

Environment, Marine & Fisheries Group
Marine & Fisheries Division



Department of
**Agriculture, Environment
and Rural Affairs**
www.daera-ni.gov.uk

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REF: ML 6_17
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Dear Ms. McParland,

Screening opinion under The Marine Works (Environmental Impact Assessment) Regulations (Amendment) 2017 - Royal Portrush Golf Club - Proposal for extension of rock armouring on Curran Strand

I am writing in relation to a screening exercise, which was carried out by the Department on the proposal by Royal Portrush Golf Club to extend the rock armouring at Curran Strand, Portrush. A 28 day consultation was carried out under the Marine Works (Environmental Impact Assessment) Regulations (Amendment) 2017, with those considered to have an interest in the project, in order to provide you with a formal Screening Opinion.

1. Background

The Marine Works (Environmental Impact Assessment) (Amendment) Regulations 2017 transpose the provisions of the Environmental Impact Assessment (EIA) Directive (2014/52/EU) into UK Law. The Marine Works (EIA) (Amendment) Regulations 2017 applies to activities, which require a marine licence under Part 4 of The Marine and Coastal Access Act 2009.

Coastal and maritime works to combat erosion capable of altering the coast are listed on Annex II of the Directive and therefore, must be screened under the Marine Works (EIA) (Amendment) Regulations 2017 for any potential significant effects on the environment. The need for an EIA is determined by the nature, complexity, location and size of the project

and its potential to have a likely significant effect on the environment (including cumulatively with other existing projects).

2. EIA Screening Consultation procedure

The Marine Works (EIA) (Amendment) Regulations 2017 sets out a procedure, which the Department must follow, in order to determine whether an EIA is required to be submitted with a marine licence application. As part of this procedure, the Department is required to consult with those considered appropriate, before providing a screening opinion.

In addition to the Departmental consideration, the following consultees were contacted with the information provided by Clyde Shanks, on behalf of their client, Royal Portrush Golf Club:

- The Crown Estate
- The Maritime and Coastguard Agency
- The Commissioner of Irish Lights
- Agri-Food and Biosciences Institute
- Council for Nature Conservation and the Countryside
- Ulster Wildlife
- Royal Society for the Protection of Birds
- UK Hydrographic Office
- The Loughs Agency
- Department for Infrastructure Sea and Ports
- Causeway Coast and Glens Heritage Trust
- Causeway Coast Maritime Heritage Group
- National Trust
- University of Ulster
- Queen's University Belfast

3. EIA Screening Opinion

The Department must have full regard to the responses provided during the consultation and consider the sensitivity of the project location and potential impacts, as well as the characteristics of projects, in deciding whether an EIA is required for your proposal.

I enclose with this letter a screening opinion and a written statement of the reasons for the opinion in respect to Royal Portrush Golf Club's proposal to extend the rock armouring at Curran Strand, Portrush. As required under the Marine Works (EIA) (Amendment) Regulations 2017, this response will also be copied to the consultees, as listed above, and publicised as the Department sees fit.

4. Habitats Regulations Assessment

A Habitats Regulations Assessment must also be undertaken in order to assess whether the proposal is likely to have a significant effect on designated European species and habitats.

The proposal is located adjacent to the Skerries and Causeway SCI which is designated under the EC Habitats Directive (92/43/EEC on the conservation of natural habitats and of wild fauna and flora). This site is designated for sandbanks which are slightly covered by sea water all the time, reefs, submerged or partially submerged sea caves and Harbour Porpoise. The nearest Special Protection Area is Lough Foyle, which is designated for its over wintering birds.

5. Other Considerations

The consultation has highlighted some other issues to be considered and which will be confirmed in the scoping stage. One of these issues is the fact that the proposal is in close proximity to White Rocks ASSI, which is designated for Cretaceous stratigraphy, Tertiary igneous and coastal processes. ASSIs are declared under the Environment Order (Northern Ireland) 2002 and any potential impacts from the proposal on protected sites should also be considered.

The proposal is also within proximity to a designated bathing water and amenity site and this should also be considered as part of the proposal.

If you have any further questions please do not hesitate to contact me.

