

## Mott MacDonald Quantity Surveyor Interview Questions

## What are the key responsibilities of a quantity surveyor?

A quantity surveyor's main responsibilities include:

- Preparing cost estimates and budgets for projects
- Monitoring costs during the project lifecycle
- Managing contracts and procurement processes
- Measuring and valuing construction work
- Ensuring projects remain cost-effective while maintaining quality
- Adhering to the set budget
- Preparing reports and advising stakeholders on cost-related issues
- Maintaining records of financial progress

# How do you ensure compliance with relevant regulations and standards in a project?

I make sure to stay up to date with relevant building regulations, health and safety standards, and procurement guidelines through continuous professional development and industry memberships. I also ensure that all documentation complies with these regulations from the planning to the post-construction stage.

## What is the difference between the Bill of Quantities (BoQ) and the Schedule of Rates?

A Bill of Quantities (BoQ) is a detailed document that lists all the materials, labour, and services required for a construction project, often broken down by item and quantity. It is specific to a project.

The Schedule of Rates is a list of pre-determined prices for various construction activities or materials, used to provide a basis for pricing work on a project. It is often used for contracts that may not have a detailed BoQ, or in maintenance contracts.



## What is Value Engineering and how do you implement it?

Value Engineering (VE) is the process of improving a project's value by finding cost-effective alternatives to materials, designs, or processes without compromising functionality or quality. It involves reviewing a project's design and specifications to find more cost-effective solutions without compromising quality or functionality. Engaging with the project team and stakeholders helps to settle on the best options.

## **Explain the process of tendering?**

The tendering process starts with the preparation of tender documents, including the BoQ, specifications, and drawings. Contractors are invited to submit bids, which are then evaluated based on price, expertise, capacity to deliver and other criteria. Once the evaluation is complete, negotiations may take place and the contract is awarded to the successful bidder.

## What is a Construction Cost Plan? How do you prepare one?

A Construction Cost Plan outlines the estimated costs of all elements of a project, from inception to completion. It is developed by dividing the project into key elements such as substructure, superstructure, finishes, and services, and assigning costs based on unit rates or historical data. The cost plan is adjusted over the project lifecycle based on design development and actual costs to ensure the project stays within the budget.

#### What are Preliminaries in a Bill of Quantities?

Preliminaries are the items in a Bill of Quantities that cover the costs of setting up and running the site. This includes site establishment, temporary works, safety measures, site supervision costs, welfare facilities, and project management expenses. These are essential for the smooth operation of the project but are not directly tied to construction activities

## How do you ensure cost control throughout a project's lifecycle?



Starting with a detailed budget and cost plan at the project outset is the primary step to ensure cost control. Costs should be tracked continuously during construction, comparing actuals with the forecast. Tools like Earned Value Management (EVM) can be used to monitor performance. It is essential to address any discrepancies immediately and provide regular reports to stakeholders.

## What are the key elements of the FIDIC or NEC contracts?

FIDIC and NEC contracts are standard forms of internationally used construction contracts.

FIDIC (International Federation of Consulting Engineers) contracts focus on clear risk allocation between contractors and employers, and are often used for large infrastructure projects.

NEC (New Engineering Contract) contracts promote collaboration while emphasizing flexibility and clarity. The NEC suite includes early warnings, compensation events, and a proactive approach to contract management.

## How do you manage relationships with subcontractors and suppliers?

I maintain clear communication with subcontractors and suppliers by setting clear terms in contracts right from the beginning. I also conduct regular meetings and get progress updates to ensure that they meet the deadlines and stay within the agreed budget. In case of any issues, I address them promptly through negotiation or finding alternative suppliers.

## What is your experience with project cost forecasting?

I develop project cost forecasts by analyzing historical data, understanding current market conditions, and using software tools like MS Excel or specialized software such as CostX or Candy. I update the forecast regularly to account for scope changes and market fluctuations, ensuring the project stays on track financially.

## How do you handle variations in construction projects?



Variations often arise in construction projects due to design changes or unforeseen site conditions. I first assess the impact of the variation on the overall project cost and timeline. Then, I prepare a cost estimate for the variation and submit it for client approval before making adjustments to the budget and schedule.

## What tools or software do you use for quantity surveying?

I use a variety of software tools depending on the project needs, including AutoCAD for design-related quantity takeoffs, MS Excel for financial tracking, and CostX or Bluebeam for cost estimation and BIM integration. These tools streamline the quantity measurement process and enhance accuracy in reporting.

