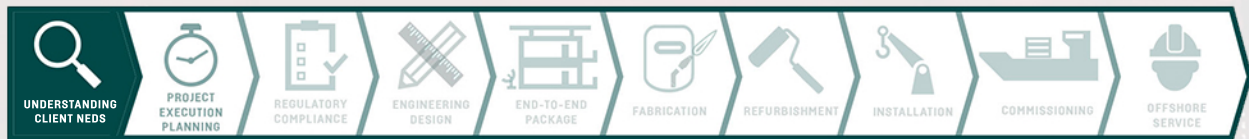


HB RENTALS OFFSHORE ACCOMMODATION WHITE PAPER SERIES



- #1: Understanding Client Needs
- #2: Project Execution Planning
- #3: Regulatory Compliance
- #4: Engineering Design
- #5: The End-to-End Package
- #6: Fabrication
- #7: Refurbishment
- #8: Installation
- #9: Commissioning
- #10: Offshore Service

OFFSHORE ACCOMMODATION

A step by step guide for maximizing TLQ project execution productivity as measured in time, cost, safety and efficiency.

#1: UNDERSTANDING CLIENT NEEDS

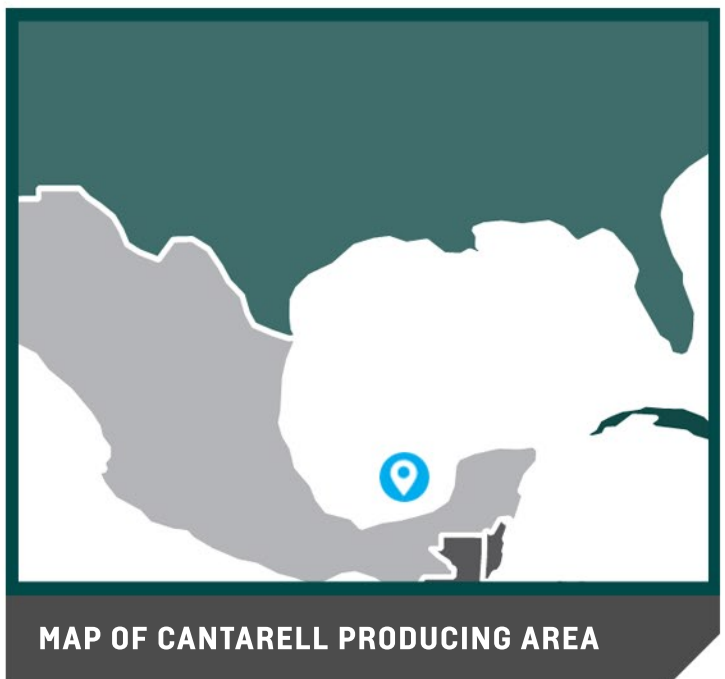
THE GOAL



Sometimes an opportunity will land on your desk and the clock is already ticking, which is exactly the case in our offshore accommodation white paper series featuring a project in support of Farstad Shipping ASA.

The Norwegian based vessel company was actively bidding on a project in offshore Mexico's Cantarell Field and they turned to the US based supplier market of temporary living quarters to support the incremental personnel accommodations, that if awarded, the project would require.

In this classic, fast moving, bid-to-a-bid opportunity, HB Rentals got to work. While not typical, at times competitive project opportunities arise in which the vessel company has not had sufficient time to detail their requirements and consequently, it becomes necessary for us to engage in a consultancy process to fully understand and document the detailed requirements for successful engineering design, regulatory approval and installation. We call this initial and often critical phase of a project – Understanding Client Needs.



For Farstad, the clock started ticking. They were bidding for an IMR (Inspection, Maintenance and Repair) project in support of Mexico's national oil company. They had a short window to submit a bid and then be on location to start work, if they won the award. So where to start? The vessel, the Far Sentinel, was docked in Norway, the temporary offshore accommodation suppliers who typically support the Gulf of Mexico were concentrated in the US, and the project was in Mexico.

