Foulkes & Sons Boatyard

Riverside Yard, Blundell Ln, Bursledon, Southampton SO31 1AA

Supporting Statement, WaFD and WFD Assessments for Quay Wall Refurbishment & Pontoon Works

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Contents

1. Introduction

This document relates to a small refurbishment of an existing quay wall and two small pontoon extensions.

An additional pontoon on the slipway (connected to the existing pontoons) will provide better access to the slipway for customers when their vessel is being slipped/launched.

An additional upstream pontoon extension is to facilitate customer berthing.

2. Site Location

Foulkes and Sons operate a family boatyard (known as Riverside Boatyard) on the west bank of the River Hamble, just north of the railway bridge. The site has been operated by the family for over 80 years.

The image below shows the general site operation outlined in blue.

3. Proposed works – Quay Wall

The works involve the refurbishment of an existing quay wall.

The red line on the following image shows the location of the works.

Drawing 10948/2D shows the proposed works.

The following photograph shows the condition of the existing quay wall:

4. Method Statement – Quay Wall

There is debris (lumps of concrete, bricks etc) at the base of the existing wall. This debris is overlaying the intertidal mud.

The debris will be removed at low water using manual methods (manually loading into an excavator bucket, the excavator not being used to excavate the debris). The debris will be removed from site by a licensed waste carrier.

A steel 'I beam' will be pushed into the bed vertically adjacent to the existing wall. The installation will be undertaken using a small land-based excavator pushing the beam into the bed. This method produces no vibration and no impact noise.

A second steel beam will then be installed 4.6m along the wall from the first beam. The two beams will form the vertical guides for the precast concrete panels. Each beam will have a bracket welded to form a base location for the concrete panels (so they remain horizontal in elevation).

A precast concrete panel will then be slotted into position (using the same land-based plant) between the two vertical steel beams.

The next steel beam will then be installed, followed by the next concrete panel.

This process will continue along the wall, installing a single row of concrete panels along the length of the wall. This will allow an opportunity to address any level issues.

Once the first row of panels is completed then next row will be installed.

The works will be undertaken over low waters, and it is anticipated that the works will take 2 weeks over the tides.

Once the wall is installed the gap behind will be filled with rejects (oversize gravel). The upper levels being filled with Type 2 subbase. The subbase layer will be compacted.

5. Proposed Works – Slipway Pontoon

The works involve the extension of an existing floating pontoon and an intertidal pontoon installed on the existing slipway.

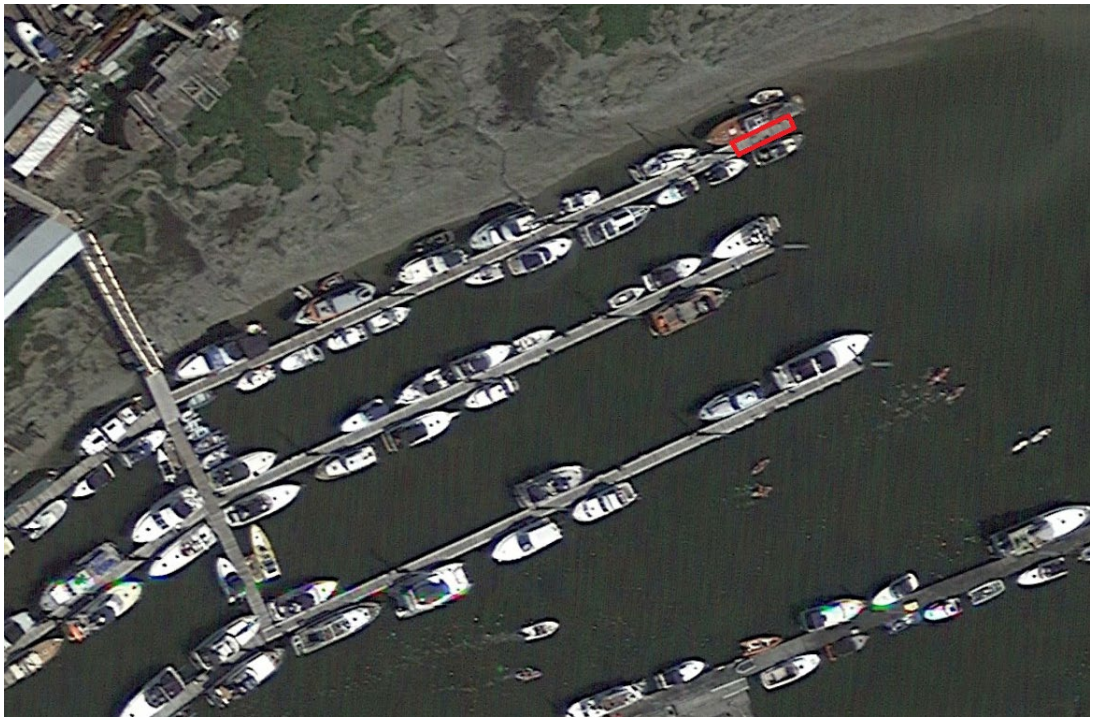
Drawing 10948/3C shows the proposed works.

