

## **Tender Document**

### **Maintenance Service for Mechanical Ventilation Air-Conditioning System**

**for**

**Hong Kong Chu Hai College,  
80 Castle Peak Road, Castle Peak Bay,  
Tuen Mun, Hong Kong**

**Hong Kong Chu Hai College Limited**

March 2023

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## SECTION ONE: INFORMATION TO TENDERERS

### 1.1. **Preambles**

The purpose and intent of this “Information to Tenderers” is to facilitate the tenderers to submit tender for providing Maintenance Service of the Mechanical Ventilation Air-Conditioning System (the “MVAC”) at Hong Kong Chu Hai College (the “HKCHC”) in Hong Kong, Tuen Mun, New Territories.

The tender document consists of:

- 1) Information to Tenderers;
- 2) Agreement of Maintenance Service for MVAC;
- 3) Terms and Conditions of Agreement;
- 4) Scope of Work;
- 5) Maintenance Schedule; and
- 6) Equipment Schedule.

The tenderer shall check the number of pages of all the documents attached. Should there be any missing or indistinct pages, the tenderer shall inform the Employer at once and have the same rectified.

Should the tenderer for whatsoever reason be in doubt as to the precise meaning of any description or item, clarification shall be made for correct meaning before the closing time for tender submission.

### 1.2. **The Site**

The Site for the Works are located at the School Campus, Hong Kong Chu Hai College, 80 Castle Peak Road, Castle Peak Bay, Tuen Mun, New Territories, Hong Kong as confined within the building lot.

### 1.3. **Tender Inquires**

Any inquiries from tenderers concerning this tender shall be directed to the HKCHC and attention to [rayyip@chuhai.edu.hk](mailto:rayyip@chuhai.edu.hk).

### 1.4. **Tender Closing Date**

All tenders must be submitted complete, entire and in the required to HKCHC not later than **3:00 p.m. on 30<sup>th</sup> April 2023 (Sunday)**. Tenders received after the closing time will NOT be accepted.

Please note that the closing time and date shall automatically be deferred to 3:00 pm on the next earliest possible working day if Tropical Cyclone Warning Signal No. 8 or above is hoisted or Black Rainstorm Warning is announced by the Government before and remains hoisted beyond the closing time. However, the closing time and date will remain unchanged should the Tropical Cyclone Warning Signal No. 8 or above or Black Rainstorm Warning be lowered or withdrawn two hours or more before the specified

closing time.

Should a tenderer discover a genuine error in the tender after it has been deposited, written amendment submitted on or before the closing time of the tender submission may be accepted.

### 1.5. **Delivery of Tenders**

One set of original and 2 sets of copy must be submitted by hand, courier delivery or registered mail. One set should be marked “Original” and the other two sets marked “Copy”. In the event of any discrepancy between the copies, the “original” one will be taken as the true Tender.

The tender is to be submitted in a sealed envelope labeled “Tender of Maintenance Service Agreement for Mechanical Ventilation Air-Conditioning System for Hong Kong Chu Hai College” and “Private & Confidential” and be addressed to the following:

Company	Hong Kong Chu Hai College Limited
Address	E701, 7/F, Hong Kong Chu Hai College, 80 Castle Peak Road, Castle Peak Bay, Tuen Mun, New Territories, Hong Kong
Contact	Finance Office
Tender Box Location	Registrar’s Office, 1/F, Hong Kong Chu Hai College, 80 Castle Peak Road, Castle Peak Bay, Tuen Mun, New Territories, Hong Kong

### 1.6. **Confidentiality Provision**

The terms of this tender and all other information provided by us in connection with this initiative are to be treated by your company as strictly confidential and proprietary. Such materials are to be used by your company solely for the purpose of responding to this tender. Access to this information shall not be granted to third parties except on prior written consent of HKCHC and upon the written agreement of the intended recipient to treat the same as confidential. We may request at any time that any of our material be returned or destroyed at our election.

### 1.7. **This Tender is NOT an Offer to Agreement**

This tender is not an offer to agreement, nor should it be construed as such. It is a definition of specific requirements of HKCHC and an invitation to recipients to submit a responsive proposal addressing such requirements. The Company reserves the right to make no selection and enter into no agreement as a result of this tender. Only the execution of a written agreement between the Company and a Tenderer will obligate the Company in accordance with the terms and conditions contained in such agreement.

### 1.8. **Your Response to this Tender Constitutes an Offer to do Business**

It should be understood that your responsive to this tender constitutes an offer to do business on the terms stated in your proposal and should an agreement be awarded to you, the Company may, at its option, incorporate all or any part of your proposal to this tender in the agreement. The Company reserves the right to accept your offer without further discussions and without any additional opportunity for you to amend, supplement or revise your submitted offer after Tender Closing Date.

**1.9. Rights Of Hong Kong Chu Hai College Limited**

The Company reserves the right to reject all proposals, to accept one which is not at the lowest cost or one which provides a lesser or larger range of services than indicated in this tender.

The Company is not bound to give any explanation or reason for the rejection of any of the proposals or for the award or non-award of the agreement to any or none of the tenderers.

**1.10. Incurred Expenses & Property Rights**

This tender does not commit or obligate the Company to pay any expenses incurred by you in the preparation of your proposal. All such expenses are solely at the risk of the tenderer. By submitting your tender, you agree that all proposals to this tender shall become the property of the Company.

**1.11. Non-Use of Hong Kong Chu Hai College Name**

You shall not use the names, trademarks, or proprietary indicia of HKCHC nor its parent corporation, subsidiaries or affiliates as a reference, or in any advertising, announcement, press release or promotional materials, including testimonials, quotations, case studies, and other endorsements. No exceptions are granted without prior written consent from the Company.

**1.12. Media Release**

In addition to obligations under your existing confidentiality agreement with the Company, you will not make (or cause to be made) any public announcement relating to this tender or the Company evaluation process, and shall not otherwise publicize, confirm the existence of or comment on this tender in any manner, without the express written consent of the Company.

**1.13. Gifts or Payments**

Tenderers shall not offer, agree to give or give any gift or consideration of any kind to any employee or representative of the Company or its affiliated enterprises as an inducement or reward for any act, including, without limitation, refraining from an act and showing favour or disfavour to any person or entity, in relation to the evaluation and consideration of this proposal or award of this or any other agreement by HKCHC.

## SECTION TWO: AGREEMENT OF MAINTENANCE SERVICE FOR MVAC

This agreement is entered into on the date set forth in Part 6 hereto (the “Effective Date”), by and between the party set forth in Part 2 hereto (the “Purchaser”) and the party set forth in Part 4 hereto (the “Vendor”) in the following Property according to the Terms and Conditions mentioned hereinafter:

### Part 1 – Type of Agreement

Maintenance Service for Mechanical Ventilation Air-Conditioning System at Hong Kong Chu Hai College

### Part 2 – The Purchaser

**Hong Kong Chu Hai College Limited**, a company with a principal place of business at Hong Kong Chu Hai College, 80 Castle Peak Road, Castle Peak Bay, Tuen Mun, New Territories, Hong Kong

### Part 3 – The Management

**ISS EastPoint Property Management Limited**, a company with a principal place of business at 6/F, Dorset House, Taikoo Place, 979 King’s Road, Quarry Bay, Hong Kong; or from time to time as assigned by the Purchaser.

### Part 4 – The Vendor

Company Name : \_\_\_\_\_  
Contact Person : \_\_\_\_\_  
Contact No. : \_\_\_\_\_  
Business Registration Certificate No. : \_\_\_\_\_  
BR Date of Expiry : \_\_\_\_\_  
Registered Address : \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

### Part 5 – Property

Name of Property : Hong Kong Chu Hai College  
Address : 80 Castle Peak Road, Castle Peak Bay, Tuen Mun, N.T.

### Part 6 – Agreement Period (Effective Date)

Twenty-four (24) months commencing from 1<sup>st</sup> July 2023 to 30<sup>th</sup> June 2025 (Both dates inclusive)

## Part 7 – Termination of the Contract

One (1) month's prior written notice given by either party can exercise such break clause. In the event of such termination, the service charge payable shall be calculated on a pro-rata basis according to the number of days of service. In the event that the Vendor has not yet performed annual inspection service as stipulated in Section Five – Maintenance Schedule by the effective date of termination, the Purchaser shall be entitled to deduct the service charge in the amount mutually agreed by both parties from the service charge.

## Part 8 – Services Charges

In accordance to the scope of work set out in Section Four – Scope of Work and Section Five – Maintenance Schedule and Section Six – Equipment Schedule attached hereto. The brief description given hereunder is to be read in conjunction with the whole Tender and Agreement document.

