

# APEAS<sub>LTD</sub>

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

**THE EXAMINATION IN PROFESSIONAL PRACTICE &  
MANAGEMENT: PART 3, 2013/14**

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

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## QUESTION 1

Write about **200 words** on each of the following:

- 1.1 Define the role of the architect when acting as BIM Coordinator on a project.
- 1.2 How does UK copyright law protect architects?
- 1.3 What are the architect's obligations in dealing with a contractor claim for loss and expense?

End of Question 1

## QUESTION 2

Dear Candidate,

As you know we finally revamped our practice web site in the last year and this seems to be well received by our existing clients and consultants. However, we are very aware that our practice needs to be more successful in gaining work if we are to maintain our size.

As a practice we have historically not been very good at marketing ourselves and have relied solely on repeat business, reputation or word of mouth to get new commissions. Before the recession this seemed to work, but it is not working as well now.

I am told that you did a marketing module as part of your degree and I am hoping that you will be able to help us develop our marketing and PR strategies. I would really appreciate it if you would draft a memo highlighting the key issues that you think we should address. The purpose of any strategies should ultimately be to attract more work (preferably work where we can make a profit) and raise our profile. Any strategies must be aligned to the ethos of our practice and please remember that our budget is still very restrictive.

Regards

John

End of Question 2

### QUESTION 3

**Memo to:** Candidate

**From:** Miriam Gorst

**Date:** 26 November 2013

**Subject:** Piranha offices, Harbour Business Park.

We have received a letter from our client's lawyer, requiring us to delay certifying Practical Completion and to issue an inflated Interim Certificate and cleaned-up Site Inspection Report.

Please can you write me a note on the following points and draft a letter in reply to the lawyer:

1. What we will do?
2. What our roles are as Project Architect and 'Architect' named in the Contract?
3. What are our duties of care in administering this contract?
4. How the Codes guide us on this?

Please can you also give me your thoughts on the status of the minor, but numerous snagging items relating to our ability to certify Practical Completion.

Regards

Miriam

## QUESTION 3 (cont.)

LETTER FROM CLIENT'S LAWYER:

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# McMillan Legal Services

*3<sup>rd</sup> floor, Fenchurch house, fenchurch circus, CITYBURGH. CB12 3HH.*

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GFY Architects  
Geddes House  
1 Union Street  
Cityburgh  
CB1 9RW

25 November 2013

FAO Candidate.

Dear Sirs,

### **PIRANHA PROPERTIES: NEW OFFICES, HARBOUR BUSINESS PARK.**

Our mutual client is finalising the terms of the lease with their prospective tenant, Seaward Shipping. Seaward originally wanted entry before Christmas 2013, but now they have put this back until possibly April.

Although the new building is now finished, our client doesn't want to be landed with looking after it, arranging security & insurance etc. over the Christmas holidays.

On behalf of Piranha, we instruct you to delay certifying Practical Completion until Seaward is ready to take entry. As our client's architect, receiving substantial fees from them, you will, of course, act in their best interests.

Additionally, in order to help Piranha to negotiate a higher rent, it would be advantageous if they could claim that construction costs have escalated above budget.

Please can you provide us with an Interim Certificate showing a gross valuation, say, £150,000 higher than the Contract Sum, so that our client can put this to Seaward.

### **QUESTION 3 (cont.)**

Finally, it would also be helpful if we could demonstrate the high quality of construction. Please can you provide us with a copy of your Site Inspection Report from last week, but 'cleaned up' by omitting the majority of the listed snagging items which, although minor in nature, are numerous.

I look forward to hearing from you.

Yours sincerely,

Trisha McMillan  
Partner  
McMillan Legal Services

End of Question 3

## QUESTION 4

**Memo to:** Candidate

**From:** Peter Sikorsky

Miriam received a phone call this morning from the local Planning Authority informing her that they are considering serving the client with an Enforcement Notice. It appears that work has started on site without discharge of all of the applicable suspensive conditions attached to the Planning and Listed Building Consent approvals.

