



Construction Environmental Management Plan

Including Method Statement and Risk Assessments

Communications and Contact Details

Client Manager	Sara Stanton Adam Sennitt	07899 265452 07899 016427
Walcon Manager	Andrew Hocking	07570 428072
Site Supervisor	Gary Nicholas Mark Jones	07788 581219 07766 087845

Hamble Point Marina X Pier & events bridge

File Number: M840

Acknowledgment: 11695

Location: Hamble Point Marina

Access: By road and sea

Nearest Post Code: SO31 4JD

Client: MDL/MPL

Principle Designer: WML

Principle Contractor: WML

Project: Hamble Point Marina X Pier and Events Bridge

Anticipated Start Date	Anticipated Completion
08/01/26	

Approval					
To Approve	Signature	Date Approved	Issued to	Issue no.	Issued
Client		N/A	MDL	1	
Issued for Planning Approval			MDL	2	25/06/26
Issued for Planning Approval			MDL	3	26/02/26

Document to be returned to Walcon Head Office on Completion of Works

Contents

Job Pack

- Site Management team
- Site Details & Access
- Description of Work
- Materials List
- Manpower
- Protection Arrangements
- Pre-Construction Information
- Resources
- Plant and Equipment
- Hazards / Particular Risks CDM Schedule 3
- PPE Requirements
- Waste Management
- Traffic Management
- Fire Precautions
- Emergency Fire Plan
- Accident, near miss, hazard and incident reporting
- Working Hours
- Welfare
- Wildlife & Environment
- First Aid & Emergency Procedure
- Working on or Near Water
- Man Overboard Rescue Plan
- Working at Height Rescue Plan
- Noise Impacts and Controls
- Dust/Fumes Creation and Controls

ATTACHMENTS

Method Statement
Risk assessments
COSHH Assessments
HSE (Staff Awareness)
Leptospirosis information
HAV Awareness
Incident Report Form
Site Access Plan
Work Area Plan
Emergency Plan
Appendix 1 Evasive species
Appendix 2 Wizard vessel details

Supplementary Environment, Health and Safety.

Further generic information is held by the site supervisor and contains further information.

SITE MANAGEMENT TEAM		
Manager	Andrew Hocking	07570 428072
Supervisor	Gary Nicholas Mark Jones	07788 581219 07766 087845
Client Contact	Sara Stanton Adam Sennitt	07899 265452 07899 016427

SITE DETAILS AND ACCESS
- Access by sea. - Site Address: - Hamble Point Marina - Hamble-le-Rice, Southampton SO31 4JD

DESCRIPTION OF WORK
- Demolition of X Pier - Removal of Events pontoons fixed bridge and floating bridge - Extraction of existing timber piles - Installation new tubular piles - Crosshead works - Shoreside bank seat civils works - Installation of new bridge sections - Installation of new pontoons X Pier - Install utilities - Commission and handover to client

MATERIALS LIST
Materials to be used in this project comprise of: - Steel tubular piles - Walcon Marine System 21 steel framed pontoons 13.5m fixed bridge and 24m hinged bridge (2 sections) - Safety equipment (emergency cabinets, ladders, etc) - Utilities (Cable tray and duct cover) cabling and pedestals by others

MANPOWER & Qualifications
- All personnel on site will have the necessary skills, knowledge, training, and experience (or in the process of obtaining through a nationally agreed qualification) to fulfil their roles as assigned. - Every contractor (or self-employed person) must ensure that those engaged within their services have the necessary skills, knowledge, training, and experience (or in the process of obtaining through a nationally agreed qualification) to carry out the role they have been employed to do. - Details of training and skills testing for contractors/self-employed must be provided to Walcon Marine prior to commencing onsite. - Contractors Managers/Supervisors must be able to demonstrate an appropriate level of SHE competence. - When appointing individuals who may be skilled but do not have any formal qualifications, Walcon Marine will supervise and assess in the working environment. - Personnel assessments will be fed back to the contractor management.

- Third Party contractors/supplier's performance report will be completed at the end of the work and kept on file.

PROTECTION ARRANGEMENTS

- Relevant permits will be in place prior to work commencing.
- Agree and confirm with the Client any exclusion zones or vessel movements.
- A copy of the company policies including the Health, Safety and Welfare policies will be kept on site and freely available for reference by all personnel.
- A file containing all COSHH assessments for materials in use on the project will be briefed and available onsite for the duration of the project.
- Information and assessments for individual items of plant which may cause Noise and Vibration will be available onsite.
 - Any additional requirements shall be referred to the Site Manager for assessment prior to commencing work or using that item / Equipment.
- Assessment of the individuals' skills, knowledge, experience, and training will be conducted onsite. Where an assessment identifies a need for further training then this will be provided, monitored, and reviewed to ensure that employee(s) are then able to fulfil their duties in a safe and professional manner.
- Prior to commencing work on site, all operatives will be given a site induction briefing by the Site Manager or his authorised representative on site specific safety matters.
- The Health and Safety induction will include but not be limited to the following:
 - Identification of main hazards and risks.
 - Organisation arrangements.
 - Emergency Procedures- Fire and First aid.
 - Access and Site Security.
 - Permit to Work System.
 - Vehicle and plant movement/Pedestrian walkways.
 - Environmental concerns – neighbours, refuelling, etc.
 - Welfare arrangements.
 - Site rules.

PRE-CONSTRUCTION INFORMATION (Eg MMO Licence, Surveys etc)

- We will comply fully to the MMO licence (L/2025/00461). A hard copy will be always made available on board works barge and specific attention will be given to the following Conditions.
 - 5.2.2 Piling must not be undertaken between 2nd May and 15th September inclusive. Reason: To avoid impacts on migratory fish
 - 5.2.3 Soft start procedures if percussive piling is needed. Reason: To allow mobile sensitive receptors to move away from the source of acoustic disturbance in order to reduce the risk of injury.
 - 5.2.4 Vibro piling must be used in the first instance. If the desired depth cannot be reached with vibro piling, impact piling will be used. Reason: To minimise noise and vibration impacts
 - 5.2.8 If temperatures of zero degrees Celsius (or lower) occur on the site, at any point within a 24-hour period, for five consecutive days leading up to or during any instance of the licenced activities as recorded by the nearest meteorological station to the site, then works must be suspended. Once temperatures have been above zero degrees Celsius for three consecutive days then works can recommence. Reason: To avoid potential impacts to the overwintering bird population.
- As an additional control - where a harbour seal is sighted piling activity will cease. Piling will resume 20 minutes after the last sighting
- No works will commence until the CEMP has been approved in writing by the Project Manager.

RESOURCES		
Machinery/Plant/Equipment	Competency required	
Walcon Wizard	In-House	☒
Walcon Warrior	In-House	☐
Walcon Wolf	In-House	☒
Walcon Mini-Rig	In-House	☒
Mobile Crane	CPCS/NPORS	☐
Working at Height	Specific for task	
Lifting	LOLER	☒
Van/Small Tools	Full UK Driving license	☒
Safety Boat	Power boat level 2	☒
PUWER		
- A thorough examination certification is to be available, checked, recorded, and filed for all Plant and equipment used at site. - All plant and equipment must Plant and equipment MUST be examined for defects prior to use. - Defective plant/equipment MUST NOT be used the defective item is then to be Quarantined and mark as defective and reported to Supervisor/Manager. - Only trained and competent Personnel who hold all the relevant in date certification may operate plant or equipment.		

HAZARDS / PARTICULAR RISKS			
1. Working at height – including work at height equipment.	☒	2. Work which puts workers at risk of harm from the use or storage of CoSHH	☒
3. Work with ionizing radiation.	☐	4. Work near high voltage power lines.	☐
5. Workers exposed to the risk of drowning.	☒	6. Working in confined Spaces.	☒
7. Any work carried out by divers.	☒	8. Reversing Vehicles.	☒
9. Demolition works involving the use of explosives.	☐	10. Work involving the assembly or dismantling of heavy prefabricated components.	☒
11. Noisy Operations.	☒	12. Vibrating operations.	☒
13. Lifting Operations - LOLLER	☒	14. Manual Handling.	☒
CONTROLS			
- All of the above hazards listed will be controlled and managed through suitable and sufficient task specific Risk Assessment and Method Statements (RAMS). - In order to minimise the risk to the Health and Safety of the workforce or others associated with the project the following procedures will be adopted: - A safe system of work will be provided for all construction activities. - COSHH assessments are to be provided and briefed for materials likely to be encountered or used on site.			

- Personal protective equipment identified through Task Specific Risk Assessment will be worn by all personnel whilst they are on site.

- All hazards that have been identified at the Design stage and have been recorded within the Pre-Construction information pack.
- Based upon the information provided within the PCI, detailed task specific method statements and risk assessments will be prepared by the management team.
- The management team will ensure that all Task Specific Risk Assessments and Method Statements have been communicated and discussed with the site teams.

