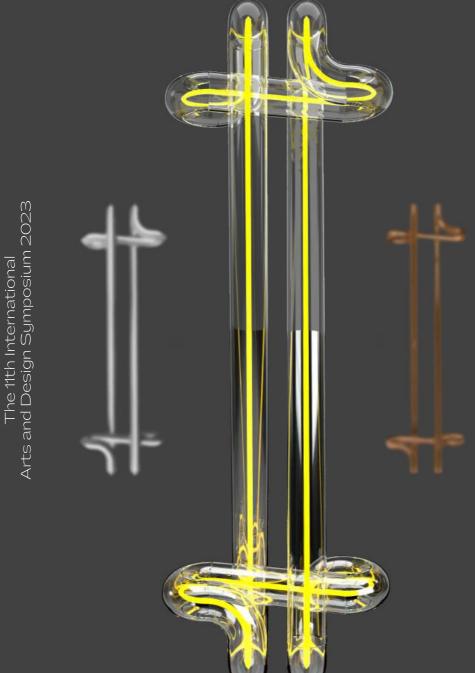
## TRANSGENERATIONAL

The 11th International Arts and Design Symposium 2023



by Council of Arts and Design Deans of Thailand (CADDT) and The Association of Siamese Architects under the Royal Patronage (ASA) together with the Faculty of Digital Arts, College of Design and the Faculty of Architecture Rangsit University.







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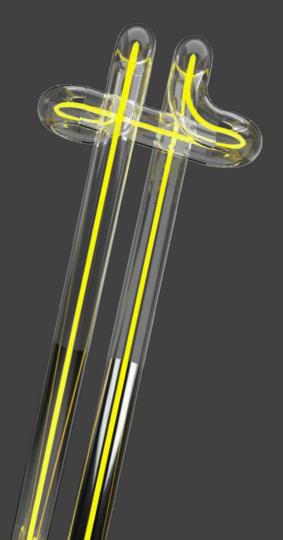
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## The Landmark Rangsit

Aamaal Phakdeetham Chimvilaisup, Assist.Prof.Dr.Suwicha Benjaporn, Monchai Bunyavipakun, Natchanon Panitwong, Pornpawit Paengjak, Thanopon Punsaing, Sarittawat Kanjanatanasade, Weerawiral Phanphonnath

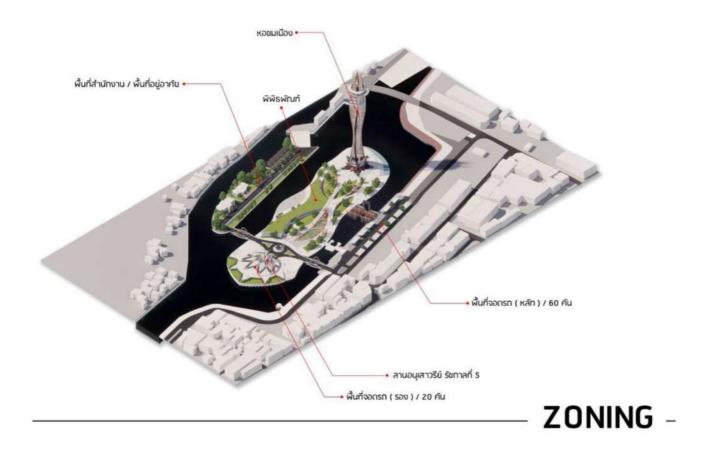
Introduction :

The Design Contest for the Landmark Rangsit, Chulalongkorn Water Gate, "Pathum Thani: City of Rivers from the Royal Grace of His Majesty King Chulalongkorn the Great" is a project that Rangsit City Municipality, Royal Irrigation Department, and private sectors in Pathum Thani Province have jointly initiated to design and improve Chulalongkorn Water Gate area to construct a public park, a monument of His Majesty King Chulalongkorn the Great, a museum, and an observation tower as well as develop the area around the Chulalongkorn Water Gate Office, Office of Water Transmission and Maintenance Department of South Rangsit, and staff houses. The project has been carried out to commemorate the royal honor and grace of His Majesty King Chulalongkorn the Great. With a firm determination to help people, His Majesty King Chulalongkorn the Great initiated the development of "Thung Rangsit" area, formerly known as "Thung Luang", which had been a forest without a river. Since the area had not been suitable for agriculture, the people had lived in poverty. His Majesty King Chulalongkorn therefore initiated the excavation of Rangsit Prayunsak Canal and an embankment in the name of His Majesty the King "Chulalongkorn Water Gate" for the benefit and prosperity of people in Pathum Thani from the past to the present. Therefore, upon completion, Chulalongkorn Water Gate area will become a new recreational area that can promote tourism and a new source of history learning of Pathum Thani Province as well.

The winner of this contest is the representatives of students and professors from the Faculty of Architecture, Rangsit University. The design shows the hamonous design and creation process of architecture and landscape and clearly reflects the identity of Pathum Thani by applying the curve of the royal lotus, the symbol of Pathum Thani Province, to architectural elements in various dimensions. In addition, the curve axis is used to connect the traffic system to all areas of the project as well as create a transition space that facilitates a harmonious interaction between the interior and exterior of the buildings, especially the arrangement of access to each area within the project. The designers have a hidden implication of conveying the history of Pathum Thani from the past to the present and the future.

