Proposed Marine Development at Doolin

Non-Technical Summary for Environmental Impact Statement

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1 INTRODUCTION

Clare County Council has applied to An Bord Pleanala for planning permission to develop a marine development in Doolin, County Clare. An Environmental Impact Statement (EIS) accompanies the planning application. The EIS documents the findings of many environmental studies that were undertaken in and around the vicinity of the proposed development. The results of these studies are described in the EIS and summarised in this Non-Technical Summary.

2 WHY THIS NEW PIER IS NEEDED

Outside of Ros a Mhil, Doolin pier is the busiest pier for passenger traffic in Ireland. This is despite the fact that the pier is tidal, exposed, too small for the number and variety of users, and frequently congested. The pier is acknowledged as currently not fit for purpose.

The pier is tidal for up to four hours a day. At low tide, trans-shipment is required to bring passengers to the ferries. This means that passengers have to be transported by a smaller vessel to the ferry waiting in deeper water. The existing pier offers no shelter as vessels overhang the pier.

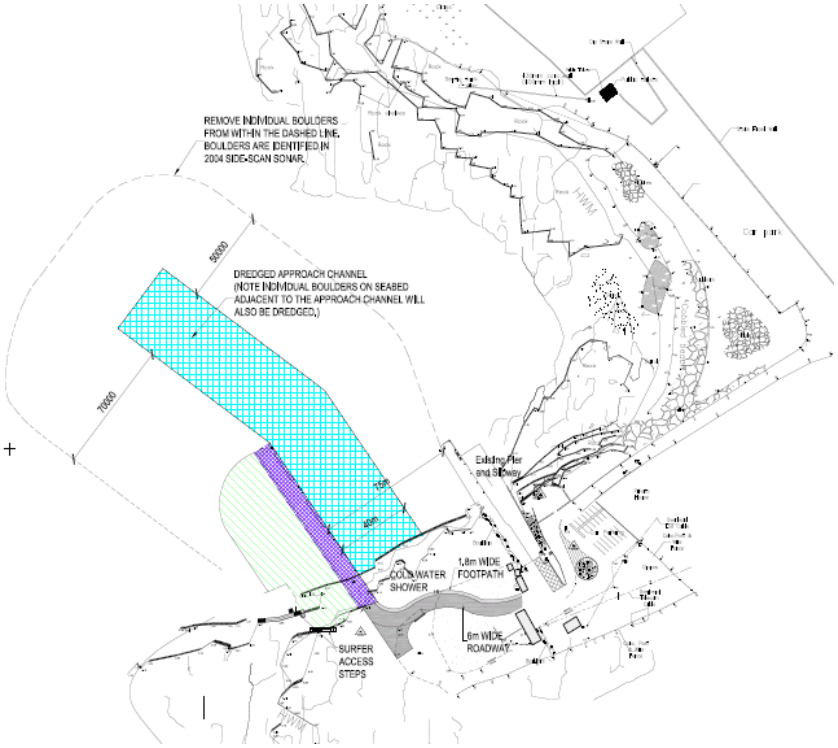
There are three major ferry operators operating out of Doolin and the boats are competing for limited space on the pier as the pier cannot cater for all of the ferries simultaneously.

There is a large variety of users making demands on the pier. The pier is too small to safely accommodate all these different users.

A larger, more sheltered pier which would allow separation of users is needed in Doolin. This separation of users will increase safety, reduce congestion and allow the coast guard, commercial and recreational interests to operate safely and independently of each other. A new pier would also prevent the necessity for trans-shipment.

3 DESCRIPTION OF THE PROPOSED MARINE DEVELOPMENT

The development will comprise of the construction of a 10m wide and some 103m long pier structure. Some of the pier structure will be constructed in the inter-tidal area. It is proposed to provide a minimum berthage length of 60m for Ferry type craft. The pier structure will be topped with a 2.25m high seawall.



