09

REVIVING SOULS: ENHANCING LAMAN KAED AS COMMUNAL PUBLIC SPACES IN UNIVERSITY

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ABSTRACT

The project aims to revive and revitalize Laman KAED at the Kulliyyah of Architecture and Environmental Design (KAED), International Islamic University Malaysia (IIUM), transforming it into a vibrant hub that promotes interaction, creativity, and spiritual grounding. Bayu Bentala Corporation envisions this space as a reflection of KAED's identity, embodying the harmony between nature, humanity, and divine principles while supporting academic and social development. The design emphasizes inclusivity, sustainability, and Shariah compliance. Proposed innovations include paved walkways for improved circulation, kiosks as income generating elements for KAED, and a stage to foster engagement between lecturers and students. Together, these interventions seek to create a multifunctional, aesthetically pleasing, and meaningful environment. Finally, this initiative aspires to establish Laman KAED as an iconic landmark that represents the Kulliyyah's architectural excellence while nurturing a sense of belonging and community.

Keywords: Laman KAED, Social Development, Interaction, Sustainability, Shariah Compliance
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INTRODUCTION

Aesthetic and vibrant gathering spaces are vital for students as they foster interaction, creativity, and a sense of belonging while supporting mental well-being and academic engagement. Efficient use of space ensures inclusivity and sustainability, with multi-purpose areas accommodating diverse activities in line with Shariah compliance. In this context, KAED aims to transform the existing Laman KAED into a sustainable landscape that reflects its architectural identity and values by harmonising nature, humanity, and divine principles. As illustrated in Figure 1 the proposed interventions such as paved walkways, kiosks as income-generating elements, and a stage for lecturer–student interaction will enhance circulation, encourage community participation, and establish the courtyard as a multifunctional hub that supports both academic excellence and social development.

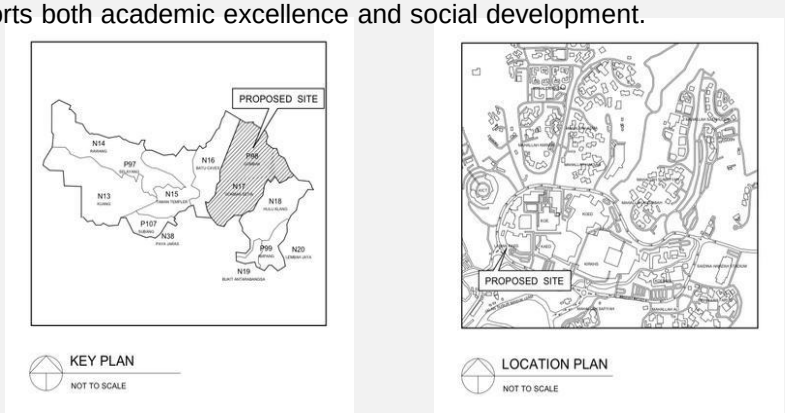

Figure 1: Key and Location Plan
(Source: Authors, 2025)

METHODOLOGY

Figure 2 shows the process undertaken to achieve the design project's objectives. The process began with a thorough literature review, followed by site analysis, precedent study and design concept. Followed by consultation sessions with the supervisor, the design was finalised. Finally, documented all processes and design in E-magazine and the multimedia presentation.

Figure 2: Research Methodology Chart
(Source: Authors, 2025)

LITERATURE REVIEW

PLACEMAKING AND THE ROLE OF COMMUNAL SPACES IN MALAYSIA

Recent studies show that well-designed communal spaces in Malaysia provide social, environmental, and psychological benefits when supported by sustainable planning. Tharim et al. (2023) highlight how biophilic strategies implemented in Malaysian green-rated office buildings improved user comfort and enhanced environmental resilience. Similarly, Manan, Artha, and Putri (2025) examined public perception of biophilic design in Kuala Lumpur high-rise buildings, finding that natural integration positively shaped how users engaged with urban communal environments. These findings reinforce that communal spaces, when embedded with ecological and cultural sensitivity, can foster vibrant interactions and long-term usability.

