

# APEAS<sub>LTD</sub>

**ARCHITECTS' PROFESSIONAL EXAMINATION AUTHORITY IN  
SCOTLAND Ltd.**

**THE EXAMINATION IN PROFESSIONAL PRACTICE &  
MANAGEMENT: PART 3, 2015/16**

**QUESTIONS for CANDIDATES**  
**All questions should be attempted**

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## QUESTION 1

Write about **100 words** on the following:

- 1.1 What are the advantages to a practice like GFY in using employment contracts?
- 1.2 What are the pros and cons of using 'retained services' within an architect's appointment for a design and build contract?
- 1.3 What are the risks of using provisional sums in a traditional building contract?

*In writing answers to Q.1.1 to Q.1.3 candidates should **not** simply copy and paste information from the Internet, but give answers in their own words. Copying and pasting information may be construed by examiners as plagiarism.*

End of Question 1

## QUESTION 2

### Memo

**To:** Candidate

**From:** Miriam Gorst

Candidate,

I have just been chatting to Sir Thomas Greaves. He was asking me if we are interested in working for him on a new fishing bothy at Loch Austerity in the Highlands. He couldn't have been more complimentary about our involvement in the Pavilion project and says he would certainly enjoy working with us again. He has a modest budget for the bothy but wants "something different and challenging". He didn't get to be CEO for nothing and although he is just exploring our interest in the project when he gets down to fees we know he will expect a competitive fixed rate with an excellent service. I am also aware that he has further call centre projects in the pipeline and I want to do everything I can to keep his interest in GFY alive.

We need to consider whether a practice such as ours can offer Sir Thomas the service he expects knowing that this is a small but bespoke project at a distant location, or whether we should instead recommend a smaller practice. We know that there aren't any firms closer to the project so our potential competitors are not advantaged by distance.

Therefore, I'd like you to think about this issue and prepare a memo to help us reach a decision by exploring the ability of a medium to larger size practice taking on much smaller projects. (I fully expect your thoughts to help inform future decisions on projects of this nature too). Some points you may like to consider are:

- Do you believe that we should create a set of office procedures and services for handling small projects that competes with the agility of smaller practices, and if so what are the head line topics?
- If you took responsibility for this project for us would that make the project tenable for us? Are there any disadvantages in this?
- Should we consider this a project to flex our design talent, have fun but expect a loss?

Regards

Miriam Gorst

End of Question 2

### QUESTION 3

Dear Candidate,

We have just been awarded a new £2.8million project by Cityburgh Council to design a new office building to replace three existing buildings in their portfolio that they are going to sell once the new building is complete.

The building is an extension of an existing, 800 sq.m, listed building to provide a total of 1750sq.m of gross floor area. The building has two ornate domes: one over the entrance and one over the second floor function room. As it is a government body I think that there may be a need for us to use BIM on the project. **What do you know about this?**

Irrespective of any guidelines that may exist I would like to use BIM as it seems to be the way forward for the practice. The project is going to be procured using a two stage design and build process using the council's framework contractors. The two stage process seems sensible as we can utilise the contractor during the first stage to do some investigations into the listed building to take away some of the risk. **What are the key issues around the use of BIM on this project? I know enough about BIM generally so please keep your response specific to the project. I am worried about how Revit will be used on this project, especially given the relative BIM experience of the design team. Who should be the BIM Coordinator for this project and why?**

Many thanks

John

End of Question 3

## QUESTION 4

**Memo:**

**To:** Candidate

**From:** Peter Sikorsky

I received an interesting phone call from Mr Waffle this morning. He is delighted with the outcome of the fabric repairs carried out to his house at the beginning of the year and particularly liked that we project managed everything to completion. He informs me that he is now planning to build a new house on the adjacent plot of land for his parents. We have obviously made a good impression as he wondered if GFY would be interested in taking this forward, providing a full service through to delivery on site using a traditional contract.

He is eager to get started and would like a meeting to formalise our appointment as soon as possible.