<u>Item</u>	<u>Description</u>	<u>Amount (per round)</u>
1.	Monthly maintenance services fee as per Section Four, Section Five and Section Six of Maintenance Service for MVAC System	HK\$ _____
	Total Contract Sum (total 2 years) :	HK\$ _____
Maintenance Fee		
(for each month)	:	_____ (In Block Letter)
Total Contract Sum	:	_____ (In Block Letter)
(for 2 years)	:	_____ (In Block Letter)

## Part 9 – Emergency Services Charges

Emergency Services Calls for 24-hour On-call within the Normal Working Hours as needed at free of charge.

Twelve (12) times of Emergency Service calls outside Normal Working Hours is included within the agreement period set in Part 6 at free of charge. Any extra emergency services shall be charged at rates specified below:

(Normal Working Hours: Monday to Saturday: 09:00 to 18:00, exclude public holidays and when typhoon signal no.8 or above is hoisted)

<u>Item</u>	<u>Description</u>	<u>Service charge per call (HK\$)</u>	<u>Number of hours included (hour)</u>	<u>Subsequent hourly rate (HK\$)</u>
9.1	Outside Normal Working Hours	_____	_____	_____

## Part 10 – Payment Term

The Vendor shall submit to the Purchaser (“Hong Kong Chu Hai College Limited”) an original invoice together with a maintenance service report upon completion of the monthly maintenance service. The settlement of service payment will only be proceeded by the Purchaser upon the receipt of the original invoice.

## Part 11 – Liability, Indemnity and Insurance

The Vendor shall provide all safety measures to protect the lives, installations and materials from accidents and damage. The Vendor shall also be liable for all injuries, losses and damages whatsoever arising from their work or in connection with their performance or purported performance pursuant to this Agreement.

The Vendor shall be responsible for all relevant insurance policies at their own costs including but not limited to Employees Compensation Insurance Policy and Public Liability Insurance Policy with a limited liability not less than HK\$30 million in any single incident and number of claim shall be unlimited within the agreement period. Copies of such policies shall be given to the Purchaser for reference by the Vendor upon the execution of this Agreement.

Signed with company chop by

[Name: \_\_\_\_\_]

[Title: \_\_\_\_\_]

for and on behalf of the Vendor:

[\_\_\_\_\_  
\_\_\_\_\_]

Signed with company chop by

[Name: \_\_\_\_\_]

[Title: \_\_\_\_\_]

for and on behalf of the Purchaser:

Hong Kong Chu Hai College Limited

\_\_\_\_\_  
Duly authorized person

Date: \_\_\_\_\_

\_\_\_\_\_  
Duly authorized person

Date: \_\_\_\_\_

## SECTION THREE: TERMS AND CONDITIONS

In consideration of the mutual promises in the Agreement including these Terms and Conditions (“this Agreement”), the Vendor and the Purchaser agree as follows:

### 1 Definitions and Interpretations

1.1 Save where otherwise defined or as the context requires, the following definitions apply in this Agreement:

“authorized / designated person(s)”	means such person(s) who has/have the authority to deal with matters relating to the terms and conditions of this Agreement as notified in writing from time to time by either party to this Agreement to the other party;
“this Agreement”	means all the Terms and Conditions of this Agreement together with all Appendices, if any, attached hereto;
“the Government”	means the Government of the Hong Kong Special Administration Region;
“the Management”	means “ISS EASTPOINT PROPERTY MANAGEMENT LIMITED / ISS” or its successors and assigns, or from time to time or from time to time as assigned by the Purchaser
“the Plant”	means the plant and all its accessories installed in the Property for MVAC purpose and as particularized in this Agreement;
“the Property”	means the Property at the location as specified in this Agreement;
“the Representative(s)”	means the Facilities Services Manager and/or his designated representative appointed by the Management to deal with the daily routine services of the Property;
“the Services”	means the upkeep and maintenance of the Plant so as to ensure its continuous operation as specified in this Agreement and the Work Schedule or as modified by the Management from time to time;
“the Vendor”	means the person(s), firm or company who is a party to this Agreement;

1.2 In this Agreement, unless the context requires otherwise:

- (a) the Schedules form part of this Agreement;
  - (b) words importing the singular include the plural and vice versa;
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- (c) words importing any gender include the other genders; and
  - (d) references to the word “include” or “including” are to be construed without limitation.
  - (e) the terms “shall”, “will” and “agree” are mandatory, and the term “may” is permissive;
  - (f) the word “or” is not exclusive;
  - (g) a “person” includes any individual, firm, company, corporation, government, state or agency of a state or any association, trust, joint venture, consortium or partnership (whether or not having separate legal personality) or two or more of the foregoing;
  - (h) a “regulation” includes any regulation, rule, official directive, request or guideline (whether or not having the force of law) of any governmental, intergovernmental or supranational body, agency, department or regulatory, self-regulatory or other authority or organisation;
  - (i) a provision of law is a reference to that provision as amended or re-enacted; and
  - (j) a time of day is a reference to Hong Kong time, unless stated otherwise.
- 1.3 Headings are inserted for convenience only and shall be ignored in construing this Agreement.
- 1.4 No rule of construction applies to the disadvantage of a Party because that Party was responsible for the preparation of this Agreement or any part of it.
- 1.5 References to designated Sections, Schedules and other subdivisions are to the designated sections, schedules and other subdivisions of the body of this Agreement and references to this Agreement include its schedules.
- 1.6 In this Agreement, the Purchaser shall in good faith determine whether an event, circumstance or other relevant situation is “material” or whether any matter or thing is necessary or desirable or otherwise calling for a determination and the Purchaser's determination shall be conclusive and binding on the Vendor.

## **2 Licence / Permit / Certificate Holder and Certified True Copies**

- 2.1 The Vendor and the personnel and/or representative(s) of the Vendor should hold valid licence(s) where applicable, recognized/issued by the relevant Trade/Industry and/or any other relevant authorities of the Government.
- 2.2 The Vendor undertakes to provide all relevant certified true copies of the
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Licence, Permit, Certificate, Business Registration (BR), Certificate of Incorporation (CI), Insurance Policy and/or other related documents, as the case may be to the Purchaser forthwith upon signing of this Agreement and/or upon any subsequent renewals/changes or at the request of the Purchaser.

### **3 Scope of Work**

- 3.1 The Vendor shall at all times provide/perform the Services as specified in Section Four and Section Five in manner to the entire satisfaction of the Purchaser and the Management during the period of its engagement.
- 3.2 To avoid doubt, Maintenance Services shall include routine inspection, regular servicing, testing, draining, commissioning and minor repair and maintenance of the Plant as particularized in Section Six hereto.
- 3.3 Upon the completion of prior inspection and routine maintenance, the Vendor is required to submit the inspection report, statement of account and/or monthly servicing report, as the case may be, to and be acknowledged by, the Purchaser or the Management and/or any other relevant authorities of the Government pursuant to the general practice of the trade.
- 3.4 It is understood that the Work Schedule and/or the Services specified in this Agreement are not exhaustive and shall at the absolute discretion of the Purchaser or the Management be modified from time to time during the term of this Agreement as and when required subject to such adjustment in service charges to be agreed between the parties hereto.
- 3.5 The Vendor is fully responsible for observing and obeying such regulations and/or requirements as imposed by the relevant authorities of the Government from time to time in the performance of the Services.

### **4 Variations**

- 4.1 To cope with the requirements and/or regulations of the Purchaser in the Property and/or any relevant authorities of the Government, the Purchaser shall have the right to make such reasonable requests by prior notice in writing for the Vendor to vary the Services such as hours of service, work schedule, scope of work as specified in this Agreement.

No such notice for variation of services shall vitiate this Agreement or be charged for by the Vendor, save and except variations or alternations which result in a significant increase/alternation of work or requirements and manpower. In such eventuality, the increment and/or any additional payment(s) shall be charged subject to consent by both parties.

- 4.2 All specifications and terms and conditions as contained in the Tender Documents, unless otherwise stated, will form part of this Agreement. If there is any discrepancy in the Terms and Conditions as stated in the Tender Documents

and this Agreement, the latter shall prevail.

- 4.3 No variation of the terms and conditions of this Agreement shall be valid unless it is signed by the respective Director, Managing Director/ General Manager of the Vendor and the Purchaser, and/ or their authorized/designated person(s).

## **5 Agreement Period**

- 5.1 This Agreement is for a period as specified on Part 6 of Section Two of this Agreement unless otherwise modified by the Purchaser in writing.
- 5.2 This Agreement is to run continuously from the commencement date until termination pursuant to Clauses 6.1, 6.2 and 6.3.