Figure 3: Dataran Merdeka's New Pedestrian Upgrades
(Source: My Kuala Lumpur Pass, 2024)

WELLBEING AND COGNITIVE BENEFITS OF BIOPHILIC CAMPUS SPACES

Recent research underscores how biophilic and restorative environments on campuses can significantly enhance wellbeing and cognitive function. Thani (2024) demonstrated that student engagement in biophilic landscapes fostered restorative experiences that improved focus and prolonged interaction with communal spaces. Similarly, Sakip (2024) highlighted that biophilic elements in university libraries not only enhanced cognitive performance but also contributed to stress reduction and greater academic productivity. Zamri (2025) further noted that such design interventions directly alleviate stress, depression, and anxiety, reinforcing the mental health value of natural integration in campus settings. Collectively, these findings suggest that embedding restorative and biophilic qualities into campus communal areas transforms them into living laboratories that support both academic excellence and holistic student wellbeing.

Figure 4: University of Malaya Rimba Ilmu Biophilic Communal Space
(Source: Hati NGO, 2025)

BIOPHILIC DESIGN AND STRATEGIES FOR REVIVING CONNECTION WITH NATURE

Biophilic design has gained momentum globally and locally as a way to strengthen user connection with nature while improving mental and physical health. Tekin et al. (2025) identified key gaps and emerging trends in biophilic design research, noting its capacity to restore psychological wellbeing and enhance built environment sustainability. Khan (2025) further emphasized that integrating elements such as greenery, daylight, and natural ventilation fosters human sensory comfort and reduces stress. In the Malaysian context, Zahir (2024) explored how biophilic architectural features in Geoffrey Bawa's works reshaped spatial perception, reinforcing the relevance of culturally rooted nature–architecture integration. Together, these studies show that reconnecting architecture with nature enhances healing, restoration, and environmental performance.

Figure 5: Biophilic Design Integration
(Source: Bonaiuto et al., 2025)

MANAGEMENT CHALLENGES IN REVITALISING PUBLIC COMMUNAL SPACE

While communal spaces offer multiple benefits, their quality is often undermined by governance and maintenance gaps. Zamri (2025) emphasizes that under-maintained environments exacerbate stress, anxiety, and reduced wellbeing, particularly in dense urban settings. Likewise, Syafinaz and Md Sidik (2025) argue that Malaysian urban public spaces need structured biophilic interventions and stronger community involvement to overcome issues such as poor upkeep, limited coordination, and declining user participation. Collectively, these findings suggest that addressing management challenges through co-management and nature-based strategies can ensure sustained engagement.

Figure 6: Abandoned Skatepark in a Malaysian Forest
(Source: Publicly documented, Selangor, 2025)

PRECEDENT STUDIES AND CASE STUDIES

CROSSRAIL PLACE ROOF GARDEN, CANARY WHARF, LONDON, UNITED KINGDOM

Figure 7: Crossrail Place Roof Garden
(Source: Google)

Figure 8: Crossrail Place Roof Garden's Multifunctional Green Roof Strategy
(Source: Google)

Located above the Crossrail station in Canary Wharf, the Crossrail Place Roof Garden is an innovative green space that fuses nature and architecture. Designed by Foster + Partners and Gillespies, the garden is enclosed in a striking timber lattice roof, creating a sheltered environment that supports a unique blend of Eastern and Western plant species, which reflect the site's location on the Prime Meridian line. The space is more than just a garden, it includes seating areas, performance spaces, and winding walkways that invite exploration. It's a peaceful sanctuary in one of London's busiest financial districts, offering both commuters and visitors a refreshing pause amidst the urban rush.

GARDEN OF COSMIC SPECULATION, DUMFRIESSHIRE, SCOTLAND

Figure 9: Garden of Cosmic Speculation's Landscape
(Source: Google)

Figure 10: Garden of Cosmic Speculatio's Curves Design
(Source: Google)

The Garden of Cosmic Speculation, created by landscape architect and theorist Charles Jencks, is a remarkable private garden that integrates science, philosophy, and art into its landscape design. Spanning over 30 acres, it features a range of imaginative sculptures, geometrically designed earthworks, fractals, black holes, and DNA-inspired elements, that each representing concepts from the universe and human understanding of space and time. The garden's flowing curves and mathematical symmetry are not only visually stunning but also intellectually stimulating. Though only open to the public one day a year, it has become globally renowned as one of the most thought-provoking gardens in the world.