As Paul Moore is on holiday this week, Miriam asked me to look into this as a matter of urgency and brief her by the end of today. I need to leave shortly to attend a Design Team meeting, so I would be grateful if you could look into this in my absence. I must confess I have not been directly involved with this project recently as I have been moved on to work on the new housing project for John. Consequently, I'm not up to speed with current events.

I have briefly managed to check the job file and found the Planning and Listed Building consent documentation. There are unfortunately two conditions outstanding both of which are required to be discharged before works commenced on site. The first was approval on the colour of the new limewash to the harling of the existing building. The second was the requirement for the implementation of an Archaeological Watching Brief.

I know that the contract was awarded 4 weeks ago to IM Trusty, however there are no minutes on file from the Pre-Contract Meeting.

On checking the job correspondence further I note an email from John Young requesting further information from the Principal Contractor for the Construction Phase Health and Safety Plan, but there is no mention of contract start date or site possession date.

I have just called the Main Contractor on his mobile and he confirmed his ground worker has indeed commenced operations and has started excavations in the field of the proposed car park in preparation for the drainage installation. He noted that the site set up (mess huts, toilets, fencing etc.) is programmed for next week.

It is critical that the new facilities are complete for the new school session. I know we are already behind given the on-going discussions with Building Control re the Invert levels next to the Castle.

## QUESTION 4 (cont.)

Can you provide me with a definitive answer by 4pm in the form of a brief report? I need to know what the various issues are, your recommendations as to how we should respond and what actions we should take.

Thanks

Peter

End of Question 4

## QUESTION 5

**Memo to:** Candidate

**From:** Miriam Gorst

I have received the attached letter from the engineer, which is self-explanatory.

We are currently close to the end of the production information period: the target date for information release is two weeks away. The last payment we received for the work we have done on this project was at Stage C.

There is a significant amount of money outstanding and our team invoices for Stages D and E have been issued and are four and two months late respectively.

The client has been very good to us over the years and has had a good payment history previously. Since receiving RHS Consulting's letter I have spoken to the Managing Director, who is apologetic, he has admitted that they do have some financial issues at the moment, but tells me that payment will be made in a month's time (not for the first time I may add). The tender issue is paramount to their funding arrangements, and he has asked us to ensure that we meet the programme to ensure their targets are met to enable payments to be made.

The engineer's approach is forthright, he has worked with the client before and while there have been statement reminders there has been no discussion about this and the letter is a bit of a surprise. The services consultant is taking a more pragmatic approach, and is working towards the information release date and so far has not pressured us in relation to the unpaid fees.

The late payment is causing us cash flow problems as well as we have devoted significant resources to this project over the last few months which have not been covered by payment yet.

I am in a bit of a quandary about this, on the one hand the client has been loyal to us previously and on the other we are caught in the middle as the engineer is entitled to payment and we are effectively his client.

## QUESTION 5 (cont.)

Could you write me a short memo on the route you think we should go down and then draft me a letter in response to the engineer and one to the client outlining our intended course of action?

Regards

Miriam

## QUESTION 5 (cont.)

RHS Consulting

GFY Architects  
Geddes House  
1 Union Street  
Cityburgh  
CB1 9RW

10<sup>th</sup> September 2013

Dear Sirs,

### **Call Centre Development Project**

It is with regret that I have to give you 7 days' notice under clause 1.6.2 of the appointment that we will be suspending any further work on this project until such times as our invoices 354 and 376 in the amounts of £40,000 and £50,000 respectively are paid in full.

Our repeated requests for payment have been ignored and regardless of the situation with the client our contract is with you and you need to fulfil your obligations to us and you have been in default for some time.

I also have to advise you that I have instructed our solicitors to prepare an action against you to recover the outstanding monies if after the period of seven days following the date of this letter payment has not been made.