## **6 Termination of Agreement**

- 6.1 Subject to Clauses 6.2 and 6.3 hereof, either party shall have the right to terminate this Agreement by giving one (1) month's prior notice in writing to the other party. On the expiration of such notice, this Agreement will absolutely be determined and the other party shall, by virtue of this Clause, waive all rights and privileges to claim for any loss and damage against the party who so terminates this Agreement but without prejudice to the indemnity contained in Clause 18 hereof and any of the Purchaser's rights and remedies against the Vendor in respect of any antecedent breach committed by the Vendor.
- 6.2 Notwithstanding anything herein contained to the contrary, in the event of the Vendor failing to observe or perform any of the terms and conditions herein contained or the Purchaser being requested more Members so to do, the Purchaser shall be at liberty at its absolute discretion to terminate this Agreement forthwith by notice in writing to the Vendor provided that nothing herein contained shall preclude the Purchaser from suing the Vendor for all losses or damages (including extra service charges) which the Purchaser may have suffered due to such non-observance or non-performance and/or early termination of this Agreement.
- 6.3 This Agreement may be determined by either party forthwith by notice in writing if either party shall become bankrupt or go into liquidation, other than for the purposes of reconstruction or amalgamation.

## **7 Termination Assistance**

- 7.1 Beginning twenty one (21) days prior to the expiration or other termination of this Agreement, Vendor will provide all assistance reasonably requested by Purchaser to assure a smooth transition of the Services to Purchaser's internal services or a successor vendor (the "Termination Assistance Services").
- 7.2 Purchaser will, effective upon the completion of any Termination Assistance Services, be permitted to recruit and/or hire any Vendor's Personnel

substantially dedicated to the performance of Services during the twelve (12) months period prior to the expiration or termination of the Agreement. Vendor will waive, and will cause its Sub-Contractors and Affiliates to waive, their rights, if any, under contracts with such personnel restricting the ability of such personnel to be recruited or hired by Purchaser or its designee.

- 7.3 Upon the completion of the Termination Assistance Services, Purchaser or its designee will have the right (but not the obligation) to purchase, or assume the lease for, any equipment owned or leased by Vendor, Subcontractors or Vendor's Affiliates that is primarily used to perform the Services pursuant to this Agreement. Any such purchase will be at a price equal to Vendor's book value of such equipment or such other price as the Parties may agree.
- 7.4 Promptly following the completion of the Termination Assistance Services, Vendor will deliver to Purchaser all materials, information and data supplied by Purchaser including the Equipment in connection with this Agreement, together with all work product and Materials in progress as of the effective date of termination, including all related source code and documentation, whether complete or partially complete, and a written summary thereof.

## **8 Extension of Agreement Period and Renewal**

The Vendor hereby grants the Purchaser a right to extend the Agreement Period for a further period [from one (1) to six (6) months] from the expiration of the Agreement Period on the same terms and conditions of the Agreement. Subject to the Vendor's satisfactory performance of the services, the Purchaser may at its discretion give the Vendor or a written notice not less than one (1) month prior to the expiry of the Agreement Period to exercise the right to extend the Agreement Period for a further period from the expiration of the Agreement Period and on the issue of the said notice to the Vendor, the Agreement herein shall be extended for a further period of the Extended Agreement Period on the same terms and conditions of the Agreement.

The Purchaser may at his absolute discretion invite the Vendor to negotiate the renewal of the Agreement with different terms and condition.

## **9 Transfer or Assignment of Agreement**

The Vendor shall not transfer, assign whole or part with the benefit and burden of this Agreement (as it affects the Vendor) or any part thereof directly or indirectly to any other person, firm or company and shall not without prior consent in writing of the Purchaser sub-contract out any of the work to be done by the Vendor hereunder.

## **10 Service Charges**

Service Charges shall include all expenses for the following items:

- 10.1 Performance of the Services as specified in Section Four, Section Five and Section Six.

For avoidance of doubt, the Service Charges shall include all costs in connection with the initial inspection, planning, overhead, supervision, travelling, transportation etc. for performance of the Services under this Agreement and all costs for inspection and providing quotation for repair.

- 10.2 All wages, benefits, compensation and entitlements of the servicing personnel and/or any other representative(s) of the Vendor.
- 10.3 Any expenses and/or claims incurred under the Clause “Make Good” of this Agreement.
- 10.4 Any other reasonable expenses.

No increment on the Service Charges and/or the Maximum Rate of Miscellaneous Charges in addition to the Service Charges for Normal Working Hours as specified on Part 9 of Section Two of this Agreement shall be allowed during the Agreement Period for any variation in the costs of tools, supplies and materials, working conditions and wages of personnel and/or representative(s) of the Vendor, etc. except when there is a significant increase/alteration of work/requirements as specified under Clause 4.1.

For increment of the Service Charges and/or other kinds of charges, if any, the Vendor must obtain prior written consent from the Purchaser. Such adjustment shall take effect not less than three (3) months after the date of such consent.

## **11 Compensation by Way of Liquidated Damages on Suspension and/or Non-Compliance of Services**

In the event of the Vendor failing to perform or complete any of the Services as specified or requested from time to time and/or to supply spare components, equipment for repair and maintenance as and when required, the Purchaser shall have the right to deduct from the Service Charges any reasonable or proportionate sum as determined by the Purchaser. In particular,

- 11.1 In the event of the Vendor failing to satisfactorily perform the Services and/or comply with any conditions specified in this Agreement and/or unable to rectify breaches, the Purchaser shall be at liberty, whether by itself or instruct a third party to rectify the same by using any materials or equipment left in the Property by the Vendor, if any, subject to service of prior notice on the Vendor. The Purchaser shall not be liable to make any future payment(s) to the Vendor until the rectification shall have been completed and accepted in accordance with the requirements of this Agreement.
- 11.2 The Purchaser shall be entitled to deduct from any amount due to the Vendor expenses incurred by the Purchaser under Clause 11.1 and if the total cost so incurred exceeds the amount due to the Vendor, the difference shall be recoverable by the Purchaser as debt due to the Purchaser from the Vendor.

## **12 Payment**

The Monthly Service Charges shall be settled by the Purchaser within Thirty (30) days from receipt of the Vendor's invoice(s) by the Purchaser provided that the Services Completion Record as previously acknowledged by the Purchaser or the Management shall be attached therewith the forwarded to the Purchaser.

## **13 Vendor's Personnel**

- 13.1 The Vendor will assign properly qualified and sufficiently trained personnel and/or representative(s) in the performance of this Agreement so as to ensure the highest standard at all times throughout the whole Agreement Period, including all Sundays and holidays in the year.
- 13.2 The personnel and/or representative(s) of the Vendor shall not be allowed to solicit gratuities from the Purchaser. No personnel of the Vendor shall undertake any unauthorized job/business within the Property other than those specified in this Agreement without the prior written consent of the Purchaser.
- 13.3 The Purchaser shall have the absolute right to request the Vendor to transfer any personnel and/or representative(s) of the Vendor with poor performance/ behavior/ conduct away from the Property.
- 13.4 The Vendor is required to observe all Rules and Regulations as set forth by the Purchaser and the Management, for example, submission of various drawings, photographs, certificates, completion reports, compliance with the notice period for replacement of equipment and/or remedial works, etc.

## **14 Make Good**

The Vendor shall make good all the disturbed/damaged areas and/or fixtures/ facilities/ equipment during the course of performing its duties.

In this Agreement, "Make Good" shall be construed as to provide for all labour and materials necessary to restore and/or reinstate the disturbed/damaged areas and/or fixtures/ facilities/ equipment back to their normal and original condition within a reasonably short period of time to the same face, colour, texture etc; and in the same materials and finishing as the surrounding work, and shall include but not be limited to painting, colouring and/or varnishing any new works to match the surrounding of existing work to the entire satisfaction of the Purchaser.

## **15 Tools, Supplies and Storage**

- 15.1 Prior to commencement of this Agreement, the Vendor must inspect all the fixtures/ facilities/ equipment and prepare and submit a list of all such lost/damaged items to the Purchaser.

The Vendor shall be fully responsible for repairing/replacement of any

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lost/damaged items not on such list to the entire satisfaction of the Purchaser.

- 15.2 The Vendor shall provide all necessary tools and supplies for the performance of the Services. Such tools and supplies must be at all times of good quality and subject to the written approval of the Purchaser. The tools should be kept in good working order at all times.

Tools and Supplies procured by the Purchaser to the Vendor on loan basis, if any, must solely be utilized for the provision of the Services to the Property. The Vendor is liable to safekeep and maintain such tools and supplies. Upon the termination of this Agreement, the Vendor shall return all such items to the Purchaser and shall be responsible for any loss and damage thereto (normal wear and tear excepted), either by means of replacement of such items and/or rectification of all such lost/damaged items back to their original condition to the entire satisfaction of the Purchaser.