Yours sincerely



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**Environmental Impact Assessment Screening Opinion under the Marine Works
(Environmental Impact Assessment) (Amendment) Regulations 2017**

Royal Portrush Golf Club - Proposal to extend rock armouring at Curran Strand, Portrush

**1 August 2017
Reference: ML 6_17**

The Marine Works (Environmental Impact Assessment) (Amendment) Regulations 2017

Screening opinion for the proposal by Royal Portrush Golf Club Coastal Protection Scheme

1. Proposal:

Royal Portrush Golf Club wishes to undertake additional coastal protection works in front of the Curran Strand dune system, which lies to the east of their golf course. Royal Portrush Golf Club is proposing to extend the existing 90 m of rock revetment to afford the golf course more protection against coastal erosion. The Golf Club are proposing to install an addition 60 m of rock revetment, which will extend for 10 m at its widest point onto the beach and will be constructed to a height of 4.5 m. The base of the rock revetment will be toed into the beach at a depth of approximately 1 m below the lowest beach level. The revetment will consist of two different types of stone including basalt and limestone/white cast concrete boulders.

In addition to this, the Golf Club plans to install sand trap fencing, extending west from the newly constructed rock revetment for 200 m. The fencing will be erected every 15 m, measuring 12 m in length and will be installed at a 40° angle into the toe of the sand dune.

2. Potential Impacts:

Article 4 (3) of the EIA Directive requires the Department to take into account selection criteria set out in Annex III of the Directive, when making screening decisions on a case by case basis. The following checklist is therefore based on the Schedule III selection criteria and has been used to assist in the decision whether an EIA is required for the proposal by Royal Portrush Golf Club:

1.	Characteristics of Development	
The characteristics of projects must be considered, with particular regard to:		
a)	Size and design of the whole project	Approximately 60 m of rock revetment will be added on to the end of existing 90 m of rock revetment in front of Portrush Golf Club. The rock revetment will extend for 10 m into the beach at its widest point and will be extended to a height of 4.5 m and the base will extend below beach level at a depth of approximately 1 m. A total of 4675 tonnes of rock will be used. Two types of rock – basalt and limestone/white concrete cast boulders – will be used. An additional 200 m of sand

		trapping will also be erected in front of the rock revetment.
b)	The cumulation with other existing and/or approved projects	<p>There are no other proposed marine licensing projects within the vicinity (granted or existing) A search on the planning portal shows full planning permission for domestic works but there are also no existing works under consideration or granted full planning permission for this stretch of beach. An existing 90 m of rock revetment is in currently in place in front of the golf club.</p> <p>It is considered that the existing rock revetment may create a cumulative impact with the proposal by decreasing the availability of sediment to move on and off shore.</p>
c)	Use of natural resources, in particular, land, soil, water and biodiversity.	<p>There is no planned use of natural resources in the actual project. However, sand displaced from the dunes during the works will be relocated further up the beach. There may also be disturbance to vegetation within the vicinity of the works via access points onto the beach. However, the proposal is that any disturbed vegetation will be re-planted close to the original location.</p> <p>It is considered there will be a direct loss of sediment from the sand dunes behind the proposed work location.</p>
d)	Production of waste	<p>There will be limited production of waste outside of packaging, which will be recycled.</p> <p>It is considered there is little or no production of waste.</p>
e)	Pollution and nuisances	<p>Any pollution risk would stem from machinery during construction works. The proposal has included mitigation, which will be managed through use of bio-diesel and storing fuel in a secure bunded area away from the beach, in a construction compound. Refueling will also take place within a construction compound as much as possible. A pollution prevention plan and emergency response plan is also in place. An Ecological Clerk of Works will be in place to monitor any services and machinery prior to work starting.</p> <p>It is considered the risk of pollution in the environment is low given that no fuel will be present on the beach.</p>
f)	Risks of major accidents and/or disasters, which are relevant to the project concerned, including those caused by climate change, in accordance with scientific knowledge	None identified

g)	The risks to human health e.g. due to water contamination or pollution	<p>There is a risk to human health through potential contamination of Whiterocks bathing water, which is adjacent to the site. Pollution prevention measures have been included with the proposal in the event any spillage does occur and emergency response plan is also in place. Any contamination will be accidental during construction works, rather than a result of the final project. The works are proposed to take place outside of the bathing season.</p> <p>It is considered there is a risk to human health –albeit low - from the proposal, through contamination of the bathing waters.</p>
2.	Location of Development	
<p>The environmental sensitivity of geographical areas likely to be affected by projects must be considered, with particular regard to:</p>		
a)	The existing and approved land use	<p>Curran Strand has high amenity value and is used frequently for recreational purposes throughout the year, including for swimming and surfing. This beach is also adjacent to the identified bathing water Whiterocks, used during the bathing season months, from May to September. The area on the landward side of Curran Strand is the Royal Portrush Golf Course. The area on the landward side of Whiterocks is domestic properties.</p>
b)	The relative abundance, availability, quality and regenerative capacity of natural resources (including soil, land, water and biodiversity) in the area and its underground;	<p>.</p> <ol style="list-style-type: none"> 1. Size: The extension of the existing rock revetment may impact the regeneration capacity of this area of beach. As it is a beach – dune – beach interchange, any extension of the revetment will block this natural interchange. In addition, the existing rock armouring measures 90 m in length and the proposed extension is 60 m in length, which is an extension of two thirds and is no means insignificant in terms of size and scale, as the revetment will extend into the beach by 10 m and down below beach level by at least a metre. 2. Nature: As noted above, the proposal is the construction of a hard rock revetment within a soft sediment system. The nature of this proposal means it will act as a physical barrier to natural sand movement within this coastal sediment cell. This means the proposed structure will affect the regenerative capacity of this area of sand dunes-beach interface by preventing a natural resourcing of the sand within the system. 3. Location: This area of coastline is well known as a sandy beach. The beach and sand dunes are