When HB Rentals got the call, we knew this was a competitive bid situation. We knew there was a project opportunity, we knew the vessel, we knew the general project location and we knew approximate schedule. But that was about all we knew.



FARSTAD VESSEL



FARSTAD IMR - INSPECTION, MAINTENANCE AND REPAIR

STEP BY STEP PROCESS

Our first order of business was to document project requirements for the temporary living quarter complex. As no two off-shore TLQ projects are exactly the same, we started the process of documenting and confirming requirements with our client in Norway and with our Sales and Project Management team in Broussard, Louisiana and Houston, Texas. The requirements definition process is rigorous and it must be precise. When you're designing a TLQ project for a vessel, there are a range of requirements to capture spanning from engineering detail to preferences for personal comfort for the temporary crew. There is also minimal room for error. You need to capture precise requirements to drive the costing, engineering design, fabrication if required, mobilization and installation. You also have to take regulatory approval into consideration from beginning to end as even a small deviation could put regulatory certification at risk – and the project schedule right with it.

Upon initiating our project due diligence, we start by capturing the basic information on the vessel, such as how is it classed. We start thinking through the regulatory approval process from the very beginning, such as whether the vessel is classed DNV-GL, ABS or any other classification. This is critical information to capture at the start.



DOCUMENTING PROJECT REQUIREMENTS

You need to capture precise requirements to drive the costing, engineering design, fabrication if required, mobilization and installation

Our second order of business was arranging for a site survey, which we believe is essential to the viability of the engineering design and securing regulatory approval in a timely manner. The challenge was how to arrange for the site survey. The clock was ticking, the Far Sentinel was sailing and our time window was closing. Given the Far Sentinel's point of origin in Norway and the fact that we have a fully staffed Aberdeen, Scotland operating and service facility, Farstad and HB arranged for the Far Sentinel to slightly divert its navigation plan for a brief stop and detailed site survey in Newcastle, England.

Each one of our vessel TLQ accommodation projects is an engineered system, designed to accomplish certain functions and operate in a specific environment. With our consultative sales approach and internal engineering, regulatory and project management expertise, we are able to manage a project from inception to commissioning all under one team, which lessened Farstad's schedule risk in having to outsource for specific expertise – such as engineering design.

With the site survey, we are able to determine all the vessel's capabilities and footprint restrictions, which drives the engineering design. The site survey is the best way to mitigate project risk and should always be implemented if at all possible. Especially for time sensitive projects like the Far Sentinel, it takes much less time to conduct thorough due diligence on the front end versus missing a key design



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requirement and being rejected for regulatory certification. The site survey drives all the technical project requirements from the most basic like the general arrangement to all the interfaces like fire & gas, deck lashings and the public address system hook up.

Our biggest challenge with most projects is simply not getting enough detailed information on the front end. This is why the site survey is so critical to a successful project but it puts the burden on the supplier and explains why offshore TLQs have become much more of a consultative sale in today's business and regulatory climate. A typical project will start off with a high level request such as "I need 50 beds". We might initially get 50% of the information we need from the client to quote the project. The site survey and our consultative process get us to 100%.

With the site survey complete, the Far Sentinel departed Newcastle for the Port of Fourchon, Louisiana, USA. We now had all the personnel accommodation and vessel technical requirements – both of which are essential to compile a budgetary proposal. Concurrent with the Far Sentinel sailing from Newcastle to the Port of Fourchon, Farstad's project management team was also traveling from Norway to meet with several potential offshore accommodation rental companies in



FAR SENTINEL TLQ GENERAL ARRANGEMENT



PORT OF FOURCHON, LOUISIANA, USA

Louisiana, HB Rentals being one of the suppliers on the short list.

Now that we've completed all of our technical due diligence, we are prepared to generate a FEED (Front End Engineering Design) Report based on the validated list of client requirements. The FEED Report consists of a draft engineering plan with full electrical and plumbing views (for host connectivity) and identifies the complete scope-of-work in order to initiate preliminary costing.

