

**PROPOSED DUNDALK TO BLACKROCK
COASTAL WALKWAY**

**ADDENDUM ORNITHOLOGICAL
REPORT**

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**PREPARED FOR
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I. COASTAL EMBANKMENT – CONSTRUCTION ISSUES

Introduction

In the main report, an assessment was made of potential ornithological impacts by development of the existing coastal embankment as a coastal walkway. The embankment will anyway require upgrading for flood protection reasons.

It was concluded that with appropriate mitigation, and allowing for some further detailed study, a walkway could be constructed that would have minimal impact on the birds and which would be compatible with the requirement of the Special Protection Area designation.

Actual impacts on the ecological interests of the Dundalk Bay site by construction along the embankment were not addressed in the main report. Also, it has been requested that consideration is given to possible impacts on the designated area by the raising of the Rockview Farm development site. These construction issues are addressed in the present report.

Potential impacts by construction works along embankment

Outline details of the construction methodology are given in the report prepared by Royal Haskoning. The following assessments are based on the contents of that report.

Habitats

It is first noted that there will be no permanent loss of coastal habitat (i.e. upper salt marsh) within the designated sites as the seaward toe of the new embankment would be placed at the same location as the existing embankment. While a temporary haul road would be required along the seaward side, and hence on the extreme upper salt marsh, the impacts of this can be mitigated as follows:

1. Keep width to absolute minimum and ensure the contractor's vehicles do not leave the road for any reason
2. Underlie road with some type of geotextile material to minimise impacts on salt marsh structure and vegetation and to ensure removal of all imported material

Standard precautions to minimise or preferably eliminate completely run-off of suspended solids or other potential pollutants from the works will need to be strictly enforced throughout the works.

It is not known if any plant species of particular conservation interest occurs along the upper salt marsh or indeed along the embankment itself, though this is considered unlikely. A full botanical survey would nevertheless be required prior to construction and mitigation could be required should a notable plant species be located.

Birds – wintering

Construction works are likely to take a minimum of 6 months and possibly up to 9 months. Works could involve the use of two excavators on the bank, with an estimated work rate of a maximum of 12 m per day.

If these works are carried out in winter, disturbance could be caused to birds along the shoreline and especially to the 'southern' high tide roost (as described in the main report). This disturbance would, however, be largely confined to the high tide period (say 2 hrs either side of the HT) when the birds are pushed up towards the upper shore. Generally, birds are tolerant of vehicles/machinery but would be highly aware of the presence of people on the embankment outside of the work vehicles.

The following is recommended as mitigation :

1. Seasonality

Best practice would be to confine the works to the period of the year when least birds are present. Wintering (and migratory) waterfowl are present in significant numbers from about early August to late March. Peak numbers are usually achieved from about late November to early/mid February (different species peak at different times). The most potentially stressful period for birds is usually from December to early/mid February, when daylight is shortest and weather normally most severe. In this period, birds expend much energy in keeping warm. While most of the wintering species can feed through the night (if they have to), daylight feeding is the most productive. The most potentially critical conditions for these birds would occur during the months of December and January and into mid February, in a period of severe weather and when high tides occur during daylight hours. In such a period, any wasteful expenditure of energy, due for instance to disturbance, could be critical. In contrast, during the early months of the winter (August to October), birds have more leisure time (i.e. they don't have to feed all the time) and disturbance is less of an issue.

On the above, it is recommended that works would best be carried out from about start of April to end of October (a 7 month period). If this period needs to be extended, the months of March and November could be utilised without any likely significant impacts on the birds. If it is considered that works cannot be completed within the suggested 9 month period of March to November (inclusive), it would be preferable to make allowance to extend the construction over a 2 year period in order to avoid the critical mid winter period. Even if the above approach is adopted, there may be a need for restrictions (i.e. periods of downtime) during the periods of high tides, which can

obviously be anticipated in advance, anytime during the winter period (i.e. between August and March) to avoid disturbance to roosting birds. An ornithologist should monitor conditions in this period and advise the contractor when restrictions may be necessary (and it noted that restrictions may only be necessary on very high tides and/or when works are close to the roost site).

2. Extent of works

It would be preferable if works were confined to one location at a time as this would limit the potential zone of disturbance to birds and wildlife in general.

Birds – breeding

It appears unlikely that any waterfowl species would nest on the upper salt marsh zone due to the tidal cycle.

