‘HYGGE’ POWERING PROJECT

Refshaleoen – Copenhagen

The Crucifix Site

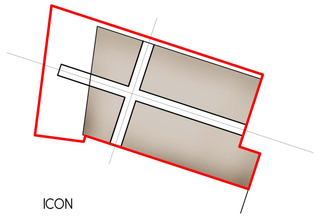
The four towers are situated at each end of the cross symbol on the site which represents the Danish Flag. Each tower holds important views out of the site at different heights and has its specific space function. The towers are described as observation decks where the people can appreciate the views that the site offers at different floor levels. Eventually, each tower will collect a different wind pressure, and the remaining of the wind is blown onto the people, for them to experience and understand the concept of harvesting energy by nature. The main largest tower at the waterfront has a huge floating platform to hold major event, as it is in a Danish culture and lifestyle to celebrate festival with people. The contoured landscape serves as green bed seating for the event and oceanic view. Underneath it is a passage tunnel between two hidden spaces for the transformers and electrical equipment. Indeed, the whole Hygge poles field can be the visitors’ casual outdoor activities such as cycling and picnic. Two side towers on the short axis will capture the water entry of visitors. The fourth tower will capture the land entry flow mainly from the bus station and vehicular access.

“Nature Energy” generates the site

As the cold wind of Copenhagen breezes through the site, the four main towers will capture, accelerate and concentrate the wind through the hollow wind shafts to the inner turbines and convert into electricity. It is further to be stored and consumed. The secondary harnessing is by the steel-reinforced piezoelectric needles that form a skeletal envelope of the towers, including protruding cross-shaped needles with LEDs end. It primarily produces electricity to glimmer the LEDs at night, and the rest will be stored. LEDs on ground are self-sustained with its built-in wind turbine, its solar panel on the top and an alternative energy harvesting kinetic energy from the cycling bays will tune the dimmer of LEDs and brightens it up.

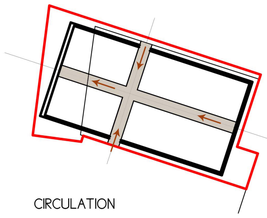
“People” activate the site

During the day, it was the ‘giving back’ time of the people to the site. The charging bays on site are found at the long corridor for people with bicycles to cycle and generate more kinetic energy to brighten up the already glimmering LEDs on ground one by one in rows, transpiring an electrical power-up racing event among peers. The rest of the contributed electricity will contribute back to the main electrical power grid.



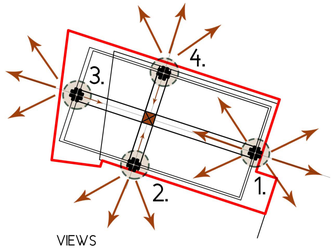
ICON

The FLAG is a symbol for the Danish people. Hence, it is translated to the site plan.



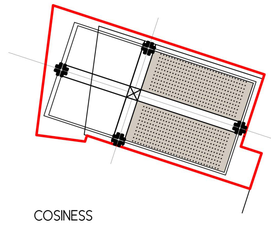
CIRCULATION

The CRUCIFIX site leads to 4 paths, highlighting the entrance of the building and the circulation.



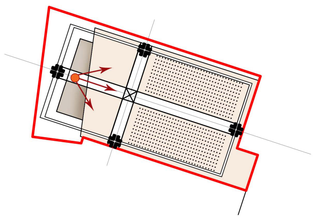
VIEWS

FOUR TOWERS are placed at the four ends of the path. These towers will have a different space experiences and will offer different views.



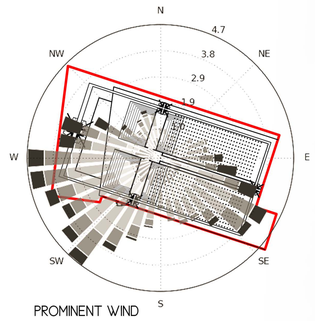
COSINESS

The Hygge poles are zoned towards the main entrance, giving a warmth welcoming passage towards the site.