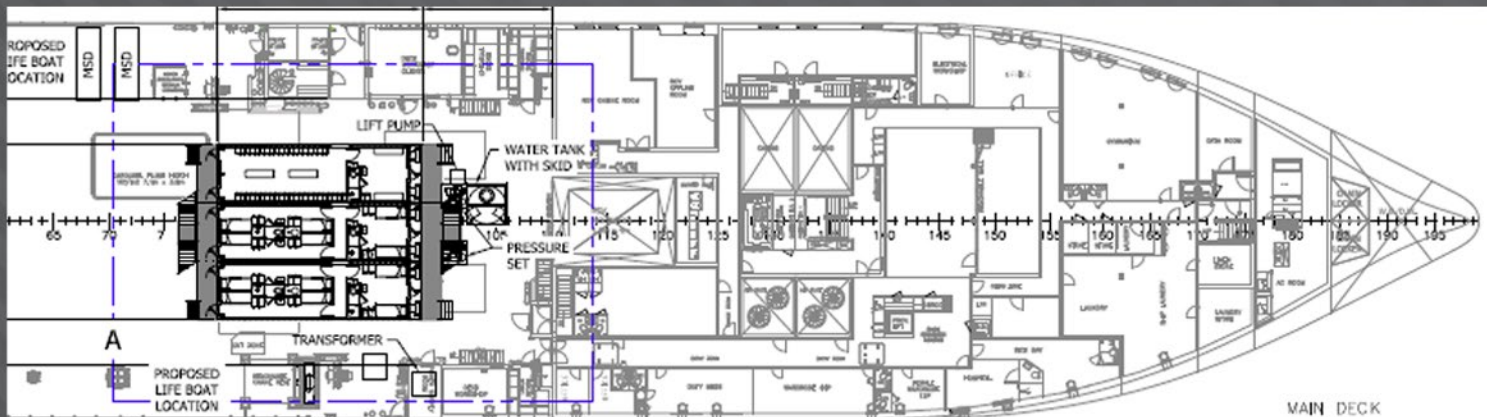
When you have a strong, proven process and the expertise to manage through it, it doesn't need to be that complex, or cumbersome, to achieve a thorough requirements definition. You simply need to know what questions to ask. HB Rentals was ready to present a validated budgetary proposal for the TLQ rental project with preliminary engineering designs. We knew what we were going to custom engineer, how we would do it, and most importantly that we could meet Farstad's tight schedule requirements.

FEED Report: What is it?

FEED Stands for:

- FRONT
- END
- ENGINEERING
- DESIGN

Based on the validated list of client requirements, this report consists of a draft engineering plan with full electrical and plumbing views. It also identifies the complete scope-of-work. This allows HB to initiate preliminary costing.



THE RESULTS

The end result in having a well-defined process to custom engineer an offshore accommodation solution is the ability to quickly capture and validate scope, determine the technical requirements, cost out the custom install and schedule the work to accommodate the client's timeline. You need a highly disciplined process, with multiple QA checkpoints in order to ensure accurate and timely delivery for what is in all purposes a highly customized, engineered solution. In a very short period of time, a Norwegian support vessel shipping company, was able to successfully bid on a project in Offshore Mexico, secure a site survey in Newcastle, England, make a supplier selection decision in Louisiana, and then settle on the Port of Fourchon as the installation site.

The proposed solution consisted of an 84 POB (personnel of board) temporary living quarters, which consisted of seven (7) A60 – ABS / USCG 12 Man Sleeper modules and one (1) Change Room module. Additional scope included sewage lift pumps, a fire detection panel, a 1,500 gallon MSD sewage unit, a transformer distribution skid and stairs and porches enabling access to the modules. The modules connect on the inside allowing full movement on each level and then using the stairs and porches to access different levels of the stacked TLQ complex.