- 15.3 All old materials, parts and components which remain or left in the Property or in its vicinity after overhaul, repair and alteration work shall become the property of the Purchaser and the removal of the same must have the prior written consent of the Purchaser. The Vendor shall clear all these materials, parts and components from the Property at its own expense whenever required by the Management.
- 15.4 In no circumstances may tools, supplies and equipment be left anywhere else in the Property or other neighbouring open areas without the prior written consent of the Purchaser.

## **16 To Comply with Statutory Requirements**

- 16.1 The Vendor shall at its own cost take all steps necessary or expedient for complying with the terms and conditions of this Agreement and all laws, statutory or other requirements or notices of any appropriate Government or other competent authorities relating to the Building Management System or any parts thereof and /or the performance of the repair or maintenance services.
- 16.2 The Vendor undertakes, at its sole costs and expenses, to obtain prior to the Agreement commencement date all the licences, permits, approvals and consents from the relevant governmental authorities for performing the services and to maintain the validity and effectiveness of the same throughout the agreement period (and the Extended Agreement Period, if any).

## **17 Health and Safety**

- 17.1 The Vendor shall comply with all statutory requirements regarding health and safety and shall submit a safety plan prior to the commencement of the Agreement and shall throughout the Agreement period (or the Extended Agreement Period, if any) have full regard for the safety of all persons and shall keep the MVAC in an orderly state conducive to the avoidance of danger to

such persons.

- 17.2 The Vendor shall provide training to their staffs which includes occupational safety and health related courses.
- 17.3 The Vendor shall provide their staffs with and ensure their staffs wear appropriate equipment including but not limited to helmets, safety shoes etc. in the course of providing the repair or maintenance services and when appropriate instruct their staffs to take all safety precaution required in carrying out the duties.
- 17.4 The Vendor shall ensure that all its employees and sub-contractor shall wear special or protective clothing and footwear as the Purchaser may consider necessary or appropriate. All special or protective clothing and footwear shall be provided, maintained and replaced as necessary by the Vendor at its own expenses.

## 18 Insurance and Liabilities

It shall indemnify in full the Purchaser and the Management against all loss, damage, costs and expenses incurred by the Purchaser and Management and/or any demands, claims, suits or actions which may at any time **(whether during the continuance of this Agreement or at any time thereafter)** be made against the Purchaser or the Management by reason or on account of any acts, deeds or things done or omitted to be done by the Vendor or its officers, employees, representatives or agents in pursuance of this Agreement, or any breach, non-observance or non-performance by the Vendor of any terms and conditions herein contained and on the Vendor's part to be served and performed, or otherwise relating to any Agreement Goods/Services supplied or provided by the Vendor pursuant to this Agreement. The Vendor shall be fully responsible for arranging adequate insurance covering all risks arising out of performance of its duties under this Agreement including but not limited to:

### 18.1 Conforming the Laws of Hong Kong and Industrial Safety

Liabilities from breaches of any Government Ordinances, Regulations or By-Laws for the time being in force relating to the provision and performance of the Services; in particular, liabilities under the Construction Sites (Safety) Regulation under the Factories and Industrial Undertaking Ordinance (Chapter 59 of the Laws of Hong Kong).

### 18.2 Third Party Liability

All liabilities from Third Party claims arising out of performance of the Services as provided by the Vendor, its servant or agent.

### 18.3 All Risks Policy

The Vendor shall keep insured a Vendor own risk policy in the sum not less than





the total agreement sum per claim to insure against delay due to accidents such as fire or other hidden hazards. The said insurance policy should contain cross liability clause and indemnity to Principal clause the Vendor should submit the name of the insurance company through which the said insurance policy is insured to the Purchaser and the Management for approval.

The Vendor shall at his/her own cost, take out proper insurance policy of All Risk (AR) in the join name of insurer with the following:

**a) *ISS EastPoint Property Management Limited as Facility Manager***

***and***

**b) *Hong Kong Chu Hai College Limited as Landlord***

which cover public liability and property damages at an insured sum not less than HK\$30,000,000.00 in any one incident unlimited in account. The policies are to cover the period from commencement of the Agreement until completion of the Work or shall, if required, be extended by the Vendor until no further work of any kind is being carried out. The Vendor shall indemnify the Employer and representatives of the Employer against all claims, expense, damages, liability, loss, proceedings etc. arising from his/her carrying out of the Work under this Agreement.

#### 18.4 Employee's Compensation

Liabilities from and against all claims for compensation under the Employee's Compensation Ordinance (Cap. 282 of the Laws of Hong Kong) by any servant and agent employed or engaged by the Vendor in the performance of the Services under this Agreement.

#### 18.5 Other Insurance

Such other insurance may from time to time reasonably be required and specified by the Purchaser.

#### 18.6 Other Liabilities

All liabilities, losses, claims, or proceedings in respect of any damages caused to the Purchaser or the Management and/or the Plant/Property, arising out of, or in the course of, performance of the Services.

#### 18.7 In procuring the insurance cover pursuant to 18 hereof, the Vendor shall ensure that these policies shall contain cross liability clauses (if the Vendor is also named as a co-insured) to the effect that each of the parties (namely Vendor and Purchaser) comprising the insured shall be considered as a separate and distinct unit as if a separate policy had been issued to each of them, and the insurers would waive all rights of subrogation or action which they may have or acquire

against the Purchaser arising out of any claim thereunder.

- 18.8 In the event of such breaches resulting in personal liabilities for the Purchaser or the Management on grounds that it is a licence-holder as required by, and/or for such Services, the Vendor shall indemnify and keep indemnified the Purchaser and the Management against all such fines and/or liabilities as the Court may impose as well as the costs charges and expenses (on a solicitor and own client basis) which the Purchaser and the Management may incur or hereafter liable in connection with the defense of such action and/or proceedings.

## **19 Confidential Information**

- 19.1 Neither Party shall disclose to any third party any Confidential Information of the other Party, or use the other Party's Confidential Information except in the proper performance of its obligations under this Agreement (or, in the case of Purchaser, its use of the Services performed under this Agreement). "Confidential Information" means any information which relates in any way whatsoever to any research, development, trade secrets, customers, technology, systems, proprietary products or business affairs of a Party, but does not include information which (a) is at the time of its disclosure publicly known; or (b) was rightfully known by the receiving Party at the time of disclosure; or (c) is lawfully received from a third party not bound by any confidentiality obligations to the owner of such Confidential Information. Each Party will share the other Party's Confidential Information on a "need to know" basis, and must give its personnel (including but not limited to employees, officers, agents and contractors) notice of the confidentiality obligations in this Agreement and the requirement to be bound by them. If there is a breach or threatened breach of this Section, remedies at law may be inadequate and the injured Party will have the right, without proof of special damages (in addition to its other legal rights) to seek an injunction or other equitable relief to enforce this Section.
- 19.2 Vendor may only disclose Purchaser's Confidential Information to the Vendor's Personnel who are directly involved in the provision of the Services and who need to know the information. Vendor shall ensure that such Vendor's Personnel are aware of, and comply with, the confidentiality obligations in this Agreement.
- 19.3 Vendor shall not, and shall procure that Vendor's Personnel do not, use any of Purchaser's Confidential Information received otherwise than for the purposes of this Agreement.
- 19.4 Vendor shall notify Purchaser immediately upon discovery of any unauthorized use or disclosure of Confidential Information, or any other breach of this Section 16 by Vendor, and shall cooperate with Purchaser in every reasonable way to help Purchaser regain possession of the Confidential Information and prevent its further unauthorized use or disclosure.
- 19.5 Upon the expiry or termination of this Agreement or at Purchaser's request,

whichever is the earlier, Vendor shall forthwith return to Purchaser (or at Purchaser's option, destroy and certify the destruction of) all originals, copies, reproductions, notes, summaries and extracts of, containing or relating to Confidential Information which are in Vendor's possession, custody or control.

19.6 All Confidential Information are and shall remain the property of Purchaser. By disclosing Confidential Information to Vendor, Purchaser does not grant any express or implied right to Vendor to or under any of Purchaser's patents, copyrights, design rights, trademarks, trade secrets or other intellectual property or other proprietary rights.

19.7 The provisions of this Clause 19 shall survive the expiry or termination of this Agreement.

## **20 Intellectual Property Rights**

Subject to Clauses 20.3 and 20.4:

20.1 Purchaser shall not acquire any right, title or interest in or to the Intellectual Property Rights of Vendor or its licensors, including:

- a) the Intellectual Property Rights relating to Vendor's Software;
- b) the Intellectual Property Rights relating to the Third Party Software; and
- c) Vendor's Background Intellectual Property Rights.