1. Work at Height 2007

- All activities that require personnel to Work at Height must comply with the requirements laid down within The Work at Height Regulations 2007. This also includes the requirement to have a rescue plan in place for personnel that are subjected to Working from height.
- Working at height shall be managed under the following principles Avoid – Protect/Prevent – Arrest.
- See relevant section of Emergency Response Plan “working at height rescue plan”

2. Use of Hazardous Substances

- CoSHH Assessments are required for all substances used on site and a register of these available in the site office.
- Contractors are to provide the Site Manager with Safety Data Sheets and COSHH Assessments for all substances hazardous to health which will be held in the site office.
- All operatives engaged in any process involving the use or handling of any hazardous substance will be given full instructions and training in the health hazards, precautions, use of protective clothing and equipment, hygiene measures as required by the contractor.
- The Site Manager will ensure all control measures identified will be monitored including any PPE/RPE requirements.
- Wherever possible and practicable the least hazardous substances are to be selected.

3. Workers exposed to the risk of drowning.

- See specific safe systems of work relevant to the activity.
- Life jackets to be worn when working afloat or within 2m of water’s edge.
- Man overboard drills and procedures to be briefed and understood by all personnel engaged in activities afloat or within 2m of water’s edge. (see relevant section of Emergency Response plan)

4. Working in confined Spaces.

- Whilst working in confined spaces is not anticipated during work activities, however the nature of the definition below is fairly broad, activities on site will be assessed by Site Manager with regard to definition below and controls put in place as appropriate.
- A Confined space is defined as:
“any place, including any chamber, tank, vat, silo, pit, trench, pipe, sewer, flue, well or similar space in which, by virtue of its enclosed nature, there arises a reasonably foreseeable specified risk”
- Any confined space tasks / operations are to be conducted by trained competent persons only.
- Confined space regulations 1997 must be followed at all times.

5. Any work carried out by divers.

- It is not anticipated that we will require Diving operations during the Construction phase however there may be circumstances where this will become necessary, for example we are unable to extract a pile, and the pile needs to be cut out at seabed level or below,
- Any diving activities will be carried out by a specialist contractor in accordance to Diving at Work Regulations 1997
- Separate RAMS shall be provided in the event that Diving Operations become necessary.
- No Walcon employee is permitted to enter the water to conduct works, at any time.

6. Reversing Vehicles. - Safe Movement of Vehicles and Pedestrians.

The maximum speed limit for this site is 5 miles per hour, unless otherwise specified by signage.

- No reversing operations are to be carried out without being under the control of a trained Traffic Marshal.
- All Traffic Marshals must be provided with formal instruction and training regarding their roles and responsibilities.
- Instruction signage will be positioned around the site stating, "No vehicles are to reverse without the presence of a Traffic Marshal".
- The following exceptions apply to vehicle reversing operations:
 - The reversing of cars and small vans with 360 clear vision.
 - Those operations where an approved Risk Assessment has been carried out and agreed control measures are in place so to ensure a safe system of work is in place.
 - Arrangements will be made to ensure that adequate segregation is provided to ensure that pedestrians and operatives are kept clear of site vehicles and mobile plant. This will be enabled through the provision of adequate traffic routes, signage and other controls.
 - Access and egress points used by pedestrians along vehicle routes will be positioned to enable pedestrians to see approaching vehicles and plant.
- All vehicles being used for construction work shall:
 - Be operated by appropriately authorised personnel.
 - Be operated in a safe and professional manner.
 - Be loaded in a way that it can be driven, operated or towed safely.
 - Have means to provide adequate visibility to the operator.
 - Have suitable precautions in place to prevent the unintended movement of the vehicle.
 - All vehicles leaving site will be in a condition that is deemed to be safe for use on the public highway, all materials/CoSHH items will be stored/covered correctly to prevent spillage, pollution and any items that may fall from the vehicle that would cause an incident.
 - Be guided by traffic Marshal

7. Work involving the assembly or dismantling of heavy prefabricated components.

- See specific safe systems of work relevant to the activity.
- Tasks to be undertaken with mechanical lifting aids wherever practical
- Works will be planned, supervised and authorised by Site Manager and or Lift Supervisor

8. Noisy Operations.

- Walcon marine will manage the risk of hearing damage to all employees from noise exposure at work.
- Walcon marine will manage the risk of noise exposure to members of the public from work activities.
- Walcon marine will arrange for health surveillance monitoring where reasonable and practicable.
- Walcon marine will eliminate or reduce the noise hazards where possible.
- Where noise limits exceed 85db, employees will:

- Wear suitable and appropriate hearing protection.
- Inform their Manager / Supervisor.
- Obey noise exposure timings as set by the HSE.

9. Vibrating operations.

- Walcon marine will manage the risk of Vibration exposure to all employees.
- Walcon marine will arrange for health surveillance monitoring where reasonable and practicable.
- Walcon marine will eliminate or reduce the Vibration hazards where possible.
- Where Vibration limits exceed, employees will:
 - Inform their Manager / Supervisor.
 - Wear suitable and appropriate protection.
 - Record exposure times.
 - Obey HAV exposure timings as set by the HSE.
 - Limit exposure as set out in the Safe systems of work.

10. Lifting Operations – LOLLER

- Contractors must ensure that all lifting equipment and appliances used on site is safe, in good working order, inspected, tested and thoroughly examined with records submitted to the Site Manager.
- A 7-day inspection of lifting equipment and accessories is required, and a register kept. The register must be available on site for inspection/auditing purposes.
- The Contractor/supplier of lifting equipment and/or accessories shall provide evidence of valid thorough examination prior to or at delivery to site and before being used for the first time.
- Workers shall ensure that all lifting operations are planned to ensure that they are carried out safely and that all foreseeable risks are considered.
- Planning should be carried out by a qualified BS7121 appointed person and approved by them.
- Walcon Marine will ensure a competent crane supervisors/co-ordinators and slinger/signaller as is available for every lift.
- All lifting hooks used on-site should have safety catches.

•

P.P.E. REQUIREMENTS

- The following PPE requirements are to be adhered to:
 - Safety Footwear - **Mandatory**
 - Safety Helmet - **Mandatory**
 - High Visibility Clothing - **Mandatory**
 - Hand Protection - **Mandatory**
 - Eye Protection - Task Specific
 - Hearing Protection - Task Specific
 - Wet Weather Clothing - Task Specific
 - Breathing apparatus - Task Specific
 - Life Jackets – **Mandatory** to be worn when working within **2m** of any water.

WASTE MANAGEMENT

- We will take all reasonable steps to ensure that all waste from the site is dealt with in accordance with the waste duty of care in section 34 of the Environmental Protection Act 1990 and the Environmental Protection (Duty of Care) regulations 1991.
- Materials will be handled efficiently, and waste managed appropriately.
- Waste materials will be transported to WML Woolston yard by barge and then on by certified waste carrier to licenced tip or recycling facility. Transferral notes will be available.
- Demolition and disassembly will take place in the Walcon Marine Woolston yard
- The pontoons will be transported to the quay wall at the Walcon Marine Woolston yard. The pontoons will be lifted out of the water and floats scraped of marine growth. The marine growth will be put back into the water. Pontoons will be checked for any biosecurity hazards, then scraped off.
- The methodology for avoiding soil from the site tracking onto the highway will be that the pontoons will be broken down on site in the Walcon Marine Woolston Yard, there will be individual bins for timber, metal and concrete for disposal. These bins will be collected and there should be no tracking of materials onto the highway
- Once the bins are full they will be collected traffic marshals will guide the lorries off site

TRAFFIC MANAGEMENT

- Parking arrangements will be defined by Marina Management.
- Site Speed limits are to be adhered to at all time – Check site specific speed limits.
- Segregated walkways are to be used all times by pedestrians.
- Marina Traffic plan will be displayed with relevant signage and traffic routing to be adhered to.
- Pontoons will be disassembled at WML Woolston yard and the arisings placed in designated skips for collection and recycling/disposal off site
- Good housekeeping measures will be adhered to ensure no arisings from the disassembly process are tracked outside the compound by skip collection lorries.
- Contractor will monitor the conditions and will engage a road sweeper to clean the approaches to and from site if necessary.

FIRE PRECAUTIONS

- **No Welding, Burning, cutting or grinding will be undertaken without a Hot Works permit.**
- All fuel must be stored in properly banded containers.
- Re-fuelling will only be carried out in designated refilling area by competent operative and at least 5 meters clear of the working area.
- No smoking, No naked flames, No heat sources or No sparks are permitted within 5 meters of the re-filling area.
- Ensure that anti-spill nozzles are fitted and used correctly.
- Appropriate Fire extinguishing media and Spill kits to be present and free from obstruction at the designated refuelling point.
- Appropriate Fire extinguishing media and spill kits to be available on site and must be kept in proximity when using petrol powered plant and equipment (generators).
- Petrol powered equipment is to be stored correctly and secured if not in use.

EMERGENCY RESPONSE PLAN

- **FIRE.**

- Raise the alarm and shout Fire...Fire.... Fire.
- Only attempt to extinguish a small fire using the fire extinguishers immediately to hand. If in any doubt leave it. DO NOT TAKE PERSONAL RISKS.
- Alert the Fire Brigade and the Site Manager.
- Proceed to the safe assembly area.
- When the Fire brigade arrive, tell the fire officer what you know about the fire, and leave it to the professionals.
- Do not return to the area of the fire or put yourself or others in danger.

