



PORT OF **CROMARTY FIRTH**

**Further Information Document for the Port of Cromarty Firth (PoCF)
Marine Scotland Seasonal Tern Raft Deployment 15/03/23.**

**Doc No. TR 001 Tern Raft Marine Scotland Application
Issue: Variation 1.10**

Introduction

The Port of Cromarty Firth in consultation with the RSPA and Nature Scotland have deployed a purpose built tern raft to enhance the safe nesting areas for Common terns visiting the Cromarty Firth from May to September.

We are a statutory harbour authority and our area of responsibility in Figure 3.6 below.

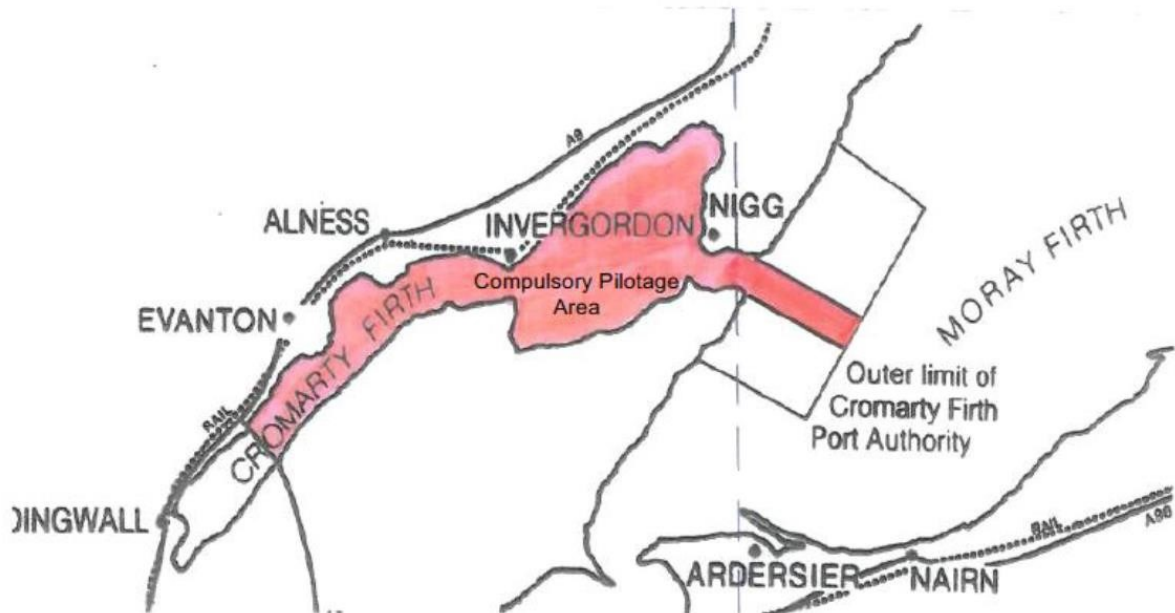


Figure 3.6: Showing the Port of Cromarty Firth Authority Area (red shading and boxed area in the Moray Firth; North ↑ to top of figure).

Location

The tern raft will be deployed seasonally and will be located at or about the locations shown in Figures 3.7 and 3.8 below. At no point will the raft be grounded at low tide, as this may allow predators to reach the tern nesting raft. The Port of Cromarty Firth will issue Notices to Mariners to ensure safe navigation within the tern rafts moored location.

