

Method Statement Template

This template is intended to be used in conjunction with a Band 1 Marine Licence application. Please complete each section below following the guidance provided (max 500 words per section). For any queries relating to this template please contact: marinelicensing@cyfoethnaturiolcymru.gov.uk

1. Summary

Please provide a brief summary of the application including location of the works (coordinates - lat/long, decimal degrees). For activities that cover a large area please provide coordinates of the approximate extent of works.

The Aberaeron Coastal Defence scheme aims to alleviate flooding in Aberaeron Harbour and along South Beach. The feasibility of using an offshore breakwater or lengthening one of the piers to reduce wave heights in the harbour is currently being investigated through computational wave modelling. Direct measurement of the nearshore wave and tide climate are required in order to calibrate the model. Data such as wave direction, height and period and tidal currents are required for a full month (including the full spring and neap cycle).

Monitoring equipment will be placed as near as possible to Easting 245216, Northing 263188. The exact final location will be marked after deployment by the survey vessel.

2. Scope of works

Please provide a full description of all proposed works including:

- Sequence of works (mobilisation, marine works, site remediation (if required))
- Estimated timing of works (duration, working hours, day/night, plus contingency)
- Plant, machinery or vessel required
- Estimated quantities (removals, deposits, construction materials)

Timing

The marine licence application requests start date of 14th May 2020 and an end date of 14th October 2020. However, the monitoring equipment will only be deployed long enough to enable 4 weeks of data to be collected. The intention is that this is collected over a 4 week period, however, the equipment may have remain deployed if, for any reason, sufficient data is not gathered over that period (e.g. if the data storage fails, or the equipment is damaged) Deployment/retrieval of equipment will be undertaken in daylight hours and will be completed within 2-3 hours.

Mobilisation

The deployment of equipment will take place as soon as the marine licence is received and following appointment of a suitable specialist contractor (to be confirmed). Access to the deployment site will be via survey vessel (exact vessel yet to be confirmed). The contractor will remove all equipment, mooring/anchoring structures, navigation markers, etc. following completion of the monitoring period.

Equipment and Proposed Works

Monitoring equipment will be placed as near as possible to Easting 245216, Northing 263188 (see Figure 1) ensuring the water depth is adequate for the installed product to record data at all states of the tide for the entire monitoring period. No interim maintenance operations are expected, but could be necessary if accidental or storm damage occurs.

Monitoring equipment will consist of a bed-mounted Acoustic Doppler Current Profilers (ADCP) (expected to be a Teledyne RDI Workhorse Waves Array). The mode of deployment will be for an anchor to be lowered with a buoy and a line run out to the ADCP which will be lowered at the required position on a weighted frame. The ADCP will be deployed from a suitable survey vessel. The exact vessel is still to be confirmed, however it is envisaged that it will be a small MCA Cat 3 or 4 workboat.

A land-based tidal gauge will be installed on the harbour wall (Figure 2) for the duration of the survey (the previous gauge, which was located near the 'Harbour Master Restaurant' has been removed/fallen off). The tidal gauge is expected to be a DKK-TOA WQC 24 multiparameter sonde.

A stilling pipe will be installed for the tidal gauge for the purposes of recording tide water levels for the same collection period. This will require a 150mm diameter sanitary downpipe to be installed on a vertical timber fender, which will be accessed from the adjacent ladder (see Figure 3)



Figure 1: Wave and Tidal Monitoring Location



Figure 2: Approximate Location of Stilling Tube

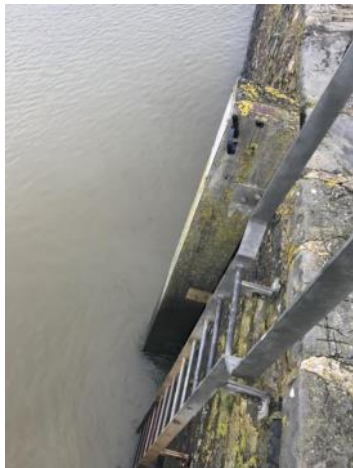


Figure 3: Timber Fender for Downpipe Installation

3. Access and working areas

Please provide details of access to the site and working areas. This should include:

- Attached map of the access/egress route and working areas (annotated aerial image and/or OS map)
- Predicted plant/vehicle movements
- Storage areas for plant, equipment and materials (if required)
- Risks to navigation

