RESPONSES TO: GSI, MSO
MI, IFI, EPA, ARCH,
CIL, CER, MET EIREANN
BIRD WATCH, ICG, ANTAISCE
BIM, DOD, OATM, HSA
NATURE

Cronin Millar
Consulting Engineers
Civil • Marine • Structural • Environmental

30 June 2014

Mr. Pat O'Neill
Foreshore Unit
Coastal Zone Management Division
Dept. of Environment, Community and Local Government
Johnstown Castle Estate
Wexford
Co. Wexford

Dept. of Environment, Heritage & Local Government
7 JUL 2014
Wexford

Re: Foreshore Lease/Licence Application FS005826
Foreshore Application by Monkstown Bay Marina Company Ltd in respect of an extension to the existing marina development, dredging, reclamation of foreshore, installation of pontoons and associated works at Monkstown Bay, Cork Harbour.

Dear Mr. O'Neill,

I refer to your letter dated 19th September 2013 in relation to observations made by the Geological Survey of Ireland:
We have no further comments to make on this observation.

I refer to your letter dated 20th September 2013 in relation to observations made by the Marine Survey Office:
We have no further comments to make on this observation.

I refer to your letter dated 29th October 2013 in relation to observations made by the Marine Institute:
The applicant intends to carry out site investigations further to receipt of a foreshore lease. This site investigation will determine whether piling or chains and anchors will be used. This site investigation will provide information with regard to the volume of dredge material to be re-used / dumped at sea. An application has not been made to the EPA for the Dumping at Sea permit at this stage. The applicant is willing to accept the additional conditions suggested by the Marine Institute.

I refer to your letter dated 29th October 2013 in relation to observations made by Inland Fisheries Ireland:
The applicant, at this stage is not aware of the quantities of silts/gravels that will be present, as a site investigation has not been carried out at this stage. It is envisaged that separate strata of overburden will be excavated in order to separate layers of silts and gravels.

Shore angling for cod and white fish will still be possible adjacent to the proposed development and surrounds.

The applicant has consulted with Cork Draft Net and Inshore Fishermen's Association in 2014. They have stated that they have *"no great issue with the proposal"*.

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Directors: Adam Cronin, David Millar
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Some berth holders in the existing marina include inshore fishermen.

The applicant welcomes the imposition of the conditions of An Bord Pleanala into the conditions of the foreshore licence.

I refer to your letter dated 29th October 2013 in relation to observations made by the Environmental Protection Agency:
The applicant intends to apply to the Environmental Protection Agency for a Dumping at Sea Licence subsequent to receipt of a foreshore lease/licence and the completion of a site investigation.

I refer to your letter dated 29th October 2013 in relation to observations made by the Underwater Archaeology Unit of the Department of Arts Heritage and the Gaeltacht:
The applicant intends to apply to the Environmental Protection Agency for a Dumping at Sea Licence subsequent to receipt of a foreshore lease/licence and the completion of a site investigation.

I refer to your letter dated 4th November 2013 in relation to observations made by the Commissioners of Irish Lights:
The applicant will apply to the Port of Cork for sanctioning of aids to navigation before commencement of the development works.

I refer to your letter dated 4th November 2013 in relation to observations made by the Commission of Energy Regulation:
We have no further comments to make on this observation.

I refer to your letter dated 4th November 2013 in relation to observations made by Met Eireann:
We have no further comments to make on this observation.

I refer to your letter dated 4th November 2013 in relation to observations made by Birdwatch Ireland:
Please refer to Appendix 1 which presents comments from EirEco Environmental Consultants in relation to the submission made by Birdwatch Ireland.

I refer to your letter dated 26th November 2013 in relation to observations made by the Irish Coast Guard:
We have no further comments to make on this observation.

