

Tech park 'will qualify for Gold Leed'

March 15, 2009

The Qatar Science and Technology Park (STP), which will be inaugurated tomorrow, will qualify for a Gold Leed rating, says its master planners Woods Bagot.

"When we did the project, there were no ratings. But given the way that we've designed the project, the building is very energy efficient and might get a gold rating," said Mark Mitcheson-Low [Regional Managing Director] at Woods Bagot. "If we push some of the other factors, it can go even higher."

The project is located in Education City, on the north-west outskirts of Doha. The master plan encompasses 123 hectares of land, which is integrated to link the research efforts of four US institutes incorporated in the Qatar Foundation, plus a planned billion-dollar teaching and research hospital and convention centre adjacent to these institutes.

The phase one construction of the STP comprises 115,000 sq m of development. At its heart is the 12,000 sqm Incubator Centre, incorporating the administrative hub and business centre. This building is flanked by the first two tenant buildings, each 20,000 sqm. The Incubator Centre is at the crossing point of the east-west arrival axis and the major north-south "green spine" that links the STP with other precincts of the City.

"We were commissioned about four years ago to do the master plan and design for the first phase of the Dh2.5 billion STP project in Education City," said Mitcheson-Low. The rest of the City was master planned by Japanese architect Arata Isozaki. "We were the first other international architect on this project, which was commissioned by the client Qatar Foundation," he said.

"The brief was to model it on the lines of Oxford Science Park in Europe. But the client asked for a project unique to Qatar. Other science parks are two to three-storeys buildings, which are set apart. So you have to drive, park and walk each time you want to go to the next building."

So the Woods Bagot design solution was to bring the buildings close to each other in a series of modules. "We created a courtyard effect between the buildings, which are connected with lakes. We also created a deck so that the campus becomes completely pedestrianised. The aim was to create a sense of community," said Mitcheson-Low. "The client brief was to also create a link to all other universities."

The architectural aesthetics were "striking and contemporary, whilst respectful of the Qatari culture and designed for the desert climate", said the architectural firm.

All the three buildings sit on a landscaped podium, providing undercroft parking for 1,450 cars. Pedestrian and landscaped areas are shaded by a large "veil structure", linking the buildings and encouraging free movement of people between all buildings. Provision for access for people with disabilities is provided in accordance with best practice urban design standards of Qatar Municipality.

The design features the separation of motor vehicles from pedestrians. The podium provides a pedestrian-only landscaped environment, under the "veil" shade structure that links the buildings. "It is very contemporary Arabic architecture – there is a series of layers and patterning that is continuous to everything in the building. The 'mashrebeyas' effect and the courtyard at the heart of the building is the communal space that links all the buildings together. The veils across the top obviously screen the buildings and bring the temperature down enormously. They also screen many services, which are not visible from the exterior," he said.

Key precinct areas are defined by "avenue plantings of mature palms and leafy trees and the use of both native/indigenous and exotic plant material", said the firm. "Microclimatic environments are developed through the careful selection of finishes and the introduction of softscape areas," he said.

Service zones are provided both horizontally and vertically between and around large areas of

column-free space, with 400 mm deep access floors, in the research community. Double-volume space, with high load capacity, is available in large areas.

Thermal comfort and natural light within the buildings is also a key driver of the design. Sun screens, facade designs and the extensive use of atria allow the buildings to achieve the demanding brief of maximum flexibility and the optimum human environment for productivity.

"The buildings are innovative and sets new benchmarks for science and research facilities. They have a peristitial space, where you can change services up and down the building without affecting any of the tenants," said Mitcheson-Low. "The spaces can be changed at any level to a point where a wall can be taken out and made into a double-volume space since some of the labs have tall equipment."

The project was designed to ensure the longest life, he added. "That is where true design efficiency comes in."

{ Emirates Business 24/7 }