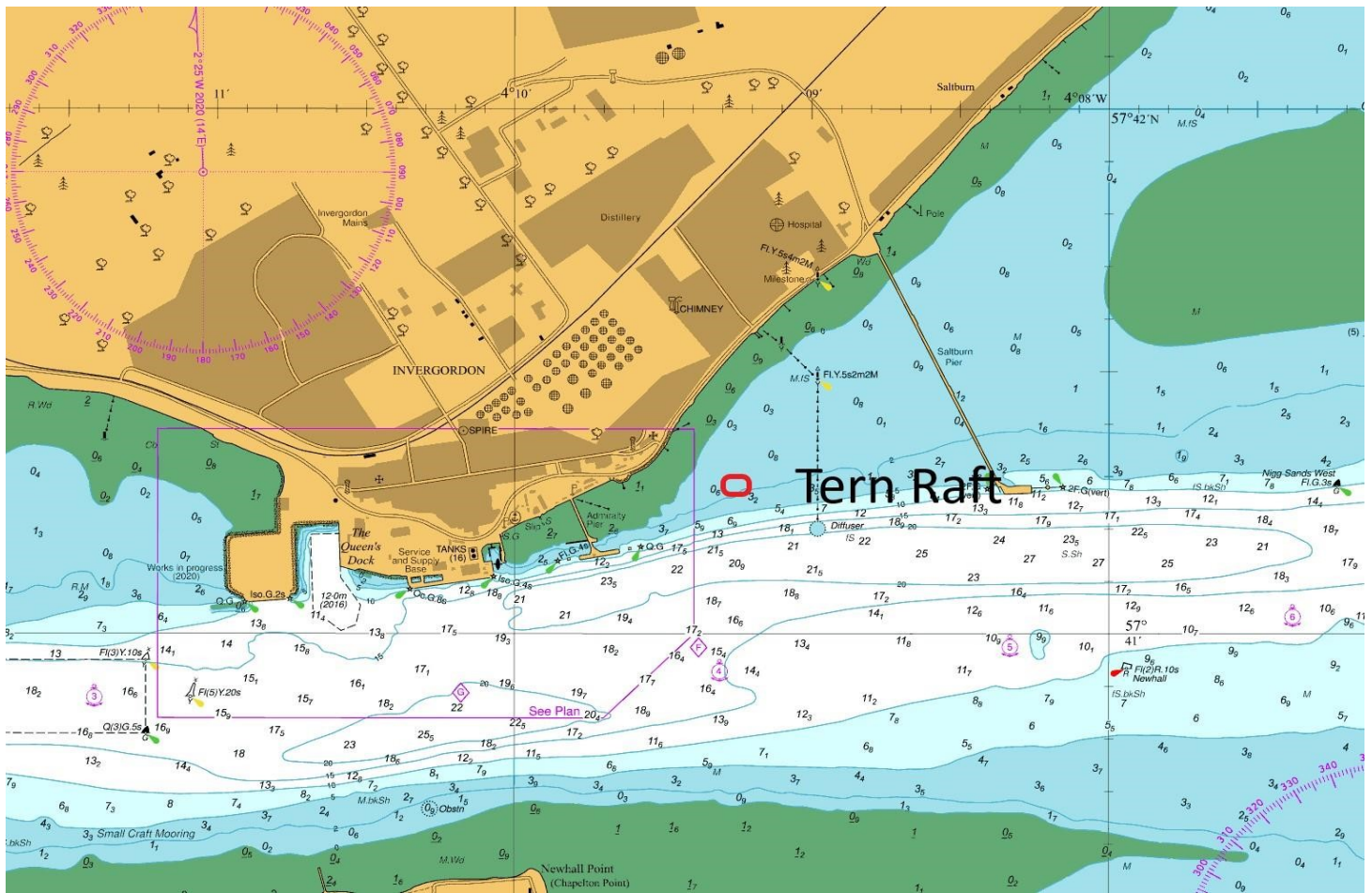


Figure 3.7: Location of the Port of Cromarty Tern Raft. Red shape shows the seasonal mooring location. North ↑ is to the top of this marine chart (number– BA1889)

