



學校檔號：HYCS/2526/04/WIFI

敬啟者：

**招 標**

**承投提供「2026-2028 提供全校無線網絡(WIFI)服務招標」投標書**

現誠邀 貴機構承投提供上述投標的服務(投標資料同步在本校網頁 <http://www.hycs.edu.hk> 刊登)。投標表格必須一式兩份，置於密封信封內，信封面清楚註明：

**承投「提供 2026-2028 提供全校無線網絡(WIFI)服務招標」投標書**

並於截止日期 2025 年 12 月 1 日(星期 一) 中午十二 時前送達九龍 巴富街六號 合一堂學校 校長收。逾期的投標書，概不受理。

貴機構的投標書有效期為 90 天，由上述截標日期起計。如在有效期內仍未接獲通知，則是次投標可視作落選論。另外亦請注意，貴機構必須填妥投標表格第 II 部分及維護國家安全、防止賄賂條例、防止串通行為及利益衝突申報，否則概不受理。

倘 貴機構未能或不擬投標，亦煩請盡快填妥隨本函附上的「不擬投標通知書」再寄回上述地址，並列明不擬投標的原因。

學校邀請招標承投所需物品時，會以「**整批**」形式考慮接受供應商的投標。

如有查詢或視察場地(視察場地指定日期與時間：2025 年 11 月 17 日下午 3 時半)，請聯絡 姜佩娟 行政主任 (電話：2711 1013、傳真：2714 2465)。專此奉達，敬祝  
台安！

此致  
執事先生

合一堂學校校長



謹啟

(吳麗霞)

2025年11月3日

- 附件：1. 有關維護國家安全、防止賄賂條例及利益衝突申報  
2. 承投服務投標表格  
3. 投標表格及價格表  
4. 場地視察回條  
5. 回郵信封封面  
6. 不擬投標通知書



## 承投提供「2026-2028 提供全校無線網絡(WIFI)服務招標」投標書

學校名稱及地址：九龍 巴富街六號 合一堂學校

學校檔號：HYCS/2526/04/WIFI

截止日期/時間：2025 年 12 月 1 日 中午 12 時正

### 利益衝突申報及資料保密

本人已細閱學校就利益衝突方面所制定的政策，並明白其內容。是次參與投標的商戶與本人及直系親屬並沒有業務往來或任何直接或間接的財務利益。並承諾不會在未經學校授權下披露有關報價的資料。

### 第 I 部分

下方簽署人願意按照所列的價格（其他費用全免），以及校方提供的要求，提供夾附的投標附表上所列的全部或部分項目。而完成服務及/或服務提供日期將於正式合約上註明。下方簽署人知悉，所有未經特別註明的項目，均須按照該細則的規定提供服務；投標書由上述截止日期起計 90 天內仍屬有效，校方不一定採納索價最低的投標書或任何一份標書，並有權在投標書有效期內，採納某份投標書的全部或部分內容。下方簽署人亦保證其機構的商業登記、保險及僱員補償保險均屬有效，而其機構所有供應的各個項目並無侵犯任何專利權。

### 第 II 部分

#### 再行確定投標書的有效期

有關本投標書單的第 I 部分，現再確定本機構的投標書有效期由 2025 年 12 月 1 日起為期 90 天。下方簽署人亦同意，投標書的有效期一經再行確定，其機構就該事項註明於投標表格內的預印條文，即不再適用。

簽署人：\_\_\_\_\_ 職銜：\_\_\_\_\_（請註明職位）

簽署人姓名（請以正楷填寫）：\_\_\_\_\_

上方簽署人已獲授權，代表：\_\_\_\_\_（機構名稱）簽署

投標書，該機構在香港註冊的辦事處地址為：\_\_\_\_\_

電話號碼：\_\_\_\_\_

傳真號碼：\_\_\_\_\_

電子郵件地址：\_\_\_\_\_

商業登記號碼：\_\_\_\_\_

日期：20\_\_年\_\_月\_\_日

(公司蓋印)

## 投標附表

檔案編號	: HYCS/2526/04/WIFI
供應物品 / 服務名稱	: 提供 2026-2028 提供全校無線網絡(WIFI)服務招標投標書
服務學校	: 合一堂學校
合約期	: 2026 年 9 月 1 日至 2028 年 8 月 31 日 (24 個月)

### 投標要求

1. 提供投標書機構須清楚列明所有費用，連同商業登記證副本各一式兩份，放置信封內封密，並於信封面註明「**提供 2026-2028 提供全校無線網絡(WIFI)服務招標投標書**」(附件一)，相關機構不應將身份披露在投標書信封面上。
2. 截標日期為 2025 年 12 月 1 日 (星期一) 中午 12 時正。相關機構應在截止日期前，以掛號信形式寄回，或由專人交回九龍巴富街六號合一堂學校校長收。逾期則恕不受理。
3. 投標書項目不設參考價目，本校不一定接納最低價格的投標書，並有權與任何提供投標書者商議批出合約的條款。
4. 投標結果將於截標日期後 90 日內書面通知提供投標書機構。
5. 提供投標書機構未能履行合約提供服務時須負責賠償學校從另處購買服務的差價。
6. 提供投標書機構明白，如收到學校訂單未能供應書面報價上所列物料或服務，提供投標書機構須負責賠償學校從另處採購上述物料或服務的差價。
7. 提供投標書機構不可藉著提供活動之便，向學校及家長推銷其他服務。
8. 提升職業安全及健康的保障：為保障非技術員工的職業安全及健康，非技術員工合約如涉及非技術員工在戶外、沒有空調的室內工作環境及／或熱源附近執行職務，投標者在競投政府服務合約時必須提交“**預防中暑工作計劃**”以符合投標的必要要求。在政府採購制度下的扣分制適用範圍亦擴大至涵蓋沒有遵從“**預防中暑工作計劃**”行事的情況，以確保有關工作計劃得以有效實施。此外，投標者過去三年內在扣分制下的扣分記錄亦納入為標書評分制度下必須採用的評審準則。

### 服務要求

1. 承辦商／承辦人明白，學校為配合政府宣布調整《學校/幼稚園/幼稚園暨幼兒中心/幼兒中心預防傳染病指引》作出相應安排，並以教育局的最新規定指引措施執行。
2. 根據香港警務處推行的《性罪行定罪紀錄查核》機制：承辦商／承辦人必須承諾委派到校之僱員已申請《性罪行定罪紀錄》並獲得及持有效之查核證

明，承辦商／承辦人已查核及確認有關僱員沒有性罪行定罪紀錄。如承辦商／承辦人虛報或隱瞞有關資料，一經查證學校有權立即終止該合約，而承辦商／承辦人須為學校因此而蒙受的任何損失或損害負上法律責任。

3. 承辦商／承辦人明白，如收到學校訂單未能供應投標書上所列物料或服務，承辦商／承辦人須負責賠償學校從另處採購上述物料或服務的差價。
4. 承辦商須為到校提供服務的所有員工購買有效的勞工保險及第三者意外保險。
5. 承辦商職員到校進行工作時需穿著制服或配戴職員證。
6. 承辦商存放於校內之其他物品，如有任何遺失或損毀，校方概不負責，但若因承辦商員工過失，而做成校方資產的任何遺失或損毀，須照價賠償或重購。
7. 因安全理由，本校不會借出任何工具，所有工具要由承辦商提供。
8. 承辦商因上所列物料或服務供應而引起任何事故導致校方被人投訴，興起訴訟，要求作出任何形式之賠償，承辦人應承擔上述責任並賠償校方為此所受到之全部損失及所付之全部費用。
9. 承辦商若未能給予校方滿意的服務水平或未能履行應負責任，校方有權以口頭或書面形式通知即時終止合約。承辦商除不會獲得任何賠償外，還需要負責本校因終止合約所導致之一切損失。
10. 合約期滿前最少三個月，校方將依照教育局指示再行投標，屆時承辦人可參與投標。但獲選與否，並非純以價低者得為準，各投標機構所列條件及其他因素在考慮之列。
11. 服務機構必須提供熱線電話，以便檢討及跟進所提供的服務質素，並於合約期間提供技術支援。
12. 所提供的無線寬頻上網(WIFI)服務及 AP 須能應付每個課室及特別室約 40 部電子器材同時無線上網。如未能符合要求，請列明能提供多少部電子器材同時無線上網。
13. 本校將根據投標機構所提供服務質素、支援、價錢及過去與本校合作表現(如有)一併考慮是否接納該機構之服務。
14. 本校沒有升降機設備，承辦商需要安排員工透過樓梯把物資送往 1 樓或以上樓層。
15. 其他服務要求請見附件六。

