

HKIA / ARB Professional Assessment 2013
Paper 1: Statutory Controls in Building Works
Examiners' Report

STRUCTURE OF PAPER

Paper 1 is an open-book examination comprising multiple-choice and short-essay questions.

The MC section had 40 multiple-choice questions. Each MC question carries 2 marks. The passing mark was set at 65%.

Candidates needed to answer 1 compulsory short-essay question and 2 out of 3 other short-essay questions. The compulsory question carried 30 marks and the other two questions each carried 15 marks. The passing mark was set at 50%.

Questions on all topics, as detailed in the syllabus of PA Handbook, included:

- (a) Buildings Ordinance
- (b) Submission of plans to the Building Authority
- (c) Other related Ordinances and Codes of Practice

The questions were set to test candidates' knowledge, skills and maturity to handle their day-to-day work as an Architect.

ASSESSMENT OBSERVATIONS

FOR WHOLE PAPER

348 candidates took Paper 1. 161 candidates (46.26%) passed.

FOR MULTIPLE CHOICE QUESTIONS

229 candidates passed (65.80%); the mean is 67.1 marks out of 100, and standard deviation 12.9%, is commented on by HKEAA as "of comparable to those of last year, meaning that candidates' performance in these two cohorts of comparable."

FOR SHORT-ESSAY QUESTIONS

74 candidates passed (21.26%). Passing rates of the short-essay questions are as follows:

- Q1 – 55.36% (191 out of 345 candidates)
- Q2 – 25.00% (49 out of 196 candidates)
- Q3 – 11.41% (30 out of 263 candidates)
- Q4 – 47.06% (104 out of 221 candidates)

Question 1 (Compulsory)

The compulsory Question 1 is set on the scenario of assessing the redevelopment potential of two adjacent lots in Mongkok, at present taken up by a six-storied commercial building at the corner of the block and an adjacent flatted factory building. The hypothetical redevelopment calls for an office tower and a residential block above a common commercial

podium.

Considering that the highest score in this question was only 23 out of 30, the overall performance was not encouraging, even though the passing rate was 55.36%. This reflects the candidates' poor ability in applying statutory controls to building developments and in turn points to a lack of exposure to this area of professional practice.

Issues to be addressed by the candidates are listed below together with a general review of candidates' performance.

(a) Town Planning Issues

Most candidates realised that some kind of application to the Town Planning Board would be required. Many correctly identified the procedure of applying under Section 16 of the Town Planning Ordinance by referring to Schedule I, Column 2 of the notes attached to the Outline Zoning Plan, but about an equal number dealt with the two lots separately by also referring to Schedule II, which should be ignored if the existing commercial and industrial buildings on the two lots were to be demolished to make way for a single redevelopment, instead of the industrial being preserved and converted to other uses. Obviously candidates who made this mistake either failed to comprehend the problem fully or were too quick to jump to conclusion, at the sight of 'industrial buildings' being included in Schedule II.

(b) Lease Modification, Possibly Involving *in-situ* Land Exchange

Most candidates correctly identified the need to apply to Lands Department for lease modification and possible payment of premium. Some, however, confused land issues with planning issues and cited the Buildings Department or Town Planning Board as the authority for dealing with land-lease related matters. While many were aware of the need to concede area to widening of the service lane, only a minority correctly discerned that the reason for doing so was to maintain a pattern consistent with neighbouring developments and not because it was required under Building (Planning) Regulations.

(c) Criteria for Exemption from Accountable GFA of Car-parking Facilities

This is probably the easiest topic for candidates and most of them correctly cited the parameters for granting exemption from accountable GFA. However only a minority of them mentioned the need to comply to Hong Kong Planning Guidelines and almost none the need for a traffic impact assessment to help establish the actual parking capacity, although a few among them did mention the engagement of a traffic consultant.

