRON SHEET BELOW CAR PLATFORM

A 150 mm high black and yellow warning strip by spray painting shall be provided at the top edge of apron sheet.

(f) Intercom and Closed Circuit Television (CCTV) System

- i. An emergency alarm push button together with a buzzer (or an alarm bell), an intercom and a CCTV camera shall be provided in the lift car and be connected to the building management office or the caretaker's office, and the machine room.
- ii. The building management office or the caretaker's office, and the machine room shall each be equipped with a buzzer (or an alarm bell), indication light(s) (one for each lift), an intercom and a CCTV monitor connected to the lift car(s). An alarm bell connected to the alarm push button in the lift car shall also be provided at the main entrance lift lobby or lift pit. The alarm bell and intercom should follow the relevant design requirements stipulated under Design Manual: Barrier Free Access 2008 and its addendums issued by Buildings Department or any updated version being at the date of tender submission deadline.
- iii. The Contractor shall supply and install in each lift a CCTV camera complete with a spur unit fused at 5Amp or a socket outlet at the car ceiling as the power supply.
- iv. The camera shall be recess mounted under the lift car ceiling / false ceiling. The camera lens can be adjusted between an angle of 30° from vertical at any direction. It shall be small and housed in a robust camera housing. There shall be locking mechanism to fix the angle.
- v. The CCTV camera shall be of full colour type and shall be of resolution at 1080p or above. The camera lens shall be super wide angle type as follows:
 - a) Focal length: 2.5 mm;
 - b) Aperture: F1.8 to F3.5;
 - c) Angular field of view: not less than 95° horizontal, 130° diagonal.
- vi. All power, control and video cables connecting the camera with the housing shall be in plug-socket arrangement to facilitate easy removal of camera for maintenance.
- vii. The camera shall be able to operate in wide range of lighting level.
- viii. The camera shall be provided with auto white balance function.
- ix. A total of two (2) LCD monitors shall be installed at machine room and security room / caretaker's room / lift lobby for each lift. The display shall be securely mounted and protected by suitable means. Unless specified by the Owner, Owner's Representative or the Contract Administrator, monitors shall be not less than 24 inches and housing shall be provided for CCTV at security room / caretaker's room / lift lobby.
- x. The CCTV system shall be equipped with digital video recorder, selector, digital video extender (i.e. VGA, DVI, HDMI) and associated accessories (if applicable). The storage of CCTV recorded image shall not be less than 2TB storage and shall be stored for at least ONE month.

- xi. If required by the Owner, the CCTV system shall be integrated with other CCTV systems in the security room / caretaker's room / lift lobby to facilitate future monitoring. The Contractor shall ensure the compatibility between the CCTV system (with its digital video recorder and associated accessories), the central console in the security room and other CCTV systems.
- xii. The CCTV monitor shall be equipped with controls to adjust the basic settings, including brightness, contrast.
- xiii. The CCTV monitor shall be completed with adjustable tilting angle wall mounted bracket and desk mounted support depending on the application on site.
- xiv. The Contractor shall provide all necessary cabling and accessories including video cables, conduits, connection units, amplifier, splitters etc. as required so that the video signal from the CCTV cameras can be adequately transmitted to the CCTV monitors in the lift machine room or at the maintenance access panel for machine-room-less lift for monitoring the lift car.
- xv. The Contractor shall provide for each lift a video cable from a connection unit at lift car ceiling to the lift travelling cable termination box. The Contractor shall then connect the video cable in surface conduit from the lift travelling cable termination box to a connection unit at high level of the main entrance floor lift lobby or location(s) as indicated by the Contract Administrator. The video cable shall be integrated with the lift travelling cable or clipped to the lift travelling cable by cable tie clips at separation not exceeding 1000 mm.
- xvi. Video cable shall be of the coaxial type with inner conductor of annealed copper or Cat 5 better. The dielectric shall be polythene with a shield of copper braid. The cable shall be insulated with an overall sheath of PVC.

(g) Obstruction Switch to Protect Suspension Ropes

- i. The Obstruction Switch(es) shall switch off the drive machine when the car or counterweight meets an obstruction when moving downwards. The construction and performance requirements shall be in full compliance with the latest version of Lift & Escalator Design CoP.

(h) Automatic Rescue Devices

- i. The automatic rescue devices shall maintain the lift in a momentary operation for the safe exit of passengers, and prevent them from being trapped. When normal power supply fails, the device detects the voltage dip, uses back-up battery power to move the lift to the nearest landing floor either in up or down direction and opens the doors to release the passengers. The lift movement shall not be started if further lift operation will lead to a dangerous situation. The lift will remain out of service until normal power supply is resumed.

4. In case the main control panels of the lifts involved in this tender need be replaced. The construction and performance requirements for main control panels shall be in full compliance with the latest version of Lift & Escalator Design CoP. Moreover, insulation rubber mat complying with BS 921 shall be provided on the floor in front of, and also at the rear of the main control panels and other electrical switchboards installed by the Contractor in the lift machine room, if access for routine maintenance at the rear is required, for better protection against electric shock.

5. Unless approved by the Contract Administrator, the operation characteristic shall match the required design criteria and control sequence (including the lift homing control logic) of the existing installations.

(a) DOWN COLLECTIVE CONTROL FOR SINGLE LIFT ("SIMPLEX" DOWN COLLECTIVE CONTROL)

- i. All calls shall be stored in the system and answered in sequence regardless of the order in which they are registered;
- ii. When travelling in the "Up" direction, the car travels to the highest call, stopping at any intermediate floor for which a car call has been registered. On stopping for the highest call, preference is established for the "Down" direction;
- iii. When travelling downwards the car stops for all car and landing calls that have been registered. When all calls have been answered, the car remains with doors closed at the floor to which it last travelled.

(b) DOWN COLLECTIVE CONTROL FOR TWO INTER-CONNECTED LIFTS ("DUPLEX" DOWN COLLECTIVE CONTROL)

In addition to the features as required in sub-clause DOWN COLLECTIVE CONTROL FOR SINGLE LIFT, it shall include the following control features:

- i. When both cars are away from the terminal floor and all calls have been answered, one car shall return automatically to the terminal floor and referred to as the "Next" car. The second car remains at the floor which it last deposited passengers and is referred to as the "Free" car. Both cars stand with doors closed;
- ii. With the cars standing with doors closed as described in sub-clause 8 (b) (i), the first landing call shall be answered as follows:
 - a. If a terminal floor call, by the "Next" car;
 - b. If from any other floor, by the "Free" car.
- iii. With the "Free" car answering calls, the "Next" car shall not start for "Down" calls behind the "Free" car until the "Free" car is descending;
- iv. Should the "Free" car return to the terminal floor and the doors close after a passenger comes in, the passenger shall be able to register a call and travel to any destination. With both cars standing at the terminal floor with doors closed, the "Next" car (i.e. the one that arrived first) shall answer the first landing call. Directional preference shall be maintained when a car stops for its last call until the doors close.

(c) FULL COLLECTIVE CONTROL FOR SINGLE LIFT

- i. All calls shall be stored in the system and answered in sequence regardless of the order in which they are registered;
- ii. When the car is in motion in a given direction it shall travel to the further-most call, stopping at any intermediate floor for which a car call or landing call for the corresponding direction of travel has been registered;
- iii. Landing calls for the direction opposite to that in which the car is travelling

shall be by-passed but will remain stored in the system to be answered when the car returns in the opposite direction;

- iv. When the car stops for the last call in its direction of travel, car preference is established for an adjustable period;
- v. When all calls have been answered the car remains with doors closed at the floor to which it last travelled.

(d) FULL COLLECTIVE CONTROL FOR TWO INTER-CONNECTED LIFTS

In addition to the features as required in FULL COLLECTIVE CONTROL FOR SINGLE LIFT, it shall include the following supervisory feature:

- i. When both cars are away from the terminal floor and all calls have been answered, one car shall return automatically to the terminal floor and is referred to as the "Next" car. The second car remains at the floor to which it last travelled and is referred to as the "Free" car. Both cars stand with doors closed;
- ii. With the "Free" car answering calls, the "Next" car shall not start for "Up" calls or "Down" calls behind the "Free" car until the "Free" car is descending. If the "Free" car is delayed the controller shall operate to dispatch the "Next" car;
- iii. With both car standing at the terminal floor with doors closed the "Next" car shall answer the first landing call; and
- iv. Should the "Free" car return to the terminal floor and the doors close after a passenger comes in, the passenger shall be able to register a call and travel to any destination.

(e) FULL COLLECTIVE CONTROL FOR MORE THAN TWO INTER- CONNECTED LIFTS

In addition to the features required in sub-clause FULL COLLECTIVE CONTROL FOR SINGLE LIFT, the control shall include features similar to those in FULL COLLECTIVE CONTROL FOR TWO INTER-CONNECTED LIFTS and shall deploy lift to answer landing call(s) with due consideration of the current car locations, car calls registered and travelling directions etc. so as to optimise the passenger waiting time and even out the lift usage.

(f) DOUBLE DUPLEX DOWN COLLECTIVE CONTROL

- i. Double Duplex Down Collective Control shall be provided for three lifts arranged in two groups serving two different floor zones (i.e. lower zone and higher zone). Two of the three lifts shall serve the high and low zones respectively while the remaining one serves both zones;
- ii. The Double Duplex Down Collective Control system shall be capable of achieving the following: -
 - a. In case of landing call(s) registered at the lower zone, the group control system shall deploy the low-zone lift or the two-zone lift or both to answer the call(s) with due consideration of the current car locations, car calls registered and travelling directions so as to optimize the passenger waiting time and even out the lift usage;

- b. In case of landing call(s) registered at the higher zone, the group control system shall deploy the high-zone lift or the two-zone lift or both to answer the call(s) with due consideration of the current car locations, car calls registered and travelling directions so as to optimize the passenger waiting time and even out the lift usage;
 - c. In case there are simultaneous landing calls registered at the lower zone and at the higher zone, the group control system shall deploy one or two or all of the three lifts to answer the landing calls with due consideration of the current car locations, car calls registered and travelling directions so as to optimize the passenger waiting time and even out the lift usage.
6. All the equipment supplied and installed under this Contract shall be designed for operation on existing electrical supply unless otherwise specified. All electrical installations including electric motors and controls shall be suitable for use with the aforesaid electricity supply. In case that the new installation is not the same manufacturer of the existing lift installations, new accessories and equipment installation compatible to the existing lift installations shall be installed so as to ensure the smooth operation of the modernisation items above and maintain the normal and safe operation of the whole lift installations.
7. In case that the existing equipment (e.g. traction machines and main control panels) has to be replaced, the performance of replaced equipment shall not lower than the original equipment. The power consumption of the replaced equipment shall not be higher than the existing equipment. All the replaced components shall be in full compliance to the statutory requirements in an edition being at the date of tender submission deadline.
8. All equipment supplied and installed under this Contract shall have a guarantee of spare parts supply of at least five years.
9. The Contractor shall ensure that the Works comply with the Building Energy Efficiency Ordinance (Cap. 610) and the BEC issued by EMSD. If necessary, within two months after the completion of modernisation work for each lift, the Contractor shall take measurement and submit a signed report in accordance with the BEC and the Building Energy Efficiency Ordinance to substantiate its compliance. The Contractor shall employ a Registered Energy Assessor to prepare the Form of Compliance (FOC) for submission to EMSD.

(IV) Builder's Works

10. Unless otherwise specified or approved by the Owner, Owner's Representative and the Contract Administrator, the Contractor shall reuse existing building works provisions such as wall/slab openings, concrete supports, hoisting beam, cat ladder and lift buffer supports at lift pit etc. for the Works, and avoid alteration on building works as far as practicable.
11. The Contractor shall check existing building work provisions for the installation of new lift equipment and the future operation & maintenance requirement. If the existing building work provisions do not fit for the purposes, the Contractor shall modify the new lift installations to suit existing site conditions at his own cost.
12. The Contractor shall provide minor building works which are necessary for the Works, including the following: -
 - (a) To dismantle and remove the existing architraves, landing door sills, landing door

and landing door hanger cases;

- (b) To install new architraves, landing indicators and landing door sills with the associated supports including concrete fill in and/or grouting works;
 - (c) To make good counter slopes in front of each landing sills including cement sand screeding provided with anti-skid dressing and/or floor tiles;
 - (d) To provide small openings for lift signal cables such as homing and parking switches etc.;
 - (e) To provide new landing call buttons, landing indicators and the associated lift control switches. Unless otherwise specified, the Contractor shall not reuse existing concealed base boxes for the new installation. The Contractor shall provide any associated minor building works encountered at lift shaft and lift lobby for installation of landing indicators, landing buttons, homing switches, fireman's switches and parking switches, including grouting and making good all affected areas; and
 - (f) To make good, paint and replace damaged wall/floor tiles resulting from the works as specified above. The pattern and colour of the wall / floor tiles shall match with existing installation as far as practicable.
13. If the above-mentioned works fall within the definition of building works under section 2(1) of the Buildings Ordinance (Cap.123), the Works must comply with the Building Ordinance and its regulations, and be supervised by competent person in that area of trade. The minor building works shall be carried out by Registered General Building Contractor (RGBC) and/or Registered Minor Works Contractors of respective classes/types (RMWC) and the works shall be executed in compliance with the statutory requirement. The Contractor shall allow for all extra cost, if any, in complying with this Clause.
14. When involving increase of structural loading on the building, the Contractor shall engage a Registered Structural Engineer (RSE) as listed under the Buildings Ordinance for the design and calculation of any structural work (both temporary and permanent work) necessary for the delivery and installation of the equipment supplied under this Contract, and submit the report endorsed by the RSE for the Owner's and Contract Administrator's record.

Contract Specification

Annex 2 – Lift Replacement Works Specification

(I) Scope of Works

1. The Works shall comprise the labour, materials, equipment, transportation and all other necessary resources for the design, manufacture, supply, delivery to Site, erection, installation, testing and commissioning for replacement of Lift(s) in their existing lift shaft(s) and subsequent one (1) year Defects Liability Period for defects rectification and warranty of the equipment, systems and all associated works and items in this Contract.
2. All parts and accessories of the Lift(s) shall be replaced except counterweights fillers, guide rails of the lift cars & counterweights, items specified in **Schedules 2 and 3**. Guide rails of lift cars & counterweights fillers could be retained and reconditioned. New oil pans shall be provided and placed underneath the guide rails in the lift pit to collect oil drained from the guide rail in case of guide lubricated by oil. Registered Lift Engineer certification and inspection report for the sound construction of the guide rails and their fixings shall be submitted. In case the guide rails have to be replaced, every such guide rail shall (a) comply with BS5655: Part 9 or BS EN 81-20/50 or ISO 7465 or other approved international standard; (b) be of adequate strength; and (c) have machined guide surface.
3. The Contractor shall be responsible for demolishing and disposal of the existing lift systems with all associated accessories as specified in Schedule of Rates No. B7.
4. The Works shall fully comply with all statutory obligations and regulations together with any amendments made thereto, in an edition being at the date of tender submission deadline, as required by all bodies and authorities for the safe and satisfactory standards of the Works. The lift(s) installed shall fulfil all relevant applicable requirements of the Lift & Escalator Design CoP, in an edition being at the date of tender submission deadline, and have equivalent standard as newly installed lifts. Save with space constraints in some existing buildings, the lift(s) will be served as an accessible lift(s); the design of which should follow the relevant design requirements stipulated under Design Manual: Barrier Free Access 2008 and its addendums issued by Buildings Department or any updated version being at the date of tender submission deadline.
5. Unless approved by the Owner, Owner's Representative and the Contract Administrator, the rated load and rated speed, as well as the car door opening and available car area of the lift after replacement shall be respectively not lower than and smaller than those of the lift prior to its replacement. All the replaced components shall be in full compliance with the latest statutory requirements. The Contractor shall ensure that the Works comply with the Building Energy Efficiency Ordinance (Cap. 610) and the BEC issued by EMSD. Within two months after the completion of replacement work for each lift, the Contractor shall take measurement and submit a signed report in accordance with the BEC and the Building Energy Efficiency Ordinance to substantiate its compliance. The Contractor shall employ a Registered Energy Assessor to prepare the Form of Compliance (FOC) for submission to EMSD.

(II) Programme of Works

6. The Works shall be completed, properly tested, commissioned and handover for operation within the programme set out in **Schedule 2**.

(III) Requirements of Lifts to be installed

7. MATERIALS AND EQUIPMENT

7.1 STAINLESS STEEL

7.1.1 Unless otherwise stated, stainless steel used for fabrication of car cage, car/landing doors or architraves shall be of *EN 10088-1 grade 1.4301 (grade 304)* or equivalent;

7.1.2 The Contractor shall provide mill certificates of the stainless steel to be used for fabrication of car cage, car/landing doors or architraves.

8. ELECTRICITY SUPPLY AND ELECTRICAL INSTALLATION

8.1 TRUNKINGS

8.1.1 All wirings installed in lift machine rooms, lift wells and lift pits, other than travelling cables, shall be enclosed in galvanised steel conduits or steel trunkings.

8.2 LIFT WELL LIGHTING

8.2.1 The Contractor shall install lighting in each lift well in surface steel conduit system or method that accepted by the Owner and the Contract Administrator. The lighting for each lift well shall comprise one lighting fitting not more than 500 mm from the lowest point in the lift well and the highest point of guided travel of the lift car with intermediate lighting fittings at 7 m maximum spacing. The position of each lighting fitting shall be such that servicing personnel can conveniently replace the lamp while standing on the top of the car;

8.2.2 The lighting shall be at least with the power rating according to Lift and Escalator Design CoP.

8.3 EMERGENCY LIGHTS

8.3.1 Emergency lights of adequate illuminance shall be provided by the Contractor in the lift machine room or at the maintenance access panel for machine-room-less lift, and in the lift car. These lights shall be operated by batteries automatically on failure of normal power supply and those lights in the lift machine room or at the maintenance access panel for machine-room-less lift shall be capable of being manually operated by a switch located at a convenient position in the lift machine room or at the maintenance access panel for machine-room-less lift respectively;

8.3.2 The batteries shall be capable of maintaining a supply to the connected emergency load for a minimum of two hours continuously, and shall be completed with self-contained and self-maintained trickle charger located within the lift machine room or lift well and at least one for each lift. The charger shall be capable of fully re-charging the batteries in not more than 12 hours.

8.4 SUPPRESSION OF RADIO AND TELEVISION INTERFERENCE

8.4.1 The lift installation shall be adequately suppressed against radio and television interference to limits laid down in BS EN 55014-1, or EN 12015 and EN 12016.

Interference suppression components shall not be used in any part of the circuit where their failure might cause an unsafe condition.

8.5 ELECTRICAL MEASUREMENTS

8.5.1 Electrical measurements including but not limited to those on voltages, currents, kW, kVA, kWh, power factor and total harmonic distortion shall be carried out in the final testing for each lift according to BEC's requirements.

9. SILENCE OF OPERATION

9.1 The installation shall be reasonably silent in operation under the conditions which they will be called upon to operate and, in any case shall be such that no unreasonable noise or vibration arising from the operation of the installation is discernible from the lift wells, machine rooms, landing doors, lift pits or similar space in which the equipment is housed. The Contractor shall take all necessary steps to ensure that the equipment provided by him is silent as described above and shall include in his Tender for such sound-absorbing, or anti-vibration materials or devices as are necessary to ensure a satisfactory degree of silence and absence of vibration in the structure of the building in full compliance with the Noise Control Ordinance.

9.2 The Contractor shall provide anti-vibration devices wherever lift equipment with moving part(s), including but not limited to the diverter pulley, are mounted directly or indirectly onto the building structure.

10. CAR AND COUNTERWEIGHT BUFFERS

10.1 BUFFERS

10.1.1 Buffers shall be installed at the bottom limit of travel for cars and counterweights in accordance with the following requirements:

- (a) Buffers of timber shall not be used;
- (b) Spring buffers or oil buffers shall be used for lifts having a rated speed not exceeding 1 m/s; and
- (c) Oil buffers shall be used for lifts having a rated speed exceeding 1 m/s.

10.1.2 Upon request, the Contractor shall provide documentary evidence to verify the place of manufacture and authenticity of the buffers delivered to the site or installed.

10.1.3 The buffers shall have valid type approval by EMSD. Type approval documents and type test certificate to this effect shall be submitted upon request.

11. COUNTERWEIGHTS

11.1 GENERAL REQUIREMENTS

11.1.1 The counterweight shall be of metal and constructed from multiple sections, contained and secured with a steel frame, and shall equal to the weight of the complete car and approximately 40-50% of the rated load. All components shall be replaced except counterweight fillers. Counterweight fillers could be reused if appropriate.

11.2 GUIDE SHOES / ROLLERS

- 11.2.1 At least four guide shoes / rollers assemblies, capable of being easily renewed or having renewable linings / rubber rollers, shall be provided on the counterweight;
- 11.2.2 Guide shoes / rollers for counterweight shall be resiliently mounted. For lift rated speed of 2.5 m/s or above, the guide shoes for the counterweight shall be of the roller type unless the lift is subjected to the physical constrain and the proposed design is approved by the Contract Administrator. Any necessary lubrication shall be applied by automatic means.

12. SUSPENSION

12.1 ROPES

- 12.1.1 Lift car suspension shall be by means of steel wire ropes of best quality with the size and number of ropes complied with the Lift & Escalator Design CoP, Section E, Part 1;
- 12.1.2 The factor of safety for all suspension ropes shall comply with the Lift & Escalator Design CoP, Section E, Part 1;
- 12.1.3 Mill test certificate with test results issued by the manufacturer to verify that the steel wire rope is in compliance with EN 12385-5, or ISO 4344 or other approved international standards shall be submitted upon request. The Contractor shall provide an undertaking confirming that the submitted mill test certificate specifically refers to the ropes delivered to the Site. The Contractor shall provide documentary evidence to verify the place of manufacture and authenticity of the ropes delivered to the site or installed upon request;
- 12.1.4 The breakage or slackening of any one of the ropes shall cause the motor of the drive machine to stop by means of an electrical safety device in accordance with the Lift & Escalator Design CoP, Section E, Part 1;
- 12.1.5 Ropes shall be lubricated during manufacture. During operation, the ropes shall be re-lubricated as necessary and the following shall be observed: -
 - (a) The rope manufacturer's instruction / recommendation on rope lubrication shall be followed;
 - (b) Surface deposit and dirt accumulated on the rope surface shall be removed prior to the application of the lubricant to ensure that the paths for lubricant penetrations are not obstructed;
 - (c) The brand and grade of lubricant recommended by the rope manufacturer or their approved equivalent shall be used. Any contaminated lubricant shall not be used;
 - (d) Rope lubrication shall be carried out prior to other lift maintenance and servicing works in order to allow an adequate idle time after application of lubricant before putting the lift into operation to ensure adequate absorption of lubricant into the core of the ropes;
 - (e) If automatic lubrication device is used, it shall be proprietary made and the following shall be ensured:
 - i. The device is applying lubricant over all the ropes;
 - ii. The lubricant reservoir is not contaminated during use;
 - iii. The ropes are not over lubricated.

12.2 ROPE COMPENSATION

- 12.2.1 For a lift with travel over 30 m, rope compensation shall be provided;
- 12.2.2 For lift speed at or below 2.5 m/s, quiet operating chains can be used as the means of compensation;
- 12.2.3 For speed exceeding 2.5 m/s, steel wire rope shall be hung between car and counterweight, passing round an idler tensioning pulley in lift pit and the tension shall be checked by an electric device in accordance with the Lift & Escalator Design CoP, Section E, Part 1;
- 12.2.4 If rope compensation is used for lift with rated speed at or below 2.5 m/s, it shall also comply with the above item 12.2.3 requirements;
- 12.2.5 For the use of quiet operating chain for compensation, a guiding device system shall be provided. The guiding device system shall include a set of four rollers at a suitable location on each side of the chain loop at the lift pit, or equivalent and approved by the Contract Administrator, to guide the movement and restrain excessive sway of the chain.

13. TERMINAL STOPPING AND FINAL LIMIT SWITCHES

- 13.1 Each lift shall be provided with terminal stopping switches and final limit switches. They shall be positively operated by the movement of the car. These switches whether mounted on the car frame or in the lift well, shall be properly enclosed.
- 13.2 Terminal stopping switches shall be arranged to stop the lift car automatically from any speed attained in normal operation within the top runby and bottom runby, independently of the operating device, the final limit switch and the buffers.
- 13.3 The method of operation of final limit switches shall comply with the Lift & Escalator Design CoP, Section E, Part 1.

14. GUARDING

14.1 GENERAL REQUIREMENTS

- 14.1.1 All dangerous accessible rotating and moving parts which would cause injury upon bodily contact, including but not limited to traction sheave, handwinding wheels, brake drums, pulleys, ropes etc., shall be effectively guarded against contact of bodily parts with metallic see-through guards. Guarding for handwinding wheels shall be easily removable without the use of tools. Removable metallic see-through guards shall be used for rotating and moving parts which require inspection during lift running. Where applicable, components should be designed to be inherently safe, obviating the need for external or removable guards.

14.2 LIFT WELL PARTITION (If applicable)

- 14.2.1 Where two or more lifts are fixed in a common lift well, the Contractor shall provide a suitable partition of adequate strength (e.g. solid block wall, wire mesh screen, etc.) between the moving parts (car or counterweight) of different lifts or services lifts to prevent trapping hazards. This partition shall extend from the floor of the lift pit through the full height of the well, and across the whole depth of the well. If the partition is so provided to

separate each lift by wall, ventilation openings shall be provided for each well in accordance with the latest version of Lift Building Works CoP.

14.3 COUNTERWEIGHT

14.3.1 Counterweights shall be guarded by means of a rigid metal screen extending from a position 300 mm above the lift pit floor to a position at least 2100 mm above the lift pit floor. It is permissible to raise the bottom of the counterweight screen to clear the compensating chain/rope/means or other equipment. The bottom of the counterweight screen shall be as low as possible and shall be at least 300 mm below the lowest parts of the counterweight resting on a fully compressed counterweight buffer;

14.3.2 Where oil buffers are fitted in the pit or when the compensating ropes or chains are used, metal screens for counterweight shall be so positioned that access for the maintenance and servicing of oil buffers and compensation ropes shall be provided.

14.4 CAR TOP

14.4.1 Balustrade/Guardrail shall be provided to prevent accidental falling of people from car top where the horizontal distance between the edge of the car roof and the corresponding wall of the lift well exceeds 300 mm;

14.4.2 If the clearance between car landing sill and the wall of the lift well exceeds 150 mm, front guardrail and toe-board facing the door side, in addition to guardrails and toe-boards at other edges, shall be installed at the car top, and foothold shall be provided on the front of the car top. The guardrail shall be so designed and constructed to allow safe access to and egress from the car top.

15. CAR FRAMES

15.1 GENERAL REQUIREMENTS

15.1.1 Every lift car body shall be carried in a steel car frame sufficiently rigid to withstand the forces which will be applied in normal lift operation, in safety gear operation or impact of the car on its buffer without permanent deformation of the car frame;

15.1.2 The deflection of the members carrying the platform shall not exceed 1/1000 of their span under static conditions with the rated load evenly distributed over the platform;

15.1.3 Upon request, the Contractor shall provide documentary evidence to verify the place of manufacture and authenticity of the car slings delivered to the site or installed.

