John Willment Marine Ltd

Universal Marina – Additional Berthing Pontoons

Supporting Statement for Harbour Works Consent. Includes Method Statement, WaFD & WFD Assessments

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1. Background

John Willment Marine Ltd operate Universal Marina on the River Hamble. The marina has undergone significant improvements since 2006 and is now a prestigious marina operation on the river.

Vessel access to the marina berths is achieved by entering through one of the 3 gaps in the J line of river pontoons and along the marina access channel to the berth.

Access to the mid-stream moorings on the J line of piles is by small tender.

2. Proposal

The increase in vessel activity at the marina has raised concerns regarding the access channel. A previous suggestion to extend H jetty out to the J line was rejected due to the use of the access channel by the J line mooring holders.

The marina has also seen an increase in vessel sizes over the last few years. This trend is expected to continue with less requirements for small length berths.

As a result, it is proposed to alter the existing marina layout by removing one jetty and increasing the available berth lengths. It follows that the access channel will become more of a concern. It is therefore also proposed that the marina extends out to the J line (over the full length). Drawing 10764/MP/5A shows the existing and proposed layouts.

The marina already operates the berthing between J3-J5 and J13-J15 and those customers have tender access from the marina.

For operational reasons, Universal Marina will no longer allow tender storage or access to non-bertholder customers with mid-stream moorings. The existing customers on the J line will be provided with berths in the new layout.

The remaining J line vessels can be accommodated in the new layout or upstream section. If the upstream section is chosen, then dingly access will be provided from the marina.

The access brow and pontoon for the upstream section will also be moved.

The existing layout has 257 marina berths, 14 midstream moorings (tender access) & 25 jet ski berths. The Crown Estate (TCE) moorings on the J line represent 46 berths (from Google Earth counts). Total number of vessels 342.

The proposed layout has 312 marina berths, 16 midstream moorings (upstream) & 25 jet ski berths. This includes the TCE J line berths. Total number of vessels 353.

In terms of vessel numbers, the proposal represents an increase of 11 vessels.

Discussions are currently underway with The Crown Estate, but these require both navigation and environmental consultation at this stage.

The increased berth lengths will require piles at the ends of the pontoons so there will be an increase in the number of piles.

24 piles will remain in their current location, 85 piles will be relocated, 12 piles will be replaced, and 54 new piles will be installed.

3. Navigation

Currently, vessels entering or leaving the marina must pass through one of the 3 gaps in the J line and along the access channel.

With the increase in dry stack vessels this can lead to a busy access channel.

The channel is also used by vessels moored on the J line who access their berth by tender. The vessels berthed between J3-J5 and J13-J15 are existing customers of Universal Marina and have tender access from the marina.

The River Hamble Notice to Mariners No1 of 2020 states:

13. Access Channels

There are a number of channels on the River Hamble which run parallel to the Main and Secondary Channels and give access to pontoons, moorings, jetties and slipways. These access channels are frequently used by operators of small craft (sailing dinghies, tenders etc) who wish to remain clear of the main channel. However, the access channels are also used by larger vessels to gain access to moorings and facilities. This can lead to potentially dangerous situations, particularly where head-on encounters occur between vessels in narrow channels. Operators of all vessels which use these access channels should be aware of these dangers and navigate with due caution.

In navigation terms, the extension to the J line would only affect small craft passing through the busy access channel. Currently this is used by tenders to the J line and marina vessels. Using the channel as a through passage is not good navigation.

The proposed works are considered an improvement in navigation.

4. Mooring Restriction Areas

The drawing shows the mooring restriction area boundaries which are taken from the current Fareham Borough Council interactive map. Note that the upstream mooring limit crosses the existing layout.

The proposed development does not connect the exiting layout beyond this boundary. The existing J line moorings upstream of this point are currently pontoons between piles and these would be replaced by a continuous length of pontoon as is common practice on the river.

5. Method Statement

A spud-legged crane barge will be employed for the works. Preassembled pontoons and piles will arrive by sea. The piles will arrive pre-coated in a marine friendly paint.

At each location, the procedure will be to remove the existing piles and pontoons where necessary (these are reused in the new layout). The pontoons will be towed to an area within the marina and rafted until required. Removed piles will be stored on a barge until required.

The piles will then be located using the crane barge and driven using vibro-piling methods. In the unlikely event that percussion piling is required to attain design level, then soft-start procedures will be employed.

All works will be conducted in daylight hours only.

6. 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.

5.1 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.

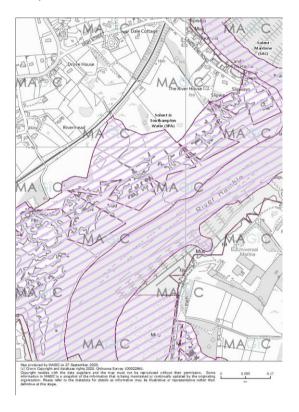
The works are new works so there is no prevention option. Apart from the piles to be replaced (which can be recycled) all materials are new to the works and no waste will be generated on site.

