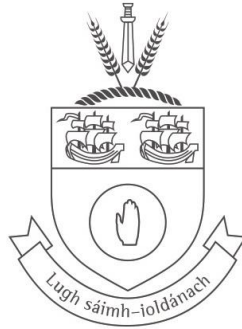


**LOUTH COUNTY COUNCIL**  
**Comhairle Contae Lú**



**DRAFT Construction Environmental  
Management Plan**

**Ballynamony (Murphy), Ballagan Coastal  
Protection Works**

## **Revision History**

<b>Prepared by</b>	<b>Approved by</b>	<b>Status</b>	<b>Issued to</b>	<b>No of copies</b>	<b>Date</b>
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# 1.0 Introduction

## 1.1 Objective

This DRAFT Construction Environmental Management Plan (CEMP) is prepared for the construction of proposed Coastal Protection Works at Ballynamony (Murphy), Ballagan, Greenore, County Louth. These works are subject to planning consent from An Bord Pleanála under Section 177AE of the Planning and Development Act 2000 (as amended).

The CEMP applies to all works associated with the construction of the proposed civil works including the pre-construction site clearance and enabling works.

As the contractor has not yet been appointed, this DRAFT CEMP has not been formally adopted and further development and commitment to the CEMP will be undertaken following selection of Contractors and prior to commencement of works onsite. Input from the Project Ecologist and Project Archaeologist may also be required prior to the final adaptation of the CEMP.

The CEMP provides the environmental management and mitigating measures to ensure that the work is carried out with minimal impact on the environment. The construction management staff must comply with the requirements and constraints within this CEMP. The key environmental aspects associated with the implementation of the coastal protection works, the appropriate mitigation and monitoring controls, are identified in the CEMP and its supporting documentation.

The implementation of the requirements of the CEMP will ensure that the construction phase of the project will be carried out in accordance with any planning conditions that may be applied in a future planning determination for the proposed works.

The CEMP will be reviewed on an ongoing basis during the construction process and updated/amended as required.

## 1.2 Site Location

The proposed works location is along the shoreline of Carlingford Lough on the Cooley Peninsula in the townland of Ballynamony (Murphy), Ballagan, southeast of Greenore, County Louth (Please see Figure 1). Grid co-ordinates for the site are as follows:

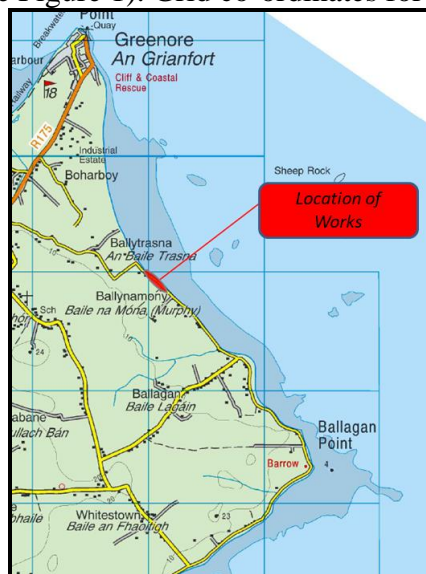


Figure 1 - Works Location

### 1.3 Description of Works

The proposed works at Ballynamony (Murphy), Ballagan is to provide coastal defences and repair the existing concrete stone seawall along a 229m stretch along the LS7066 Public Road using a range of measures. Refer to Drawing No. CE-2021-01-01 and CE-2021-01-02 in Appendix A.

These remedial measures will use concrete products. The Concrete Works proposed are as follows:

- Re-pointing of stonework at chainages; 0-4 metres and 144-150 metres
- Concrete crack repair at chainages; 4-15 metres and 100-144 metres. Smaller cracks in the existing wall are to be repaired using Crack Repair epoxy repair/mix mortar. Cracks and gaps are to be cleaned out thoroughly prior to application.
- In situ concrete to fill voids of the existing sea wall at chainages; 15-35 metres, 75-100 metres and 159-164 metres. These larger voids are to be repaired by cleaning out loose and broken Concrete from the previous installation and adding In situ concrete: (30N lean mix concrete infill to voids) to the existing Sea Defence wall. The largest void infill will be no more than sections 300mm x 700mm in dimension
- Break up damaged section of existing coastal defences and compact down. The sea wall is then to be replaced with composite concrete at chainage 35-75 metres. This will undertaken by adding In situ concrete: (30N lean mix concrete) to the enhance the existing Sea Defence wall.

