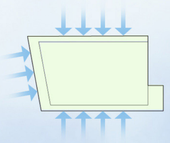
LOOKING FOR MERMAID

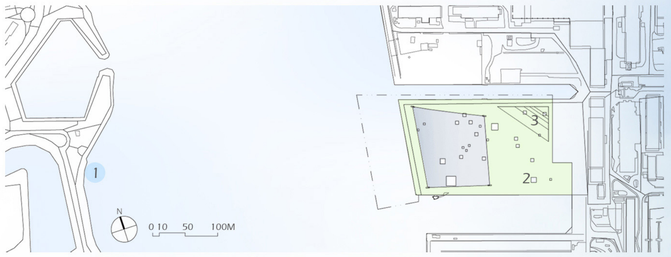
Artistic consideration

Installed on a metal lattice hung by steel cable web, the floating mirror is composed of millions of polished aluminum panels. Each panel has piezoelectric transducer on one side fixed to the lattice and the other free to capture wind energy. In calm whether, their angles to the ground reflect Edvard Eriksen's statue ONLY to a position INSIDE of the site. Mathematically, they compose a parabola in the air, further cut and defined by the site's geometry projected to the sky, so that the parabolic front projects the statue's reflection to the site front and the rear to the site back edge. The parabola is easily realized due to a natural phenomenon that the web assuming originally catenary always tends to parabola when uniformly distributed load is exerted, i.e. the weight of the panels.

In this way, the mirror reproduces in the sky another Little Mermaid at Refshaleøen, and turns it into the child of the air as the image is in high sky and mixed with the sky view. As wing blows, the mirror is like a sky pond with ripples turning back from time to time to the reflection.

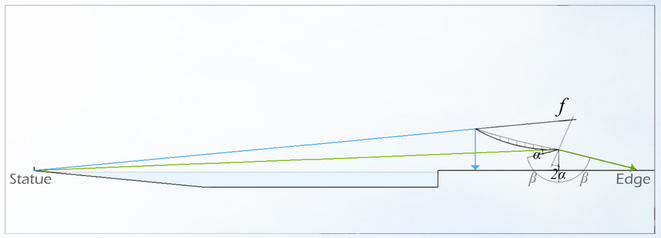
To convey and strengthen this concept, a number of angle-fixed binoculars are installed on the ground, one for every deck platform, to help directing the Little Mermaid's mirror image in calm weather, as well as watching wind mobile detail and understanding its energy conversion principle. Stroll or running throughout the site following the Little Mermaid is as interesting as a framed view through binocular, which introduces ground piezoelectric transducer to the site. No other complex landscape is introduced so as to leave the uses of the site open.





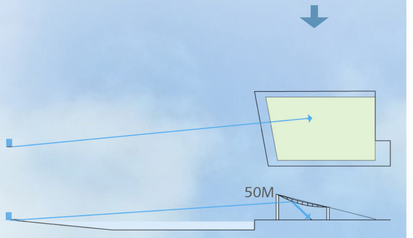
Master plan

1, Statue of the Little Mermaid 2, Viewing platform 3, Electrical substation

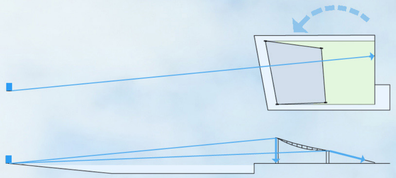


Mathematical calculation of a site specific parabola (with site setback reduction)
Principle: sight line parallel to parabolic axis of symmetry is reflected along a line directing reversely to the focus

Waterfront setbacks for panoramic view and houseboat quay



50M high (=Lynetten wind farm) in the front of mirror to determine the rear height, a blade-like perspective from the bottom to be created



Figuration of mirror from the site geometry, enabling parabola to reflect the statue image to the whole site

View from binocular