		<p>replenished by the on-off shore movement of sand and beach-dune interchange, but winter storms can also deplete the sand from the sand dunes. This area therefore shows accretion and depletion, however, the existing coastal protection works can lead to beach scouring. Therefore, adding an extension to the existing coastal protection works will lead to beach-dune scouring further along the beach. Furthermore, it is not known what kind of impact the project would have on the existing coastal sediment cell.</p>
c)	<p>The absorption capacity of the natural environment, particularly:</p> <ul style="list-style-type: none"> I. Wetlands, riparian areas, river mouths; II. Coastal Zones and the marine environment; III. Mountain and forest areas; IV. Nature Reserves and parks; V. Areas classified or protected under National legislation; Natura 2000 areas designated by Member States pursuant to Directive 92/43/EEC and Directive 2009/147/EC VI. Areas in which there has already been a failure to meet the environmental quality 	<p>The proposal is adjacent to the Skerries and Causeway SCI, which is designated for - among other things – the offshore sandbanks. It is known the offshore sandbanks provide a sediment source to the beach at Curran Strand. The Whiterocks ASSI is also adjacent to the proposal and one of the site selection features for this ASSI is coastal processes.</p> <p>As noted in a response from an expert in the field of coastal processes, dune erosion is occurring, most likely due to the existing rock revetment sea defence ‘up beach’ reducing longshore sediment supply. Adding to this defence may impact these natural features, by directly acting as a barrier to the natural on-off shore movement of sediment. In addition, it is highly likely that increased scouring will take place from the proposal, which would lead to a lowering of the beach and an increase of erosion levels across the beach-dune interface.</p> <p>There is also the potential for disturbance to cultural heritage artifacts, as the proposal is close to several protected cultural heritage sites, and for further archaeological discoveries in this area.</p> <p>Both Whiterocks and Portrush Curran Strand are identified Bathing Waters as classified under the EC Bathing Waters Directive. The longer terms impacts on the beach may then have an impact on the populations in this area, which use the beach on a regular basis for recreational activities, and also those transiting through the area.</p> <p>It is considered that there is the potential for a likely significant effect from the proposal on the coastal processes in this stretch of coastline and an effect on natural and cultural heritage.</p>

	<p>standards, laid down in Union legislation and relevant to the project, or in which it is considered that there is such a failure;</p> <p>VII. Densely populated areas;</p> <p>VIII. Landscapes and sites of historical, cultural or archaeological significance.</p>	
3.	Characteristics of the potential impact	
<p>The likely significant effects of projects on the environment must be considered in relation to criteria set out in points 1 and 2 of Annex III of the EIA Directive, with regard to the impact of the project on the factors specified in Article 3(1) of the Directive, taking into account:</p>		
a)	<p>The magnitude and spatial extent of the impact (for example geographical area and size of the population likely to be affected);</p>	<p>The magnitude and scale of the impact on the beach and sand dunes is unknown at this point until further assessment is made of temporal and spatial dimensions of the wave-cell sediment transfer system and also the potential impact of scouring on the beach. It is known, however, that there is depletion of sand dunes due to reduced longshore sediment supply, which may be attributed to current coastal protection works.</p>

b)	The nature of the impact	The nature of the impact would be permanent and long terms as long as the structure remains in place
c)	The trans-boundary nature of the impact	None predicted
d)	The intensity and complexity of the impact;	This is unknown until further work is carried out examining the coastal cell and the potential impact the work would have on adjoining coastal cells and reducing sand availability across the length of the beach
e)	The probability of the impact;	There is a high probability of the impact.
f)	The expected onset, duration, frequency and reversibility of the impact	The onset would be expected to be immediate, the duration and frequency unknown until there is further assessment made. The impact will only be reversible if the rock revetment is either not constructed or an alternative is explored to the revetment.
g)	The cumulation of the impact with the impact of other existing and/or approved projects;	None predicted at this time.
h)	The possibility of effectively reducing the impact	The only way to reduce the impact will be through either not constructing the rock revetment or looking at alternative designs.