20.2 Vendor shall not acquire any right, title or interest in or to the Intellectual Property Rights of Purchaser or its licensors, including:

- a) the Intellectual Property Rights relating to Purchaser's Software;
- b) the Intellectual Property Rights relating to Purchaser's documentation, processes and procedures;
- c) the Intellectual Property Rights relating to Purchaser's know-how;
- d) the Intellectual Property Rights relating to Purchaser's Data;
- e) the Intellectual Property Rights relating to the Database;
- f) Purchaser's Background Intellectual Property Rights; and
- g) the Intellectual Property Rights relating to the Work Product.

20.3 Where either party acquires, by operation of law, title to Intellectual Property Rights of the other referred to in Clauses 20.1 or 20.2, and such acquisition is inconsistent with the allocation of title set out in Clauses 20.1 or 20.2, such

Intellectual Property Rights shall be assigned by it to the other party on the request of the other party, whenever that request is made.

- 20.4 Purchaser hereby grants to Vendor a royalty-free, non-exclusive, non-transferable licence during the term of this Agreement to use:
- a) the Purchaser's Software;
  - b) the Purchaser's documentation, processes and procedures; and
  - c) the Purchaser's Data and the Database, including the right to grant sub-licences to its Sub-Contractors, provided that any relevant Sub-Contractor has entered into a confidentiality undertaking with Vendor in a form reasonably acceptable to Purchaser.
- 20.5 The licence granted in Clause 20.4 is granted solely to the extent necessary for performing the Services in accordance with this Agreement. Vendor shall not use such licensed materials ("Purchaser Materials") for any other purpose. Vendor will not, and will not permit any Vendor's Personnel to use any Purchaser Materials for the benefit of any person or entity other than Purchaser without the prior written approval of Purchaser, which may be withheld at Purchaser's sole discretion.
- 20.6 In the event of the termination or expiry of this Agreement, the licences referred to in Section 20.4 shall terminate automatically and Vendor shall deliver to Purchaser all Purchaser Materials licensed to Vendor pursuant to Clause 20.5 in its possession or control.

## **21 Publicity**

Vendor must not use the name, trademarks, service marks, logos, domain names, Web sites, or any other identifiers of Purchaser or any of Purchaser's Affiliates in any way without prior written approval of Purchaser.

## **22 Entire Agreement**

This Agreement is the entire agreement between the Parties with respect to the subject matter of this Agreement. The appendix and schedules attached to or referred to in this Agreement are incorporated by reference. If there is a conflict between these Terms and Conditions and any Schedule, the provisions of these Terms and Conditions (as they may be amended by mutual agreement of the Parties) will prevail. No change or amendment to this Agreement will be valid unless it is in writing and signed by an authorized representative of both Parties.

## **23 Governing Law**

This Agreement shall be construed in accordance with the laws of Hong Kong and both Parties agree to submit to the non-exclusive jurisdiction of the courts of Hong Kong.

**24 Time is of the Essence**

Vendor acknowledges that time is of the essence with respect to the performance of its obligations hereunder.

**25 No Waiver**

The failure of either Party to insist upon or enforce strict performance by the other Party of any part of this Agreement or to enforce any right under this Agreement shall not be construed as a waiver or a relinquishment of such Party's right to assert or rely upon such provision or any other provision of this Agreement.

**26 Counterparts and Electronic Signatures**

This Agreement, and all agreements executed hereunder, may be executed in counterparts, with the same effect as if the Parties had signed the same document. Each counterpart so executed shall be deemed to be an original, and all such counterparts shall be construed together and shall constitute one Agreement. The counterparts of this Agreement and any agreement executed hereunder may be executed and delivered by facsimile or other electronic signature by any of the Parties to any other Party and the receiving Party may rely on the receipt of such document so executed and delivered by facsimile or other electronic means as if the original had been received.

**27 Conditions Affecting the Maintenance Services**

The Vendor shall satisfy himself as to nature of the systems and its general location with the site. Any failure on the part of the Vendor to obtain reliable information as to the conditions under which the maintenance services are to be carried out shall not relieve him from any risks or responsibility for the performance of his obligation under this Agreement.

**28 Compliance with laws**

28.1 The Parties hereto mutually agree, for themselves and their employees, agents and intermediaries, that they will not pay, and will not permit or suffer any agent, intermediary or employee to pay, directly or indirectly, any money or thing of value, to any official of the government of any nation or political subdivision thereof, or any of their agencies, instrumentalities, corporations or ventures, or to any political party, official thereof, or any candidate, for the purposes of influencing the acts, omissions or decisions, in an official capacity, of such official, party or candidate in violation of his/her or its lawful duty or inducing him or it to exercise his/her or its influence to affect or influence any act or decision of such government or instrumentality or to obtain or retain business for Vendor or Purchaser.

28.2 Moreover, before making payment of any money or thing of value on behalf of,

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or with funds directly or indirectly received from Vendor or Purchaser, the Parties hereto will make such inquiry as the circumstances may indicate is prudent into whether the immediate recipient and any ultimate recipient or beneficiary of such payment may have any official status with the government of any nation or political subdivision thereof, or any of their agencies, instrumentalities, corporations or ventures, or with any political party, official thereof, or any candidate for political office.

- 28.3 Should either Party become aware of a possible violation of Section 28.1 and/or 28.2, or of the facts and circumstances from which a prudent person could conclude that further inquiry is necessary to determine whether such a violation has occurred, is occurring or is likely to occur, such Party will give representatives designated by the other Party immediate notice of such violation, facts or circumstances, and will cooperate fully, and direct all agents, employees and other person(s) the other Party may retain or direct in connection herewith, to cooperate fully, with any inquiry or investigation the other Party may conduct.

## **29 Exclusion of Rights**

Notwithstanding any other provisions of this Agreement, a person who is not a party to this Agreement shall not have any right under the Contracts (Rights of Third Parties) Ordinance to enforce any provisions of this Agreement. This does not affect any right or remedy of such third party which exists or is available apart from that Ordinance.

## **30 Disputes**

This agreement and the rights and obligations of the parties hereunder shall be governed by the construed in all respects in accordance with the laws of Hong Kong Special Administrative Region and the parties hereto submit to the non-exclusive jurisdiction of the Hong Kong Courts.

**SECTION FOUR: SCOPE OF WORK**

The Service Charges as specified on Part 8 of Section Two and Clause 10 of Section Three of this Agreement are inclusive of the following Services:

- 1 An initial inspection of the Plant is required to perform by the Vendor prior to the commencement of the Agreement Period without cost implication.
- 2 The Vendor is deemed to have included in the maintenance fee contained in this agreement for the material cost of parts replacement that are rendered defective because of normal wear and tear with the exception of main and major equipment.
- 3 A Preventive Maintenance Schedule of the Plant is required to be submitted to and approved by the Purchaser within thirty (30) days after confirmation of Agreement awarded.
- 4 The Vendor shall provide a 24-hour a day, 7 days a week maintenance or “call-out” service during the period of this agreement procure or cause a service engineer to carry out, the rate of charges are listed, an emergency call, inspection or survey of the Systems including fixing the operation fault, testing the signal and alarm apparatus whenever the Vendor is advised by the Purchaser that a fault has appeared in the Systems. The Vendor should be responsible for repairing and replacing the defective parts of the Systems to render the Systems back to normal operation unless the replacement of main and major equipment is involved.
- 5 The Vendor shall provide qualified technician and shall respond within 30 minutes after receiving the call inform the Purchaser about the detail of the call-out arrangement and shall arrive to attend breakdown or emergency service within 2 hours under all circumstances.
- 6 The Vendor shall carry out thorough performance tests for the equipment / system and make all necessary adjustments including setting of all controls and checking of the operation of all protective and safety devices in accordance with the manufacturer’s instructions, rules, regulations, ordinances and requirements imposed by the Government Authorities.
- 7 The Vendor is to advise the Purchaser when repairs or replacements are required and to provide estimates for such repairs or replacements, taking into account the availability of spares which may be available at the Property or alternatively for the supply of such spares from other sources, and could submit as “Unit rate schedule” for the Purchaser’s consideration. The Purchaser is not bound to accept such quotation if it considers such to be unreasonable and have the right to employ another Vendor to carry out the repair or replacement works.
- 8 In the occasion so happened as above-mentioned (clause 7), the Vendor is still required to coordinate with and assist the Management to assure the satisfactory workmanship and completion of the 3<sup>rd</sup> parties Vendor’s work despite the warranty and defect liabilities shall fall on the 3<sup>rd</sup> parties Vendor.



