

2021/22

**Constructionarium Ltd:
A Guide To Setting Up
Project Teams**

Constructionarium Ltd
c/o Construction Industry Council (CIC)
The Building Centre
26 Store Street
London, WC1A 7BT

www.constructionarium.uk

Welcome

Thank you for participating in Constructionarium.

Constructionarium Ltd provides a safe, construction experiential learning experience. This guide is designed to assist you in preparing for your week to ensure that you and your students can get the maximum out of the learning experience.

This document relates to your residential week whilst on our site at **Bircham Newton, Norfolk**. The full postal address is:

Constructionarium Ltd
c/o National Construction College
CITB
Bircham Newton
Norfolk
PE31 6RH

Should you have any queries then please contact either Joe Chandler or myself:

Julia Stevens	Chief Exec.	jstevens@constructionarium.uk	07950 686 596
Joe Chandler	Site Manager	jchandler@constructionarium.uk	07840 118 398

We look forward to welcoming you on site and for your students/delegates to have a safe, valuable and enjoyable learning experience with us.

Regards

Julia Stevens
Chief Executive
Constructionarium Ltd

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1. Introduction

Constructionarium Ltd is a not for profit organisation which provides a learning experience for Students/Delegates who are following a civil, construction or built environment academic course and for professionals who are starting out on their career in the construction industry.

The experience gained from six-days of practical work is based on a rich vein of participation at all levels. It introduces safety, logistics and cost control as well as the reality of site operations. The Students/Delegates are involved in the wide range of construction tasks ranging from project manager to site operative. At the same time they benefit from industry's practical expertise and develop a wide range of managerial, interpersonal and team skills as when a practical understanding of the complexities and dimensions of working on site.

Constructionarium is hosted by the National Construction College (NCC) in Kings Lynn, Norfolk. We have our own dedicated training area on an established 19-acre site. Ground features and conditions have been created to provide challenging environments requiring technical and practical solutions.

Constructionarium operates on the basis of a triangular relationship between a University or College, Contractor and Consulting Engineering working in partnership to deliver a learning experience to Students/Delegates studying built environment related courses. The unique role each part plays should not be underestimated.

It can also be used by organisations who wish to embed H&S, Company behaviours and values in a unique learning environment to new starters or to harmonise best practice in JV arrangements.

In the traditional method, the University provides the theoretical framework and academic rigor. They ensure that Students/Delegates are briefed on the event prior to attending, help the Students/Delegates identify and allocate dedicated team roles; and provide the pastoral care during the event.

The Contractor will bring the practical construction knowledge, costing experience, provide experience personnel to coach the Students/Delegates in their activities, provide project materials, PPE (not boots) and safety management. Whilst the Consulting Engineer, will provide design knowledge, drawing interpretations, project co-ordination and management skills.

The Contractor will become the "Client" during the week, holding project review meetings each evening and checking that their project is to time and budget.

To be truly successful, Students/Delegates benefit the most from having all elements of the partnership in place and the event is planned into the academic timetable with sufficient opportunity for the three parties to interact with the Students/Delegates before starting their week.

The following will assist you in your event preparation.

2. During The Event

Constructionarium seeks to model the activities of a full-scale construction project. Each project team will act as a contracting company for their structure they are to build and hand over the completed structure to the Client at the end of the week (Friday mid-day). The stages in achieving this will be:

Production of a tender document comprising:

- the programme of works for completion of the structure within the allotted time frame;
- a budget price, with justification;
- an overall project method statement;
- a risk assessment for the project as a whole.

This should be completed prior to attending the event. This will be presented by the Project Managers for approval by the Client. The tender will be settled at this meeting, following which, detailed planning of the immediate tasks for the start of construction on can be pursued.

Monday – Four member of each project team will be involved in Power tool training. They should be identified prior to the week and report to the Resident Site Manager at the Constructionarium site office at 09:00hrs.

Monday 08:00hrs to Friday 12:00hrs:

Carry out construction to completion under the supervision of the Contractor staff to the satisfaction of the Consulting Engineers, who are acting as the client representative.

For each structure, there will be a daily contract review (held every evening) at which the construction team will present a progress report on:

- Health and Safety
- Programme
- Cost
- Quality
- Teamwork

to the Client acting as company directors.

The hand-over of the completed structure at midday/early afternoon on Friday will be followed by a final contract review and on-site presentation.