(d) Assessment of Development Potential under Town Planning and Buildings Ordinances

For many candidates who performed poorly, this was probably the make-or-break topic. Identifying the maximum permitted plot ratio under the OZP was generally not a problem at all, and most candidates correctly quoted from Building (Planning) Regulations on applicable plot ratio and percentage site coverage, based on assessment of site classification and building height, but many also overlooked the provision in the planning notes for relaxation of the

height limit to 100m PD for sites larger than 400 m², which is applicable to the problem. The real challenge was to apply the planning criteria to arrive at a realistic assessment of achievable gross floor area for the proposed redevelopment. Regrettably, the candidates' overall performance was disappointing. Many of them simply avoided the problem altogether, but among the few who attempted at working out the actual plot ratio, site coverage and GFA, still fewer demonstrated an ability to apply the regulations correctly for a composite development. There is a case to be argued for straightforward subtraction of the actual non-domestic plot ratio from the maximum permitted figure of 9 to arrive at the residual domestic plot ratio, and candidates who did this without applying the appropriate conversion factor were not penalised. Those who tried to apply the ratio did so in ways that would not be approved by the Building Authority. An example is the formula widely used by the candidates to determine the actual domestic plot ratio:

$$\frac{An}{Pn} + \frac{Ad}{Pd} = 1$$

Where:

An = actual non-domestic plot ratio, *Pn* = max permitted non-domestic plot ratio

Ad = actual domestic plot ratio, *Pd* = max permitted domestic plot ratio

A reasonable guess would be that the above formula is found in some of the “unauthorised” manuals widely circulating among the candidates. This problem deserves to be discussed, away the Professional Assessment Committee.

(e) Setbacks for EVA and Sustainable Building Design Criteria

Most candidates correctly concluded that an EVA cutting into the combined lot was not necessary but among them many also hedged their bets equally on both streets A and B, even as they used the correct formula in determining the required length of climbing face from an adjacent street.

Identifying the required setback from Street A to comply with PNAP 152 in accordance with Sustainable Building Design practice did not present much challenge. On aspects relating to *L_p*, separation between buildings and setback of podium edge from street frontage, answers were mostly drawn from typical ‘textbook’ examples without actually applying parameters to the actual situation in the question.

Question 2

Out of the 196 candidates who attempted this question, only 49 attained 7.5 marks or above out of the full mark of 15 marks, representing a pass rate of 25%.

This question asks for an understanding of the various options of submission procedures for alterations and additions (A&A) works that are open to one to consider in different situations, and a comparison of the formal A&A submission and the more recently introduced minor works control system.

Despite the relatively factual nature of the question, the result was obviously less than satisfactory. Apart from some who appeared to have run out of time when answering this question, most of the others who fetched low marks were unable to demonstrate the different scenarios of submission procedures where one can choose for an A&A submission and the pros and cons of the formal A&A and minor works submissions systems.

The reason for this phenomenon could be two-fold :

1. the lack of real life experience of the candidates on A&A submissions and Minor Works submissions; and
2. inadequate study and understanding of the related legislations and PNAPs on the subject.

Question 3

30 candidates attempted this question and 11.41% passed.

The first part of the question required the candidates to explain why prescribed windows were needed and the principles behind setting the specific requirements in the regulations. While most of the candidates could correctly point out the need for natural lighting and ventilation, only a small portion of the candidates could merely outline, not to mention explain, the principles behind the requirements in the regulations, which specified the size of windows in relation to the size and function of the room, the disposition of windows to face external air or open air, and the depth of the (habitable) room being not more than 9m. It reflects that most of the candidates were unfamiliar with the concerned regulations and hence the principles behind.

The second part of the question asked the candidates to discuss whether prescribed windows could directly face into the five features mentioned, and it called for an understanding of “external air” and “street” in the context of provision of natural lighting and ventilation in the lifetime of the building. Only a few candidates were correct in their answers (yes or no) for all of the five features. For the correct answers, the discussion was sometimes inadequate in justifying the answers, which reflects a lack of the understanding that was called for as mentioned above.

In view of the above, the candidates are advised to familiarize themselves with the requirements of important features in the building, like prescribed windows in this case, as well as the rationale behind the relevant regulations.