16. 服務機構需提供提供以下各項服務價格：(請一式兩份回覆)

2026年9月1日至2028年8月31日(共24個月)

月費\$\_\_\_\_\_，24個月全期費用\$\_\_\_\_\_

## 其他

1. 提供投標書機構需根據以上內容及要求安排有關服務。
2. 遵守已訂下之價目，未經雙方同意前不得在服務期內隨意加價、轉讓服務權或終止服務。
3. 對於提供投標書機構的僱員受傷或死亡，學校無須因此或就此負上任何法律責任，除非該等傷亡事件是由學校或其僱員疏忽引致。學校及其僱員若就該等傷亡事件遭人提出根據本條款無須負責的任何法律行動、訴訟、索償、要求、費用或開支，提供投標書機構須作彌補。
4. 提供投標書機構必須就前述的一切賠償或補償的法律責任，為所有僱員及其他可能受僱進行任何與本合約有關的工作人士，向根據《保險公司條例》(第41章)獲授權並具良好信譽的保險公司投保，投保費用自付。提供投標書機構並須在其僱用的任何人員履行有關服務的整段時間內，保持保單有效。
5. 如提供投標書本人、其公司的合夥人或股東為校方僱員或僱員之親屬，提供投標書機構應明確申報。
6. 供投標書機構獲選後將獲邀簽署合約，承辦合約不得轉讓予他人或委託別人代為經營。
7. 評審分包括服務及價格評審，各佔的比重如下：品質評審比重：40% (而品質評審未獲過半分數者，則為不合格，將被取消資格)及價格評審比重：60%。

下方簽署人願意按照正式訂明的日期及所列的價格，以及校方所列出的細則，提供投標書附表上所列項目的服務。校方不一定採納索價最低的投標書或任何一份投標書，並有權在投標書的有效期內，採納某份投標書的全部或部分內容。下方簽署人亦保證其公司的商業登記及僱員補償保險均屬有效，而其公司所提供的服務不會損壞學校的校舍。

本機構／本人明白，如收到 貴校採用服務後未能提供投標書上所列事項之服務，須負責賠償學校從另處採購上述服務項目之支出。

承投公司：\_\_\_\_\_

承投公司負責人姓名及職銜：\_\_\_\_\_

簽署：\_\_\_\_\_

日期：\_\_\_\_\_

(公司蓋印)

## 場地視察回條

學校名稱：合一堂學校

檔案編號：HYCS/2526/04/WIFI

### 【承投項目「2026-2028 提供全校無線網絡(WIFI)服務招標」場地視察】

敬啟者：

為方便 貴公司可更了解有關本校服務之場地及要求，特別安排是次活動，有關資料如下：

地點：合一堂學校（地址：九龍巴富街六號）


日期：2025 年 11 月 17 日（星期一）

時間：下午 3 時 30 分

活動詳情：了解是次報價的場地。

備註：需於 2025 年 11 月 12 日（星期三）下午四時或之前傳真回本校申請（傳真號碼：2714 2465），否則不能參加是次場地視察，如有任何問題可致電與姜佩娟行政主任查詢（電話號碼：2711 1013）。

此致  
貴公司

校長：  謹啟  
(吳麗霞)

日期：2025 年 11 月 3 日

### 【承投「2026-2028 提供全校無線網絡(WIFI)服務招標」場地視察】

敬覆者：本公司/機構知悉是次活動詳情。

當天本公司將派代表依時出席，共\_\_\_\_\_人出席。

此覆

合一堂學校吳校長

(公司蓋印)

負責人姓名： \_\_\_\_\_

負責人簽署： \_\_\_\_\_

公司名稱： \_\_\_\_\_

聯絡電話： \_\_\_\_\_

日期： \_\_\_\_\_

## 合一堂學校

### 承投提供 2026-2028 提供全校無線網絡(WIFI)服務招標備忘

- (一) 截止日期為 2025 年 12 月 1 日(星期一)，中午十二時正。
- (二) 提交投標書必須填具一式兩份，並放置信封以密函形式一併寄回。
- (三) 提交投標書者必須採用本校所提供之信封封面（附件一）。
- (四) 提交投標書者切勿將機構名稱寫在投標書封面。
- (五) 提交投標書者若不擬投標，煩請盡快填妥「不擬投標通知書」(附件二)再寄回本校，並列明不擬投標的原因。
- (六) 提交投標書者將獲書面通知審核報價書結果。
- (七) 如有疑問請聯絡姜佩娟行政主任（電話：2711 1013、傳真：2714 2465）。

九 龍  
巴富街六號  
合一堂學校  
校長 收

**提供 2026-2028 提供全校無線網絡(WIFI)服務招標**

投標書編號：HYCS/2526/04/WIFI  
截標日期：1/12/2025 中午 12 時正

承投：2026-2028 提供全校無線網絡(WIFI)服務招標  
不擬投標通知書

如 貴公司未能提供 2026-2028 提供全校無線網絡(WIFI)服務招標，請填妥此表格後，傳真至 2714 2465 或寄回九龍巴富街六號合一堂學校收

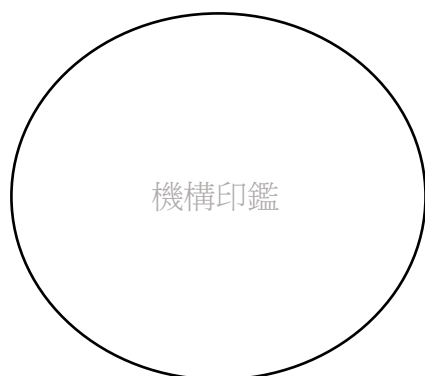
致：合一堂學校

投標書：提供 2026-2028 提供全校無線網絡(WIFI)服務招標

截標日期及時間：2025 年 12 月 1 日(星期一)正午十二時正

有關 貴校邀請本公司承投以上服務，現因以下理由未能報價，特此回覆。  
(請在適當的□內加上✓)

- 未能提供貴校所示服務/產品
- 未能達到貴校所示要求或規格
- 未能於指定日期內完成
- 未能於截止限期內遞交投標書
- 其他(請註明)\_\_\_\_\_



簽 署：\_\_\_\_\_

簽署人姓名：\_\_\_\_\_

公 司：\_\_\_\_\_

日 期：\_\_\_\_\_

## PART VI –An example on Wi-Fi REQUIREMENTS

### SPECIFICATION

附件六

#### 1. Introduction

The Contractor is invited to

- Build up a Wi-Fi network in **HOP YAT CHURCH SCHOOL** (The School); and
- Provide and maintain a Wi-Fi service through subscription mode.

#### 2. Background

The School will **enhance / top up** the IT infrastructure so as to set up the necessary Wi-Fi environment in the school premises (full Wi-Fi coverage in ALL classrooms) for supporting e-learning in class. Regarding the enhancement of Wi-Fi infrastructure, we would like to hire a contractor to design, build, operate and maintain the whole infrastructure; and to pay for the service by subscription thereafter, through a **subscription** model.

#### 3. User Requirements

This section specifies the user requirements of the School of the Wi-Fi network. The Contractor shall be capable of supporting the requirements set out below.

##### 3.1 Standard Provision

- **Wi-Fi Internet Connectivity** – use Wi-Fi 5 network or above in a standard classroom. The minimum number of classrooms to be covered shall be at least equal to the number of approved classes for the 2026/27 and 2027/28 school year, that is **24** classrooms.
- **Number of Concurrent Connection** – commensurate with the maximum number of students, say **40**, in a class with at least **2.5Mbps** upload / download bandwidth per connection
- **Number of classrooms using Wi-Fi concurrently.**
- **Authentication Method** – use 802.1x standard based authentication and Hong Kong Education City single sign-on services.

- **Session Control** –Hong Kong Education City authentication service can support one device or multiple devices to connect based on user group (student, teachers).
- **Internet Content Filtering Service** – Cloud based Internet Content filtering profile commonly adopted by most schools with ability to create black / White list filters and managed by vendors and school.
- **Existing Network Facilities** – not rely on any existing network facilities and cabling of the School, nor interfere with the existing Wi-Fi network of the School. The Wi-Fi network shall be physically separated from the school network
- **Broadband Network** – use separate broadband for the Wi-Fi service. State otherwise if the existing broadband can be utilized for the service.
- **Managed Service** – operate the Wi-Fi and its networking devices using managed service model, provide end-to-end service with single point of contact including configuration, provisioning of service, proactive monitoring, maintenance and regular reporting.
- **Service Level Agreement** – ensure at least 99.7% availability of the Wi-Fi service, support four-hour response time and four-hour service recovery with active monitoring, helpdesk support with support hours from Mon to Sat 8:00 am to 6:00 pm, and provide monthly monitoring reports for the School.
- **Contract End Arrangement** – All provisions of trunks, conduits, cables, LAN ports and power points shall be considered as fixture of the School and shall become the property of the School. The Contractor shall remove or keep those provisions according to the instruction of the School. Contractor can remove the network equipment such as switch, routers, and access points.