15.2 CAR GUIDE SHOES / ROLLERS

15.2.1 At least four renewable guide shoes / rollers assemblies, two at the top and two at the bottom of the car frame shall be provided;

15.2.2 For lift speed exceeding 1 m/s, the guide shoes shall be resiliently mounted. For lift speed of 2.5 m/s or above, the guide shoes for the lift car shall be of the roller type unless the lift is subjected to the physical constrain and the proposed design is approved by the Contract Administrator. Any necessary lubrication shall be applied by automatic means.

16. CAR ENCLOSURES

16.1 NON-COMBUSTIBLE MATERIALS TO BE USED

16.1.1 Lift cars shall be constructed of non-combustible materials.

16.2 CAR TO BE COMPLETELY ENCLOSED

16.2.1 The car of every lift shall be completely enclosed at the sides and on top and shall, save for any opening affording access thereto or for ventilation or emergency trap door, not have any openings or open work panels in the sides;

16.2.2 Unless otherwise specified or the lift is subjected to the physical constrain and the proposed design is approved by the Contract Administrator, the interior height of car shall not be smaller than the existing one.

16.3 PLATFORM LOADING

16.3.1 Car platforms shall be of framed construction. Platforms for passenger cars shall be designed on the basis of rated load, this being evenly distributed;

16.3.2 At least two coats of epoxy paint coating primer shall be applied to all parts of car platform, followed by at least two coats of finishing epoxy paint coating for marine application in accordance with the paint manufacturer's recommendation. The same coating system shall also be applied to the internal surfaces of any cavities forming the integral part of the car platform;

16.3.3 If the car platform is made of stainless steel, epoxy paint is not required.

16.4 INTERNAL CONSTRUCTION OF PASSENGER LIFT CARS

16.4.1 All passenger lift car walls, skirting and doors shall be constructed of at least 1.5 mm thick stainless steel sheet. Mild steel sheet lined with stainless steel shall not be acceptable. Car walls and doors shall be adequately stiffened by stainless steel ribs where required to provide a robust mechanical construction for heavy and rugged usage;

16.4.2 For lift with rated load of 680kg or above, handrails constructed of stainless steel shall be provided on three sides of the lift car extending to within 150 mm of all corners. The top of the handrail shall be at 900 mm above finished car floor. The handrails shall comply with Figure 15 of Design Manual: Barrier Free Access 2008 and its latest amendments;

16.4.3 The finishes of the stainless steel sheets shall be hairline, satin, random embossed wavy line pattern, mirror finish, or similar finishes as approved by the Owner and the Contract Administrator. All fasteners for the fixing of stainless steel sheets shall be of stainless steel;

16.4.4 Hairline stainless steel ceiling or other ceiling shall be provided by the Contractor. Access panel shall be provided at the ceiling such that the access panel is accessible from the car emergency trap door and its size and positioning shall match with the emergency trap door. Secure fixing of the stainless steel panel to the emergency trap door shall be provided, adhesive glue fixing is not acceptable. Compact fluorescent or Light Emitting Diode (LED) down lights shall be recess mounted;

- 16.4.5 A concealed high/low speed fan/blower shall be recessed above the car ceiling. Stainless steel air diffuser(s) complete with suitably angled deflectors shall be provided to discharge air evenly to the lift car. The opening of the diffuser should be adequately sized such that the air flow of the fan will not be obstructed. The fan shall be guarded against contact by finger from inside the lift car and from the lift car top. The fan shall be able to produce at least twenty air changes per hour of lift car volume with the lift car stationary and car door closed. The sound pressure level inside lift car with car door closed shall not exceed 60 dB(A) when the fan is producing air flow rate at twenty air changes per hour;
- 16.4.6 The Contractor shall calculate the exact decoration load based upon the design materials and fixing details that suit the particular lift design in sizing of lift equipment;
- 16.4.7 The floor finishing of the lift car shall be durable, abrasive resistant and slip-proof. It shall be stainless steel chequer plate of at least 3 mm thick, or granite / marble, or homogeneous tiles / rubber tiles as determined and approved by the Owner and the Contract Administrator;
- 16.4.8 The joint between car wall/skirting and the floor plate shall be sealed with a suitable mastic sealant or by other approved means to make a watertight joint.
- 16.5 TOE GUARD
- 16.5.1 Each lift car top shall be fitted with a toe guard in accordance with the Lift & Escalator Design CoP, Section E, Part 1;
- 16.5.2 The toe guard shall be constructed of stainless steel, at least 1.5 mm thick and hairline finish;
- 16.5.3 A 150 mm high black and yellow warning strip by spray painting shall be provided at the top edge of the toe guard.
- 16.6 MAINTENANCE FACILITIES
- 16.6.1 A 13A 3-pin shuttered type socket outlet to BS 1363-1 and BS 1363-2 shall be provided on both the top and bottom of the lift car;
- 16.6.2 A permanent light, suitably protected and separately switched, shall also be fitted on both the top and the bottom of the lift car.
- 16.7 CAR ILLUMINATION AND PARKING
- 16.7.1 Lift car shall be illuminated to a level of not less than 120 lux at car floor level and on control devices. At least two independent sets of lighting control gear circuits and fittings shall be used;
- 16.7.2 When no call is registered within an adjustable period of 2 minutes with the lift doors closed, the lift car's ventilation fan shall be shut off automatically until the lift car is activated again by passenger call. The automatic switch-off function to the ventilation fan shall not be operative during breakdown of the lift and with any passengers being trapped inside the lift car.

16.8 EMERGENCY LIGHTING

- 16.8.1 Every lift car shall be provided with emergency lighting automatically illuminated in the event of failure of power supply to the lift;
- 16.8.2 At least two lighting fittings of independent control gear circuits in lift car shall be used to provide emergency lighting as well as normal lighting. The lamps shall be fed from the battery automatically upon failure of normal lighting supply;
- 16.8.3 The emergency lighting shall be able to provide an illumination level of at least 5 lux at car floor level and on control devices.

16.9 EMERGENCY SIGNAL

- 16.9.1 Every lift car shall be provided with an emergency signal which shall be operative from the lift car, visible and audible at the lift lobby on the main entrance floor;
- 16.9.2 The power supply to the emergency signal shall be fed from the batteries.

16.10 BATTERIES

- 16.10.1 The batteries shall be capable of maintaining a supply to the connected emergency load for a minimum of two hours continuously, and shall be completed with self-contained and self-maintained trickle charger located within the lift machine room or lift well and at least one for each lift. The charger shall be capable of fully re-charging the batteries in not more than 12 hours.

16.11 EMERGENCY TRAP DOOR

- 16.11.1 Each lift car shall be provided with an emergency trap door of minimum size 400 mm x 500 mm. Construction details of the emergency trap door shall be submitted for approval, if requested, prior to fabrication;
- 16.11.2 Emergency trap door shall:

- (a) Not open towards the inside of the car;
- (b) Be clear of any apparatus mounted above the roof of the lift car;
- (c) Be held by suitable locking device which can be opened from outside the lift car without a key;
- (d) Be provided with an electric safety device which functions as follows:
 - i. Operate the alarm sounder and prevent operation of the lift and ventilation fan at car top under any one or both of the following conditions:
 - When the locking device in sub-clause 16.11.2. (c) ceases to be effective;
 - When the panel is open.
 - ii. Stop the alarm sounder and restore operation of the lift and ventilation fan only when the locking device is effective and has been manually relocked.


17. CONTROL AND INDICATOR IN CAR

17.1 CONTROL PANEL IN CAR

17.1.1 Each lift car shall have a flush mounted control panel. The control panel shall be mounted such that essential lift control buttons (call registration buttons, alarm button and door open/close buttons) on this main control panel not less than 900 mm and not more than 1200 mm above the finished car floor;

17.1.2 The material for the panel shall be stainless steel with a thickness not less than 2.5 mm. The control panel shall be fixed onto the car panel by stainless steel secret-head screws;

17.1.3 The control panel shall comprise:

- (a) Push buttons for the landings served;
- (b) The alarm button shall be yellow in colour and identified by the symbol “” in accordance with the Lift & Escalator Design CoP, Section E, Part 1 and with protection from being pushed accidentally. The alarm button shall also be in tactile bell shape;
- (c) Door open and door close push buttons;
- (d) If required by the owner, the alarm, door open, and door close push buttons shall have labels, either engraved or embossed in both English and Chinese characters as follows:
 - "Alarm 警鐘"
 - "Door Open 開門 "
 - "Door Close 關門 "
- (e) A service ON/OFF key switch shall be provided, and shall have label, either engraved or embossed in both English and Chinese characters as follows:
 - "Service Switch 維修掣"

When the service switch is operated, the lift shall remain inoperative to facilitate service, cleaning and standby mode. The service switch shall be rendered ineffective unless the car has stopped or parked at a lift landing;

17.2 ATTENDANT CONTROL

17.2.1 Lifts shall be equipped with attendant control. The control panel mentioned in sub-clause 17.1 shall also incorporate the following with proper labels:

- (a) A key-operated attendant control switch; and
- (b) A non-stop button for the purpose of by-passing landing calls, but the landing calls shall remain registered until answered. This button shall only be operative when the above key-operated attendant switch is switched on; and
- (c) A high-low fan speed selector switch.

17.2.2 The button and switches specified in this clause together with the service on/off key switch specified in sub-clause 17.1.3.(e) shall be housed in a recessed stainless steel box with hinged lid which shall be key-locked.

17.2.3 The message “ATTENDANT CONTROL” (服務員操作中) shall be displayed when the attendant control being activated.

17.3 ILLUMINATED INDICATOR

17.3.1 An illuminated indicator, indicating the landing at which the car is stopped or passing, and up and down directional indication, and displaying pre-programmed messages/symbols shall be provided in the car. The indication fixture shall comply with sub-clause 20.3 and pre-programmed with additional messages same as those verbal annunciations specified in sub-clause 20.6.5 and sub-clause 20.6.6.

17.4 PUSH BUTTONS

17.4.1 Unless otherwise specified, all push buttons shall be flush with the control panel. The push buttons shall have a minimum dimension of 20 mm and shall be vandal- proof of robust design and construction, impact resistant and suitable for heavy use and integral with tactile braille and LED illuminators;

17.4.2 Braille and tactile markings of Arabic numerals and symbols shall be placed on the control buttons. Tactile markings shall have a minimum dimension of 15 mm high and be raised 1 mm minimum, and shall be of high contrasting colour background. Tactile marking in "star" shape shall be provided at the left hand side of the push button for the main entrance floor;

17.4.3 The Contractor shall confirm with supporting document that a confirmation letter has been issued from a recognised organisation of the visually impaired to certify that the messages of the Braille and tactile markings on the model or type of the push buttons to be provided have already been proof read to be correct and readable for use by the visually impaired.

17.5 CAR TOP CONTROL

A control station shall be fitted on top of the car and shall include:

17.5.1 A lighting switch and fan switch, with on/off position indicators, to control the lights and the fan in the lift car;

17.5.2 A bi-stable inspection switch marked "NORMAL" (正常) and "INSPECTION" (慢車) which when operated shall ensure that:

- (a) It is not possible to control the car, including any automatic doors, from any other position;
- (b) The car shall only travel at a speed not exceeding 0.63 m/s;
- (c) The car shall not move until all safety devices are in, and remain in, the safe position;
- (d) The movement of the car shall be dependent on a continuous pressure simultaneously on a "Common" push button and a "Up" or "Down" push button. These push buttons shall be protected against accidental operation and with the direction of movement clearly indicated. The words "UP" (上), "DOWN" (落) and "RUN" (開行) or "U", "D" and "C" indicating the intended direction of motion shall be provided on or near the buttons.

17.5.3 A stopping device complying with the Lift & Escalator Design CoP, Section E, Part 1;

17.5.4 A switch lock on the inspection/operation switch at the car top or other similar device shall be installed.

17.6 STOP SWITCH TO BE PROVIDED

Stop switches as specified in sub-clause 17.5.3. shall also be provided at the following locations:

17.6.1 Compartment separate from motor room or lift well where lift equipment is housed;

17.6.2 Where a lift machine and its controller are installed at different levels exceeding 600 mm, a stop switch shall be provided near the machine;

17.6.3 In the pit for each lift;

17.6.4 At the top of the pit cat ladder adjacent to the pit lighting switch.

17.7 SOCKET TO BE PROVIDED IN PIT

17.7.1 A 13A 3-pin watertight socket outlet of the type BS 1363 shall be provided at the lift pit.

17.8 LIFT CONTROL FEATURES IN CASE OF FAILURE OF NORMAL POWER SUPPLY FOR BUILDING WITH THE PROVISION OF EMERGENCY GENERATOR

17.8.1 In the event of failure of normal power supply and the emergency generator being actuated, all fireman's lifts in a building shall resume their normal operation immediately. Other lifts in the same building shall be stopped and within 45 seconds, be sequentially started to return to the terminal floor one at a time before the next lift is started and remain stationary at that level to release the passengers. Emergency power will be available for the sequential returning of the lifts to the home landing while the fireman's lifts are in operation. To prevent the simultaneous starting of the non-fireman's lift and all the fireman's lifts, the starting of the non-fireman's lift shall be momentarily delayed when all the fireman's lifts are being started or about to be started. However, momentary delay of the movement of a non-fireman's lift during sequential returning is not allowed after the lift has started to move. The operation of the fireman's lifts shall not be affected in any case;

17.8.2 Under surge and starting load condition, the emergency generator will maintain the transient state voltage dip within 15% with 1.5 seconds recovery time. The lift system shall be capable for operation in safe working order under this transient variation limit;

17.8.3 In case the emergency generator system and a pair of voltage-free contacts terminated inside a surface mounted box inside the lift machine room or near the lift control panel is provided as existing, the contactor shall be responsible for checking of the energizing characteristics of these contacts in relation to the operation of emergency generator before reusing these contacts;

17.8.4 All lifts shall resume their normal operation automatically upon the reset of the above voltage-free contacts of the emergency generator system;

17.8.5 The Contractor shall be responsible for all connection and control after these voltage-free contacts.

17.9 LIFT CONTROL FEATURES IN CASE OF SUPPLY VOLTAGE DIP WITHOUT ACTUATION OF EMERGENCY GENERATOR

- 17.9.1 In the event of supply voltage dip to less than 90% of normal and the emergency generator is not being actuated, the lifts in a building shall either continue their normal operation during the voltage dip or automatically resume normal operation after the voltage dip. In the latter case, the controller should carry out self-diagnosis and run other safety automatic routines as required by the manufacturer immediately after the voltage dip, return to home or the nearest landing either in up or down direction to resume normal operation. If self-diagnosis tests fail, the lift should not resume normal operation unless the system is checked by maintenance personnel;
- 17.9.2 When the lift restarts after resumption of normal supply, visual signal must be provided in the lift car to inform the trapped passengers the status of the lift. Unless otherwise specified by the Contract Administrator, the visual signal shall be the messages same as those verbal annunciations specified in sub-clause 20.6.5. and sub-clause 20.6.6. shown in dot-matrix LED type car position indicator.

18. INTERCOM AND CLOSED CIRCUIT TELEVISION (CCTV) SYSTEM

- 18.1 An emergency alarm push button together with a buzzer (or an alarm bell), an intercom and a CCTV camera shall be provided in the lift car and be connected to the building management office or the caretaker's office, and the machine room.
- 18.2 The building management office or the caretaker's office, and the machine room shall each be equipped with a buzzer (or an alarm bell), indication light(s) (one for each lift), an intercom and a CCTV monitor connected to the lift car(s). An alarm bell connected to the alarm push button in the lift car shall also be provided at the main entrance lift lobby or lift pit.
- 18.3 The Contractor shall supply and install in each lift a CCTV camera complete with a spur unit fused at 5A or a socket outlet at the car ceiling as the power supply.
- 18.4 The camera shall be recess mounted under the lift car ceiling / false ceiling. The camera lens can be adjusted between an angle of 30° from vertical at any direction. It shall be small and housed in a robust camera housing. There shall be locking mechanism to fix the angle.
- 18.5 The CCTV camera shall be of full colour type and shall be of resolution at 1080p or above. The camera lens shall be super wide angle type as follows:
- (i) Focal length: 2.5 mm;
 - (ii) Aperture: F1.8 to F3.5;
 - (iii) Angular field of view: not less than 95° horizontal, 130° diagonal.
- 18.6 All power, control and video cables connecting the camera with the housing shall be in plug-socket arrangement to facilitate easy removal of camera for maintenance.
- 18.7 The camera shall be able to operate in wide range of lighting level.
- 18.8 The camera shall be provided with auto white balance function.

- 18.9 A total of two (2) LCD monitors shall be installed at machine room and security room / caretaker's room / lift lobby for each lift. The display shall be securely mounted and protected by suitable means. Unless specified by the Owner or the Contract Administrator, monitors shall be not less than 24 inches and housing shall be provided for CCTV at security room / caretaker's room / lift lobby.
- 18.10 The CCTV system shall be equipped with digital video recorder, selector, digital video extender (i.e. VGA, DVI, HDMI) and associated accessories (if applicable). The storage of CCTV recorded image shall not be less than 2TB storage and shall be stored for at least ONE month.
- 18.11 If required by the Owner, the CCTV system shall be integrated with other CCTV systems in the security room / caretaker's room / lift lobby to facilitate future monitoring. The Contractor shall ensure the compatibility between the CCTV system (with its digital video recorder and associated accessories), the central console in the security room and other CCTV systems.
- 18.12 The CCTV monitor shall be equipped with controls to adjust the basic settings, including brightness, contrast.
- 18.13 The CCTV monitor shall be completed with adjustable tilting angle wall mounted bracket and desk mounted support depending on the application on site.
- 18.14 The Contractor shall provide all necessary cabling and accessories including video cables, conduits, connection units, amplifier, splitters etc. as required so that the video signal from the CCTV cameras can be adequately transmitted to the CCTV monitors in the lift machine room or at the maintenance access panel for machine-room-less lift for monitoring the lift car.
- 18.15 The Contractor shall provide for each lift a video cable from a connection unit at lift car ceiling to the lift travelling cable termination box. The Contractor shall then connect the video cable in surface conduit from the lift travelling cable termination box to a connection unit at high level of the main entrance floor lift lobby or location(s) as indicated by the Contract Administrator or his Representative. The video cable shall be integrated with the lift travelling cable or clipped to the lift travelling cable by cable tie clips at separation not exceeding 1000 mm.
- 18.16 Video cable shall be of the coaxial type with inner conductor of annealed copper or Cat 5 better. The dielectric shall be polythene with a shield of copper braid. The cable shall be insulated with an overall sheath of PVC.
- 18.17 PROVISION FOR LIFT FLOOR NUMBER DISPLAY SYSTEM FOR DOMESTIC BUILDING BLOCKS
- 18.17.1 The interfacing with the lift floor number display system, the Contractor shall provide, for each lift in domestic building blocks, lift signals for floor location, up/down travel direction and lift alarm in the form of the following voltage free contacts rated at 500 mA maximum current and 25V maximum voltage, terminated in an interface metal box in Meter Room on Ground Floor or location(s) as agreed by the Owner:
- (a) One pair of N.O. contacts for each landing floor, to be closed only when the lift is at the floor which the contact is assigned. At any one time, only one pair of these contacts shall be closed;

- (b) Two pairs of N.O. contacts for lift travel up/down directions, one to be closed when the lift is going up and the other to be closed when the lift is going down. Simultaneous closing of the two contacts shall not occur;
- (c) One pair of N.O. contacts for lift alarm, to be closed when the lift emergency alarm push button is pressed.

18.17.2 An additional voltage free contacts for each lift shall also be provided in the interface metal box for connection to the central alarm system:

- (a) One pair of N.O. contacts for lift alarm, to be closed when the lift emergency alarm push button is pressed.

18.17.3 All terminals for the dry contacts shall be properly labelled to indicate their functions;

18.17.4 It is acceptable that digital signals are used in lieu of the above dry contact signals, should an agreement be reached between the Contractor and the CCTV Sub-contractor. In this case, the details of communication protocol, data format and the hardware interface shall be clearly defined by the two parties.

19. CAR DOORS AND LANDING DOORS

19.1 GENERAL REQUIREMENTS

- 19.1.1 Unless alternatives are approved by the Owner, Owner's Representative and the Contract Administrator, Car Doors and Landing Doors shall be horizontal sliding doors. Doors shall be with fully automatic power opening and closing. The speed of the door panels shall be reduced when approaching the ends of their travels during closing. Car door shall be re-opened upon actuation of the landing call button and before the car door has fully closed.
- 19.1.2 Any projections or recesses in the exposed parts of the car doors or landing doors shall not exceed 3 mm in order to avoid shearing and the clearance between sliding parts of the door and any fixed part of the car or landing entrance shall not exceed 6 mm to avoid trapping that may cause bodily injury;
- 19.1.3 Sliding car doors and landing doors shall be guided on two parallel edges of the door. The distance between the car and landing sills shall not exceed 30 mm;
- 19.1.4 The clear height of all car doors and landing doors shall be not less than 2000 mm unless otherwise specified due to site constraint;
- 19.1.5 Under normal circumstances, lift car doors shall not be opened automatically unless the car has attained the levelling accuracy of less than 10 mm;
- 19.1.6 Door hangers and tracks together with their fixing for car and landing door shall be of steel or approved material of equivalent strength and be of robust construction. Means shall be provided to prevent the hangers from misaligning, jumping the tracks and jamming or displacement at the extremities of their travel;
- 19.1.7 Two guide blocks shall be fitted at the bottom of each door panel at appropriate positions to prevent twisting of door panel even after wear. Each guide block unit shall incorporate a robust safety flange extending downwards in the event of the collapse or breaking a drift of the normal rubbing surface of the guide block, the safety flange will prevent the bottom of the door panel from being pushed into the lift well;

19.1.8 Rollers shall be constructed of steel with sealed ball or roller bearings. An outer plastic lining on roller is acceptable;

19.1.9 Ropes shall be steel wire ropes to BS EN 12385-4 or equal and approved;

19.1.10 The Contractor shall provide documentary evidence, upon request, to verify the place of manufacture and authenticity of the car doors and landing doors delivered to the site or installed.

19.2 CAR DOOR

19.2.1 Each car entrance shall be provided with a car door which shall extend the full height and width of the car opening. The top track of the door shall not obstruct the car entrance. The stainless steel car door finishes shall be of hairline, satin, random embossed or wavy line pattern, unless otherwise stated in the Schedule of Rates;

19.2.2 Anti-hand/Anti-finger trapping device for minimizing the risk of dragging children's hands/fingers into the gaps between the car door panels and uprights shall be provided unless the lift is subjected to the physical constrain and the proposed alternative solution is approved by the Contract Administrator. The device shall immediately send a signal to stop the car door operation when it detects an obstacle in the door opening operation.

19.2.3 In order to facilitate the smooth operation of fireman's lift in an emergency, the anti-finger trapping device should be disabled when the fireman's lift mode is in operation according to FSD's requirement.

19.3 LANDING DOOR

19.3.1 All landing openings in lift well enclosures shall be protected by doors which shall extend the full height and width of the landing opening. The top track of landing door shall not obstruct the entrance to the lift car. Every such door shall have a fire resistance rating of not less than 120 minutes with regard to integrity;

19.3.2 The landing doors on all floors, including G/F, shall be constructed of at least 1.5 mm thick stainless steel. The finishes of the stainless steel landing door shall be of hairline, satin, random embossed or wavy line pattern, or similar finishes as approved by Contract Administrator. Mild steel sheet lined with stainless steel shall not be acceptable. Sample of stainless steel shall be submitted to the Contract Administrator for approval prior to manufacture. The landing doors shall be adequately stiffened by stainless steel ribs where required to provide a robust mechanical construction for heavy and rugged usage.

19.4 CAR DOOR LOCKING DEVICE

19.4.1 Every set of car door shall be provided with electrical safety device(s) which shall prevent the lift car from being started or kept in motion unless all car door panels are closed. It shall not be possible under normal operation to open a car door whilst the car is in motion. Operation of the lift with car door open is permitted under the conditions laid down in the Lift & Escalator Design CoP, Section E, Part 1;

19.4.2 For centre-opening 2-panel car doors, each car door panel shall be provided with a separate door closed proving device;

19.4.3 Every set of car door shall be provided with an effective mechanical locking device and mechanically locked by at least 7 mm so that the door cannot be opened from inside the car unless the car is within the levelling zone (i.e. stopped or is levelling);

- 19.4.4 The positive locking of the mechanical car door lock shall be proved by an electrical safety device in conformity with the Lift & Escalator Design CoP, Section E, Part 1 and shall precede the movement of the car;
- 19.4.5 The car door locking device shall be protected against deliberate misuse. The locking elements and their fixings shall be resistant to shock and shall be made of, or reinforced with, metal;
- 19.4.6 The engagement of the locking elements shall be achieved in such a way that a force in the opening direction of the door shall not diminish the effectiveness of locking. In the event that the locking action is effected by the action of spring, the spring shall act by compression and shall be guided and of such dimension that the coil is not compressed solid at the moment of unlocking. In the event of the spring no longer fulfilling its function, gravity shall not cause unlocking;
- 19.4.7 The locking device shall be protected against the risk of accumulation of dust, and tampering by external objects from below which could hinder its proper functioning;
- 19.4.8 The car door locking device shall comply with the minimum mechanical strength requirement as detailed in the Lift & Escalator Design CoP, Section E, Part 1 such that at its locked position, the car door cannot be opened by itself, or by forcing open the door panels at any position by hands from inside the car, and/or by shaking of car door.
- 19.5 LANDING DOOR LOCKING DEVICE
- 19.5.1 Landing door locking device shall be provided as detailed in the Lift & Escalator Design CoP, Section E, Part 1;
- 19.5.2 The locking device shall be protected against the risk of accumulation of dust, and tampering by external objects from below which could hinder its proper functioning.
- 19.6 DOOR LOCKING DEVICES TO BE INACCESSIBLE FROM LANDING AND CAR
- 19.6.1 All door locking devices and door switches, together with any associated actuating rods, levers or contacts, shall be so situated or protected as to be reasonably inaccessible from the landing and the car.
- 19.7 PROTECTIVE DEVICE
- 19.7.1 2-in-1 mechanical safety edge (i.e. multi-beam embedded in safety edge) & multi-beam door re-opening detection device complete with not less than 90 infrared beams or other approved technology shall be provided for lifts. The detection field of the light curtain shall cover the entire car opening width and extend from not more than 25mm above the sill to a minimum height of 1600mm above the sill. The multi-beam door re-opening detection device shall be inoperative when the fireman mode of fireman's lift and / or home landing operation (if required) is activated.
- 19.8 LANDING DOOR KEY
- 19.8.1 The Contractor shall supply two landing door keys for each block upon completion of the installation.
- 19.9 EMERGENCY LANDING OPENING IN LIFT WELL
- 19.9.1 The following warning notice in English and Chinese characters not less than 25 mm high shall be embossed onto a 1 mm thick stainless steel plate which shall be fixed onto the door by strong adhesive, with the lower edge of the notice plate at least 1500 mm above finished floor level:

“DANGER
UNAUTHORIZED ACCESS PROHIBITED
LIFT WELL RESCUE DOOR
CLOSE AND LOCK THIS DOOR”

「危險
不得擅進
升降機槽救生門
請關閉並緊鎖此門」

19.9.2 Where emergency landing openings are required in the lift well, these openings shall:

- (a) be equipped with dual key-operated locks requiring the simultaneous operation of two designated keys for opening from the outside and capable of being reclosed and relocked without a key;
- (b) be capable of being opened from inside the well without a key even when locked; and
- (c) except for doors in the form of lift landing doors, bear on its outside face a prominent figure-type warning sign of size not less than 100 mm high and immediately above or next to the keyholes of such doors as shown below-



- (d) be electrically interlocked with the lift safety circuit;

19.9.3 Where the design and disposition of lift well inspection and emergency doors can reduce the likelihood of inadvertent entry, paragraph 19.9.2 is not applicable and a single locking device operated by a designated key is acceptable. Typical examples are:

- (a) lift landing doors serving as the lift well inspection and emergency doors; or
- (b) lift well inspection and emergency doors with their sills being 1 m or more above the adjoining floor.