Question 4

104 candidates passed this question, representing a passing rate of 47.06%. Taking 50% of the marks allocated to each sub-question as the passing mark, the passing rate of each sub-question is:

- (a) Provision of the Building (Planning) Regulations – 75.11%
- (b) PNAP APP-151, *Building Design to Foster a Quality and Sustainable Built Environment* – 67.87%
- (c) PNAP APP-152, *Sustainable Building Design Guidelines* – 71.49%
- (d) Other Codes of Practice – 17.65%

General observations are highlighted below:

- a. Most candidates are able to describe how the Building (Planning) Regulations, PNAP APP-151 and PNAP APP-152 may contribute in promoting a sustainable built environment, though not much description on “how effectively has this objective been achieved”.
- b. Most candidates are not able to answer question 4(d) – how effectively has the objective be achieved in terms of Other Codes of Practice. Question 4 clearly refers to the objectives of the Buildings Ordinance, however many answers mention Codes of Practice outside the Buildings Ordinance, or irrelevant Codes of Practice / Design Manuals / Practice Notes under the Buildings Ordinance. It is also surprised that out of 221 answer books, 51 answer books, representing 23.08%, do not contain any answer to this sub-question.

RECOMMENDATIONS TO CANDIDATES

- (a) Attend the lecture series, seminars, conferences and workshops arranged by HKIA and other tertiary institutes or professional institutes. Be familiar with the materials and topics covered.
- (b) Get on-job experience in particular areas of interest.
- (c) If the candidates do not have on-job exposures as mentioned in (b) above, reading or discussion on what other colleagues have done would help.
- (d) Keep abreast of the times ---- through reading, and use of audio, video or internet resources.

Paper 1 Subject Panel Chair

HKIA / ARB Professional Assessment 2013
Paper 2: Building Contracts, Professional Practice, Professional Conduct,
Conditions of Agreements and Scale of Charges
Examiners' Report

STRUCTURE OF PAPER

Paper 2 is an open-book examination comprising multiple-choice and short-essay questions.

The MC section had 80 multiple-choice questions. Each MC question carries 1 mark. The passing mark was set at 65%.

Candidates needed to answer 1 compulsory short-essay question for Part A Professional Practice, Code of Professional Conducts and Conditions of Agreement and 2 out of 3 short-essay questions for Part B Building Contract. Question for Part A carried 15 marks while questions for Part B Building Contract each carried 15 marks. The passing mark was set at 50%.

ASSESSMENT OBSERVATIONS

FOR WHOLE PAPER

275 candidates took Paper 2. 148 candidates (53.82%) passed.

FOR MULTIPLE CHOICE QUESTIONS

179 candidates passed (65.09%); the mean is 66 marks out of 100, and standard deviation 10.2%, is commented on by HKEAA as "of comparable difficulty with appropriate levels of difficulty."

FOR SHORT-ESSAY QUESTIONS

123 candidates passed (44.73%). Passing rates of the short-essay questions are as follows:

SQ Part A - Q1 – 26.55% (73 out of 275 candidates)
SQ Part B - Q2 – 49.50% (50 out of 101 candidates)
SQ Part B - Q3 – 65.89% (141 out of 214 candidates)
SQ Part B - Q4 – 60.80% (138 out of 227 candidates)

Part A Question 1

The question consisted of 3 parts, carrying a total of 15 marks distributed as follows: (1) 5 marks, (2) 5 marks and (3) 5 marks.

General observations:

- Some candidates did not read the questions carefully and so they failed to address the question in a right track.

- Just a few number of candidates managed to provide reasons / justification to their answer, most of them simply copied the so-called answer from the reference materials without any elaboration.
- Nearly half of candidates answered a question wrongly by using a standard answer script which is very strange.
- Candidates are suggested to enhance their English writing technique in order to communicate effectively.

Part B Question 2

Q2a.

- Not many candidates asked for contractors' submission of shop drawings and only one or two could score the bonus mark for reminding the contractor for BD submission.
- Less than 50% of the candidates used the word "instruction" or you are "instructed". Words like "requested, notified" were used.
- Less than 30% candidate remembered to include the design intent drawings as they would likely think that no drawings is required to be issued for "design and build" works.

Q2b.

Completed roof finishes becomes abortive works and only two to three candidates could rightly point it out and then issue the corresponding instruction to deal with those abortive works under the contract.

Q2c.