Yours Faithfully

Joe Steel  
Director

RHS Consulting Scotland Ltd a company registered in Scotland No SC 2322098980, Vat No 73337171862  
Rock House, Unit 5, Cityburgh Business Park, Cityburgh, CB1 2XH  
E:office@rhs.cb, Tel: 0414 234 56789 W: [www.rhs.cb](http://www.rhs.cb)  
Directors : Jim Rock, CEng, MICE. Madge Hudson, CEng, MIStructE. Joe Steel, MICE.

End of Question 5

## QUESTION 6

**Memo to:** Candidate

**From:** Miriam Gorst

We have just about wrapped up the contract for Mr Susendrah's extension and I thought things had gone quite well despite the contract delay and delay in receiving the contractor's costs at the end. Attached is our reconciliation document.

However, I received a rather worrying email this morning and I'd like you to look into this for me and draft up a reply. I'm really not sure how things could have got this far without me noticing particularly as Virus has been our accountant for some time.

To further complicate matters I have just heard from HWB Ltd that they have not included all their over-heads or any profit in their invoices (I believe this is an oversight on their part as their surveyor has been on a yearlong round the world yachting sabbatical).

I would like a memo from you that includes:

1. A draft response to his email.
2. How we deal with the news that the invoices were not complete?
3. Are there any immediate steps we should be taking?
4. Anything else you think would reflect on best practice for the future.

## QUESTION 6 (cont.)

### Cost Reconciliation Prepared By GFY Architects

EXTENSIONS TO EXISTING HOUSE		Interim Certificate Number					Unclaimed Variations Not Yet Included in Builder's Invoices	Current Value of Packages
	BUDGET COSTS Accepted 20th September 2012	1	2	3	4	5		
		16.12.12	25.01.13	28.02.13	10.04.13	27.10.13		
DOWNTAKINGS	£1,100.00		? See note below					
JOINERWORK	£29,900.00	£4,000.00	? See note below	£5,000.00	£15,000.00	£5,900.00	29,900.00	
SUPPLY OF STAIRCASE	£5,000.00					£5,000.00	5,000.00	
BUILDERSWORK	£8,700.00	£3,000.00		£3,000.00	£4,000.00		10,000.00	
ROOFING WORKS	£11,000.00			£9,000.00		£2,000.00	11,000.00	
ELECTRICAL WORKS	£3,000.00		? See note below			£3,000.00	3,000.00	
PLUMBING & HEATING WORKS	£6,000.00		? See note below			£3,400.00	3,400.00	
SUPPLY OF SANITARYWARE	£3,000.00							
STEELWORK	£2,000.00				£2,000.00		2,000.00	
BALCONY RAILINGS / TIMBER DECKING	£2,100.00					£2,100.00	2,100.00	
PLASTER / TAPING WORKS	£2,500.00			£1,000.00		£1,500.00	2,500.00	
EXTERNAL RENDER	£1,000.00					£1,000.00	1,000.00	
WALL / FLOOR TILING TO ENSUITE	£1,900.00					£900.00	900.00	
MASTIC WORKS	£300.00							
GARAGE DOOR	£900.00							
PAINTING / DECORATING	£4,000.00							
SCAFFOLDING	£2,000.00					£2,000.00	2,000.00	
INSURANCES	£750.00							
SCAFFOLDING	£1700.00							
Unspecified invoice*			£10,000.00				10,000.00	
<b>SUB-TOTAL</b>	<b>£86,850.00</b>	<b>£7,000.00</b>	<b>£10,000.00</b>	<b>£18,000.00</b>	<b>£21,000.00</b>	<b>£26,800.00</b>		
EXTERNAL WORKS SUM	£10,000.00				£9,000.00		9,000.00	