John, Miriam and Paul have agreed that this would be a good project for the office and a great example of repeat business. They have asked me to prepare a resource schedule and fee calculation. We know that Mr Waffle likes an easy life and he wants us to again project manage the build. We will, therefore, need to appoint the design team and I suggest we use the same consultants as we used for the fabric repair works.

I note that you recently attended a CPD event on CDM 2015 and it would be good if you can give me the benefit of your knowledge in order that I can complete the fee calculations and prepare for the meeting with Mr Waffle.

Can you get back to me on the following?

- 1.) What would be our role under CDM 2015 for Mr Waffle's project and are we in a position to provide this service?
- 2.) I would be interested in your thoughts on any resource implication and whether we should charge a fee?

I feel somewhat out of touch with the changes to the new CDM regulations and so can you also give me some notes on the following:

- a.) What is the strategic aim behind the new regulations?
- b.) Reflecting on how we respond to the new regulations, do you have any suggestions on how office procedures might be developed?

End of Question 4

## QUESTION 5

### Memo

**To:** Candidate

**From:** Paul Moore

Dear Candidate,

In view of the fact that Jill has been running this project and is an experienced architect I have not had a great deal of involvement to date. However, as she is now on holiday I have been trying to update myself. As I have never been involved in this sort of contract before, and as you have been with the project from the start, there are a couple of issues you may be able to help me with.

#### 1.

I have become aware that our targets for hours for the last 5 months have all been exceeded – we've had three people working flat out when it should have only had the project architect with a small amount of assistance. Now it must be said that we have been invoicing for these hours, and have been paid everything. We reached the target price a month ago and they are still paying (remarkably promptly I am happy to say) – should we just keep going? How does this work? My understanding is that the additional hours are at least mostly due to the contractor not following our drawings, and then needing fresh information to correct his own blunders, so I feel quite ok about it.

#### 2.

The client has apparently just announced that they don't want draught lobbies at the two entrances, which have always been shown on the drawings and were discussed at length at the design stage. They now want motorised revolving doors, but we are to make sure that the same number of people can access the building at peak times. To be totally honest I think they are right (although they did specifically ask for draught lobbies). We are going to have to alter a lot of information though! I doubt if we can get the drawings done in time for the contractor not to be involved in considerable expense – indeed it will involve cutting out slab which is already poured. At this late stage it will also surely delay completion. It is clear enough what we have to do on the technical side – the contractor has asked us to produce the information and provided a programme, but can we get paid for the work? What should we do to ensure this?

Could you let me have a memo outlining how change is meant to be handled in this type of contract? Could you also let me know what you think we should do/have done on both points above please? I have heard rumours that it is possible to go badly wrong with some of these contracts...

End of Question 5

## QUESTION 6

### Memo

**To:** Candidate  
**From:** Miriam Gorst  
**Date:** 23 November 2015  
**Subject:** AccessAll: Eastburn Road.

Vogon Construction's Commercial Director is really pushing for issue of the Certificate of Making Good and the Final Certificate. The Final Account has been agreed.

There are only two outstanding issues:

1. A major defect, listed at the end of the Rectification Period, was the failure of the solar water heating system, due to design faults and component defects. The Contractor has newly completed removal of the entire system and replacement with another system with panels from a different manufacturer. The replacement solar water heating system was tested and commissioned last week and seems to be operating satisfactorily. However, such was the magnitude of the design failure; the Client has lost all confidence in the M&E Subcontractor's competence and wants a further 12-month period for testing the new system over all 4 seasons, before agreeing to its acceptability.
2. Two months after the end of the Rectification Period, many areas of vinyl flooring began to blister up and this continues to worsen and remains an unsightly problem and a trip hazard. The Client wants something done about this. The problem seems to be caused by shrinkage of the chipboard flooring & ply, but the Contractor is refusing to deal with this.

Please can you provide me with a memo, outlining:

- a. The normal procedure for notifying defects at the end of the Rectification Period, Certifying Making Good and issuing the Final Certificate.
- b. How the solar heating and vinyl flooring issues affect these procedures.
- c. What you suggest we should do to overcome this situation.