Majority of the candidates failed to use the term "Cost and Time implications" of an "A.I." The discussions on cost and time implication had therefore side tracked to the quality of the works and the cost of the additional works that the Main Contractor would have to spend in completing the skylight now, within the original contract, [Q2c (i)] and after Substantial Completion of the original contract as A&A works [Q2c (ii)].

Regarding the discussion on "Cost implications", majority of the candidates were not clear about the binding time within which the contract rates could be used for valuation of variations when discussing the 2 options.

Moreover, very few candidates included the L&E expense associated with the EOT claim into the discussion of cost implications for option 1 which option 2 won't have.

For the discussion on "Time implication", only a few candidates were able to mention about the merit of maintaining the original contract completion date if option 2 is adopted despite majority of the candidates knew about EOT would be resulted due to A.I. being issued at such a late stage.

Part B Question 3

- The majority of candidates seemed to have understood and adequately explained the key issues which the questions sought to be answered.
- With regard to Question 3(c) too many candidates simply repeated what is set out in the contract clause rather than addressing the actual question. The exam is an “open book” examination, then candidates must be discouraged from simply quoting from the contract.
- Candidates should pay attention to the marks distribution among different parts of the question. 3(c) carried 10 marks out of total 15. Most candidates who failed this question did not provide good answer for 3(c), even if getting full marks for all other parts.
- Instead of writing down "yes or no" for 3(a) and 3(d), candidates should provide a statement to demonstrate their understanding of the concept.
- Some candidates did not read 3(d) carefully. They copied wordings from the Contract without answering the question asked.

Part B Question 4

- Some candidates appeared to have run out of time and did not answer the latter questions. Time management is important to allocate appropriate time for each question.
- Although the questions are “straight-forward”, but instead of giving just the answer (like : “issue instruction”), a better approach would be to state the rationale / justification to support the answer. A few more lines would show that the candidates have thought about and analyzed the issue in question, before giving the answer.
- There weren’t that many candidates make reference to the Contract Conditions, which should be the basis on which the contract is administered.
- For those that have made reference to the Contract Conditions, instead of merely reciting the Contract Conditions, candidates should state how the relevant Conditions apply to the issue in question.
- Some candidates answered the questions in bullet points – which should be discouraged. The exam is also to test the candidates’ ability to communicate effectively through writing.
- Quite a few candidates were relying too much on the Employer’s opinion and advice before making their own professional judgment. Suggest that a balance shall be strike between professionalism and commercialism.

- Some candidates seem not too clear on the duty and responsibility of the Quantity Surveyor and request the QS to specify materials to be used and provide specification.

Paper 2 Subject Panel Chair

STRUCTURE OF PAPER

Paper 3 was an open-book examination comprising multiple-choice questions only. The paper consists of 60 multiple-choice questions. The passing mark is set at 65%.

This was the second year in which three assessments were carried out for Paper 3 in March, June and September respectively. The paper for each of the 3 assessments was set in a similar format and structure covering a variety of topics.

Questions covered various aspects of building structures, including general structural principles, different structural forms and systems, foundation systems, excavation and lateral support systems, load paths and force diagrams, practice and construction, and a case study. Diagrams were included as appropriate for better understanding of the questions.

ASSESSMENT OBSERVATIONS

The passing rates for the three assessments were 50.99%, 62% and 44.16%, which had shown a slight decline from the passing rates in PA2012, probably because candidates had not prepared well before taking the assessment.

The “mean mark” for the three assessments this year was 64.6%, 66.6% and 62.3% respectively, which is very close to passing mark of 65%, with a “standard deviation” ranging from 8.6% to 11.5%. This indicates that the average candidates’ performance was generally up to the required standard, except for the 3rd quarter assessment which the candidates had a slightly lower general performance. A reasonable “standard deviation” indicates that the assessment had generated a broad range of marks, and was fair, and effective in differentiating the abilities and depths of knowledge of the candidates.

It was observed from the results that the candidates had shown weaknesses in certain areas, including the less common and less conventional structural systems (such as suspension structures, trusses, etc), and construction and practice (such as material properties, real-life application of structural systems, etc). It was also observed that the results and general performance on the questions on the basic structural principles and concepts (such as load path, simple bending moment diagrams, structural beams and floors, etc) were also not satisfactory.