## How do you manage cash flow for a construction project?

Managing cash flow involves careful planning and regular monitoring of project expenditures versus the budget. I prepare cash flow forecasts, track expenditures against the forecast, and ensure timely payment of invoices and claims, while also keeping in mind the project's payment schedules.

## What is the role of a tender document in the construction process?

A tender document provides a detailed description of the project requirements, including the Bill of Quantities (BoQ), technical specifications, and contract terms. It allows contractors to prepare their bids, and it forms the basis for comparing bids in terms of price and capability to execute the work.

## How do you ensure a project stays within its budget?

I ensure budget adherence by preparing a detailed cost plan at the project's outset and monitoring costs throughout the project. I review expenditure against the forecast regularly and identify cost overruns early. If necessary, I suggest cost-saving measures or adjust the project scope to avoid exceeding the budget.

## What is your process for valuing work in progress (WIP)?

I value work in progress by physically inspecting the site, measuring completed work, and comparing it to the agreed Bill of Quantities and schedules. I consider



labor, material, and plant costs incurred to date and ensure that any variations are included in the valuation.

## How do you mitigate risks in construction projects?

I identify potential risks early in the project through detailed risk assessments and contingency planning. Risks like material price fluctuations or labor shortages can be mitigated by using fixed-price contracts, sourcing alternative suppliers, or including contingencies in the budget for unexpected costs.

## What is your experience with contract administration?

As a quantity surveyor, I manage contract documentation, monitor compliance with contract terms, assess claims and variations, and ensure payments are made according to the contract schedule. My goal is to ensure both parties—client and contractor—adhere to the agreed terms.

## How do you prepare a feasibility study for a construction project?

A feasibility study evaluates the project's cost, time, and technical viability. I analyze the project requirements, assess costs based on similar past projects, estimate the likely timeline, and ensure that the project is economically feasible for the client to proceed with.

#### What role does a quantity surveyor play in dispute resolution?

In disputes, a quantity surveyor provides impartial advice based on contract terms, project documentation, and cost assessments. I ensure that all claims, variations, and disagreements are thoroughly documented, and I help negotiate fair settlements to keep the project on track.

## How do you approach lifecycle costing?

Lifecycle costing involves estimating the total cost of a project from inception through operation and maintenance to disposal. I assess initial capital costs and project operating expenses, then suggest cost-effective solutions that reduce long-term maintenance costs without compromising quality



## What experience do you have with procurement in construction?

I manage procurement by preparing tender documents, evaluating bids, and selecting the most suitable contractors and suppliers. I consider factors like price, quality, and delivery timelines to ensure that materials and services meet project specifications at the best possible value.

## How do you ensure accurate measurement of quantities in a project?

I use standardized methods like the New Rules of Measurement (NRM) or SMM7 to ensure accuracy in measuring quantities. I also utilize software tools like CostX to automate measurements from drawings, which minimizes errors and enhances the efficiency of the process.

## What is your experience with Value Management workshops?

Value Management workshops involve collaboration with project stakeholders to explore cost-effective alternatives. I participate by providing cost analysis and facilitating discussions that focus on balancing cost, quality, and functionality to deliver maximum value within budget constraints.

#### What are Provisional Sums in a BoQ?

Provisional Sums are placeholder amounts included in the Bill of Quantities for work that cannot be fully detailed at the time of tender. These sums provide flexibility in pricing, allowing for adjustments once the exact scope of the work is determined.

## What methods do you use for preparing final accounts?

Preparing final accounts involves a thorough review of all contract documents, variations, and claims submitted during the project. I reconcile these with the actual work completed and agreed contract terms, ensuring that the final cost reflects any adjustments made during construction.

## How do you assess contractor claims for additional payments?



I assess contractor claims by reviewing the original contract, the work completed, and any relevant variations. I ensure that claims are justified based on the actual impact on the project scope, cost, or schedule before making recommendations to the client for approval.

## How do you handle cost overruns in a project?

When a cost overrun occurs, I immediately review the project's budget and expenditure to identify the cause. I work with the project team to propose cost-saving measures, such as revising the scope or negotiating better rates with suppliers, to bring the project back within budget.

## What strategies do you use for tender evaluation?

I evaluate tenders by reviewing submitted bids against the tender document criteria, including price, technical competence, and capacity to deliver. I also ensure that all bids are compliant with contractual requirements before making a recommendation based on both cost and quality.