- 9 The Vendor shall provide all necessary tools and testing equipment for the maintenance works at its own expenses.
- 10 In accordance with the Electricity Ordinance, all electrical works for shall be carried out by Registered Electrical Workers. All relevant certificates / test reports shall be duly signed by a Registered Electrical Worker and the Vendor shall submit the copies to the Purchaser for record.
- 11 The Vendor is required to submit to the Purchaser maintenance reports in the form of log sheets, service reports, and other written reports on maintenance works or services carried out as required within seven (7) days after the completion of the said works or services.
- 12 The Vendor shall provide full and adequate supervision to ensure that the system is in good condition and high standard of workmanship. The Vendor shall carry out inspection regularly and ensure that all faults / breakdowns are remedied immediately.
- 13 The Vendor shall at their own expenses make all suitable arrangement to avoid damage to property or installations provided by others during the course of their work. The Vendor shall be responsible for all losses, claims or whatsoever for injury or damage to any person or property arising out of or in consequence of the execution of the maintenance work.
- 14 The Vendor shall be responsible for the removal of debris and other remaining materials and cleaning of the working areas and the adjacent areas on completion of works. Alternatively, the Purchaser shall undertake the same at the Vendor's cost.
- 15 The Vendor shall be responsible for the extra work arising from any discrepancy between the existing site conditions and record drawings, if any, provided by the Purchaser.
- 16 The Vendor shall provide unlimited times of emergency call-out service within Normal Working Hours to the MVAC system (save and except that public holidays or Typhoon Signal No. 8 or above is hoisted) and twelve (12) times of emergency call-out service outside Normal Working Hours at no extra charge within the agreement period. The Vendor shall attend and carry out service within two (2) hours upon receipt of any emergency call in case of breakdown of equipment.
- 17 The Vendor shall send a report to the Purchaser immediately following a major repair or repeated breakdowns of service due to system or equipment fault of similar nature or as when required by the Purchaser. The report shall include the cause(s) necessitating such a repair, the reason of such a breakdown of service, the time and date of the remedial action taken, repairing works the normal service resumed. A list of replaced equipment shall be attached to the report.

Reports on routine maintenance are required, especially where necessary to draw attention on the defect which could not be rectified during the routine maintenance work.



Each routine or call-out visit, with details of work done or action taken, shall be recorded on a services report / log book which shall be provided by the Vendor.

- 18 The Vendor shall comply with all the rules, regulations, ordinances and requirements imposed by the Government Authorities including but not limited to those of the Buildings Department (BD), the Fire Services Department (FSD), the Environmental Protection Department (EPD), the Electrical and Mechanical Services Department (EMSD) and shall be responsible for liaising with the relevant authorities and paying all fees levied. Such fees shall be included in the Contract Price. No “Extra Payment” will be entertained by the Purchaser in compliance with any rules, regulations, ordinances and requirements imposed by the Government Authorities.
- 19 The Vendor shall not be only responsible for inspection and repairing of the existing MVAC system as stipulated in SCHEDULE 5 – Equipment Schedule, but also the new MVAC system and equipment which are replaced or installed within the period of this Agreement.
- 20 Competent engineer(s) shall be provided by the Vendor to investigate the fundamental cause of every fault. Temporary quick fix methods will not be accepted as permanent solutions. Proper fault finding report and remedial proposal shall be submitted to the Purchaser for reference and consideration.
- 21 The Vendor shall submit a copy of effective CAR insurance with the required limit as specific in the clause 18 of section three of this Agreement for the approval of the Purchaser after confirmation of Agreement awarded and before commencement of any maintenance service.
- 22 The Vendor shall as request by the Purchaser, submit maintenance schedule and copy of the maintenance log sheet/ checklist / sample of service reports, which covers all scope of works specified in below clauses, for the approval by the Purchaser within 14 days after confirmation of Agreement awarded.
- 23 The Vendor may be requested to carry out an Annual Joint Interfacing Testing Services and interfaced with other disciplines (like Building Management System, Fire Services, Electrical, Plumbing and Drainage, etc.) of Maintenance Vendors at Hong Kong Chu Hai College without extra cost.

## SECTION FIVE: MAINTENANCE SCHEDULE

The Vendor shall, as soon as practicable, carry out the following repair and / or maintenance works in accordance with the minimum service standards as stipulated below:

### Section (A) – Water Side System

#### (A1) - Cooling Towers

Cooling tower installations should be regularly inspected and properly maintained. Inspection should include cooling towers and their associated mechanical equipment, water treatment, facilities and water tanks.

#### Weekly Services

1.1	Check cooling water for clarity, odour, surface debris, algae and temperature.
1.1.2	Check water level of basin and the foaming condition of the cooling tower.
1.1.3	Check bleed-off valves, strainers, drains and float valves for proper operation.
1.1.4	Check operation condition of water treatment dosing equipment, and check water treatment chemicals or materials for adequacy and safety.
1.1.5	Check operation conditions of the cooling tower fan and drive, water treatment dosing facilities, and water pumps.
1.1.6	Drain stagnant water in dead-legs if any by manual purging for at least 15 minutes each.
1.1.7	Run all standby condensing water-side equipment at least one hour.

#### Monthly Services

##### General

2.1.1	Check cooling water for clarity, odour, surface debris, algae and temperature and ensure that the cooling water be properly dosed with biocides or alike by chemical treatment devices (or disinfected by physical treatment devices if adopted instead) to prevent microbial growth.
2.1.2	Check internal surface condition of cooling towers for scale, rust, sludge, and bio-film accumulation, in particular the water basin. The Vendor shall remove them by scrubbing and cleaning.
2.1.3	Check sprays and distribution deck for proper water distribution.
2.1.4	Check for proper operation of bleed-off valves and other valves of the installation.

##### Water Basin

2.2.1	Check basin sides and comers of cooling towers for any leakage or overflow.
2.2.2	Inspect suction screen and clean away any accumulated debris.
2.2.3	Assure float valves and make-up water controls operating freely and maintain proper water level.

#### Tower Framework

2.3.1	Inspect the tower framework visually for any deterioration and test its members for soft spots with a screw driver or other pointed tool.
2.3.2	Check and clean all air inlet corrugated GRP louvers.
2.3.3	Grease vibration isolation springs.
2.3.4.	Remove corrosion and rust and carry out touch-up painting.
2.3.5	Inspect the general condition and check tightness of framework bolts for safe.

#### Fills and Drift Eliminators

2.4.1	Check condition/ cleanliness of fills and drift eliminators, and remove any accumulated dirt.
2.4.2	Check that fills are intact and in place with no sagging or gaps in packs.

#### Make-up Water and Bleed-off Water Tank

2.5.1	Check tank sides and comers for any leakage or overflow.
2.5.2	Assure float valves and water level controls operating freely and maintain proper water level.
2.5.3	Inspect the support framework of the tanks visually for any deterioration.
2.5.4	Inspect water tank and clean away any accumulated debris.

#### Quarterly Services

3.1.1	Adjust and lubricate fans, pumps and motors bearings.
3.1.2	Adjust and lubricate all moving parts of valves.
3.1.3	Clean the water distribution pipework including nozzles.
3.1.4	Carry out internal cleaning work for cooling tower and to refill water to the condensing water system & resume functioning of the system (to quote separately whenever need / upon request).

#### Semi-annual Services

Water basin and internal surfaces of cooling towers should be cleaned, desludged and disinfected at least every 6 months:

4.1.1	Circulate first biocides in the system.
4.1.2	Circulate chlorinated water of 5 ppm for 4 hours and then drain.
4.1.3	Manually clean and desludge internal surfaces.
4.1.4	Refill and recirculate chlorinated water for 6 hours and then drain.
The water in (4.1.2) and (4.1.4) should be dechlorinated by a neutralizer (e.g. sodium thiosulphate) before draining.	
4.1.5	Fills and drift eliminators should be removed for cleaning. (to quote separately whenever need/upon request).
4.1.6	End cap in each header should be removed for cleaning. (to quote separately whenever need/upon request).

## **(A2) - Filtration System**

### **Monthly Services**

1.1.1	Record all reading (including inlet / outlet pressure and motor running current).
1.1.2	Record and compare these readings whenever periodic check-up and maintenance is required.
1.1.3	Check the suction strainer basket and clean dirt and debris if required.
1.1.4	Check flow and efficiency of pipe nozzle.
1.1.5	Check stuck needles / pegged gauges indication. Clean separated solids collector in the SRV vessel if indication shown 'fault'.
1.1.6	Check pipe leakage, rectify if found.
1.1.7	Carry out back wash to the filters while cleaning work for cooling tower is being done.

