



Museum Storage Facility Contract Procurement Report

Executive Summary

Within the report I have outlined the three main procurement routes that I believe to be applicable for the museum storage facility.

With each of the outlined procurement options, I have highlighted both the positives and negatives and expressed my view that the contract should remain a design and build contract as per the original intent. This is my view as it enables the main contractor to be in charge of everything in terms of managing specialist design inputs such as the cladding. This should allow for a much faster and fluid construction phase as well as potentially reduce costs.

Design & Build

Advantages

In a D&B (Design & Build) contract there is a single point of responsibility – The main contractor is responsible for the overall programme of works and construction phase. If the construction falls behind it is the responsibility of the main contractor to try and bring the construction back in line with the contract programme. There are many risks involved in the construction phase with a big one being the detailed design development of various elements of the build. Design can be painfully slow sometimes with many consultants having to review, comment and amend details and drawings to ensure compliance to specification, regulations, and cost. For this reason, I believe it is better to get this risk over to the main contractor.

Detailed design development can occur at the same time as construction which should allow for faster project delivery. The specialist designers/ sub-contractors will also be in one house under the main contractor such as the lift, cladding, roofing & prestressed concrete floor planks (if they are to be used to form the first floor).

This enables the main contractor to appoint the sub-contractors early in the construction if they wish to start/complete their design subject to the main consultant's approval and have full coordination.

With this form of build, there will be simplified communication as there will be a single point of contact.

Disadvantages

With this form of build the client will have less control over design and fewer opportunities for design customization. Having said that, it would be my proposal that a clause is added to the employers' requirements stating that the main contractor, will have to issue key package drawings throughout the project for client approval, to ensure that they are not deviating too far from the original design intent and will give you, the client, some level of involvement in the journey.

Late design changes from us not on the original design intent will result in additional costs and delays.

Traditional Contract

Advantages

We will have separation of design and construction which will give you, the client, full control over the design.

This format of contract will allow us to have a competitive tendering process as we should have a comprehensive fully detailed design. This will therefore allow the contractors tendering to know exactly what they are pricing and not include too many provisional sums or risk pots in their tender.

Disadvantages

Longer project duration – We will have to ensure that the design process is completed in full prior to going out for tender. This inevitably will make the process longer as all the 'i's' will need to be dotted and 't's' crossed.

There is also a risk that there will be extra costs along the way with this form of contract as the design is solely ours. When issues would crop up on site due to drawings potentially being wrong or not co-ordinated fully, we will not only be at risk for the costs to revise the drawing but also at risk to be charged any preliminary costs (day by day, week by week) by the main contractor (as would be outlined in their contract).

Construction Management

Advantages

Early contractor involvement – We will employ a construction management consultant who will manage all aspects of the construction for us including the design, procurement, and Build. The construction management consultant will be involved in the project from a very early stage.

The contract will be divided into smaller packages thus allowing early engagement from specialist contractors into the design such as cladding for the storage facility.

This process is similar in this respect to a D&B contract as it will allow us to start on site while still working on the design. This should bring us a completed storage facility for you, the end user, much faster than the traditional contract.

Disadvantages

This form of contract will need much more direct client involvement and will need your participation throughout in managing the trades and design. If you, the client, cannot designate the necessary time, then this form of contract would not be the correct option for you.

With all the packages let separately there is obviously more risk for cost uncertainty. As well as this not to mention the client team working for you will have more work certifying multiple invoices on your behalf on a monthly basis. This will therefore require more resources to achieve which in turn brings further costs.

Conclusion

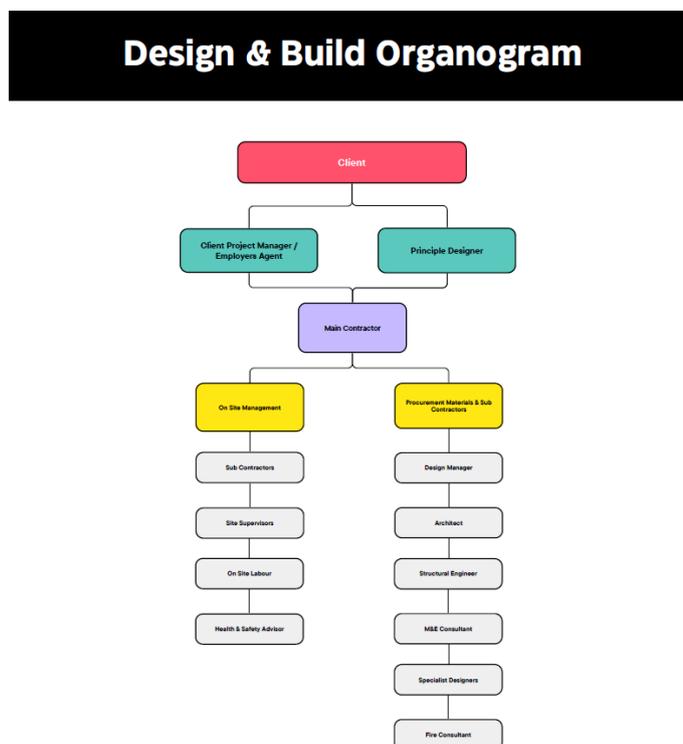
Based on the above and the current level of outline design we have in place, I would recommend we stick with the JCT D&B (Design and Build) contract to build the storage facility.