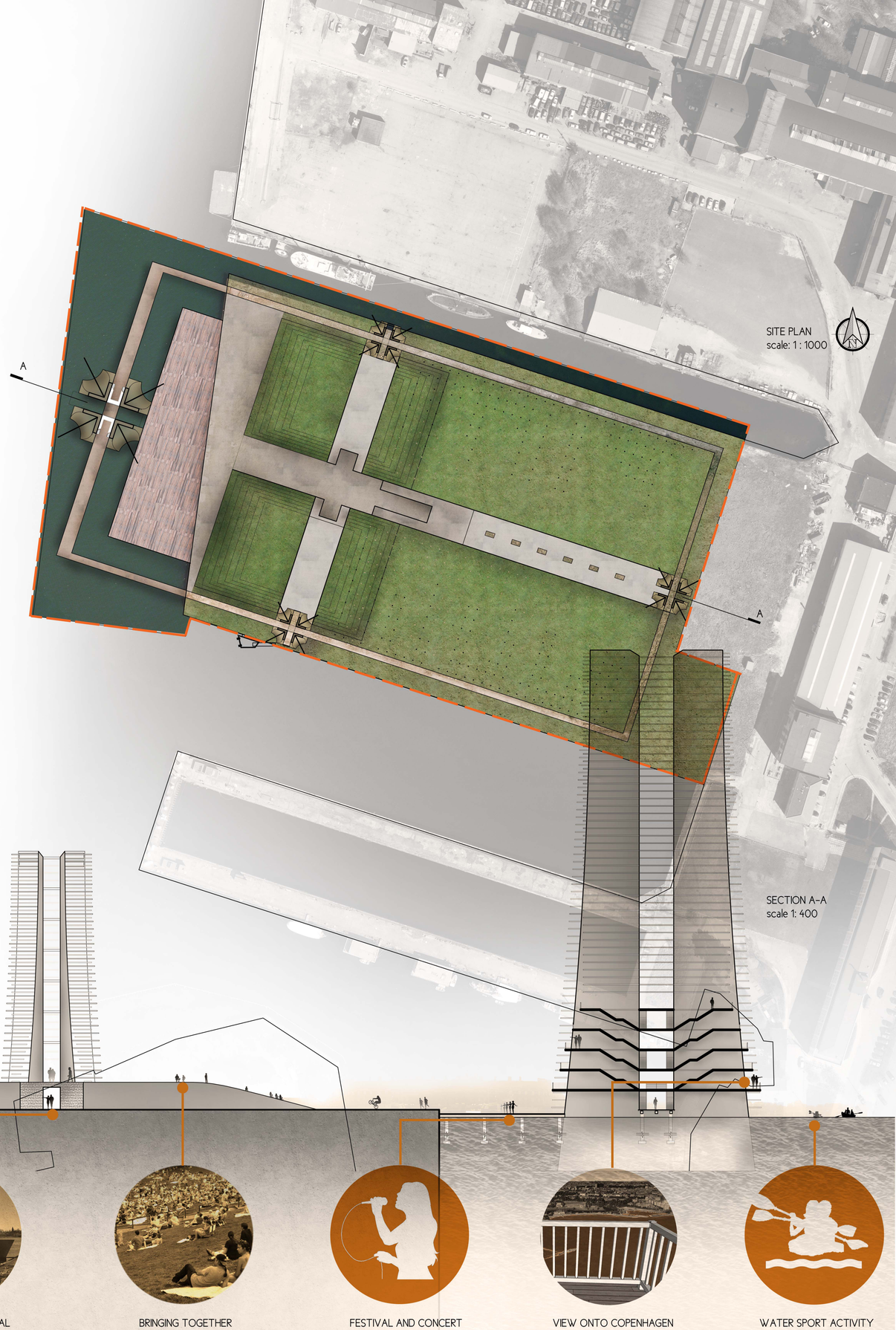
ACTIVITY

A platform is design on the sea, enclosing and drawing the boundary of the site.



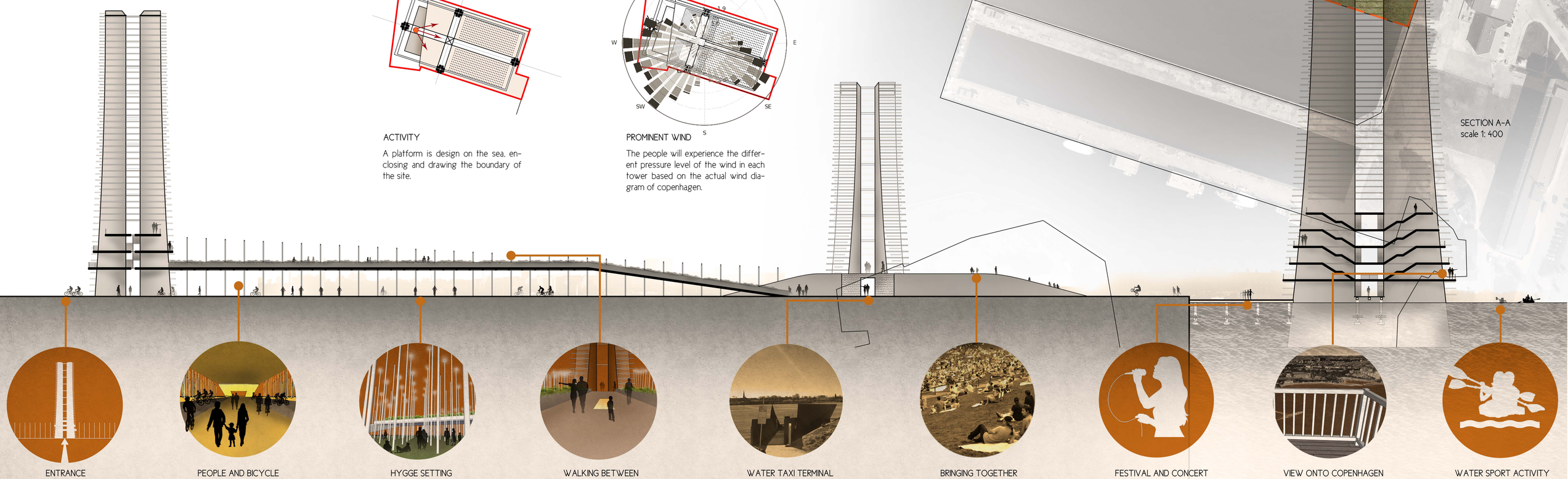
PROMINENT WIND

The people will experience the different pressure level of the wind in each tower based on the actual wind diagram of copenhagen.



SITE PLAN
scale: 1 : 1000

SECTION A-A
scale 1: 400



ENTRANCE

PEOPLE AND BICYCLE CIRCULATION

HYGGE SETTING PEOPLE AMONGST THE POLES

WALKING BETWEEN THE LIGHTS

WATER TAXI TERMINAL DROP-OFF IN TOWER

BRINGING TOGETHER THE COMMUNITY

FESTIVAL AND CONCERT

VIEW ONTO COPENHAGEN

WATER SPORT ACTIVITY