

**Pre-qualification Structured Learning
for
Building Surveying Probationers**

Tuesday 10 December 2019

Topic : BS APC Practical Task 實務試
Speaker : Sr Prof. Barnabas H K Chung

Building Surveying Division

Assessment of Professional Competence

Rules & Guide 2.4.5

The Practical Task is designed for candidates to resolve a range of professional problems normally faced by building surveyors in their real life practices. All candidates are required to attempt a practical task which entails the application of basic technical knowledge and professional skills for the understanding of the problems, as well as the analytical approach to problem solving.

November Practical Task 2019

The Requisition

The Board of Trustees of the Academy of Building Surveying is inviting Building Surveying Consultants to prepare a Feasibility Study to adapt an existing 45 years old purpose-built industrial building to house the ABS Resource Centre.

Feasibility Study

可行性研究

根據有效數據評估委託人的發展計劃在技術上是否可行

根據發展計劃的要求草擬概念規劃

根據委託人的要求提供專業意見

目的：期望委託人接納可行性研究

並授予下一階段的詳細發展設計及項目管理合約

The Building

The existing industrial building is the Topy Tower at 45-51 Kwok Shui Road, Kwai Chung, as delineated on the attached site plan. Also attached are all the plans and details available to us. There had been approved alterations to the G/F, 10/F and 11/F some 12 years ago. The building has recently undergone improvement works to the facades and the main roof, mainly to tackle waterproofing and leakage problems. The building is currently provided with split type air-conditioners in the common lift lobbies with condensers mounted on the roof top. Air-conditioning was not provided to the individual units that were hitherto separately let. Electricity supply may only provide the nominal loading for the existing use. We expect to have vacant possession of the entire building in due course.

Background information

背景資料

曾經進行改建裝修的 45 年樓齡的工廠大廈

原有樓宇結構能否承受新用途的設施及負載？

現有樓層設計可否適合新用途的佈局？

現有基建能否承載新設施的負荷？

在原有空間之內可否提升新用途的觀感及價值？

The Proposal

It is proposed to adapt the building within its existing bulk to house the Academy of Building Surveying (ABS) which was established in 2002 under the Companies Ordinance as a research and teaching institute to promote the knowledge and technique of building surveying and to foster the specialist expertise and professional competence of building surveyors and building engineers.

**項目要求：裝配樓宇現有之空間成為
『建築測量研究院』的『資源中心』**

建築測量研究院成立的目的 ≠ 項目要求的目的

The ABS envisages that this building can be used as a resource centre for building surveying professionals and students accommodating the following facilities:

1. a library for professional, legal and technical literature relevant to the building and surveying industry with internet connections for research;
2. a lecture theatre with state-of-the-art broadcasting facilities that enable off-site communications;
3. a showroom for the display of building materials and hardware;
4. a laboratory for the testing of building materials and components;
5. a workshop for the demonstration and tutorial of tools and instruments for building surveys and defects diagnosis;
6. ancillary offices for administrative and technical staff and a common room for visiting members with catering facilities.

In order to provide some self-funding, the ABS would like to explore the possibility of commercializing the laboratory facilities to undertake material testing for the construction industry.

建築測量研究院『資源中心』所需設施的要求

可供網上研習的建築測量專業藏書閣

可提供廣播互動的講學堂

展覽建築材料及硬件的陳列場

測試建築材料及組件的試驗室（可否商用？）

操作建築測量工具及進行測量工序的實習工場

附設食堂的員工辦公室及會員客廳

Consultancy service

The Consultant must illustrate the feasible disposition of the various accommodations and justify their allocations with supporting data in compliance with all relevant statutory, regulatory and licensing requirements.

The Consultant may advise what exactly should preferably be housed in the various facilities stated above and to justify the space allocation. If there will be heavy machineries, or if it is necessary to extend the storey height of any room to accommodate machineries with excessive height, the Consultant should also address any structural concern.

In view of the apparently different nature of the accommodations, the Consultant should also advise on suitable partitioning, relevant air-quality control, and fire protection.

顧問服務的要點

一．概念規劃

樓層地方的分配必須合情，合理，合法，根據相關數據，按照設施功能，使用人數，需用面積，空間結構，器材設備，安全措施，照明，空調，衛生設備，支援裝置，人流管理，協同效應，行政管理，相關配套等，進行規劃：務求達至最理想的配置，在使用上有最高的經濟效益。

Environmental efficiency

As the building was constructed some 45 years ago, the Consultant **should advise what strategy** should be employed for the **continued maintenance** of the building fabrics and services, and **illustrate** how piecemeal defects could be identified and rectified.