I refer to your letter dated 27th February 2014 in relation to observations made by an Taisce:
As previously stated in this letter, it is our understanding that the proposed development is located adjacent to (not within Cork Harbour SPA). The site was formerly within the SPA but an appeal to have it removed from the SPA was successful on scientific grounds. Section 14.39 of the EIS states:

> *"While otter do occur in the vicinity, the loss of this limited area of habitat will not negatively impact on the species."*

The concerns relating to protected bird species are addressed in Appendix 1.

I refer to your letter dated 4th March 2014 in relation to observations made by the Bord Iascaigh Mhara:
We are not aware of any oysters being cultivated in these areas. Mr. David Hugh Jones had the opportunity to submit observations during the public notice period (and the planning process). The oyster fishing are operated by Mr. Hugh Jones is more than 5km from the site of the proposed marina. The proposed development will not have any impact on the oyster fisheries Area. See also comments from DAFM in your letter dated 1st May 2014.

I refer to your letter dated 11th March 2014 in relation to observations made by the Department of Defence:
We have no further comments to make on this observation.

I refer to your letter dated 2nd April 2014 in relation to purchasing of 0.348 hectares of foreshore:
I will advise the applicant regarding your comments and will revert accordingly.

I refer to your letter dated 1st May 2014 in relation to observations made by the Department of Agriculture, Food and the Marine:
We have no further comments to make on this observation.

I refer to your letter dated 1st May 2014 in relation to observations made by the Health and Safety Authority:
We have no further comments to make on this observation.

I refer to your letter dated 19th May 2014 in relation to observations made by the National Parks and Wildlife Service:
It is our understanding that the proposed development is located adjacent to (not within Cork Harbour SPA). The site was formerly within the SPA but an appeal to have it removed from the SPA was successful on scientific grounds. Chapter 14 of the Environmental Impact Statement which forms part of this application addresses impacts and mitigation measures proposed with reference to impact on birds. Please see also additional comments in Appendix 1.

Please confirm if we have responded to all outstanding items of correspondence.

Yours sincerely,

Shane McCarthy B.Eng., MIEI
Engineer

Enclosed:

Appendix 1 –	Response to Submission by BirdWatch Ireland
Appendix 2 –	Letter from DoECLG 19th September 2013
	Letter from DoECLG 20th September 2013
	Letter from DoECLG 29th October 2013
	Letter from DoECLG 29th October 2013 (UAU)
	Letter from DoECLG 4th November 2013
	Letter from DoECLG 26th November 2013
	Letter from DoECLG 27th February 2014
	Letter from DoECLG 4th March 2014
	Letter from DoECLG 11th March 2014
	Letter from DoECLG 2nd April 2014
	Letter from DoECLG 1st May 2014
	Letter from DoECLG 19th May 2014

Appendix 1

Response to Submission by BirdWatch Ireland

Monkstown Marina Foreshore Licence

Response to Submission by BirdWatch Ireland

EirEco Environmental Consultants

10th June 2014

1.

Lack of data to inform conclusions:

There is a lack of scientific data or survey work completed to support the conclusion of the proposed development having no impact on the qualifying interests and integrity of the Cork Harbour SPA.

It is Bird Watch Ireland's view that a full assessment of species movement and a full detailed assessment of potential impacts, both direct and indirect, on the interests of the SPA wintering water bird assemblage is required. Significant disturbance in one area may move birds to other areas. This needs to be considered when assessing the usage of the area by water birds.

As part of the Environmental Impact Statement process data was obtained from BirdWatch Ireland on wintering bird activity within Monkstown Creek for the period 2001 to 2006, collected as part of the Irish Wetland Bird Survey (IWeBS). The data presented the peak counts for each species of wetland bird during the respective winter period. Peaks and means over the 5 year period were also presented.

In addition, EirEco Environmental Consultants also undertook 2 winter bird counts in Monkstown Creek and the mudflats in the vicinity of the proposed marina. Counts were undertaken in February and March 2009 during periods of spring tide, with species occurrence and utilization of the shoreline in the vicinity of the proposed marina recorded over the duration between low water to high water. This survey aimed to determine bird utilisation of the site for the proposed marina and to provide a comparison with the adjacent Monkstown Creek which is part of the Cork Harbour SPA. The surveys were undertaken during the peak period for wintering bird activity. The results of the survey are presented in Table 1 below which compares the numbers of birds within the site of the proposed marina with those recorded from Monkstown Creek.