### 3.2 Add-on Service (to be aligned with PART VIb)

- **Wi-Fi coverage** – to include special rooms and open areas
- **Broadband Service** – provide at least 1Gbps Internet connection at school and allowing upgrade to 2Gbps
- **Authentication Method** – Authentication method shall includes WPA2 Enterprise, WPA3, OAuth 2.0 and well as MAC address filtering and user account system being used by school, etc.
- **Session Control** – Guest Landing page shall support session control where access time can be changed by school

- **WLAN system access control** – specific request on MAC address filtering.
- **MAC Address Monitoring** – The lists of filtering and filtered MAC addresses are to be monitored by **the Contractor**.
- **Internet Content Filtering Service** – Cloud based Internet Content filtering profile commonly adopted by most schools with ability to create black / White list filters and managed by vendors and school.
- **Integration of networks** – system integration with existing network with secure design.
- **Internet addresses subscription & configuration** – for Internet access to school internal resources, via system integration
- **Monitoring of Wi-Fi network** – specific request on monitoring of Wi-Fi network by the Contractor and the School.
- **Redundancy** – increase the availability of the Wi-Fi service.
- **Support hours** – extended support hours and/or reduced time for recovery, the SLA must be 4 hours response and 4 hours onsite
- **Contract End Arrangement** – Other arrangements

### 3.3. Deliverables

3.3.1 The Contractor is required to provide the following deliverables for the Wi-Fi network design:

- Master Activity Plan
- Network Configuration Report and Network Diagram
- Network Test Plan and Network Test Result Report
- Operation Manual for End User
- User Acceptance Test Plan
- Exit Plan

3.3.2 The Contractor is required to provide the monthly monitoring report with the following items:

- Network Health Report
- Network Usage Report
- Reporting of security incidents
- Reporting on trend and statistics of incident and their analysis
- Reporting of the failure rate for all equipment with detailed fault analysis

- Problem log and incident log for critical failure of the network

- Statistical report on the type and no. of calls
- Summary of the outstanding enquiry for the month-to-date

#### **4. Technical Specification (Standard Provision)**

##### **4.1 Wi-Fi Network**

4.1.1 The Wireless LAN (WLAN) System of the Wi-Fi network shall support simultaneous dual-operation-mode that is FAT Access Point (AP) and Thin Access Points are both supported together with Cloud-based WLAN Controller in Managed model. The Cloud-based WLAN Controller shall be capable of fully centralized provisioning, configuration and monitoring all APs functionalities; a backup of the Cloud-based WLAN Controller shall be available.

4.1.2 The thin client WLAN Access Point (AP) shall be a high performance wireless network access device, which shall be connected with the Power over Ethernet (PoE) Access Switches via Structured Cabling System.

4.1.3 The WLAN APs shall be compatible Wi-Fi 5 or above with IEEE 802.11a/b/g/n/ac wave 2 standard or above, support dual band of 2x2:2 in 2.4GHz and 2x2: 2 in 5GHz as well as OFDMA, MU-MIMO and Internal antennas.

4.1.4 The Contractor shall design the WLAN System to provide the coverage for the required wireless coverage place. The received signal strength measurement from the Wi-Fi Service at the Wi-Fi client device (such as tablet PC or notebook computer) is no worse than -68 dBm. The Contractor shall provide certificate or test report to illustrate that the Wi-Fi client device for testing satisfies the power emission requirement.

4.1.5 The WLAN AP shall support PoE, WPA2, WPA3, IEEE 802.1x and certificate authentication.

4.1.6 The WLAN System shall support automatic channel selection, protocol filtering, multicast/broadcast storm filtering and load balancing.

4.1.7 The WLAN system shall allow single or multiple devices per user account to be authenticated using 802.1x and Hong Kong Education City single sign-on service.

4.1.8 Each WLAN AP shall be able to support at least concurrent **40** users connecting to the network simultaneously. In no circumstance shall the speed of data transmission symmetrically fall below the data rate requirement at any place or any corner or any highly congested area within the areas being covered. In case the transmission speed is below the said data rates, the Contractor shall be responsible for all remedial measures to rectify or configure fine-tuning of antenna or even increase the quantity of the WLAN AP at Contractor's own costs in order to meet the data rate requirement as mentioned in the Specification. A complete set of catalogues with brand and model shall be submitted and highlighted for reference. The catalogues shall show all the features and technical specifications of the products and systems.

4.1.9 The system shall provide bandwidth control per connection.

4.1.10 The WLAN shall allow different authentications by using Service Set Identifiers (SSIDs).

4.1.11 Individual APs shall be allowed to be assigned by more than one SSID and up-to eight SSIDs.

4.1.12 Antennas of APs shall be capable of detecting user locations in real time for direction switching while devices in motion, beam forming.

4.1.13 The DHCP server shall support at least 30 queries/sec.

4.1.14 The WLAN system shall suspend the session of the user once the session control is expired and the suspension time shall be configured by the school.

4.1.15 The Contractor shall in provision of the service comply with non-interference requirements of and shall not cause interference prohibited under the Telecommunication Ordinance (Cap 106) or any other

laws or regulation of Hong Kong.

4.1.16 The WLAN System shall provide termination of idle sessions and control of the duration features.

4.1.17 The WLAN System shall support client roaming across Access Points.

4.1.18 The WLAN system shall cover all areas specified under this tender.

4.1.19 The quotation shall include the cost to provide sufficient quantity and its cabling work required, including but not limited to supply and install the Fibre optics, Cat 6 cable, Conduit, cable patch panel, cable faceplate, Cable patch cord.

4.1.20 The Contractor shall provide complete set of WLAN Systems which consist of Wireless Access Point, Connection Cable, Authentication System, Wireless LAN Controller, PoE Switch, horizontal UTP Cat 6 cable/OM3 Fiber, patch cable UTP Cat 6 / OM3 Fiber Optics, any required license and all associated accessories.

4.1.21 All access points (AP) shall be certified by OFCA and copy of certificates issued by OFCA shall be attached to the proposals.

4.1.22 The Contractor shall ensure that there is no interference between WLAN Access Points due to limited non-overlapping channels assignment when the WLAN AP is installed. The Contractor shall be responsible at his own costs for providing solution to eliminate the interferences including but not limited to reassignment of the non-overlapping channels, adding extra APs with lower transmission power and/or replacement of the WLAN AP.

4.1.23 The WLAN System shall support Web GUI management.

4.1.24 FTP service shall not be allowed in the Wi-Fi network (to avoid exchanging credential and files in plain text without any encryption).

4.1.25 The WLAN System shall support IPV6 addressing method.

## **4.2 Core Switch**

4.2.1 The Core Switch would be responsible for connecting all PoE access switches in typical floors for WLAN AP.

4.2.2 The Core Switch shall be capable of providing DHCP Services for IP addresses distribution for mobile devices connecting to the network, and the required bandwidth, QoS, and policy-based routing to carry all sorts of information including video, voice, data, image, etc.

4.2.3 Each Core Switch shall provide a Gigabit Ethernet connection to each PoE Access Switch in typical floors.

4.2.4 The Core Switch shall support Layer 2 and Layer 3 switching and capable of providing the wired speed performance.

4.2.5 The Core Switch shall support basic IP unicast routing protocols, Static route, Routing Information Protocol (RIPv1, RIPv2), inter VLAN routing.

4.2.6 The Core Switch shall support Internet Group Management Protocol (IGMP) snooping and multicast and unicast storm control, Spanning-Tree Protocol.

4.2.7 The Core Switch shall support WebGUI Management for contractor's support, Access Control Lists (ACLs), DHCP Interface and SNMP.

4.2.8 The Core Switch shall support VLANs including support for IEEE 802.1Q and IEEE 802.1p.

### **4.3 PoE Access Switch**

4.3.1 The Access Switches shall be deployed to provide high performance interconnectivity between the Core Switches and the WLAN APs on typical floor and support Cloud-based management

4.3.2 The Access Switch shall consist of 8/12/24/48 x 10/100/1000Base-T Ethernet ports, with minimum of 1 x 1000Base-T / 1000Base-SX SFP Gigabit Ethernet uplink ports connected with the Core Switch.