A new section of rock armour is proposed at chainage; 189-229 metres, this will be completed by;

- Excavating a 1m wide x 1m deep trench, approximately 30m in length at along the toe of the existing shoreline embankment,
- The existing soil and subsoil within the 120m<sup>2</sup> area (i.e., 40m x 3m) will need to be dug by excavator to a depth of 1m below ground level and removed offsite
- Placement of the first row of 3 tonne boulders within these excavations to form a bedding of rock armour off which further armour will be positioned,
- Placement of further rows of rock armour, with each row stepped back, to form a sloped wall at a slope of approx. 1 - 1.5 of rock armour up to the existing road level,
- Placing a layer of geotextile membrane underneath the rock armour to mitigate against any migration of fines from under the rock armour
- It is proposed to recycle any suitable boulders excavated as part of the groundworks. Any materials removed from the site which may be found to be suitable for the rock armour will be sorted and placed in a temporary stockpile at a suitable location upgradient of the site.
- The previously excavated suitable material will be used to fill void spaces within the emplaced boulders.

#### **1.4 Programme of Works**

Anticipated construction time is approximately 4 weeks.

It is anticipated works will commence in Q2 or Q3 of 2024.

No works will be allowed take place after September 2024 in order to comply with Natura Impact Statement (NIS) conditions.

The above timelines will be confirmed upon appointment of a contractor to complete the works.

## **2.0 Project Roles and Responsibilities**

The Contractor is responsible to ensure that all members of the Project Team, including sub-contractors comply with the procedures set out in the CEMP.

The Contractor will ensure that all persons working on site are provided with sufficient training, supervision and instruction to fulfill this requirement. The Contractor will ensure that all personnel are allocated specific environmental responsibilities are notified of their appointment and confirm that their responsibilities are clearly understood.

### **2.1 Construction Manager**

The contractor shall appoint a Construction Manager, who will have overall responsibility for the coordinating and carrying out of all related environmental activities as appropriate, in accordance with regulatory and project environmental requirements. The principal duties and responsibilities of this position will include:

- Overall responsibility for the implementation of the CEMP, including reviewing the CEMP on an ongoing basis throughout construction, and update as required.
- Providing resources to ensure the implementation of CEMP
- Participates in the management review of the CEMP for suitability, adequateness and effectiveness.
- Sets the focus of the environmental policy, objective and targets for the contractor.
- To discharge responsibility as outlined in the CEMP and to support and supplement the construction management team and the Environmental office through the provision of adequate resources and facilities.
- Ensure that environmental matters are taken into consideration when assessing construction methods.
- Inspect and ensure all plant is clean and free from debris and contaminants prior to offloading onsite.
- Provide and implement Method Statements and ensure correct working procedures are followed.
- Ensure waste register is compiled throughout project.
- Provide Project Ecologist and Project Archaeologist sufficient time and notice to allow inspections take place.
- Liaise with the Project Ecologist to mark out the extent of Annex I habitat prior to the commencement of works.