<b>VARIATIONS</b>								
Liquid Plastic AI 1.11					£2,271.00			2,271.00
Paper to lounge				£320.00				320.00
Rads to new heating system pipe work				£2,000.00				2,000.00
<b>UNCLAIMED VARIATIONS (AI 1)</b>								
Alter & Enlarge Stair Opening AI 1.1							£1,880.00	
Alter hatch for handrail AI 1.2							£120.00	
Extra C24 Joists; HW Floor; Enhanced decking AI 1.3							£5,454.00	
Less Original Steelwork Allowance							-£2,000.00	
Labour for above AI 1.3							£4,000.00	
Additional Paving in Rear Garden AI 1.4							£4,800.00	
Take delivery of Sanitaryware AI 1.5							£100.00	
Redo defective new painterwork AI 1.5							£900.00	
Supply and fit timber balustrade AI 1.7							£600.00	
Supply and fit time clock to heating AI 1.8							£120.00	
Security Alarm AI 1.9							£2,000.00	
Fit thermostat to radiator AI 1.10							£60.00	
Remove defective underfloor pipework AI 1.12							£2,707.90	
Remove water tank within roof space AI 1.13							£380.00	
Lighting to decking AI 1.14							£800.00	
Downlighters; underfloor heating; add stair light AI 1.15							£900.00	
Balcony Railing AI 1.16							£2,889.00	
Front infill railing AI 1.16							£410.00	
Less amount paid in valuation 5							-£2,100.00	
Additional leadwork AI 1.17							£600.00	
Security Alarm AI 1.18							£1,200.00	
Garden rockery and planting AI 1.19							£2,600.00	
Client supplied garage door AI 1.20							£1,429.00	
Painter work deduct AI 1.20							-£2,000.00	
Steelwork joist hangers & bolts AI 1.22							£750.00	
New boiler and expansion tank AI 1.23							£5,532.00	
Accept Insurances Quotation AI 1.24							£750.00	
Accept Scaffolding Hire AI 1.25							£1,700.00	
<b>TOTAL ARCHITECT'S INSTRUCTIONS</b>								£34,131.90
<b>TOTAL</b>	<b>£96,850.00</b>	<b>£7,000.00</b>	<b>£10,000.00</b>	<b>£20,320.00</b>	<b>£32,271.00</b>	<b>£26,800.00</b>	<b>£36,581.90</b>	<b>£132,972.90</b>
* Note for Payment 2: A blanket invoice of £10k to cover: Strip out brick partitions hardwood floors doors; Windows and Doors; Plumber new Heating system and hot water and First fix Electrician in lounge/porch.								

## QUESTION 6 (cont.)

### Email from Mr Virus Susendrah, CA to GFY Architects

**TO:** Miriam  
**FROM:** Virus Susendrah  
**SUBJECT:** Little Miasma House Extension - Costs

Dear Miriam

I have just received the reconciliation from your office as a precursor to agreeing the final account with HWB Ltd. What I've been anticipating for some time has now in fact crystallized! The silence on the costs had been deafening. But thank you for this.

I have been asking for details of the extras for some months now but have only been asked to approve three bits of additional work:

1. Landscaping/garden - although I've not been asked to approve the sums involved.
2. The new boiler – two quotes were provided.
3. Removal of the defective under floor pipework.

All the other extras noted against AI No 1 (the only AI received, and at that only just received with the reconciliation), I don't have any recollection of, or at least, did not appreciate additional costs were involved.

Amongst other things, I'm particularly interested in the sum allocated for the security alarm as I personally dealt with the contractor directly and received his quote, which I have to say bears no relation to the sum provided directly to me.

Also, I've just had the roofer on the phone and apparently he has never been paid for the job and is threatening to come to site and remove the slates! Should I pay him directly and knock off the amount I owe to the builder? I feel really sorry for this chap as I know his father rather well.

I look forward to your reply.

Regards

Virus

End of Question 6

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## QUESTION 7

**Memo to:** Candidate

**From:** John Young

Originally through a recommendation by our accountant we have a real chance to be part of a significant development at the highland headquarters of Glendrookit distillery. Recently purchased by a Japanese investor, the distillery plan to double their current production facility, triple their bonded warehouse on an adjacent site and extend their current visitor centre located within a grade “B” listed former mash house.

We originally submitted a quality submission to the client in competition with around twenty other practices and we have now been placed on a shortlist of three practices being asked to provide a fee submission. If we get the numbers right then this will be a major commission for us for the next few years.

