

Pontoon Installation Method

Schedule of Works

- Mobilise site, making work area safe and ready to receive the new installation.
- Pontoon units and access gangway will be delivered to site and via lifting plant, the pontoon units will be introduced to the water and used to correctly set out the pile positions.
- Once piling operations have been completed and pontoons are securely moored, lifting plant will be used to set the access gangway between the shore frame and floating installation.
- Installation will be commissioned and site will be demobilised.

GENERAL METHODOLOGY:

Inception and Design Phase

The design will be based on a well proven pontoon system and modelling using Solidworks, with a finite element analysis conducted utilising site-specific information. We have allowed for floatation to account for the specified UDL of 1.5 Kn/m², which follows the TYHA guidance.

We recognise the importance of communication between all parties involved and directly affected by installation works. To that end we would look to hold an inception workshop on appointment with all project contributors and stakeholders. Following the workshop, we would prepare an inception report detailing the key basis of design assumptions, programme and communication strategy for the project. The inception process will ensure a firm basis for subsequent work and key living documents that can be used to assist project management through the scheme. As part of the communication strategy we would identify key interfaces to ensure clear lines of communication. We would also look to define the strategy, with regard to regular formal progress meetings and/or formal progress reporting.

Fabrication, Protection and Testing of Marine Structures

The principal items requiring fabrication and protection are the pontoon units, and access gangway. All the described elements will be fabricated from mild steel standard sections by coded fabricators accredited to the industry standard CE (European Certificate of Conformity). Once specific elements are fabricated in accordance with the approved fabrication drawings they will be prepared for their protective coating. Upon completion of the fabrication and coating activities, the fabricated elements can be assembled and transported to site in readiness to complete the installation phase of the programme.

GENERAL APPROACH AND INSTALLATION OF PONTOONS

During the initial setting up of the site, the approved pedestrian and other vehicular traffic routes will be established as required. In order to maintain a tidy site all materials will be delivered as required and where possible avoiding the peak hours for traffic movements on roads and within the area adjacent to the site. This method of working will ensure that the maximum amount of working room is available while minimising time on site and potential disruption.

All operatives are to wear life jackets, high viz. jacket/waistcoat, protective footwear and hard hats during the works (unless risk assessments state otherwise). All barriers, fencing and signs erected will be checked and secured at all times with special attention paid at the end of the working day and at meal breaks as well as before any lifting operations commence.

Making the Site Ready for Installation Works

Prior to any installation works taking place, operatives would make the site ready to receive the proposed shore elements of the project. This would entail setting out the position of the bridge head and shore frame.

Also, work can begin on access for piling and lifting plant. Sections of fence will be removed and securely stored within the fenced work area for the duration of the works. This will give plant access to the river bank directly adjacent to the work site. All removed articles will be reinstated once all installation works have been completed.

Installation of the Pontoon Facility

The pontoon units will be delivered to site, fully assembled, by articulated lorry. This method minimises the time on site and impact on local operations. Delivery of the pontoons and the required lifting operations will be coordinated by the site supervisor. The pontoon units will be installed under the supervision of a GFE experienced site supervisor and a minimum of one other GFE operative.

The pontoons will be lifted into the water from the proposed lifting location, via an onsite crane. Once in the water, the units will be moved into position allowing the piling contractor to use the pile guides attached to the pontoon frames as locating guides for the pile locations.

Once piling operations have been complete and the pontoons are securely moored, the access gangway will be lifted from the worksite and positioned between the shore frame and bridge landing pontoon. With this in position, it will be secured at the shore end while ensuring it is tracking correctly on the pontoon.

Testing and Commissioning of Facility

With the pontoons installed, the system as a whole can be checked for freeboard compliance around its perimeter. These checks will be undertaken with a tape measure to ensure that the freeboard is constant at all locations around the perimeter. Where adjustment is required the pontoon floats can be adjusted or ballasting alteration made to ensure a level structure and that there is no trip hazard between the new pontoon units. The full installation pontoon will then be thoroughly inspected to ensure compliance with the clients' requirements. An Inspection record form will be completed for both the pontoon installations.

Demobilisation

Upon completion of the works to the satisfaction of the Client, the site will be thoroughly cleaned and tidied with all waste removed from site. During the demobilisation period, the completed as-built drawings and Operation and Maintenance Manuals will be handed over to the Client. Shortly after this the Health and Safety File will also be completed and handed over.