METHOD STATEMENT
FOR
PROPOSED COASTAL PROTECTION WORKS
AT
BETTYSTOWN_LAYTOWN, CO. MEATH

CLIENT:
LAYTOWN_BETTYSTOWN MUNICIPAL DISTRICT
MEATH COUNTY COUNCIL
DULEEK CIVIC OFFICES
MAIN STREET
DULEEK
CO. MEATH

CONSULTANT:
J.V. QUINN & ASSOCIATES
CHARTERED CONSULTING ENGINEERS
RATHMOLYON
ENFIELD
CO. MEATH
METHOD ATATEMENT

1.0 General Description of the Works

The works will involve the placement of rock armour along a section of beach (c. 107m) at Bettystown_Laytown where severe damage to the existing coastal protection system of gabions was incurred during storms of January 2014. It is proposed to construct a revetment using rock armour to protect the existing gabions as the analysis indicated that rock armour is the only long-term solution to coastal erosion at this site.

2.0 Site Access

The site access point shall be from Delaney’s Entrance as shown on drawing No. MCC/L_B/6/05. From this access point all of the construction plant and materials delivery shall travel along a defined route (indicated by traffic cones) on the beach (max. speed limit on the beach is 10km/h) to the construction site. When using route all operatives will be made aware of pedestrian movements to make sure site traffic passes safely. All mobile plant shall have warning sirens on while using this route.

The construction site will have temporary fencing and appropriate signage warning the public of the works in place to prevent unauthorised access within the working area. The public will be restricted access onto the beach in the vicinity of the proposed works and these restrictions will include the closure of temporary and permanent access points, see drawing No. MCC/L_B/6/05.

Impact to the beach will be kept to a minimum with no unnecessary trafficking and designated routes set up.

3.0 Notification of Works to the Public

The public will be clearly notified of the works by area being fenced off, signage erected, letter drops to local schools, residential and business properties adjacent to the works. Advertising will be via the local newspapers and on the local radio. Also the public will be notified of the works using VMS (variable message signs) on approach roads notifying them of the works at least 2 weeks prior to commencement of the works.

4.0 Rock Revetment Works

Prior to the main rock revetment works commencing the existing coastal defence gabion structure shall me stabilised by the intersection of steel piles into the ground in front of the gabions.

The new rock revetment shall be constructed at 10m sections by the excavation and grading of the existing beach to the required angle (1:1.5).

The excavated material shall be re-used as follows:

- Excavated material shall be placed back upon completion in the following order
  (i) Excavated material other than sand to be placed back at original level
  (ii) Sand material to be placed at original level i.e. top exposed level

- No offsite tipping of surplus sand material shall be permitted. Surplus sand material shall be spread along the beach in front of the rock armour revetment in an
appropriate manner.
- Surplus excavated material other than sandy material shall be deposited in areas to
reinstate where soil erosion has occurred.

On completion of the initial grading layer the following sequence of work will
commence as follows: -

- the geotextile will be rolled out over this graded area
- underlayer of imported quarry rockfill shall be spread and compacted to the required
grade
- secondary armour stone (300kg) shall be place
- primary rock armour stone (3Ton) shall be placed

Placing of rocks is to commence at the lower end i.e. seaward side and proceed inwards
and upwards towards the crest. Rocks shall be lowered into place and not dropped.
Particular care shall be taken not to puncture the filter fabric where such fabric is used.
A drop height of no more than 1m is acceptable in relation to the primary rock armour
and 1.5m for the rock armour under-layer. When working on the beach machine
operatives will take cognisance of ground conditions. All works shall be carried out at
low tide.
All existing gabions that are required to be removed in order to facilitate the rock
revetment works shall be stored in Gormanston Depot for re-use at a later date to
reinstate the existing gabions which are above the HWM.
On completion of the works all temporary structures, plant and machinery shall be
removed and the beach shall be reinstated to its previous condition and level.

5.0 Construction Traffic

The primary construction equipment to be used on site will comprise an excavator (20-
30Ton), JCB, 8Ton Dumper and a 20Ton lorry to deliver the rock armour. Hydraulic
excavators with grab attachment will be used for individual placement of rock armour.
Several potential pollutants will be utilised at the site, including diesel, engine/hydraulic
oils, etc. Contractor will ensure they are using bio-diesel in machinery. Mobile
equipment should have warning reversing sirens and cameras. Emergency repair tools
and/or towing equipment is to be made available in case of broken down machines
before they are submerged by the tide

6.0 Stockpiling of Material on Site

There will be a minimum amount of stock piling of materials on site (stones etc) as
shown on drawing No. MCC/L_B/6/05.
Stockpiling of the material
- material to be kept separate i.e. 3 & 0.3ton armour stone and underlayer material
- stockpile area should be level firm ground free from obstructions, unauthorised
access should be prevented and area must be well-lit at night.
- primary armour stone to be placed seaward of the secondary armour stone and
underlayer stone, this will allow protection for the smaller stone during stormy or
flooding conditions
- segregation of the public from the stockpile area using warning signs and if possible
physical barriers to prevent the public, especially children from climbing on to
stockpiles
- clear marking of the stockpiles to prevent collision from small water crafts from running into the submerged stockpile
- ensure that personnel keep a safe distance from tipper trucks unloading
- site personnel to be clearly instructed on the discharge and reloading of the quarry material
- action to prevent formation of soft areas on the beach as stockpiles are removed

The site should provide adequate and safe space for storage and for the manoeuvring lorries/dumpers, the handling equipment and the possible reloading of site vehicles. Care should be taken in tipping of rock armour to ensure the truck does not overturn. All material brought to site shall comply with best practice management as per section 2.4.2 of the Appropriate Assessment Screening report prepared by FERS.

7.0 Timescale

It is anticipated that the rock revetment works will be completed within a 10-week programme and that the beach reinstatement works will be completed within 1 week thereafter.

8.0 Noise

The anticipated noise/vibration levels are low and anticipated air/dust emissions are also low (BS 5228 Code of Practice for Noise Control on Construction and demolition sites). Noise levels shall be kept below the following maximum limits: -
- 0800hrs – 2000hrs (Mon to sat) Peak 75dBA and all other times Peak 45Dba.