The surveys undertaken in 2009 determined that utilization of the shoreline in the vicinity of the proposed development was primarily by small numbers of oystercatcher, turnstone, curlew and redshank. These species are adept at foraging in the coarse substrate and in the case of oystercatcher availing of the presence of mussels. Gulls also were found to forage along the shore probing amongst the wrack opportunistically. The limited area of inter-tidal along this stretch of shore limits the duration during which birds can feed. The mud specialists for which Monkstown Creek holds Nationally or near-nationally important numbers, namely black-tailed godwit and shelduck, do not feed along the intertidal zone within or in the vicinity of the proposed site as the substrates are too coarse.

The low numbers of birds recorded at the proposed marina location reflects limited area of intertidal habitat and the coarser nature of the substrate within the intertidal zone. These factors were obviously recognised and accepted by the National Parks and Wildlife Service in the appeal to exclude this area from the Cork Harbour SPA. The boundary of the SPA is amended from that as shown within the AA Screening Report and NIS and the current SPA boundary is shown in Figure 1 below.

Table 1. Results of Wetland Bird Counts in the vicinity of the site and in Monkstown Creek, February and March 2009.

	Total counts			
	February 26th		March 26th	
Species	Site	Creek	Site	Creek
Cormorant	1	30	2	27
Grey heron		4	2	3
Mute swan		2		2
Brent goose		12		
Shelduck		54		93
Teal		34		42
Mallard		12		4
Oystercatchers	9	9	2	19
Black-tailed godwit		59		80
Curlew	3	41		15
Redshank	3	35	1	61
Greenshank		2		3
Turnstone	4	16	18	22
Black-headed gull	27	79		52
Lesser black-backed gull		8	7	16
Herring gull	7	4	10	3
Great black-backed gull	5		1	