4.3.3 The Access Switch shall be used for connecting the WLAN APs. The Contractor shall determine the Maximum power loading of the devices to be connected with the PoE Access Switches. The Contractor shall provide additional PoE Access Switch(es) if the total power loading summed up from the PoE devices exceeds the maximum power loading capacity of the PoE Access Switch.

4.3.4 The Access Switches shall support VLAN configuration.

4.3.5 The Access Switches shall be at wired speed.

4.3.6 The Access Switches shall be provided sufficient port density to meet all the required links.

4.3.7 The Access Switches shall support PoE and shall conform to IEEE 802.af / IEEE 802.3af standard, which delivers power over single copper UTP cable for WLAN AP.

4.3.8 The Access Switches shall support Internet Group Management Protocol (IGMP) snooping and multicast and unicast storm control, IEEE 802.1D Spanning-Tree Protocol.

4.3.9 The Access Switches shall support Virtual local area network (VLANs) including support for IEEE 802.1Q and IEEE 802.1p.

4.3.10 The Access Switches shall support WebGUI Management, Access Control Lists (ACLs), DHCP Relay and SNMP.

## **4.4 Firewall**

4.4.1 The performance of the Firewall shall not be degraded with 100% Internet bandwidth utilization.

4.4.2 Network Address Translation (NAT) is required.

4.4.3 Access Control Policy, Content Filtering and Anti-Malware services are required.

4.4.4 The configuration settings of the appliance shall be allowed to export to files for backup and restore for rapid recovery and shall control all incoming and outgoing Internet traffic, serving as the sole entry and exit point between the Internet and the WLANs in all locations.

4.4.5 The configuration settings of the appliance shall support blocking specific network ports, including ports of Transmission Control Protocol (TCP) and User Datagram Protocol (UDP). Blocking denial of service (DoS) attacks and malformed packet attacks shall also be configured.

4.4.6 The firewall policy should be applied to control network traffic such that public users should be prohibited to access the internal network segments of the School.

## **4.5 Service Requirements**

4.5.1 The Contractor shall be responsible for the total project management and shall assign a person to act as the single contact point to the School regarding all related activities of the contract. This single contact point cannot be transferred to a sub-contractor unless explicitly agreed by the School. Contractor should formally inform the School in writing if there is a change of contact point.

4.5.2 The Contractor shall provide rack/cabinet or use existing school rack if there is available rack space. All switches/firewall shall be properly installed into wall mounted cabinet or rack.

4.5.3 Cables shall be labelled with connected port and its device id.

4.5.4 All the equipment shall be labelled with an identifiable id.

4.5.5 The placement of cables, cabinets, racks and appliances shall be shown on the network diagram.

4.5.6 Switches and/or other appliances shall be properly installed into cabinet/rack with appropriate ventilation.

4.5.7 13A power cord(s) shall be bundled with appliance(s).

4.5.8 Cable shall be properly set up onto appropriate cable management guide.

4.5.9 Contractor should make sure that the actual environment is suitable for the installation and operation of equipment with School agreement in advance, and make necessary suggestions, if any.

#### **4.6 Service Level Requirements**

4.6.1 The Contractor shall provide incident/problem report to the School within 5 working days after each incident and the resolution taken.

4.6.2 The Contractor shall derive mechanism, including forms and reference tables for measuring and recording the Service Level Measures, to ease the administration and monitoring by the School.

4.6.3 Advance notice by at least 2 weeks shall be given to the School prior to all scheduled maintenance. At most 4 scheduled maintenances per year are excluded from the calculation of Service Levels. No more than 1 hour service interruption or an agreed time slot is accepted for each scheduled maintenance.

4.6.4 Service Level, expressed in percentage, is the ratio of actual available time to the scheduled available time for the Wi-Fi network of the School and is calculated according to the following formula:

Service Availability Level = (Schedule Uptime within the month–  
Unscheduled Downtime within the month) / Scheduled Uptime within the

month, where

Scheduled Uptime: The duration, in unit of minutes, for the Wi-Fi network of the School is scheduled to be available for the month. The duration will exclude the scheduled downtime, which is defined as duration agreed between the School and the Contractor during which the service may be deliberately made unavailable to users.

Unscheduled Downtime: The amount of time, in unit of minute that the services are unavailable due to equipment failure or other reasons under the responsibility of the Contractor.

#### **4.7 Service Level Rebates**

4.7.1 The Service Rebates to the School operate as liquidated damages for the performance fallen short of the target service levels over a period of one month. The service measures stipulated in 4.6 will be used to determine the Service Rebates in Service Availability (S1) and Service Resumption Time (S2).

4.7.2 The application of the Service Level Rebates adjustment to the monthly charge will commence with effective from the acceptance of the reliability test.

4.7.3 For each month, the Service Rebates for different service measures (S1, S2) will be calculated as below if the Contractor cannot meet the target Service Levels for the Wi-Fi network of the School under the availability agreed:

$\text{Failure Hour} \times [(\text{Yearly Subscription Fees}) / (365 \times 24)] \times 2$ , where

Failure Hour: The unscheduled downtime or the time to resume the network due to the failure of hardware or software which is provided by the Contractor. Failure Hour is calculated in the increment of 0.5 Hour.

4.7.4 The Service Rebates of the Wi-Fi network of the School, if any, will be paid by crediting the invoice of the following month.

#### **4.8 Helpdesk Service**

4.8.1 The Helpdesk Service shall maintain dedicated hotline, including phone, email and fax, for enquiries and complaints.

4.8.2 The Helpdesk Service shall answer enquiries and complaints originated from the School concerning the Service.

4.8.3 The Helpdesk Service shall operate from Mon to Sat 8:00 am to 6:00 pm.

4.8.4 The Helpdesk Service shall maintain call logs on enquiries and complaints. The information shall be included but not be limited to date, time, description of issues, contact information, and follow-up actions. The Contractor shall observe and comply with Personal Data (Privacy) Ordinance in handling all information relating to these enquiries and complaints.

4.8.5 The Contractor shall provide the following information concerning the Helpdesk service related to the implementation of the Service:

- Detailed information of the helpdesk office, such as address, phone number, fax number; and
- Facilities, computer systems and equipment provided in the helpdesk office, such as private branch exchange (PBX), keyline telephone system (KTS), interactive voice response system (IVRS) and voice recording system.

4.8.6 The Contractor shall provide helpdesk staff with the necessary tools, including but not limited to hardware and software, related training for supporting the Service.

4.8.7 The Contractor shall not make use of the Helpdesk Service to transmit any message or conduct any activity to the School, which is not connected with the provision of the Service. The School shall have the full discretion to determine whether any such message or activity is in breach of this provision. The Contractor shall forthwith stop transmitting such message or conducting such activity and refrain from doing it further once the School has notified the Contractor in writing or verbally of its

determination.

## **4.9 User Acceptance Test**

4.9.1 The Contractor shall conduct tests with the School before the service is officially accepted and subscription started. Tests shall include User Acceptance Test for reliability and performance of the hardware and software, and also the monitoring, operation support and all other aspects related to the Service Level Agreement of the Service. At least 14 school working days of trial period is expected for service monitoring after testing.

4.9.2 The contractor will be required to perform test making reference to the User Acceptance Test and System Test documents at [www.edb.gov.hk/ited/Wi-Fi900](http://www.edb.gov.hk/ited/Wi-Fi900). They include the types of testing to be performed, the requirements to be tested, the testing environment, testing tools and pass/fail criteria as reference to the Contractor.

4.9.3 The Contractor shall upon request by the School arrange briefings to the School and/or Responsible Parties of the School, with briefing materials, prior to the User Acceptance Test when required.

4.9.4 The Contractor shall provide detailed acceptance test plan and a step by step testing procedure with expected results against the requirements set out in this specification.

4.9.5 The Contractor shall provide, configure and set up the proper software and hardware for the School to carry out the User Acceptance Test.

4.9.6 The Contractor shall be required to carry out tests to demonstrate that the equipment and system meet the specification and other contractual requirements. The Contractor shall also be responsible for the timely preparation and compilation of all test schedules, test procedures and test reports.

4.9.7 The Contractor shall follow the agreed standards as laid down in this specification for the testing methods and procedures.

4.9.8 The Contractor shall submit a schedule of site performance and commissioning tests at least 3 working days prior to the commencement of the scheduled commissioning date.

4.9.9 Special tools, test equipment, test objects and simulators required for the demonstration of either bench or commissioning tests shall be made available by the Contractor at no extra charge to the School.

4.9.10 All test equipment used by the Contractor shall be properly and periodically calibrated. Measuring standards used in calibration shall be traceable to international or national measurement standards, or to an industry recognized manufacturer's reference, subject to approval of the School.