The works therefore comply with the Waste Framework Directive.

7. Protected Areas

The site is within an existing area of high vessel activity. It is not within or near a MCZ (whether designated, proposed or recommended).

SAC – Solent Maritime (UK0030059). The primary reasons for designation of this site are Estuaries, Spartina swards and Atlantic salt meadows. There are no Spartina swards or Atlantic salt meadows within the works area so there will be no negative impact on these habitats. The boundary largely excludes the marinas in the river, but has not been updated at this particular site. There will have no measurable impact on the protected site.

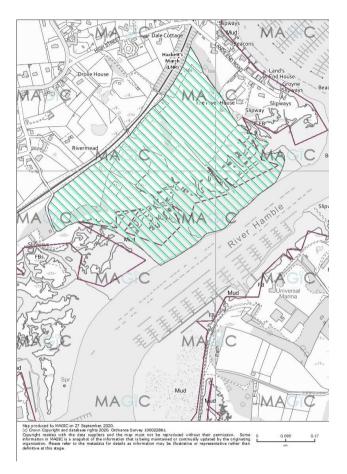


pSPA – Solent and Dorset Coast. This proposed SPA is intended to protect the foraging areas utilised by the Sandwich Tern, Common Tern & Little Tern. The proposed boundaries in this area extend those of the Solent & Southampton Water SPA such that the application site is covered. This pSPA does not currently appear on the MAGIC website but is included here for completeness.

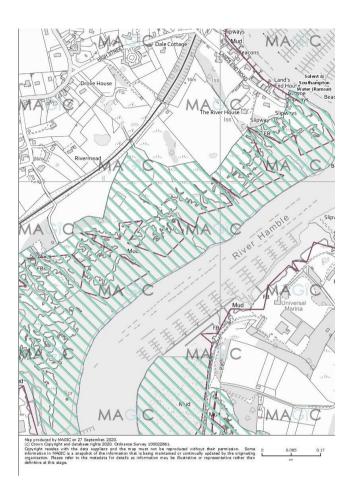
In construction terms the proposed works are within existing areas of high activity. In operational terms there is no difference.

Nearby protected areas –

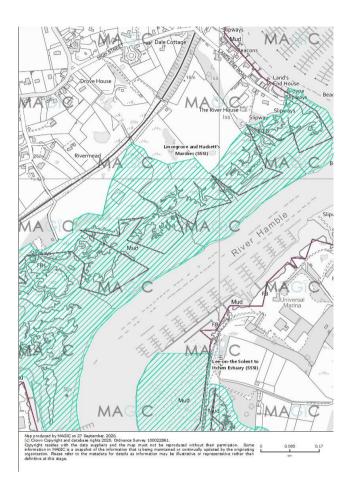
Local Nature Reserve (LNR) – Hackett's Marsh (1009285). This area is located on the opposite side of the river to the works site. The existing main channel and associated tidal flows mean that the works area is physically separated from the LNR. The reserve is therefore unaffected by the proposed works.



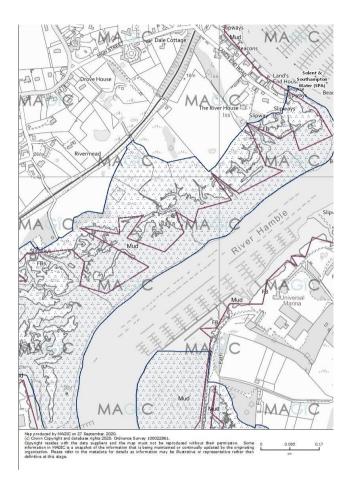
Ramsar – Solent and Southampton Water (UK11063). This has a similar coverage to the LNR and there will be no impact from the proposed works on the protected area.



SSSI - Lincegrove & Hackett's Marshes (1080733). This also overlays the LNR and similarly the proposed works will have no impact.



SPA – Solent & Southampton Water (UK9011061). This overlays the above sites and is similarly unaffected by the proposal.



Shellfish Waters – Approaches to Southampton Water (36). No possible impact.

Coastal Sensitive Areas – Eutrophic – Hamble Estuary (UKENCA123), nitrate sensitivity. The nature of the works is such that they can have no impact on the level of nitrates.

Best practice is being employed with the use of the most appropriate plant.

WFD Estuarine and Coastal Water Bodies Cycle 2 GB5207040202800 Southampton Water

WFD Habitats – higher sensitivity – saltmarsh (unaffected by the proposed works)

WFD Habitats – lower sensitivity – subtidal soft sediment (unaffected by the proposed works)

8. 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). Activities conducted between 2009-2014 are excluded as they would have been covered by the River Basin Management Plan (RBMP) evidence collection process. This typically applies to maintenance activities including dredging.

Stage 2 – The Scoping Stage

This stage identifies the potential risks to the following receptors:

- Hydromorphology
- Biology fish 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.

9. WFD Assessment

The assessment uses the new (Dec 2016) online EA tables which are reproduced in the following pages.

The Catchment Data Explorer provides data updated 17:09:20.