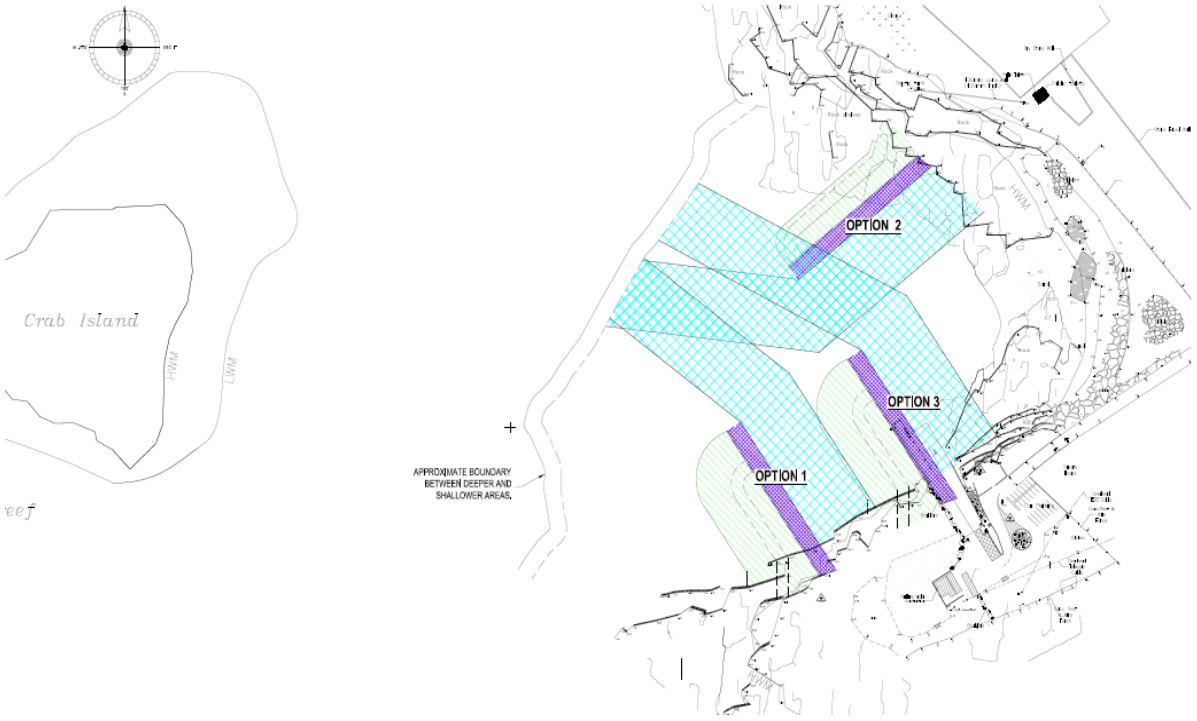
There will be dredging of a 40m wide area of seabed from deeper water to the pier, along the berthing face of the pier and into the inter-tidal area. The South facing side of the pier will be protected by a revetment.

The revetment will consist of concrete unit primary armour overlying two layers of rock armour placed on a core of material obtained from the dredging arisings.

There will also be an approach road of some 90m in length. The development will include the provision of power, lighting and water to the pier, and the installation of navigation aids, barriers, handrails, bollards, mooring rings, ladders and access steps, surfer access to the water and a cold water shower. There will also be a temporary extension and reconfiguration of existing parking facilities.

4 CONSIDERATION OF ALTERNATIVES

A review of alternative pier options was undertaken as part of the Environmental Impact Assessment. Following a review of earlier work, findings, investigations and concerns three options were selected for final review. They represented what was considered to be the full range of locations for the provision of the required berthage and tidal access requirements.



Option 1 was selected as preferred and for full assessment of environmental impacts on the basis that:

- It provides the required improvements to tidal access;
- It provides the required additional berthage length;
- It allows for separation of pier users between the new pier and the existing pier;
- It improves navigation safety in terms improved water depths and greater distance to the north shore;
- It allows the continuing use of the existing pier during the construction period;
- It provides protection to the existing pier;
- It is furthest from the Special Area of Conservation;

- It allows for the more cost effective further expansion in terms of an extension to the pier and a deeper wider approach channel if ever required at a later date

Option 2 is not preferred principally as it provides little protection to the berthage area from the direction of approach of the dominant waves (SW). It also provides little protection to the existing pier, and it encroaches on the Special Area of Conservation.