19.10 ARCHITRAVES

19.10.1 The Contractor shall provide installation method (either by replacement or overlay) on all landing entrances, unless otherwise specified, architrave fabricated from at least 1.5 mm thick stainless steel sheet. Finishes of the landing architrave shall be of hairline, satin, random embossed or wavy line pattern, or similar finishes as approved by the Owner and the Contract Administrator within one month from submission;

19.10.2 All surfaces of architrave shall be formed true and gaps between sections shall not be allowed. Bolts shall not be visible on the exposed surfaces of the architraves;

19.10.3 A stainless steel tactile-braille plate for the blind people shall be provided and fixed on both sides of the architraves on all floors at 1200 mm above finished floor level. The tactile markings shall be Arabic numerals of minimum 60 mm high and raised 1 mm. The tactile-braille plates shall be at least 100 mm square with raised letter or numeral and

corresponding Braille. The Braille messages provided on the tactile-braille plates at the architraves on each floor shall also tally with those provided on the lift push buttons. The tactile-braille plates shall be fixed by both strong adhesive and spot-welding or stainless steel rivet at four corners of the plate;

19.10.4 The design and construction of the architrave shall have no sharp edges or projections which will cause bodily injury to passengers.

19.11 APRON SHEET BELOW EACH LANDING

19.11.1 The Contractor shall provide a galvanized steel sheet of at least 1.5 mm thick below each landing threshold to comply with the Lift & Escalator Design CoP and the Lift & Escalator Works CoP;

19.11.2 A 150 mm high black and yellow warning stripe by spray painting shall be provided at the top edge of apron sheet.

19.12 DOOR SILLS

19.12.1 Door sills shall be of robust construction and shall be rigidly fixed to withstand the passage of loads to be introduced into the car. The thickness of any section of the sill shall be not less than 3 mm;

19.12.2 Car door sills shall be constructed of stainless steel;

19.12.3 Landing door sills for passenger lifts shall be constructed of extruded aluminum except the ones at ground floor or at main entrance access which shall be constructed of stainless steel.

19.13 MAXIMUM LIFT DOOR OPENING AND CLOSING TIME

19.13.1 Maximum lift door opening and closing time shall not exceed the following time specified:

Operator and door type	Opening size (mm)	Opening Time (s)	Closing Time (s)
two-panel side opening	800	2.9	3.3
	900	3.1	3.5
	1000	3.3	3.7
	1100	3.5	4.2
two-panel center opening	800	2.3	2.5
	900	2.4	2.6
	1000	2.5	2.7
	1100	2.7	3.0

19.14 TYPE TEST

19.14.1 The landing door locking device shall have valid type approval by EMSD. The landing door shall be certified in accordance with the FS Building CoP. In addition, fire test report / assessment report for at least 1.5 mm thick landing door of 1100 mm wide by 2100 mm high stainless steel shall be provided. Documentary evidence on the above certification shall be submitted upon request.

19.15 APRON SHEET BELOW CAR PLATFORM

19.15.1 A 150 mm high black and yellow warning strip by spray painting shall be provided at the top edge of apron sheet.

20. LANDING FIXTURES AND INDICATORS

20.1 POSITIONING

20.1.1 A landing fixture shall be mounted adjacent to each lift landing entrance or between the landing entrances of duplex control lifts or group control lifts on the same floor or location(s) as indicated by the Contract Administrator;

20.1.2 Landing indicators shall be provided at each lift landing and on other floor(s) as indicated by the Contract Administrator.

20.2 CALL BUTTON

20.2.1 The landing fixture shall consist of landing call button(s) and illuminated call acceptance signal. The landing call button(s) with LED illuminators shall be mounted such that the call button is at 900 - 1200 mm above finish floor level unless site constraint or otherwise specified and shall be vandal-proof of robust design and construction, impact resistant and suitable for heavy use;

20.2.2 The buttons shall be flush mounted on a stainless steel plate of with thickness not less than 2.5 mm. The plate shall be fixed by stainless steel secret-head screws;

20.2.3 The base box for call button shall be galvanized steel of thickness not less than 1.5 mm;

20.2.4 Up/Down directional indications shall be engraved or embossed on the buttons or the mounting plate.

20.3 LANDING INDICATORS

20.3.1 Landing indicator of dot-matrix type amber colour LED display, minimum 32 x 16 dots, actuated by reliable solid state circuitry shall be provided above each lift landing. The indicator shall be of robust design and impact resistance to a degree equivalent to that of polycarbonate material;

20.3.2 The indicator shall be able to display at least 32 messages. The dot-matrix display system shall be pre-programmed with the following messages/symbols to inform passengers the corresponding status of the lift:

- (a) Landing at which the car is stopped or passing
- (b) '超載 Overload';
- (c) '滿載 Full Load';
- (d) '暫停 Out of Service';
- (e) '消防員使用中 Used by Firemen';
- (f) '求助警鐘 Lift Alarm';
- (g) '例行保養,暫停使用 Routine Maintenance (Out of Service)';
- (h) '維修中,暫停使用 Under Maintenance (Out of Service)';
- (i) '清潔中,暫停使用 Cleaning in Progress (Out of Service)';
- (j) '停置狀態,暫停使用 Parking Mode (Out of Service)';

- (k) '升降機故障 Lift Breakdown';
- (l) '火警,請勿使用升降機 Fire (Do Not Use The Lift)';
- (m) Scrolling [UP] and [DOWN] arrow to indicate the lift travelling direction; and
- (n) Other messages/symbols as required by the Contract Administrator.

The height of each character in the dot-matrix indicator shall be 50 mm minimum. The luminous intensity of the indicator shall be at least 3500 µcd.

- 20.3.3 Existing fire alarm dry contact /signal should be reused for displaying the message '火警,請勿使用升降機 Fire (Do Not Use The Lift)';
- 20.3.4 Messages/symbols of dot-matrix indicator shall be re-programmable such that changes, if required, can be effected to suit requirements arise after completion of the Works. Two (2) times of free messages/symbols revision within the Defects Liability Period for the Contract shall be deemed to be included;
- 20.3.5 On floors served by only one lift, the landing indicators as described above for the other lifts shall be installed at location(s) indicated by the Contract Administrator;
- 20.3.6 The base box for the landing indicators shall be galvanised steel of thickness not less than 1.5 mm thick. The box shall be adequately stiffened as necessary to avoid deformation after grouting by the other contractors. Sample of the floor indicator with the base box as well as the dot-matrix graphic layout and the pre-programmed messages shall be submitted for approval upon request.
- 20.3.7 Uppercase English characters shall be used for the message.
- 20.4 MANUAL HOMING SWITCH
 - 20.4.1 For each lift, a manual homing ON/OFF bi-stable switch to effect the home landing operation in compliance with the Lift & Escalator Design CoP, Section E, Part 1 shall be provided;
 - 20.4.2 The switch shall be flush mounted, and properly labelled in both English and Chinese on a stainless steel cover plate of at least 1.5 mm thick with glass vision panel. The cover plate shall be hinged and lockable with a key;
 - 20.4.3 Common key shall operate all locks on the cover plates for the homing switches of the same building block. Two master keys shall be provided for each building block upon completion of the earliest Section of the Works.
- 20.5 MANUAL PARKING SWITCH
 - 20.5.1 Except for single lift, a manual parking ON/OFF key switch to effect lift parking mode in compliance with the BEC shall be provided for each lift;
 - 20.5.2 The manual parking ON/OFF key switch shall be flush mounted on a stainless steel cover plate of at least 1.5 mm thick, and shall have label, engraved or embossed in both English and Chinese characters as follows:

"Parking Switch 停置掣"
 - 20.5.3 Common key shall operate all parking switches of the same building block. The master keys for the parking switches shall be provided for each building block to the Employer upon completion of the earliest Section of the Works;

20.5.4 When the parking switch is operated, the following automatic functions shall be performed for the lift:

- (a) The message/symbol “停置狀態, 暫停使用 Parking Mode (Out of Service)” shall be displayed at all landing indicators;
- (b) Car call buttons and landing call buttons shall become inoperative, and new car calls and landing calls shall not be registered;
- (c) The lift shall continue to operate until the already registered car calls and landing calls are answered;
- (d) The lift shall then return to the home landing for parking;
- (e) The lift doors shall open, then close after a few seconds and remain closed;
- (f) The alarm button and the door open button in the car shall remain operative;
- (g) The ventilation fan in the car shall be shut off;
- (h) Only one lighting circuit for the car interior lighting shall remain on for providing a very minimum lighting level inside lift car. In addition, provisions shall be provided for easy changeover the circuitry connection to totally “OFF” all lightings during parking mode for further energy saving;
- (i) The fireman's switch upon operation shall override the functions of the packing switch.

20.6 AUDIBLE SIGNALS AND VERBAL ANNUNCIATION

20.6.1 An audible signal shall be provided at the lift entrance for all accessible lift to indicate the lift car arrival and its direction of travel. The audible signal shall sound once for up direction and twice for down direction, and shall activate before the arrival of the lift. The audible signal can be broadcasted from a device in the lift car as an alternative provided it can be heard from the lift lobby;

20.6.2 Before arrival and opening of lift doors, a verbal annunciation of "樓層 stopping floor; 請勿貼近機門 stand clear of door" in Cantonese, Putonghua and English shall be initiated inside the lift car;

20.6.3 An audible signal, distinguishable from that for sub-clause 20.6.1., such as buzz sound, shall be provided to signify the closing action of the doors on departure to alert people;

20.6.4 After closing of lift doors on departure, another verbal annunciation of "往上/下 going up/down" in Cantonese, Putonghua and English shall be provided before initiating the verbal annunciation in sub-clause 20.6.2.;

20.6.5 When the lift restarts after resumption of normal supply, a verbal annunciation of "升降機正在重新啟動 Lift is restarting" in Cantonese, Putonghua and English shall be initiated inside the lift car repeatedly until the lift restarted;

20.6.6 When the lift is searching for or going to home/the nearest landing to resume normal operation, another verbal annunciation of "升降機正前往最近樓層 Lift is travelling to the nearest landing" in Cantonese, Putonghua and English shall be initiated inside the lift car repeatedly until the car arrived home/the nearest landing. When home/the nearest landing is arrived, another verbal annunciation of "升降機已回復正常操作, 請按開門或目的地樓層按鈕 Lift has resumed normal operation, please press door open or destination floor button" in Cantonese, Putonghua and English shall be initiated once inside the lift car;

20.6.7 Script content of the verbal annunciations shall be re-programmable such that changes, if required, can be effected to suit requirements arise after completion of the Works. Two

(2) times of free script revision within the Defects Liability Period shall be deemed to be included;

20.6.8 Volume of the audible signals and verbal annunciations in sub-clauses 20.6.1., 20.6.2., 20.6.3., 20.6.4., 20.6.5. and 20.6.6. shall be adjustable such that changes can be effected at no cost to the Owner to suit operational needs after completion of the Works. For sub-clauses 20.6.1. and 20.6.3., an automatic timer-controlled volume adjusting device shall be provided to produce two pre-set volume levels respectively for day and night operation modes;

20.6.9 The speaker for the audible signals and verbal annunciations shall be located at high level above the car control panel in the lift car.

21. CAR CAPACITY AND LOADING

21.1 The relationship between rated load and maximum available car area of every passenger lift shall be as shown in the Lift & Escalator Design CoP, Section E, Part 1.

21.2 An adjustable device for bypassing of intermediate landing calls without their cancellation during a lift journey shall be provided for the lifts and preset to operate at 90% of the contract load value.

22. LOAD PLATES, NOTICE BOARDS AND INSTRUCTIONS

22.1 LOAD PLATE

22.1.1 A load plate giving the rated load of the lift shall be fitted in each lift car in a conspicuous position;

22.1.2 The rated load shall be given in kilograms and persons, each of which is regarded as weighing 75 kg;

22.1.3 The number of passengers to be displayed shall comply with the Lift & Escalator Design CoP, Section E, Part 1.

22.2 NOTICES AND WARNING SIGNS

The following notice boards and warning signs shall be provided:

22.2.1 In each car, the name of the lift company, telephone number, lift number, use permit, emergency instructions, inter-com symbol and user instruction shall be engraved onto stainless steel plate not less than 1.5 mm thick and fixed at the car panel by stainless steel secret-head screws. Use Permit shall be placed under clear acrylic plastic plate at least 5 mm thick and fixed rigidly by stainless steel secret-head screws;

22.2.2 In each car, the following English and Chinese characters not less than 15 mm high with graphic symbol shall be engraved onto stainless steel plate not less than 1.5 mm thick and fixed at the car panel by stainless steel secret-head screws.

"IN CASE OF FIRE DO NOT USE THE LIFT"

「如遇火警切勿使用升降機」

22.2.3 In each car, the following English and Chinese characters not less than 10 mm high and a pictograph shall be engraved onto stainless steel plate, not less than 1.5 mm thick and fixed rigidly onto the car panel by stainless steel secret-head screws.

"KEEP CLEAR OF LIFT DOORS"

「小心升降機門」

22.2.4 The following information shall be engraved on a stainless steel plate not less than 1.5 mm thick fixed rigidly over the main entrance floor landing of each lift:

- (a) Lift Number;
- (b) Floors served; and
- (c) Name of lift company and contact telephone no in case of emergency repair and breakdown, etc.

22.2.5 At each landing the following English and Chinese characters not less than 15 mm high for sub-clause 22.2.5(a) and not less than 10 mm high for sub-clause 22.2.5.(b) and a pictograph shall be engraved onto a stainless steel plate not less than 1.5 mm thick and fixed by the Contractor.

- (a) "IN CASE OF FIRE DO NOT USE THE LIFT"
「如遇火警切勿使用升降機」
- (b) "KEEP CLEAR OF LIFT DOORS"
「小心升降機門」

22.2.6 In each car a 'DANGER, DO NOT FORCE OPEN LIFT DOORS' sign in English and Chinese characters with pictograph shall be engraved onto a stainless steel plate of not less than 1.5 mm thick and fixed rigidly by stainless steel secret-head screws. The size of the English and Chinese characters shall be as follows:

English Wordings	Chinese Characters	Minimum Size
DANGER	危險	10 mm
DO NOT FORCE OPEN LIFT DOORS	切勿強行打開升降機門	10 mm

22.2.7 In each lift car, a Use Permit board with size suitable for housing the Use Permit in compliance with EMSD's requirements shall be fixed rigidly onto the car panel and at a height level so that the bottom of the board is at least 1 m above floor level and the top of the board is not higher than 1.8 m above floor level;

22.2.8 At each lift lobby where entry to the building can be gained, an appropriate number of International Symbol for Access for People with a Disability shall be provided by the Contractor (if applicable);

22.2.9 Approved electric shock treatment notice mounted in an anodised aluminium frame with transparent plastic front plate of 3 mm minimum thickness and wooden backing board of 5 mm minimum thickness shall be prominently displayed in each lift machine room;

22.2.10 The lift machinery and the lift control panels shall be properly labelled and identified with the lift number to facilitate working on the correct equipment safely;

22.2.11 Approved notice of safe working at lift pit shall be fixed with ties, screws or other suitable fasteners to the counterweight screen located at the lift pit of each lift;

22.3 EMERGENCY RELEASE EQUIPMENT AND INSTRUCTIONS

22.3.1 A board or suitable container for the necessary tools, together with clear instructions on the method for moving the lift car and releasing passengers in an emergency shall be

positioned in the machine room in a conspicuous manner. At least one set of such equipment and instruction shall be provided in each lift machine room. For machine-room-less lift, such equipment and instruction shall be provided at a location acceptable to the Contract Administrator.

23. SAFETY GEAR AND GOVERNOR

23.1 PROVISION OF SAFETY GEAR

23.1.1 Every lift shall be provided with a safety gear attached to the car frame and place beneath the car platform;

23.1.2 Where any space located below any liftway is accessible to persons, the counterweight, as well as the car, shall be provided with a safety gear if there is no solid pier below the counterweight extending down to solid ground.

23.2 GENERAL REQUIREMENTS OF SAFETY GEAR

23.2.1 Safety gear shall comply with the following general requirements:

- (a) It shall only be possible to release car (or counterweight) safety gears by raising the car (or counterweight);
- (b) Each car or counterweight safety gear shall be operated by means of its own overspeed governor;
- (c) The application of the safety gear shall not cause the car platform to slope at more than 1 in 20 to the horizontal;
- (d) It shall not be possible for vibration of the car frame to cause a safety gear to be applied.

23.2.2 The Contractor shall provide documentary evidence, upon request, to verify the place of manufacture and authenticity of the safety gears delivered to the site or installed.

23.3 TYPE TEST OF SAFETY GEAR

23.3.1 The safety gear shall have valid type approval by EMSD. Type approval documents and type test certificate to this effect shall be submitted upon request.

23.4 OVERSPEED GOVERNOR

23.4.1 The overspeed governor shall be of the centrifugal type and shall operate the safety gear in case the speed of the car reaches the tripping speed in accordance with the Lift & Escalator CoP, Section E, Part 1;

23.4.2 The Contractor shall provide documentary evidence, upon request, to verify the place of manufacture and authenticity of the overspeed governors delivered to the site or installed.

23.5 ELECTRICAL CHECKING ON OPERATION OF OVERSPEED GOVERNOR

23.5.1 The overspeed governor shall initiate the stopping of the lift machine before the car speed, either up or down, reaches the tripping speed of the governor in accordance with the Lift & Escalator Design CoP, Section E, Part 1.

23.6 GOVERNOR ROPES

23.6.1 The governor ropes shall not be less than 6 mm in diameter and shall be tensioned by a tensioning pulley. This pulley (or its tensioning weight) shall be guided;

23.6.2 The Contractor shall provide documentary evidence, upon request, to verify the place of manufacture and authenticity of the governor ropes delivered to the site or installed.

23.7 TYPE TEST OF GOVERNOR

23.7.1 The overspeed governor shall have valid type approval by EMSD. Type approval documents and type test certificate to this effect shall be submitted upon request.

23.8 ASCENDING CAR OVERSPEED PROTECTION DEVICE

23.8.1 Every traction drive lift shall be provided with ascending car overspeed protection device in accordance with the Lift & Escalator Design CoP. The ascending car overspeed protection device shall have valid type approval by EMSD;

23.8.2 The Contractor shall provide documentary evidence, upon request, to verify the place of manufacture and authenticity of the ascending car overspeed protection device delivered to the site or installed.

23.9 UNINTENDED CAR MOVEMENT PROTECTION DEVICE

23.9.1 Every traction drive lift shall be provided with unintended car movement protection device in accordance with the Lift & Escalator Design CoP. The unintended car movement protection device shall have valid type approval by EMSD;

23.9.2 The Contractor shall provide documentary evidence, upon request, to verify the place of manufacture and authenticity of the unintended car movement protection device delivered to the site or installed.

24. OVERLOAD DEVICE

24.1 PROVISION OF OVERLOAD DEVICE

24.1.1 Every lift shall be provided with an overload device which shall be of fail safe design, or of such a design that the device shall not be damaged by excessive overloading, and shall operate when the load in the car is ten percent or more in excess of the rated load in respect of such lift.

24.2 OPERATION OF OVERLOAD DEVICE

24.2.1 The overload device, when in operation, shall:

- (a) Prevent any movement of the car;
- (b) Prevent the closing of any power operated door whether fitted to the car or to the landing at which the car is resting;
- (c) Give audible and visible signals;
- (d) The audible and visual signals shall be positioned at the same level as the car position indicator;

- (e) The visual signal shall have characters that are not visible when not operating and shows amber in colour when illuminated from behind with a flashing light when in operation; and
- (f) The visible signal shall be in both English and Chinese characters as follow:
"OVERLOAD""超重"

24.2.2 The lift shall resume normal operation automatically on removal of overload. The overload device shall be inoperative whilst the lift car is in motion.

25. LIFT MACHINERY FOR ELECTRIC LIFT

25.1 LIFT MOTOR

25.1.1 The main driving motor shall be of quiet running type, and shall be designed to operate for an unlimited period according to the expected duty of the lift;

25.1.2 Lift motor ratings in terms of number of starts per hour shall be not less than those in the following Table:

Rated speed, v in m/s	Number of starts per hour
$v \leq 1.0$	150
$1.0 < v \leq 1.75$	180
$v > 1.75$	240

25.1.3 The Contractor shall provide documentary evidence, upon request, to verify the place of manufacture and authenticity of the lift motors delivered to the site or installed.

25.2 REDUCTION GEAR

25.2.1 Conventional worm reduction gear shall be employed for geared lift machine. Helical or planetary reduction gear may be accepted provided that the gear system of the same speed range has proven satisfactory in-service record as approved by Contract Administrator.

25.3 BEARINGS

25.3.1 Bearings for motor shall be of the sleeve ring type or ball bearing type with oil ring. Reduction gear box shall be provided with journal and thrust bearings suitable for the application.

25.4 HAND WINDING FACILITIES

25.4.1 Provision shall be made for each lift whereby the lift car can be raised or lowered in an emergency by manual operation or means according to EMSD Design CoP. The direction of winding corresponding to the raising and lowering of the lift car shall be clearly indicated;

25.4.2 The hand winding apparatus, when detachable and portable, shall be mounted in an accessible and conspicuous position in the machine room. If the detachable/portable apparatus is suitable for use with four or more lifts installed in the machine room, at least two sets of such apparatus shall be provided;

25.4.3 For lift where the manual effort to raise the car with its rated load exceeds 400 N, an emergency electrical operation device to permit emergency electrical operation in accordance with the Lift & Escalator Design CoP, Section E, Part 1 shall be provided for each lift.

25.5 BRAKES

25.5.1 Every lift machine shall be provided with a brake that is mechanically applied and electrically held off. The brake shall be capable of stopping the machine when the car is downward travelling at its rated speed with 125% rated load. It shall be fitted with an emergency release which shall remain open only while manual pressure is being applied or means according to EMSD Design CoP.

25.6 REGENERATIVE POWER

25.6.1 For every lift with rated speed of 2.5m/s or above and rated load at 1000kg or above, controller / inverter / converter with appropriate facilities shall be provided to condition and feed the regenerative power induced during operation of the lift back to the power line for use by other lifts or electrical installations in the building;

25.6.2 Filtering facility shall be incorporated to ensure proper regenerative power quality such that the voltage and frequency shall not exceed $\pm 6\%$ and $\pm 2\%$ respectively of the rated supply in accordance with the Supply Rules of the concerned power supply company and that the extent of harmonic distortions shall comply with the concerned power supply company's requirements.

26. CONTROLLER

26.1 CONSTRUCTION

26.1.1 Unless otherwise specified, the controller shall be mounted in a ventilated steel cubicle with hinged doors at the front, in which all contactors, solenoids, relays, electronic cards and motor starting equipment, etc. shall be fitted;

26.1.2 Panels at the rear of the cubicle shall be of removable hinged type if access for routine maintenance at the rear is required.

26.2 GENERAL REQUIREMENTS

26.2.1 The controller shall comply with the general requirements as stated in the Lift & Escalator Design CoP, Section E, Part 1 and the following features shall be included:

- (a) Materials used in the construction of the control equipment shall not support combustion;
- (b) The components shall be designed and mounted in a manner which facilitates inspection, maintenance, adjustment and replacement. Wirings shall be terminated in such a way that the wires are not damaged. Accessible terminals suitably marked, shall be provided for all cables;
- (c) Control circuits shall be supplied through a double wound isolating transformer to BS EN 61558-1, and BS EN 61558-2-23 or IEC 61558-2-23;
- (d) Where rectifier is used it shall be of the full wave silicon type fed from a transformer;

- (e) The control circuits shall be protected by suitably rated miniature / moulded case circuit breakers or fuses to BS EN 60269-1 or BS 88-1, and BS HD 60269-2 or BS 88-2 independent of the protection of the mains circuits;
- (f) The brake solenoid and any retiring cam shall operate on direct current;
- (g) Motors connected to polyphase a.c. power supplies shall incorporate means to prevent the motor from being energised in the event of phase failure and / or phase reversal;
- (h) A main switch shall be provided by the Contractor for each lift capable of breaking the supply to the lift on all conductors and interrupting the highest current involved in normal conditions of use in accordance with the Lift & Escalator Design CoP, Section E, Part 1;
- (i) Interruption of the power supply or isolation of the main switch and / or other isolation / switching devices pertaining to one of the lifts under duplex control or group control shall not affect the normal operation of the other lift(s);
- (j) In the event of out of service of one of the lifts under duplex control or group control, the other lift(s) shall be able to remain in normal service while the out- of-service lift is under repair or servicing.

26.2.2 The Contractor shall provide documentary evidence, upon request, to verify the place of manufacture and authenticity of the controllers delivered to the site or installed;

26.2.3 Insulation rubber mat complying with BS 921 shall be provided on the floor in front of, and also at the rear of the lift control panel and other electrical switchboards in the lift machine room, if access for routine maintenance at the rear is required, for better protection against electric shock.

26.3 MICROPROCESSOR-BASED CONTROL

Microprocessor-based control shall include the following design features:

26.3.1 Interruption of the electrical supply to the lift shall not affect the system memory or software;

26.3.2 It shall be possible to change the supervisory control algorithm to meet a change in building use by re-programming the instruction memory;

26.3.3 It shall be possible to display information on the operational status of the lift and to locate fault by having means of access/test points on the controller, self-diagnosis circuits with visual indicator or equivalent means to facilitate ease of maintenance and quick repairing, and printed circuit board modules shall be used;

26.3.4 Multiplexing techniques may be employed to reduce the number of trailing cables normally required, if considered cost effective to do so.

27. AUTOMATIC CONTROL SYSTEM

Unless approved by the Contract Administrator, the operation characteristic shall match the required design criteria and control sequence (including the lift homing control logic) of the existing installations.