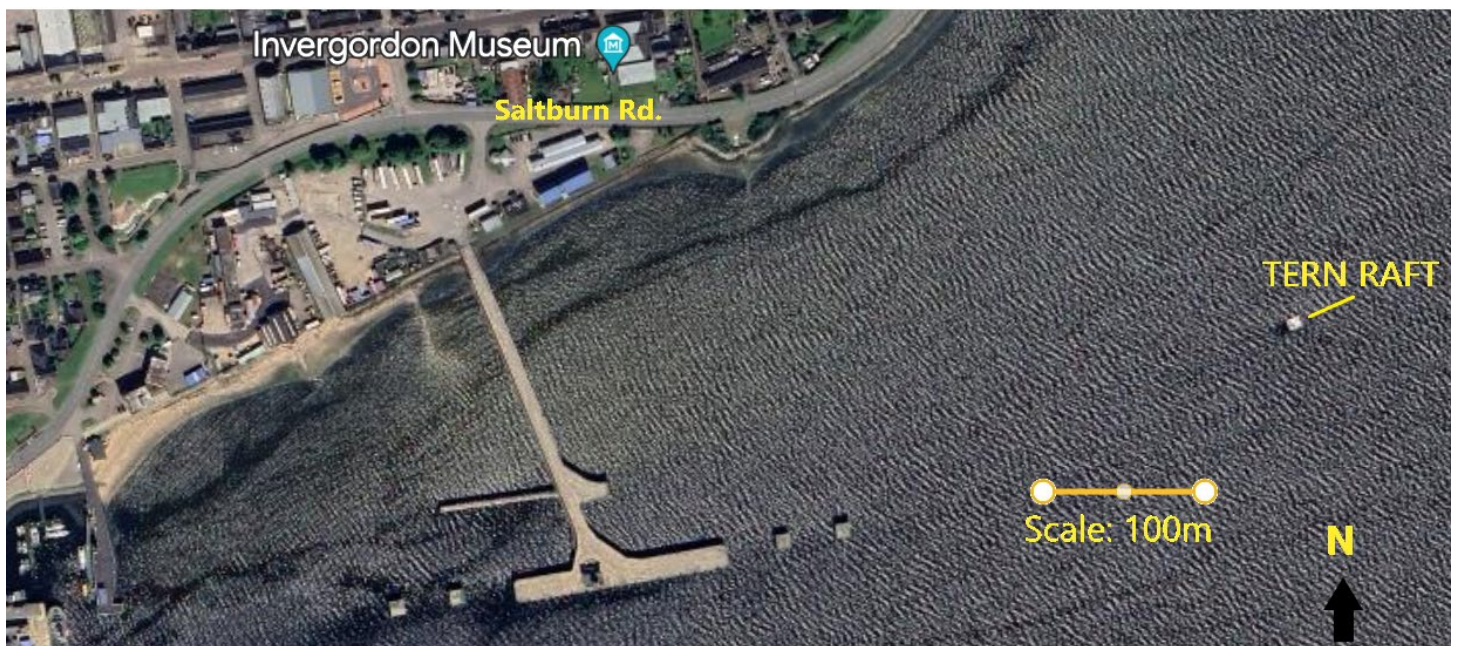
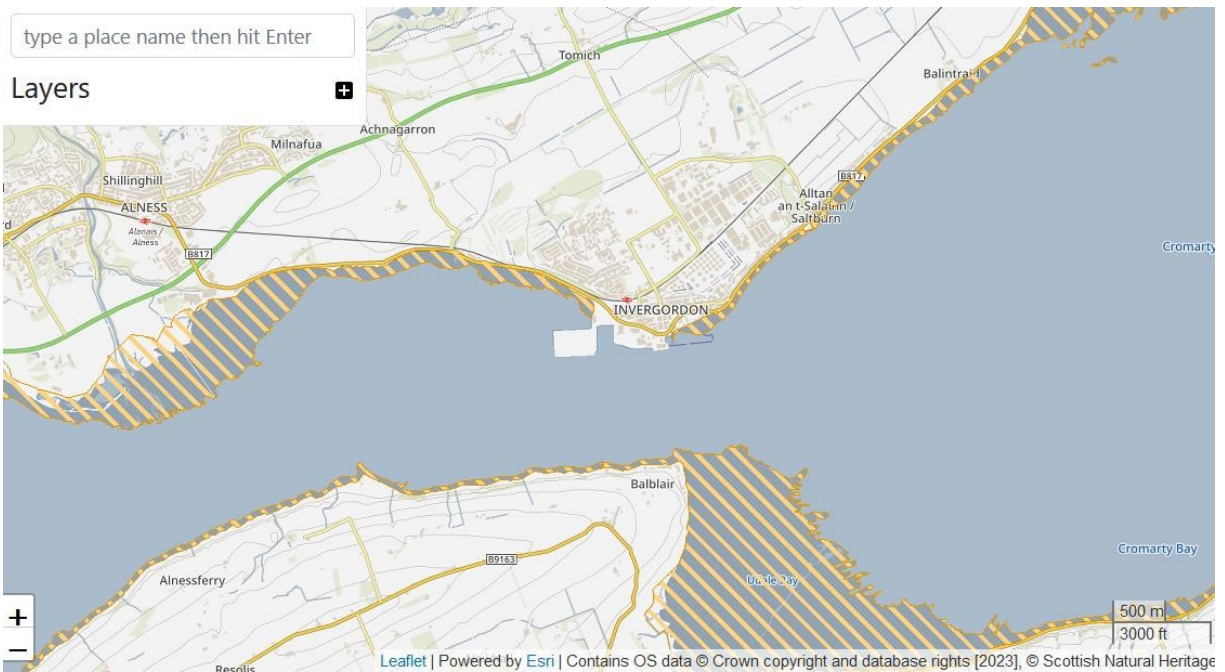