4.9.11 Calibration procedures and results shall be documented and signed by certifying body where applicable. The Contractor may be requested to show evidence of calibration of test equipment by submission of copies of these calibration records prior to conduction of any tests.

4.9.12 The Contractor shall submit the User Acceptance Test report within 3 working days. The acceptance of the installation will only be granted after receiving a satisfactorily UAT report from the Contractor.

4.9.13 All equipment to be installed may be subject to inspection and bench testing. The Contractor shall meet the cost of deliveries for bench test. Notwithstanding, the Contractor shall have carried out the tests in accordance with the requirements and procedures stipulated in this specification and submitted the associated test reports for inspection.

#### **4.10 Termination of Service**

4.10.1 The School reserves the right to terminate all or part of the Service at any time with written notice of 10 working days in advance if:

- The Contractor fails to meet the target service levels under Service Level Requirements for two consecutive months, or three months in total within the committed subscription period;
- The School suspects that unauthorized activity has occurred or is

occurring in relation to the Service;

- The provision of the Service will cause the School to be in breach of any applicable law;

4.10.2 The Contractor shall provide to the School and implement the Exit Plan in accordance with:

- The Contractor shall provide to the School an Exit Plan with feasible arrangements before the committed subscription contract date;
- If the School considers the Exit Plan as not satisfactory, it will notify the Contractor with comments. The Contractor shall revise the Exit Plan by taking into consideration of the School's comments and provide to the School with five (5) working days after the date of receiving the School's comments. If the Exit Plan has been considered as not satisfactory for three or more times, the School shall have the right to terminate this Contract by giving 10 days' notice in writing;
- Detailed exit procedures, disengagement timetable and actions to be taken by both the Contractor and the School for smooth termination of all or any part of the Service;
- The Exit Plan shall aim at enabling the School or its authorized parties to perform in substitution for the Contractor and to eliminate or minimize any disruption or deterioration of the Service. The Exit Plan shall contain, but not limited to the following information:
  - Detailed exit procedures, disengagement timetable and actions to be taken by both the Contractor and the School for smooth termination of all or any part of the Service;
  - Any information that is necessary for the School or a new service provider to continue the provision of the Service;
  - Details of the Contractor's personnel and other resources that will assist the School or the School's authorized parties during the handover;
  - All provisions of facilities such as trunks, conduits, cables, LAN ports and power points, shall be considered as fixture of the School venues and shall become the property of the School. The Contractor shall remove or keep those provisions according to the instruction of the School. Contractor can remove the network equipment such as switch, routers, and access points.
- The Contractor shall be responsible for the implementation and execution of the Exit Plan and shall ensure that the exit plan is carried

out in a timely and orderly manner.

#### **4.11 Wi-Fi Project Reference**

4.11.1 The Contractor shall list out at least 10 Wi-Fi 100 and 50 Wi-Fi 900 reference cases with compliment letters. The compliment letters shall be provided during the tender submission

4.11.2 To prove that the Contractor has the capability on Wi-Fi system design and maintenance, The Contractor shall list out 20 reference cases in non-subscription model which uses the same wireless solution vendor as the proposed brand in last 3 years while the cases in a single year shall not be less than 10.

4.11.3 The project references shall be provided during tender submission.

#### **5. Technical Specification (Add-on Requirement)**

##### **5.1 Firewall-as-a-Service for ITED Network**

5.1.1 The performance of the Firewall shall not be degradable.

5.1.2 Network Address Translation (NAT) is required.

5.1.3 Access Control Policy, Content Filtering and Anti-Malware services are required.

5.1.4 The configuration settings of the cloud appliance shall control all incoming and outgoing Internet traffic, serving as the sole entry and exit point between the Internet and School's ITED network.

5.1.5 The cloud appliance shall provide Intrusion prevention System in order to prevent signature based attacks such as imminent security policy violation and shall not impact the performance of the Broadband Line provided by the ISP

5.1.5 The school shall have administrative rights to change and configure

the standard blacklist and website white list of the firewall.

5.1.6 The service shall be a Value added service of the broadband internet provided

5.1.7 The subscription renewal and maintenance shall be the responsibility of the contractor

## **6. Wi-Fi.HK (optional service)**

6.1 The implementation of Wi-Fi.HK is advocated by the School, the decision of the implementation will not be served as a basis of discrimination for proposal evaluation.

6.2 To make it easier for the public and visitors to access free Wi-Fi services in Hong Kong, the Government is promoting the free Wi-Fi services offered by the public and private sectors in Hong Kong under a common Wi-Fi brand “Wi-Fi.HK”. It will help the public and visitors find and connect to the public Wi-Fi hotspots throughout Hong Kong. These free hotspots will be promoted under the Wi-Fi.HK brand through various means such as the Wi-Fi.HK thematic website and mobile app. With a common brand in place, it will create more business opportunities for the Wi-Fi.HK participating organisations to promote and deliver their products and services to their customers by leveraging on mobile technologies.

6.3 Contractor is invited to provide free Wi-Fi service riding on the same Wi-Fi network infrastructure using the Wi-Fi.HK SSID for school visitors such as parents to access the Internet in schools and such services shall incur no additional charge to the School.

6.4 The following are the requirements of the Wi-Fi.HK scheme:

- Aggregated total of at least 30 minutes free access time per day per device;
- Service available 24 hours x 7 days **or as long as the venue is accessible to the user;**
- All Access Points providing public Wi-Fi service be registered with

OFCA;

- SSID of Access Points be presented in “Wi-Fi.HK via <designated name of service provider>” format;
- Landing page with Wi-Fi.HK logo, terms and conditions and disclaimers for user to accept for connection but no need for user to login using username or password;
- Hotline service, contact email or on-site support be provided for public enquiry and technical support; and
- Preferably with installation of digital server certificate issued by recognized certificate authority on the landing page so that users can easily discern the legitimacy of the Wi-Fi services.

6.5 The network for supporting Wi-Fi.HK shall not be allowed to have direct access to the School’s network. Connections via Wi-Fi.HK shall have access to the Internet only.

6.6 Content filtering is not a requirement for Wi-Fi.HK.

6.7 When the School terminates all or part of the Service, the Wi-Fi.HK service of the related area will be terminated together. The School also reserves the right to request the Contractor to terminate or suspend the Wi-Fi.HK service at any time.

6.8 More details of the scheme can be found at Wi-Fi.HK thematic website (<http://www.wi-fi.hk>).

## **7. Sub-Contracts**

7.1 The Tenderer shall be the prime Contractor for all the services specified in PART VI and PART VIb of this contract. The Tenderer shall be the single point of contact for all contractual matters.

7.2 The Tenderer shall be liable for the performance or breach of any provisions of the contract by Sub-Contractors.

7.3 The Tenderer shall provide details of the sub-contract service for the Wi-Fi operation and maintenance of the Sub-Contractors in the format listed on Section 5 of PART VIb. The hierarchy of the sub-contracting shall also be clearly stated below. If there are no Sub-Contractors, please enter nil.

7.4 No Sub-Contractor(s) specified in Section 5 of PART VIb shall be replaced unless prior written consent has been given by the School.

7.5 The Tenderer shall ensure that the quality of the service rendered by the Tenderer shall not be affected due to any change of Sub-Contractors;

7.6 The Tenderer shall not be relieved from any of its obligations hereunder by entering into any sub-contract for the performance of any part of this contract. If request by the School, the Tenderer shall describe which part of the service shall be performed by the Sub-Contractor(s) in the sub-contract(s) between the tenderer and its Sub-Contractor(s).

## 8. Schedule of Work

8.1 The Contractor shall provide the service according to the following schedule.

Phase	Items	Starting Date	Ending Date	Service fee
I	Build up of Wi-Fi network	On or before July 2026	31 Aug 2026	0
II	Subscription of service	1 Sep 2026	31 Aug 2028	Quoted price

## 9. Delay of Schedule

9.1 If the Contractor fails to provide any part of the Wi-Fi service which shall be ready for use in the School within 60 days after the target Ending Date specified in Section 8 of Schedule of Work then notwithstanding anything else contained in this Contract the School shall be entitled to terminate this Contract with forthwith by giving written notice to the Contractor and to recover from the Contractor the amount of all damages and loss suffered by the School resulting from such failure, including without limitation to any damages and loss resulting from the termination of related service orders.

9.2 Within one (1) week of the termination of this Contract, the Contractor shall collect its own Hardware and Software at his own cost after the contractor has removed the School Data in the Hardware.

9.3 The Contractor shall reinstate and make good the concerned area of the School to the satisfaction of the School after removal of the hardware.