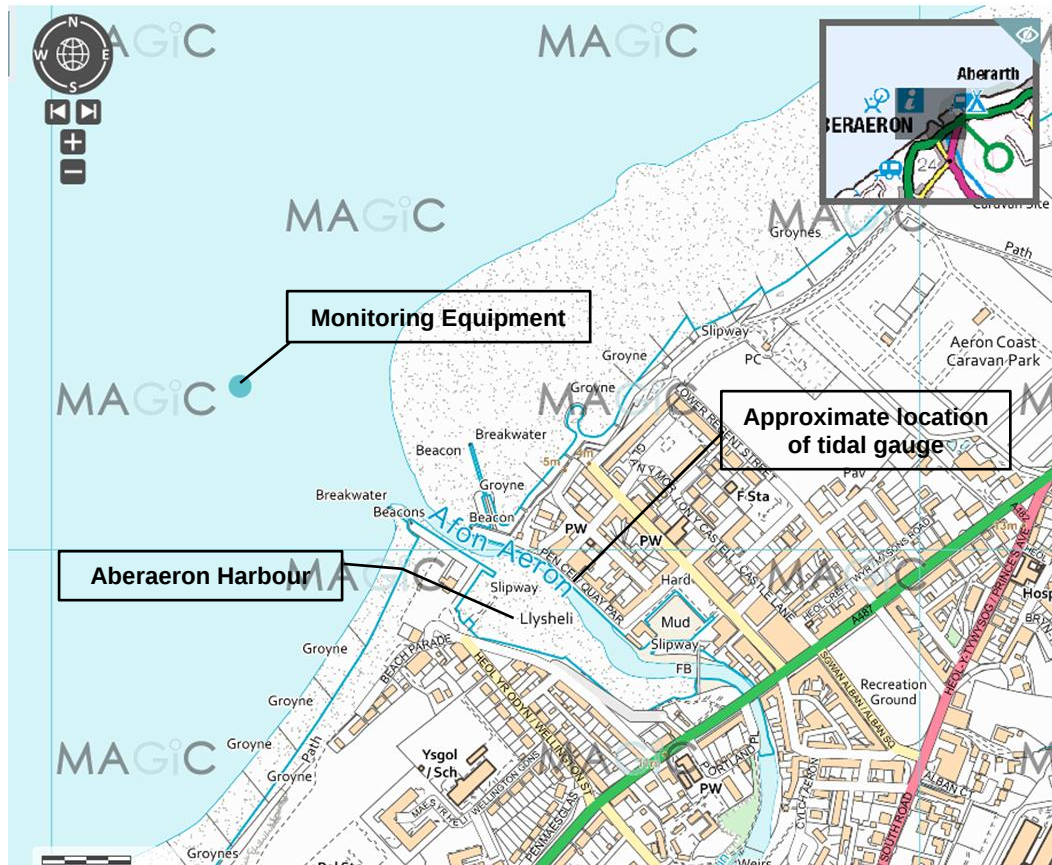


Figure 4: Working Areas

Navigation

The location of the ADCP will be relatively close to Aberaeron Harbour and as such vessel movements may present a hazard to the mooring. The moorings' Surface Marker Buoy (SMB) will be equipped with a yellow navigation light which will be programmed to meet local licencing requirements, in order to warn marine traffic to its presence; typically, the light is set to flash 5 times every 20 seconds. This will be subject to the approval of the Ceredigion Harbourmaster. A temporary fishing exclusion zone of 500m will be in place for the duration of the deployment.

A Notice to Mariners will be produced prior to deployment of the monitoring equipment. Natural Resources Wales (NRW) and Ceredigion County Council (CCC) will be notified of the deployment of the monitoring equipment.

Survey operations will be based at Aberaeron or other suitable local harbour (e.g. Aberystwyth).

Access for the tidal gauge will be via Quay Parade by foot to minimise disruption. Storage for plant, equipment and materials will be not be required.

4. Environmental mitigation

Please list appropriate mitigation measures to minimise impacts on the marine environment these may include:

- *Pollution prevention and control procedure (guidance available at: <http://www.netregs.org.uk/media/1304/gpp-5-works-and-maintenance-in-or-near-water.pdf>)*
- *Spill response kits*
- *Minimise plant traffic*
- *Designated access and egress routes*
- *Storage of materials (fuel, chemicals, construction waste)*
- *Biosecurity (guidance available at <http://www.snh.gov.uk/docs/A1294630.pdf>)*

Note: To assist you, the following mitigation statements will be used as conditions within the licence. By signing this method statement you will be agreeing to adhere to these restrictions. If you are unable to do this, the application will not qualify as Band 1.

- ✓ All equipment, temporary structures, access tracks, waste and/or debris associated with the survey will be removed on completion of the works.
- ✓ Bunding, storage facilities and spill kits will be employed to contain and prevent the release of fuel, oils and chemicals associated with the plant, refuelling and construction equipment into the marine environment.
- ✓ Plant, vehicles and machinery will not be refuelled on the foreshore.
- ✓ Coatings and treatments will be suitable for use in the marine environment and are used in accordance with best environmental practice.
- ✓ All equipment, materials, machinery and PPE used will be in a clean condition prior to their arrival on site, and upon removal from site, to minimise risk of introducing non-native species into the marine environment.
- ✓ In the event of removal of any sensitive species or habitat designated by NRW under Schedule 7 of the Environment (Wales) Act 2016, no further removals will occur at that location or within 20m of that location.
- ✓ Clean, Check, Dry procedures will be followed for all equipment, clothing, vessels and other materials to be used in the deployment, checking and retrieval of the equipment.

Please list your bespoke mitigations here:

- ✓ The contractor will be required to remove all equipment, mooring/anchoring structures, navigation markers, etc. following completion of the monitoring period.

5. Additional Information

Please list any additional information that may help with the application:

- *Consents/permissions required*
- *List of plans or drawings attached to method statement*
- *Emergency procedures*
- *Contact details*

The following plans are provided separately in addition to the application form and method statement:

6. Customer details

Signature:



Full name: Rhodri Llwyd

Organisation name (where appropriate): Ceredigion County Council

Contact e mail: rhodri.llwyd@ceredigion.gov.uk

Contact phone number: 01545 570881