TRX CITYPARK, KUALA LUMPUR, MALAYSIA

Figure 11: TRX Citypark Garden
(Source: Google)

Figure 12: TRX Citypark – Birdview
(Source: Google)

TRX City Park is a landmark public park located at the heart of Kuala Lumpur's new international financial district, the Tun Razak Exchange. Spanning 10 acres, the elevated park was designed to seamlessly integrate green spaces with the urban skyline. It offers wide open lawns, tree-lined promenades, shaded rest areas, and sustainable rainwater management systems. The landscape incorporates local flora and eco-friendly materials, creating an inviting space for both leisure and community activities. Surrounded by iconic skyscrapers, the park functions as the "green lung" of the city, enhancing the quality of life and urban biodiversity while promoting healthy, outdoor living in the city center.

TAMAN TASIK TITIWANGSA, SELANGOR, MALAYSIA

Figure 13: Taman Tasik Titwangsa's Reflective Water
(Source: Authors, 2025)

Figure 14: Taman Tasik Titiwangsa's Jogging Paths
(Source: Authors, 2025)

Taman Tasik Titiwangsa is one of Kuala Lumpur's most iconic recreational parks, offering a serene escape in the middle of the bustling capital. Centered around a scenic lake with views of the KL skyline, the park covers over 95 hectares and features lush green landscapes, cycling and jogging paths, water activity zones, children's playgrounds, and reflective water bodies. A recent revitalization project introduced modern features such as interactive water fountains, dedicated sports areas, and improved accessibility, making it even more family-friendly and inclusive. The park is a cherished green space where residents and tourists alike gather for exercise, picnics, or simply to enjoy nature within the urban environment.

SITE ANALYSIS

Laman KAED is an open communal courtyard located within the Kulliyyah of Architecture and Environmental Design (KAED) at the International Islamic University Malaysia, Gombak Campus. Its strategic location positions it as a key transitional node for students and staff. Pedestrian movement remains constant throughout the day. The physical characteristics of the site reveal a gently sloping terrain with a mix of hardscaped walkways and soft landscape elements such as lawns and scattered trees. While this open layout allows for flexibility of use, the space currently lacks defined programmatic functions that would strengthen its role as an active communal hub within the kulliyyah.

Figure 15: Laman KAED's Entrance

Figure 16: Students Activity at Pavillion at Laman Kaed

In terms of climate, the location is representative of the usual tropical climate of Malaysia, where high temperatures, high humidity, and a lot of rain affect outdoor comfort. Laman KAED's openness permits a certain amount of natural ventilation, but the lack of flora and shade structures leads to extended exposure to sunshine and precipitation, discouraging extended occupation. Although they partially shade the adjacent buildings, some of them also block cross-ventilation. These environmental considerations emphasize how crucial it is to incorporate sustainable design elements, such tree planting, water-sensitive landscaping, and covered pavilions, to enhance the site's microclimatic resilience and comfort.

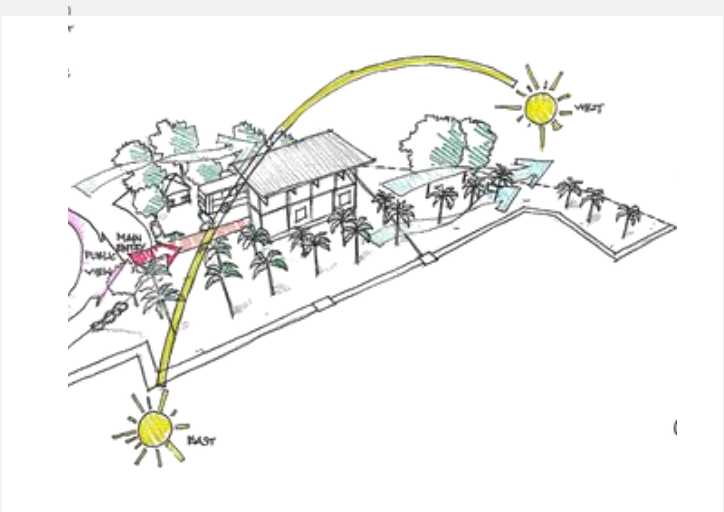

Figure 17: Sun Path Study of Laman KAED
(Source: Authors, 2025)

In terms of usage and potential, Laman KAED is primarily employed as a spillover area for informal discussions, student activities, and circulation, yet its spatial and environmental qualities suggest broader opportunities. A comprehensive site analysis indicates that the space could be transformed into a dynamic micro-community hub by addressing current weaknesses, such as limited seating, shading, and functional diversity. Through careful planning and design, the site may evolve into a living laboratory for sustainability and creativity, aligning with KAED's academic vision while enhancing the overall student experience. This positions Laman KAED not only as a transitional courtyard but as an integral element of the Kulliyyah's identity, contributing to IIUM's aspiration of holistic, sustainable, and experiential learning environments.