The red line on the following image shows the location of the works.

6. Proposed Works – upstream pontoon

The works involve the extension of an existing floating pontoon by 8.5m. Drawing 10948/3C shows the proposed works.

The red line on the following image shows the location of the works.



7. Method Statement - Pontoons

The pontoons will arrive by road and launched down the existing slipway. The extension pontoons will be floated into position and bolted to the end of the existing walkway. The slipway pontoon will be positioned at high water and bolted to the pontoon extension. The shore end will be attached to a bracket on the quay wall. No marine plant is required.

8. Navigation

There is no change to normal river navigation by these proposals. Passage by small personal craft between the pontoons and shore is not currently practical, nor safe. The proposal will more physically prevent this, and this is a safety improvement.

Vessels that are currently moored inside the southern area (near the quay wall) are not seagoing. In the event that one of these vessels wished to move, the pontoons can be removed temporarily to allow this.

9. Flood Risk Assessment

The proposed works are a fully water compatible minor development.

The actual works cannot be affected by flooding. Nor will the works themselves increase the risk of flooding.

As this is a water compatible minor development the following should be considered:

i. *Would the works have an adverse effect on the watercourse, floodplain or its flood defences?* The impact on the river flow is insignificant. There is no impact on the floodplain nor any flood defences.
ii. *Would the works impede access to flood defence and management facilities?* There are no such facilities in the locality and full access to the area remains.
iii. *Would the cumulative impact of the development have a significant effect on local flood storage capacity or flood flows?* No, the impact of the works is insignificant.

10. Waste Framework Directive

This section follows the guidance contained in the Guidelines on the interpretation of key provisions of Directive 2008/98/EC on waste.

The waste hierarchy sets out 5 methods of dealing with waste – Prevention, Preparing for re-use, Recycling, Other recovery, and Disposal.

6.1 Prevention

Article 3(12) WaFD defines 'prevention' as:

'Measures taken before a substance, material or product has become waste that reduce:

• the quantity of waste, including through the re-use of products or the extension of the life span of products;

• the adverse impacts of the generated waste on the environment and human health; or

• the content of harmful substances in materials and products.

Whilst prevention is not technically a waste management operation it does trigger whether the material becomes waste.

The works are necessary improvements so there is no prevention option.

The works are all new and there is no waste produced. The material to be used is recycled material which makes the proposal fully compliant with the WaFD.

11. Protected Areas

South Marine Plan – This application is for improvements to an existing facility. The works are compliant with the plan. The following Policies are directly relevant:

S-TR-1 & 2 – supports and improves recreational facilities – the proposal is a minor alteration to an existing facility and will improve access.

S-ACC-1 – improvements to access

S-CC-2 – structure is fully compliant with climate change (sea level rise).

This is also compliant with the Marine Policy Statement.

The site is not within a Marine Conservation Zone, either designated, proposed, or recommended.

The proposed works are within an existing boatyard and mooring area, with high leisure usage and within the following protected sites –

Solent & Dorset Coast Special Protection Area (SPA) – UK9020330. No impact likely.

Coastal Sensitive Areas (Eutrophic) – Hamble Estuary (UKENCA123), Nitrate sensitivity. The nature of the existing activities and the proposed works is such that there will be no change to eutrophication.

The works are nearby (within 2km) the following sites:

SAC – Solent Maritime (UK0030059). The works are outside this boundary, as are similar yards and marinas.

Ramsar - Solent and Southampton Water (UK11063). This covers two areas, one upstream and one downstream. Both are over 700m away and the works can have no possible impact.

SPA - Solent & Southampton Water (UK9011061). This covers two areas, one upstream and one downstream. Both are over 700m away and the works can have no possible impact.

SSSI – Lincegrove and Hackett's Marshes (downstream of site), and Upper Hamble Estuary and Woods (upstream of site). Both are over 700m away and the works can have no possible impact.