RECOMMENDATIONS TO CANDIDATES

On top of the studying the recommended reading list, the candidates are also encouraged to gain more knowledge and exposure by the following means:-

- (a) Candidates are recommended to attend the Professional Assessment Seminar / Lecture Series organized by HKIA, not only for the Professional Assessment but also to broaden their knowledge.
- (b) Candidates are encouraged to get more on-job experience and learn through better communication / coordination with structural engineers at work.
- (c) Sharing of knowledge and experience with fellow colleagues and graduates is also encouraged, and should be helpful if job exposure is limited.

Paper 3 Subject Panel Chair

STRUCTURE OF PAPER

Paper 4 was an open-book examination comprising multiple-choice questions only. The paper consists of 60 multiple choice questions. The passing mark is set as 65%.

Questions were simple in wording and straightforward format, and questions with combination choices were avoided as far as practicable. Topics tested as detailed in the syllabus (viz. Basic Principles, Sustainable Design & Environmental Issues, HVAC & Heating, Fire Services, Plumbing & Drainage, Electrical, Acoustics and Miscellaneous aspects) were included with emphases as described below:-

1. Different disciplines for building services (both the fundamental and real-life applications that a practicing architect should know);
2. Issues concerning hygiene, human comfort and acoustics;
3. Greater emphases are put in recent years, on the non-services matters related to sustainable design and environmental issues.

Candidates were also tested on knowledge that spans across the building services disciplines and on the energy conservation and sustainable designs. All in all, the questions were set to test the candidates' knowledge, skills and maturity to handle day-to-day works as an Architect.

As in the previous years, quite a significant portion of the paper was based on re-used questions. The intention of including re-used questions is to encourage candidates to study more thoroughly similar topics that appeared in the past papers for better knowledge enrichment.

ASSESSMENT OBSERVATIONS

This was the second year in which Paper 4 allowed 3 attempts per year, with assessments held in March, June and September respectively (rather than one-off at the year-end as before). The "mean marks" for 3 assessments this year were 62.7%, 58.3% and 59.4%, which were slightly lower than last year, probably because candidates had not prepared themselves well before taking the paper. As in previous years, particular focus on non-services matters related to environmental issues was made in the lecture series, and the recommended reading list was extended to include literature on the topics. However, similar to previous years the candidates' weakest part was still in the questions on the Environmental aspects. As before, candidates performed better on the academic-based questions (i.e. theory, fundamentals and basic knowledge that were taught at universities or found in literature) and were generally weaker on job-based questions (i.e. those practical knowledge gained from architectural practice and its real-life application).

RECOMMENDATIONS TO CANDIDATES

Broadening the candidates' exposure is the key to success. On top of the literatures and the recommended reading list, the following means would also assist in broadening the enhancing the candidates' knowledge in the area:-

- i. Attend the Paper 4 lecture series and related seminars, conferences and workshops arranged by HKIA and other tertiary institutes or professional institutes.
- ii. Get on-job experience, closer coordination with Building and Environmental Consultants in the design development stage of projects.
- iii. Keep abreast of the times and have hands-on experience on OTTV, IAQ, BEAM Plus or other environmental assessment schemes.
- iv. If the candidates do not have on-job exposures as mentioned in (ii) and (iii) above, reading of documentation on the work done by other teammates would also help.
- v. Take initiative to go through specifications, material and equipment submissions, shop drawings, method statements etc. even though they are typically within the scope of work of the Building Services Engineer.

Paper 4 Subject Panel Chair

HKIA / ARB Professional Assessment 2013
Paper 5 : Building Materials and Technology
Examiners' Report

STRUCTURE OF PAPER

Paper 5 was an open-book examination comprising multiple-choice questions only. The paper consists of 60 multiple choice questions. The passing mark is set as 65%. The questions are set at a very similar format and variety in each examination. This is a second year that the paper was set for three assessments in March, June and September.

The contents of the paper include the different trades of construction regarding materials and technology, actual practices including working procedures and detailing as well as law related construction questions such as the Building Ordinance and Regulations, PNAP, Codes of Practices, etc. Questions with diagrams were set so that more than one question can be out of it. Generally, the questions are quite straight forward and all based on Hong Kong local practices.