### **2.2 Project Ecologist**

An Ecological Clerk of Works (ECOW) is required for the duration of the proposed works as per Mitigation Measures identified in the NIS which states;

- In order to minimise any impact to Natura 2000 sites, in particular (Carlingford Shore SAC - Site Code 002306) and “Special Protection Area” (Carlingford Lough SPC - Site Code 004078), it is proposed that daily supervision by an Ecological Clerk of Works (ECOW) is provided before, during and after the completion of the construction works;

The ECOW will report to the construction manager and the client's representative onsite and is responsible for advising on all ecology monitoring timelines. The Construction Manager shall provide the ECOW with sufficient time and notice to allow inspections to take place. The ECOW role will include the following:

- Review initial drawings and Natura Impact Statement for both sites and ascertain extent of Ecologist supervision and inspections required.
- Review the DRAFT CEMP and provide input/information as required to ensure all ecology requirements are outlined and addressed.
- Prior to commencement of works onsite the ECOW and the Construction Manager shall mark out the extent of Carlingford Shore SAC.
- Prior to commencement of works onsite the ECOW and the Construction Manager shall mark out the location where the haul road and works area as per Drawing No. CE-2023-03-01Rev.A.
- Liaise with the Construction Manager throughout site mobilisation and the construction phase.
- Ensure the mitigation measures proposed in the Natura Impact Statements are implemented onsite through liaison with the Construction Manager.
- Liaise with the relevant local and government authorities.
- The ECOW shall compile an Ecology Report upon completion of the proposed works. The report shall be provided to the Client and shall be made available for viewing and submitted to An Bord Pleanála for approval if so required.
- The ECOW, in conjunction with the Construction Manager, shall implement any ecological conditions that may be applied under the Planning Application.

### **2.3 Project Archaeologist**

Subject to planning determination, a project archaeologist may be required for the duration of the proposed works.

If so required, the project archaeologist will report to the construction manager and the client's representative onsite and is responsible for advising on all archaeology monitoring timelines. The Construction Manager shall provide the Project Archaeologist with sufficient time and notice to allow inspections to take place. The Project Archaeologist role will include the following:

- Review initial drawings and ascertain extent of archaeology inspections required.
- Review the DRAFT CEMP and provide input/information as required to ensure all Archaeology requirements are outlined and addressed.
- Liaise with the Construction Manager throughout site mobilisation and the construction phase.
- Ensure the appropriate course of action is taken in the event archaeology material is discovered.
- Liaise with the relevant local and government authorities.

### **2.4 Training and Site Inductions**

All personnel involved onsite will receive environmental awareness training. The environmental training and awareness procedure will ensure that staffs are familiar with the principles of the CEMP, the environmental aspects and impacts associated with their activities, the procedures in place to control these impacts and the consequences of departure from these procedures.



## **3.0 Existing Conditions, Potential Impacts and Controls**

### **3.1 Planning Conditions**

A planning determination for the proposed works is awaited from An Bord Pleanála. Any conditions arising from a successful planning determination will be inserted into this CEMP and developed accordingly thereafter.

### **3.2 NIS Mitigation Measures**

The mitigation measures listed in the NIS are as follows:

- A site-specific Construction and Environmental Management Plan (CEMP) will be prepared for the development in advance of the works by the appointed Contractor with a draft CEMP submitted to Louth County Council's representative for approval prior to commencement of the works;
- In order to minimise any impact to Natura 2000 sites, in particular (Carlingford Shore SAC - Site Code 002306) and "Special Protection Area" (Carlingford Lough SPC - Site Code 004078), it is proposed that daily supervision by an Ecological Clerk of Works (EcOW) is provided before, during and after the completion of the construction works;
- Coastal protection works should only take place outside of the winter migratory bird months of September to March;
- Ecological enhancements can be implemented in coastal protection structure design to boost biodiversity and offset any possible negative impacts on the local ecology. For example, the addition of rough materials (i.e., jagged/porous rocks), artificial texturing on surfaces, or repurposing existing weathered rocks adds structural complexity; and therefore, creates microhabitats which will increase species colonisation. Another example includes incorporating structural gaps to increase water retention at low tide and mimic more valuable rock pool habitats. Ecological enhancements can be incorporated once the structural integrity remains intact with regards to the required specification and the specific purpose of the works;
- During periods of heavy precipitation and run-off, works will be halted or working surfaces/pads will be provided to minimise soil disturbance.
- Any bulk fuel storage tank should be a sufficient distance from the foreshore and properly bunded with a bund capacity of at least 110% of that of the fuel tank. No refuelling or storage of fuel will occur within the works area.
- Limit disturbance when excavating - Retain as much of the vegetated areas as possible. By limiting land disturbance, erosion hazards are reduced;
- The pouring of concrete for the project shall be completed in the dry to avoid seepage to the groundwater environment.
- Temporary fills or stockpiles will be covered with polyethylene sheeting to avoid sediment release associated with heavy rainfall;