3. Roles of the Partnering Triangle

Contractor:

- Overall responsibility for constructions operations including approval of method statements, risk assessment, Health and Safety, materials and resources;
- Available for advice and guidance on construction activities, including specialist tasks such as setting out Chairing daily contract review;
- Advice is at no cost to the contract.

Site supervisors/tradespeople (blue hats)

Individual specialists, not all are required depending on the project, but can include:

- Joiner
- Steel fixer
- Concrete foreman
- Scaffolder
- Plant operator.

These personnel are available for advice on construction methods and techniques at no cost to contract, or available for work at specified rates.

Consulting Engineers

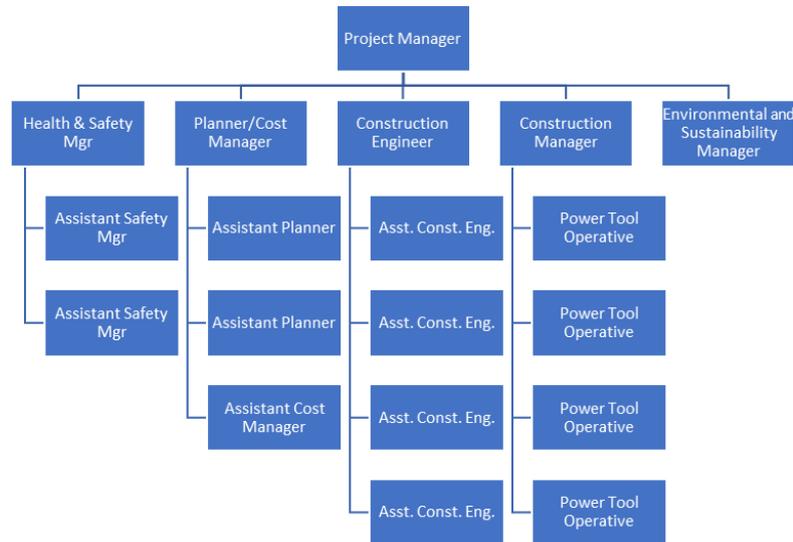
- Monitoring of construction to ensure that works are in accordance with the contract documents (drawings and specifications);
- Ensuring that the contractors construction sequence does not compromise the design intent;
- Reviewing contractors designs for miscellaneous items (e.g. anchor fixings etc.);
- Dealing with design issues that arise during the construction process;
- Sign off and acceptance of the completed works;
- Available for advice and guidance on design issues at no costs to contract.

University/College Staff

- Responsible for monitoring and assessing the general performance of the construction;
- teams and pastoral care for all Students/Delegates on site;
- Manage poor behaviour/participation of Students/Delegates if required;
- Available for advice on all issues relating to construction, student/delegate pastoral care and the accommodation at the National Construction College. They are at no costs to contract.

4. Role Of The University/College/Organisation Project Teams:

Depending on the project, there could be between 15-25 Students/Delegates. This number varies depending on University/College/Organisation. However, the organisation of the project team and the roles to be filled remain the same. For example:



The teams can adjust the numbers of safety, planners, costings and construction engineers to suit the size of the group.

Specific training is provided by CITB for the identified Power Tool Operatives. Once trained, Those individuals will be the only ones available to operate small power tools.

No student/delegate/organisation staff member will be allowed to operate heavy plant.

In identifying the team roles, Students/Delegates should look for evidence that there is a strong correlation between the skills required and those that have been demonstrated in previous University/College/Organisations activities. A brief summary of the responsibilities and skills required are shown on the next page.

Please ensure your Project Manager completes page 10 and sends directly to the Site Manager jchandler@constructionarium.uk **before the event.**

