

## **Cory Environmental Centre**

Thurrock Thameside Nature Park is a new green wildlife space created on the restored Stanford-le-Hope and Tilbury landfill site, and part of an integrated chain of Ramsar designated, conserved green belt open spaces along the Thames estuary, which are being made accessible to the public.

In November 2009 van Heyningen and Haward won a design competition to design the Cory Environmental Visitor Centre, to be a focal landmark for visitors within this new Park. Its purpose is to provide information, to be a resting/gathering place before visiting the park, to be an educational centre for local children throughout the year, and to be a local community hub.

The brief was for a building that would communicate the natural, historical and regenerative aspects of the site in an approachable way. The building is designed to inspire local people to engage in a different experience. It also had to be sustainable and cost effective. The Centre captures and communicates these aspects of the brief, as well as the essence of regeneration.

### **Planning constraints**

The new centre is provided under Cory Environmental's Restoration Agreement and a Section 106 agreement for the landfill site. The site is also a Ramsar designated wetland. Essex Wildlife Trust (EWT) have a "piecrust" lease from Cory to run and operate the nature park. In order to provide benefit to the local community, and thus satisfy planning policies the new centre:

- Provides a focal point for the activities of the wider nature park, including new habitats being established by EWT
- Promotes this area of South Essex in a positive way
- Provides all-weather access for disabled visitors throughout
- Provides an educational area indoors and outdoors for local groups and schools
- Provides a Natural Play area close to the entrance
- Provides a focus for other community activities such as star-gazing events on the roof

The building also provides access, and sits on the ground with a light touch, a strategy dictated by the landfill restrictions. Architecturally, but also in planning terms the building responds to the landscape, which is devoid of settlements, but contains distinctive landscape elements such as the cranes at Mucking Wharf, by utilising a strong and recognisable coastal form.

### **Materials and method of construction**

Materials are generally chosen for longevity, robustness in use, finish character and embodied energy, as well as budget. The construction of the building aims as far as possible avoid the use of materials which damage the environment through their exploitation, or through their production.

The building sits on a concrete 'floating' raft foundation which avoids the risk of leachate had traditional piling been adopted. This carries with it the small risk of settlement due to the nature of the landfill, for which an allowance for future adjustment is built into the scheme if necessary.

The main frame is steel. This reduces weight, cost, and aids speed of construction. The secondary structure is timber reducing the environmental impact. A fully timber structure was considered unfeasible due to cost. Moreover, recent press reports indicate that as much as 83% of UK constructional steel is from recycled sources, with a further 11 % being directly re-used.

The building is surrounded by a vertical Larch post 'screen'. The primary function of this screen is to screen people from the view of birds on the flats as they move around the edge of the building. The timber is attached to a secondary steel structure which also supports the spiral ramp.

Behind the screen, the solid sections of wall are constructed using timber studs with insulation and Larch weatherboarding. The remainder of the external wall (to the visitor hall and education resource area) is high performance double glazed stained softwood windows.

### **Summary of time-table, programme and budget constraints**

The Construction Cost of the building and infrastructure was £1.96m.

van Heyningen and Haward won the competition to design the building in November 2009. The contractor started on site in April 2011 and the building was completed in July 2012.