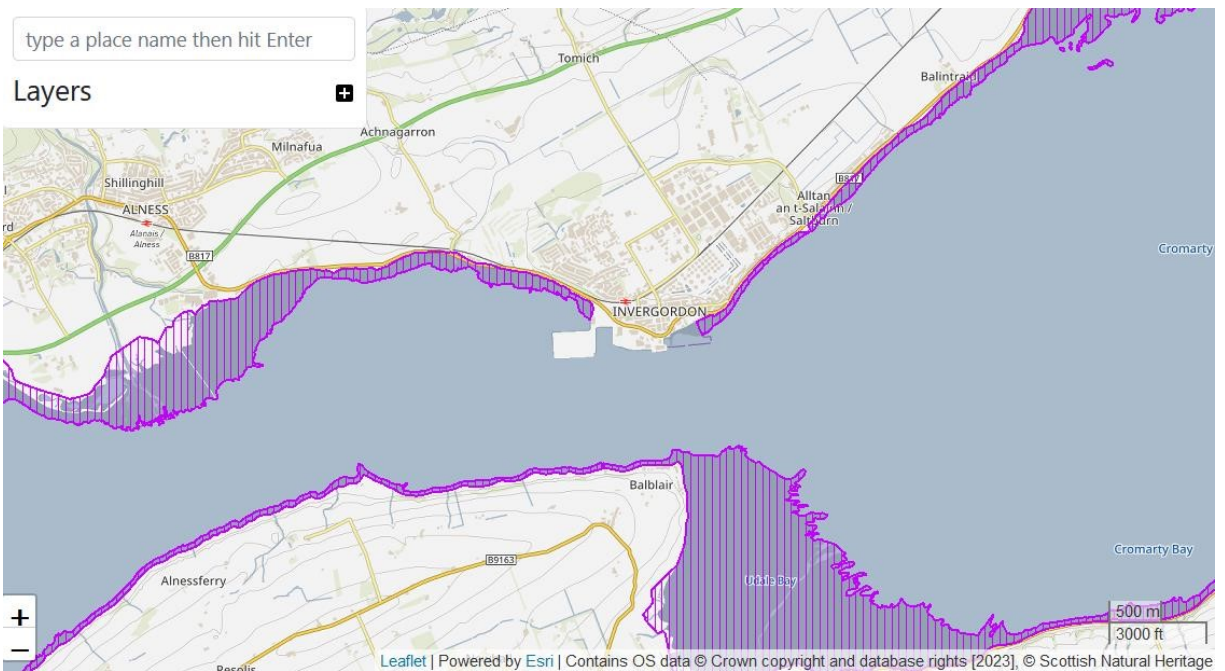