## 10. Terms of Payment

10.1 The subscription will be paid in arrears of each month during the subscription period.

## **11. Price Proposal**

11.1 The Service Provider is required to provide a breakdown on the service charges for each of the service items as set out in the Price Proposal at **PART VIB - PRICE SCHEDULE**. Failure in complying with this requirement will render the quotation disqualified.

11.2 Please note that, the School has the absolute discretion to accept the whole of the Services or just part of the Services as listed out by items in the Price Proposal.

11.3 Set up cost will not be considered as a part of the cost in subscription mode.

## **12. Invitation for Quotations**

12.1 Quotations are invited for the execution of the whole of the Services as described in this document. Quotations for part but not all of the Services will not be considered.

12.2 Please provide two sets of quotation documents for processing of the quotation.

## **13. Tender Preparation and Submission**

13.1 The Service Provider is required to submit the following information and document.

- A Statement of Compliance to provide response that the quotation complies with all requirements stated in this Specification.
- Price Schedule
- No upfront cost or one off cost schools shall be paid throughout the entire subscription period.
- Proposed AP location mark on the Floor plan.
- Proposed Network infrastructure show on the Network Diagram.
- Implementation Plan.

- Wi-Fi Access Point certificates issued by OFCA.
- Product information including technical and descriptive literature and catalogues. Information provided by the manufacturer shall be able to substantiate that the products offered meet the mandatory Technical Specification.

#### **14. Selection and Payment**

School is looking for a contractor based on the following criteria

- Proposed pricing
- Proposed solution
- Equipment and services level
- Case reference
- Other useful information

#### **15. Enquiry**

For enquiry, please contact Miss Keung Pui Kuen of the School at [hycsa@hycs.du.hk](mailto:hycsa@hycs.du.hk) or by phone at **27111013**.

## PART VIB - PRICE SCHEDULE

### 1. Price details for Standard Provision

Standard Provision	2 years	
	Monthly price	Annual price
Wi-Fi Service Subscription (Requirement as stated in Part VI)		
Total in HK\$		

### 2. Price details for Add-on Services (Offer will be considered on itemized basis)

Add-on Service		2years	
Item	Description	Additional monthly price	Additional annual price
Wi-Fi coverage for other areas	<ul style="list-style-type: none"> <li>● <b>To be specified by School.</b></li> </ul>		
Broadband service			
Firewall-as-a-Service for ITED Network	<ul style="list-style-type: none"> <li>● The performance of the Firewall shall not be degradable.</li> <li>● Network Address Translation (NAT) is</li> </ul>		

<b>Add-on Service</b>		<b>2years</b>	
<b>Item</b>	<b>Description</b>	<b>Additional monthly price</b>	<b>Additional annual price</b>
	<p>required.</p> <ul style="list-style-type: none"> <li>● Access Control Policy, Content Filtering and Anti-Malware services are required.</li> </ul>		
Authentication Method			
Session Control			
WLAN Access Control			
Internet Content Filtering Service			
Integration of networks			
Internet addresses subscription & configuration			
Monitoring of Wi-Fi network			
Redundancy			
Wi-Fi Service Recovery			
Support hours			
Reporting			

<b>Add-on Service</b>		<b>2years</b>	
<b>Item</b>	<b>Description</b>	<b>Additional monthly price</b>	<b>Additional annual price</b>
Contract End Arrangements			

### 3. Wi-Fi.HK Service

Wi-Fi coverage area of Wi-Fi.HK :	
Will you provide free Wi-Fi.HK service (Y/N) ?	Y/N (to be input by Contractor)

### 4. Details of equipment to be proposed in the Buildup of Wi-Fi network in the School

Items	Quantity	Model
Wi-Fi Controllers		
Access Points		
Router/Firewall		
Core Switch		
Access PoE Switches		
LAN Cables		
Others (please specify)		

**5. The Tenderer to provide details of the sub-contract service involved in the proposal for the project implementation, service operation and maintenance in the format listed below**

Name of Sub-Contractor	Sub-contract service	Roles and responsibility

**6. The Tenderer to provide case reference of past deployment in Wi-Fi100/Wi-Fi900 with Sub-Contractors details in the format listed below**

Name of School	Name of Sub-Contractor	Sub-contract service	Roles and responsibility

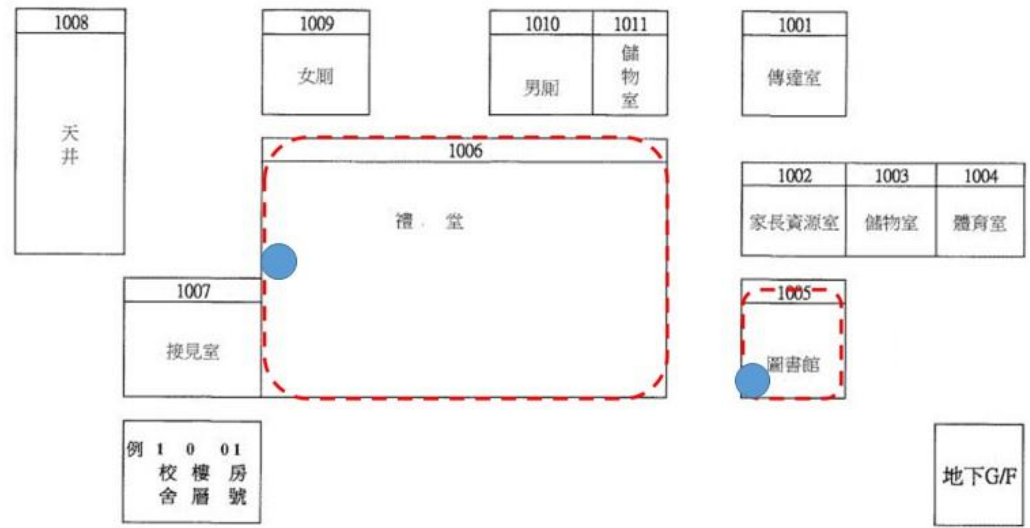
7. **A floor plan (provided by the School) is attached.**