- **MEDICAL**

- First Aid cover will be provided, and all First aiders will be clearly identifiable onsite.
- A First Aid station will be established on board works Barge and additional stations will be available throughout the site where required.
- Typically, at least one trained First Aider is required at any location where there are 50 or fewer employees, additional First Aiders should be available to cover absences (Note: First Aiders must have attended a HSE approved 3-day First Aid at Work course).
- A list of personnel who have completed a course in First Aid at Work (FAW), Emergency First Aid in the Workplace (EFAW) or Appointed Person training will be displayed throughout the site and be identified by First Aid stickers on their helmets.

- **MAN OVERBOARD**

In the event that an operative falls into water the following steps are to be taken:

- Sound the alarm.
- Keep constant visibility (look at point)
- Seek immediate assistance from the local services ie the Client, Marina, etc.
- Throw a life ring close to the person. (keep hold of the line to provide further assistance, where possible)
- Guide and assist them to an exit ladder. (Get the person as close to the pontoon or shore as is possible)
- If the situation allows, Wait for further assistance to arrive to enable a safe recovery from water or
- Use the workboat to conduct the rescue / recovery from water.
- Once the person is recovered from water, provide first aid and any specific medical requirements.
- Keep the person/s dry, warm and provide shelter.
- Transfer the recovered person to hospital for further treatment/check-up as required.
- Complete an accident/incident form and complete an entry in the accident book.
- Report to incident to Walcon management at the earliest opportunity. (Only after the person is safely recovered)
- Replace any used LSA items, Smoke and Light Canister, flares or Lifejackets.

(Note: the Walcon Marine Barges also have a Man Overboard Emergency Plan)

- **RECOVERY FROM HEIGHT**

- The working at height task must be assessed by the supervisor/manger. (apply the WAH Hierarchy of controls)
- A working at height permit is to be in place Prior to commencing any working at height.
- All suitable and sufficient control measures are to be in place and maintained whilst the activity in taking place.
- A suitable and sufficient rescue plan is to in place with all the rescue equipment ready for immediate use.

ACCIDENT, NEAR MISS, HAZARD AND INCIDENT REPORTING

- All accidents are to be reported on the accident report form and sent to the management team for actioning.
- The First aider is to attend to the injured persons, assess any injuries and seek further medical attention if required.
- All near miss's are to be reported on the Near Miss report form and sent to the management team for actioning.
- Unforeseen hazards or Risks that have not been identified are to be reported to management as soon as possible. Further guidance will be given.
- If any incident occurs or is identified a dynamic assessment of the situation is to be conducted and Walcon Marine management notified at the earliest opportunity.
- All Walcon Vehicles and Vessels are to carry spill kits including disposal bags,
 - All operatives are competent in the use of spill kit equipment.
 - Should a minor spillage occur absorbent mats/buoys will be used to surround and absorb the contaminate fluid.
 - The contamination will then be disposed of in sealed bags.
 - All appropriate PPE is to be worn before any handling of or clearing the contamination or Spill.
- Any Oil, Fuel or Chemical spill within the marine environment must be reported to the MCA immediately through the nearest coastguard station.
 - Call MMO to request approval to use an oil spill treatment product or report a marine pollution incident on:
 - 0300 2002024 during office.
 - 07770 977 825 outside of office hours.
 - 0345 051 8486 at all times if other numbers out of order.
 - 02920 491719 for incidents in Wales.
 - dispersants@marinemanagement.org.uk
- The Environment Agency should be called for pollution to water or land on:
 - Environment Agency incident hotline: 0800 80 70 60 (24-hour service)

WORKING HOURS

Pontoon Installation (General times unless otherwise stipulated in MMO licence)

- Monday to Friday 07:30 – 18:00
- Saturday/Sunday 07:30 – 13:00

Piling hours (General times unless otherwise stipulated in MMO licence)

- Monday to Friday 09:00 – 16:00
- Saturday/Sunday No weekend piling

WELFARE

- All Walcon sites are to ensure suitable, clean and warm facilities are available and are to comply with schedule 2 of the CDM regulations 2015, and will include:
 - Washing facilities complete with running water, soap and towels.
 - A supply of drinking water.
 - Facilities to accommodate the drying of and the changing of clothing, including somewhere to change if special clothing is worn for work.
 - Facilities for rest and the preparation and consumption of meals. (not to be used for changing or storing soiled work clothes)

- All welfare facilities, site offices etc., will be designated as 'No Smoking'.
- Where practicable, operatives are to be within ten minutes travel time (either by foot or transport) from the nearest welfare facilities.

WILDLIFE AND ENVIRONMENT

1. Protection of Species

- Any species protected under the Wildlife and Countryside Act 1990 and Conservation of Habitats and Species Regulations 2010 found during work will be handled according to proper procedures.
- All personnel to be briefed on potential protected and invasive species that maybe encountered in the course of the works. This will include Otters, Bats, nesting birds, Quagga mussels Red Eared Terrapin & Asian Shore Crab
- On discovery of protected or invasive fauna or flora, relevant works will be halted and a specialist ecologist consulted to ensure protection of or prevent spread of identified species.
- See Appendix 1 for details of Invasive species

2. Hazardous Materials Management

- All hazardous materials, including oils, fuels, or solvents, will be stored and used as per the Safety Data Sheet instructions to prevent harm to wildlife and the environment.

3. Spill Response Plans

- Each site will have a spill response plan, ensuring the availability of a suitable and appropriate spill response kit.
- In the event of a large spill, emergency services and the Environment Agency will be promptly notified.
- Any oil, fuel or chemical spill within the marine environment must be reported to the MMO Marine Pollution Response Team within 12 hours.
Within office hours: 0300 200 2024
Outside office hours: 07770 977 825
At all times if other numbers are unavailable: 0345 051 8486
Email: dispersants@marinemanagement.org.uk

4. Protection of Nesting Birds

- Measures will be taken to prevent disturbance to nesting birds. On-site inspections will be conducted; no signs of nesting birds were observed during preliminary visits.

5. Impact on Supporting Habitats

- The installation of new marina piles is not anticipated to negatively impact supporting habitats due to habitat loss under the proposed works footprint. This pathway is not expected to result in a Likely Significant Effect (LSE)
- The removal and installation of new piles are not anticipated to affect supporting habitats, including disturbance or abrasion of the substrate, changes to suspended sediment concentrations, or resultant sedimentation/smothering. This pathway is also not expected to cause an LSE on the designated site.

6. Water Quality and Pollution Control

- Measures will be implemented to prevent impacts on designated site water quality or pollution sources.
- Walcon Management will be notified of any spills in accordance with the MMO Licence.

7. Plant and Equipment Maintenance

- All equipment will undergo regular inspections and maintenance.
- Plant nappies will be used to prevent spillage, and fuel will be stored in bunded containers when not in use.

8. Habitat Damage Prevention

- Measures will be taken to prevent habitat damage, such as using piling equipment with a soft start, in line with the MMO Licence

WORKING ON OR NEAR WATER

- Any operations that are undertaken within Two (2) meters of **or** working above the water, the following **WILL** be adhered to:
 - There is **NO** lone working for any operation
 - Check and continuously monitor the weather to determine that it's safe to start or continue to work.
 - Continuous monitoring of the tide times and currents, with work stopping as soon as adverse or deteriorating sea conditions are observed.
 - Life saving appliances are to be in place, checked are in date and they are to be suitable and appropriate for the activities.
 - Suitable PPE and clothing, including boots are to be worn at all times.
 - Life jackets are to be fitted with a crotch strap and are to be worn at all times.

See emergency procedure for Man Overboard/In the Water.

NOISE EXPOSURE

- Walcon only uses approved plant and tools with considerations to engineered design for reducing the impact of noise exposure to its workers the public, or others in the area.
- All workers are to wear suitable and appropriate hearing protection, relevant to the noise exposure levels.
- Work areas are to be assessed on a routine basis, with noise exposure levels recorded and controlled where applicable.
- Noise producing tasks are not permitted before 0800hrs or after 1700hrs.
- Noise and vibration impact mitigation will be via a soft start on all marine piling. And working hours will be 9:00 to 16:00

General rule unless otherwise stipulated in MMO License

Vibro-piling must be used as standard. Percussive piling must only be used if needed to drive a pile to its design depth. where percussive piling is required, soft-start procedures must be used to ensure incremental increase in pile power over

DUST/FUMES CREATION AND CONTROLS

- Dust creation onsite is to be managed and controlled by:
 - Water suppression.
 - Wet cutting.
 - On tool exhaust.
 - General mechanical ventilation.
- We endeavour to not use dust or Fume producing plant onsite, where possible.
- All plant and generators are to be switched off when not in use.
- Walcon Marine will ensure all considerations to eliminate or reduce dusty air from the work area.
- Will ensure routine health monitoring is conducted with the results being clearly communicated to the work force.
- Will ensure suitable and sufficient R.P.E and appropriate filters are provided free of charge.
- Pontoons will be disassembled into their constituent parts by mechanical means wherever possible cutting and burning will be kept to a minimum

Reference Documents.

REFERENCE DOCUMENTS.