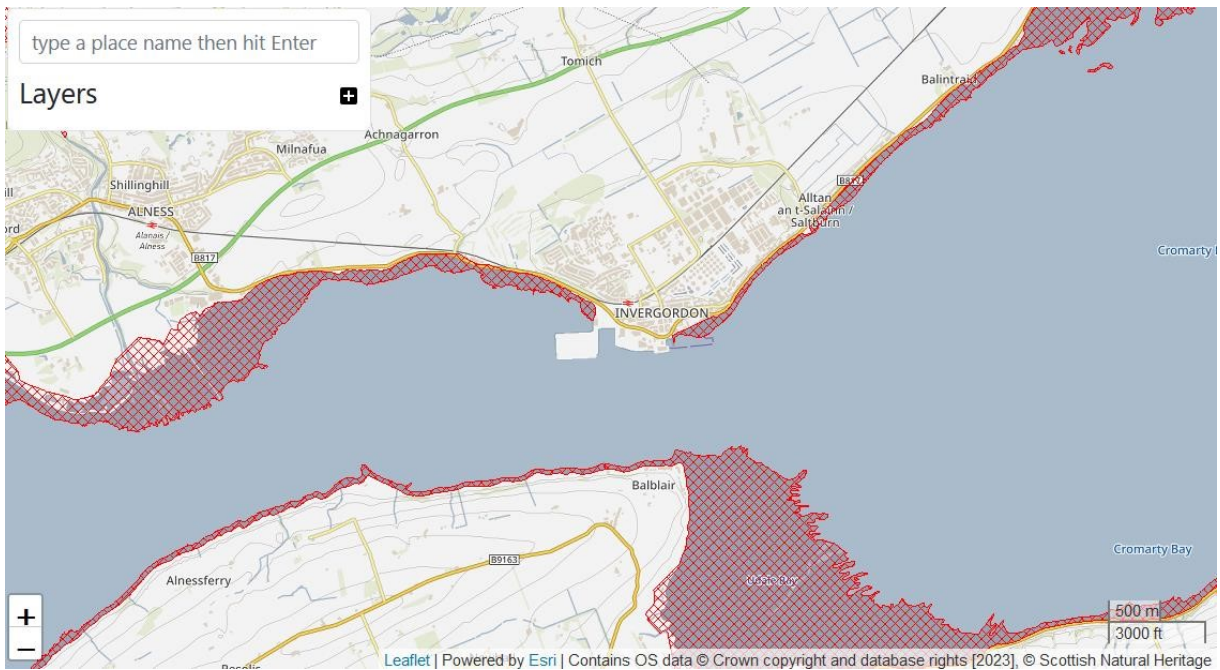
Figure 3.8: Aerial photo showing location of the Port of Cromarty Tern Raft (source Google Earth®).