However, a range of small birds would be expected to nest within the existing vegetation on the embankment. To comply with the Wildlife Acts 1976 and 2000, vegetation should not be cleared during the nesting season which extends from 1st March to 31st August (unless an exemption is obtained from the National Parks & Wildlife Service).

II. MAIN DEVELOPMENT – CONSTRUCTION AND OPERATIONAL ISSUES

In the following, consideration is given to potential impacts on birds by the construction works and subsequently by the operation of the scheme.

Implications of Land Raising Measures

While specific details of the land raising measures are not yet available, it is anticipated that the residential part of the site may require raising by some 2 metres, and the recreational part by 1.5 metres to achieve final ground levels of 4.25m ODM to 3.5 m ODM on the residential and amenity areas of the site respectively. Implications of the land raising measures for the birds in the development site and in the adjacent parts of the Dundalk Bay SPA require consideration.

Birds within development site

The lands to be occupied by the residential development and the recreational area are presently of little importance to birds. Currently they are intensively farmed, with large fields separated by steep-sided drainage ditches and some hedgerows. A study in winter 2004/05 showed that the site supported a typical range of agricultural bird species, including skylark and some localised species such as tree sparrow. The study also showed that the site was used by some wetland birds, including curlew, redshank and black-headed gull, but all in small numbers. These are typical ‘field-feeding’ wetland species, and may be found in any of the fields inland from Dundalk Bay. There is no evidence that greylag geese feed in the fields. The presence of kingfisher along the channel (on two occasions) is of some note as this is a species of high conservation value.

As the proposed development will include extensive open grassland areas and landscaping, many of the existing small birds will continue to be found within the site and indeed species such as black-headed gull and curlew would be expected to utilise the grassland areas when disturbance is low (such as early in morning). At a later stage, advice can be provided on optimising new habitat development for birds, including the provision of high-tide feeding and roosting opportunities for waterbirds from the SPA.

In summary, it is considered that the raising of the land within the site will have negligible impacts on the birdlife in the development area, and with appropriate planning for birds and wildlife, some positive impacts could be achieved, giving an overall Neutral impact.

Birds in Dundalk Bay

The land filling operation is unlikely to have any direct impacts on the birds of Dundalk Bay as regards disturbance, as the works will essentially be screened by the coastal embankment, and the majority of the works will be at a distance from the embankment.

It is assumed that the land fill material will be free of potentially harmful contaminants, so that drainage channels and ultimately the estuarine environment are not adversely affected from seepage or run-off. Increased levels of suspended solids could be harmful to the macro-invertebrates of the intertidal mudflats (on which many of the birds feed upon). The installation of sediment traps at drains might be appropriate, especially in the early stages of development before the lands are settled and bonded by vegetation cover.

Possible changes to drainage patterns and to the volumes of surface run-off from the infilled ground (to Dundalk Bay) will need to be evaluated but it is considered unlikely that an increased volume would have a significant impact on the ecology of Dundalk Bay.

Potential Impacts by Operation of Scheme

The proposed development will result in a substantial increase in human activity in the area. Potential impacts on the wetland birds of Dundalk Bay require consideration.

Already, the issue of people having access to the embankment (on a designated walkway) has been discussed in some detail. With or without a designated walkway, it is crucial that direct access from the new development to the embankment and the adjoining salt marshes is curtailed. In particular, the issue of uncontrolled dogs is highlighted.

The other key issues that require consideration are expected increased light and noise levels as a result of the development.

As mitigation, it is recommended that lighting within the site be minimised in the sector towards the embankment. All required lighting should be focused away from the bay area and cowed towards the focal point. Also, screening by way of appropriate landscaping could minimise the scatter of light towards the bay. It would be preferable to have no lighting along the actual walkway on the embankment. However, if this is necessary for health and safety reasons, then this should be designed to minimise scatter of light towards the bay. Low bollard type lights or structures of low height would be appropriate (as opposed to lamp posts).

Birds habituate readily to normal background noise as demonstrated by the location of many important bird sites in major cities. However, irregular, loud blasts, can cause birds to react and should be avoided where large concentrations of birds occur.

Overall, with appropriate mitigation (which can be considered in full at detail design stage), it is considered that the birds in Dundalk Bay will habituate easily enough to the expected additional light and noise levels generated by the proposed development.