All referencing withing this CEMP is aligned with the relevant guidance from the below Regulations and guidance documents. i.e.

- The Construction (Design and Management) Regulations 2015
- Health and Safety at Work act 1974
- Management of Health and Safety at Work Regulations 1999
- Yacht Harbour Association Code of Practice
- Manual Handling.
- Lifting Operations Lifting Equipment Regulations 1998, LOLER
- Provision and Use of Work Equipment Regulations 1998 (PUWER)

RISK ASSESSMENTS

This CEMP is aligned with the relevant Risk Assessments for the associated activities.

1. Site Establishment
2. Public access
3. Working on or near or over water.
4. Lifting operations / Crane movements
5. Working at Height
6. Weather conditions
7. Slips Trips and Falls
8. Safety Boat/Dory
9. Falling Objects
10. Fuel Oil Spillages
11. Welding / Burning
12. Company Vehicles
13. Noise
14. Overhead and Buried services
15. Hand Arm Vibration
16. Use of Small tools and Equipment
17. Manual Handling
18. Litter, Sharps
19. Working adjacent to Road or footpath
20. Use of substances hazardous to health
21. Lone Working Unsociable Hrs
22. Driver Fatigue
23. Electrical Hazards
24. Trapped Limbs

METHODOLOGY

All works are to be carried out in accordance with the relevant guidance i.e.:

- The Construction (Design and Management) Regulations 2015
- Health and Safety at Work act 1974
- Management of Health and Safety at Work Regulations 1999
- Yacht Harbour Association Code of Practice
- Power Boat level 2, Use of power boat/safety boat.
- Manual Handling
- Emergency first aid at work
- CPCS/NPORS crane operator
- NPORS Slinger/signaller
- Lifting Operations Lifting Equipment Regulations 1998, LOLER
- Provision and Use of Work Equipment Regulations 1998 (PUWER)
- Lifting Plan(s) at the Annex

The Work can be broken down into the following stages:

1. Site set up
2. Removal of Existing Access Bridges
3. Removal of Existing Pontoons
4. Extraction of Existing Piles
5. Delivery and Driving New Piles
6. Shoreside bank seat Civils works
7. Installation of new bridge sections
8. Delivery, Assembly and Installation of Walkway Pontoons
9. Delivery, Assembly and Installation of Finger Pontoons
10. Installation of Hardware
11. Utilities Installation

Requirements from Client

The Clients Project Manager will ensure that all relevant permissions are acquired prior to work commencing. The Clients Project Manager will ensure that any vessel/vehicles within the work areas shown on the **Work Area Plan(s)** are removed ahead of Walcon arriving.

The Clients Project Manager will ensure that an exclusion zone is in place to ensure there is no public access to the work area, boats, berths etc whilst the works are on-going.

All services are to be disconnected from the pontoons by the client prior to Walcon arrival.

1. Site Setup

- **See Site Access Plan.**
- Walcon will arrive on site with required tools and equipment.
- The site supervisor will report to the Project Manager or their representative and sign all relevant permits prior to commencing work.
- Site supervisor to give Task Briefing and identify any risks to the work force, once complete the work force will sign to say they have received and understood the task brief.
- Operatives will check all PPE, tools and equipment prior to use and all findings will be logged. **DO NOT USE IF DEFECTS ARE FOUND.**
- There will be no additional lighting for the works as all duties will be carried out outside and daylight hours.

2. Removal of Existing Access Bridges

- The crane barge (Wizard) will move into location and set up with spudlegs down.
- Where required, fencing will be installed temporarily to restrict public access to the location of the bridgehead.
- The lifting points on the bridge will be established and soft strops passed under through the bridge.
- Under the direction of the slinger/signaller the crane chains will be connected to the strops.
- The crane will take the weight of the bridge and lift until the bridge is horizontal.
- The hinge pins will be removed, and the bridge lifted.
- The bridge will be landed on board dumb barge (Wolf) for transportation and disposal at WML Woolston yard.
- All bridges will be lifted out in this manner.

3. Removal of Existing Pontoons

- The Client will confirm that all utilities have been disconnected and made safe on shore.
- Any deck furniture such as pedestals or safety equipment will be removed and returned to the Marina Management for disposal or reuse.
- Where necessary cables will be cut to allow for the removal of the pontoons.
- The workboat will be secured to the first finger pontoon using cargo straps.
- The deck at the joint of the pontoon to the walkway will be removed.
- The connecting bolts will be removed using spanners – these may need to be burnt off.
- The finger pontoon will be towed to the working barge where the crane chains will be connected to it.
- Finger pontoons may be rafted together and towed in groups.
- Under the direction of the slinger/signaller the crane will take the weight of the pontoon, and the workboat will be disconnected.
- Once the workboat is clear the pontoon will be lifted on board Dumb barge for transport and disposal at WML Woolston
- The walkway pontoons will be disconnected in the same manner and towed in twos or threes to the working barge where they will be disconnected and loaded for transport.
- Pile guides will be removed as part of the process; the bolts may need to be burnt off.
- NOTE: Hammerhead pontoons on X pier will be taken to WML Woolston for refurbishment before being returned to site for installation.

4. Extraction of Existing Piles

- The crane barge will move to the location of the first pile to be extracted and spud down.
- Under the supervision of the slinger/signaller the crane will be connected to and lift the vibro hammer.
- The vibro will be lifted onto the top of the pile and jaws will clamp onto the pile.
- Using the vibro in extraction mode, increase the power and the pile will slip out of the basin bed.
- Greenheart piles are removed in a similar manner, but the green heart extractor is connected to the vibro hammer.
- The greenheart extractor clamps onto the pile and extracts as described above.
- Piles will be laid on the deck of the crane barge and offloaded to the dumb for transport and disposal.

Typical MMO License Stipulation

The existing piles will be extracted using a vibro hammer attached to the crane. The vibro-hammer will be attached to the top of the pile and will extract the pile by means of vibration. The piles will be laid on the deck of the working barge and offloaded to the dumb for onward transport and disposal. The Waste Hierarchy will be followed and the majority of materials will be re-used or re-cycled. Where re-use is not possible, materials will be transferred to a suitable land-based waste management facility.

5. Delivery and Driving New Piles

- A barge (Wolf) will arrive carrying the steel tubular piles.
- Under the direction of a slinger/signaller the barge will moor adjacent to the crane barge.
- The chains of the crane will be attached to a pile.
- The pile will be lifted horizontally and placed on the deck of the crane barge (Wizard).
- The chains will be removed, and this process repeated.
- The barge will be piloted to the proximity of the first pile location.
- The quick release will be attached to the top of one of the piles.
- Under the supervision of the slinger/signaller, the pile will be lifted vertically by the onboard crane and lowered into the water either through a spud leg hole or over the side of the vessel.
- The pile will be lashed to the barge if over the side.
- Operatives are not to approach the pile until it is on the seabed or unless it is to guide it into the spud leg hole in which case the pile must be close to the hole before approaching.
- Once the pile has touched down on the seabed and is secure the quick release will be disconnected from the pile and lowered to the deck.
- The vibro hammer will be attached to the crane and lifted on top of the pile.
- The hydraulic jaws will clamp the pile.
- The pile will be lifted and offered into location and lowered to the seabed.
- Under the direction of the Piling Supervisor the pile will be placed in the correct location.
- Once in the correct location the vibro will be started and the pile will be driven to the required depth.
- The pile will be checked for level.
- The hydraulic jaws will be released, and the crane barge will move on to the next pile location.
- This will be repeated for all piles.

We will follow the MMO licence to avoid any unacceptable risk to groundwater

Vibro-piling must be used as standard. Percussive piling must only be used if needed to drive a pile to its design depth. where percussive piling is required, soft-start procedures must be used to ensure incremental increase in pile power over a period of 20 mins

6. Shoreside bank seat Civils works

- New concrete support slab will be cast insitu support the UB beam onto which the shore end of the fixed bridge will be fixed and supported.
- Ply shuttering will be fixed to concrete blinding and mesh reinforcement placed as per design
- Concrete will be mixed on site using potable mixer and placed in the shuttered area.
- Concrete will be compacted using a 110V vibro poker powered from a 3kva generator
- Concrete will be floated off with hand tools
- UB support beam will be placed and fixed down

7. Installation of new bridge sections

- Pile cap plates will be welded in place from a man riding basket supported on the working barges crane.
- Cross head member will be placed on pile and either welded or secured with mechanical fixings
- Bridges will be delivered to site by barge (Wolf) and lifted into place by the Wizards on board crane

8. Delivery and Installation of Walkway pontoons

- The pontoons will be delivered to site assembled by barge.
- Under supervision of Slinger/banksman Pontoons will be launched by Warrior deck crane using bespoke certified lifting clutches

- Once several pontoons are in the water, they will be bolted together end-end as per drawing, connected with bolts and rubbers.
- Once a string of 3-4 pontoons is connected end-end the work boat will be cargo strapped to the end.
- The work boat will tow the string of pontoons to its correct location as per drawing.
- The pontoon will be positioned against the piles and a pile guide will be placed around the pile and bolted to the pontoon securing it in position.
- This process will be repeated for all the pontoons.
- The deck boards at each joint will be secured as the pontoons are bolted together.