Option 3 based on the existing pier is not preferred because:

- It is not as cost effective as Option 1 because of the greater volume of dredging required;
- It is limited in terms of providing for separation of use;
- The approach channel is close to the north shore and therefore is therefore inferior to Option 1 in terms of navigation safety;
- The existing pier would most likely have to be shut down for at least part (one summer, perhaps two) of the construction period.

5 ENVIRONMENTAL IMPACT ASSESSMENT

The main objective of the Doolin pier EIA process is to ensure that all direct, indirect and cumulative environmental effects of the project are anticipated. Where effects are identified as unacceptable, these will be avoided or reduced during the design process through the implementation of practical mitigation measures. The main chronological stages of the EIA Process include:

- Baseline Studies and Data Collection;
- Impact Assessment Methodology; and
- Mitigation, Compensation and Enhancement.

The EIA has been carried out in accordance with the relevant legislative requirements and guidelines including the Environmental Protection Agency (EPA) - 'Guidelines on information to be contained in an environmental impact statement, 2002'. Specialist guidance as required under each of the environmental topics have also been used where appropriate.

6 ENVIRONMENTAL TOPICS

6.1 WATER QUALITY

During construction of the pier the potential will exist to negatively impact on water quality in Doolin harbour. The main potential to impact on water quality will come from the dredging of the new approach channel. Sediment can smother organisms and transfer contaminants. However an analysis of the tidal currents and the sediment size shows that there is very little fine material and no silt or mud. Most of the material to be dredged is rock with very small amounts of cobbles and coarse grained material on the sea bed. Tidal currents in the dredge area are slow, so any of the finer material will not travel far. Dredging will only take place in calm conditions.

The risk of plant and machinery leaking fuel and oil is low however a management plan will be prepared to deal with such an eventuality. Similarly any waste or other potentially polluting material will be carefully managed during the construction phase to prevent pollution to the water in Doolin harbour. The construction methodology and water quality are discussed in detail in Chapter 2 and 5 of the main EIS

6.2 TERRESTRIAL AND MARINE ECOLOGY

There will be a temporary loss of marine flora and fauna. None of the flora or fauna recorded is rare or protected. A protected ecologically sensitive area is partly located in Doolin harbour and Crab Island, namely the Black Head Poulsallagh Special Area of Conservation and proposed Natural Heritage Area. None of the flora and fauna for which the Black Head Poulsallagh Complex is protected, was recorded under the footprint of the proposed development.

The rock pools photographed during surveying did not contain any rare or protected species. The rock fill, revetment and pier base would over time be colonised by similar rocky shore species and the shelter provided by the pier will allow the colonisation of more species, increasing the biodiversity of the area directly in the lee of the pier.

With regard to marine mammals, there would be no impact on seals at Inishmore or within the Inner Galway Bay area. There would be a potential impact on seals foraging in the immediate area of the development site during rock piling or blasting. Impacts on seals and dolphins and porpoises from the proposed development are likely to be acoustic in nature. An exclusion zone and Marine Mammal Observers will ensure there will be no harm to any marine mammals.

6.3 NOISE AND VIBRATION

During construction there will be plant and machinery used to build the pier and for delivery and export of material. There will be noise associated with these operations. However the construction works will be phased and limited to daylight hours where possible. The works will also be temporary. Noise and vibration limits and working practices to minimise nuisance will be detailed in a Construction Environmental Management Plan to be developed prior to construction.

Underwater noise from blasting has the potential to harm underwater mammals. An exclusion zone will be marked out around the working area. Marine Mammal Observers will be on site to watch for any marine mammal entering the exclusion zone (including Dusty the Dolphin, who is known to visit the area). Blasting will be stopped until the animals leave of their own accord. The exclusion zone has been calculated to ensure all mammals outside of this zone are protected. Chapter 6 explains in detail the underwater noise assessment carried out for this proposal.

6.4 DREDGING AND BLASTING

Blasting will be required to remove rock from the sea bed to accommodate the dredge channel. This will be undertaken under strict control and supervision. The main impacts from blasting include the impacts of the noise on underwater mammals and sediment transportation from the removal of this material. The tidal currents in the vicinity of the proposed pier are low and the particle size of the material to be dredged is coarse grained size to cobble and boulders and broken rock. It will therefore not travel far and will not impact on the nearby Black Head Poulsallagh Special Area of Conservation and proposed Natural Heritage Area.