Annex: Floor Plan of the School

# Proposed Old Wing G/F AP Location

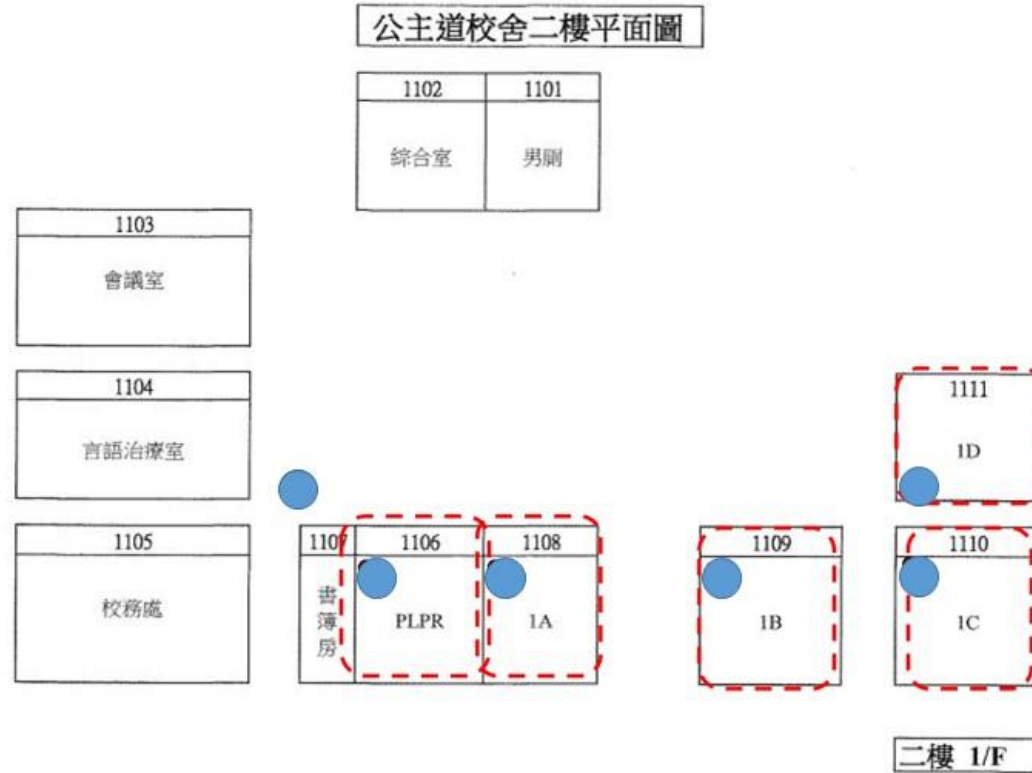
● AP

公主道校舍地下平面圖



# Proposed Old Wing 1/F AP Location

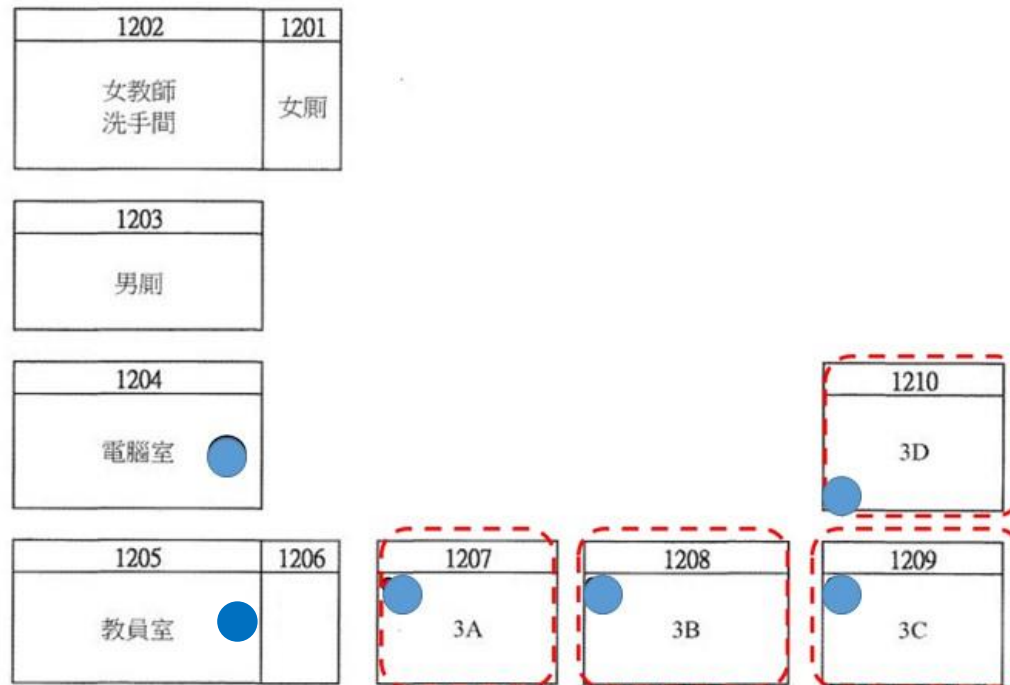
● AP



# Proposed Old Wing 2/F AP Location

● AP

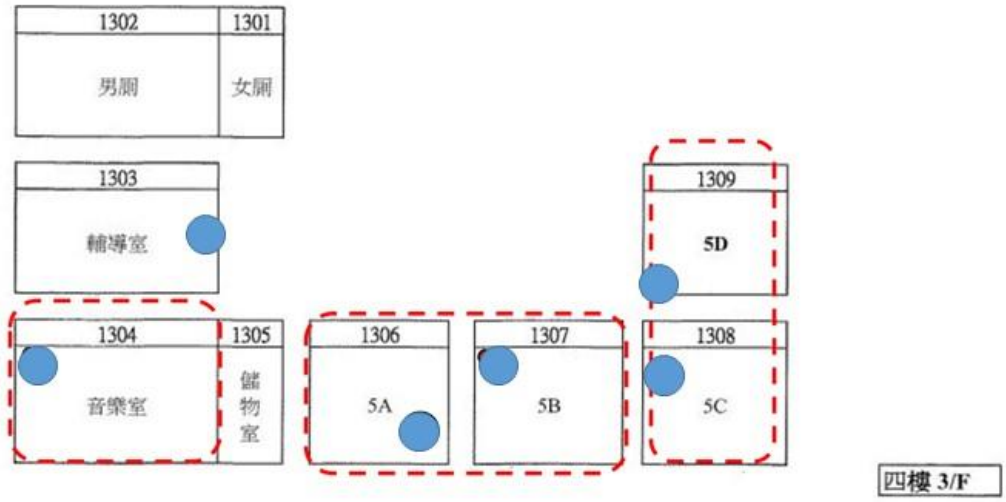
公主道校舍三樓平面圖



# Proposed Old Wing 3/F AP Location

● AP

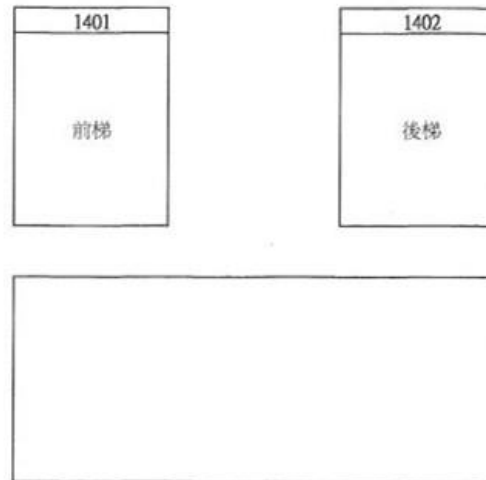
公主道校舍四樓平面圖