27.1 DOWN COLLECTIVE CONTROL FOR SINGLE LIFT ("SIMPLEX" DOWN COLLECTIVE CONTROL)

27.1.1 All calls shall be stored in the system and answered in sequence regardless of the order in which they are registered;

27.1.2 When travelling in the "Up" direction, the car travels to the highest call, stopping at any intermediate floor for which a car call has been registered. On stopping for the highest call, preference is established for the "Down" direction;

27.1.3 When travelling downwards the car stops for all car and landing calls that have been registered. When all calls have been answered, the car remains with doors closed at the floor to which it last travelled.

27.2 DOWN COLLECTIVE CONTROL FOR TWO INTER-CONNECTED LIFTS ("DUPLEX" DOWNCOLLECTIVE CONTROL)

In addition to the features as required in DOWN COLLECTIVE CONTROL FOR SINGLE LIFT, it shall include the following control features:

27.2.1 When both cars are away from the terminal floor and all calls have been answered, one car shall return automatically to the terminal floor and referred to as the "Next" car. The second car remains at the floor which it last deposited passengers and is referred to as the "Free" car. Both cars stand with doors closed;

27.2.2 With the cars standing with doors closed as described in sub-clause 27.2.1. the first landing call shall be answered as follows:

- (a) If a terminal floor call, by the "Next" car;
- (b) If from any other floor, by the "Free" car.
 - i. With the "Free" car answering calls, the "Next" car shall not start for "Down" calls behind the "Free" car until the "Free" car is descending;
 - ii. Should the "Free" car return to the terminal floor and the doors close after a passenger comes in, the passenger shall be able to register a call and travel to any destination. With both cars standing at the terminal floor with doors closed, the "Next" car (i.e. the one that arrived first) shall answer the first landing call. Directional preference shall be maintained when a car stops for its last call until the doors close.

27.3 FULL COLLECTIVE CONTROL FOR SINGLE LIFT

27.3.1 All calls shall be stored in the system and answered in sequence regardless of the order in which they are registered;

27.3.2 When the car is in motion in a given direction it shall travel to the further-most call, stopping at any intermediate floor for which a car call or landing call for the corresponding direction of travel has been registered;

27.3.3 Landing calls for the direction opposite to that in which the car is travelling shall be bypassed but will remain stored in the system to be answered when the car returns in the opposite direction;

27.3.4 When the car stops for the last call in its direction of travel, car preference is established for an adjustable period;

27.3.5 When all calls have been answered the car remains with doors closed at the floor to which it last travelled.

27.4 FULL COLLECTIVE CONTROL FOR TWO INTER-CONNECTED LIFTS

In addition to the features as required in FULL COLLECTIVE CONTROL FOR SINGLE LIFT, it shall include the following supervisory feature:

27.4.1 When both cars are away from the terminal floor and all calls have been answered, one car shall return automatically to the terminal floor and is referred to as the "Next" car. The second car remains at the floor to which it last travelled and is referred to as the "Free" car. Both cars stand with doors closed;

27.4.2 With the "Free" car answering calls, the "Next" car shall not start for "Up" calls or "Down" calls behind the "Free" car until the "Free" car is descending. If the "Free" car is delayed the controller shall operate to dispatch the "Next" car;

27.4.3 With both car standing at the terminal floor with doors closed the "Next" car shall answer the first landing call; and

27.4.4 Should the "Free" car return to the terminal floor and the doors close after a passenger comes in, the passenger shall be able to register a call and travel to any destination.

27.5 FULL COLLECTIVE CONTROL FOR MORE THAN TWO INTER-CONNECTED LIFTS

27.5.1 In addition to the features required in FULL COLLECTIVE CONTROL FOR SINGLE LIFT, the control shall include features similar to those in FULL COLLECTIVE CONTROL FOR TWO INTER-CONNECTED LIFTS and shall deploy lift to answer landing call(s) with due consideration of the current car locations, car calls registered and travelling directions etc. so as to optimise the passenger waiting time and even out the lift usage.

27.6 DOUBLE DUPLEX DOWN COLLECTIVE CONTROL

27.6.1 Double Duplex Down Collective Control shall be provided for three lifts arranged in two groups serving two different floor zones (i.e. lower zone and higher zone). Two of the three lifts shall serve the high and low zones respectively while the remaining one serves both zones;

27.6.2 The Double Duplex Down Collective Control system shall be capable of achieving the following:-

(a) In case of landing call(s) registered at the lower zone, the group control system shall deploy the low-zone lift or the two-zone lift or both to answer the call(s) with due consideration of the current car locations, car calls registered and travelling directions so as to optimize the passenger waiting time and even out the lift usage;

(b) In case of landing call(s) registered at the higher zone, the group control system shall deploy the high-zone lift or the two-zone lift or both to answer the call(s) with due consideration of the current car locations, car calls registered and travelling directions so as to optimize the passenger waiting time and even out the lift usage;

- (c) In case there are simultaneous landing calls registered at the lower zone and at the higher zone, the group control system shall deploy one or two or all of the three lifts to answer the landing calls with due consideration of the current car locations, car calls registered and travelling directions so as to optimize the passenger waiting time and even out the lift usage.

28. LIFT POWER SYSTEM AND LEVELLING

28.1 GENERAL REQUIREMENT

- 28.1.1 Lift power system shall be AC variable voltage variable frequency (ACVVVF) system.

28.2 LEVELLING ACCURACY

- 28.2.1 Levelling accuracy of the lift system shall not exceed 10 mm.

28.3 AUTOMATIC RE-LEVELLING

- 28.3.1 Automatic re-levelling shall be provided for lift of rated speed of 2.5 m/s and above and for lift where the lift machine is more than 60 m above the lowest landing door, to maintain the accuracy of stopping at landing within 10 mm. A leveling accuracy of not more than 20mm shall be maintained. If during e.g. loading and unloading phases, the value of 20mm is exceeded, it shall be corrected.

28.4 MAXIMUM ALLOWABLE ELECTRICAL POWER, TOTAL HARMONIC DISTORTION AND TOTAL POWER FACTOR OF LIFTS

- 28.4.1 The maximum allowable electrical power, total harmonic distortion and total power factor of each lift shall comply with the requirements stipulated in the BEC.

29. LIFT ALARM SYSTEM

29.1 GENERAL REQUIREMENTS

- 29.1.1 The Contractor shall supply and install a lift alarm system including all sensing devices, cabling, flexible conduits, alarm sounders, batteries, indication panels and accessories;

- 29.1.2 This system shall operate as follows:

- (a) Alarm sounders shall be provided on top of the lift car, in the main entrance lift lobby or at the lift pit, and buzzers in the guard counter or location(s) as specified, and in the lift machine room or at the maintenance access panel for machine-room-less lift. These alarm sounders shall be connected to the emergency battery normally maintained by trickle charger from A.C. source;
- (b) These alarm sounders or buzzers shall be arranged to sound as long as the alarm push button inside the car is being pressed;
- (c) Alarm sounders shall be of electronic type with the following two-tone pattern:

Low frequency: 600Hz ($\pm 15\%$)	Duration: 600 ms ($\pm 20\%$)
High frequency: 920Hz ($\pm 15\%$)	Duration: 300 ms ($\pm 20\%$)

The alarm sounders shall be impact resistant and suitable for conduit entry. Alarm sounders for outdoor installation shall be weatherproof to IP 65;

- (d) An emergency alarm push button together with an intercom shall be provided in the lift car and be connected to the guard counter or location(s) as indicated by the Contract Administrator, and the lift machine room or maintenance access panel for machine-room-less lift. Alarm sounder or buzzer, indication light and intercom connected to the lift car shall be provided in the guard counter or location(s) as indicated by the Contract Administrator, and in the lift machine room or maintenance access panel for machine-room-less lift. An alarm sounder connected to the alarm push button in the lift car shall also be provided at the main entrance lift lobby and at the lift pit;
- (e) The alarm sounders and buzzers shall sound and the indication lights shall be lit if the alarm push button is pressed. The indication lights shall remain on until they are manually reset by activation of a reset button inside the guard counter/main entrance lift lobby or location(s) as indicated by the Contract Administrator upon releasing of trapped passengers. The hook switch of an intercom handset shall not be used as the indication lights reset button. The sound generated by the alarm sounders shall be distinguishable from that of fire alarms;
- (f) An indication light for acknowledgment shall be provided in the lift car. The indication light for acknowledgment shall be in the form of a blinking light adjacent to the intercom speaker and the following notice shall be provided next to the blinking light:

"When light blinks, it indicates your emergency call has already been received. Please be patient and wait for the rescue."
「此燈閃亮時，表示已收到求救信息，請耐心等待救援」

The indication light for acknowledgment shall blink after the manual activation of an acknowledgment switch located in the guard counter / main entrance lift lobby. The blinking shall continue until the acknowledgment switch is reset.
- (g) Separate lift alarm / indication / intercom system shall be provided for each lift. In the lift machine room, separate lift alarm / indication / intercom panels constructed of 1.5 mm thick hairline stainless steel shall be provided for each lift adjacent to each lift control panel. In the guard counter / main entrance lift lobby, a combined lift alarm/indication/intercom panel constructed of 1.5 mm thick hairline stainless steel shall be provided;
- (h) A pair of voltage free contacts for each lift shall be provided for connection to the local alarm system by others. The contacts shall be normally open and shall close when the alarm push button in lift car is being pressed;
- (i) The lift alarm system for all lifts shall be provided as detailed in the Lift & Escalator Design CoP, Section E, Part 1;
- (j) For each of the lifts, a lift failure indication light shall be provided in the guard counter/main entrance lift lobby. The lift failure indication light shall be lit and the alarm sounder / buzzer in the guard counter/main entrance lift lobby mentioned in sub-clause 29.1.2.(a) shall sound when the lift is caused to stop under the following fault conditions:
 - i. Actuation of any safety devices, e.g. the stopping device and inspection operation switch on the car roof, but excluding the lift door safety devices;

- ii. Power supply failure for lifts; or
- iii. Malfunction of ventilation fan for the lift well, when applicable.

The alarm sounder / buzzer shall continue to sound until manually muted by activation of the reset button in sub-clause 29.1.2(i). The lift failure indication light shall remain on until the fault is cleared and the actuated safety devices resume to the normal condition.

30. FIRE SERVICES REQUIREMENTS

30.1 FIREMAN'S LIFTS

30.1.1 Where called, fireman's lift(s) shall be provided which shall satisfy the statutory requirements.

31. REQUIREMENTS ON RIDING COMFORT

31.1 RIDING COMFORT

31.1.1 All lift installation shall comply with the following riding comfort criteria:

Maximum Jerk (m/s ³)	Maximum Lift Car Vibration (cm/s ²)		
	X - Axis	Y - Axis	Z - Axis
2.2	25	25	25

31.1.2 The Z-axis is along the lift travel direction and the X-axis and Y-axis are on the horizontal plane;

31.1.3 Upon completion of the lift installation, the Contractor shall carry out riding comfort measurement for each lift. Measurement results shall be submitted upon request. The Contractor shall propose and carry out remedies to the installation if the measurement result exceeds the criteria in sub-clause 31.1.1;

31.1.4 Riding comfort measurement shall be conducted with the lift car carrying rated load and travelling in both upward and downward directions;

31.1.5 Re-measurement shall be carried out by the Contractor after any remedy to show compliance with the criteria in sub-clause 31.1.1.

32 PARTICULAR REQUIREMENTS FOR MACHINE-ROOM-LESS LIFT

32.1 STATUTORY REQUIREMENTS

32.1.1 The machine-room-less lift shall be of a type approved by EMSD;

32.1.2 The passenger rescue operation for the machine-room-less lift shall comply with EMSD Design CoP and accepted by the Fire Services Department;

32.1.3 The Contractor shall be responsible for preparing and arranging all necessary submissions to the relevant authorities and providing all necessary information and assistance to the Contract Administrator for applying for approval and exemptions / modifications of the statutory codes and requirements, where applicable.

32.2 GENERAL REQUIREMENTS

- 32.2.1 Maintenance, repair, major alteration, replacement and examination of the overspeed governor and machine shall be able to be carried out on the car roof safely and efficiently;
- 32.2.2 Tripping and re-setting of the overspeed governor shall be able to be remotely controlled outside the lift well or where required at a position approved by the Contract Administrator;
- 32.2.3 The motor brake shall be able to be remotely released by hand outside the lift well or where required at a location approved by the Contract Administrator or means according to EMSD Design CoP. A constant manual effort is required to keep the brake open;
- 32.2.4 In any case, the over-travel of the lift car above the upper terminal landing floor level shall not exceed a dimension that will hinder the release of passengers in a safe manner;
- 32.2.5 Sufficient energy efficient lighting with battery back-up shall be provided for illumination of the overspeed governor, motor brake and machine in the lift well;
- 32.2.6 Lift motor located in lift pit is not acceptable.

32.3 LIFT WELL VENTILATION

- 32.3.1 A ventilation system for the lift well of machine-room-less lift shall be provided. A ventilation fan adequately sized to maintain the temperature inside the lift well below 40°C shall be provided. The motor of the ventilation fan shall be protected to IP55 minimum and suitable for continuous running;
- 32.3.2 The operation of the ventilation fan shall be controlled by both a temperature sensor installed in the lift well and a timer in the maintenance access panel. The status and fault indication of ventilation fan shall be provided at the maintenance access panel. An independent by-pass ON/OFF switch in maintenance access panel for each ventilation fan for the lift well shall be provided for maintenance purpose;
- 32.3.3 For ventilation system to be installed by the Contractor, the Contractor shall submit calculation to verify that the proposed ventilation fan can maintain the temperature inside lift well below 40°C;

32.4 LIFT MAIN CONTROL PANEL

- 32.4.1 The controller for machine-room-less lift shall be mounted in a ventilated stainless steel lift control panel, in which all contactors, solenoids, relays, electronic cards and motor starting equipment, etc. shall be fitted.
- 32.4.2 When the lift control panel is located outside the lift well, a maintenance access panel constructed of stainless steel frame and stainless steel sheet of minimum 1.5 mm thick shall be provided by the Contractor to enclose and protect the lift control panel, the lift alarm/indication/intercom panel, the CCTV monitor, the 2-way lift well lighting switch, the emergency light switches, the lift well ventilation fan switches, timer and indication lights, flood alarm indication lights etc. The door(s) of the enclosure shall be hinged at the front, shall not open towards the lift control panel, shall be fitted with a lock which can be locked without a key from outside and only accessible by authorised person. It shall bear on the outside face a notice in English and Chinese in letters and characters not less than 25 mm high as follows:

**“UNAUTHORISED OPENING PROHIBITED
LIFT CONTROL PANEL
CLOSE AND LOCK THIS DOOR”**

「不得打開
升降機控箱
請關閉並緊鎖此門」

- 32.4.3 When the lift control panel is located inside the lift well, it shall be located at a position that will enable the lift maintenance personnel to carry out inspection and maintenance work in a safe and efficient manner. All necessary working platform and access to the lift control panel shall be provided by the Contractor. A thermal protection device shall be provided by the Contractor to stop the lift car and return to a landing when the lift control panel has reached a pre-set temperature level. At a suitable location outside the lift well, a maintenance access panel constructed of stainless steel frame and stainless steel sheet of minimum 1.5 mm thick with hinged lockable door(s) shall be provided by the Contractor to enclose and protect the lift alarm/indication/intercom panel, the CCTV monitor, the 2-way lift well lighting switch, the emergency light switches, the lift well ventilation fan switches, timer and indication lights, flood alarm indication lights etc.;
- 32.4.4 The door of the enclosure located outside the lift well shall be so constructed that the CCTV monitor inside the enclosure can be visible from the outside through safety glass of 6 mm minimum thickness complying to BS 952-1 and BS 952-2, BS EN 81-20/50 or equivalent;
- 32.4.5 Additional wall thickness to embed the enclosure located outside the lift well while maintaining the fire resistance period requirement for the wall will be provided by the Main Contractor as necessary.

33. AUTOMATIC RESCUE DEVICES

- 33.1 The automatic rescue devices shall maintain the lift in a momentary operation for the safe exit of passengers, and prevent them from being trapped. When normal power supply fails, the device detects the voltage dip, uses back-up battery power to move the lift to the nearest landing floor either in up or down direction and opens the doors to release the passengers. The lift's movement shall not be started if further lift operation will lead to a dangerous situation. The lift will then remain out of service until normal power supply is resumed.

(IV) Builder's Work

34. Unless otherwise specified or approved by the Owner and the Contract Administrator, the Contractor shall reuse existing building works provisions such as wall/slab openings, concrete supports, hoisting beam, Cat ladder and lift buffer supports at lift pit etc. for the new lifts installation, and avoid alteration on building works as far as practicable.
35. The Contractor shall check existing building work provisions for the installation of new lift equipment and the future operation & maintenance requirement. If the existing building work provisions do not fit for the purposes, the Contractor shall modify the new lift installation to suit existing site condition at his own cost.

36. The Contractor shall provide minor building works at both existing and new lift landing floors which are necessary for the new lift, including the followings: -
- (a) To dismantle and remove the existing architraves, landing door sills, landing door and landing door hanger cases;
 - (b) To install new architraves, landing indicators and landing door sills with the associated supports including concrete fill in and/or grouting works;
 - (c) To construct / make good counter slopes in front of each landing sills including cement sand screeding provided with anti-skid dressing and/or floor tiles;
 - (d) To provide small openings for lift signal cables such as homing and parking switches etc.;
 - (e) To provide new landing call buttons, landing indicators and the associated lift control switches. Unless otherwise specified, the Contractor shall not reuse existing concealed base boxes for the new installation. The Contractor shall provide any associated minor building works encountered at lift shaft and lift lobby for installation of landing indicators, landing buttons, homing switches, fireman's switches and parking switches, including grouting and making good all affected areas; and
 - (f) To make good, paint and replace damaged wall/floor tiles resulting from the works as specified above. The pattern and colour of the wall / floor tiles shall match with existing installation as far as practicable;
37. If the above-mentioned works fall within the definition of building works under section 2(1) of the Building Ordinance (Cap.123), the Works must comply with the Building Ordinance and its regulations, and be supervised by competent person in that area of trade. The minor building works shall be carried out by Registered General Building Contractor (RGBC) and/or Registered Minor Works Contractors of respective classes/types (RMWC) and the works shall be executed in compliance with the statutory requirement. The Contractor shall allow for all extra cost, if any, in complying with this Clause.
38. When involving increase of structural loading on the building, the Contractor shall engage a Registered Structural Engineer (RSE) as listed under the Building Ordinance for the design and calculation of any structural work (both temporary and permanent work) necessary for the delivery and installation of the equipment supplied under this Contract, and submit the report endorsed by the RSE for the Owner's and Contract Administrator's record.

(V) Tools and Equipment

39. The Contractor shall provide all necessary tools and equipment required to facilitate the safe release of passengers, i.e. door release keys, brake release keys, hand winding wheels, etc. and must be readily available at all times within the machine room. This equipment must be clearly identified and readily accessible and positioned on a purpose made tool board which is to be placed in each machine room.

Schedule 1(b)

Reference Drawings

Disclaimer: Any Reference Drawings set out in this Schedule 1(b) are given without any warranty on the part of the Owner as to their accuracy or completeness, and they shall be deemed to be supplied for the Contractor's information only and shall not have contractual force.

[List all Reference Drawings]

Schedule 1(c)

House Rules of Building Manager
(As a separate attachment)

Schedule 2

Information relating to the Works (to be completed by the Owner/Owner’s Representative¹¹)

Remarks: The Owner shall fill in the date / amount / percentage / no. of days and quantity in the [] of this Schedule 2. The number inside [] is for reference only and the Owner can modify such number.

Clause of Conditions of Contract	Description	Information provided by the Owner/Owner’s Representative																																																																											
1.3	Commencement Date	[Date]																																																																											
1.6	Contract Administrator	The person so named in the Letter of Acceptance																																																																											
1.25	Lift	<table border="1"> <tr> <td>Location ID of Lift:</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Use Permit Expiry Date</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Load Test Expiry Date</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Brand</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Rated Load (kg)</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Rated Speed (m/s)</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Rope Ratio</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>No. of Cars in Lift Group</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>No. of Risers for Landing Call Panel</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Collective (Down / Full)</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Levels Served</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Rise (m)</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Type of Car Door</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Type of Landing Door</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Fireman Lift (Yes / No)</td> <td></td> <td></td> <td></td> <td></td> </tr> </table>	Location ID of Lift:					Use Permit Expiry Date					Load Test Expiry Date					Brand					Rated Load (kg)					Rated Speed (m/s)					Rope Ratio					No. of Cars in Lift Group					No. of Risers for Landing Call Panel					Collective (Down / Full)					Levels Served					Rise (m)					Type of Car Door					Type of Landing Door					Fireman Lift (Yes / No)				
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1.32	Period for Honouring Payment	[21] days																																																																											

¹¹ Or by the Contract Administrator in consultation with the Owner.

Clause of Conditions of Contract	Description	Information provided by the Owner/Owner's Representative (cont'd)																								
1.40	Location of the Site	[address of building and location ID for lift(s)]																								
1.49	Works Section	<table border="1"> <thead> <tr> <th>Works Section</th> <th>Lift No(s) and Location ID(s)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td></td> </tr> <tr> <td>2</td> <td></td> </tr> <tr> <td>3 ...</td> <td></td> </tr> </tbody> </table>	Works Section	Lift No(s) and Location ID(s)	1		2		3 ...																	
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4.3.1	Site Access Date and Completion Date	<table border="1"> <thead> <tr> <th>Works Section</th> <th>Site Access Date</th> <th>Completion Date</th> </tr> </thead> <tbody> <tr> <td>1</td> <td></td> <td></td> </tr> <tr> <td>2</td> <td></td> <td></td> </tr> <tr> <td>3 ...</td> <td></td> <td></td> </tr> </tbody> </table>	Works Section	Site Access Date	Completion Date	1			2			3 ...														
Works Section	Site Access Date	Completion Date																								
1																										
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4.3.2	Milestone Schedule	<table border="1"> <thead> <tr> <th>Milestone No</th> <th>Works Required to be Completed</th> <th>Time for completion</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Provision of Design</td> <td></td> </tr> <tr> <td>2</td> <td>Shipping Advice for parts Ordering</td> <td></td> </tr> <tr> <td>3</td> <td>Parts Arrival on site / warehouse of Contractor</td> <td></td> </tr> <tr> <td>4</td> <td></td> <td></td> </tr> <tr> <td>5</td> <td></td> <td></td> </tr> <tr> <td>6</td> <td></td> <td></td> </tr> <tr> <td>...</td> <td>Completion of site works for all Lift</td> <td></td> </tr> </tbody> </table>	Milestone No	Works Required to be Completed	Time for completion	1	Provision of Design		2	Shipping Advice for parts Ordering		3	Parts Arrival on site / warehouse of Contractor		4			5			6			...	Completion of site works for all Lift	
Milestone No	Works Required to be Completed	Time for completion																								
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3	Parts Arrival on site / warehouse of Contractor																									
4																										
5																										
6																										
...	Completion of site works for all Lift																									
4.4	Restrictions on working days or hours	The working hours for the Works shall be between [Time] and [Time], Monday to Saturday																								
4.9	Rate of liquidated damages for delayed completion	HK\$1,500 / calendar day / lift																								
4.9	Maximum of liquidated damages	10% of Contract Price																								

Clause of Conditions of Contract	Description	Information provided by the Owner/Owner's Representative (cont'd)	
6.11.2	Payment Stages	Payment Stage	Percentage of Contract Price
		Down payment	15% of Contract Price
		Shipping advice of all lifts for that Works Section	30% of Contract Price of lift(s) for that Works Section
		Parts and equipment delivered on Site for all lifts for that Works Section	20% of Contract Price of lift(s) for that Works Section
		Substantial Completion of the Works for all Lift(s) for that Work Section including the testing, commissioning, obtaining the resumption permit (Form LE8) from EMSD, obtaining the valid Use Permit from EMSD (if applicable) and resumption of lift services to the satisfaction of the Contract Administrator and Owner	30% of Contract Price of lift(s) for that Works Section
		Expiry of the Defects Liability Period and the issue of the Defects Rectification Certificate by the Contract Administrator for all Lift(s)	5% of Contract Price of lift(s) for that Works Section
10.2	Percentage of professional fees in case of reinstatement of the Insured Property (10.2.2(c)(i))	[percentage] %	
	Amount for the removal of debris ((10.2.2(c)(ii))	HK\$ [amount]	
	Percentage for the possible increase in the reinstatement value of the Insured Property (10.2.2(d))	[percentage] %	
	Limit of indemnity for third party liability (10.2.3(c))	HK\$ [amount]	

	Third party liability excess in respect of each and every occurrence of loss or damage (10.2.4)	HK\$ [amount] or [percentage] %
Clause of Conditions of Contract	Description	Information provided by the Owner/Owner’s Representative (cont’d)
14	Receipt of notices	Address : Email address : Fax no. : Recipient :

Item of Contract Specification	Description	Information provided by the Owner/Owner's Representative (cont'd)							
Item 2 of General Specification, Item 1 of Annex 1 and Item 2 of Annex 2	Safety Device								
Safety Device	[Location ID]		[Location ID]		[Location ID]		[Location ID]		
	Existing	To be Installed	Existing	To be Installed	Existing	To be Installed	Existing	To be Installed	
Essential Item									
Double Brake System	[Yes / No]	[Yes / No]	[Yes / No]	[Yes / No]	[Yes / No]	[Yes / No]	[Yes / No]	[Yes / No]	
Unintended Car Movement Protection Device/ Function	[Yes / No] [Type]	[Yes / No]	[Yes / No] [Type]	[Yes / No]	[Yes / No] [Type]	[Yes / No]	[Yes / No] [Type]	[Yes / No]	
Ascending Car Overspeed Protection Device/ Function	[Yes / No] [Type]	[Yes / No]	[Yes / No] [Type]	[Yes / No]	[Yes / No] [Type]	[Yes / No]	[Yes / No] [Type]	[Yes / No]	
Car Door Mechanical Lock Device/ Function	[Yes / No]	[Yes / No]	[Yes / No]	[Yes / No]	[Yes / No]	[Yes / No]	[Yes / No]	[Yes / No]	
Door Safety Edge	[Yes / No]	[Yes / No]	[Yes / No]	[Yes / No]	[Yes / No]	[Yes / No]	[Yes / No]	[Yes / No]	
Optional Item									
Intercom	[Yes / No]	[Yes / No]	[Yes / No]	[Yes / No]	[Yes / No]	[Yes / No]	[Yes / No]	[Yes / No]	
CCTV System	[Yes / No]	[Yes / No]	[Yes / No]	[Yes / No]	[Yes / No]	[Yes / No]	[Yes / No]	[Yes / No]	
Obstruction Switch	[Yes / No]	[Yes / No]	[Yes / No]	[Yes / No]	[Yes / No]	[Yes / No]	[Yes / No]	[Yes / No]	
Automatic Rescue Devices	[Yes / No]	[Yes / No]	[Yes / No]	[Yes / No]	[Yes / No]	[Yes / No]	[Yes / No]	[Yes / No]	
Enhancement of Lift Safety									
Enhancement Plan	[Lift Modernisation / Lift Replacement]		[Lift Modernisation / Lift Replacement]		[Lift Modernisation / Lift Replacement]		[Lift Modernisation / Lift Replacement]		

Schedule 3

Information and Schedule of Rates relating to the Works

(to be completed by the Contractor)

Clause of Conditions of Contract	Description	Information provided by the Contractor
14	Receipt of notices	Address : Email address : Fax no. : Recipient :

Preambles to Schedule of Rates and Schedule of Rates

for

Lift Works

Lift modernisation works / Lift replacement works Preambles to Schedule of Rates

1. All descriptions in these Schedule of Rates shall be deemed to have been read in conjunction with the Preamble clauses herein which are relevant.
2. Preambles to Schedule of Rates
 - (a) In the Schedule of Rates, the sub-heading and descriptions identifying the work covered by the respective items, and the exact nature and extent of the work to be performed is to be ascertained by reference to the Conditions of Contract and Contract Specification. The rates and prices entered in the Schedule of Rates shall be deemed to be the full inclusive value of the Works including but not limit to all labour costs, material costs, plant costs, indirect costs, management costs, overheads, profits, taxes, and costs of all ancillary work and liability indispensably necessary for the item of work to which the Contract Rate applies and shall not be adjusted for error made by the tenderer in building up the Contract Rate.
 - (b) The unit rates in the Schedules of Rates shall be used for payment purposes and / or a basis for valuing any Variation in the Works which may be instructed by the Owner / Owner's Representative pursuant to the Conditions of Contract.
 - (c) Where Item A11 of the Schedule of Rates No. A has been priced while Item A12 has not been priced by the tenderer, the price for Item A12 shall be deemed to have been included in Item A11 if after the award of the Contract, the Contractor considers that the works under Item A12 works are required to be carried out, notwithstanding that Item A12 has not been priced. The price for Item A12 shall also cover the approved installation method and finishes selected.
 - (d) The unit price submitted by the tenderer shall include the two installation methods of "architrave replacement" and "architrave overlay". Whatever the Owner / Owner's Representative has selected, it shall not affect the total contract price.
 - (e) All rates and/or prices are deemed to include the costs of working outside the normal working hours.
 - (f) The Owner is at its sole discretion or liberty to instruct and determine the duration of carrying out of any or all Optional Items, in part or in whole. If the said Optional Items are not to be instructed by the Owner/Owner's Representative/Contract Administrator in writing, the said items shall be omitted from the Contract Sum and the Contractor shall not be entitled to any such claim whatsoever.

