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REVIVING THE DESIGN OF AL-GHAZALI WALK AND COURTYARD AT IIUM

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ABSTRACT

The main goal of this project is to create a design that can fulfil the requirements of the project objectives. This project aims to redesign the International Islamic University Malaysia, Sultan Haji Ahmad Shah (IIUM, SHAS) Mosque's lower floor courtyard and the road along the Al-Ghazali Walk. The selected concept for this project is 'Iqtisad of Diversity', which means to create a harmony of diversity in terms of the built environment and cultures found in IIUM. The idea was to elaborate on the concept of Imam Al-Ghazali in the design.

Keywords: Grand Archway, Courtyard, Islamic Garden, Al Ghazali Walk *Corresponding author: affah@iium.edu.my



INTRODUCTION

The project site is located at the International Islamic University Malaysia (IIUM) Gombak campus. The purpose of this project is to propose a new design for the Al-Ghazali Walk and the lower courtyard of the SHAS Mosque. The designed area starts from the entrance of the Al-Ghazali Walk towards the end of the second boom gate of the road. The design incorporated the fundamental background and history of both IIUM and Imam Al-Ghazali himself.





LITERATURE STUDIES

1. AL-GHAZALI

Background and History

- His full name was Abu Hamid Muhammad bin Muhammad al-Tusi al-Ghazali
- A Muslim scholar, law specialist, rationalist, and spiritualist of Persian descent.
- Studied with al-Juwaini, ahl fiqh, and a professor of Madrasah Nizamiyah.
- Passed away in Tus

Characteristics

- One of the most prominent and influential philosophers, theologians, jurists, and mystics of Sunni Islam.
- Al-Ghazali considered himself to be the Mujaddid of his age



Figure 1: Imam Al-Ghazali



Figure 2: Example of Flooding occurrence

2. FLOOD

Floods are overflows of water that submerge typically dry land areas. Floods that originate from oceans, seas, lakes or rivers can cause damage to homes, businesses, and infrastructure and cause human casualties.

Impacts of flood:

- **Direct impacts** include structural and property damage caused by the impact of flood waters, erosion, or submersion.

- **Indirect damages** include loss of livestock; a decline in economic activities, tourism, restricted access to food and critical supplies; disruption of transportation systems, long-term economic impacts, and exposure to diseases.

3. DRAINAGE SYSTEM

i. Surface Drainage

Surface drainage is the system used to remove excess water from the surface of land or road by improving natural channels or constructed drains (ICID, 2012). This system is classified as a Regular Surface Drainage System and a Controlled Surface Drainage System. The regular surface drainage systems will start functioning as soon as there is an excess of rainfall, as it operates entirely by gravity.

Surface Drainage in Suburban Area

Bioswale / Swale Drain

Swale drains help to slow and control water runoff that occurs outdoors. They prevent any water from flooding or eroding the surrounding soil and keep storm drains from being overwhelmed by a sudden high volume of water.

Trench drains intercept the flow of water runoff over vast expanses of ground. They take the water from the floor

surface and through the channel, where it reaches a

ii. Subsurface Drainage

final drainage point.



Figure 3: Bioswale/Swale drainage



Figure 4: Trench drain

Subsurface drains are placed beneath the top layer of soil to remove excess water at the root level. Subsurface drains require the digging of deep ditches and the installation of underground pipes. A large collector drain installed to collect water from these pipes.

Point Drain

Trench Drain

Point drain requires the floor surface to be sloped in the direction of the drain. It collects water from a single point or gully, commonly found in the middle of a shower.



Figure 5: Point Drainage

PRECEDENT STUDIES

1.0 Courtyard Design Inspiration: Yin-Yang Shaped Panda House



Figure 6: Yin-Yang Shaped Panda House



Location: Copenhagen Zoo, Denmark.

Typology: Multi Level outdoor facility.

Area: 4,950 m²

Architect: BIG - Bjarke Ingels Group.

The Panda House is formed from its residents' solitary nature and immediate surroundings, including the central square, the Nordic area, the monkey house, and an elephant house (Crook, 2019).