THE FAR SENTINEL TLQ - WHAT IS IT?

The Far Sentinel TLQ is a complete solution consisting of:

ACCOMMODATIONS

- **7 A60 ABS/USCG 12 Man Sleepers**
- **1 Change Room Module**

OPERATING ESSENTIALS

- **Sewage Lift Pumps**
- **Fire Detection Panel**
- **1,500 Gallon MSD Sewage Unit**
- **Transformer Distribution Skid**
- **Stairs**

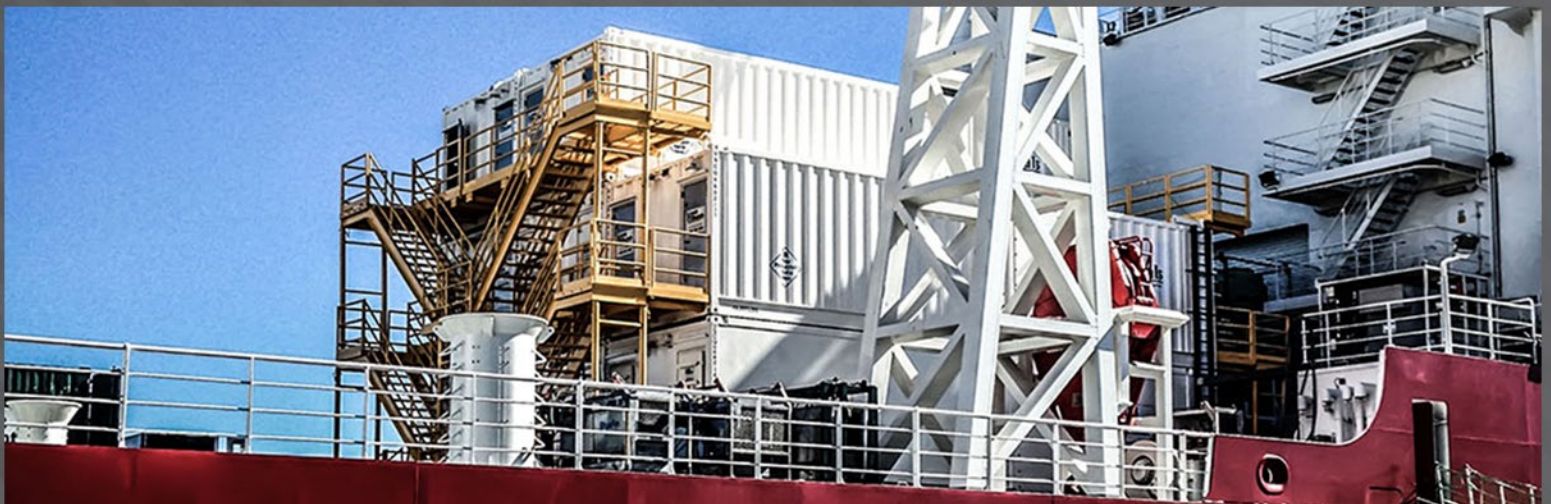
So by the time Farstad actually sat down with HB Rentals to review the opportunity and proposed solution, all the key details were thought through, the rental cost estimated and the execution plan mapped out. HB could speak to how we would execute the custom engineering, the regulatory submittals, preparing the modules as based on the scope, mobilizing the modules to the Port of Fourchon and installing on the Far Sentinel. A significant investment of time and resource went into preparing for this meeting – to understanding the client's needs – which gave Farstad the confidence that HB could deliver based on the budgetary proposal.



RENDER OF FARSTAD TLQ COMPLEX

About HB Rentals

HB Rentals specializes in offshore temporary living quarter accommodation and oilfield housing for the land drilling and completion markets. Additional markets served for onsite accommodation include maritime, offshore wind, disaster recovery, remote energy infrastructure and plant construction, military and other markets. Visit www.hbrentals.com.



HB TLQ INSTALLATION ON FAR SENTINEL