Summary Roles

	Role	Summary Responsibilities	Skills
1	Project Manager	<ul style="list-style-type: none"> ▪ Leadership of project ▪ Successful and safe project delivery ▪ Cost management ▪ Chair of team leaders ▪ Main point of contact for Contractor ▪ Ambassadors for visitors/press 	<ul style="list-style-type: none"> ▪ Strong leadership skills ▪ Good communicator ▪ Excellent organisation skills ▪ Relationship management skills ▪ Ability to multi-task
2	Planner/Cost Manager	<ul style="list-style-type: none"> ▪ Project planning ▪ Method statements ▪ Cost management ▪ Materials control and ordering ▪ Progress checks ▪ Progress records 	<ul style="list-style-type: none"> ▪ Strong analytical skills ▪ Organisational skills ▪ Eye for detail and accuracy ▪ Numerical skills ▪ Completer finisher
3	Assistant Planner		
4	Assistant Planner		
5	Assistant Cost Manager		
6	Safety Manager	<ul style="list-style-type: none"> ▪ Health and Safety (including maintaining H&S documentation) ▪ Risk assessments ▪ Production of task sheets ▪ If multiple projects are being undertaken, this person should also carry out a daily Safety Inspection on another team. 	<ul style="list-style-type: none"> ▪ Strong interpersonal skills ▪ Resilient ▪ Assertive ▪ Aware of surrounding environment ▪ Eye for detail and accuracy
7	Assistant Safety Manager		
8	Assistant Safety Manager		
9	Construction Engineer	<ul style="list-style-type: none"> ▪ Building the project as specified ▪ Quality management ▪ Understanding the requirements and drawings ▪ Fabrication drawings/sketches ▪ Fabrication team management ▪ Design calculations ▪ Setting out 	<ul style="list-style-type: none"> ▪ Attention to detail ▪ Good level of English language ▪ Communication skills ▪ Teamwork ▪ Numerate ▪ Eye for detail and accuracy
10	Assistant Const. Engineer		
11	Assistant Const. Engineer		
12	Assistant Const. Engineer		
13	Assistant Const. Engineer		
14	Assistant Const. Engineer		
15	Environmental and Sustainability Manager	<ul style="list-style-type: none"> • Promote and coordinate the integration of environmental management and sustainability issues into the project event, policies, rules, products, services and operations. • Calculate the carbon usage for the project which includes lower costs for using reusing/2nd use ply/wood • Entering the project into Constructionarium's Carbon Challenge at the end of the week. Submission noon Friday. 	<ul style="list-style-type: none"> • Interested in decarbonisation • Excellent communications skills • Excellent written/calculation skills • Management of information
16	Construction Manager	<ul style="list-style-type: none"> ▪ Site organisation ▪ Daily attendance register ▪ Resource availability and prepare rotas for: <ul style="list-style-type: none"> ○ Hand tool operation ○ Team hut, staff hut and welfare facilities cleaning ○ Tea urn and fresh water provision 	<ul style="list-style-type: none"> ▪ Strong organisation ▪ Good Interpersonal skills ▪ Good communications skills ▪ Resilience ▪ Teamwork ▪ Motivational skills ▪ Influencing skills

		<ul style="list-style-type: none"> ○ End of day site tidy up/return of tools ○ Friday clean-up of cabins, welfare and toilet blocks 	
17	Trained power tool operator	<ul style="list-style-type: none"> ▪ Must have attended and passed certified training. 	<ul style="list-style-type: none"> ▪ Keen eye ▪ Steady hand ▪ Able to follow instructions ▪ Uncompromising in health and safety ▪ Works in a tidy and organised manner
18	Trained power tool operator	<ul style="list-style-type: none"> ▪ Must have attended and passed certified training. 	
19	Trained power tool operator	<ul style="list-style-type: none"> ▪ Must have attended and passed certified training. 	
20	Trained power tool operator	<ul style="list-style-type: none"> ▪ Must have attended and passed certified training. 	

On the page 10 there is a template to record the team allocation. This should be forwarded to the Site Manager before the event.

Finalised Project Team roles

University/College/Organisation: _____

PROJECT: _____ Date: _____

	Role (those in bold are essential and must be filled). Please amend as appropriate.	Student Name
1	Project Manager	
2	Planner/Cost Manager	
3	Assistant Planner	
4	Assistant Planner	
5	Assistant Cost Manager	
6	Safety Manager	
7	Assistant Safety Manager	
8	Assistant Safety Manager	
9	Construction Engineer	
10	Assistant Const. Engineer	
11	Assistant Const. Engineer	
12	Assistant Const. Engineer	
13	Assistant Const. Engineer	
14	Environmental Manager	
15	Sustainability Manager	
16	Construction Manager	
17	Trained power tool operator	
18	Trained power tool operator	
19	Trained power tool operator	
20	Trained power tool operator	

Please send a copy of this team allocation to Joe Chandler, Site Manager, Constructionarium Ltd's (jchandler@constructionarium.uk) by 5pm on the Thursday before your event date.