3. Conclusion

This development is screened having regard to developments covered under the EIA Directive, which may or are likely to have, a significant effect on the environment. An assessment of the likely significant impact of the development proposals on the environment using the criteria set out under Schedule 3 of the Directive has been completed, as set out above.

Having taken account of this assessment, it is considered that the proposed development is likely to have a significant effect on the environment by virtue of the size, scale, nature or location of the proposal. It is considered by the Department that this proposal is likely to have a significant effect on the environment through creating a barrier between the dune-beach interfaces. This barrier is likely to lead to further beach scouring along the shore, beach lowering and interference in the long term sediment budget of the dune system. It may have a wider effect through impacting the Skerries and Causeway SCI.

Therefore, the conclusion has been reached that a **positive Screening Opinion** is appropriate in this case and the submission of an environmental impact statement must be submitted to support the marine licence application.

Appendix One – Consultation Responses

1. DAERA Considerations

- **Marine Conservation:**

Given the nature of the works, location and geomorphology of the site, MCR are of the opinion that an Environmental Statement is required for this project.

The proposal is to take place adjacent to a European site and within close proximity to a national designated site:

- Skerries and Causeway SCI which is designated under the EC Habitats Directive (92/43/EEC on the conservation of natural habitats and of wild fauna and flora). This site is designated for sandbanks which are slightly covered by sea water all the time, reefs, submerged or partially submerged sea caves and Harbour Porpoise, and
- White Rocks ASSI, which is designated for Cretaceous stratigraphy, Tertiary igneous and coastal processes. ASSIs are declared under the Environment Order (Northern Ireland) 2002.

It is considered by MCR that an environmental statement is necessary to identify if the proposed works would have the potential to cause direct loss or deterioration of the qualifying habitat of the SCI (sandbanks which are slightly covered by sea water all the time).

Likewise the ASSI is designated for coastal processes and information is required to understand whether additional armouring may further alter local patterns of sediment movement. It is widely accepted that “hard” structures within a “soft” mobile system will impair the natural behaviour of the beach, impacting upon coastal processes. The proposed project will add a further 4675 tonnes of rock to this dune system.

The Coastal Erosion Study completed by RPS further supports this theory. The report *“demonstrates the highly dynamic nature of the Curran Strand shoreline”* and how *“it is an effective coastal buffer, capable of responding and adapting to extreme seasonal variations”*. The report also highlights that at present there is a two-way movement of sediment on and off shore during extreme events at Curran Strand. Blocking this off with additional rock armouring will impede this movement. RPS have indicated in section 7.3.1. and 7.3.2 that further rock armouring will result in further erosion. In particular a 80m extension would *“sever the natural beach dune interaction”* and increase the rate of erosion over the across the larger dune system.

An Environmental Statement would need to determine whether this change to sediment movement would impact the site selection features of the designated sites.

- **Archaeology & Built Heritage**

Considerations

The application site is in close proximity to several sites which produced evidence of activity – including occupation and burial – from the Neolithic period through to the medieval period. These include ANT002:012, ANT002:006, and ANT002:007, all of which are monuments of local importance and protected under Policy BH2 of PPS6. These monuments indicate the potential for further archaeological features to be encountered in this area.

Historic Environment Division: Historic Monuments (HED: HM) has considered the impacts of the proposal. Should it be determined that an Environmental Impact Assessment (EIA) is required then HED: HM would require an archaeological section within it. If an EIA is not required, then HED: HM is content that the proposal satisfies PPS 6 policy requirements, subject to conditions for the agreement and implementation of a developer-funded programme of archaeological works. This is to identify and record any archaeological remains in advance of new construction, or to provide for their preservation *in situ*, as per Policy BH 4 of PPS 6.

- **Water Quality and Amenity**

The proposed rock armouring is directly adjacent to Whiterocks Bathing Water, and is close to Portrush Curran, both of which are identified Bathing Waters under Directive 2006/7/EC (“The Bathing Water Directive”) and a Protected Areas under Directive 2000/60/EC (“The Water Framework Directive”). This recognises the high amenity and tourism value of the area. There are only 23 identified bathing areas in Northern Ireland, where bathing is traditionally practised by large numbers of bathers and three of these are in Portrush. All of these sites are also award winning beaches (Blue Flag at Portrush Mill and Whiterocks, Seaside Award at Portrush Curran). These Awards recognising the highest standards of water quality and beach management. In addition, Portrush is an important surf destination.

