Ban Chang Town Hall, Rayong, Thailand

Catenary Arches

Summary and appraisal of the project by the jury

The project began with a decision by the local community to invest in converting a community hub into a new Power Development Funding in a city landmark instead of spending on an annual festival that did not benefit future generations. The environmentally friendly landmark will instead revitalize tourism; stimulate community economy by attracting visitors locally and internationally. The proposal passed through public hearing from members of village, municipal district and provincial levels leading to the approval within a year for new Power Development Funding with the supports of architect, community leader, government officer and Map Ta Phut Industrial Estate. The collaborative action expressed the solidarity among all parties, overcame conflicts between locals and public sector. This process has embedded the collaborative action for their better future, and also for the nation.

Project data

- **Project group:** Architecture, building and civil engineering
- **Client:** Ban Chang Subdistrict Municipality
- **Project background:** Public commission
- **Planned start:** September 2017

**Project description**

The project is not only the expected future prosperity of Ban Chang community; it is also about people’s perspective of the problem, power of unity, creativity and conciliation. The community members, all together have written down the new history by transforming conflict into harmonious collaboration for their better future, and also for the nation.

**Ethical standards and social inclusion – People**

The project started from locals’ wills to invest in a new building within the community before construction begins. Through this participation, it is clear that the imaginative construction will be met with equally imaginative uses.

**Resource and environmental performance – Planet**

The town hall utilizes the fly ash, coal combustion waste from nearby power plant as concrete mixture to gain concrete performance efficiency. Fly ash responds to government policy of waste reuse instead of piling in landfills, reducing risk of soil contamination, water and air pollution. Less cement usage also leads to less limestone mountain destruction. The town hall construction reduces pollution and preserves natural resources by transforming fly ash into the environmentally friendly habitat for humans, plants and animals.

**Contextual and aesthetic impact – Place**

The town hall was designed to trigger consciousness of “living with nature” through realizing the overlap between air volume and void space. The catenary arches out of concrete curving in different directions. An open air structure, it is intended to be functionally vague to host varied activities. The use of fly ash is common as a partial substitute for cement. In this location, through, it takes on additional meaning through the conversion of industrial waste into structure.

Statements on the sustainability of the project by the author

**Image 2:** The key of this revitalization project is to see the possibility for community future. It’s about changing the perspective of locals and visitors in perceiving the unique identity of Ban Chang as Brownfield Tourism Community. The project encourages urban activities through organizing tourist attraction route. The town hall will serve as the gateway to Ban Chang with its location on beach front streets connecting to famous beaches with community temples, and the highway to U-Tapao International Airport.

**Image 6:** Wastes: Transforming industrial waste to highly efficient and environmentally friendly construction material.

**Image 3:** Place: Landmark that stimulates the fruitful tourism back in the area once again.

**Image 5:** The project is not only the expected future prosperity of Ban Chang community; it is also about people’s perspective of the problem, power of unity, creativity and conciliation. The community members, all together have written down the new history by transforming conflict into harmonious collaboration for their better future, and also for the nation.

**Image 4:** Cultural route/urban stimulator: Urban revitalization potentials and targets.

**Image 7:** Sense: Spatial perceptions stimulate energetic sense.

**Image 1:** The project is not only the expected future prosperity of Ban Chang community; it is also about people’s perspective of the problem, power of unity, creativity and conciliation. The community members, all together have written down the new history by transforming conflict into harmonious collaboration for their better future, and also for the nation.

**Image 8:** Cultural route: Urban stimulator. The effects of coal power plant on nearby neighborhood tourism economy.