Contract No:
Location ID for Lift(s):
Address:

Schedule of Rates

Schedule of Rates No. A

Item	Description of Works	Item Involved	Quantity	Unit	Rate	Amount (HK\$)
	A. Lift Modernisation Works					
	<i>(All works as specified in Annex 1 of Contract Specification)</i>					
	<i>ESSENTIAL ITEM</i>					
A1	Modification of existing traction machine to achieve the function of double brake and *ACOP / UCMP Brand: Model: Place of origin:	*Yes / No		Set		
A2	Replacement of traction machine to achieve the function of double brake system and *ACOP / UCMP Brake on sheave (*Yes / No) Brand: Model: Place of origin:	*Yes / No		Set		
A3	Supply and Installation of rope gripper to achieve the function of UCMP and *ACOP Brand: Model: Place of origin:	*Yes / No		Set		
A4	Replacement of overspeed governor to achieve the function of ACOP and *UCMP Brand: Model: Place of origin:	*Yes / No		Set		
	<i>* Delete as appropriate</i>					

Contract No:
Location ID for Lift(s):
Address:

Schedule of Rates

Schedule of Rates No. A

Item	Description of Works	Item Involved	Quantity	Unit	Rate	Amount (HK\$)
	<p><u>A. Lift Modernisation Works</u> (All works as specified in Annex 1 of Contract Specification)</p> <p><u>ESSENTIAL ITEM (cont'd)</u></p>					
A5	Modification of existing control panel to achieve the function(s): *Double Brake System / ACOP / UCMP / Mechanical Car Door Lock & Safety Edges / Obstruction Switch / Automatic Rescue Device Brand: Model: Place of origin:	*Yes / No		Set		
A6	Replacement of control panel to achieve the function(s): *Double Brake System / ACOP / UCMP / Mechanical Car Door Lock & Safety Edges / Obstruction Switch / Automatic Rescue Device Brand: Model: Place of origin:	*Yes / No		Set		
A7	Other items required to achieve double brake system, if any Please specify:	*Yes / No		Set		
A8	Other items required to achieve ACOP, if any Please specify:	*Yes / No		Set		
A9	Other items required to achieve UCMP, if any Please specify:	*Yes / No				
	* Delete as appropriate					

Contract No:
Location ID for Lift(s):
Address:

Schedule of Rates

Schedule of Rates No. A

Item	Description of Works	Item Involved	Quantity	Unit	Rate	Amount (HK\$)
	<u>A. Lift Modernisation Works</u> <i>(All works as specified in Annex 1 of Contract Specification)</i> <u>ESSENTIAL ITEM (cont'd)</u>					
A10	Supply and Installation of Mechanical Car Door Lock Brand: Model: Place of origin:	*Yes / No		Set		
A11	Supply and Installation of landing door lock Brand: Model: Place of origin:	*Yes / No		Set		
A12	Supply and Installation of landing door panel	*Yes / No		Set		
A13	Supply and Installation of landing sill	*Yes / No		Set		
A14	Supply and Installation of car door safety edge Methodologies: *Electronic door safety edge / 2 in 1 door safety edge / Others (please specify):- Brand: Model: Place of origin:	*Yes / No		Set		
A15	Provision of all associated works including but not limited to the plants, equipment, builder's works, temporary works, cables and wiring works, storage of materials, etc. as appropriate and necessary for the delivery, installation, testing, commissioning and completion of the Lift Modernisation Works, obtain Form of Compliance by Registered Energy Accessors and others (please specify):-	*Yes / No		Lift		
	* Delete as appropriate					

Contract No:
Location ID for Lift(s):
Address:

Schedule of Rates

Schedule of Rates No. A

Item	Description of Works	Item Involved	Quantity	Unit	Rate	Amount (HK\$)
	<p><u>A. Lift Modernisation Works</u> (All works as specified in Annex 1 of Contract Specification)</p> <p><u>ESSENTIAL ITEM (cont'd)</u></p>					
A16	Dismantle and taking down, removal and disposal of the replaced equipment, accessories and others (please specify):-	*Yes / No		Lift		
A17	Allow below any items not herein above mentioned but necessary for the completion of Works (please specify in details)	*Yes / No		Lift		
	<p><u>OPTIONAL ITEM</u></p>					
A.O1	Supply and Installation of intercom	N/A		Set		
A.O2	Supply and Installation of closed circuit television (CCTV) system	N/A		Set		
A.O3	Supply and Installation of obstruction switch; Included in new control panel - *YES/NO, if NO, please specify:-	N/A		Set		
A.O4	Supply and Installation of automatic rescue device Included in new control panel - *YES/NO, if NO, please specify:-	N/A		Set		
	* Delete as appropriate					

Contract No:
 Location ID for Lift(s):
 Address:

Schedule of Rates

Schedule of Rates No. B

Item	Description of Works	Item Involved	Quantity	Unit	Rate	Amount (HK\$)
	B. Lift Replacement Works (All works as specified in Annex 2 of Contract Specification)					
	<i>ESSENTIAL ITEM</i>					
B1	Replacement of the lift traction machine Brand: Model: Place of origin:	Yes		Set		
B2	Replacement of the lift control panel Brand: Model: Place of origin:	Yes		Set		
B3	Replacement of the lift <u>excluding</u> the lift traction machine, lift control panel, lift car decorations, guide rails and automatic rescue device	Yes		Lift		
B4	Replacement of the guide rail including supporting frames, fitting and accessories, temporary work, scaffolding and working platform, etc	*Yes / No		Lift		
B5	Provision of all associated works including but not limited to the plants, equipment, builder's works, temporary works, cables and wiring works, storage of materials, etc. as appropriate and necessary for the delivery, installation, testing, commissioning and completion of the Lift Replacement Works, obtain Form of Compliance by Registered Energy Accessors and others (please specify):-	*Yes / No		Lift		
B6	Any adjustment on the above Item B3 :-	*Yes / No		Sum		
Sub-total of Lift Replacement (SoR No. B c/f):						

Contract No:
 Location ID for Lift(s):
 Address:

Schedule of Rates

Schedule of Rates No. B

Item	Description of Works	Item Involved	Quantity	Unit	Rate	Amount (HK\$)
Sub-total of Lift Replacement (SoR No. B b/f):						
<u>B. Lift Replacement Works</u> <i>(All works as specified in Annex 2 of Contract Specification)</i>						
<u>ESSENTIAL ITEM</u>						
B7	Dismantle and taking down, removal and disposal of the replaced equipment, accessories and others (please specify):-	*Yes / No		Lift		
B8	Allow below any items not herein above mentioned but necessary for the completion of Works (please specify in details)	*Yes / No		Lift		
<u>OPTIONAL ITEM</u>						
B.O1	Lift car decoration package (A) - Stainless steel car cab with stainless steel chequer plate flooring	N/A		Lift		<i>(rate only)</i>
B.O2	Lift car decoration package (B) - Stainless steel car cab with floor plate in granite / marble finishes	N/A		Lift		<i>(rate only)</i>
B.O3	Lift car decoration package (C) - Stainless steel car cab with floor plate in homogeneous tiles / rubber tiles finishes	N/A		Lift		<i>(rate only)</i>
B.O4	Supply and Installation of automatic rescue device Included in new control panel - *YES/NO, if NO, please specify:-	N/A		Set		<i>(rate only)</i>
* Delete as appropriate						
Total of Lift Replacement without Lift Decoration (SoR No. B):						

Schedule 4
Declaration of Ethical Commitments

Declaration of Ethical Commitments

To: _____ (the "Owner")
[Name of Owners' Corporation / Owner(s) of (name of the Building)]

Re: The Articles of Agreement for lift modernisation works / lift replacement works ¹² at

In accordance with the Ethical Commitments clauses in the Contract (as defined in the Articles of Agreement):

1. We (the "**Contractor**") confirm that the Contractor has complied with the following provisions and has ensured that the Contractor's directors, employees, agents and sub-contractors (where applicable) are aware of the following provisions:
 - (i) prohibiting the Contractor or its directors, employees, agents and sub-contractors (where applicable) involved in the Contract from offering, soliciting or accepting any advantage as defined in section 2 of the Prevention of Bribery Ordinance (Cap. 201), any hospitality, entertainment or inducement which could impair the impartiality of the Contract or any advantage and excessive hospitality when conducting business in connection with the Contract;
 - (ii) requiring its directors, employees, agents and sub-contractors (where applicable) involved in the Contract to declare to the Contractor in writing any conflict or potential conflict between their personal / financial interests with their relevant duties in relation to the Contract. If any conflict or potential conflict is disclosed in a declaration, the Contractor shall immediately take such reasonable measures as are necessary to mitigate as far as possible or remove the conflict or potential conflict so disclosed;
 - (iii) declaring to the Owner in writing any conflict or potential conflict between the Contractor's personal / financial interests and its duties in relation to the Contract. If any conflict or potential conflict is disclosed in the declaration, the Contractor shall immediately take such reasonable measures as are necessary to mitigate as far as possible or remove the conflict or potential conflict so disclosed;
 - (iv) prohibiting its directors and employees (where applicable) involved in the Contract to engage in any project or work, with or without remuneration, which could create or potentially give rise to a conflict between their personal / financial interests and their duties in connection with the Contract; and requiring the Contractor's agents and sub-contractors (where applicable) to do the same;
 - (v) taking all measures as necessary to protect any confidential / privileged information or data entrusted to the Contractor by or on behalf of the Owner from being divulged to a third party other than those allowed in the Contract.

¹² Delete as appropriate.

2. The Contractor further confirms that the Contractor has ensured that its accountants, insurers and legal advisers (where applicable) are aware of the confidentiality provisions of the Contract requiring the Contractor to take all measures as necessary to prevent any third party (other than those permitted under the Contract) from obtaining any confidential / privileged information or data entrusted to the Contractor by or on behalf of the Owner.

The Contractor sign and complete the following:

[Signature of the company's authorized representative and seal of the company]

[Name of company, name and title of authorized representative]

[date]

Delete as appropriate.

Schedule 5

Sample Forms of Documents Issued by Contract Administrator

Delayed Completion Notice Form

Using Contract Administrator's letter head and letter template

Date: [_____]

Certificate Number : [_____]

To: [*Contractor*]

Attention: [*Principal of the Contractor*]

[*Description of the Works*]

Delayed Completion Notice

In accordance with Clause 4.9 of the Contract , I hereby certify the Contractor did not complete the above [*The Works / The Works Section*] by the Completion Date ([*Date*]) or the currently extended Completion Date ([*Date*]).

Contract Administrator

cc Owner
 Owner's Representative

Substantial Completion Certificate Form

Using Contract Administrator's letter head and letter template

Date: [_____]

Certificate Number : [_____]

To: [*Contractor*]

Attention: [*Principal of the Contractor*]

[*Description of the Works*]

Substantial Completion Certificate

[*Description of the Works or the Works Section*]

In accordance with Clause 4.10.2 of the Contract , I hereby certify the above [*Works / Works Section*] has achieved substantial completion to the satisfaction of the Contract Administrator on the date of [*Date*].

Contract Administrator

cc Owner
Owner's Representative

Contract Administrator's Instruction Form

Using Contract Administrator's letter head and letter template

Date: [_____]
Instruction Form Number: [_____]

To: [*Contractor*]

Attention: [*Principal of the Contractor*]

[*Description of the Works*]

Contract Administrator's Instruction

I hereby issue the following instruction on behalf of the Owner:

A. Nature of the Instruction:

- Demobilization of Temporary Site Facilities (Clause 4.10.3 of the Contract)
- Variation (Clause 6.6.1 of the Contract)
- Test and inspection in addition to those required by the Contract on work already carried out (Clause 7.5.2 of the Contract)
- Not to rectify some or all of the defects specified on the list [*List Number*] (Clause 7.6.5 of the Contract)
- Others: _____

B. Content of the Instruction :

C. Annex :

- Number of Drawing : _____
- Conditions : _____
- Others: _____

Contract Administrator

Owner or Owner's Representative's signature indicating agreement

(Only applicable to Variations or instructions which will cause change to the Completion Date of the Works or the Contract Price of the Works)

cc Owner
 Owner's Representative

Payment Certificate Form

Using Contract Administrator's letter head and letter template

Date: [_____]

Certificate Number : [_____]

To: [*Owner*]

Attention: [*Owner*]

[*Description of the Works*]

I hereby certify that in accordance with Clause 6.11.3 of the Contract, the Owner shall pay the amount to the Contractor under this Payment Certificate as stated below:

Payment Stage []
achieved:

Payment due under this \$
Payment Stage

Deduction for any other \$
sums from the Contractor
to the Owner (including
liquidated damages)

Net Amount payable to the Contractor under this Payment Certificate	\$
--	-----------

Contract Administrator

cc Owner's Representative
Contractor

List of Defects Form

Using Contract Administrator's letter head and letter template

Date: [_____]

List Number : [_____]

To: [*Contractor*]

Attention: [*Principal of the Contractor*]

[*Description of the Works*]

List of Defects

[*Based on the site inspection* conducted on [*Date*]¹³, I hereby list out the following outstanding defects for the Contractor to rectify in accordance with Clause 7.6.3 of the Contract. [*Relevant photos and/ or other supporting documents for reference are attached*]:

[*Please list out all the defects for the Contractor to rectify*]

In accordance with Clause 7.6.3 of the Contract, I hereby direct the Contractor to rectify all the defects on this List of Defects within [xxx days] upon receipt of the List.

Contract Administrator

cc Owner
Owner's Representative
Relevant sub-contractors

¹³ If there was an inspection.

Defects Rectification Certificate Form

Using Contract Administrator's letter head and letter template

Date: [_____]

Certificate Number : [_____]

To: [*Contractor*]

Attention: [*Principal of the Contractor*]

[*Description of the Works*]

Defects Rectification Certificate

In accordance with Clause 7.6.6 of the Contract, I hereby certify the rectification of defects on the list of defects of the above [*Works / Works Section*] has been completed to the satisfaction of the Contract Administrator on [*Date*].

Contract Administrator

cc *Owner*

Owner's Representative

Final Certificate Form

Using Contract Administrator's letter head and letter template

Date: [_____]

Certificate Number : [_____]

To: [*Contractor*]

Attention: [*Principal of the Contractor*]

[*Description of the Works*]

Final Certificate

In accordance with Clause 6.13.1 of the Contract, I hereby issue the Final Certificate.

Original Commencement Date: [_____]

Original Contract Price: [\$ _____]

Original Completion Date: [_____]

Final Contract Price \$

Authorized Adjustments by the Contract \$

Amount previously paid to the Contractor \$

Amount of Difference \$

The above amount of difference between the Contract Price (including the authorized adjustments by the Contract) and the amount previously paid to the Contractor, shall be a debt payable * by the Owner to the Contractor/ by the Contractor to the Owner (*Please delete as appropriate). The relevant amount shall be paid within the Period for Honouring Payment stated in Schedule 2 calculated from the date of the Final Certificate, unless either of the Contract Parties has expressed in writing to the other party its disagreement to the Final Certificate.

Contract Administrator

cc Owner

Owner's Representative

Schedule 6

Amendment to Schedules (if applicable)

(As a separate attachment)

Part D(II): Articles of Agreement and Conditions of Contract and Schedules for lift maintenance services

Articles of Agreement

This Agreement is made on the _____ day of _____ 20____

Between:

(1) _____ (the "**Owner**" as defined in the Conditions of Contract)

[Name and address of Owner's Corporation / Owner(s) of the Building]

and

(2) _____ (the "**Contractor**").

[Name and registered address of Contractor]

Whereas:

The Owner wishes to carry out certain lift maintenance works and services for the Lifts (as defined in the Conditions of Contract) (the "**Services**") at the building located at _____ (*address of the Building*) (the "**Building**") and engage the **Contractor** to provide such services in accordance with the terms of the Contract.

It is hereby agreed as follows:

1. The "**Contract**" comprises:
 - (i) this Articles of Agreement;
 - (ii) the Conditions of Contract and its Schedules (including the completed Schedule of Rates) attached hereto¹⁴; and
 - (iii) Tender Correspondence attached hereto¹⁵.
2. Unless otherwise specified in the Articles of Agreement, words and expressions used in the Articles of Agreement shall have the same meaning given to such words and expressions in the Conditions of Contract attached hereto.
3. The Contractor shall commence, execute and complete the Services in accordance with the requirements and terms of the Contract.
4. The Owner shall pay the Contract Price to the Contractor in accordance with the Conditions of Contract.

This Agreement has been duly executed as a deed by the parties on the date first before set out in the Articles of Agreement.

¹⁴ To be provided by the Contractor together with its Tender.

¹⁵ Please attach communications between the parties in relation to any correction, clarification or supplementary information to the Tender Documents issued by the Owner and in relation to the tender submitted by the Contractor.

[Execution by an Owners' Representative¹⁶ or the Owners' Corporation]

(Execution by an Owners' Representative)

Signed, sealed and delivered)
as a deed)
by [name of Owners' Representative]) _____ [signature of Owners' Representative]
on behalf of all Owners of [name of the)
Building])
in the presence of:)
)
)

Signature of witness:¹⁷

Name:
Address:
Title:

(Execution by Owners' Corporation)

Signed, sealed and delivered)
as a deed)
on behalf of [the Owners' Corporation]) _____ [signature of the Chairman of Management
Committee]
by Chairman and Secretary of the)
Management Committee)
)
)
)
)
)
)
)
)
)
)
) _____ [signature of the Secretary of Management
Committee]
)
)
)
)
) _____ [common seal]

¹⁶ The owners' representative should be duly authorised to execute this deed by way of a power of attorney.
¹⁷ Witness is not required under Hong Kong law, but it is recommended to execute the deed in the presence of a witness as a matter of good practice.

[Execution by the Contractor]

(Execution by a company using a common seal)

[Common seal of the Contractor]

The common seal of [the)
Contractor])
was affixed to this deed in the)
presence of:)

Director

Director / Secretary

(Execution by a company without using a common seal)

Executed and delivered)
as a deed)
by [Contractor]acting by either)
two directors or one director)
and the company secretary)
)

[signature of director]

[signature of director / company
secretary]

Conditions of Contract
for
Lift maintenance services

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CONDITIONS OF CONTRACT
FOR LIFT MAINTENANCE SERVICES

1. INTERPRETATIONS

1.1 Building

“Building” means the “Building” as defined in the Articles of Agreement.

1.2 Building Manager

"Building Manager" means the person providing estate, property or facility management services to the premises where the Site is.

1.3 Commencement Date

“Commencement Date” means the commencement date for the Services as set out in Schedule 2 or such earlier date as decided by the Owner pursuant to Clause 4.1.

1.4 Completion Date

“Completion Date” means the completion date for the Services as set out in Schedule 2.

1.5 Contract

“Contract” has the meaning given in Article 1 of the Articles of Agreement.

1.6 Contract Award Date

“Contract Award Date” means the date of the Letter of Acceptance.

1.7 Contract Documents

“Contract Documents” means the contract documents as set out in Clause 5.1.2.

1.8 Contract Parties

“Contract Parties” means the Owner and the Contractor and each are individually referred to as a “Contract Party”.

1.9 Contract Period

“Contract Period” means the period beginning on the Commencement Date and ending on the Completion Date.

1.10 Contract Price

“Contract Price” means the contract price as stated in the Articles of Agreement.

1.11 Contract Specification

"Contract Specification" means the general specification set out in Part A of Schedule 1(a) and the relevant option specific specification as set out in Part B of Schedule 1(a) for the option(s) accepted by the Owner in the Letter of Acceptance.

1.12 Contractor

"Contractor" means the person named in the Articles of Agreement who has been appointed by the Owner to carry out and complete the Services required under the Contract.

1.13 Day and counting of periods

A day means a calendar day unless otherwise stated. When counting days, 1 day means 24 hours. Within 1 day means within 24 hours, not within the same day. "Commencing or starting from a certain day" means that certain day is day 1 for counting. "Commencing or starting after a certain day" means the day following that certain day is day 1 for counting.

1.14 General Holiday

"General Holiday" means every Sunday and other day which is a general holiday by virtue of the General Holidays Ordinance (Cap. 149).

1.15 Headings

Headings to this Contract shall be for identification purposes only and shall not be read to restrict or enlarge the scope of application of the articles or clauses under the headings.

1.16 Insured Property

"Insured Property" means the property referred to in Clause 9.2.2(a).

1.17 Letter of Acceptance

"Letter of Acceptance" means the letter issued by the Owner to the Contractor accepting the Contractor's tender for the Services.

1.18 Lift(s)

"Lift(s)" means the lift(s) as described in Schedule 2.

1.19 Maintenance Plan

"Maintenance Plan" means the maintenance plan to be prepared by the Contractor pursuant to Clause 3.4.

1.20 Monthly Maintenance Fee

"Monthly Maintenance Fee" means the monthly maintenance fee as set out in Clause 6.1.

1.21 Owner

"Owner" means the party named as "Owner" in the Articles of Agreement and where it refers to the owners of the Building, the definition of "Owner" shall refer to the owners who collectively own the legal title to the Building.

1.22 Owner's Representative

"Owner's Representative" means the company, authorized representative of the owners' corporation or any person (including any employee of the Owner) appointed by the Owner as such in relation to the Contract.

1.23 Plant

"Plant" means construction plant, equipment or machinery used for carrying out the Services.

1.24 Schedule of Rates

"Schedule of Rates" means the document called as such and included in Schedule 3 for the Contractor to show its price build-up of the Contract Price and applicable rates.

1.25 Separate Contractor

"Separate Contractor" means a person appointed by the Owner to carry out work, supply goods or provide services in connection with but not forming part of the Services, but excludes any statutory undertaker or utility company carrying out work in pursuance of its statutory obligations and not having a contractual relationship with the Owner, the Contractor or any person for whom the Owner or the Contractor is responsible.

1.26 Services

"Services" means the "Services" as defined and described in Clause 3.1.

1.27 Site

"Site" means one or more areas or spaces, whether contiguous or not, on plan or at location(s) as described in the Schedule 2 as to be made available by the Owner to the Contractor for the Contractor to carry out and complete the Services.

1.28 Statutory Requirements

"Statutory Requirements" means all laws, statutory enactments, permissions, consents, codes, by-laws, rules, orders and regulations and the requirements of the Government, any public authorities, statutory undertakers or utility companies and any planning permission and the provisions of all codes of practices, guidance notes and recommendations for the time being in force on the date of tender submission deadline insofar as the same are relevant and applicable to the Services.

1.29 Tender Correspondence

"Tender Correspondence" means the correspondence including the Letter of Acceptance relating to the tender attached to the Articles of Agreement.

1.30 Variation

"Variation" means a change (addition, omission, substitution, alteration, modification, etc.) as instructed by the Owner or the Owner's Representative to the design, quality or quantity of the Services or to the time or manner for carrying out the Services from that provided for in the Contract, and includes other events deemed by these Conditions of Contract to be a Variation.

2. SITE

2.1 Provision of Site

2.1.1 The Owner shall provide such portions of the Site to the Contractor and access thereto on such access dates as may be stipulated in Schedule 2 and/or as is reasonably required by

the Contractor to carry out the Services in accordance with the terms of this Contract. Provision of the Site shall entail the sustained use, but not exclusive possession therefore by the Contractor for the carrying out and completion of the Services. The Contractor shall allow and protect legitimate occupiers and users for the time being on the Site to have continued use of such portions of the Site not immediately required by the Contractor for carrying out the Services.

2.1.2 The Contractor shall not obstruct the lawful and continued use by anyone of the land and premises outside but in the vicinity of the Site.

2.1.3 Where exclusive possession of any portion of the Site will be granted to the Contractor pursuant to the Contract, the Contractor shall take over the relevant portion of the Site upon the respective access date and take responsibility for the care thereof.

2.2 Site access

2.2.1 Where access to the Site is through land or premises which are not under the control of the Owner, the Contractor shall procure at its own costs and expense any necessary right of access.

2.2.2 Where access to the Site is through land or premises which are under the control of the Owner, the Owner shall provide the Contractor with right of access free of charge at such time as reasonably required for the carrying out of the Services and as mutually agreed between the Owner or the Owner's Representative and the Contractor. For the purposes of this Clause, where the Owner is the landlord or the owner's corporation or the Building Manager of the premises in which the Site is situated, any individual units of the premises which are separately owned or rented (such as residential flats, car parking spaces, offices, shops, workshops, stores, and the like) shall be deemed to be under the control of the Owner.

2.2.3 Physical means of access to the Site and to work locations within the Site by way of roads, footpaths, ladders, etc. shall be arranged for by the Contractor at its own expense unless otherwise stated in the Contract.

2.2.4 Entry and exit points to the Site shall be at locations shown or described in the Contract or, when no specific location is shown or described, at such locations as proposed by the Contractor and approved in advance by the Owner or the Owner's Representative. Subsequent re-location and re-sizing of the entry and exit points to suit the sequence and progress of the Services shall be approved in advance by the Owner or the Owner's Representative and made by the Contractor at its own expense.