This recommendation is based upon the level of the current design which will require a lot of work to develop it to a stage where we could build this project on a traditional contract basis. This will in turn slow us down in getting what we all want, which is a fully operational storage facility.

It is also a much easier route for you to take in terms of communication as we will have a one stop shop for all communication throughout the process with the main contractor responsible for all design and construction including from pre-construction to final handover once completed.

While each format presents good and bad points, it is my view that the design build route best serves us to deliver this project closest to the outline budget and very importantly on time to when we need to use it.

Design and Build Organogram



Please see above D&B organogram for reference as per Appendix 1. This in my view, is the organisational structure as it would be working for you, the client.

To explain the organogram, I have outlined each of the roles below and described the purpose along the organisational structure.

- To start off with there is the client-side project manager or Employers Agent (or both depending on the size of the project).
- Next there is the project manager who will work on your behalf ensuring project completion and overall success but will also be familiar and experienced in construction contracts law ensuring that both the main contractor and we the client team abide by the contract. The project manager will work directly for you but in terms of the contract and if there are any disputes will be impartial. In any time of dispute, the project manager or employer's agent will use the agreed contract to settle any disagreements.
- The principal designer follows who again will work directly for you the client. Their role will be to ensure that all parties follow their duties as per CDM (Construction Design Management) regulations 2015. Ensuring that we are all building and managing this project in line with UK law and guidance. This individual will give us all a level of security on site that we are doing things correctly throughout the process.
- Then we have the main contractor who will have a number of roles in managing this process with this format. They will oversee the on-site management – Building to a contract programme in sequence and with the necessary quality control procedures along the way.
- The on-site management will manage the sub-contractors and all on site operatives. This will involve the sequence, quality, health and safety, managing deliveries, storage, protection of materials & following the overall design intent. This will also involve managing or securing the site itself during on site period erecting hoarding and providing a level site security along with providing adequate welfare provisions for the workforce throughout the construction phase of the project.
- The onsite construction team will provide monthly reports highlighting progress and potential risks to project completion to the contract programme.
- They will also employ a health and safety advisor or manager external or independent in my view to monitor the site on a monthly minimum basis to check that we are all building safely and that we have the correct procedures and documentation in place to ensure workforce safety throughout the construction phase. They will produce reports that I would expect to come over as part of the monthly reporting process.

On the other side of the organogram but still under the main contractors control we have procurement which will probably be split in two roles Buyers and Quantity Surveyors.

- The buyer who will be responsible for all materials that the main contractor decides to supply directly for their sub-contractors. They will go out to the market securing the best prices that are in line with our specifications but still achieving key on site delivery dates for the on-site team to achieve programme.
- The other part of main contractor procurement will be the project surveyor who will place orders with sub-contractors trying to achieve the best price while not forgetting quality. The project surveyor will also produce monthly applications to us claiming against progress on site.

- The main contractor's design manager will oversee all of the design making sure that everything is co-ordinated between the rest of the design team. This will involve managing the architect, structural engineer, M&E consultant, specialist designers, sub-contractor design and any specialist consultant such as the fire consultant. This process will involve constant review to ensure that all drawings co ordinate and will work alongside each other. The design manager will also be responsible for engaging with building control and warranty providers with their designs ensuring compliance.

The details that are on drawings need to follow the guidance that is in the current building regulations such as part L – Insulation levels with the walls and roofs following our minimum SAP calculation requirements from our ER's (Employers Requirements). Part M – Accessibility what will be needed to give access to all parts of the building.

They will also engage with the fire consultant or specialist ensuring compliance to the fire strategy drawings. What protection we have in our external walls, the doors to different compartments within the building.

The design manager has a very important role in ensuring that the facility is built to your concept design while complying with building regulations and that every designer has fully coordinated drawings.

Without this process being managed properly inevitably the job will fall behind programme and everybody within the process will become frustrated.

Bibliography

UK GOV, Last updated March 2023, *Building Regulations and approved index*, Accessed 12.06.23
<https://www.gov.uk/guidance/building-regulations-and-approved>.

JCT Design On Line store 2016, *JCT design & Build*, Accessed 12.06.23, Design and Build Contract
(jctltd.co.uk)

Bara Projects 2023, *Traditional contract*, Accessed 12.06.23,
<https://www.barraprojects.co.uk/procurement-routes/traditional-contract/>

Siera Group 2022, *What is a construction management contract*, Assessed 12.06.23, *Construction Management Contract What Is It and What Should I Know (callsierra.com)*

HSE Executive, 2015, *The Construction design and management regulations 2015*, Assessed 12.06.23
Construction - Construction Design and Management Regulations 2015 (hse.gov.uk)