

# **ABERDEENSHIRE COUNCIL**

**Detailed Method Statement** 

For

Repairs to the Railway Jetty, East Pier and North Pier at Banff Harbour

**Infrastructure Services** 

#### Introduction

**Aberdeenshire Council** ("the Council") is responsible for providing a wide range of services to the population of Aberdeenshire. Aberdeenshire currently has a population of circa 243,000 with approximately 11,000 non-domestic and 100,000 domestic properties. There are currently 19 multi-member electoral wards with a number of Councillors in each. There are currently 68 elected Councillors which comprise the Council.

## **General Requirements**

The project is to carry out essential repairs to sections of the Railway Jetty, the East Pier, and the North Pier at Banff Harbour.

The repairs to the Railway Jetty and the East Pier require the placement of concrete bagwork to protect the foundation of the piers, but the placement will be outwith the existing footprint of the works being maintained, hence the need for this licence application. Note that this is the only element of the work which is outside of the existing footprint.

#### **Detailed Method of the Works**

### **Railway Jetty:**

The end section of the Railway Jetty must be rebuilt. This will involve the removal of a temporary gabion basket structure and taking the Jetty wall back to bedrock. A new reinforced concrete slab, doweled into the bed rock, will be installed as a foundation to build the new wall upon. This foundation is required because the underlying bedrock is heavily fractured and is liable to disintegrate further leading to heightened risk of future collapse if left untreated. The structural element of the new wall will be comprised of pre-cast reinforced concrete blocks. This approach is being taken as the weight of the concrete blocks will be controlled so that they can be lifted into place by small plant (e.g. a 20T excavator) which is preferable to minimise any additional loading on the Jetty. Approved engineering fill will be used to make up the interior of the Jetty. The outer part of the wall will be rebuilt in natural stone such that the concrete blocks will be hidden from view.

#### **East Pier:**

The subsiding section of the East Pier will be stabilised using a Kingpile wall system. The Kingpile wall will be installed behind the line of the existing cope stones and will provide temporary structural support while the face of the East Pier is dismantled and rebuilt. The sunken cobbled deck will also be built up to level. Once the outer face of the East Pier wall is reinstated the Kingpile wall will be hidden from view, but it will continue to provide permanent structural support. This method has been carefully chosen as it is deemed to be the one which minimises the risk of further damage to the pier while it is in its temporary state. It will also prevent a huge section of mass concrete in the inside of the pier from sliding further outwards. Any alternative strategy would require the excavation and complete removal of the concrete from the inside of the pier to permit installation of structural supports inside the wall. In doing so, the internal volume of the pier would be significantly reduced until the repairs are completed and it is this volume that gives the pier its stability. This is particularly important for the East Pier as it interfaces directly with the North Sea and as such the pier would be placed in a particularly vulnerable state if this alternative approach were to be adopted.

### **North Pier:**

Sections of the Pier wall at the entrance to the harbour will be re-pointed. No works outwith the current footprint of the North Pier will be carried out.