ASSESSMENT OBSERVATIONS

The respectively passing rates for the three assessments are: 64.2%, 56.7% and 58.9%. The passing rates had significantly dropped when compared with that in 2012. Though new questions have been added to the papers, yet the standard of questions were consistent with the immediate three years. Some candidates expressed that they have wrong conception on the "open book" examination and thus have not been well prepared for the assessment.

OUTLOOK FOR COMING YEAR 2014

Despite the drop for passing rate, the panel will still maintain its standard of setting questions and insist on preparing new questions for the year 2014. However, more focus is given to the lectures for explaining clearly the scope of examination.

RECOMMENDATIONS TO CANDIDATES

1. Study the materials and technology in terms of the various building trades.
2. Look at building control on construction and updates with the PNAP.
3. Study detail construction drawings of various components at the candidates' office or through local references.
4. Learn the procedure of construction for various trades.
5. Read about the specification of materials.
6. Attend all lectures given by the panel.

Paper 5 Subject Panel Chair

1. THE QUESTION

The test case is a development comprising student dormitories and staff quarters in a virgin site within a university campus, which abuts campus roads on the east, north and south. The surrounding buildings are teaching and administration blocks of 6-10 storeys high.

The task is to produce a preliminary master layout plan to accommodate 4 staff quarters blocks, 2 student dormitory blocks, a 1-storey dining / multi-purpose hall, car parking spaces, and loading / unloading bays. Prototypes of staff quarters and student dormitory are given. Major planning features include a landscaped open area of at least 1000m², and extending an existing artificial lake to 2500m² in total, the provision of pedestrian walkways to connect all blocks without the need to cross the internal roads, and the provision of a 6m wide pedestrian passage linking the roads on the north and south through the site.

It is specified that the design shall comply with the building separation, street setbacks and green coverage requirements in accordance with the Sustainable Building Design (SBD) Guidelines (PNAP APP-152).

The candidates are expected to demonstrate their competence in coming up with a sensible site arrangement that generally meets the statutory requirements and the design brief.

2. ANSWER SCRIPTS

Given the generous site area, a considerable number of layout variations are possible. The panel observes a wide range of design approach in response to the design brief and the site.

The panel is generally satisfied with the performance standard this year. This is the second Site Design paper in a row, in which the SBD requirements are incorporated. Most candidates were able to demonstrate a fair understanding of the SBD requirements.

3. KEY INDICATORS

The preliminary master layout plan of each answer script was carefully scrutinised by the assessment panel, which did not look for perfect design solutions and absolute compliance with the regulations, but a sensible approach and reasonable execution of site planning with general understanding of the statutory requirements.

The following key indicators are specific to the Paper this year, revealing the competence of the candidates in their sensibility, level of technical knowledge, understanding of statutory control, and skill of implementation:

- (a) General compliance with development parameters – maximising development potential, compliance with building height limit and SBD requirements.
- (b) General compliance with the brief – provision of dining / multipurpose hall, landscaped open area, extended lake, pedestrian walkways, pedestrian passage, car parking spaces, and loading / unloading bays as required.

- (c) General compliance with major statutory requirements – prescribed windows, EVA, ingress / egress points, etc.
- (d) Sensibility in disposition of blocking to exploit views to the lake and landscaped open area and to avoid major overlooking.
- (e) Sensibility in the arranging vehicular and pedestrian circulation, demonstrated by internal roads and pedestrian paths, car park, drop off, loading / unloading provisions and access to each block.
- (f) Sensibility in the provision of open space, which could be conveniently enjoyed by the residents but appropriately segregated from the internal roads and car park.
- (g) Sensibility in planning the extended lake in harmony with the landscaped area, pedestrian walkways, and individual blocks.

4. **WEAKNESSES**

The following major weaknesses are observed:

- (a) Non-compliance with SBD requirements
 - Linking individual blocks together or providing separation between individual buildings of less than 15m so that the Projected Façade Length (LP) exceeds 60m.

