



Supplementary Environmental Information

Impact of the Pumping Station

Explanatory Note EX 11.26

June 2012
Revision: 0
ERM

EXPLANATORY NOTE ON THE IMPACT OF THE PUMPING STATION

1.1 INTRODUCTION

- 1.1.1 This note clarifies the impacts of the pumping station on estuarine habitat loss and disturbance effects on birds. It has been prepared in response to a request from Natural England for clarification.

1.2 IMPACTS OF THE PUMPING STATION ON ESTUARINE HABITATS AND SPA BIRD SPECIES

- 1.2.2 The pumping station is a small component of the overall AMEP project. The cofferdam which will be installed to allow construction of the permanent works encloses an area of roughly 0.08 ha (810 m²). Of this only approximately 0.05 ha (500 m²) lies within the existing intertidal habitats. The estuarine habitat losses associated with the pumping station are to the south of the quay, within the 275 m disturbance zone. Compensation is already proposed which takes accounts of losses of estuarine habitat due to the new quay.
- 1.2.3 The construction of the pumping station will be undertaken concurrently with the work on the new quay, and it is the work on the new quay which will have by far the greatest effect on the SPA bird species of the estuarine habitats. The L_{max} noise levels associated with the hammer piling for the new quay will be much greater than that associated with sheet piling for the pumping station cofferdam. The construction noise assessment (see *Section 16.6 of the Environmental Statement*) and the *Update of Predicted Noise Levels from AMEP Piling Activity* (appended to the *Habitat Regulations Assessment Report*) list the L_{max} noise levels. The installation of sheet piling for the pumping station cofferdam will be considerably quieter (c10-12 dB) than the hammer piling. The work on the pumping station and the new quay will be concurrent, and the L_{max} levels from the different piling works will not be additive. Hence it will be the highest noise level which will be the source of disturbance, which in this case will be that from the hammer piling on the new quay construction.
- 1.2.4 The construction work on the pumping station will be undertaken from within the cofferdam or behind the existing flood defence and will not require construction equipment and personnel to be located on the intertidal mudflats, again reducing the sources of visual disturbance on birds on the intertidal habitat from these works. Again this work on the

pumping station must be set in the context of the concurrent work on the new quay, which is a much larger structure, and will require construction equipment and personnel on the intertidal mudflats, and will be the main source of effect on the SPA birds.

1.2.5 The assessment which has already been undertaken of the effects of the construction of the new quay on bird species of the Humber Estuary SPA, covers the area that would be affected by the construction and operation of the pumping station. Permanent compensation for these effects is being provided on the north bank of the Humber at Cherry Cobb Sands.

1.2.6 The estuarine habitat provision in the compensation site allows for permanent losses of birds from an area adjacent to the new quay once it is operational. This area overlaps with the estuarine area adjacent to the pumping station. The detailed design of the pumping station will also ensure that noise levels on the adjacent estuarine habitats remain at levels that will not have significant effects on SPA qualifying interest bird species, in the event that some birds do continue to use the estuarine habitats despite the daily activities on the quay.

1.3 *CONCLUSION*

1.3.7 The effects on estuarine habitats and SPA bird species from construction of the operation of the pumping station are insignificant in comparison to the effects of the works and operation of the new quay. As the works will be concurrent it is expected that any effects on habitats and species will result from the new quay rather than the pumping station and that the pumping station will not have any significant additive effects. Measures are being developed to compensate for the effects of the new quay. The pumping station will also be designed to avoid significant effects on birds from noise once operational.