2.2.5 In accessing the Site, the Contractor must ensure that all persons engaged or involved by the Contractor in the provision of the Services:

- (a) take all reasonable care not to interfere with, disrupt or cause any damage to any facilities located at the Site;
- (b) comply at all times with all security requirements notified to the Contractor by the Owner, the Owner's Representative or the Building Manager; and
- (c) wear at all times any uniform provided by the Contractor and/or display any identity badges provided by the Building Manager.

2.3 Protection of access routes

2.3.1 The Contractor shall protect all access routes related to the Services throughout the Contract Period, and shall remove at its own costs any protection when no longer required and make good any damage and disturbance for those caused by the Contractor.

2.3.2 The Contractor shall comply with all relevant requirements, regulations or restrictions of all utility companies and relevant authorities including the police and government authorities for the purpose of the Services and in respect of access, usage of roads, parking of vehicles and similar issues arising from such works, and shall submit all necessary applications and pay any necessary fees and charges which shall be deemed to be included in the Contract Price.

2.4 Responsibility of the Contractor

2.4.1 The Contractor is solely responsible for ensuring that, at all times:

- (a) the Services are carried out in a safe working environment;
- (b) the Services comply with the Statutory Requirements;
- (c) the Services comply with the occupational health and safety standards specified in Schedule 1(a); and
- (d) the Site is kept in a state of cleanliness and tidiness.

2.5 House rules and requirements of Building Manager

2.5.1 The Contractor shall comply with the requirements, restrictions and/or house rules as provided, announced or published by the Building Manager as set out in the Schedule 1(b) from time to time for carrying out the Services including the day to day operation and use of the premises in which the Site is situated and any special restrictions on such Services within the premises.

2.5.2 Any restrictions on access or working hours imposed by the Building Manager which are more stringent than those provided, announced or published by the Building Manager prior to the Contract Award Date and affecting the Services shall be deemed to be a Variation.

2.6 Off-site areas

The Contractor shall arrange by itself any areas or spaces outside the Site that it requires to prepare for the carrying out of the Services.

2.7 Site visit

2.7.1 The Contractor is deemed to have visited the Site and thoroughly acquainted itself with the location, general site conditions, accessibility, storage space, restrictions for loading and off-loading materials, and any other conditions which may affect its carrying out of the Services prior to entering into the Contract and is deemed to have made due allowance for all such restrictions and factors in the Contract Price.

2.7.2 Any claim for extra payment shall not be allowed on the grounds of ignorance or misinterpretation of the Site conditions.

3. SERVICES

3.1 Definitions

The Contractor shall carry out in accordance with the Contract the works and services as described for the applicable option under Option M1 (Maintenance (lift modernisation works)) or Option M2 (Maintenance (lift replacement works)) and (where applicable) Option M3 (Maintenance services for existing lift (before lift modernisation/replacement works)) as set out in Schedule 3 which has been accepted by the Owner in the Letter of Acceptance (the "**Services**").

3.2 Workmanship

3.2.1 Should the Services be found of poor workmanship / quality, using inferior and/or incorrect materials, applying incorrect and/or improper method for the execution of the Services and/or with any other action that may cause damage to the Lift(s), its equipment and/or personnel or if the Owner or the Owner's Representative has any safety concern about the Services or operation of the Lift(s), the Owner or the Owner's Representative may order suspension of any Services at any stage. The Contractor shall immediately rectify such Services at its own expense after being instructed to do so by the Owner or the Owner's Representative. The Contractor shall not be allowed to claim for any extension of time and costs as a result of such suspension.

3.2.2 At the Owner's discretion, the Owner's Representative or other designated persons by the Owner may carry out inspection on any Lift(s) at any reasonable time by prior written notice to the Contractor. The Contractor shall dispatch adequate and sufficient technical staff on the Site to facilitate the smooth conduction of the said inspection upon request by the Owner.

3.3 Taking over existing Lift(s)

3.3.1 With effect from the Commencement Date, the Contractor shall take over the responsibilities on carrying out the Services for the Lift(s) in accordance with the requirements of the Contract.

3.3.2 As to providing a clear demarcation of liabilities with the existing lift maintenance contractor in respect of the transfer of maintenance responsibilities for the Lift(s) taken over for maintenance, the Contractor shall examine each of the Lift(s) 2 weeks prior to the Commencement Date. The Contractor shall check the running conditions of the Lift(s) and shall immediately inform the Owner of any defects found, and liaise with the existing lift maintenance contractor of the responsibilities of the defects. Apart from the above defective components or equipment notified by the Contractor, the Contractor accepts that all the Lift(s) taken over by the Contractor for maintenance are in good working order and the Contractor shall be required to accept full responsibility for carrying out the Services in respect of the Lift(s) at the Contract Price.

3.3.3 The Contractor shall arrange a thorough examination for each Lift within 2 weeks from the Commencement Date as per the Code of Practice for Lift Works and Escalator Works issued by Electrical and Mechanical Services Department ("EMSD"), unless the Services are suspended pursuant to Clause 3.2.1 or Clause 4.4. In the case of Clause 3.2.1, the thorough examination shall be carried out within 2 weeks after the suspension is lifted.

3.4 Maintenance Plan

3.4.1 The Contractor shall, within 28 days from the Contract Award Date, prepare and submit to the Owner for reference, a Maintenance Plan setting out the proposed programme for the Services which:

- (a) describes the method, sequence and timing of performing the Services together with checklists for recording the activities to be done and any reading and/or measurements to be taken;
- (b) lists the tools and equipment required to perform the Services; and
- (c) describes operational procedures for accessing the Lift(s) for the Services.

3.4.2 The Maintenance Plan shall ensure compliance with any regular and emergency maintenance procedure and requirements as stated in the Contract and subject to that, the Lift(s) are properly maintained in accordance with good industry practice and the lift manufacturer's requirements.

3.4.3 If the Contractor fails to submit a Maintenance Plan or such Maintenance Plan submitted is not in accordance with the requirements of the Contract, the Owner may withhold payment of any and all sums that are payable to the Contractor under the Contract. If the Contractor subsequently submits a Maintenance Plan, the Owner will release any withheld sums within 10 days from the date of submission of the Maintenance Plan.

3.4.4 The submission to the Owner of the Maintenance Plan shall not relieve the Contractor of any of its duties or responsibilities under the Contract.

3.5 Site Co-ordination

3.5.1 The Contractor shall co-operate and co-ordinate with the Owner or Owner's Representative, Building Manager, utility companies, relevant authorities and Separate Contractor(s) engaged in work on Site for the smooth progress and satisfactory completion of their works. The Contractor shall continually keep Owner and the Owner's Representative informed of all matters involving coordination for the smooth progress of work.

3.5.2 Should the Contractor notice any defects found on Site such as on the building fabric, cladding or the lighting/power socket, ventilation/air-conditioning in machine room for which the Contractor is not responsible, it shall report to the Owner or the Owner's Representative for repair by other contractors. If necessary, the Contractor shall provide attendance to facilitate such repair work by other contractors. If the attendance results in extra costs, such extra costs shall be paid to the Contractor as a Variation.

3.5.3 The Contractor shall, at all times, unless otherwise prior approval is obtained from the appropriate parties, ensure that the execution of the Services shall not interfere with the normal operation of the Building. The Contractor shall be responsible for any claims arising from its default.

3.5.4 Subject to Clause 3.5.2, the Contractor shall be deemed to have allowed the cost for the cooperation and coordination works referred to in this Clause 3.5 in their Contract Price and to have taken account of such work in assessing the labour force required for the Services.

4. **TIME**

4.1 Early commencement

The Owner reserves the right to bring forward the Commencement Date with at least 1 month's written notice prior to the proposed earlier date. The Contract Price shall not be adjusted in the event of the bringing forward of the Commencement Date pursuant to this Clause.

4.2 Performance of Services

The Contractor shall commence and duly perform the Services during the Contract Period.

4.3 Completion of Services

4.3.1 Unless the Contract Parties have mutually agreed to extend the Contract Period, without affecting the obligations of the Contractor under the Contract to carry out the Services up to the Completion Date, the Contractor is not required to further carry out any Services after the Completion Date.

4.3.2 The Contractor shall fulfil the following obligations to the satisfaction of the Owner or the Owner's Representatives on or before the Completion Date:

- (a) to handover the Lift(s) to the Owner for acceptance in accordance with Clause 4.5;
- (b) to remedy defects found during the handover of the Lift(s) in accordance with Clause 4.5.3; and
- (c) to update (if necessary) and handover all documents in accordance with Clause 4.5.7.

4.4 Suspension of Services

The Owner or the Owner's Representative may order suspension of any Services for the purpose of carrying out modernisation or replacement works for the Lift(s) during the Contract Period. The Monthly Maintenance Fee shall be adjusted pursuant to Clause 6.2.1.

4.5 Handover of Lift(s) to the Owner prior to the Completion Date

4.5.1 One month prior to the Completion Date, the Contractor shall arrange a schedule for handover of all the Lift(s) to the Owner which shall include a joint handover inspection at a date to be agreed between the Contract Parties. The successive maintenance contractor shall be invited by the Owner or the Owner's Representative to attend the joint handover inspection.

4.5.2 Prior to the joint handover inspection, the Contractor shall ensure that the Lift(s) are in a safe working order and satisfactory operation condition in compliance with all the Statutory Requirements and all necessary Services have been carried out in respect of the Lift(s) to the satisfaction of the Owner or the Owner's Representative.

4.5.3 During the joint handover inspection, any non-compliance with Statutory Requirements, operational problems, defect and/or damage found in any of the Lift(s) caused by the breach of the Contract and/or negligence of the Contractor shall be duly and timely rectified at the

Contractor's own expense and to the satisfaction of the Owner or the Owner's Representative.

- 4.5.4 Following the rectification of any non-compliance with Statutory Requirements, operational problems, defect and/or damage under Clause 4.5.3, if the Owner or the Owner's Representative considers necessary, additional joint handover inspection(s) at the cost of Contractor shall be carried out until the non-compliance with the Statutory Requirements, operation problems, defects and/or damages have been properly rectified to the Owner or the Owner Representative's satisfaction.
- 4.5.5 The Contractor's obligations under the Contract shall not be released until all the Lift(s) are agreed by the Owner to be handed over. All losses and expenses suffered by the Owner including the cost of the works to be carried out by others due to necessary delay in handover of the Lift(s) to the Owner caused by the breach of the Contract and/or negligence of the Contractor shall be fully reimbursed by the Contractor to the Owner accordingly.
- 4.5.6 The Contractor shall attend the handover meeting(s) at no extra cost to the Owner, for the purpose of handover of the Lift(s) and subsequent maintenance of the Lift(s).
- 4.5.7 All documents (updated to the date of handover) in relation to the Lift(s) including, but not limited to, drawings, logbooks, maintenance schedule, safety circuits, operation and maintenance manuals (including those being handed over from the previous maintenance contract) should be handed over to the contractor assuming the maintenance of the Lift(s).

5. **CONTRACT BASIS**

5.1 Interpretation of Contract Documents

- 5.1.1 The various parts of the Contract Documents are complementary to each other and shall be interpreted as a whole as far as possible.
- 5.1.2 The Contract Documents shall mean the following and in case of any contradiction or discrepancy between the various parts of the Contract Documents, the order of precedence for interpretation shall be in the following descending order:
 - (a) Articles of Agreement;
 - (b) Letter of Acceptance;
 - (c) Tender Correspondence;
 - (d) Special Conditions of Contract (if applicable);
 - (e) Amendment to Schedules (if applicable);
 - (f) Contract Specification;
 - (g) Schedule of Rates; and
 - (h) Conditions of Contract.
- 5.1.3 No other documents exchanged prior to the Contract Award Date shall form part of the Contract, or affect the meaning and interpretation of the Contract Documents, unless otherwise agreed in writing by the Contract Parties.

5.1.4 Any documents or information including but not limited to the information and documents provided by the Owner or its consultants or agents regarding the Services and the Site during the tender stage are provided to the Contractor without any warranty or representation on the part of the Owner or its consultants or agents as to their accuracy or completeness, and they shall be deemed to be provided for the Contractor's reference only and shall have no contractual effect. The Contractor shall be solely responsible for verifying of any of the said information and contents of the documents provided and for use of correct and appropriate information for the provision of the Services in compliance with the Contract.

5.2 Clarification of discrepancy or divergence

If the Contractor finds any discrepancy in or divergence between the various parts of the Contract Documents, the Contractor shall immediately give a written notice specifying the discrepancy or divergence to the Owner who shall issue instructions to clarify. Any such instructions to clarify issued by the Owner or the Owner's Representative shall not be considered as a Variation and shall not entitle the Contractor to additional time or money.

5.3 Supplementary information

The Owner shall, if so requested by the Contractor, or may on its own initiative, issue supplementary information to amplify the Contract Documents.

5.4 Number of copies of Contract Documents and supplementary information

The Contractor shall be entitled free of charge to one signed copy and one unsigned copy of the Contract Documents.

5.5 Instructions

5.5.1 The Owner or the Owner's Representative may issue instructions in writing in regard to any matter in connection with the Services to the Contractor. Subject to Clause 6.3.1, the Contractor shall forthwith comply with all instructions issued to the Contractor by the Owner or the Owner's Representative. If the Contractor fails to comply with an instruction of the Owner, then the Owner or the Owner's Representative may issue a notice in writing requiring the Contractor to comply with the instruction. If the Contractor does not comply with the instruction within **7 days** of receipt of a written notice from the Owner or the Owner's Representative requiring compliance with an instruction, then the Owner or the Owner's Representative may without further notice employ and pay other persons to carry out any works and services whatsoever to give effect to such instruction and all extra costs incurred in connection with such employment shall be recoverable from the Contractor by the Owner.

5.5.2 All instructions issued by the Owner or the Owner's Representative shall be issued in writing. Any instruction issued orally shall be confirmed in writing by the Owner within 2 days, otherwise the oral instruction shall have no effect.

5.6 Cleanliness and tidiness

5.6.1 The Contractor shall remove, to an appropriate disposal point, all old parts or debris arising from the Services without undue delay at the Contractor's own expense. The Contractor shall keep the equipment and its surrounding area clean and tidy to the satisfaction of the Owner. Before leaving the Site and on completion of execution of Services each time, the Contractor shall be responsible for keeping all tools, materials in safe custody, and relevant access doors and panels locked.

5.6.2 The Contractor shall clean all lift equipment and flooring in the machine rooms and pulley rooms (where applicable) and lift shaft equipment, structures and flooring after completion of any repair or maintenance works in relation to the Services so that all are kept clean at all times and free from rubbish and potentially inflammable material. It is essential that all buildup of oil and fluff on shaft guide rails and car guide shoes and fluff on ropes, rope guards and car panels are removed immediately when evident during service visits. Should the Contractor fail to comply with this requirement, the Owner may order the cleaning work to be carried out by others and subsequently reimburse the full cost of the work from the amount payable to the Contractor.

6. PRICES

6.1 Monthly Maintenance Fee

6.1.1 On the first day of every month during the Contract Period, the Contractor shall issue an invoice for the Monthly Maintenance Fee claimed for the following month. If the first day of the month falls on a General Holiday, the Contractor shall submit the invoice on the following day which is not a General Holiday.

6.1.2 If:

- (a) the Services of the previous month (if applicable) have been carried out to the satisfaction of the Owner or the Owner's Representative; and
- (b) the required inspection reports and information duly submitted by the Contractor to the satisfaction of the Owner or the Owner's Representative up to the date of payment,

the Owner shall, after making any deduction or adjustment in accordance with the Contract, pay the amount which the Contractor is entitled to within 10 day from the receipt of invoice.

6.1.3 The Monthly Maintenance Fee shall be calculated based on the Contract Price set out in Schedule 3 divided by the number of months of the Contract Period, subject to any payment adjustment in accordance with Clauses 6.2 to 6.5 below. The Monthly Maintenance Fee shall cover all costs (including without limitation all necessary labour, materials, spare parts, tools, instruments, testing equipment, transportation) arising from the Contractor's performance of Services.

6.1.4 Payment to the Contractor by the Owner shall not:

- (a) relieve the Contractor of any obligation or liability under and/or in connection with the Contract or the Services; nor
- (b) constitute a waiver of any right of the Owner to claim against the Contractor arising from:
 - (i) unsettled liens;
 - (ii) any fault or deficiency in the Services, including non-compliance of the Services with the requirements of the Contract (whether apparent before or after completion of the Services); and
 - (iii) any breach of the terms of the Contract or any other legal obligation.

6.2 Payment Adjustment

6.2.1 The Monthly Maintenance Fee for any month where the Services for any Lift were only provided or suspended (pursuant to Clause 4.4) for part of the month shall be calculated in accordance with the following formula:

(Monthly Maintenance Fee for each Lift in that month / number of days in that month) x number of days for which the Contractor has provided the Services in that month

6.2.2 For any repetitive breakdown or any Lift(s) which cannot be returned to normal services by the Contractor for a continuous period exceeding 15 days, deductions will be applied to the Monthly Maintenance Fee in accordance with the following table depending on the reasons for not returning to normal services:

Reason for not returning to normal service	% Deduction of Monthly Maintenance Fee
1) Breakdowns, repair, which arise from normal wear and tear or service suspension due to lack of spare parts	100% of the month(s) of occurrence
2) [Owner to insert any other reasons]	

6.2.3 The Owner reserves the right to withhold payment in part or in whole if the Contractor fails to duly submit the required inspection reports and information to the satisfaction of the Owner or the Owner’s Representative up to the date of payment.

6.2.4 The balance of the Contract Price shall be paid to the Contractor at the end of the Contract Period.

6.3 Variations

6.3.1 The Owner or the Owner’s Representative may issue instructions under Clause 5.5 from time to time requiring a Variation (for omission, variation or additional works). The scope and price of any Variation shall be agreed in writing between the Contract Parties prior to execution of any work relating to the Variation. No Variation ordered in accordance with this Clause 6.3 shall in any way vitiate or invalidate the Contract.

6.3.2 On receipt of the Owner or Owner’s Representative’s confirmation in respect of the agreed scope and price of any Variation, the Contractor shall immediately proceed to carry out such Variation.

6.3.3 For additional works as a result of a Variation, the Owner or the Owner’s Representative may require the Contractor to submit reports / update of manual / photo records / measurements of quantities for materials / equipment used, etc. for checking and verification of the claimed payment.

6.3.4 Claims for Variations must be separately invoiced and these must be submitted monthly. No payment shall be made by the Owner or the Owner’s Representative for any unauthorised works or services performed by the Contractor.

6.3.5 Payment for any Variation agreed or determined will be made within 30 days of the receipt of the invoice under Clause 6.3.4.

6.4 Money recoverable from Contractor

If the Owner has any right (whether according to the Contract or pursuant to other legal rights) to recover money due from the Contractor under the Contract, the Owner may deduct such money from the Contract Price and deduct it from the next or further payment(s) to the Contractor until the amount is fully deducted. If the balance of the Contract Price is inadequate to cover the amount not yet deducted, the residue amount may be recovered from the Contractor by the Owner as a debt which may be set-off against any payment which the Owner is liable to pay to the Contractor under other contracts.

6.5 Money recoverable from Owner

If the Contractor has any right (whether according to the Contract or pursuant to other legal obligations) to recover money due from the Owner under the Contract, such money, shall be added to the Contract Price and added to the next or further payment to the Contractor after the amount is ascertained, unless the Owner requests to settle and settles the payment separately without adjustment to the Contract Price.

7. **QUALITY**

7.1 Quality liability

The Contractor shall, repair or replace at its own cost any part/component/equipment of the Lift(s), which is defective by reason of any breach of its duties under the Contract and/or at law, including but not limited to the Contractor's negligence, inadequate servicing and maintenance, poor performance and workmanship, use of incorrect materials or materials of inferior quality. Without prejudice to any other rights or remedies which the Owner may possess, claim in any form whatsoever made by the Contractor for such repair work or replacement of parts / component / equipment will not be accepted by the Owner.

7.2 Materials, workmanship and method to comply with Contract

7.2.1 The Services shall be carried out, tested and inspected using the materials, workmanship and methods specified in the Contract including but not limited to those shown on the Maintenance Plan and described in the operation manuals.

7.2.2 If any of the specified materials are not procurable, then the Contractor shall propose alternatives of equivalent standard for acceptance by the Owner or the Owner's Representative before placing any order for or use in the Services.

7.2.3 All materials including goods, tools, equipment and other items used in the Services and/or in the provision of the Services shall be:

- (a) of good quality;
- (b) fit for use in or in connection with the Services and fit for any other purpose for which the Contractor is informed or aware that such materials will be used; and
- (c) free from defects.

7.3 Testing and inspection

7.3.1 The Contractor shall carry out all tests and inspections required by the Contract to be carried out or arrange for them to be carried out by independent parties if so required, all at the Contractor's expense unless the testing and inspection is covered by a provisional

quantity or a provisional sum item. A copy of the testing and inspection report shall be submitted to the Owner or the Owner's Representative as soon as possible after the testing and inspection.

- 7.3.2 The Owner may issue instructions requiring the Contractor to carry out tests and inspections additional to those required by the Contract on works already carried out, and the relevant costs (including the cost of subsequent making good) shall be borne by the Owner. Provided that if the additional testing or inspection shows that the works are not in accordance with the requirements of the Contract, then the relevant costs (including the cost of subsequent making good and cost of rectification of other work) shall be borne by the Contractor.
- 7.3.3 The Contractor shall inform the Owner or the Owner's Representative not less than 24 hours before the Services are to be covered up to allow the Owner or the Owner's Representative to inspect such Services. If the Owner or the Owner's Representative fails to inspect, the Contractor may carry out its own inspection and cover up. If the Owner or the Owner's Representative requires the Services to be uncovered for inspection after it has been covered up, the Contractor shall so uncover the Services and all costs of such inspection shall be borne by the Owner, unless the inspection reveals that the Services are not in accordance with the Contract, in which case the costs shall be borne by the Contractor.
- 7.3.4 If the Contractor fails to give the notice required by Clause 7.3.3, then the Owner or the Owner's Representative may nevertheless require the inspection of any relevant work, and the cost of any such inspection shall be borne by the Contractor.

8. GENERAL OBLIGATIONS

8.1 Statutory obligations

- 8.1.1 The Contractor shall comply with, give all notices and make all applications on behalf the Owners required by, the Statutory Requirements and shall, at the Contractor's cost, provide to the Owner or the Owner's Representative a copy of all submissions and applications made. The Contractor shall pay any fees, charges or taxes for all statutory submissions, inspections and certificates in relation to the Services except for those fees, charges or taxes for which the Owner is legally responsible. Any cost arising from the Contractor's non-compliance with any Statutory Requirements shall be fully borne by the Contractor and shall be deemed to be included in the Contract Price.
- 8.1.2 If the Contractor considers that a change to the Services is necessary to comply with any change in Statutory Requirements, the Contractor shall give a written notice specifying the change to the Owner for approval. If the Contractor does not receive any instructions from the Owner within **7 days** of having given such a written notice, the Contractor shall proceed with the change, which shall be deemed to be a Variation.

8.2 Assignment and sub-contract

- 8.2.1 The Contractor shall not, without the written consent of the Owner or the Owner's Representative, assign the whole or part of the Contract or sub-contract any obligations under the Contract.
- 8.2.2 Notwithstanding that the Owner or the Owner's Representative has consented in writing for the Contractor to assign or sub-contract any obligations under the Contract, the Contractor shall ensure that the assignee or sub-contractor understands and

agrees to observe the same obligations and responsibilities the Contractor is required to observe under the Contract and the relevant Statutory Requirements.

8.2.3 The Contractor shall remain liable to the Owner for the performance and observance of the obligations under the Contract notwithstanding that such obligations are to be performed on behalf of the Contractor by any sub-contractor or assignee.

8.3 Care of the Services

The Contractor shall take responsibility for the care of the Services, materials supplied by it or persons for whom it is responsible for incorporation into the work and persons for whom he is responsible for during the Contract Period.

8.4 Injury to persons and property and indemnity to Owner

8.4.1 Without prejudice to Clause 8.3, the Contractor shall be liable for and shall indemnify the Owner against any damage, expense, liability or loss in respect of any claims or proceedings:

- (a) for injury or damage to real or personal property arising out of, or in the course of, or by reason of the carrying out of the Services and whether arising on or off the Site, to the extent that the injury or damage is due to a breach of contract or other default of the Contractor or any person for whom the Contractor is responsible. The Contractor shall make good any such injury or damage at its own costs;
- (b) for bodily injury to, disease contracted by or the death of any person arising out of, or in the course of, or by reason of the carrying out of the Services and whether arising on or off the Site, except to the extent that the injury, disease or death of that person is due to any act or neglect of the Owner or any person for whom the Owner is responsible;
- (c) in respect of all risks resulting or arising from the materials, equipment or spare parts used in the Services, notwithstanding any testing or inspection carried out by or approved by the Owner or the Owner's Representative or their agents;
- (d) in respect of all risks resulting from documents made available by the Contractor or its agents or otherwise, including any manuals, specifications, drawings and plans; and
- (e) in respect of all risks resulting or arising from the maintenance activities of the Lift(s) by the Contractor.

8.5 Labour

8.5.1 The labour provided by the Contractor shall be adequate in number, of the appropriate trades, skillful and competent in their respective callings to perform the Services in accordance with the Contract and any Statutory Requirements.

8.5.2 The persons employed upon the Services shall be legally employable in Hong Kong. They shall wear proper uniforms and bear identification cards. Illegal immigrants shall not be allowed to enter the Site.

8.5.3 The Owner may require, following a written warning issued to the Contractor, the replacement of any person employed upon the Services who in the opinion of the Owner misconducts himself or is incompetent or negligent in the proper performance of his duties with a suitable substitute at no extra cost and time to the Contract.

8.6 Protection

8.6.1 Without prejudice to Clauses 8.3 and 8.4, the Contractor shall take every care and safety precaution necessary to protect all persons and properties, including but not limited to the following, from injury, disease, death, loss, damage, nuisance, fire hazard, etc. caused by reason of the carrying out of the Services:

- (a) all workers or other persons on the Site;
- (b) all occupiers or users in the vicinity of the Site;
- (c) the public;
- (d) the Services, materials and spare parts for incorporation into the Services, Plant or equipment used for the Services;
- (e) existing building construction, finishes, fittings, services within the Site which are not to be modified under the Contract;
- (f) roads, loading and unloading points, temporary parking spaces, footpaths, corridors, staircases and lift(s) for travel within the Site or within the premises in which the Site is situated;
- (g) the premises where the Site is situated;
- (h) public properties, public roads and footpaths; and
- (i) existing trees and shrubs.