Monitoring of the sediment in the water will take place during dredging and where levels are deemed height dredging will stop and only take place in times of calm water when the potential for sediment to travel is minimised. The sediment and coastal process are described in detail in Chapter 4 of the main Environmental Impact Statement.

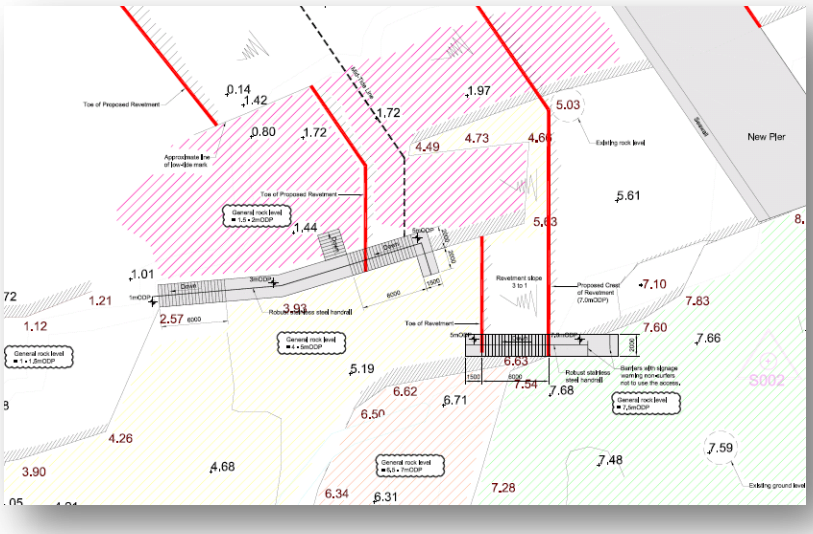
An exclusion zone will be marked out using buoys and if any underwater mammals enter this zone blasting will cease until the animal leaves of its own accord.

6.5 WAVES AT BALLAGHLINE POINT AND CRAB ISLAND

Surfing is recognised as an important natural asset. The waves at Crab Island and Ballaghline Point are recognised as very good surfing waves. These waves however are not for everybody and are recommended only for the fit and experienced surfer. This is because of the rocky shore, underwater reef and long paddle required to reach them.

There is the potential for reflection from the pier revetment to impact on these waves. The slope of the pier revetment has been designed to minimise any impact. A computer simulation model was built and used to predict the impact that reflection may have on these waves. The results found that there would be no significant impact on the waves at Crab Island and potentially a minor impact on the waves at Ballaghline point. These results are discussed in more detail in Chapter 4, Hydrodynamics and Sediment Regime.

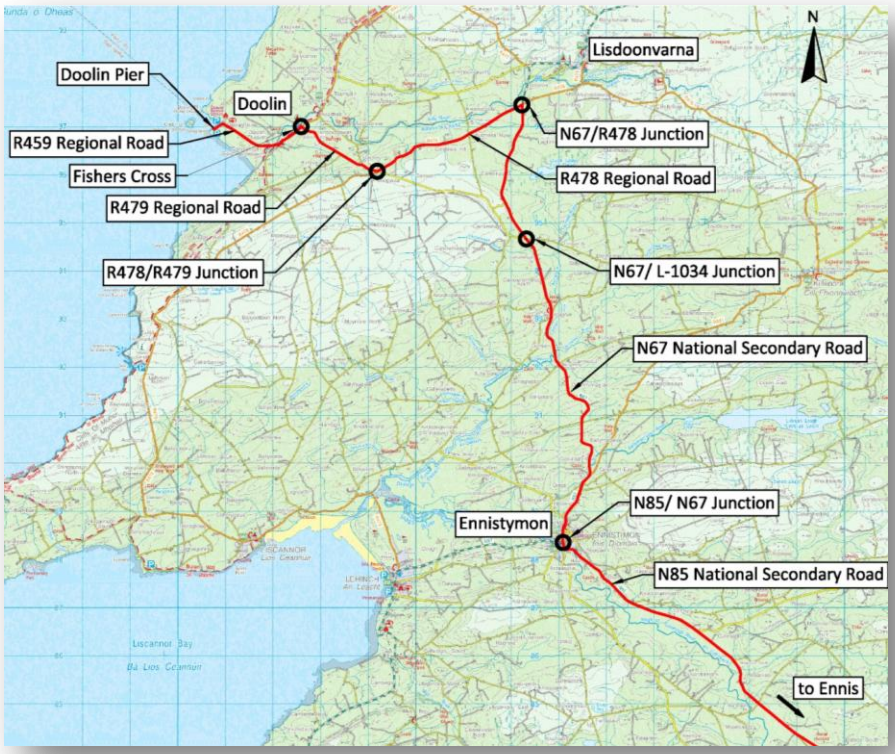
There are several access points to the waves along the rocky shore near the existing pier. One of the more popular access points will be lost as a result of the proposed development. However, as part of the new development a series of steps and platforms will be constructed to lead surfers safely to an alternative access point. A cold water shower for rinsing surfing gear and equipment will also be constructed beside the revetment.