9. Delivery and Installation of Finger Pontoons

- Fingers are delivered and assembled in the same way as walkway pontoons.
- Once assembled they are lifted onto the water and secured to the workboat to be towed to location.
- This ensures they do not roll over.
- Once in location they are bolted to the walkway in the same manner as the walkway pontoons.
- The deck boards at each joint will be secured as the pontoons are bolted together.

10. Installation of Hardware

- Any cleats not installed during the assembly of the pontoons will be fitted and secured.
- Cable tray for services will be laid in duct voids and secure with cable ties and tray joiners
- Safety equipment including safety ladders and emergency cabinets will be fitted in locations agreed with the Client.

11. Utilities Installation

- The utility installation will be undertaken by a third part contractor.
- This will include power, lighting and water supplies
- Walcon Marina will have a team of 2 men to work with Services contractor fixing duct cover as works progresses

On completion of the works, the pontoons will be handed over to the Client and Walcon Marine will leave site.

INSTALLATION RISK ASSESSMENTS

Reviewed By:						Date:			Next review Date:			
RISK RATING = SEVERITY X LIKELIHOOD												
SEVERITY CODE:						LIKELIHOOD CODE:			RISK RATING:			
1=Accident where no injury occurs.						1=Improbable.			1 – 6=Low – Work can proceed			
2=Minor injury First aid only						2=Remote.			8 – 12=Medium – Consider further controls, Proceed at caution.			
3=Over 3 day off work (RIDDOR)						3=Possible.			15 & over =High – In put more controls before proceeding.			
4=Major injury (RIDDOR)						4=Probable						
5=Fatality or Multiple Fatalities						5=Very Likely to occur						
			RISK BEFORE CONTROLS			RISK AFTER CONTROLS						
No	HAZARD	RISK	S	L	R/R	CONTROL MEASURES				S	L	R/R
I1	Site Establishment	Public Area Working / Vehicles Moving / Working Close to Quayside	4	3	12	The site will be established using fencing, barriers, hazard tape, cones or similar. Signage will be installed and the public will be excluded from the site. All operatives are to be briefed and will ensure the site boundary is kept in place at all times. Only operatives authorised by Walcon Marine Ltd will be allowed to work within the site and will wear PPE at all times. Operatives are to ensure materials and equipment are secured correctly to reduce site hazards, including trip hazards on walkways. Any concerns are to be realised immediately with the on site manager, supervisor and/or client and issues are to be addressed immediately.				4	2	8
I2	Storage Area Control Lay down, Stacking area	Stacked items, Slips, trips and falls, public intrusion, objects falling	4	2	8	All Materials will be stacked safely and in such a way to not disrupt any site movements, all stacking of materials will be within the exclusion area, no public access to the stacking area. Ensure that materials are stacked so they cannot roll or fall.				4	1	4
I3	Public access	Injury to the public	3	4	12	There will be no public means of access to the working area, exclusion zones will be installed by means of Heras fence or barrier tape.				2	2	4
I4	Working on or near or over water.	Drowning Hypothermia	5	5	25	Life jackets will be worn when working within 3m of the water. Safety boat to be available wherever practicable. No vehicles or plant within 3m of the water. At least 1 operative will be a First Aider. All personnel familiar with man overboard procedure				5	2	10

15	Lifting operations / Crane movements	Falling objects crushing. Working at height. Swinging / moving loads. Bumps/Strikes	5	5	25	All lifting Plant/equipment will be checked prior to use and all findings logged. All plant/equipment is LOLER tested (certs available on request). PPE will be worn including hard hat, high visibility vest, gloves and Safety Boots. Exclusion area will be enforced around lifting operation. All lifting operations will be overseen by a competent Slinger/Signaller. Only trained operatives will operate the crane. All lifts will be carried out in conjunction with lift plans. Refer to CEMP and Method Statement.	5	2	10
16	Working at Height	Falling from Height	5	3	15	All Operatives will wear the appropriate PPE and all low-level access i.e. unloading lorries will be undertaken from a footed ladder or similar. Prior to working at height a fall arrest system but be agreed with the supervisor/manager and implemented. All operatives will be competent in working at height. There will be NO work at height if the wind speed is above 18-24mph. Operatives have the authority and responsibility to stop the work/task if risks are not appropriately assessed and managed.	5	2	10
17	Unloading / Loading Vehicles	Working at height, Manual Handling, Trapped Limbs, Bumps/strikes, Moving vehicles	5	4	20	Planned activity. Personnel are to be briefed and wearing the appropriate PPE. Footed ladders will be used to access loads where possible. No lone working, Work area to be cordoned off from public. See RA I16 - Working at Height.	4	3	12
18	Weather conditions	Slips Trips and Falls, Heat exhaustion / exposure	3	3	9	Monitor conditions, cease operations if necessary. Additional awareness of proximity to objects/vessels. Wear suitable clothing for the conditions. Pay attention to underfoot conditions. In extreme heat take more breaks and drink plenty of fluid. Keep warm where possible and wear dry clothes everyday	2	1	2
19	Slips Trips and Falls	Minor injuries, Fractures, Concussion	3	3	9	Wear company supplied footwear, hold railings where possible, Keep the area tidy and clear of tools and debris. Pay attention to your Underfoot conditions.	1	2	2
110	Safety Boat/Dory	Collision with other vessels, Engine Failure	5	5	25	Only trained operatives will control the power boat. With the assistance of the harbour master all other vessels will be kept out of the area, work will stop should another vessel stray into the area. If engine failure occurs oars are stowed on board the power boat. Kill cord worn/used at all times.	5	2	10
111	Falling Objects	Head injuries, Concussion	5	3	15	All tools required to be used at height will be tethered where practicable. Exclusion zone will be enforced below work area where required. All operatives will wear appropriate PPE	4	2	8
112	Fuel Oil Spillages	Contamination, Fire	3	3	9	No naked flames/ignition sources to be with in 5m of refuelling. All refuelling where possible will take place on land, non-spill nozzles or funnels will be used Oil nappies or drip trays will be used where possible. All Walcon vehicles and plant have spill kits. No refuelling within 10m of any watercourse. Fire extinguishers can be found on board ALL Walcon vessels and vans.	2	2	4

I13	Welding / Burning	Fire, Explosion	5	4	20	All operatives undertaken Welding or burning will be trained and competent, all operatives will wear appropriate PPE which as of Nov 2019 HSE regulations inc, air fed welding mask and gauntlet gloves, No Welding or burning will take place unless there is a valid in date and approved hot works permit. A full in date fire extinguisher will be available at the site of welding/burning during and after the works until the area has cooled.	5	2	10
I14	Company Vehicles	Crashing into other vehicles or objects	2	4	8	Only Walcon Authorised Employees over 21 years old and holding a full valid UK driving licence can drive Walcon vehicles. Mobile phones and other hand-held electronic information and communication devices should only be used in a car when you are parked safely and legally. You must not use your device at any other time, including when you are stopped in traffic. All vehicles should be reversed parked where possible. A banksman will aid in the parking should the driver require. Driver is responsible for carrying out frequent checks of vehicles to ensure safety and efficiency in accordance with current legislation and highway code.	2	2	4
I15	Noise	Hearing problems, Complaints from locals	1	2	2	All Operatives will wear the appropriate PPE i.e. Ear plugs or ear defenders (where required). All operatives will do their best to keep noise to a minimum, no radios onsite, Normal working Hours 0700-1800 will be adhered to (unless agreed otherwise prior to work). Notify any residents nearby of the works out of courtesy. Use the correct piling head for the job.	1	1	1
I16	Overhead and Buried services	Electrocution, damage to utilities	5	2	10	Either Walcon or the Client will supply detailed information about any services so they can be avoided during any lifting or piling operations. Refer to the CEMP and Lift Plan for any onsite controls or restrictions.	4	1	4
I17	Hand Arm Vibration	White finger	2	3	6	All operatives are trained in the use of vibrating tools. Vibrating tools will be used to the manufacturer's guidelines. Monitor trigger time in accordance with legislation.	1	1	1
I18	Use of Small tools and Equipment	Minor injuries	2	4	8	All operatives are competent in using small tools. PPE will be worn including eye protection, gloves and RPE when required. Only battery-operated tools will be used when working near the water. All tools are inspected and PAT tested. All tools are inspected by the operator before every use.	1	1	1
I19	Manual Handling	Back strains, pulled muscles	3	3	9	Operatives are to assess each load to minimise manual handling. Operatives should reduce the weight and distance and utilise apparatus where practical. Where possible all lifting will be done by mechanical means, loads over 25kg should be lifted by more than 1-person, Appropriate PPE will be worn. All operatives are competent in manual handling. Operatives have the authority and responsibility to advise their manager/supervisor of any concerns prior to lifting.	2	1	2
I20	Litter, Sharps	Punctures, Abrasions, Weil's disease	3	3	9	All operatives will make sure that all rubbish and waste is disposed of in the correct manner. Any sharps or needles will be reported to the client and supervisor to be disposed of in a sharps box.	2	1	2