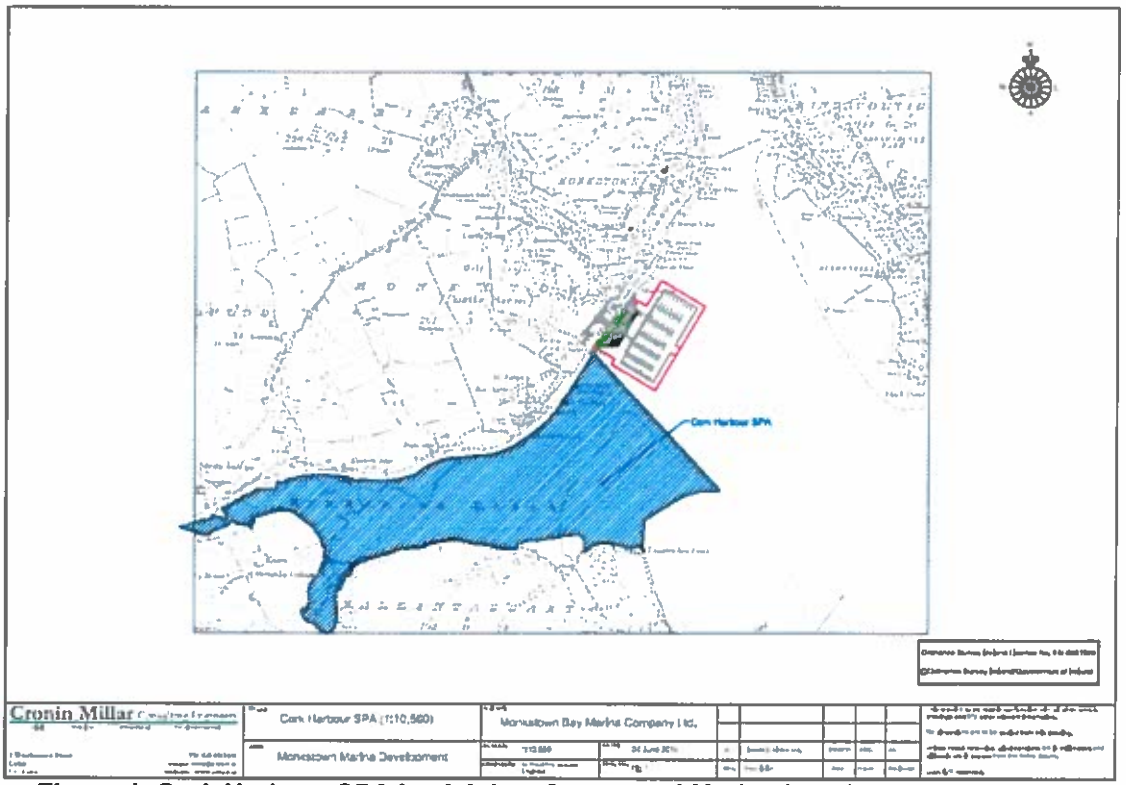

Figure 1. Cork Harbour SPA in vicinity of proposed Marina location at Monkstown.

2.

Conservation Objectives are not discussed or incorporated into the AA:

The AA does not adequately discuss the Conservation Objectives of the site. The Conservation Objectives for the Cork Harbour SPA are to maintain or restore the favourable status of the bird species listed as Special Conservation Interests for this SPA. These objectives are briefly mentioned in the AA (Stage 2), but they are not incorporated into the AA and there is no discussion on how this proposal could have the potential to impact on the favourable status of this protected site. There is no evidence or scientific data shown to conclude that there is "no impact" anticipated on any of the Qualifying Interests for the SPA.

Within Section 3.1.1 of the AA Screening Report and Natura Impact Statement, it states "*In the absence of conservation management plans for this SPA, the conservation objectives can be considered to include maintaining and restoring the favourable conservation status of the habitats and species for which the sites was selected (i.e. qualifying interests)*". The assessment undertaken within the AA Natura Impact Statement addresses the mechanisms of the proposed development that would give rise potential negative impacts on the special conservation interests or on the integrity of the SPA in view of the conservation objectives to maintain and restore the habitats and species for which the site was selected. The potential impacts on the SPA were considered in relation to:

- Direct and indirect loss of habitats
- Disturbance to habitats
- Disturbance to species
- Water Quality
- Air Quality
- Hydrological changes

The Conservation Objectives for the Cork Harbour SPA (version April 2012) state that the Favourable conservation status of a habitat is achieved when:

- its natural range, and area it covers within that range, are stable or increasing, and
- the specific structure and functions which are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future, and
- the conservation status of its typical species is favourable.

The favourable conservation status of a species is achieved when:

- population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats, and
- the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future, and
- there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.

As detailed and assessed within the AA Screening Report and Natura Impact Statement the proposed marina will not alter the area of habitat within the SPA. No impacts are anticipated on the utilisation of Monkstown Creek by wintering waterfowl and waders arising from the proposed marina. The small numbers of birds utilising the existing intertidal area in the footprint of the proposed marina will be displaced and this loss of habitat is acknowledged within the NIS. There may be localised disturbance within the parts of the SPA nearest to during the construction phase though this is temporary in nature and will be confined in extent thus generating at worse a very limited zone of influence. During operation, the majority of the activities at the marina will occur outside of the wintering period for waterfowl and waders thus limiting the potential for disturbance. Boating activities are limited to deeper waters and thus do not pose a disturbance threat to foraging birds on intertidal mudflat habitat.

3.

Lack of assessment in relation to disturbance:

The Appropriate Assessment fails to adequately assess the impacts of this proposed development on birds. In particular, the consideration of disturbance of this activity on water birds is not fully analysed within this AA. The impacts are evaluated without consideration of specific species ecology, sensitivities or requirements. Given its proximity to an important SPA, it is Bird Watch Ireland's view that a detailed examination of impacts of disturbance be conducted. The increase in marine recreational traffic and the increase in noise levels need to be better assessed in relation to species of conservation concern within this site.