(In this Paper, given the generous site area, the requirements of street setbacks and green coverage could easily be satisfied.)
- (b) Non-compliance with prescribed window requirements
 - Complying with the SBD requirements at the expense of the prescribed window requirements.
 - Blocks abutting the common boundary on the west of the Site.
- (c) Insensible disposition
 - Dormitories / quarters substantially overlooking each other despite the generous site area.
 - Non-user-friendly / unusable leftover space between blocks.
 - Student dormitories / staff quarters facing away from delightful features such as lake, landscaped open area, etc.
- (d) Non-compliance with planning feature requirements
 - No extension to the existing lake, or the extended lake is substantially below the required area.
 - The extended lake is disjointed with the development.
 - Missing pedestrian walkways and/or 6m wide pedestrian passage.
 - Pedestrian walkways substantially interrupted by internal roads.
 - Missing or insufficient covered car parking spaces.
 - Dining / multi-purpose hall more than one storey.
- (e) Insensible internal road planning
 - Grossly over-provided internal roads leading to fragmented open space and numerous pedestrian crossings.
 - Under-provision of internal roads leading to inadequate drop off and

- loading / unloading provisions for each block.
- Car parking spaces and loading / unloading bays accessed directly from roundabouts.
- Vehicular access not complying with XYZ points.
- (f) Non-compliance with EVA requirements
 - Substandard hammerheads and turning circles for fire engines.
 - Inadequate coverage of building facades.
 - Substandard EVA width.
 - Excessive internal roads as EVA where the buildings can be easily reached from the public roads.
- (g) Failure to maximise development potential
 - Number of student dormitories / staff quarters blocks and/or number of storeys substantially less than required in the Brief.

Paper 6 Subject Panel Chair

The Paper

This year's Paper aims to examine the candidates' competence in the design of a residential typical floor plan for a private developer in an urban site. The question is to test our candidates their understanding of typical unit planning in a private residential development, common in Hong Kong.

The design brief mainly requires the provisions of 3 units on a typical floor, main entrance and clubhouse facilities as appropriate.

For simplicity sake, provision of loading/unloading space and vehicular parking are not required within the site. Site vehicular access is also not required.

In view of the reduction in answering time from 8 hours to 6 hours since PA 2012, submission requirements are limited to a Ground Floor Plan, a Typical Floor Plan and 1 Section. 3 Dimensional illustration and calculations are not required.

The Answer Scripts

The Subject Panel agrees that the site constraints are clear and straightforward. The design brief is related to a building type that candidates should broadly in touch with in Hong Kong. It should show their understanding of residential planning. Also first time in many years, the scale of drawings for plans is required to be drawn at 1:100 as compared to 1:200 scale in the past. These enlarged plans enable the Panel to do a more detailed assessment.

Key Indicators

The detailed layout of each paper was scrutinized carefully jointly by the assessment panel. The Panel was not looking for brilliant architectural design, but a sensible design solution that could meet the design brief, respect the site constraints and in general compliance with the buildings regulations.

The Panel had made the assessment based on the following key indicators that can reveal the competence of the candidates in their design sensibility, level of technical knowledge and skill of implementation:

- a) General compliance with development parameters – including permitted site coverage and building height;
- b) General compliance with major statutory requirements – including prescribed windows, fire escape and EVA.
- c) General compliance with Sustainable Building Design (SBD) guidelines- street set-back.
- d) Response to site condition for living spaces disposition.
- e) Sensibility in arrangement of main entrance on ground floor

- f) Sensibility of core design and common circulation in a typical residential plan.
- g) Sensibility of hierarchy of units on typical floor.
- h) Sensibility of scale and proportion of living spaces and their functional relationship
- i) Sensibility in the design of structural system, floor-to-floor height and disposition of building services spaces.

The Weaknesses

The major weaknesses observed this year includes:

- a) Design and Planning
 - Inappropriate disposition of the 3 units around the core;
 - Inappropriate access of ground floor entrance;
 - Inappropriate clubhouse consideration;
 - Inadequate scale – lifts, stairs, corridors are often grossly oversized or undersized;
 - Inappropriate common circulation arrangement.

- b) Building Structure
 - Inappropriate structural design and its integration with the unit layout;
 - Inadequate floor to floor height.

- c) Scale and Proportion of living space
 - Inadequate dimension for future furniture layout;
 - Inadequate proportion and geometry for living and dining;

- d) Relationship of functional spaces within unit
 - Inappropriate relationship between main door to living/dining room;
 - Inappropriate relationship between kitchen and dining room;
 - Inappropriate relationship between bathroom and bedrooms.