I21	Working adjacent to Road or footpath	Public interface, hit by traffic	4	3	12	When working on public or private highway a traffic management plan will be implemented. An external plan and permit will be required from the local authority when working on a public highway. All appropriate PPE will be worn, depending on locations signage and cones will be put out to warn the public about any works in the area, by the client or Walcon. Plan unloading area to be clear of moving vehicles.	3	1	3
I22	Use of substances hazardous to health	Allergic reaction, blindness, Death	5	3	15	Operatives are to read the relevant COSHH assessment prior to using any hazardous substance. All operatives will wear the appropriate PPE. Suitable spill kits will be available, and First aid kits with eye wash are in the vehicles.	3	3	9
I23	Lone Working Unsociable Hrs	Fatigue	4	2	8	There will be NO lone working on any Walcon projects. Normal working hours are between 0700 –1800. Should out of hours work be required we will inform any residents by way of letter drop prior to the work. Operatives will have a min of 10hrs break between shifts to manage fatigue.	2	1	2
I24	Driver Fatigue	Driver/other road users may suffer serious injury if road accident results from fatigue	4	2	8	Work is planned to minimise the risk of driver fatigue. Drivers must take breaks if they become tired and comply with the law regarding breaks in any given time period. Remind drivers to report when they are feeling ill, have developed a medical condition or are taking medication that could affect their driving. Regularly review shift schedules with drivers to ensure the risk of fatigue is minimised	2	1	2
I25	Electrical Hazards	Electric Shock on Pontoons from live cables	5	3	15	Operatives will check with Client to ensure that power has been disconnected in the work area. If the disconnection is to be phased, operatives are to check daily as part of the morning briefing. If in doubt do not touch the cable until a qualified electrician has confirmed they are safe.	5	2	10
I26	Trapped Limbs	Limbs becoming trapped when joining pontoons	4	4	16	Operatives should limit the necessity to place limbs between pontoon sections as much as possible. Loose clothing to be secured. Operatives to ensure pontoons are stable and not moving excessively. Limbs are not to be put between pontoon sections if pontoons are closing together.	4	2	8

Supervisor:

Print Name: Signature: Date:

Please document below, any risks and control measure not included above.

Activity/Task	Controls Measures, Required/Implemented

Report No:

Incident Report

Date of Incident:

Time of Incident:

Person/s Involved:

Address/Location:

.....

Phone Number/s:

Details of Incident:

Name of Injured Person/s:

Type of Injury:

Does the Injury Require Hospital Treatment or a Physician? Yes No (Delete as appropriate)

Hospital Name:

Address:

Phone Number:

Was the Injury RIDDOR Reported? Yes No (Delete as appropriate)

Damage to Material or Property? Yes No (Delete as appropriate)

Details of Damage:

Important Notes and Information:

Completed By: Signature: Date:

SITE ACCESS PLAN



WORK AREA PLAN



EMERGENCY PLAN - DETAILS & CONTACTS

Ambulance

Fire

Police

Coastguard

999 or 112

SITE ADDRESS	GEOGRAPHICAL COORDINATES
Hamble Point Marina School Lane Hamble Southampton SO31 4NB Tel: 023 8045 2464	50°51'9.37"N 001°18'44.16"W
	ACCESS POINT
	Hamble Point Marina
	WHAT THREE WORDS
	///darts.install.conclude
	NEAREST JUNCTION
	B3397/School Lane
	TYPE OF ACCESS
	Road and Sea

MOBILE PHONE STRENGTH							
Vodafone	Good 4G	O2	Good 4G	EE	Good 4G	3	Good 4G
Nearest telephone point: marina office							

OTHER TELEPHONE NUMBERS	
Walcon Office	01489 579977
James Walters	07768 251767
Andrew Hocking	07570 428 072

NEAREST A & E HOSPITAL	MINOR INJURY CLINIC
Princess Anne Hospital Coxford Road Southampton SO16 5YA Tel: 023 8077 7222	Fareham Community Hospital Brook Lane Sarisbury Green Sarisbury Fareham Hampshire, SO31 7DQ Tel: 01489 587400

UTILITY COMPANIES	
ELECTRICITY	0800 404 090
GAS	0800 111 999
WATER	0800 771881
TELECOMS OPENREACH	0800 023 2023
ENVIRONMENTAL AGENCY	0800 807 060
BRITISH TRANSPORT POLICE	0300 12302211

ASSEMBLY POINT

EMERGENCY CARD Please carry this card with you during operations POLICE – FIRE – AMBULANCE 999	SITE ADDRESS
	Hamble Point Marina
	(NRST) POST CODE
	SO31 4NB
	WHAT THREE WORDS
	///darts.install.conclude
GEOGRAPHICAL COORDINATES	
	50°51'9.37"N 001°18'44.16"W

EMERGENCY CARD Please carry this card with you during operations POLICE – FIRE – AMBULANCE 999	SITE ADDRESS
	Hamble Point Marina
	(NRST) POST CODE
	SO31 4NB
	WHAT THREE WORDS
	///darts.install.conclude
GEOGRAPHICAL COORDINATES	
	50°51'9.37"N 001°18'44.16"W

EMERGENCY CARD Please carry this card with you during operations POLICE – FIRE – AMBULANCE 999	SITE ADDRESS
	Hamble Point Marina
	(NRST) POST CODE
	SO31 4NB
	WHAT THREE WORDS
	///darts.install.conclude
GEOGRAPHICAL COORDINATES	
	50°51'9.37"N 001°18'44.16"W

[illegible]

If at any time **ANYONE** feels the safe system of work is not sufficient or they are in doubt of task, they must speak to the Walcon Site Supervisor immediately, who should in turn review the Method statement and risk assessment, if this still requires clarification work **MUST STOP** and the Walcon Project Manager should be contacted to resolve the issues.

Document to be returned to Walcon Head Office on Completion of Works

Appendix 1 Invasive species

EA Press release

Quagga mussel discovered for first time in UK

The invasive species, the quagga mussel (*Dreissena rostriformis bugensis*), has been discovered in the south east.

From:

Environment Agency

Published

9 October 2014

The quagga mussel - Picture courtesy of Dr David Aldridge, Cambridge University.



The quagga mussel is generally the size of a thumbnail but can grow to 4cm - Picture courtesy of Dr David Aldridge.

The discovery was made by Environment Agency teams carrying out routine water quality testing on River Wraysbury. It has subsequently been found in the nearby Wraysbury reservoir too.

The identification was confirmed by Dr David Aldridge of Cambridge University on 1 October 2014.

Since the mussel was identified the Environment Agency has been working with partners including Thames Water, Angling Trust and local angling clubs, to put biosecurity measures in place. Work is now taking place to monitor the River Thames and reservoirs in the local area to investigate the extent of the problem and the distance that the quagga mussel has spread.

Anglers and boaters can play an important part and everyone is urged to help stop the spread of this species by following the 'check, clean, dry' approach and thoroughly cleaning any equipment.

The quagga mussel is a prolific breeder – a fully mature female mussel is capable of producing up to one million eggs per year. Due to its ability to filter out large quantities of nutrients and to breed quickly, the quagga mussel can significantly reduce native populations and affect freshwater ecosystems. It can outcompete native mussels. This alters the ecology of the habitats it invades. It can also block water pipes and smother boats' hulls.

Sarah Chare, deputy director of fisheries and biodiversity at the Environment Agency, said:

Invasive species – such as the quagga mussel – cost the UK economy in excess of £1.8 billion every year. And while Britain's rivers are the healthiest for over 20 years, rivers that harbour non-native species could fall short of tough EU targets.

The quagga mussel is a highly invasive non-native species, affecting water quality and clogging up pipes. We are monitoring the extent of its spread and working closely with partners to ensure they are aware of it.

If you spot one then please report it to us through the online recording form. Like the zebra mussel and killer shrimp this species comes from the Ponto-Caspian region – an area around the Black and Caspian seas in south-east Europe.

Simon Earl, head of water production at Thames Water, said:

Another invasive species is the last thing we need clogging up our network. But we have a lot of experience in dealing with zebra mussels, which are similar to quagga mussels, and there is no threat to the quality of the water we supply to our customers. We'll continue to work closely with the Environment Agency to monitor the mussels discovered at Wraysbury reservoir.

Mark Owen, head of freshwater at the Angling Trust, said:

It's vitally important that all water users, including anglers, take every possible precaution to stop this species spreading throughout the UK. Quagga mussels could do untold damage to freshwater and estuarine environments if they are allowed to spread which could have a significant impact on marine and freshwater fish stocks.

The mussels tend to be about the size of a human thumbnail but can grow to about 4cm. The larvae of quagga mussel are not visible to the naked eye, which makes drying a critical step in applying good biosecurity. There's good evidence that rinsing or soaking equipment in hot water increases the chance of killing larvae and adults, and is a suggested addition to the Check, Clean, Dry approach. Check, Clean, Dry is important not only to help slow the spread of this species, but also other invasive species that might be present in our waterways. It is especially important to prevent the spread of invasive non-native species to isolated, vulnerable or protected sites.

More information and advice on the quagga mussel and advice on how to slow its spread can be found on the Non-native Species Secretariat web pages: <http://www.nonnativespecies.org/alerts/quaggamussel>.