Please also draft a letter to AccessAll, stating our position on this and giving advice on how they could deal with this.

End of Question 6

## QUESTION 7

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**Subject:** New job for Dent  
**Date:** 24/11/15 08:02:13 GMT  
**From:** [mgorst@gfy-arch.co.uk](mailto:mgorst@gfy-arch.co.uk)  
**To:** [candidate@gfy-arch.co.uk](mailto:candidate@gfy-arch.co.uk)  
**CC:** [jyoung@gfy-arch.co.uk](mailto:jyoung@gfy-arch.co.uk)

Hi Candidate,

### **NEW PROJECT FOR DENT.**

See attached letter from TMM re our likely appointment.

TMM are to be Contract Administrator, so what effect will this have on our input during Workstages 5 & 6?

I also see that it's intended to use SBC/XQ/Scot 2011. Is this likely to have an effect on what we do?

Please can you provide me with a draft Resource Schedule showing estimated hours input for Partner, Project Architect and yourself, for all workstages, along with likely cost to the office.

Please also suggest an appropriate percentage fee.

What about a fee for acting as CDM Principal Designer?

Regards,  
Miriam.

**Miriam Gorst DA, RIBA, FRIAS  
GFY Architects**

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## QUESTION 7 (cont.)

### LETTER FROM TMM:

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**T M M P R O J E C T M A N A G E M E N T L T D .**  
UNIT 16, WESTMOUNT BUSINESS PARK, CITYBURGH. CB12 7PL Tel. 0123 456 7890 Fax. 0123 456 7899

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Miriam Gorst  
GFY Architects  
Geddes House  
1 Union Street  
Cityburgh.  
CB1 9RW

22 November 2015

Dear Miriam,

**DENT INDUSTRIAL SERVICES:  
PROPOSED OFFICE BUILDING, HOLLOW INDUSTRIAL ESTATE.**

I refer to our meeting with Arthur Dent Snr. last week and I confirm that he would like to progress with your appointment for the above.

Please can you provide me with a fee proposal for your services as Architects on the project.

You should note the following:

1. Your Client will be Dent Industrial Services Ltd, but I will be your point of contact.
2. Your appointment will be based on SCA/2014.
3. We will use 'traditional' procurement, with SBC/XQ/Scot/2011. There isn't enough time to prepare Bills of Quantities.
4. I will be Contract Administrator, so you won't have much to do during the construction phase, apart from helping me with the site meetings, keeping an eye on things, snagging, and the Final Account.  
Please take this into account in your fee proposal.
5. As you are to be the principal designer on this project, you will, naturally, be the CDM 'Principal Designer'.

I look forward to receiving your fee proposal ASAP.

Yours sincerely,

T. McMillan  
TMM Project Management Ltd.

TMM Project Management is a Company registered in Magrathea, company number MA0037043.

End of Question 7

## QUESTION 8

### Memo

**To:** Candidate

**From:** John Young

Dear Candidate,

We have just been appointed as architects by Grey Line Construction who won the design and build tender for this project.

I have examined the Planning Permission in Principle (Outline Planning Permission in England and Wales and Northern Ireland) document and it seems fairly straightforward although there are several conditions to be satisfied.

There are a couple of pressing issues to address:

The contractor already owned a small yard and store building adjacent to the site: it extends to three quarters of an acre. We were able to include this site in the team bid proposal which meant that we were able to increase the numbers of dwellings on the site by 8 units by moving the suds pond into this location. How do we cover this in our application to take the project forward?

It is apparent that the four - storey blocks proposed on the site will be higher than the stipulated height in one of the planning conditions, we will be 0.5 m higher using the required ceiling heights because of the proposed structural floor and service zones. Our contractor is insisting on using a specific pre-fabricated off site form of construction which determines these zones. Is there a procedure for getting this condition changed?

The Contractor is a little unfamiliar with Major Planning applications and the implications for the programme, could you advise of an appropriate timescales?

Is there any risk for us here that we should address? I am slightly concerned that we have not consulted with the planning authority to date.