6.6 TRAFFIC

A flow capacity assessment was undertaken on the existing proposed haulage route road network to establish the estimated capacity of the proposed haulage route during the peak August tourist season. The analysis confirmed that the existing haulage route operates within capacity.

Peak construction would occur in 2013. The increase in HGV volumes, on the proposed haulage route, during peak construction coinciding with the peak summer season, would be considered as significant impacts, in particular as these road links form part of important tourist and cycle routes.



The likely increase in traffic through Doolin Village, during the peak construction and operational phases, in particular along the bridge on Fisher Street, could prove significant as this area currently experiences congestion during peak summer season and would require mitigation.

A traffic management plan will be implemented to minimise disruption to local residents and visitors. Further details are available in Chapter 13 of the main Environmental Impact Statement, Traffic Impact Assessment.

6.7 ARCHAEOLOGY AND CULTURAL HERITAGE

Ground works for the development will impact a recorded monument classified as a habitation site. The proposed development has previously been the subject of a Maritime Cultural Heritage Assessment incorporating an intertidal survey undertaken in June 2010. The results of this survey found that the proposed harbour development would not have any discernible impact on the underwater archaeology of the subject area.

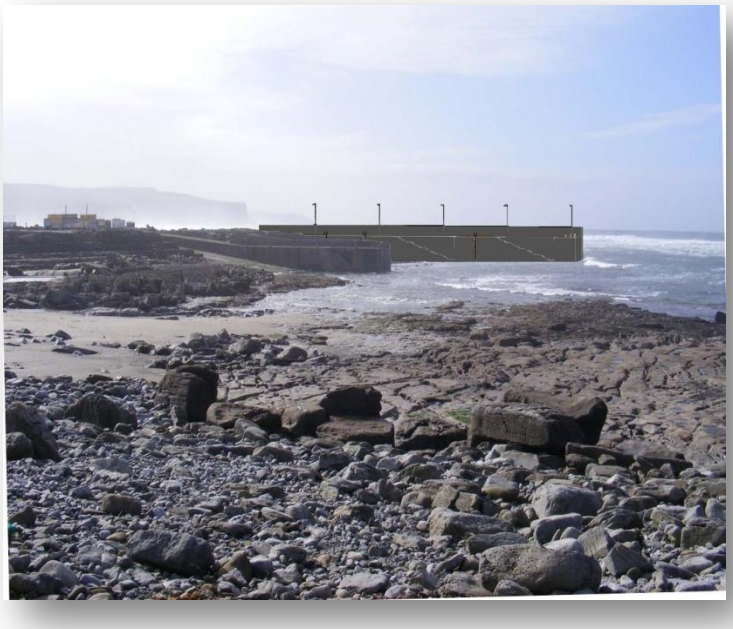
In advance of this development an excavation of this site was undertaken. The investigations exposed a series of archaeological deposits containing bone, shell, and charcoal. Two possible human teeth and a skull fragment were also recovered. According to preliminary excavation report the site probably represents the remains of a pre-historic midden. Midden sites are typically found scattered along the western seaboard and are defined as archaeological deposits of food refuse generally comprised of the remains of edible molluscs and occasionally containing animal bone.