Red-eared Terrapin

Species Description

Scientific name: *Trachemys scripta elegans*

AKA: Red-eared slider, Terapin Clustgoch (Welsh)

Native to: Southern USA

Habitat: A wide range of still to slow flowing freshwater habitats

Red-eared terrapins have a distinctive red stripe behind the eye and can grow to 30 cm in length. They often use the banks of water bodies to bask. They are wary and will enter the water quickly if disturbed, so they are best observed using binoculars.

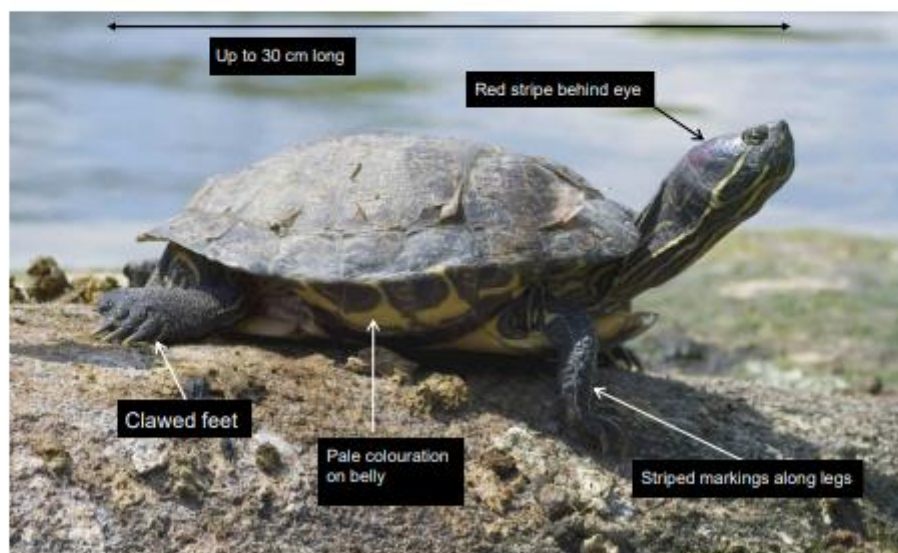
Red-eared terrapins are popular pets and many have been deliberately released into the wild. This was particularly the case during the 1980s. Red-eared terrapins are opportunistic omnivores, and due to their size it is possible that they could predate on native amphibians, fish, water birds, invertebrates and amphibians. They are also known to bask on the nests of waterfowl such as Moorhens and thus interfere with breeding.

Red-eared terrapins can often be seen on ponds and fishing lakes in urban parks, such as those in Cardiff and London. While it is not known whether this species is breeding in Britain, it is considered to be unlikely.

For details of legislation go to www.nonnativespecies.org/legislation.



Key ID Features



Identification throughout the year

Although smaller, juveniles have similar features to adults. Red-eared terrapins are known to have laid eggs in the UK but it is not known if any have hatched.



Juvenile

Distribution

No breeding populations have been confirmed, but non-breeding individuals have been recorded in some parts of the UK.



Source: Various

Similar Species

The UK has no native species of terrapin, tortoise or freshwater turtle. European pond terrapins have been recorded in the wild in the west of England and have been shown to be susceptible to competition from red-eared terrapins in France.

European Pond Terrapin/Turtle

Non-native
(*Emys orbicularis*)

Range considerably in size from 12 - 38 cm long

Speckled markings instead of stripes on legs



No red stripe behind eye

Common Snapping Turtle

Non-native
(*Chelydra serpentina*)

25 - 47 cm long

Large head with hooked jaws

Saw-edged crest on upper side of long tail



Snapping turtles are kept as pets and may be found in the wild as a result of releases or escapes.

References and further reading:

Arnold, N E & Ovenden D W (2002) "Collins Field Guide to the Reptiles and Amphibians of Britain and Europe". HarperCollins

Beebee, T and Griffiths, R (2000) "Amphibians and reptiles: A Natural History of the British Herpetofauna". HarperCollins

<http://www.alienencounters.org.uk>

* *Emys orbicularis* by M. Kutzli, Creative Commons BY-SA, http://commons.wikimedia.org/wiki/File:Emys_orbicularis.jpg

Photos from: Danial Winchester, Frank Tiegler, GBNSS, M. Kutzli, Moondigger

Asian Shore Crab & Brush Clawed Crab

Species Description

Scientific name: *Hemigrapsus sanguineus* (Asian shore crab) & *Hemigrapsus takanoi* (brush clawed crab)

Native to: North West Pacific coast; China (Hong Kong) Taiwan, Korea, Russia, and Japan.

Habitat: *H. sanguineus*: Range of estuarine and marine habitats, within intertidal or shallow subtidal zones.

H. takanoi: Muddy sediment in the intertidal areas of mudflats, estuaries, harbours, lagoons and sheltered bays.

Small crabs with a square carapace (shell) that has three distinct 'teeth' on each side. These teeth are more acutely pointed in *H. sanguineus* than *H. takanoi*. Both species are variable in colour from orange-brown to greenish-black. Carapace can be up to 4.5 cm across in *H. sanguineus* and up to 2.5 cm in *H. takanoi*. Both species have distinctly white claws. Females and juvenile males can be more difficult to distinguish.

H. sanguineus usually has dark purple, red or brown spots on the upper side of pincers, distinctive banding on the walking legs, and large males have a fleshy bulb at the pincer base. Typically found on exposed rocky shores but also in soft sediments under the shelter of rocks or shells, artificial structures, mussel beds and oyster reefs.

H. takanoi has tiny dark spots on carapace, legs and claws (never on the abdomen) and adult males have a small patch of yellow-brown fuzzy growth on the claws. Tend to occupy low energy, sheltered sites and are found under boulders and other hard structures.

A single specimen of *H. sanguineus* has been reported from Glamorgan, Wales and another from Kent, England in May 2014. A specimen of *H. takanoi* was recorded on the Medway Estuary in August 2014. Both species may compete with native crab species, and are potential predators of shellfish.

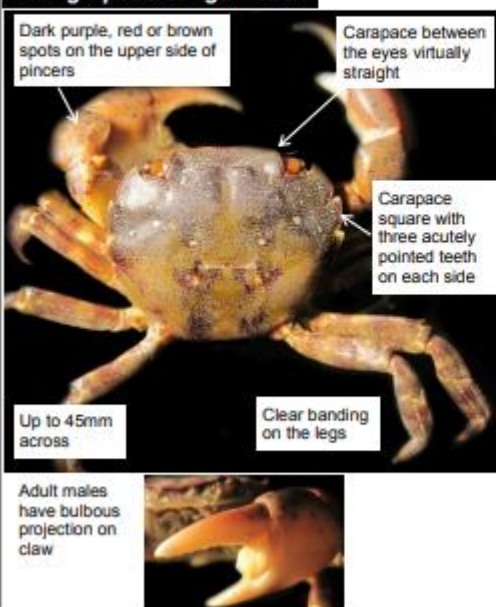
For details of legislation go to www.nonnativespecies.org/legislation.

Hemigrapsus sanguineus
(Asian shore crab)

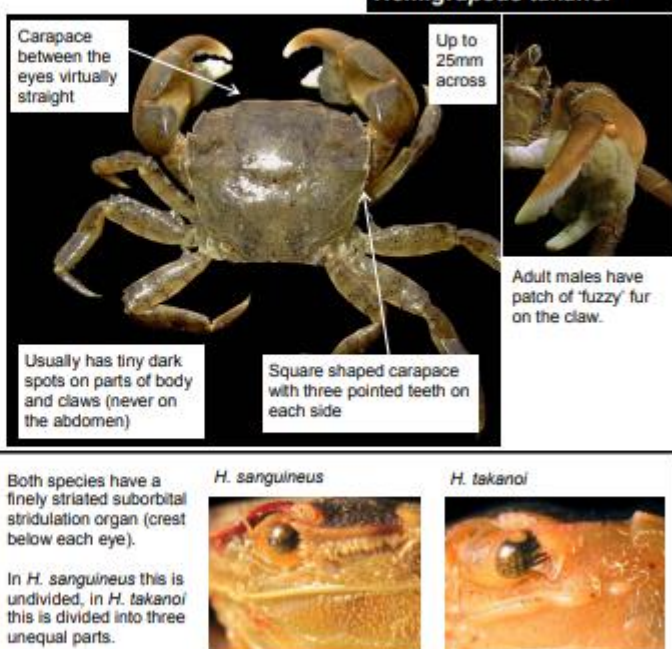


Key ID Features

Hemigrapsus sanguineus

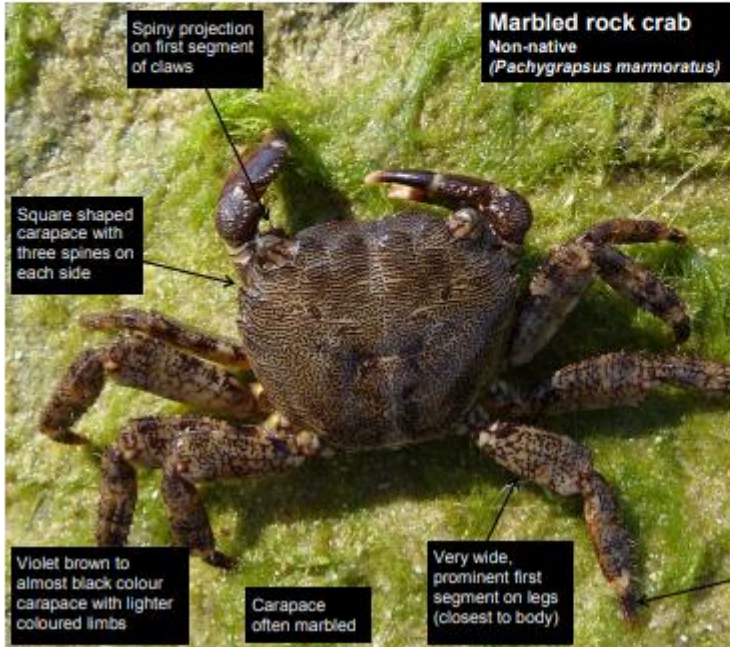


Hemigrapsus takanoi



Similar Species

Most crabs likely to be found on the shore in GB have more than three teeth on either side of carapace and are not square shaped. An exception is *Pachygrapsus marmoratus* (another non-native species), which can be differentiated from both species by its marbled colouration and spiny projection on the first segment of the claw.