The client is looking for fees for a full design team (architect, civil and structural engineer, mechanical and electrical services engineers) with the other professional functions (project manager, quantity surveyor and CDMC) being appointed separately. In order that we can reach a suitable fee figure I need you to prepare the following for me:

1. A high level fee resource schedule which considers the content and character of the three components of the project of our architectural fee in a competitive and commercial manner whilst still delivering a professional service;
2. Our initial quality bid did not require us to state our full design team. Can you list for me the key points we should consider in selecting the engineering consultants and any specialist skills they may require? Can you advise the likely fee levels we should be expecting compared to our own? As these consultants are working for us can you advise the most effective mechanism for their appointment in this instance?
3. The final procurement route is yet to be decided. However, we have been asked to consider whether the fee level for our services delivered under a traditional architect’s appointment would vary under a novated Design and Build contract; and if so can you let me know why?
4. The clients have not yet decided if all the portions of the project are to run in parallel or phased one after the other. What are the implications of this commercially: in particular with reaching a competitive bid?

End of Question 7

## QUESTION 8

**Memo to:** Candidate  
**From:** John Young  
**Date:** 27 November 2013  
**Subject:** Eastvale Trucks Workshop.

You may already have heard that there has been a problem on the site. The adjacent retaining wall, which was subject to the underpinning work, has collapsed. The supported ground, part of Notional Car Rental's site next door, along with 11 of their cars, has ended up in Eastvale's site. The cars appear to have been damaged significantly. Fortunately, no-one was hurt.

The Contractor appears to have followed the Engineer's detailing and sequencing for the underpinning, which also seem to be pretty sound, including the required shoring.

It looks like the correct insurance for this wasn't in place and the client will have to foot the bill for all the damage and rectification.

I can't see any evidence of the Contractor's insurances in the file. What should we have done, and when?

I'm not sure if GFY have been negligent in this. What do you think?

Please can you provide me with a memo, describing the correct insurance cover for this situation and the mechanism for obtaining it.

Just for completeness, please can you also list the other insurances, their purposes and who is to affect them, which are required by the contract, so we can check that cover exists.

Regards

John.

End of Question 8

## QUESTION 9

Dear Candidate,

This job is becoming very awkward, we are six months into the 12 month Rectification Period and the snagging list is a real issue. Our client is very angry and is demanding that we remove the builder and get the works carried out by someone competent. Thankfully so far we have maintained a good relationship with the client but their patience is running thin and because of who they are I think we need to be very precise about this.

There are too many issues to go into but almost everything the contractor tries to rectify they manage to make worse and now I am concerned that the retention of 2.5% we have deducted from the valuation will not touch the real cost of making good the works. The final account has not been finalised and we are arguing over £20,000 arising from the last Architect's Instruction which was issued 2-months before the end of the job. There is therefore around £30,000 still floating around to be valued. The contractor always looks for the cheapest way of rectifying issues often making the situation no better. For example, the shower drains are not draining away properly and so far they refuse to open up the ceiling below to properly fix the issue. They just use a drain un-blocker and try rodding it from above which helps for a day or two, but then gets worse again. The sealant they have used to hide many of the gaps around skirtings and the like has turned a yellowish colour and their decoration touch ups stand out more than the original defects.

The biggest issue though is the porcelain floor tiling in the reception and toilet areas, some of the tiles de-bonded very quickly after completion and the contractor replaced 15 number 600 x 600mm tiles in the reception that were affected. They are shaded differently from the original tiles, they stand out horrendously and we have sent away an original tile piece to the factory in Italy to get a better colour match. More of the original tiles have also de-bonded from the screed, some have cracked. The contractor is refusing to do anything more with the tiles without further payment, the tiling sub-contractor is not around anymore, the contractor is blaming our specification of the spacing of the movement joints in the tiling as insufficient, causing this problem. I have since found out that the new screed may have had something to do with it, the under floor heating was contractor designed. Their specialist suggested an anhydrite (calcium sulphate) screed which was recommended for their heating system. After reviewing the technical details we agreed to the change in specification of the screed but did not change our specification of the tiling adhesive which was based on the specified cement screed. As a result a bonding primer and the correct adhesive were not used as it should have been and I am sure this is the real reason the tiles are de-bonding. This gives me some concern as I believe we may have some liability in this regard. I am unsure what to do about this as we could bring attention to our own deficiencies if we highlight this issue.