8.7 Prevention of bribery offences

8.7.1 The Contractor's directors, employees, agents or its sub-contractor (where appropriate) shall not offer, give or agree to give to any person any bribe, commission, gift, loan or advantage of any kind as defined in the Prevention of Bribery Ordinance (Cap 201) as an inducement or reward for doing or forbearing to do or for having done or forborne to do any action in relation to the execution of the Contract or any other contract with the Owner, or for showing or forbearing to show favour or disfavour to any person in relation to the Contract or other contract with the Owner. The Contractor shall take all necessary measures (including by way of a code of conduct or contractual provisions where appropriate) to ensure that its directors, employees, agents and sub-contractor (where appropriate) are aware of the aforesaid provisions and shall not offer, solicit or accept any advantage and excessive hospitality when conducting business in connection with the Contract. Any commitment of the aforesaid offences by any person with the Contractor's prior authorization or subsequent acquiescence shall be deemed to be the Contractor's fault. The Contractor shall take all necessary measures to ensure that its employees, agents, sub-contractors, suppliers, or other persons for whom the Contractor is responsible comply with the foregoing provisions.

8.8 Conflict of interest

8.8.1 Upon or prior to the execution of the Contract, the Contractor shall submit to the Owner or Owner's Representative a duly signed Declaration of Ethical Commitments in the form set out in Schedule 4. If the Contractor fails to submit the duly signed Declaration of Ethical Commitments required above, the Owner or Owner's Representative shall be entitled to withhold the Contract Price or any payment until such Declaration of Ethical Commitments

is submitted, and the Contractor shall not be entitled to any interest associated with any delay in such payment.

8.8.2 The Contractor shall prohibit its directors and employees involved in the Contract to engage in any project or work, other than in the performance of the Contract (with or without remuneration), which could create or potentially give rise to a conflict between their personal / financial interests and their duties. The Contractor shall also require its agents and sub-contractors (where appropriate) to impose similar restrictions on its employees by way of a code of conduct.

8.8.3 The Contractor shall take all necessary measures (including by way of a code of conduct or contractual provisions (where appropriate)) to ensure that its directors, employees, agents and sub-contractors (where applicable) are aware of the restrictions contained in Clause 8.8 and shall not offer, solicit or accept any advantage and excessive hospitality in the performance of any matter in connection with the Contract.

9. **INSURANCES**

9.1 Employees' Compensation Insurance

9.1.1 The Contractor shall effect and maintain and cause any sub-contractor(s) of all tiers to effect and maintain employees' compensation insurance in compliance with the provisions of the Employees' Compensation Ordinance (Cap. 282) in the name of the Contractor or any sub-contractor(s) (whichever is applicable) as "the insured contractor" and the Owner and the Building Manager as "the principals" to cover the legal liabilities, costs and claims against any or all of the insured contractors in respect of death or bodily injury by accident or disease sustained by any employees employed by any of the insured contractors arising out of and in the course of their employment on the Services or in connection with the Contract whether on Site or off-site, for the Contract Period.

9.1.2 As soon as the Contractor becomes aware of any employees, self-employed persons or sole proprietors employed or engaged upon the Services or in connection with the Contract sustaining death or bodily injury by accident or disease, it shall notify the Commissioner for Labour in the manner prescribed by the Employees' Compensation Ordinance (Cap. 282), with a copy of the notice to the Owner and the insurers, irrespective of whether the death or bodily injury gives rise to any liability to pay compensation.

9.2 Contractors' All Risks and Third Party Liability Insurance

9.2.1 The Contractor shall at its own costs and expenses take out the Contractors' All Risks and Third Party Liability Insurance and shall effect and maintain the said insurance in the joint names of the Contractor and its respective sub-contractors of all tiers as "the insured contractors" and the Owner and the Building Manager as "the principals".

9.2.2 The "material damage" section of the said insurance shall comply with the following requirements:

- (a) the insured property ("**Insured Property**") shall consist of the works under the Contract and the materials and spare part supplied by the Owner for incorporation into the Services and shall include temporary work and all unfixed materials and goods delivered to, placed on or adjacent to the Insured Property and intended therefor (excluding construction plant and temporary buildings which are owned or hired by the insured contractors);

- (b) it shall cover physical loss of or damage to any part of the Insured Property during the Contract Period until **14 days** after the Completion Date notwithstanding any use or occupation thereof by the principals or others prior to completion, and also cover loss of or damage to such property arising during the Contract Period from a cause occurring during construction prior to completion or occasioned by any of the insured in the course of their carrying out of remedial work or outstanding work;
- (c) the sum insured shall be equal to the full reinstatement value of the Insured Property plus:
 - (i) the percentage of professional fees in case of reinstatement as stated in in Schedule 2 to cover the costs and expenses in respect of architects', surveyors' and engineers' fees necessarily incurred in the reinstatement of the Insured Property consequent upon its loss or damage but not for preparing any claim; and
 - (ii) an amount not less than the amount for the removal of debris as stated in Schedule 2 to cover the costs and expenses necessarily insured by the insured with the consent of the insurers in dismantling and removing debris of the portion or portions of the Insured Property destroyed or damaged by any peril thereby insured against;
- (d) it shall contain an escalation clause to cover the possible increase in the reinstatement value of the Insured Property by the percentage as stated in the Schedule 2.

9.2.3 The "Third Party Liability" section of the said insurance shall comply with the following requirements:

- (a) it shall cover the legal liability, costs and claims against any or all of the insured contractors in respect of:
 - (i) accidental death, bodily injury, illness or disease suffered by any person, other than employees of the insured contractors;
 - (ii) accidental loss or damage to physical property, other than those insured under the Material Damage section until **14 days** after Completion Date;
 - (iii) loss of or damage to property real or personal including damage to property, land or buildings due to collapse, subsidence, vibration, weakening or removal of support or lowering of ground water;
 - (iv) loss of or damage to any building, structure or property belonging to the principals in the care, custody or control of the insured contractors (alternatively, this sub-clause (iv) may be covered by the "material damage" section of the insurance); and
 - (v) accidental death, bodily injury, illness or disease suffered by any employee of the principals visiting the Site on occasional basis,

arising out of the performance of the Services;

- (b) there shall be a "cross-liability" clause to cover the insured contractors as separate and distinct parties with stipulation that the insurers agree to waive any subrogation rights which the insurers may have against any of the insured contractors;
- (c) the limit of indemnity shall not be less than the amount as stated in Schedule 2.

9.2.4 The amount of excess in respect of each and every occurrence of loss or damage shall not be more than the respective amounts or the percentages of loss or damage stated in the Schedule 2, whichever is greater.

9.2.5 If the Contractor considers that the above-mentioned insurance coverage is inadequate to cover his contractual or legal liabilities and requires that the coverage be increased or the amounts of excesses be reduced then the additional premium so payable shall be solely for the account of the Contractor.

9.2.6 In the event of loss or damage covered by the "Material Damage" section of the insurance, the Contractor shall remove and dispose of any debris, repair or replace any materials damaged, destroyed, lost or stolen, restore work destroyed, damaged or lost, and proceed with the carrying out and completion of the Services with due diligence immediately after any inspection required by the insurers has been carried out. The Contractor shall not be entitled to any payment in respect of the replacement, repair or restoration of the loss or damage and the removal and disposal of debris other than the amount received under the insurance (less the amount to cover professional fees) unless and to the extent that the loss or damage was caused or contributed to by a breach of contract or other default by the Owner or any person for whom the Owner is responsible.

9.3 Taking out insurances

9.3.1 The policies of the aforesaid insurances shall contain the usual terms and conditions, subject only to non-negotiable exclusions imposed by the insurance market. They shall remain in force for the entire Contract Period.

9.3.2 For insurances to be taken out by the Contractor or its sub-contractor(s), the terms and conditions of the policies and the insurers shall be reviewed and accepted (such acceptance shall not be unreasonably withheld or delayed) by the Owner, and evidence of insurance cover shall be submitted to the Owner as a condition precedent to the commencement of any Services. The policies and premium receipts shall be deposited with the Owner as soon as practicable afterwards.

9.4 Company master policy or annual policy

If the Contractor maintains a company master policy or an annual policy, and endorses the policy to specifically include the Contract and the required parties as the insured and provide cover no less than that required under the Contract, then this shall be a discharge of the Contractor's obligations to take out the insurance separately for the Contract. The Contractor shall produce a copy of the policy, the specific endorsement and premium receipt for the inspection by the Owner or the Owner's Representative prior to commencement of any physical work.

9.5 Maintaining insurances

9.5.1 The Contractor shall maintain and extend as necessary the insurances to be in full force for the required periods of insurance. Extension endorsement, renewal policy (in the case of annual policy) and premium receipt shall be produced to the Owner or the Owner's Representative for inspection within **14 days** after each extension or renewal date.

9.5.2 If the period of insurance shall be extended as a result of an extended Contract Period caused by reason of any default of the Contractor or parties for whom the Contractor is responsible, the Contractor shall be responsible for any additional premiums for the extension of the insurance, otherwise, the Owner shall be responsible.

9.6 Remedy for failure to insure

If the Contractor shall at any time fail upon request to produce any receipt showing that any of the insurances is in full force then the Owner may without prejudice to other rights and remedies in the joint name and on behalf of both Contract Parties insure against any risk, loss or damage with respect to which the default shall have occurred, and shall be entitled to recover the premium paid plus 15% administrative charges from the Contractor upon production of the premium receipt, without further adjustment to prices allowed in the Contract for insurance.

9.7 Compliance with insurance conditions

The Contractor shall with all due diligence and at its own cost conform to the terms and conditions of the aforesaid insurances and all reasonable requirements of the insurers in connection with the prevention of accidents, the submission and settlement of claims, the recovery of losses and shall bear at its own cost the consequences of any failure to do so.

9.8 Reporting incidents

In the event of the occurrence of the perils covered by the aforesaid insurances, the Contractor shall notify the insurers and the Owner of the details of the incident immediately upon its becomes aware of it.

9.9 Insurances not affecting Contractor's liability

9.9.1 The presence of the aforesaid insurances shall not prejudice or reduce the Contractor's liability or responsibility under the Contract.

9.9.2 The Contractor shall bear the costs of all excesses, exclusions or limitations applying under the aforesaid insurances in so far as they concern risks or liabilities for which it is responsible under the terms of the Contract.

10. **DETERMINATION**

10.1 Determination by Owner

10.1.1 The Owner may but not unreasonably or vexatiously by notice sent by registered post or recorded delivery to the Contractor forthwith determine the employment of the Contractor under the Contract in any one or more of the following events:

- (a) the Contractor without reasonable cause fails to proceed regularly and diligently with the Services (including rectifying defects) or completely or substantially suspends the carrying out of the Services (including rectifying defects) during the Contract Period;
- (b) the Contractor without the written consent of the Owner assigns or sub-contracts the Contract;
- (c) the Contractor without reasonable cause fails to submit evidence of the Employees' Compensation Insurance and the Contractors' All Risks and Third Party Liability Insurance within **2 months** after the Commencement Date;
- (d) the Contractor becomes bankrupt or makes a composition or arrangement with its creditors or has a petition for compulsory winding-up presented or made against its or enters into compulsory or voluntary liquidation except for the purpose of reconstruction or has a provisional liquidator or receiver appointed, unless the Owner, the Contractor and its trustee in bankruptcy, liquidator or receiver, as the case may be, agree in writing before or after the notice of determination to the continuation or reinstatement of the Contractor's employment;

provided that the employment of the Contractor shall not be determined due to Clauses 10.1.1(a) to (c) unless the event either has continued for **7 days** after receipt of a warning notice of determination from the Owner specifying such event or, except for Clause 10.1.1(c), at any time thereafter has repeated, and the Owner has certified this during the continuation or resumption of the event not more than **14 days** before the notice of determination.

10.1.2 In the event of the Owner determining the employment of the Contractor as aforesaid:

- (a) the Contractor shall reimburse the Owner all additional costs and direct loss and/or expense caused to the Owner by the determination. Provided always that the right of determination shall be without prejudice to any other rights or remedies which the Owner may possess;
- (b) the Contractor shall not without the consent of the Owner remove from the Site any materials, plant and facilities;
- (c) the balance of payment from one Contract Party to the other shall be computed by calculating the expenses at sub-clause (i) below and then making the deductions or additions (as the case may be) at items sub-clauses (ii) to (v) below:
 - (i) the expenses incurred by the Owner in completing the Services, excluding the costs of Variations instructed after determination, but including the additional costs of employment of consultants and site staff for the necessary period of time until the settlement of the final payment under the Contract and the completion of the Services;
 - (ii) addition for the total amount previously paid to the Contractor;
 - (iii) addition for the additional costs and direct loss and/or expense caused to the Owner by the determination, including damages for delayed completion of any Services for the period until the original completion date of the contract for completion;

- (iv) deduction for the total amount that would have been payable for completing the Services calculated in accordance with the Contract if the determination had not occurred; and
- (v) any other deduction to which the Owner is entitled to make under the Contract.

10.1.3 If the Owner does not employ other persons to commence the Services left outstanding within **12 months** after determination, the expenses, costs, direct loss and/or expense, and period of delay for the purpose of Clause 10.1.2 shall be assessed on the assumption that the employment of such persons had commenced by the end of the said **12 months**.

10.2 Determination by Contractor

10.2.1 The Contractor may but not unreasonably or vexatiously forthwith determine its employment under the Contract by notice by registered post or recorded delivery to the Owner in any one of more of the following events:

- (a) the commencement or carrying out of the whole or substantially the whole of the Services has been postponed or suspended as instructed by the Owner due to no breach or default of the Contractor for a continuous period of more than **3 months** beyond any stipulated periods of postponement or suspension in the Contract;
- (b) the Owner:
 - (i) becomes bankrupt; or
 - (ii) makes a composition or arrangement with his creditors; or
 - (iii) has a petition for compulsory winding-up presented or made against him; or
 - (iv) enters into compulsory or voluntary liquidation except for the purpose of reconstruction or has a provisional liquidator or receiver appointed,

unless the Contractor, the Owner and his trustee in bankruptcy, liquidator or receiver, as the case may be, agree in writing before or after the notice of determination to the continuation or reinstatement of the Contractor's employment.

Provided that the employment of the Contractor shall not be determined due to Clause 10.2.1(a) unless the event has continued for **14 days** after receipt of a warning notice of determination from the Contractor specifying such event or, except for Clause 10.2.1(a), at any time thereafter has repeated, and the notice of determination is issued during the continuation or resumption of the event.

10.2.2 In the event of the Contractor determining its employment as aforesaid:

- (a) the Owner shall reimburse the Contractor all additional costs and direct loss and/or expense caused to the Contractor by the determination. Provided always that the right of determination shall be without prejudice to any other rights or remedies which the Contractor may possess;

- (b) the Contractor may after informing the Owner remove from the Site any materials, plant and facilities;
- (c) the balance of payment from one Contract Party to the other shall be computed by calculating the gross valuation at sub-clause (i) below and then making the deductions or additions at sub-clauses (ii) to (iv) below:
 - (i) addition for the Monthly Maintenance Fees for Services performed but not paid, plus any Variations;
 - (ii) addition for the additional costs and direct loss and/or expense caused to the Contractor by the determination;
 - (iii) deduction for the total amount previously paid to the Contractor; and
 - (iv) any other deduction to which the Owner is entitled to make under the Contract.

10.3 Consequences of determination

10.3.1 In the event of determination of the employment of the Contractor under Clause 10.1 or 10.2, this Clause 10.3 shall apply in addition to Clause 10.1.2 or 10.2.2.

10.3.2 Any removal by the Contractor of materials, plant and facilities shall be carried out with due care and with suitable safety provisions provided so as not to affect the safety and stability of work and other objects remaining on site or endanger personal safety.

10.3.3 The Owner may provide site security to prevent improper removal and unauthorised access from happening and provide safety measures to protect the Services, people and adjoining properties.

10.3.4 The Contractor and the Owner or the Owner's Representative or their designated persons shall jointly take records of the status and quantities of the work done and materials, plant and facilities on site.

10.3.5 The Owner may employ and pay other persons to carry out and complete the Services and use or dispose of the materials, plant and facilities left on the Site pursuant to Clause 10.1.2(b) or 10.2.2(b).

10.3.6 If instructed to do so by the Owner, the Contractor shall so far as possible and without payment from the Owner terminate or assign its contracts with suppliers and sub-contractors to the Owner or its nominee to enable the Owner or its nominee to employ and pay those suppliers and sub-contractors to continue to provide their service, warranties, guarantees on similar terms to their existing contracts.

10.3.7 The additional costs incurred in implementing the above procedures and measures shall be part of the additional costs due to determination.

10.3.8 The Contractor and the Owner or the Owner's Representative or their designated persons shall as soon as practicable exchange their computations of the balance of payment in Clause 10.1.2(c) or Clause 10.2.2(c) as the case may be with supporting documentation and to agree on the balance of payment. The Contractor and the Owner or the Owner's Representative shall reach an agreement on the balance of payment within 30 days of the date of the notice of termination issued in accordance with Clause 10.1 or 10.2. Upon agreement, the Owner shall issue a statement of account showing a summary computation

of the balance of payment. If the Owner considers that he has taken into account all the representation of the Contractor but still fails to obtain the Contractor's agreement, he may issue a unilateral statement of account to the Contractor and declare it as such. The amount stated as due in the statement of account shall be a debt payable as the case may be by the Owner to the Contractor or by the Contractor to the Owner within 30 days from the date of the agreed statement of account, unless the Contractor has expressed his disagreement to the unilateral statement of account issued by the Owner and notified the Owner no later than the due date for payment to resolve the dispute in accordance with Clause 11.

10.3.9 Before the agreement of the statement of account, the liable Contract Party shall pay the undisputed portion of the up-to-date balance of payment once every **2 months**.

11. DISPUTE RESOLUTION

11.1 Any dispute, controversy, difference or claim arising out of or relating to the Contract, including the existence, validity, interpretation, performance, breach or termination thereof, or any dispute regarding non-contractual obligations arising out of or relating to the Contract (the “**Dispute**”), shall first be referred to mediation at the Hong Kong International Arbitration Centre (“**HKIAC**”) and in accordance with its then current Mediation Rules of the HKIAC (the “**Mediation Rules**”).

11.2 The Contract Parties may commence legal proceedings in respect of the Dispute but no further steps shall be taken by either Party in such legal proceedings which shall be stayed (unless otherwise directed by the relevant court or tribunal having jurisdiction over the Dispute) pending the termination of the mediation under the Mediation Rules. If the mediation is terminated without the Dispute being resolved, then the stay shall be lifted (unless otherwise directed by the aforesaid court or tribunal) and either Party may take further steps in and proceed with the legal proceedings in respect of the Dispute.

11.3 Save and except for Disputes concerning claims which are within the jurisdiction of the Small Claims Tribunal established under the Small Claims Tribunal Ordinance (Cap.338) which claims shall be actionable in the Small Claims Tribunal, all Disputes shall be referred to and finally resolved by arbitration pursuant to the Domestic Arbitration Rules of the HKIAC in force when the notice of arbitration is submitted.

11.4 The law of this arbitration clause shall be Hong Kong law. The seat of arbitration shall be Hong Kong. The number of arbitrators shall be one.

11.5 All the provisions in Schedule 2 to the Arbitration Ordinance (Cap. 609) shall apply to any arbitration referred under the provisions of this Clause 12.

11.6 Each Contract Party irrevocably:

- (a) accepts that the award of the arbitration shall be final and legally binding; and
- (b) undertakes to fully and promptly execute and perform the award of the arbitration.

11.7 Notwithstanding the existence of any dispute, controversy, difference, claim, mediation or legal proceedings, the Contract Parties shall continue to perform their respective obligations under the Contract except in relation to rights and obligations related to the dispute.

12. NOTICES

- 12.1 Any notice to be given by any Contract Party shall be in writing and shall be sent to the addresses, email addresses or fax numbers (where applicable) for receipt of notices set out in Schedules 2 and 3. Where a notice is sent by email, it shall be deemed to have been received 1 day after the time sent (as recorded on the device from which the sender sent the email) unless the sender receives an automated message that the email has not been delivered. Where a notice is sent by facsimile, it shall be deemed to have been received at the time shown in the transmission report as the time that the whole fax was sent.
- 12.2 Any notice may be sent by hand or prepaid post. Where a notice is sent by post, it shall be deemed to have been received **3 days** after the date of posting (subject to proof by postmark); and if it is delivered by hand, it shall be deemed to have been received when delivered (subject to proof of delivery).
- 12.3 If any Contract Party wishes to change its address, email address or fax number for receiving notices, it shall give notice thereof in writing to the other party **14 days** in advance.

13. SCOPE OF CONTRACT

The Contract shall constitute the entire agreement between the Contract Parties in respect of the Services and shall supersede and extinguish any previous agreements, representations and undertakings.

14. SEVERABILITY

If any provision of the Contract is considered ineffective or unenforceable, the remaining provisions of the Contract shall continue to have effect.

15. GOVERNING LAW AND JURISDICTION

The Contract shall be governed by and construed according to the laws for the time being in force in Hong Kong and subject to Clause 11 the Contract Parties submit to the non-exclusive jurisdiction of the courts of the Hong Kong Special Administrative Region.

16. THIRD PARTY RIGHTS

The terms of the Contract do not confer any right or benefit on any third party under the Contracts (Rights of Third Parties) Ordinance (Cap. 623) and are not intended to be enforceable by any third party. This Contract may be rescinded or varied without the consent of any third party.

Special Conditions of Contract (if applicable)

(As a separate attachment)

Schedule 1(a)

Lift Maintenance Services Specification

Contract Specification

Lift Maintenance Services Specification

(I) General Requirements

1. The Contractor shall provide the all-in comprehensive lift maintenance service and to maintain efficient and prompt response to breakdown; emergency call-out or complaints for the timely attendance of installation / equipment failure and / or unsatisfactory services. The maintenance and servicing work required under this Specification shall be deemed to include both preventive and corrective maintenance and servicing for Lift(s).
2. The Contractor shall maintain the “Service Availability” of every lift above the performance targets as shown in the table below. The “Service Availability” shall be evaluated as follows:

$$Service\ Availability = 1 - \frac{Total\ downtime\ of\ lift(s)\ (min.)}{Total\ serving\ time\ of\ lift(s)(min.)} \times 100\%$$

Note 1: The downtime of planned repair and maintenance shall be excluded from the calculation of the Service Availability.

Service Items	Performance Targets
1. Service Availability of Lifts after (a) Lift Modernisation Works (b) Lift Replacement Works	>98% >99%
2. Response Time to Fault Call (a) cases with trapped passengers (b) stoppages without trapped passenger	<= 30 minutes (Note 2) <= 60 minutes (Note 2)
3. Fault Rectification (a) urgent fault (Note 3) (b) non-urgent fault (Note 3)	<= 24 hours <= 7 days

Remarks: Any factors that beyond the control of Contractor shall be exempted.

Note 2: For the performance targets on response time to fault call, the compliance level is 95% for all cases. The adverse weather cases and remote site location (e.g. outlying islands) shall be exempted from the performance targets on response time to fault call.

Note 3: Urgent fault calls refer to system or equipment failure bearing safety implication or seriously affecting the operation of the whole venue or substantial part of the venue. Faults other than urgent ones are treated as non-urgent.

3. Except those lifts suspended from services for Lift Modernisation Works or Lift Replacement Works, the Contractor shall provide routine lift maintenance service at an interval **not more than 14 days** for every Lift(s), or the maintenance requirements specified by the manufacturer of the lift, whichever is shorter.
4. The Contractor shall attend fault call, inspect, service, repair, maintain and test the lift(s) and ensure that the requirements of all relevant Ordinances and Codes of Practice prevailing at the time of confirmation of acceptance for this Contract. Unless otherwise specified in this Contract, any government fees/charges so required by the ordinance(s) shall be charged to the bearer in substance.

(II) Scope of Service

5. The Contractor shall properly, effectively and efficiently maintain all the Lift(s) to ensure the reliability and safe operation of the lifts, and to the satisfaction of the Owner or Owner's Representative. The fee of the comprehensive maintenance service shall have included all transport, labour, material for the servicing, repair, or replacement of such mechanical (including suspension ropes), electrical and electronic parts, if equipped but unserviceable, of the lift due to normal wear and tear or at the end of their serviceable life for the normal operation of the lifts. The Contractor shall be responsible for maintenance of Closed Circuit Television (CCTV) system of the Lift(s), as specified in this Contract, including the CCTV camera and monitors installed in the lift machine room and the main entrance floor lift lobby. If the CCTV system is maintained by a third party contractor, the Contractor shall apply exemptions to EMSD without extra cost and facilitate the maintenance work of that contractor as far as practicable.
6. Cleaning materials, lubricants, chain preservative, testing instruments etc. required for the Maintenance Works are also deemed to be included in this Contract. All lubricants and greases must be of the type specified by the original lift manufacturer's specifications.
7. The Contractor will be paid separately for the repair and replacement of those parts accessible by passengers with examples including car ceiling, fan/blower louver, light diffuser, landing door, emergency door, car wall panel, car decoration, transom, car flooring, landing architrave, emergency door architrave, and emergency door sill for lift, lamp cover, cladding and decorative as well as those parts which are damaged by misuse, vandalism, accident, fire and other causes which are beyond the control of the Contractor.
8. Excluding the lifts suspended for site work, the Contractor shall ensure that the Use Permit (Form LE11) for the Lift(s) shall always be valid and affixed on the Use Permit holder throughout the duration of the Contract. In case where the Contract Completion Date falls on a date which is less than 2 months from the expiry date of the Use Permit, the Contractor shall, at its own cost, arrange Registered Lift Engineer(s) to carry out thorough examination (and load test if due) to the lifts as specified in Cap. 618, prepare the Safety Certificate for lift(s), and remind the Owner to apply for a Use Permit permitting a lift to continue to be used and operated. For the avoidance of doubt, the application fee for the Use Permit (Form LE11) shall be borne by the Owner.
9. The Contractor shall provide all tools, consumables (e.g. oil, grease, detergents, cleaners, preservatives, cotton waste, etc.), safety facilities (e.g. working platform), personal protection equipment and other necessary materials as required for the execution of Maintenance Works. All necessary labour and materials of any value, tools, instruments, testing equipment, and transportation, etc. required for carrying out fault attendance, routine and emergency inspection, testing and examination in accordance with Clause 8 of this Specification, repair, replacement and maintenance services shall deem to be included under this Maintenance Services Contract.
10. The Contractor shall, repair or replace at his own cost any part/component/equipment of the Lift(s), which is proved to be defective by reason of the Contractor's negligence, inadequate servicing and maintenance, poor performance and workmanship, use of incorrect materials or materials of inferior quality.
11. A detailed maintenance schedule for each lift in this Contract is to be stated and attached in the lift logbook (LE50) and must reflect the frequency of maintenance operation of each item of equipment per lift, and must be based on the requirements set out in Clause 3 of this Specification. On completion of each maintenance visit, the maintenance works must be dated and signed in the logbook by the Contractor's staff carrying out the work.