- All fuels, lubricants and hydraulic fluids for equipment used on the construction site should be stored a sufficient distance from the foreshore in a roofed and banded hazardous liquids container. These liquids should be carefully handled to avoid spillage, properly secured against unauthorised access or vandalism, and provided with spill containment in accordance with current best practice;
- A wheelie bin type hydrocarbon spill kit will be required and should be positioned close to the works area at the foreshore to deal with any leakage from plant working within the coastal protection works site; and
- Given the risk posed by the leakage of hydrocarbons from the excavator and dumper (e.g. hydraulic fluid from leaking cables, leaking diesel, lube oil, etc), a sufficiently long floating spill boom with a suspended curtain will need to be put in place on the foreshore to prevent the spread of any hydrocarbons in the event that a leakage of hydrocarbons occurs. The floating spill boom will be required to completely encircle the entire works area with the boom being tethered to posts installed upgradient of the high-water mark. The integrity of the boom will require checking twice a day.

### **3.3 Implementation**

The Construction Manager shall be responsible for the implementation of all control measures during the construction phase.

The Contractor shall comply with the requirements of this CEMP to document and seek approval for method statement, permits and other site-generated documentation as required.

This Draft CEMP will form part of tender and contract documentation for the works contract. Requirements and responsibilities will be reviewed with any appointed contractor at site meetings and at all progress meetings.

### **3.4 Monitoring and Inspections**

Coupled with any archaeological or ecological inspections, periodic inspections throughout construction by the Construction Manager shall be carried out to address environmental issues including dust, litter, noise, traffic, surface water, waste management, any contamination issues/risks and general housekeeping.

### **3.5 Preventative Actions**

Corrective Action Requests will be issued to the contractor to ensure prompt action is agreed and committed to, with a view to the effective resolution of any deviations from the CEMP requirements of any environmental issues. Sample Corrective Action requests may arise as a result of the following:

- Non conformance with Project Ecologist requests/direction.
- Non conformance with Project Archaeologist request/ direction.
- A regulatory audit or inspection
- A suggestion for improvement
- An incident or potential incident

All Corrective Action Requests shall be logged and numbered.

## **3.6 Mitigation Measures**

### **3.6.1 Waste Management Plan**

The contractor shall include a Waste Management Plan for approval prior to commencement of works.

### **3.6.2 Air Quality**

The appointed contractor will be responsible for the coordination and implementation of any dust control measures.

### **3.6.3 Control of Noise**

Environmental noises arising from activities on the construction site shall be controlled in accordance with the requirements of BS5228.

### **3.6.4 Flora & Fauna**

The ECOW will be onsite through the duration of works ensuring flora and fauna will be protected in accordance with the Natura Impact Statement.

### **3.6.5 Ground Water and Soil Protection**

Material storage and handling measures, as detailed in the NIS and any planning conditions, will be implemented to contain potential sources of soil/groundwater pollution. Contractors will ensure that spill kits will be accessible to construction personnel at all times and all spills will be reported to the Construction Manager.

## **4.0 Conclusion**

This DRAFT CEMP is indicative. However, it is expected that this CEMP will be further developed with input from the ECOW and archaeologist prior to its adoption. Any appointed contractor will be required to comply with the approved CEMP, ensuring that all requirements identified as part of the planning consents will be addressed in the adopted CEMP.

# Appendix A

## Drawing Numbers CE-2023-02-01 and CE-2023-02-02

(Drawing details may be subject to change based on any future planning determination)