## QUESTION 9 (cont.)

The original snagging list was issued six months ago at the time of Practical Completion. It was then updated and re-issued two months ago. Having gone round the site with the client last week I have new items to add to the previous defects list, including replacing all of the floor tiling, which I feel I should issue now.

The client does not want the contractor near the building again but he has entered into a contract with the contractor and it is our duty to administer the contract fairly.

Knowing that the contractor has attempted the original defects list, do we need to give him the opportunity to rectify the new list? Contractually how should we proceed and how would we get another contractor to complete the rectification works? Will we be able to recover additional fees from the contract in organising this? What should we do in relation to the tiling specification issue?

Regards

John

End of Question 9

## QUESTION 10

**Memo to:** Candidate

**From:** John Young

Dear Candidate,

We have received the attached communication from Couper Construction, requiring us to make a series of changes to the design of Ardneilan Community Centre. I am somewhat perplexed by this as I thought that the project was on course. I have to go to the Housing Conference for the next couple of days, so could you make some notes on each item and draft a possible reply? I haven't given it much time, but my initial reaction is:

1. We must have the smoke vents, as building control has confirmed it.
2. I know it is expensive, but we've "sold" the idea of that brick to the client and the planners. It is going to be really embarrassing going back now and change our tune.
3. That Mr Cleaner is a thorn in our side. I can't believe he is now siding with the contractor against us. I know for a fact that the hoist is the only solution, so don't really know what to do here. As for deleting the rooflights, it is unthinkable. If only we were still working for Property Services.
4. The tiles were added for good reason, as the lino was too slippery when wet. They are also quite lovely and I think we should stick to our guns here. The client is also expecting them as we specifically spoke about them when we presented to the councillors last week.

Regards

John

## QUESTION 10 (continued)

GFY Architects  
Geddes House  
1 Union Street  
Cityburgh  
CB1 9RW

21<sup>st</sup> November 2013

Dear Sirs,

### **Ardneilan Community Centre**

As you will be aware, the above project is significantly over budget. This has been revealed during a gap analysis exercise that we have just completed, which measures the movement in the design since tender. We require the following items to be actioned immediately:

- 1 A number of smoke vents have been added to the top of the atrium space along with actuators on doors and windows at the bottom. These extremely expensive items (totalling some £75,000) were not indicated at Stage C or on the planning drawings. Accordingly they have not been priced for and must be removed forthwith. If they are deemed to be required by Building Control, and have therefore been omitted through your error and if compensatory savings cannot be found, recompense for their cost will be required from you.
- 2 As stated at the time of our interview the brick specified for the main facades is absurdly expensive, being three times the price of bricks we have used on similar buildings. We can see no reason for this and require you to find a more economical brick costing a maximum of £30 per 100 rather than the £90 per hundred which the present one costs.
- 3 We have had a meeting with the Council's Facilities Manager, who informs us that he will not accept the idea of cleaning the underside of rooflights from a mechanical hoist. Indeed he states that he has complained many times to the Property Services Department regarding this proposal, but that his concerns have been dismissed. We are at a loss to explain why you have disregarded your client in this manner, but Mr Cleaner has confirmed that the rooflights should be deleted and you are therefore instructed to implement this forthwith.

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## **QUESTION 10 (continued)**

- 4 Almost half the ground floor is now covered with expensive ceramic tiles. These are not described anywhere in the tender information, which shows linoleum throughout that area. Again, we require the removal of these items from the design.

Please could you furnish us with a programme for the implementation of these instructions by return. Furthermore, we must inform you that you are not authorised to make any further changes to the design without our specific instruction.

Yours Faithfully

Reginald Brown,  
Director, Couper Construction

End of Question 10  
**END OF PAPER**