12. The Contractor shall assign sufficient competent personnel in carrying out all lift works to ensure the Maintenance Works under this Contract be satisfactorily and safely carried out and meeting the performance targets and programmes, including but not limited to routine and comprehensive maintenance services, emergency services, fault calls, examinations, design, statutory and technical matters.
13. Spare Parts
 - 13.1 The Contractor shall be responsible for keeping adequate stock of spare parts which are necessary to maintain the safe and satisfactory working conditions and operation order of the Lift(s) at all times. All labour costs and costs for repair or replacement of parts whenever required shall be included under this Contract.
 - 13.2 The Contractor should use genuine original or equivalent quality compatible spare parts for replacement of equipment, parts and/or components of the Lift(s). A permanent replacement of the genuine equipment, parts and/or components with alternative products shall not be implemented without good reasons, subject to the manufacturer's warranty that the safe and satisfactory working condition and operation order of the installation will not be affected due to the use of alternative make.
 - 13.3. Alternative and compatible equipment, parts and/or components are allowed to be used as contingent measure to temporarily re-instate the function and operation of the lift during on-call maintenance and emergency repair services, and subject to the Contractor's undertaking for their subsequent replacement by genuine products as quoted in the manufacturer's spare part list on or before a specified date to be agreed by the Owner. Unless otherwise specified in the Specification, the temporary and subsequent replacement works including provision of equipment, parts, components, all necessary tools and materials shall be provided under the Contract at no extra cost.
14. Log Book and records
 - 14.1. The log book shall be provided by the Contractor and kept at management offices of Building Manager or Owner's representative, or appropriate places on site as agreed by the Owner. If the log book is damaged, lost or fully completed, the Contractor shall inform the Owner's Representative or Building Manager immediately for its replacement. The replacement of log books and their return to the Owner's Representative or other party as designated by the Owner's Representative is the responsibility of the Contractor under the Contract.
 - 14.2. In addition to record in the log book, the Contractor shall also inform the Owner, Owner's representative and Building Manger in writing for any abnormality found during the routine inspection which may not cause present danger to the passenger but awareness is to be taken.
15. Shut-down of lift system for execution of works shall be kept to minimum. The Contractor shall dispatch sufficient technical staff to execute diligently the works within a reasonable period of time or as directed by the Owner's Representative or Building Manager. If shut-down is deemed necessary and is not caused by any incident which is required to be reported to Director of Electrical and Mechanical Services, the following guidelines should be observed:
 - (a) Shut down of any lift must be strictly on need basis and be resumed as soon as possible.
 - (b) Avoid shutting down all lifts within a building at the same time.
 - (c) Giving well in advance written notice to the Owner, Owner's representative or Building Manager on any shut down indicating the scheduled shut down period and the resumption of the lift(s) involved.

16. Whenever requested, the Contractor shall notify the Owner's representative the method, sequence and program of the lift works prior to the execution of such works in all cases of maintenance, overhaul, repair, modification, addition and/or improvement works. The Contractor shall, at all time, ensure minimal interference to the residents or other contractors on site during the whole course of execution of lift works.
17. The Contractor shall provide and fix at the main landing with appropriate notice and guard railing during each shut down of lift services. The temporary guard railing and notice should be taken away immediately when the system is resumed to normal or upon instruction.
18. The Contractor shall report any defects found on the building fabric, cladding or the lighting/power socket, ventilation/air-conditioning in machine room, etc. and report to the Owner, Owner's Representative or Building Manager for any necessary repair by other contractors. When necessary, the Contractor shall provide attendance to supervise such repair work by other contractors. If the attendance incurred extra standby time, the Contractor will be paid separately when agreed by the Owner.

(III) Emergency Service

19. Emergency Service

- 19.1 An round the clock call-out and repair service is to be in force throughout the duration of the Contract including Sundays and general holidays, rainstorm warning and typhoon periods. The emergency service shall include all mechanical, electrical, and electronic works, and inspection, testing, adjustment, commissioning and cleaning which are found necessary to reinstate the safe and satisfactory working condition and operation order of the Lift(s) as soon as possible and within 24 hours, provided that there is a safe working environment and availability of public transportation. The Contractor shall be required to substantiate the time required for repairing work should it be considered by the Owner, Owner's Representative or Building Manager to be unreasonably long.
- 19.2. All calls to the Contractor's emergency service shall be responded promptly. The Contractor shall respond to the emergency call for service and arrive the site:
 - within 30 minutes in case of lift incidents with passenger entrapment; and
 - within 60 minutes in case of lift incidents without passenger entrapment.
- 19.3. After receiving instructions from the Owner's Representative or Building Manager, either verbal or written, all faulty systems should be restored to its normal condition within one day or as the date agreed by the Owner's representative or Building Manager.
- 19.4. Should the Contractor fail to respond promptly within the specified period, the Contractor shall immediately contact the Owner, Owner's Representative or Building Manager and provide sufficient justification for his incapability to comply with the requirement of response.
20. The Contractor shall operate an Emergency Call Centre which shall be equipped with adequate telephone lines and facsimile machines, manned by sufficient number of technical and clerical staff and operated 24 hours a day throughout the whole year even in adverse weather conditions to meet the following performance requirements: -
 - (a) To monitor the progress of the fault/emergency call attendance and to report to the Owner's Representative or Building Manager on any unattended appointment (including missed appointment and inaccessibility to the premises) and the subsequent remedial measures no later than 30 minutes of the originally scheduled appointment time.

- (b) To report the completion of fault/emergency call attendance within 1 day.
 - (c) To notify reportable incidents to the Director of Electrical and Mechanical Services by specified forms as required by the Lifts and Escalators Ordinance (Cap.618).
21. Should any passenger be injured as reported, the Contractor shall deploy its Registered Lift Engineer to attend the site within two (2) hours to conduct detailed investigation of the reportable incident and thorough examination of the lift without extra cost.
22. In the case of certain occurrences as detailed in Sections 40 of the Lifts and Escalators Ordinance (Cap.618), the Contractor shall immediately notify the Owner, Owner's Representative, Building Manager and the Director of Electrical and Mechanical Services on behalf of the Owner in writing of the occurrence and, after an investigation carried out by the Contractor, submit reports to the Owner and to the Director of Electrical and Mechanical Services on behalf of the Owner, in accordance with the requirements in the Ordinance without extra cost.
23. For all major incidents that the Owner or Owner's Representatives consider necessary, the Contractor shall be required to submit incident investigation reports of details as mentioned in Clause 22 within 7 days.

(IV) Payment Adjustment

24. For additional works ordered under cover by separate Works Orders as issued by the Owner or Owner's Representative, the Employer may require the Contractor to submit reports / update of manual / photo records / measurements of quantities for materials / equipment used, etc. for checking and verification of the claimed payment.
25. Additional works must be separately invoiced and these must be submitted monthly. No payment shall be made by the Owner or Owner's Representatives for any unauthorised service performed by the Contractor. Additional works shall be separately agreed with the Owner or Owner's Representatives.

(V) Provision of registered lift worker for lift works

26. The Contractor shall indicate, in the Schedule of Rate, the rate for attendance of registered lift worker for carrying out lift works outside the scope of Maintenance Works during the Contract period, including but not limited to escorting the additional inspection works during the Maintenance Works. This rate shall include the provision of registered lift worker during the time of 09:00 to 18:00 from Monday to Saturday (except general holidays).

Schedule 1(b)

House rules and requirements of Building Manager

(As a separate attachment)

Schedule 2

Information relating to the Services (to be completed by the Owner)

Remarks: The Owner shall fill in the date / amount / percentage / no. of days and quantity in the [] of this Schedule 2. The number inside [] is for reference only and the Owner can modify such number.

Clause of Conditions of Contract	Description	Information provided by the Owner																																																																											
1.3	Commencement Date	[Insert date]																																																																											
1.4	Completion Date	[Insert date]																																																																											
1.18	Lift(s)	<p>(I) For the maintenance service of existing lift before lift modernisation/replacement works (Schedule of Rates No. M3)</p> <table border="1"> <tr> <td>Location ID of Lift:</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Use Permit Expiry Date</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Load Test Expiry Date</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Brand</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Rated Load (kg)</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Rated Speed (m/s)</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Rope Ratio</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>No. of Cars in Lift Group</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>No. of Risers for Landing Call Panel</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Collective (Down / Full)</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Levels Served</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Rise (m)</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Type of Car Door</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Type of Landing Door</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Fireman Lift (Yes / No)</td> <td></td> <td></td> <td></td> <td></td> </tr> </table> <p>(II) For the maintenance service of the whole lift after the lift modernisation/replacement works (Schedule of Rates No. M1/M2). The lift details as stated in the <i>Letter of Acceptance</i>.</p>	Location ID of Lift:					Use Permit Expiry Date					Load Test Expiry Date					Brand					Rated Load (kg)					Rated Speed (m/s)					Rope Ratio					No. of Cars in Lift Group					No. of Risers for Landing Call Panel					Collective (Down / Full)					Levels Served					Rise (m)					Type of Car Door					Type of Landing Door					Fireman Lift (Yes / No)				
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Clause of Conditions of Contract	Description	Information provided by the Owner (cont'd)								
1.27	Location of the Site	[Insert address of building]								
2.1.1	Access date to portions of the Site	<table border="1"> <thead> <tr> <th>Location ID of Lift</th> <th>Site Access Date</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> </tr> </tbody> </table>	Location ID of Lift	Site Access Date						
Location ID of Lift	Site Access Date									
9.2.2(c)(i)	Percentage of professional fees in case of reinstatement of the Insured Property	[Insert percentage] %								
9.2.2(c)(ii)	Amount for the removal of debris	HK\$ [Insert amount]								
9.2.2(d)	Percentage for the possible increase in the reinstatement value of the Insured Property	[Insert percentage] %								
9.2.3(c)	Limit of indemnity for third party liability	HK\$ [Insert amount]								
9.2.4	Third party liability excess in respect of each and every occurrence of loss or damage	[Insert amount or percentage]								
12.1	Receipt of notices	Address : Email address : Fax no. : Recipient :								

Schedule 3

Information and Schedule of Rates relating to the Services (to be completed by the Contractor)

Clause of Conditions of Contract	Description	Information provided by the Contractor
13.1	Receipt of notices	Address : Email address : Fax no. : Recipient :

Preambles to Schedule of Rates and Schedule of Rates

for

Lift Maintenance Services

Lift Maintenance Services Preambles to Schedule of Rates

1. All descriptions in these Schedule of Rates shall be deemed to have been read in conjunction with the Preamble clauses herein which are relevant.

2. Preambles to Schedule of Rates
 - (a) In the Schedule of Rates, the sub-heading and descriptions identifying the work covered by the respective items, and the exact nature and extent of the work to be performed is to be ascertained by reference to the Conditions of Contract and Specifications as the case may be. The rates and prices entered in the Schedule of Rates shall be deemed to be the full inclusive value of the Works including but not limit to all labour costs, material costs, plant costs, indirect costs, management costs, overheads, profits, taxes, and costs of all ancillary work and liability indispensably necessary for the item of work to which the rate applies and shall not be adjusted for error made by the tenderer in building up the rate.
 - (b) The unit rates in the Schedules of Rates shall be used for payment purposes and / or a basis for valuing any Variation in the Works which may be instructed by the Owner / Owner's Representative pursuant to the Conditions of Contract.
 - (c) Items in Schedules of Rate where "Rate only" is specified shall also be priced as required for a unit quantity of that item and shall not be carried to the total of the Contract Sum.
 - (d) The Contractor shall indicate, in the Schedule of Rates, the rate for attendance of registered lift worker for carrying out lift works outside the scope of the Works during the Contract Period. This rate shall include the provision of registered lift worker during 09:00 to 18:00 from Monday to Saturday (except General Holidays).
 - (e) All rates and/or prices are deemed to include the costs of working outside the normal working hours.
 - (f) Notwithstanding any descriptions of the maintenance works in the Schedule of Rates Section M1, M2 and M3, the rates of maintenance works shall be deemed to include all-in comprehensive lift maintenance works and services to the whole lift system forming the Services, including but not limited to the supply of all labour, materials, tools, transport and everything necessary to carry out the scheduled servicing and maintenance as specified in the Contract for the Services.

Contract No:

Schedule of Rates

Location ID for Lift(s):

Address:

Schedule of Rates No. M1

Item	Description of Works	Unit	Monthly Rate		
			First Three (3) Years <small>(Average amount*)</small>	Forth (4th) Year	Fifth (5th) Year
M1.1	<p><u>M1. Routine Maintenance Works after Lift Modernisation Works</u> <i>(All works as specified in Lift Maintenance Services Specification)</i></p> <p>Provision of comprehensive maintenance service for the <u>whole</u> lift after the resumption of lift service for the Lift Modernisation Works, excluding the following devices:- - CCTV and intercom system - Obstruction Switch</p> <p>Monthly maintenance rate for : 1st year \$ _____ : 2nd year \$ _____ : 3rd year \$ _____</p>	Lift			
M1.2	<i>Extra for</i> M1.1 for lift comprehensive maintenance service - CCTV and intercom system	Set		Rates to be adjusted by _____% (on top of average monthly rate for the first three years)	Rates to be adjusted by _____% (on top of average monthly rate for the first three years)
M1.3	<i>Extra for</i> M1.1 for lift comprehensive maintenance service - Obstruction switch	Set			
M1.4	<i>Extra for</i> M1.1 for lift comprehensive maintenance service - Automatic rescue device	Set			
<p>* The average maintenance cost of 1st, 2nd and 3rd years</p>					

Contract No:

Schedule of Rates

Location ID for Lift(s):

Address:

Schedule of Rates No. M2

Item	Description of Works	Unit	Monthly Rate		
			First Three (3) Years <small>(Average amount*)</small>	Forth (4th) Year	Fifth (5th) Year
M2.1	<p><u>M2. Routine Maintenance Works after Lift Replacement Works</u> <i>(All works as specified in Lift Maintenance Services Specification)</i></p> <p>Provision of comprehensive maintenance service for the <u>whole</u> lift after the resumption of lift service for the Lift Replacement Works, excluding the following devices:- - CCTV and intercom system - Obstruction Switch</p> <p>Monthly maintenance rate for : 1st year \$ _____ : 2nd year \$ _____ : 3rd year \$ _____</p>	Lift			
M2.2	<i>Extra for</i> M2.1 for lift comprehensive maintenance service - CCTV and intercom system	Set		Rates to be adjusted by _____% (on top of average monthly rate for the first three years)	Rates to be adjusted by _____% (on top of average monthly rate for the first three years)
M2.3	<i>Extra for</i> M2.1 for lift comprehensive maintenance service - Obstruction switch	Set			
M2.4	<i>Extra for</i> M2.1 for lift comprehensive maintenance service - Automatic rescue device	Set			
<p>* The average maintenance cost of 1st, 2nd and 3rd years</p>					

Contract No:

Schedule of Rates

Location ID for Lift(s):

Address:

Schedule of Rates No. M3

Item	Description of Works	Quantity	Unit	Rate	Amount (HK\$)
<p><u>OPTIONAL ITEM</u></p>					
<p><u>M3. Others</u> <i>(All works as specified in Lift Maintenance Services Specification)</i></p>					
M3.1	Provision of comprehensive lift maintenance service of the existing lift before carrying out Lift Modernisation Works or Lift Replacement Works	N.A.	Lift / Month		<i>(rate only)</i>
M3.2	Provision of registered lift worker for carrying out lift works during the maintenance period	N.A.	Man-hour		<i>(rate only)</i>

Schedule 4
Declaration of Ethical Commitments

Declaration of Ethical Commitments

To: _____ (the "Owner")
[Name of Owners' Corporation / Owner(s) of (name of the Building)]

Re: The Articles of Agreement for lift maintenance services at [_____ address of the building _____]

In accordance with the Ethical Commitments clauses in the Contract (as defined in the Articles of Agreement):

1. We (the "**Contractor**") confirm that the Contractor has complied with the following provisions and has ensured that the Contractor's directors, employees, agents and sub-contractors (where applicable) are aware of the following provisions:
 - (i) prohibiting the Contractor or its directors, employees, agents and sub-contractors (where applicable) involved in the Contract from offering, soliciting or accepting any advantage as defined in section 2 of the Prevention of Bribery Ordinance (Cap. 201), any hospitality, entertainment or inducement which could impair the impartiality of the Contract or any advantage and excessive hospitality when conducting business in connection with the Contract;
 - (ii) requiring its directors, employees, agents and sub-contractors (where applicable) involved in the Contract to declare to the Contractor in writing any conflict or potential conflict between their personal / financial interests with their relevant duties in relation to the Contract. If any conflict or potential conflict is disclosed in a declaration, the Contractor shall immediately take such reasonable measures as are necessary to mitigate as far as possible or remove the conflict or potential conflict so disclosed;
 - (iii) declaring to the Owner in writing any conflict or potential conflict between the Contractor's personal / financial interests and its duties in relation to the Contract. If any conflict or potential conflict is disclosed in the declaration, the Contractor shall immediately take such reasonable measures as are necessary to mitigate as far as possible or remove the conflict or potential conflict so disclosed;
 - (iv) prohibiting its directors and employees (where applicable) involved in the Contract to engage in any project or work, with or without remuneration, which could create or potentially give rise to a conflict between their personal / financial interests and their duties in connection with the Contract; and requiring the Contractor's agents and sub-contractors (where applicable) to do the same;
 - (v) taking all measures as necessary to protect any confidential / privileged information or data entrusted to the Contractor by or on behalf of the Owner from being divulged to a third party other than those allowed in the Contract.
2. The Contractor further confirms that the Contractor has ensured that its accountants, insurers and legal advisers (where applicable) are aware of the confidentiality provisions of the Contract requiring the Contractor to take all measures as necessary to prevent any third party (other than those permitted under the Contract) from obtaining any confidential / privileged information or data entrusted to the Contractor by or on behalf of the Owner.

Declaration of Ethical Commitments (cont'd)

Contractor sign and complete the following:

[Signature of the company's authorized representative and seal of the company]

[Name of company, name and title of authorized representative]

[date]

Delete as appropriate.

Schedule 5

Amendment to Schedules (if applicable)

(As a separate attachment)

Part E(l): Sample Form of Letter of Acceptance for Contract for lift modernisation works / lift replacement works

Letter of Acceptance

To: [Name of Tenderer]

Regarding the lift modernisation/replacement works for [description of the lifts]
 at the building located at [address of the Building]

We are pleased to inform you that the following option of the tender dated [] submitted by you (including subsequent communications between you and us in connection with the corrections, clarifications or supplementary information relating to the tender documents issued by us and correspondence in relation to the tender submitted by you for the following scope and item of works) has been accepted:

Scope of Works	Lift modernisation works / Lift replacement works ¹⁸
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Lift modernisation works, if selected above, shall include¹⁹:

Schedule of Rates Item	Description	Amount (HK\$)
(I) Essential Item		
Sub-total of Essential Item (I):		
(II) Optional Item		
Sub-total of Optional Item (II):		
Total of lift modernisation works (I) + (II):		

¹⁸ Delete as appropriate.

¹⁹ Delete this section if Lift moderation works is not selected.

Lift replacement works, if selected above, shall include²⁰:

Schedule of Rates Item	Description	Amount (HK\$)
(I) Essential Item		
Sub-total of Essential Item (I):		
(II) Optional Item		
Sub-total of Optional Item (II):		
Total of lift replacement Works(I) + (II):		

The following tender correspondence/documents relating to the above works also form part of contract (if applicable).

- i)
- ii)

The Contract Administrator referred to in Schedule 2 of the Conditions of Contract in Part D(I) of the Tender Documents is [**name**].

We will contact you within [**14**] days to execute the Articles of Agreement with you in the form set out in Part D(I) of the Tender Documents.

[Name and signature of the Procurer]

²⁰ Delete this if Life replacement works is not selected.

Part E(II): Sample Form of Letter of Acceptance for lift maintenance services

Letter of Acceptance

To: [Name of Tenderer]

Regarding the lift maintenance services for [description of the lifts] at the building located at [address of the Building]

We are pleased to inform you that the following option of the tender dated [] submitted by you (including subsequent correspondence between you and us in connection with the corrections, clarifications or supplementary information relating to the tender documents issued by us and correspondence in relation to the tender submitted by you) has been accepted:

Schedule of Rates Item	Description	Amount (HK\$)
Total of lift maintenance services:		

The following tender correspondence/documents relating to the above works also form part of contract (if applicable).

- i)
- ii)

We will contact you within [14] days to execute the Articles of Agreement with you in the form set out in Part D(II) of the Tender Documents.

[Name and signature of the Procurer]

Part F: Survey report on the conditions of lift shaft(s), lift pit(s) and lift machine room(s)

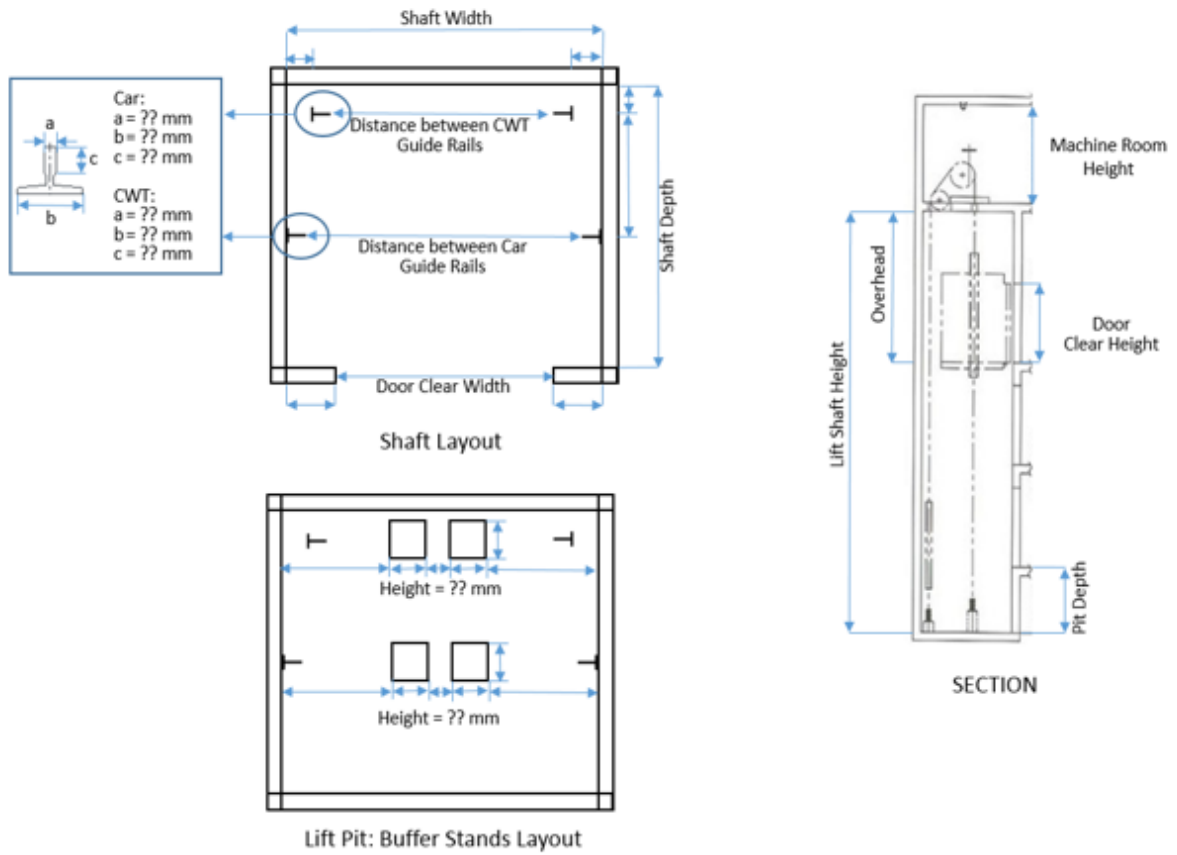
(As a separate attachment)

Part G: 360-degree video showing the conditions of the lift shaft for each lift

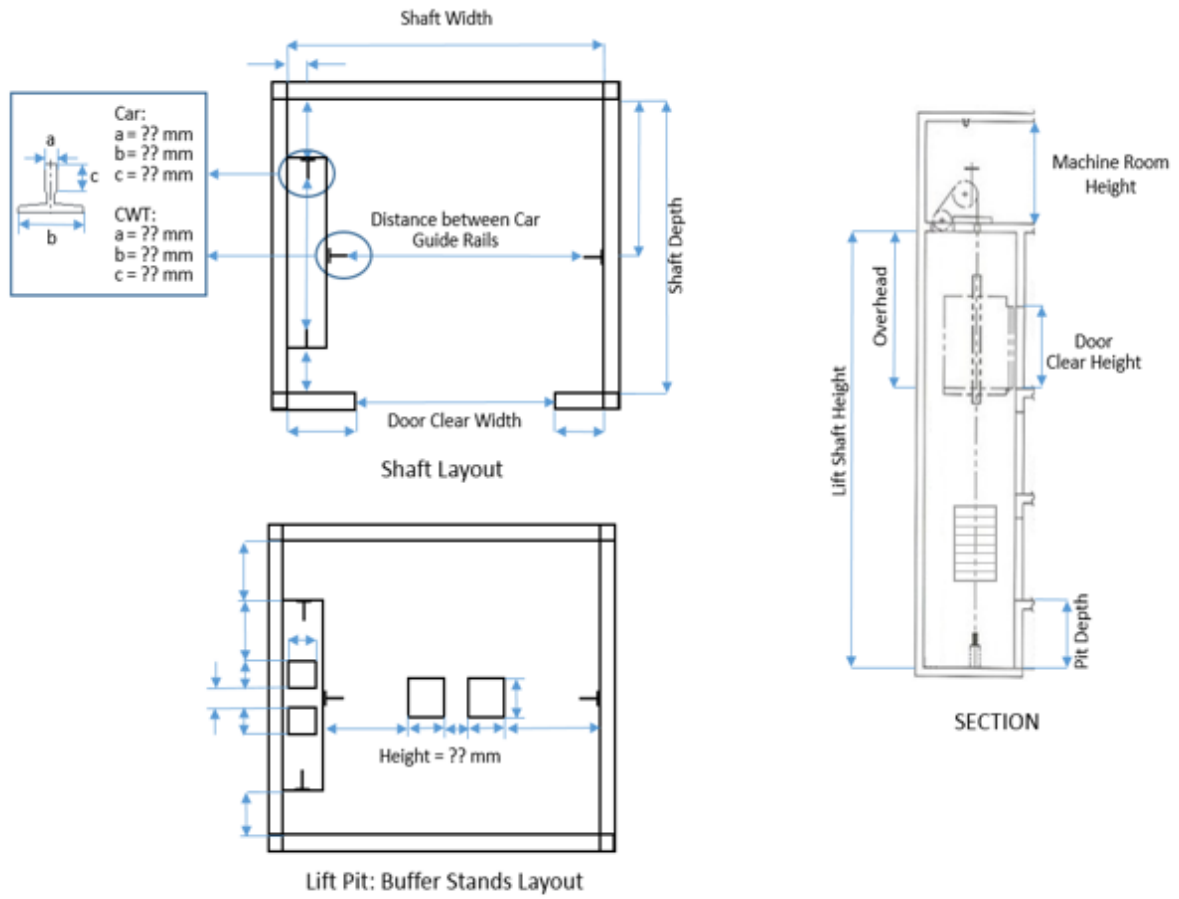
The video can be reviewed via the following link: [insert the hyperlink]

Part H: Basic dimensions of the lift shaft(s)

SCENARIO 1: Rear Counterweight Configuration



SCENARIO 2: Counterweight on the Left Configuration



SCENARIO 3: Counterweight on the Right Configuration