## **(A3) - Water Treatment System**

### **Monthly Services**

	<b>Water Treatment &amp; Chemical Dosing Unit for Chilled Water System</b>
1.1.1	Check the operation of chemical feeding equipment and report for irregularity.
	<b>Water Treatment &amp; Chemical Dosing Unit for Condensing Water System</b>
1.2.1	Check the operation of chemical dosing unit and report for irregularity.
1.2.2	Check the operation of conductivity monitoring system and report for irregularity.

## **(A4) - Water Cooled Chillers**

### **Monthly Services**

The works shall include but not limited to the following Items:

The vendor shall operate the system, and provide labour, tools and material to

1.1.1	Review daily log kept by operator. Observe for any abnormal record and condition.
1.1.2	Inspect the equipment including motor, Chiller and accessory parts as complied with original manufacturers' instruction.
1.1.3	Carefully observe the response of the control instruments, check and test the operation of control panel, check the operation parameter condition of the chillers-flow, temperature, water pressure, check suction & discharge refrigerant pressure and so on.
1.1.4	Check fault and alarm history, operating logs, set point, running procedure and so on of the chiller and chiller system from the control panel and BMS system; Analysis chiller system condition, report if any replacement of parts and repairs are required immediately.
1.1.5	Check the water system, refrigerant system, oil system; examine the condition of joints, stop valves, covers and seals for leaks. Check condition of operating and liquid level of refrigerant, lubricating oil, water system for leakage and tracing the

	sources of leakage if any.
1.1.6	Open motor terminal box & inspect the cable connection; clean the contact, dismantle the cable terminal unit and accessory to detail check the wiring, if necessary. Check electrical equipment condition, eg. cable, cable connection, control panel, electrical equipment and so on.
1.1.7	Check and record condenser and evaporator.
1.1.8	Check the water quality laboratory report and bleed off the chilled and condensing water if necessary.
1.1.9	Check the colour of lubricating oil, and operation of the lubricating system and replace the lubricating oil if necessary.
1.1.10	Check electrical system, chiller, motor, actuator, spring and system against excessive noise, temperature and vibration.
1.1.11	Submit maintenance record to manufacturer or employ manufacturer to check the chiller to get recommendation from manufacturer, If necessary.
1.1.12	Carry out minor repairing work, and minor parts replacement if necessary
1.1.13	De-rust and repair with prime, finish coating, and repair insulation as necessary
1.1.14	Check VSD panel condition; clean the VSD Panel if necessary. Check the water level and condition of coolant, refuel or change the coolant water if necessary.
1.1.15	Check and lubricating condition of spring, pump and motor, add lubricating oil if necessary (material supply by vendor)(not applicable to permanently sealed bearings).
1.1.16	Check all BMS point signal, eg flow switch, running and trip and so on, with FMO BMS operator.
1.1.17	Check operation condition and COP for individual chiller in operation.
1.1.18	Submit monthly check report, with defect report and improvement & ratification proposal.
1.1.19	Check and record the VSD Panel internal Temperature.
1.1.20	Clean the heat exchanger of the VSD Panel, if necessary.
1.1.21	Check and record the system operation's sub-cooling and super heat with the setting is matched.
1.1.22	Motor bearing greased, if necessary.
1.1.23	Calibrate for all sensor, if necessary.

### **Semi-annual Services**

The works shall include but not limited to the following:

The vendor shall operate the system, and provide labour, tools and material to

2.1.1	Carry out all works specified at above item 1.1 Monthly maintenance services.
2.1.2	Check air relief valves in the system.
2.1.3	Check, adjust and calibrate for all safety sensor and operation sensor for the machines and related controls, control circuits.
2.1.4	Check VSD panel condition, use vacuum cleaner to clean the VSD Panel.
2.1.5	Tighten electrical connection and terminals.
2.1.6	Supply and replace dryer for VSD panel.

### **Annual Services**

The works shall include but not limited to the following:

The vendor shall operate the system, and provide labour, tools and material to

3.1.1	Carry out all works specified at above item 1.1 Monthly and Semi-Annual maintenance services.
3.1.2	Supply and Change of oil and refrigerant filters.
3.1.3	Perform chiller vibration test and submit test report.
3.1.4	Laboratory test for lubricating oil, analysis the lubricating oil and chiller condition, and replace the lubricating oil if necessary. (Spectrochemical analysis Item include: Iron, Chromium, Nickel, Aluminum, Lead, Copper Tin, Silver, Titanium, Silicon, Boron, Sodium, Potassium, Molybdenum, Phosphorus, Zinc, Calcium, Barium, Magnesium, Antimony, Vanadium, Viscosity, and Sample analysis by lab.).
3.1.5	Check VSD panel condition, use vacuum cleaner to clean the VSD Panel, change the coolant water for VSD panel.
3.1.6	Check and record the system full operation status with values are matched to BMS readings.
3.1.7	Insulation test on motor windings & incoming power cable of the hermetic motor c/w report. Check the condition of electrical circuits, control circuits and, control panel, motor cable terminal box, cable, cable connection and electrical equipment. Insulation test on motor windings & incoming power cable. Clean and tight the cable connection. Perform inspection for fixed electrical installation (Incoming & Outgoing) as complied with EMSD requirement.
3.1.8	Brushing Cleaning & Chemical Cleaning of water cool condenser heat transfer tubes or air cool condenser heat transfer coil in the month of December or to be arranged by Facilities Management Office subject to building operation.
3.1.9	Check the earthing connection condition.
3.1.10	Test for High pressure cut, low temperature cut and so on protection device.
3.1.11	Clean the heat exchanger of the VSD Panel.
3.1.12	Check the condition of Spring & vibration isolation system.
3.1.13	Calibrate for all sensor, and pressure gauge, replace it if necessary.
3.1.14	Surface cleaning for the equipment.
3.1.15	Provide photo record report for annual maintenance works.

### **(A5) - Chilled Water Pumps, Condensing Water Pumps, Make-up Water Pumps and Bleed-off Pumps**

#### **Monthly Services**

1.1.1	Check for pump vibrations and pay attention to abnormal noise generated.
1.1.2	Check and re-tighten any loose bolts and nuts in proper sequence.
1.1.3	Check for normal operation of the check valve.
1.1.4	Check the pump bearing, and oil or grease and clean if necessary.
1.1.5	Clean all water strainer in all water circuits.

1.1.6	Measure and record major operational parameters, including current, chilled water in & out pressure, and no. of pumps running hour etc.
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**Annual Services**

2.1.1	Lubricate and clean pump and motor bearings.
2.1.2	Remove the coupling safety cover and check the conditions coupling, observe any sign of mis-alignment.
2.1.3	Measurement of the insulation resistance of pump motors, wiring and associated electrical equipment.

**(A6) - A/C Make-up Tank, Feed & Expansion Tank and Chemical Dosing Tank**

**Monthly Services**

1.1.1	Check the sign of water leakage from tank, valves, supports and associated pipes.
1.1.2	Check normal operation of ball valve, water supply valve and drain valve.
1.1.3	Inspect metal components for corrosion and as found necessary, wire brush to clean metal and paint with an approved anti-corrosion paint.





## **Section (B) – Air-Side System**

### **(B1) - Primary Air Unit and Air Handling Units Monthly Services**

#### **Monthly Services**

1.1.1	Clean all the air filters. And Carry out replacement of per-filter upon the management instruction (Per-filter to be provided by the Management).
1.1.2	Check the fan belts for proper tension. Carry out replacement of fan belts upon the management instruction (fan belts to be provided by the Management) and examine the fans for correct alignment, lubricate the bearing as required.
1.1.3	Clean the fan and motor casing, grease and lubricate if necessary.
1.1.4	Check the running amperes against the designed and inspect motor starter panel.
1.1.5	Check pressure gauge and temperature sensor are properly working.
1.1.6	Check condensate drain pipe and floor drains and take necessary cleaning work if required.
1.1.7	Check for abnormal running noise and vibration and report immediately.
1.1.8	Inspect metal components for corrosion and as found necessary, wire rush to clean metal and paint with an approved anti-corrosion paint system.
1.1.9	Test the volume control dampers and examine flexible connections.
1.1.10	Check sign of leak and function of all valves and control valves.

#### **Annual Services**

2.1.1	Check the electrical starter and associated electrical equipment for good working conditions.
2.1.2	Insulation test fan motors and controls, wiring insulation, cable terminals, and cables.
2.1.3	Chemical jet clean the cooling coils in winter season / December in service years (to quote separately whenever need / upon request).
2.1.4	Check and clean condensate drain pipe and floor drains to ensure pan, drain pipe and floor drains to ensure no choking and flooding.
2.1.5	Submission of a written report with photo record incorporating the above observations.