Distribution

Several specimens of *H. sanguineus* have been reported from Jersey and Guernsey since 2009 and specimens were reported from Glamorgan, Wales and Kent, England in May 2014. A specimen of *H. takanoi* was recorded on the Medway Estuary in August 2014.

Hemigrapsus sanguineus

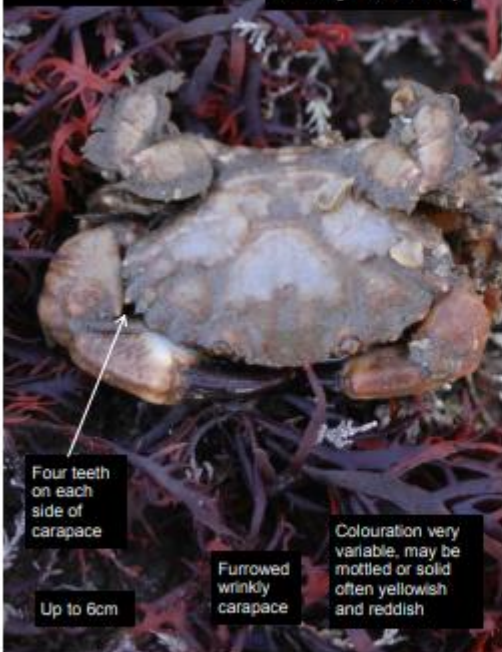
Source: NBN Gateway. Check website for current distribution.



Xantho spp.

Native
Pictured: (*Xantho pilipes*)

Wide, oval to triangular shaped carapace (shell) narrowing at rear of body



Shore crab

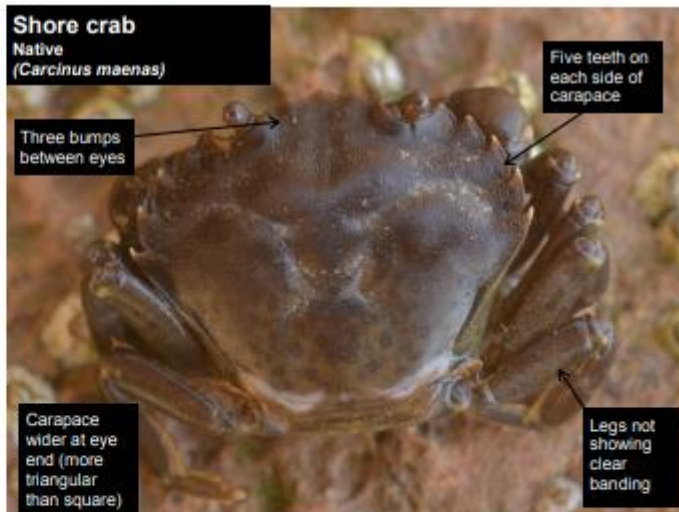
Native
(*Carcinus maenas*)

Three bumps between eyes

Five teeth on each side of carapace

Carapace wider at eye end (more triangular than square)

Legs not showing clear banding



References and further reading:

Charles E. Epifanio, *Invasion biology of the Asian shore crab Hemigrapsus sanguineus: A review*, Journal of Experimental Marine Biology and Ecology, Volume 441, March 2013, Pages 33-49, ISSN 0022-0981, <http://dx.doi.org/10.1016/j.jembe.2013.01.010>.

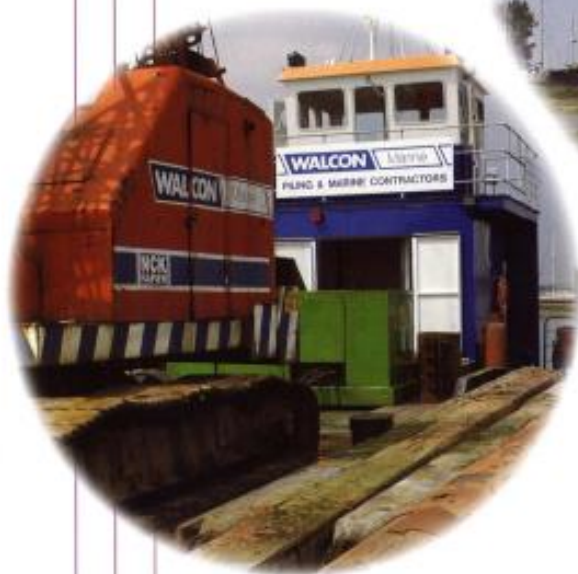
Photos from: Martin Burke, Joey, Butler, Jack Sewell and Wikicommons



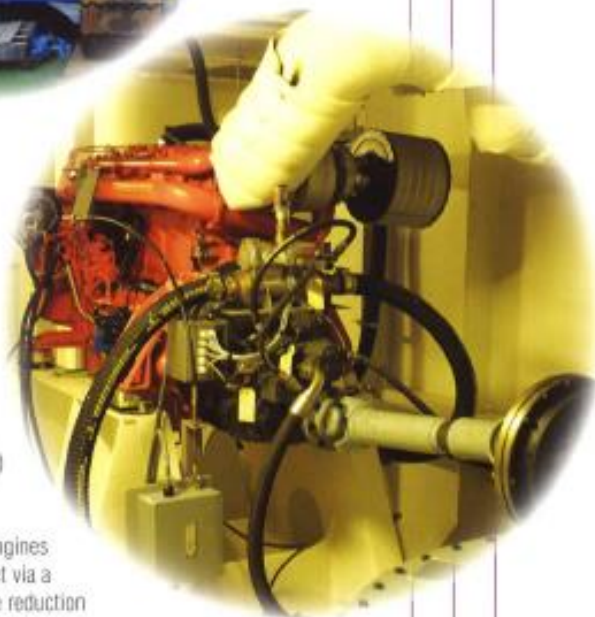
WALCON WIZARD

A HIGHLY MANOEUVRABLE, TWIN ENGINED,
SELF PROPELLED SHALLOW DRAFT
CONSTRUCTION BARGE

This purpose built 'state of the art' piling barge was commissioned to compliment the company's marina construction activities. With its shallow draft and powerful engines the barge will be able to respond rapidly to carry out piling or maintenance works on harbour beacons and entrance buoys etc. in previously inaccessible areas.



With both a crane and piling plant loaded on board the vessel can cruise at 6.5 knots and will be more efficient than a towed barge.



TECHNICAL SPECIFICATION

PORT OF REGISTRY:	Southampton
OFFICIAL NUMBER:	908792
CLASSIFICATION:	Workboat Code Cat 3
DATE BUILT:	2003/2004
LAUNCH DATE:	June 2004
LENGTH:	23.99m
MOULDED BEAM:	11.00m
MOULDED DEPTH:	2.50m
LOADLINE LENGTH:	23.85m
LIGHT DRAUGHT:	0.675m (Midship)
LOADED DRAUGHT:	1.35m (Midship)
SPEED:	7.0 - 8.7 Knots (Normal running speed)
NET REGISTERED TONNAGE: (NRT)	105.6
PROPULSION:	2 No D9-93M, 9 Litre Scania Diesel Engines driving 2 x Schottel SPJ-57RD Pumpjet via a Twin Disc Marine transmission, reverse reduction gearbox.
AUXILIARY POWER:	Demountable 7.5K va Generator in under deck store.
USABLE STORAGE CAPACITY ON DECK:	150 m2
MAXIMUM CARGO WEIGHT:	165 Tonne
MAXIMUM DECK LOAD: (POINT LOAD)	2.5 Tonne/m2 Local strengthening to 15 Tonne/m2 between the crane rails to accommodate track loads.

WALCON

Walcon Marine Limited
Cockerell Close Segensworth West
Fareham Hants PO15 5SR
Tel: +44 (0) 1489 579977
Fax: +44 (0) 1489 579988
E-mail: sales@walconmarine.com
Web Site: www.walconmarine.com



Due to our policy of continuous product development we reserve the right to change specifications without prior notice.