The ABS Resource Centre must be able to demonstrate the highest environmental and safety standards. All existing and new building elements should be environmentally friendly achieving reasonably high efficiencies. The Consultant **should identify** any such elements including lighting and ventilation and **illustrate** the expected environmental improvements. Any **innovative** environmental installations that can increase cost-efficiency are welcome.

顧問服務的要點

二·環保效益

如何設計樓宇結構及基建保養策略，以防患於未然為原則。

如何偵測樓宇破損而進行有效維修。

如何提升環保效能，並引進創新環保設施。

Planning approval

While an independent Property Consultant will advise on lease-related issues, the Consultant **must advise** if the proposal complies with planning restrictions and if not, **what and how** planning approval should be sought. The Consultant should also advise **what leverage** could be presented to secure planning approval if required.

Building approval

We understand that there are different approaches to the carrying out of building works in existing buildings. The Consultant **must advise the best approach** to secure acceptance by the Building Authority and **must justify** the efficacy of his suggested approach.

顧問服務的要點

三·合乎法定程序

是否需要向規劃署申請批准？應如何進行？

是否需要向屋宇署申請批准？應如何進行？

有關地政問題由獨立產業顧問處理

Licensing requirements

We are not sure if any license will be required for any of the various operations we envisage. The Consultant **must help clarify** our uncertainty. Should the Consultant consider if a particular license is required, he **should advise** what the licensing requirements are and how such license could be obtained.

顧問服務的要點

四 · 是否需要申領牌照

資源中心是否需要申領牌照才能開業？

應如何辦理？

Site visit

The site is open from 9:30 a.m. to 1:00 p.m. on Wednesday 6 November 2019 for consultants to conduct visual inspections in person. Consultants may collaborate for the site survey but no other assistants will be admissible to the site. Visiting consultants are reminded to observe site instructions and be mindful of their own safety. Consultants are free to take site measurements and photographs but cannot conduct any testing whatsoever of the building elements or services. One-way transportation from the Surveying Learning Centre to the site will be provided.

Note: *Any information of the site and the subject building including photographs taken must be treated as confidential and should only be used for the purpose this assessment only. Any unwarranted disclosure is strictly prohibited.*

實地勘察

確證樓宇圖則之全備和真實

勘察樓宇目前之狀態

推敲結構改動的可行性

推測提升樓宇功能的潛力

評估周邊環境對項目的支授或影響

在有限的時間內取得最多而實際的資料

Presentation of proposal

Consultants will present their proposals individually on Saturday 9 November 2019 for a maximum of 25 minutes and should be prepared to elaborate on specific issues. They may adopt any mode of presentation except electronic means. They should also prepare 4 identical sets of handouts, each containing not more than fifteen (15) pages on single-sided prints of not more than A3 size to illustrate the salient issues of their proposals. (Your names and candidate numbers should be clearly printed on the handout for identification.) Any layout plans should be drawn to a scale of not less than 1:100. Relevant statistical data to justify their proposals should be included. We are only concerned with the feasibility of the proposed adaptation, and we are not interested in the programming or costing of any proposed building works at this stage.

書面報告 + 口頭陳述

書面報告

是可行性研究的終極建議 * 是呈交委託人的參考文件

**報告書不得超過 15 頁 A3 度單而印刷紙張，
以不小於 1:100 比例設計佈局圖詳細說明概念規劃建議，
並附上足夠數據以供佐證。**

報告書亦須包含其他相關課題及回應以供委託人參考。

口頭陳述

是向委託人交待可行性研究的成果

25 分鐘之內重點陳述研究內容，概念規劃，及總結建議。

必須與書面報告協調。

Points to Ponder

Editorial sequencing of the handouts and the presentation

Consistency of the contents in font size and scale of drawings

Rationale and relevance of statistical data

All-in academic solutions vs Pinpointed technical propositions

Feasible 可行 \neq Suitable 合適

Sentimentally, Rationally and Legally Suitable

當緊守立場，切勿被誤導，莫沉迷陋習

沒有聲明的，不要胡亂猜測

沒有要求的，不必要贈送

要對症下藥，切忌堆砌處方

不是賣武，不用大顯身手

資訊太多，不是款款皆合適

懂得選取，才是真功夫

以事論事，以人為本，以理服眾

建築測量師 對 項目委託人

站在委託人的立場

了解其主觀及客觀的限制

提出專業及實際的意見

滿足委託人的期待

留有好印象

他日好相見