### **(B2) - Fan Coil Units at common areas**

#### **Monthly Services**

1.1.1	Clean up the air filter.
1.1.2	Check the function order of rotating parts (bearings, bushes etc) of Fan Coil Unit and add grease if necessary.
1.1.3	Check and clean condensate drain pan, drain pipes to ensure no choking and flooding.
1.1.4	Check any abnormal noise from fan blowers and motors.
1.1.5	Check the associated electric and temperature control system.
1.1.6	Submit monthly maintenance report.

### **Annual Services**

2.1.1	Check fan motors and controls, wiring insulation, cable terminals, and cables.
2.1.2	Check sign of leak and maintain the normal operation of 2-way control valve and manual valves.
2.1.3	Check and clean condensate drain pipe and floor drains to ensure pan, drain pipe and floor drains to ensure no choking and flooding.
2.1.4	Submission of a written report with photo record incorporating the above observations.
2.1.5	Report on general condition of the unit and suggest any major repair or unit replacement so may be required.

### **(B3) - Ventilation Fans and Jet Fans**

#### **Monthly Services**

1.1.1	Check proper operation of the fan motor and remove obstruction to ensure clear air flow path if any.
1.1.2	Check for abnormal running noise and vibration.
1.1.3	Lubricate bearing and moving parts.
1.1.4	Check fan belt condition and tension, if any, adjust as necessary.
1.1.5	Measure and record major operational parameters, including current, air flow rate, etc.
1.1.6	Performance insulation test on the fan motor and report any irregularity.
1.1.7	Check proper operation of the jet fans in B/F Carpark (22 nos. JF-BF-01 to JF-BF-22) and remove obstruction to ensure clear air flow path.

### **Annual Services**

2.1.1	Check the electrical starter and associated electrical equipment for good working conditions.
2.1.2	Inspect metal components for corrosion and as found necessary, wire brush to clean metal and paint with anti-corrosion paint.

### **(B4) – Annual Inspection of Ventilating System**

Accordance with the Regulation 5A of the Building (Ventilating Systems) Regulations, Cap. 123J, Laws of Hong Kong,

#### **Annual Services**

1.1.1	Provide qualified labour to perform inspection to all fire dampers and smoke dampers in accordance with the schedule of maintenance services for Air Conditioning System and Ventilation System.
1.1.2	Clean the fire and smoke damper plates and chambers.
1.1.3	Check and release the damper fusible link for functional test and reinstate afterwards.



1.1.4	Inspect metal components for corrosion and as found necessary, wire brush to clean metal and paint with an approved anti-corrosion paint.
1.1.5	Check and lubricate the moving parts and brush where necessary.
1.1.6	Replace FSD approved fusible link if failure, aged or was found not in compliance to Fire Service Regulation / Requirements; (fusible link to be provided by employer).
1.1.7	Submit inspection report, photo records and issue Annual Inspection Certificate (Ventilation System) for FSD approval.

#### **(B5) - Ventilation / Air Conditioning (V/AC) Control System**

Ventilation/air conditioning control system is classified as fire service installation. The relevant specification is detailed in Section 5.25 of current Code of Practice for Minimum Fire Service Installations and Equipment.

#### **Annual Services**

2.1.1	Carry out joint inspection and testing with building nominated Fire Service maintenance vendor for the VAC system.
2.1.2	Submit inspection report and photo records for management agent retention.
2.1.3	Issue inspection certificate FS251 for VAC control system for FSD and the management retention.

**Section C - Control & Electrical System**

**(C1) - Motor Control Centre (MCC) and Local Motor Control Panel (LMCP)**

**Monthly Services**

1.1.1	Check, Inspect and maintain the normal operation of motor control circuit, control devices, measuring meters and protective devices.
1.1.2	Check all indicated bulb. Rectify if necessary.
1.1.3	Visually check all electrical components.
1.1.4	Clean away the dirt on the panel internal and surface.
1.1.5	Check that routine operation of electrical apparatus is satisfactory.

## SECTION SIX: EQUIPMENT SCHEDULE

The Vendor shall also be responsible for performing the duties as stipulated in this Agreement for the equipment which quantities available in the building exceed those state in the schedule as herein below:

Equipment	Manufacturer	Model	Location	Quantity
Water-Side System				
Fresh Water Cooling Tower (CT-7F-01 to 02)	“Ryowo”	FWS-700-22-AS/E (Heat Rejection 3750kW)	R/F	2 sets
Fresh Water Cooling Tower (CT-7F-03)	“Ryowo”	FWS-94-7.5-AS/E (Heat Rejection 660kW)	R/F	1 set
Filtration System - Cooling Tower (For SS-7F-01 to 02)	“PEP”	ICS2-TCP-150-GPM	R/F	2 sets
Filtration System — Cooling Tower (For SS-7F-03)	“PEP”	ICS2-TCP-50-GPM	R/F	1 set
Water cooled chillers — Centrifugal type Style G (WCC-BF-01 & 02)	“York”	YK16KSH95CSG R134A (Cooling Capacity 3000 kW)	B/F Chiller Plant Room	2 Sets
Water cooled chillers — Screw type Style G (WCC-BF-03)	“York”	YEWS170HA50E R134A (Cooling Capacity 528 kW)	B/F Chiller Plant Room	1 set
Chilled water pump (CHWP-BF-01 to 03)	“AURORA” Horizontal Split Casing Pump	Model: 8x10x15B Flow: 142 l/s Type: 2BF-280S-4	B/F Chiller Plant Room	3 Sets
Chilled water pump (CHWP-BF-04 to 05)	“AURORA” Horizontal Split Casing Pump	Model: 3X4X14 Flow: 25.2 l/s Type: 2DF-180M-4	B/F Chiller Plant Room	2 Sets

Equipment	Manufacturer	Model	Location	Quantity
Water-Side System				
Condensing Water Pump (CWP-BF-01 to 03)	“AURORA” Horizontal Split Casing Centrifugal Pump	Model: 8x10x15B Flow: 177.5 l/s Head: 30m Power: 75kW	B/F Chiller Plant Room	3 Sets
Condensing Water Pump (CWP-BF-04)	“AURORA” Horizontal Split Casing Centrifugal Pump	Model: 4x15 Flow: 30.4 l/s Head: 30m Power: 18.5kW	B/F Chiller Plant Room	1 Set
Makeup Water Pump (MWP-BF-01 to 02)	“Drakos Polemis” Vertical Multi-Stage	Model: MS-E50v5 Flow: 5 l/s Head: 50m Power: 50kW	B/F Chiller Plant Room	2 Sets
Booster Water Pump (BP-7F-01 to 02)	“AURORA” Vertical Multi-Stage	Model: SV 32-60 Flow: 5 l/s Head: 25m Power: 1.5kW	7/F Cooling Tower area	2 Sets
Pressure Vessel (BF-7F-01 to 02)	“CIMM”	Model: AFE CE 500	7/F Cooling Tower area	2 Sets



Equipment	Manufacturer	Model	Location	Quantity
Air-Side System				
Primary Air Unit	AAF International	PAU-MF-01 to 02 PAU-1F-01 PAU-2F-01 PAU-7F-01 to 03	Various Common Areas in Site	7 Sets
Air Handling Unit		AHU-MF-01 to 07 Model: ESD1317 Model: ESD0913 Model: ESD0709 Model: ESD0911  AHU-1F-01 to 02 Model: ESD0710  AHU-2F-01 Model: ESD0607  AHU-3F-01 to 05 Model: ESD0709 Model: ESD0710 Model: ESD1215 Model: ESD0608  AHU-4F-01 Model: ESD0816	Various Locations in Site	16 Sets
Fan Coil Unit	YORK	FCU04 (YGFC04CC3U)	Various Locations in Site	79 nos.
		FCU06 (YGFC06CC3U)		47 nos.
		FCU08 (YGFC08CC3U)		275 nos.
		FCU-10 (YGFC10CC3U)		123 nos.



Equipment	Manufacturer	Model	Location	Quantity
Air-Side System				
Ventilation Fans	-	AEQ 350-4A/ DKN 400-6/ WMF 710PF-4/ AEQ 400-6A/ RS315L, M/ WMF 500PF-4 ENK 250-4/ DKH 500-4/ ENK 280-4/ ENK 450-4/ DKN 315-4/ ENK 400-4/ RS 160L/ RS 200L/ WMF 450PF-4 RS 315M, L/ ENK 225-4/ TYEB 450-05/ TYZ 315-05	Various Locations in Site	155 nos.
Fire Damper	Local Made	-		Approx. 500 nos.

Equipment	Manufacturer	Model	Location	Quantity
Control & Electrical Systems				
Motor Control Centre (MCC)	“Ready Electrical”	-	Various Locations in Site	5 sets
Local Motor Control Panel (LMCP)	“Ready Electrical”	-	Various Locations in Site	Approx. 26 sets