Given the current bathing, recreation and amenity value of this area, it is recommended that an Environmental Statement is appropriate in this circumstance, to ensure that these aspects are not compromised by the proposal. The Environmental Statement must take into account any potential impacts on identified Bathing Waters.

- **NIEA – Conservation Science - Ornithology**

CS has no evidence of significant usage of the development site and adjacent land area by sensitive terrestrial bird species of conservation concern which would be adversely affected by the proposed works. It is intended that the works will take place during Autumn and Winter 2017, outside the bird breeding season. As a result there will be no risk of disturbance to breeding species.

Surveys of wintering birds have been carried out by the developer. These covered the affected area of dunes, the adjacent beach and inshore waters. Three transects were undertaken twice daily (am and pm) on four dates in December 2015 and February 2016. These surveys detected a total of 13 species. Of these, two (Black-headed Gull and Herring Gull) were Red-listed species of conservation concern in Ireland, and a further four (Common Gull, Lesser Black-backed Gull, Oystercatcher and Stonechat) are Amber-listed. Of the remainder, Dunnock is a Northern Ireland Priority Species. These species have all been classified on the basis of recent rates of decline, rather than intrinsic scarcity or restricted range, and all remain widespread and relatively abundant. In no case do the numbers recorded within the survey area approach national or regional significance.

It would have been preferable to have had survey coverage across the entire extent of the proposed construction period. CS has no information on the scale of usage of the adjacent beach and intertidal area by waders and other waterbirds during the autumn passage period but the nature of the shore suggests that feeding conditions for these species would be relatively poor and numbers are therefore likely to be low. We are therefore content to accept the survey results as they stand. The likelihood of significant disturbance to wintering bird populations in the vicinity of the construction area is assessed as very low.

Any species wintering offshore are very unlikely to be affected.

CS is content with the Environmental Management Plan for the project as it stands.

We conclude that there are no significant ornithological issues associated with this proposal. This project is very unlikely to adversely impact ornithological selection features of any designated site in the wider area.

- **NIEA – Water Management Unit**

The applicant should be informed that it is an offence under the Water (Northern Ireland) Order 1999 to discharge or deposit, whether knowingly or otherwise, any poisonous, noxious or polluting matter so that it enters a waterway or water in any underground strata. Conviction of such an offence may incur a fine of up to £20,000 and / or three months imprisonment. The applicant should ensure that measures are in place to prevent pollution of surface or groundwater as a result of the activities on site, both during construction and thereafter.

- **DAERA Sea Fisheries**

From a Sea Fisheries Inspectorate aspect we would not require an EIA for this project but as always;

It is an offence under Article 47 of the Fisheries Act (NI) 1966 to cause pollution which is subsequently shown to have a deleterious effect on fish stocks.

All works near watercourses to be carried out in line with guidance as described in the Pollution Prevention Guidelines 5 (Works In, Near or Liable to Affect Watercourses).

2. Professor Julian Orford – School of Natural and Built Environment – Queens’ University Belfast

An Environmental Statement is required with the following reasoning for this conclusion.

Site is dominated by beach-dune-beach exchanges, in particular during storm activity. The evidence of beach-dune exchanges over the last two-four years (RPS report) where storm activity has been extreme, show that existing defences have virtually held, while longshore dune depletion has been followed by recent upper-beach foredune accretion. This dune erosion is likely due to the up-beach existing protection reducing longshore sediment supply, so that the immediate downbeach area becomes a new source area for westerly-directed swash flow.

This movement and transfer of maximal erosion position alongshore is normally expected as part of the longshore terminal scour caused by existing coastal protection.

Adding further lengths of protection is likely to lead to the longshore transference of further beach-dune scouring and interference into the long-term sediment budget of the whole dune frontage.

More evidence is required as to the nature of scour transfer as well as the return periods of the episodes of erosion and deposition at the upper beach/ dune interface. Clearly the storm events of 2013-14 have been influential in the consultants view for extra protection. There is however no context of the return period of such storm events in terms of long term sediment sourcing, budgets and dynamics.

There is a requirement to better understand the temporal and spatial dimensions of the wave-cell sediment budgets along Curran strand, as the sediment cell development constrains the drivers of future change. The interaction between deflected cells due to coastal protection also has to be considered.