## Proposed Old Wing R/F AP Location

● AP

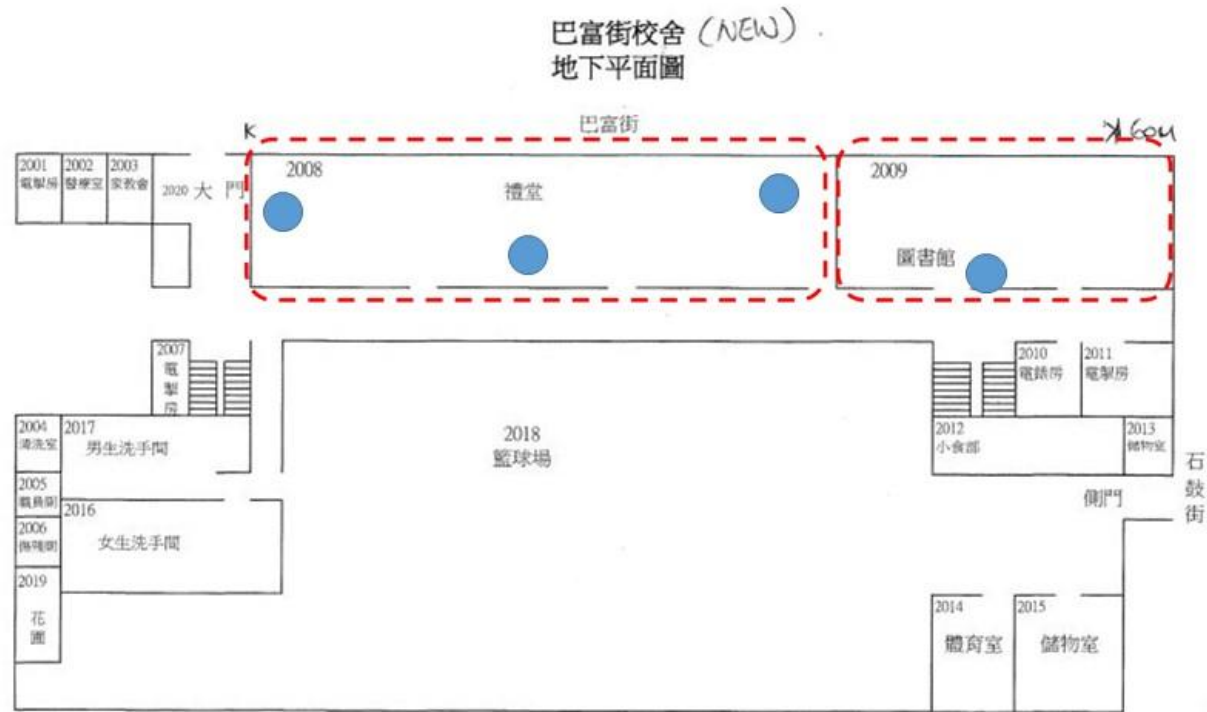
公主道校舍天台平面圖



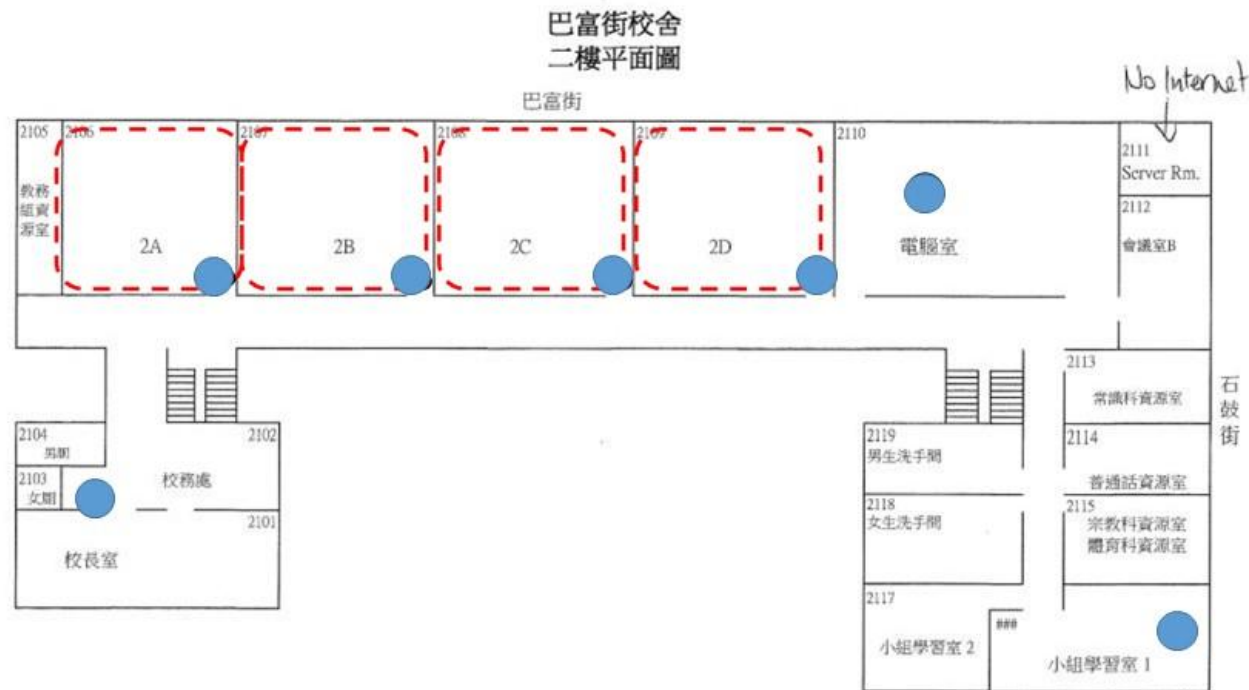
天台

# Proposed New Wing G/F AP Location

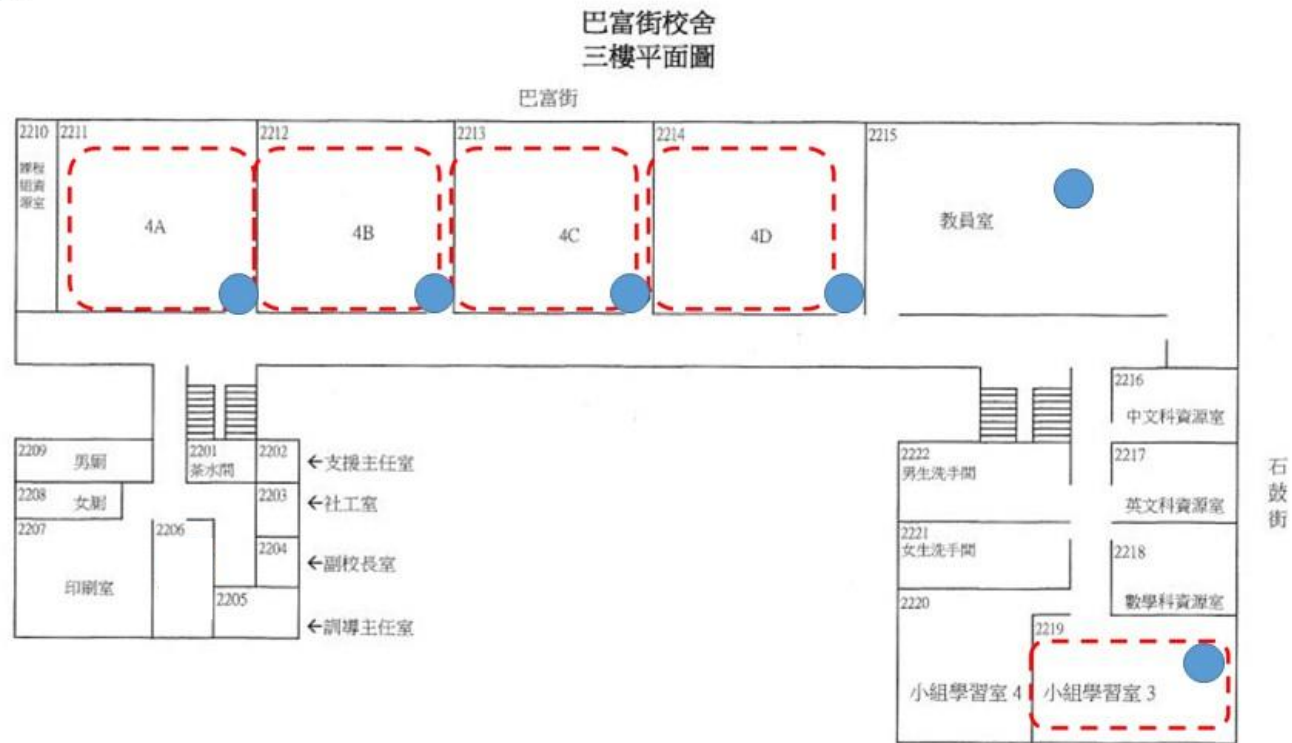
● AP



# Proposed New Wing 1/F AP Location

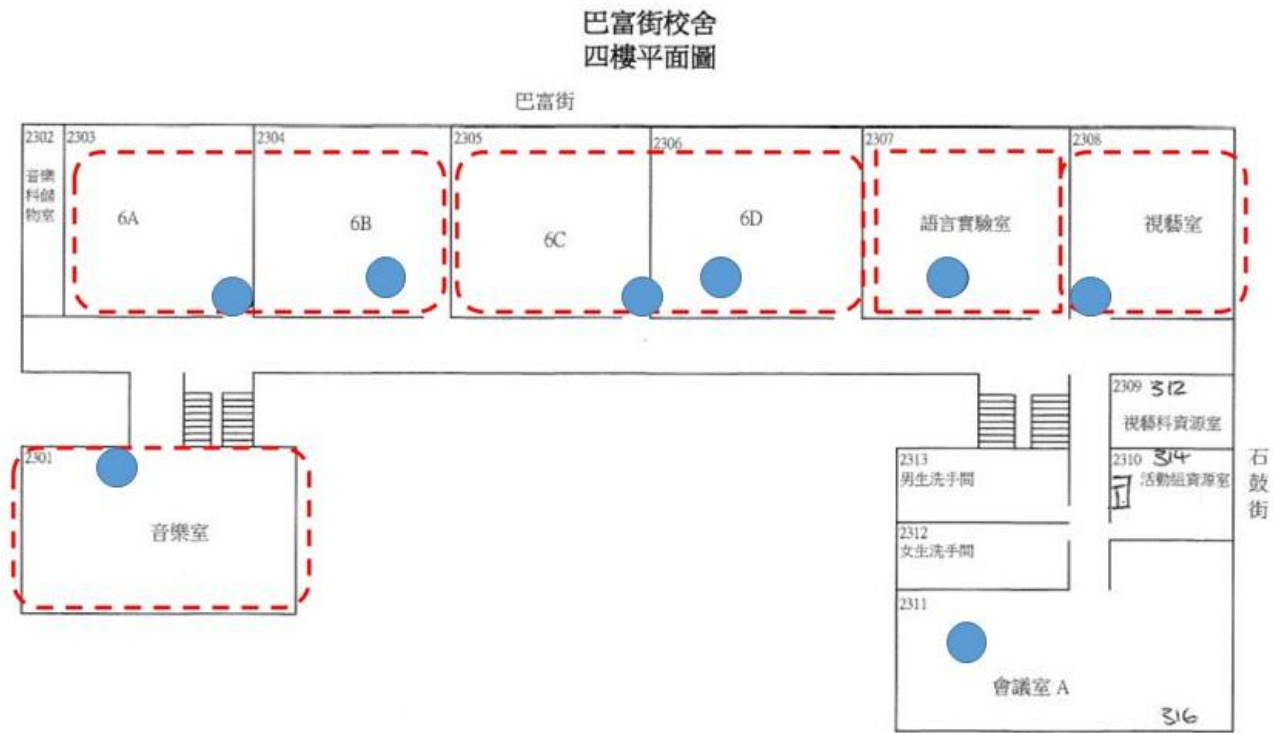


# Proposed New Wing 2/F AP Location



# Proposed New Wing 3/F AP Location

● AP



## Proposed New Wing R/F AP Location

