



Lymington Technical Services Ltd

Cabin Boatyard

Repair of Quay wall

*Design and Access Statement
inc Method Statement and FRA*

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10236 DAv1*

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Repair of Quay Wall

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(includes Method Statement & Flood Risk
Assessment)

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1. BACKGROUND

Cabin Boatyard is a small family run boatyard and marina situated on the western edge of the River Hamble just upstream of the A27 Bridge. The boatyard consists of a mix of both wet and drying berths in a similar layout to the adjacent yards.

The picture below shows the boatyard with the area of ownership (inc lease) shown in blue.



The River Hamble is widely considered to be the Mecca of sailing and the existing boatyards/marinas provide essential services to maintain this centre of excellence. Continued investment in such facilities is necessary to maintain this status. This is supported by the local plan.

The following is an extract from the Local Plan -

- 5.82 The boatyards on the River Hamble lie outside the defined urban edge. They make an important contribution to the economy of the borough and the sub-region, and are important for tourism and recreation. It is important that they are retained in this use, and that they are able to evolve and change to accommodate and develop new technology, provided they do not have an adverse impact on the sensitive environment of the river

2. THE PROPOSED WORKS

The existing boundary between the land and the water (the quay wall) consists of tubular steel piles with some infill. This is in an unacceptably poor condition and requires major repairs or replacement.

The picture below shows the current state of the wall with the red line indicating the length of the proposed new wall.



In similar sites a sheet pile wall solution has been adopted. This is seen as unnecessarily over-engineered solution for this site and its operations. It is proposed to install king piles spaced approximately 2.5m apart to form vertical structural members. Each of these piles will be tied back to an anchor pile driven into the existing car park.

The gaps between the piles will be infilled with horizontal planks (either timber or pre-cast reinforced concrete) to form a vertical wall. Horizontal gaps will be formed between the planks to provide access for marine life.

At the base of the wall a short section of vertical sheet piling (as a cantilever wall) will be driven to provide scour protection.

The area behind the wall will be filled with inert fill. The top edge of the wall will be formed as a reinforced concrete beam to provide a neat finish. The cope level will be at 5.5m ACD to match similar levels in the area.

Drawing 10236/1A shows full details of the proposed works.

3. APPLICATION PROCESS

The following main applications are necessary for these works:

LPA – This would include environmental, transport, general development issues.

MMO (Marine Management Organisation) – A Marine Licence is required for the works.

Harbour Works Consent – this is primarily concerned with safe navigation and environmental impacts on the existing waterway.

Flood Defence Consent – primarily concerned with any works that may have an impact on flooding.

4. DESIGNATED AREAS

Conservation Area – The boatyard is situated within the Old Bursledon conservation area. However the works will not impact on the nature of the site.

Special Protection Area – the boatyard is remote from any SPA designation.

Special Area of Conservation – this covers the whole of the river but excludes the pontoons at Cabin Boatyard. The works will have no impact on this designation.

Site of Special Scientific Interest – the boatyard is remote from any SSSI designation.

Local Nature Reserve - the boatyard is remote from any LNR designation.

Site of Importance for Nature Conservation - the boatyard is remote from any SINCD designation.

5. DESIGN DETAILS

The boatyard will continue to be operated as at present. The current sea wall is in need of major refurbishment as the existing structure is in poor condition. The proposed works should be seen as a repair operation to bring the existing wall up to more modern standards.

Drawing 10236/1A shows the existing layout and the proposed layout.

There is no change to the current use of the site.

5.1 Amount of Development

The works represent a repair of an existing wall so there is no increase in development.

5.2 Landscaping

The site is an existing boatyard, no landscaping is appropriate. No landscaping of the adjacent area is affected by the proposals.

5.3 Appearance

The proposed works will make the boatyard safer, tidier and visually more attractive in keeping with similar yards on this river.

5.4 Access

The proposals do not affect the highway or access to the site. The traffic generated to the site is not changed by the proposals.

5.5 Lighting

No lighting is proposed on the works.

6. BIODIVERSITY

This is a well-developed section of the river and no protected species are present on any part of the site. The site is visited by fish and marine animals at high water. The proposals will not affect these visitors. Wild birds also visit the site, roosting on the pontoons and vessels. The proposals will have no effect on these visitors.

The piling works will be undertaken using vibro methods where possible (percussion methods will only be employed to attain design levels but this is considered unlikely). The outer (wet) section of the works will be undertaken when the mud is exposed to ensure good positioning. This will reduce the possible impact on fish.

The works will only be undertaken during daylight hours.

The chosen design allows for marine animals to occupy the new wall as at present.

7. ARCHAEOLOGY

The history of the site is that it has been an operational boatyard since the early 1900's. All of the proposed works are within the existing footprint. There will be no impact on archaeology.

8. METHOD STATEMENT

The works will be installed from the land. The existing tubular piles will be left in position and the toe of the wall will be cleared of debris. The king piles will be driven individually along with the toe piling and the planks installed as work progresses.

When the wall is in position the anchors and capping beam will be installed. At each end of the wall it will be tied into the existing sheet piling.

The final stage will be the reinstatement of the hard standing and completion of the infill.

The works are expected to be completed within 1 month.

9. FLOOD RISK ASSESSMENT

Development description and location

The development consists of a repair of an existing land/water boundary that is in a poor state of repair.

The development is water-compatible.

As the site is operated by a marine operator all warnings of excessive tides would be known and in any extreme event the jetty would not be used.

In terms of a FRA the works are insignificant.

Flood Hazard

The flood hazard in this area is primarily from tidal flooding. Under extreme flood conditions the adjacent land could be under water. The proposed works will make no difference to this.

Probability

The flood zone adjacent to the development is defined as having a moderate risk of flooding with an annual risk of 1 in 75 or less but greater than 1 in 200.

Detailed development proposal

The works consist of a king pile wall with a RC beam as the cope and with steel sheet piling at the toe to prevent scour damage. The wall will be porous and ingress and egress of water with the tide will continue as at present. The works are clearly water-compatible and an appropriate development.

The details are shown on drawing 10236/1A.

Flood risk management measures

The wall will have a top level of 5.5m ACD which is approximately 0.5m above the existing yard area, HAT is 5.1m.

The design of the wall (porous) and the existing site levels prevent this being classed as a flood defence wall.

Off-site impacts

The development, by its very nature, cannot increase the level of flood risk.