As detailed in the response to item 2 above, the majority of the activities at the marina will occur outside of the wintering period for waterfowl and waders thus limiting the potential for disturbance. There are existing moorings and associated marine recreational traffic in the location of the proposed marina and boating activities are limited to deeper waters and thus do not pose a disturbance threat to foraging birds on intertidal mudflat habitat. This situation will not alter and boats launching from the marina will primarily move towards the east into open water and away from Monkstown Creek. Boat activity within Monkstown Creek will be very limited due to the shallow ground and is likely to be confined to small sailing dinghies during periods of high water.

Boating activity will for the most part occur during the spring to autumn period and thus be outside of the main season of bird activity within the SPA which is as a wintering site for waterfowl and waders. While some marina activity may occur during the winter, this will be confined primarily to weekends.

The surveys undertaken at the proposed marina location identified only two species occurring which are listed as conservation concerns within the SPA namely grey heron and oystercatcher. Both species occurred in very low numbers (max 2 herons and 9 oystercatchers). The 5 year mean for oystercatcher in Monkstown Creek is 77 (IWeBS data for 2001 to 2006) while the 1% national threshold for the species is 680. While oystercatcher is an Amber listed species of conservation concern, the limited numbers present at the proposed marina location do not warrant or justify the requirement for a more detailed assessment than has been undertaken in relation to the proposal.

In a long term study on the effects of construction activities on estuarine bird populations Burton et al (2002) identified that the impact of disturbance on populations of birds that whole sites can support depends upon the availability of alternative habitat. In the case of Cork Harbour, the SPA is divided into a number of sub elements which are spread throughout the harbour complex. Monkstown Creek forms a discreet element of the SPA and in the event of disturbance of birds from the mudflats in the vicinity of the proposed marina site, provides large areas of alternative habitat beyond any conceivable zone of influence from such disturbance. Viewed at the Cork Harbour level, there is a very large amount of alternative habitat available though it is recognised that birds displaced to other sites within the SPA would suffer a negative impact in terms of feeding time lost. Burton et al (2002) concluded that although it is difficult to determine whether disturbance has an impact at the population level, such an impact would likely occur if the reduction in habitat quality associated with increased disturbance was sufficiently widespread. Within the Cork Harbour SPA in the vicinity of the proposed marina, Monkstown Creek provides a large area of high quality habitat with limited disturbance potential due to the extensive nature of the intertidal mudflats and the inaccessibility of the southern shore.

4.

Lack of reference to support statements within the AA: *"The tolerance of waders and waterfowl to human disturbance has received little study in Ireland but the presence of large wintering bird populations within the urban centres of Cork, Dublin, Galway and in close proximity to other large urban centres throughout the country testifies to their ability to accommodate considerable levels of human activity."*
This statement within the AA is not based on any scientific data of status or trends. It implies that just because there is a presence of birds within an area, that they are not being disturbed or affected. There are also no references to support the comment that birds will "habituate" to the predicate and confined activities that will occur in the marina."

As indicated in Section 2.4 of the AA Screening Report and NIS, the tolerance of waders and waterfowl to human disturbance has received little study in Ireland. Phalan and Nairn (2007) have recorded disturbance to shelduck and light-bellied Brent geese from pedestrians and in particular, dogs in Sandymount Strand. They note however, that Dublin Bay remains an internationally important site for wintering waterbirds despite the high levels of human activity. This suggests that birds are compensating to some degree and thus habituating, though they caution that disturbance levels are such that they are likely to have an effect during stressful periods, such as in mid to late winter, and during migration periods. The mudflats in Monkstown Creek are however unsuited to pedestrian access in the same way as the sandflats at Sandymount Strand and any increase in human activity will be associated with the fixed structure of the marina and the associated infrastructure such as carpark and club house. Davidson and Rothwell (1993) noted that the effects of disturbance may very enormously from estuary to estuary and birds may habituate on some estuaries but not on others. As Burton et al (2002) observed, the effects of disturbance depend on the scale of disturbance and the availability of alternative habitat. Ravenscroft et al (2007) identified walkers with dogs being the primary source of disturbance to waders and waterfowl in a three year study at the Stour and Orwell estuaries. Birds were found to be most sensitive to relatively infrequent activities such as shots, aircraft and bait diggers while they appeared habituated to activities such as boating, horse-riding and vehicles and little disturbance was caused by these events where they were most frequent.