Location: Shanghai

Typology: Facade

Area: 420,000m²

Architect: Foster +Partners

Figure 7: Panda House from below

2.0 Façade Design Inspiration: Fosun Foundation Arts Centre



Figure 8: Fosun Foundation building



Figure 9: The building's overlayed facade design

Inspired by traditional Chinese theatres, the 3-storey building features a curtain-like facade of bronze tubes which hang in three layers, creating semi-transparent screens in front of windows and balconies (Castro, 2017). The building contains exhibition and events halls.

CONCEPT

"IQTISAD OF DIVERSITY"

The conceptual idea aims to design a structure for the IIUM community that simplifies lives by sharing resources and minimising environmental impact. Users from many ranges of ethnic backgrounds and social classes will come together to gather and play in harmony to achieve the delicate balance between functional and spiritual elements. It is also an opportunity for them to interact with one another from within and outside the community.

The concept from the built environment perspective

A sense of social responsibility towards IIUM's surroundings and ecosystem through the selection of building materials in design. The implications of physical purity, how to attain it, and what impurities formed through the natural elements in the built environment.

DEVELOPMENT CONCEPT

IQTISAD

DIVERSITY

A harmony created through the point of intersection gives stability to the soul and benefits IIUM communities. The existence of a variety of cultural or ethnic groups within a society.

Concept Objective

Al Ghazali Walk and courtyard should indicate the feeling of cultural harmony through a repetitive pattern of façade that could ease its users' mindfulness through the international element that includes nature and culture.



Create an axial organization of the Ghazali Walk that intersects with the Masjid 's courtyard.

Elevating 3000 mm from the ground to maximize the best views for users to reflect on the IIUM community.

Defining possible entrances and pathways from the main traffic to connect with other spatial divisions.



Excavating the courtyard on genius loci to allow more privacy for robustness and integration of spaces.

DESIGN COMPONENT

AL-GHAZALI WALK

The Al-Ghazali Walk designed by Bina Qarar has proposed a wellraised bridge design for the road. It gives two options for the pedestrian to walk at the bottom of the bridge or on the bridge. Walking on the bridge will lead them to the exhibition, whilst the bottom of the bridge leads them to the food stalls.

- BAZAAR







Figure 10: Bazaar Area underneath the exhibition area

COURTYARD

The courtyard is designed to meet and unite people from many pathways. Its centered and centralised design functions to attract people from many other places to one place (Lucchese, 2014). The area of the courtyard has different levels, which are the lower ground level, ground level and a higher level that stands between the bridges from the road and the center.



Figure 12: Multilevel courtyard

SEATING AREA

- EXHIBITION









Figure 11: Exhibition area



Figure 13: Seating area

DESIGN COMPONENT

DETAILING

- PATTERNS

The Islamic geometric pattern synchronised the new design of Al-Ghazali Walk with the surrounding architecture.

- FURNITURE

The selection of furniture and the structures designed by the architects are synchronised. The most prominent element of the structures is the wavy and circular design that were harmonized into the furniture design.

- LIGHTING

The most prominent lighting is LED fixtures inspired by Zaha Hadid's famous lighting style, such as "luminous fluidity". The concept is basically for the LED lights to follow the shape of the architectural structures.

- MATERIALS

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- Concrete Bamboo
- Timber Acrylic sheet
- Steel
- Glass

LANDSCAPE

- SOFTSCAPE





SPECIAL STUDIES

- WATER FILTER SYSTEM

The system will provide water quality treatment for the water runoff by going through several physical, biological and chemical unit processes. The treated water can be used for other needed systems in the project area or even for a drink.



Figure 15: Water filter system

- ERGONOMICS

Ergonomics is the process of designing or arranging workplaces, products and systems to fit the people who use them. Ergonomics aims to improve workspaces and environments to minimise the risk of injury or harm.



Figure 16: Ergonomic in areas of the project

CONCLUSION

The proposed project was to redesign the lower level courtyard of the IIUM SHAS Mosque and the Al-Ghazali Walk. The proposal is to create an atmosphere that could attract students and visitors to explore and learn more about the community life at IIUM, its history, the culture and traditions of the students and staff of IIUM, and to understand more about Imam Al-Ghazali himself. To achieve this goal, the Bina Qarar members of group 5 have translated the newly-proposed design of the courtyard and the Al-Ghazali Walk that could create a new type of ambience and environment within the area.

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