Map 1 Ramsar Sites at Invergordon and Saltburn (North to top of map, Source Nature Scotland at- <https://sitelink.nature.scot/map>)



Map 2 Special Protection Areas (SPAs) at Invergordon and Saltburn



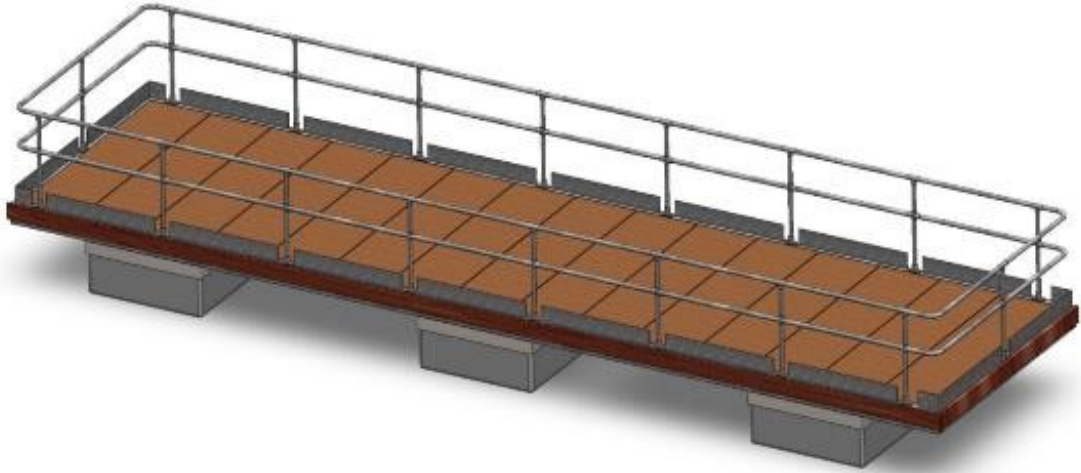
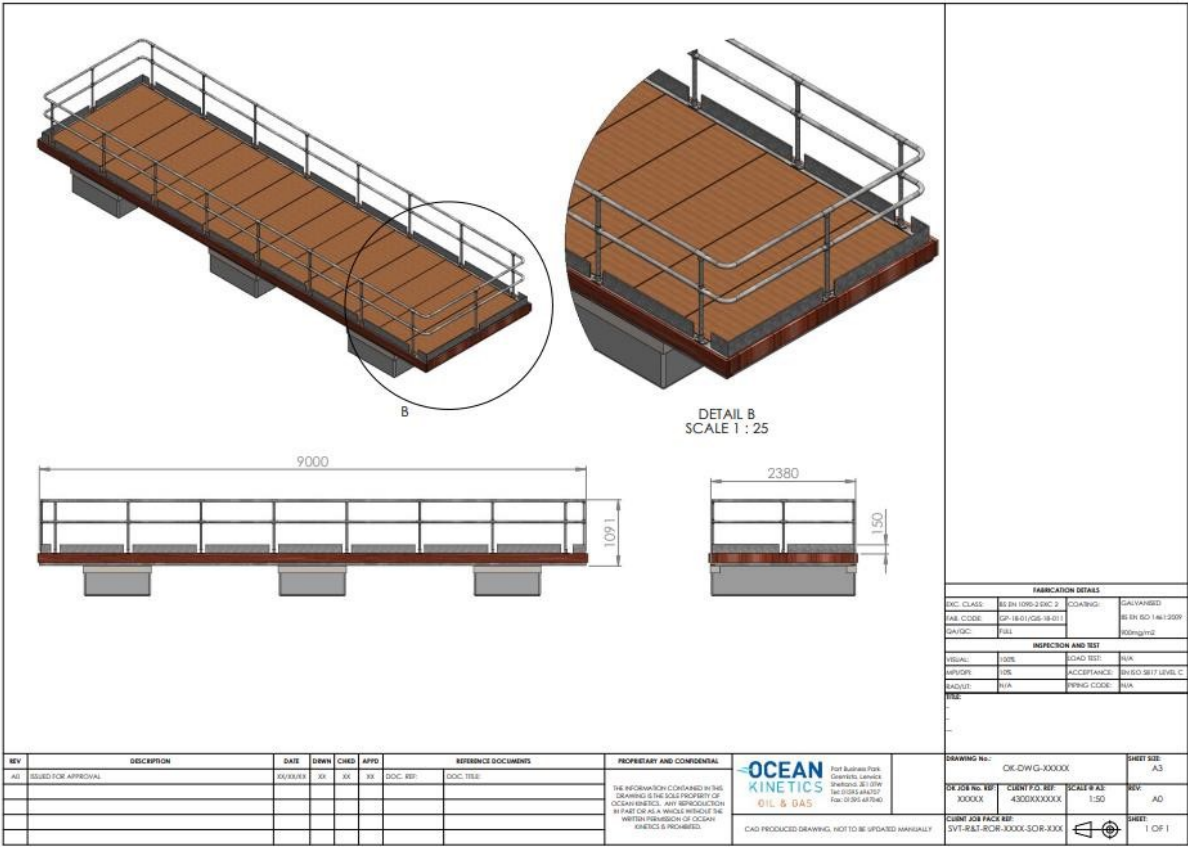
Map 3 Sites of Special Scientific Interest (SSSIs) at Invergordon and Saltburn

Method Statement

The Cromarty Firth is a challenging environment for floating structures, as there can be strong winds with associated waves as well as strong tides. Hence the tern raft will be deployed during April and removed for maintenance and safe winter storage on land till September of each year. The temporary moorings are 8 sea anchors and these will be removed along with the main tern raft structure (Picture TR1.). The structure will be moved to the Invergordon harbourside, sprit into its 3 sections and each section lifted out by crane. This will ensure there is no interaction or disturbance within any of the designated conservation areas, which are shown in Maps 1-3 above.

Tern Raft Construction

The tern raft is composed of 3 pontoon sections, each section measures 9m x 2.4m which are joined to produce one nesting area measuring 9m x 7.2m and is fitted with three concrete impregnated GRP buoyancy units – polystyrene filled. 150mm x 50mm hard wood rubbing strip on long sides. A timber deck of marine ply and sectioned wooden cells will be added in season 2023 to protect the nesting area from wind and waves. Each nesting area will be filled with crushed scallop shell to provide the ideal nesting substrate for the birds. The approximate weight of each of the three raft sections is 2.5 MT (metric tonnes). See (Figure TR 1, Photographs TR2 and TR3).