References:

Burton, N. H. K., M.M. Rehfisch and N. A. Clark (2002). *Impacts of Disturbance from Construction Work on the Densities and Feeding Behavior of Waterbirds Using the Intertidal Mudflats of Cardiff Bay, UK.* Environmental Management Vol. 30, No. 6, pp. 865–871.

Davidson, N. C., and P. I. Rothwell, (1993), *Disturbance to waterfowl on estuaries.* Wader Study Group Bulletin 68.

Phalan and Nairn (2007). *Disturbance to Waterbirds in South Dublin Bay.* Irish Birds 8: 223-230.

Ravenscroft, Neil, Bill Parker, Rick Vonk and Mick Wright (2007). *Disturbance to Waterfowl in the Stour-Orwell Estuaries SPA.* A report from Wildside Ecology to the Suffolk Coast and Heaths Unit.

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8th October 2014

Mr. Patrick O'Neill
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Coastal Zone Management Division
Dept. of Environment, Community and Local Government
Johnstown Castle Estate
Wexford
Co. Wexford

Dept. of Environment, Heritage & Local Government
9 OCT 2014
Wexford

Re: Foreshore Lease/Licence Application FS005826
Foreshore Application by Monkstown Bay Marina Company Ltd in respect of an extension to the existing marina development, dredging, reclamation of foreshore, installation of pontoons and associated works at Monkstown Bay, Cork Harbour.

Dear Mr. O'Neill,

I refer to your letter dated 2th October 2014 in relation to observations issued by Cork County Council to your office:
We have no further comment to make to Cork County Council but advise the Foreshore Unit of the following:

1) The applicant will continue to liaise with Cork County Council in relation to any scheduled nearby works;
2) The proposed development will not have a negative impact on flood risk. This has been addressed as part of the foreshore application;
3) The applicant shall give advance notice to Cork County Council's Roads, Environmental and Coastal Management & Flood Protection department.

I refer to your letter dated 7th October 2014 in relation to observations issued by the Sea Fisheries Protection Authority (SFPA) to your office:
We have no further comments to make on this observation.

I refer to your letter dated 7th October 2014 in relation to observations issued by Inland Waterways and Marine (IWM) to your office:
We have no further comments to make on this observation.

Yours sincerely,

Shane McCarthy B.Eng., C.Eng. MIEI
Chartered Engineer

Enclosed: Appendix 1 – Letter from DoECLG 2nd October 2014
Letter from DoECLG 7th October 2014 (SFPA)
Letter from DoECLG 7th October 2014 (IWM)

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3rd November 2014

Mr. Patrick O'Neill
Foreshore Unit
Coastal Zone Management Division
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Johnstown Castle Estate
Wexford
Co. Wexford

Re: Foreshore Lease/Licence Application FS005826
Foreshore Application by Monkstown Bay Marina Company Ltd in respect of an extension to the existing marina development, dredging, reclamation of foreshore, installation of pontoons and associated works at Monkstown Bay, Cork Harbour.

Dear Mr. O'Neill,

I refer to your letter dated 31st October 2014 in relation to observations issued by your Water Services Advisor to your office. We have no further comments to make on this observation.

Yours sincerely,

Shane McCarthy B.Eng., C.Eng. MIEI
Chartered Engineer

Enclosed: Appendix 1 – Letter from DoECLG 31st October 2014

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