Regards,

John

End of Question 8

## QUESTION 9

### Memo

**To:** Candidate

**From:** Paul Moore

Dear Candidate,

A quite extraordinary thing seems to be happening on the Smalltown Health Centre project. Apparently the M&E Engineers, Green and Green, have failed to answer any correspondence from Sawtooth regarding their novation. Sawtooth have approached SDL, and they have had similar problems, leading eventually to David Smith, SDL's MD calling at G&G's office unannounced to tackle them. Apparently they are unwilling to proceed with Sawtooth (for reasons unstated) and are pulling out of the project. Sawtooth (quick off the mark as ever) have approached P&D Engineers to replace them. I am nervous about this as we have never worked with them before. Also they have apparently indicated that at first glance they are not prepared to accept areas of G&G's design (G&G do not have any healthcare experience and I think they are relying on us a lot). P&D are saying that a lot of rooms which were to be naturally ventilated will require mechanical ventilation!

As time is short and to simplify the appointment process Sawtooth are asking if we could take them on as a sub-consultant.

This is all something outwith my experience! Could you have a think as to what the possible issues are from our point of view? Should we accept P&D?

SDL have also been on to say that Sawtooth are asking for additional money (amount as yet undefined) to cover their "inevitable" expense due to this. They want to know if this is a reasonable request. What do you think? What expenses will they incur?

End of Question 9

## QUESTION 10

Dear Candidate,

The Partners are now all out today either on holiday or on business for a couple of days and are not contactable. John did the tender opening; the tenders have been checked and are compliant. My task was to report the costs to the client and instruct the winning contractor as unusually the mobilisation period is only a week as the works need to be complete for the client's birthday party giving a 12 week construction period for the works. I have terrible toothache and I need to go to the dentist. As you know the job can you deal with it please?

The tenders have come back as follows:

Beetle Builders Ltd- £150,000;

House Extensions R Us - £152,500;

Rich Joinery - £159,000;

Family Construction Co - £169,500.

The good news is that the winning bid is right on the client's budget of £150,000. John managed to speak to Mr Sailor on the phone before he left and told him the tender returns and he seemed really pleased. He has asked us to send out a letter of acceptance for the project this evening to ensure that Beetle are on board for a week's time. John is away now Munro bagging until Tuesday and can't be contacted.

I've since had Beetle Builders Managing Director, Bobby Beetle, on the phone, I know him well from other projects and I told him the tender result, he is delighted to have won. He mentioned that he would be happy to take cash for part of the job. He suggested that if we put through £100,000 in the normal way he would take £50,000 in cash that would save Mr Sailor a £10,000 VAT payment. It looks like a win / win situation, perhaps suggest this to Mr Sailor?

Mr Beetle also said to me that this will allow him to complete the new GFY conference room project for the office that is currently out to tender at zero cost. He says he will return a Nil tender to keep the paperwork correct for the return date next week. I'm sure John will be delighted, an added bonus, I know he had budgeted nearly £10,000 for the conference room! It will help make up for this job, it has been a nightmare as you know, Mr Sailor has constantly made changes, I'm sure we have lost a fortune on the job.

Mr Sailor is also going on a long cruise around the world while the works are on-going. He has asked us to look after the money for the project while he is away and pay the contractor as necessary, we may even earn a bit of interest. He's asked that we write to him summarising the tender returns and suggesting a payment regime for the money on the project so he can organise the funds to be transferred in advance.

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## QUESTION 10 (cont.)

Can you prepare a cash flow statement for him? We'll have 3 monthly valuations for the project, maybe 3 equal payments would be ok, but put down what you think is best.

I have to admit I am a bit unsure on all of this as I have not come across a situation like this before.

In summary, two things I need you to prepare and issue, a Letter of Acceptance to the Contractor (it must go out tonight) and an e-mail to the client summarising the tenders and suggesting a payment regime / cash flow forecast. Sorry to dump this on you at the last moment.

Thanks,

Helen

End of Question 10  
End of Paper