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

Works take place in or affect more than one water body, complete a template for each water body – *single water body*

Works include several different activities or stages as part of a larger project, complete a template for each activity as part of your overall WFD assessment – *single activity*

Activity	Description, notes or more information
Applicant name	John Willment Marine Ltd
Application reference number (where applicable)	n/a
Name of activity	Universal Marina additional berths

Brief description of activity	Installation of berthing pontoons and piles
Location of activity (central point XY coordinates or national grid reference)	449020,108700
Footprint of activity (ha)	4.3 ha
Timings of activity (including start and finish dates)	Dependent upon contractor availability. Works anticipated to take 15-20 weeks.
Extent of activity (for example size, scale frequency, expected volumes of output or discharge)	Works anticipated to be conducted in phases.
Use or release of chemicals (state which ones)	None

Water body ¹	Description, notes or more information
WFD water body name	Southampton Water
Water body ID	GB520704202800
River basin district name	South East
Water body type (estuarine or coastal)	Transitional Water (Estuarine in summary table)
Water body total area (ha)	3091.3
Overall water body status (2019)	Moderate
Ecological status	Moderate
Chemical status	Fail
Target water body status and deadline	Moderate by 2015
Hydromorphology status of water body	Supports Good (summary table)
Heavily modified water body and for what use	Yes – navigation, ports & harbours, flood defence
Higher sensitivity habitats present	Yes – saltmarsh – unaffected by proposal
Lower sensitivity habitats present	Yes – subtidal soft sediment – unaffected by proposal
Phytoplankton status	High from summary table
History of harmful algae	No from summary table
WFD protected areas within 2km	Yes

Specific risk to receptors -

Section 1: Hydromorphology

Consider if hydromorphology is at risk from your activity.

Use the water body summary table to find out the hydromorphology status of the water body, if it is classed as heavily modified and for what use.

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

Record the findings for hydromorphology and go to section 2: biology.

Section 2: Biology

Habitats

Consider if habitats are at risk from your activity.

Use the water body summary table and Magic maps, or other sources of information if available, to find the location and size of these 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			No
1% or more of the water body's area	Yes to one or more – requires impact assessment	No to all – impact	No
Within 500m of any higher sensitivity habitat		assessment not required	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 fish are at risk from your activity, but only if your activity is in an estuary or could affect fish in or entering an estuary.

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

Record the findings for biology habitats and fish and go to section 3: water quality.

Section 3: Water quality

Consider if water quality is at risk from your activity.

Use the water body summary table to find information on phytoplankton status and harmful algae.

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

Consider if water quality is at risk from your activity through the use, release or disturbance of chemicals.

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	Not applicable
It disturbs sediment with contaminants above Cefas Action Level 1	Requires impact assessment	Impact assessment not required	Not applicable

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.

Record the findings for water quality go on to section 4: WFD protected areas.

Section 4: WFD protected areas

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

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

shellfish waters

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.

Record the findings for WFD protected areas and go to section 5: invasive non-native species.

Section 5: Invasive non-native species (INNS)

Consider if there is a risk your activity could introduce or spread 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	Within an HMWB for same use
Biology: habitats	Yes	Subtidal sediment
Biology: fish	No	
Water quality	No	
Protected areas	Yes	Saltmarsh upstream & downstream of works
Invasive non-native species	No	

10. WFD Impact Assessment & Mitigation

The assessment has identified potential risks to the following:

Hydromorphology -

The works relate to pontoon installation covering some existing moorings. There is no additional risk.

Biology: habitats -

Subtidal habitats covert the whole riverbed. The proposed work that interacts with this is the piling. Such piling is short in duration with significant periods between each pile. This is no different to the maintenance that occurs on the river and significantly less disturbing than the regular dredging that occurs annually on the river. There is therefore no significant impact.

Protected areas -

SAC – Solent Maritime (UK0030059). The primary reasons for designation of this site are Estuaries, Spartina swards and Atlantic salt meadows. There are no Spartina swards or Atlantic salt meadows within the works area so there will be no negative impact on these habitats.

Local Nature Reserve (LNR) – Hackett's Marsh (1009285). This area is located on the opposite side of the river to the works site. The existing main channel and associated tidal flows mean that the works area is physically separated from the LNR. The reserve is therefore unaffected by the proposed works.

Ramsar – Solent and Southampton Water (UK11063). The works are sufficiently removed from this area and there will be no impact from the proposed works on the protected area.

SSSI – Lincegrove & Hackett's Marshes (1080733), Lee-on-the-Solent to Itchen Estuary (1000802). This overlays the Ramsar site and similarly the proposed works will have no impact.

SPA – Solent & Southampton Water (UK9011061), This overlays the above sites and is similarly unaffected by the proposal.

Coastal Sensitive Areas – Eutrophic – Hamble Estuary (UKENCA123), nitrate sensitivity. The nature of the works is such that they can have no impact on the level of nitrates.

The works will therefore have no negative impact on the protected sites.

Summary

By following EA guidance, it is concluded that the proposal will not have a negative impact on the water body nor any protected area.