Local Nature Reserves – Manor Farm and Hackett's Marsh. Both are approximately 750m away and the works can have no possible impact.

Further details regarding potential impacts are detailed in the accompanying document Environmental Information 10948 Rpt4B.

WFD Habitats (from MAGIC website) – higher sensitivity – saltmarsh on the intertidal areas both upstream and downstream of the works area. The area upstream is shown to be along the seaward edge of the marsh and separated from the works by existing vessel moorings. The downstream saltmarsh is shown as being southwest of the yard boundary and is separated from

the works area by existing hardstanding and slipway. There is no possibility of impact from the proposed works.

WFD Habitats (from MAGIC website) – lower sensitivity – intertidal soft sediment indicated on the works area. The accuracy of this data is questionable at the scale of these works. For the quay wall works it is assumed that the works area is intertidal on spring tides.

12. Background to Water Framework Directive Assessment

The purpose of a Water Framework Directive (WFD) assessment is to determine whether the proposed works will compromise the attainment of a WFD objective or result in the deterioration of the current ecological status of the relevant waterbodies.

The process consists of 3 stages –

Stage 1 – The Screening Stage

This stage is used to identify activities which need to be considered further (i.e. excludes those which do not require further assessment).

Stage 2 – The Scoping Stage

This stage identifies the potential risks to the following receptors:

- Hydromorphology
- Biology – habitats
- Biology – fish
- Water quality
- Protected areas

Stage 3 – Impact Assessment

This stage examines whether the activity will have a significant non-temporary effect on each receptor.

13. WFD Assessment

The assessment uses the online EA tables which are reproduced in the following pages.

The Catchment Data Explorer provides data updated 22:08:22.

13.1 Screening & Scoping Stage - WFD Tables for activities in estuarine and coastal waters

Activity	Description, notes or more information
Applicant name	*Foulkes & Sons Boatyard*
Application reference number (where applicable)	*n/a*
Name of activity	*Riverside Boatyard, refurbishment of an existing quay wall and installation of small pontoon extensions.*
Brief description of activity	*Installation of king pile wall and pontoons.*
Location of activity (central point XY coordinates or national grid reference)	*449429,110020*
Footprint of activity (ha)	*0.0061 ha*
Timings of activity (including start and finish dates)	*Dependent upon Marine Licence and plant availability.*
Extent of activity (for example size, scale frequency, expected volumes of output or discharge)	*Anticipated to take 2 weeks spread over suitable tides.*
Use or release of chemicals (state which ones)	*No*

Water body[1]	Description, notes or more information
WFD water body name	*Southampton Water*
Water body ID	*GB20704202800*
River basin district name	*South East*
Water body type (estuarine or coastal)	*Transitional Water (Estuarine in summary table)*
Water body total area (ha)	*3123.51*
Ecological status (2019)	*Moderate*
Chemical status (2019)	*Fail*
Target water body status and deadline	*Ecological moderate by 2015, Chemical good by 2063*
Hydromorphology status of water body (2019)	*Supports good*
Heavily modified water body and for what use	*Yes – coastal, flood protection, navigation ports and harbours*
Higher sensitivity habitats present	*Yes*

Lower sensitivity habitats present	*Yes*
Phytoplankton status	*High from summary table*
History of harmful algae	*No*
WFD protected areas within 2km	*Yes*

Specific risk to receptors -

Section 1: Hydromorphology

Consider if your activity:	**Yes**	**No**	**Hydromorphology risk issue(s)**
Could impact on the hydromorphology (for example morphology or tidal patterns) of a water body at high status	Requires impact assessment	Impact assessment not required	*No*
Could significantly impact the hydromorphology of any water body	Requires impact assessment	Impact assessment not required	*No*
Is in a water body that is heavily modified for the same use as your activity	Requires impact assessment	Impact assessment not required	*Yes*

Section 2: Biology

Habitats

Higher sensitivity habitats [2]	**Lower sensitivity habitats [3]**
~~chalk reef~~	~~cobbles, gravel and shingle~~
~~clam, cockle and oyster beds~~	intertidal soft sediments like sand and mud
~~intertidal seagrass~~	~~rocky shore~~
~~maerl~~	~~subtidal boulder fields~~
~~mussel beds, including blue and horse mussel~~	~~subtidal rocky reef~~
~~polychaete reef~~	~~subtidal soft sediments like sand and mud~~
saltmarsh	
~~subtidal kelp beds~~	
~~subtidal seagrass~~	

[2] *Higher sensitivity habitats have a low resistance to, and recovery rate, from human pressures.*