First, the Monument of His Majesty King Chulalongkorn the Great is designed with lines similar to lotus petals and elevated 5 meters above street level for the outstanding and open scenery from the Rangsit Prayoonsak Canal. The location of the monument at the beginning of the Rangsit Prayunsak Canal is selected to remind people of the benevolence of His Majesty the King Chulalongkorn the Great who initiated the development of this Rangsit Field. Then, the area of the Irrigation History Museum exhibits about the excavation of the Rangsit Prayunsak Canal and the construction of the Chulalongkorn Water Gate. The museum building is designed for easy access with the harmony with the surrounding landscape. A green area is located on the roof of the building which represents the agricultural town of Rangsit Field. The former office of Water Transmission and Maintenance Department of Southern Rangsit, an ancient wooden building and a part of the outdoor display in the park, can be viewed from the hall of the museum building. Next to the museum building is a multipurpose activity area which is the entrance to the City Observation Tower. The twisted shape of the lotus stem is applied to the architectural style which leads to the base of the tower that is rounded like lotus petals arranged in the shape of a royal lotus. The copper-colored aluminum composite is used to cover the steel structure that is the building's weight bearing core, which is durable and can change the color of the surface according to the intensity of the sunlight at different times. IGU insulated glass that can withstand high winds is used to reduce heat transfer and conserve energy. In addition, Air Purification Tower System is integrated into the Rangsit City Observatory Tower to help improve air quality, covering a radius of approximately 1 square kilometer around the tower. Therefore, this observatory tower is an important landmark to convey the story of Pathum Thani at present and in the future as well as a lung for people in Rangsit area as well.





Objectives:

- 1. To participate in the national contest program to develop academic and professional skills
- 2. To design the project that specifies objects as a landmark of a large and important area in the history of Pathum Thani Province as well as a new tourist attraction of the country
- 3. To develop design concepts that meet national needs which is an upcoming construction project

### Methodology:

Architectural design process has been applied to the work for the contest by showing the concept. However, the design development for the actual construction has not yet proceeded, which will be carried out after this current stage. The working process at this stage consists of:

- 1. Study the requirements of the contest and listen to the information from Rangsit City Municipality as well as get additional information to synthesize detailed information for the design guidelines.
- 2. Study the area by surveying the actual area to analyze the scenery data both inside and outside the project
- 3. Study both domestic and international case studies

- 4. Determine the project programming by specifying the areas in the project according to the requirements and add more designing ideas to create a national landmark project
- 5. Design an architectural work based on the project objectives and use the architectural design process, starting from the survey of the actual area and the area plan of the municipality to create a contextual plan of the project; the disassembly and application of the royal lotus pattern, the symbol of Pathum Thani, into geometric shapes to design the area layout; and the creation of the spatial interactions through the curves of the lotus petals. These are the main concepts of the design as well as the architectural work for the whole project.

#### Techniques and Materials:

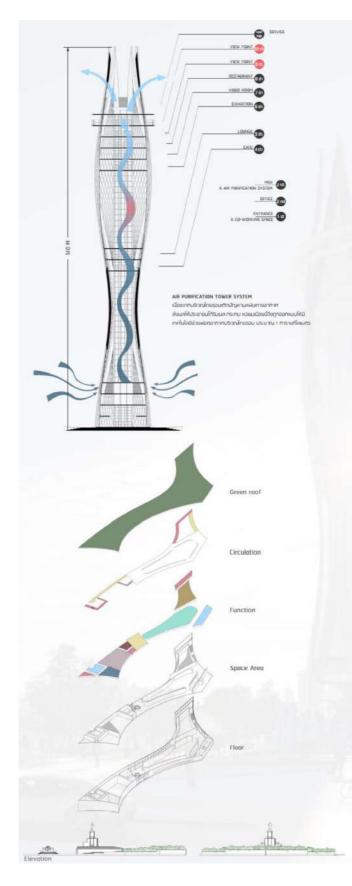
Design with architectural design process knowledge, 2D plans, and 3D simulations to analyze the potential perspectives, both from within the project area and from the outside into the project area, as well as analyze the free space and the relationship between the buildings within the project area and make animations to depict the atmosphere of future projects.





#### Conclusion:

Detailed analysis of the project objectives and interpretation of the actual needs of the contest requirements are required for working in this contest. The histories of Pathum Thani Province, Rangsit Prayoonsak Canal excavation, and His Majesty King Chulalongkorn the Great who intended to excavate the canal to develop Thanyaburi - Thung Luang Rangsit area have been studied, analyzed, and synthesized to determine design guidelines that affect changes in space utilization. Students, with the supervision of the lecturers, won this contest and received a prize of 200,000 baht as well as worked with Rangsit City Municipality in order to develop the design for the future construction of Rangsit City Municipality. Regarding the work process, the coordination between Rangsit City Municipality and the team faced some difficulties related to the appointment time for the presentations. The issue was solved by submitting and arranging additional online meetings.





MATERIA รัสตุที่เลือกใช้เป็นหลักของหอชมเนื่องเป็นวัสดุ ออูปีเมียม สี COPPER เงา ซึ่งกวาม พิเศษ ของสีปีกือ เชื่อกระทบทีมเสขในบางช่วงเวลา จะส่งผลให้ตว วัสตุมีการสะก้อนให้เราได้รับรู้กังสีก็เยกต่างกันออกไปตามสภาพเวกล้อมที่กัด ชิ้นในแต่ละวันและเวลา

**กระจก** ที่ใช้เป็นกระจกนิรทีย ลามิเนต ทักแสง สีเซียว เนื่องจากทนต่อแรงตันลมในพื้นที่สูง เละ ช่วยลดความร้อน ทีมแสง ปV ให้ทีมผู้คนกายใน อาการ





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