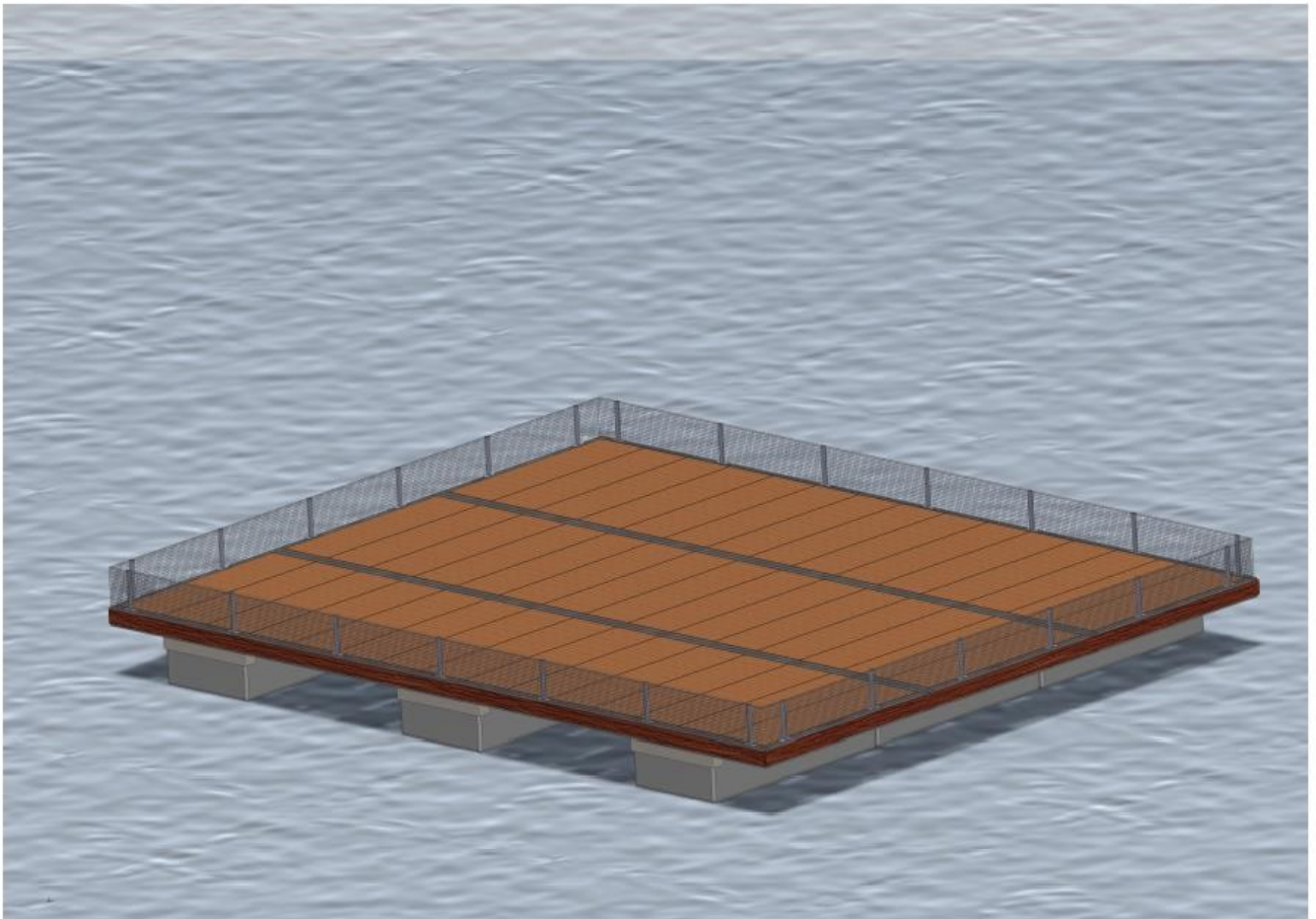


Figure TR 1: Showing the tern rafts construction of galvanised and stainless steel/clear Perspex sheeting, concrete/wood surface and grey plastic floats.



Photograph TR2: Tern raft and 8 sea anchors at Port of Cromarty Firth, Invergordon Service Base.



Photograph TR3: Tern raft deployed and ready for the common tern's arrival.

~End of Tern Raft Application Supporting Document~