[3] *Lower sensitivity habitats have a medium to high resistance to, and recovery rate from, human pressures.*

Consider if the footprint[4] of your activity is:	**Yes**	**No**	**Biology habitats risk issue(s)**
0.5km^2 or larger	Yes to one or more – requires impact assessment	No to all – impact assessment not required	*No*
1% or more of the water body's area			*No*
Within 500m of any higher sensitivity habitat			*Yes*
1% or more of any lower sensitivity habitat			*No*

[4] *Note that a footprint may also be a temperature or sediment plume. For dredging activity, a footprint is 1.5 times the dredge area.*

Fish

Consider if your activity:	**Yes**	**No**	**Biology fish risk issue(s)**
Is in an estuary and could affect fish in the estuary, outside the estuary but could delay or prevent fish entering it or could affect fish migrating through the estuary	Continue with questions	Go to next section	*No*
Could impact on normal fish behaviour like movement, migration or spawning (for example creating a physical barrier, noise, chemical change or a change in depth or flow)	Requires impact assessment	Impact assessment not required	*No*
Could cause entrainment or impingement of fish	Requires impact assessment	Impact assessment not required	*No*

Section 3: Water quality

Consider if your activity:	**Yes**	**No**	**Water quality risk issue(s)**

Could affect water clarity, temperature, salinity, oxygen levels, nutrients or microbial patterns continuously for longer than a spring neap tidal cycle (about 14 days)	Requires impact assessment	Impact assessment not required	*No.*
Is in a water body with a phytoplankton status of moderate, poor or bad	Requires impact assessment	Impact assessment not required	*No*
Is in a water body with a history of harmful algae	Requires impact assessment	Impact assessment not required	*No*

If your activity uses or releases chemicals (for example through sediment disturbance or building works) consider if:	**Yes**	**No**	**Water quality risk issue(s)**
The chemicals are on the Environmental Quality Standards Directive (EQSD) list	Requires impact assessment	Impact assessment not required	*No*
It disturbs sediment with contaminants above Cefas Action Level 1	Requires impact assessment	Impact assessment not required	*No*

If your activity has a mixing zone (like a discharge pipeline or outfall) consider if:	**Yes**	**No**	**Water quality risk issue(s)**
The chemicals released are on the Environmental Quality Standards Directive (EQSD) list	Requires impact assessment[5]	Impact assessment not required	*No*

[5] *Carry out your impact assessment using the Environment Agency's surface water pollution risk assessment guidance, part of Environmental Permitting Regulations guidance.*

Section 4: WFD protected areas

Consider if WFD protected areas are at risk from your activity. These include:

- special areas of conservation (SAC)
- special protection areas (SPA)
- shellfish waters
- bathing waters
- nutrient sensitive areas

Use Magic maps to find information on the location of protected areas in your water body (and adjacent water bodies) within 2km of your activity.

Consider if your activity is:	Yes	No	Protected areas risk issue(s)
Within 2km of any WFD protected area[6]	Requires impact assessment	Impact assessment not required	*Yes*

[6] *Note that a regulator can extend the 2km boundary if your activity has an especially high environmental risk.*

Section 5: Invasive non-native species (INNS)

Risks of introducing or spreading INNS include:

- materials or equipment that have come from, had use in or travelled through other water bodies
- activities that help spread existing INNS, either within the immediate water body or other water bodies

Consider if your activity could:	Yes	No	INNS risk issue(s)
Introduce or spread INNS	Requires impact assessment	Impact assessment not required	*No*

Summary

Receptor	Potential risk to receptor?	Note the risk issue(s) for impact assessment
Hydromorphology	*Yes*	*HMWB for same use*
Biology: habitats	*Yes*	*Saltmarsh and subtidal sediments*
Biology: fish	*No*	
Water quality	*No*	
Protected areas	*Yes*	*SPA, SAC, Ramsar, SSSI*
Invasive non-native species	*No*	

14. WFD Impact Assessment & Mitigation

The assessment has identified potential risks to the following:

Hydromorphology –

The works are improvements to an existing facility. Whilst the use is as the HMWB classifications (ports and harbours) there is no change. There can therefore be no negative impact or risk.

Protected areas -

These have been assessed in the attached report - Environmental Information 10948 Rpt4C

Biology –

The saltmarsh is physically sheltered by existing structures and there can be no possible impact. Impact on the intertidal sediment is addressed in the attached report - Environmental Information 10948 Rpt4C

Summary

By following EA guidance, it is concluded that the proposal will not have a negative impact on the water body.