Middens can vary in size from a thin local layer to scatters of bone extending over a wide area. Due to the nature of these sites it is possible that there may be isolated deposits of archaeological potential within the footprint of the proposed development. All site ground works will be monitored by an archaeologist under licence to the National Monuments Service. In the event that archaeological deposits are exposed the archaeologist will be allowed sufficient time to sample, excavate and record the features appropriately. More details on the Cultural and Archaeological Assessment carried out for this proposal can be read in Chapter 11 of the main EIS.

6.8 LANDSCAPE AND VISUAL IMPACT

The landscape of the Ballaghaline / Doolin area is both a natural resource and a cultural resource. Its beauty and diversity is important both to the quality of life of the local community and the economic prosperity of the region. It has a pleasing combination of natural attributes and historic man-made elements which are valued by the local population and wider public. It is an area with high scenic quality views towards the Atlantic and along the coast. Recreational opportunities are plentiful due in the main to the maritime nature of the area. The existing pier at Ballaghaline is a key feature of the local landscape and lends distinctiveness to the local seascape and coastline.

The new pier will represent a new element within the local landscape. However, it is not considered that it would constitute an unacceptable or detrimental effect on either the local or wider landscape character or values. The proposed new pier development would not impart any notable change or loss of character to this area. The existing semi-rural coastal character of the area in essence will prevail.



The existing pier contributes significantly to local distinctiveness and thus the development of the new pier would assist in preserving this. The impact to both the local and wider landscape character area is seen as neutral as the proposed scheme would maintain existing landscape quality and character and is in keeping with local and regional land-use zoning objectives.

6.9 LOCAL COMMUNITY AND VISITOR EFFECTS

During construction the local community and visitors to the area may experience some disruption in particular during the peak construction period. This disruption may take the form of noise nuisance, increased truck volumes and traffic congestion. There will be a degree of access restriction to the working area and water during times of blasting for health and safety reasons. However a Construction Environmental Management plan to minimise all these issues will be implemented.

Once constructed, the new pier will accommodate all the commercial boat traffic including ferries and charters. The existing pier will be for the use of all others. This separation of users will reduce the risks associated with congestion and the current mix of users. The new pier will also provide shelter for the existing pier. The necessity for trans-shipment will also be eliminated which will improve the quality of the service for those taking a ferry to the Aran Island or to see the Cliffs of Moher.

Efforts have been made in the design and location of the pier to minimise the impacts on the surfing waves at Crab Island and Ballaghline Point. It is predicted that there will be no significant impact on the waves at Crab Island and a minor impact on the waves at Ballaghline Point. An alternative access will be constructed for surfers to safely access the water and an outdoor cold water shower will be provided to rinse gear and equipment.

7 MANAGEMENT OF ENVIRONMENTAL IMPACTS

Environmental impacts during construction will be managed through the design and implementation of a Construction Environmental Management Plan. This will address working hours, traffic management, control of pollution, waste management, noise, dust and vibration. Clare County Council will provide a public liaison officer to keep the public informed through the construction period.

There will be put in place procedures regarding the handling of the explosives and their placing, packing and detonation, and, there will be procedures with regard to safety to the public, other harbour users and underwater mammals. Method statements and risk assessments will be prepared prior to undertaking blasting. In addition, adherence to the method statements and procedures will be supervised by the Gardai.

8 CONTACT INFORMATION

Further detail relating to the above can be found in the Main Environmental Impact Statement and Appendices to same. A copy of the Environmental Impact Statement and the Natura Impact Statement, and the documents, particulars plans, and other information relating to the application, may be inspected at the following locations:

- Clare County Council, Aras an Contae, New Road, Ennis between the hours of 9.00 am and 5 p.m on working days from 9th July 2012 to 20th August 2012 (inclusive of both dates).
- Ennistymon Area Office, Ennistymon, Co. Clare between the hours of 9.30 am and 4.30 p.m on working days from 9th July 2012 to 20th August 2012(inclusive of both dates).
- the offices of An Bord Pleanála, 64 Marlborough Street, Dublin 1 between the hours of 9.15 am and 5.30 p.m on working days from 9th July 2012 to 20th August 2012(inclusive of both dates).

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