- e) SBD guidelines Compliance
 - Non-compliance of the building setback at podium from street B, which is only 6m wide.

- f) Statutory Compliance
 - Non-compliance of prescribe window, particularly facing common lot boundary and service lane;
 - Non-compliance of MOA.

STRUCTURE OF PAPER

Candidate has to provide a one-page synopsis and go on to complete a 20-page report. The Professional Assessment Handbook details the topics requirement and report format. The passing mark is set at 50%.

ASSESSMENT OBSERVATIONS

148 out of 203 candidates passed the Paper. The passing rate is 72.91%. 7 candidates failed this paper due to high percentage of copying found. Starting 2014, candidates who commit plagiarism in this paper would receive zero mark and the result slip of the concerned candidates would be marked "zero due to plagiarism". The concerned candidates are not allowed to take this paper in the following year of PA.

The main issue with this paper continues to be for the increasing numbers of candidates to find suitable projects to study. This is the third year a requirement to research a special topic is introduced. It is generally agreed that the case study remains a useful tool through which graduates can learn about the essential elements of contract administration, even though the projects they are handling in the office may not give them sufficient exposure to the entire range of practical issues. Passing rates are usually high and it is not seen as a major source of anxiety for candidates.

RECOMMENDATIONS TO CANDIDATES

Carefully study and analyze available information on the project and talk to the project team to get a thorough understanding, then write the report to cover what has been learned. High emphasis is put on candidate's own appraisal of the various issues and problems relating to the project. Special topic study gives candidates opportunity to research in depth a topic of interest. Students may continue to use previous reports as format and contents template but have to refrain from copying multiple sentences and paragraphs, which will be readily detected by the new software.

Paper 8 Subject Panel Chair

HKIA/ARB Professional Assessment 2013
Paper 9 : Professional Interview
Examiners' Report

STRUCTURE OF PAPER

This paper is a 30-minute interview conducted primarily in English and each candidate is interviewed by a panel consists of three interviewers. This is the second year that the new policy on using Cantonese for technical terms and for supplementary purpose with the permission of the Chairperson of the Panel of Interviewers is implemented.

This is also the second year to test candidates on their Case Study reports in the Professional Interview. Interviewers reminded the candidates that their case study report is also used as a referencing material in the interview. Candidates may choose projects not handled by themselves and Interviewers are reminded to cross reference with the candidates' logbooks.

Interviewers are advised to make sure the candidates have digested the followings in doing their Case Study reports:

- a) Statutory Control
- b) Cost Control
- c) Time Control
- d) Safety
- e) Quality Control
- f) Design Quality Control
- a) Building Contracts

Candidates' professional maturity and adequacy of the practical experience as recorded in the Logbook are assessed by the interviewers. Questions may cover topics related to Buildings Ordinance, Building Regulations, other related ordinances and Codes of Practice, construction knowledge, Building Contract and Contract Administration and Professional Ethics. Candidates' confidence in answering questions is also looked for by interviewers.

ASSESSMENT OBSERVATIONS

114 out of a total of 154 candidates (74.03%) passed the paper in the March 2014 attempt (for PA2013), which is the same as the attempt in March 2013.

From the report of Interviewers on failed candidates, most candidates were lack in knowledge on Building Contract and Building Ordinance. The candidates were also lack of confidence and general knowledge; and were not well prepared for the Interview. The weaknesses may be attributed to their lack of practical experience on local projects.

RECOMMENDATIONS TO CANDIDATES

1. To reinforce his/her understanding of a project selected for case study, a candidate is recommended to instead of just reporting to his/her advisor what have been done during the period of review, discuss regularly with the advisor of what he/she has

observed in the case study and to consult the advisor the rationale behind certain solutions to various problems.

2. As reflected in the summary, main reasons of failure of some candidates in the examination attribute to the lack of practical construction and contract administration experience, which may be a result of the reducing number of local projects. Candidates are advised to look at their job exposure in particular the chance of getting in touch of local projects before they commit or engage to the practice during their internship period.

Paper 9 Subject Panel Chair