Figure 18: Laman KAED's Seatings
(Source: Authors, 2025)

Figure 19: Laman KAED's Decking
(Source: Authors, 2025)

SWOT ANALYSIS

Table 1: SWOT Analysis

Categories	Description
Strength	The site has a natural gradient terrain suitable for landscaping, allowing ease of pedestrian movement.
Weakness	Current cultural uses are scattered with no structured events to consistently highlight KAED culture.
Opportunity	The site's rich plant biodiversity and calming environment can create an educational nature park.
Threat	The nearby drainage, while currently not a problem, could produce odours if maintenance declines during certain weather conditions.

DESIGN CONCEPT

REVIVING SOULS

The concept of Reviving Souls reimagines Laman KAED as a lively and sustainable space that transforms an underutilized site into a hub for learning, creativity, and community engagement. Rooted in the idea of renewal, this concept emphasizes reinstating the space's fundamental functions such as facilitating interaction, nurturing creativity, and supporting academic and social learning. It seeks to reconnect people with the site, restore its memory and social value, and harmonize the presence of nature within the KAED environment.

The design objectives highlight reconnecting users through layered spatial experiences, generating a sustainable source of income for KAED, and restoring the space's functionality for daily usability. To achieve this, the spatial strategy focuses on revival through temporal adaptability, where multifunctional structures cater to diverse activities; regenerative elements, such as a rainwater-fed greenhouse, ensure ecological resilience; and material transformation turns raw, unused surfaces into inviting and functional platforms.

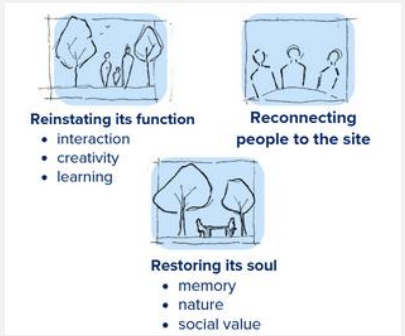

Figure 20: Core Ideas
(Source: Authors, 2025)

Figure 21: Design Objectives
(Source: Authors, 2025)

Stylistically, the project adopts an industrial-biophilic approach, integrating exposed structural elements with natural features. Passive water systems, strategic planting, and structural integration embody a design language that bridges human activity and environmental awareness. These interventions allow the site to evolve as both a practical and symbolic place of gathering, grounded in Islamic values. The essence of Revive resonates with the verse from Surah Al-Baqarah (2:261) emphasizes the concept's spirit of growth, generosity, and multiplication of benefits, where a modest intervention blossoms into manifold outcomes that is academic excellence, community strength, and spiritual enrichment.

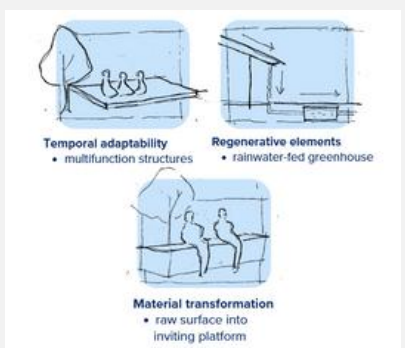

Figure 22: Spatial Strategy as Revival
(Source: Authors, 2025)

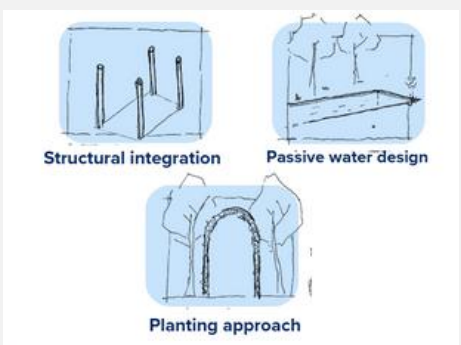

Figure 23: Industrial Biophilic Styling
(Source: Authors, 2025)

DESIGN DEVELOPMENT

1) ZONING AND BUBBLE DIAGRAM

The zoning divides the site into the pocket garden, multipurpose area, commercial zone, and parking for clear functional separation. Each zone is placed to maximize accessibility and minimize conflict between uses. The bubble diagram develops this further by adding activity nodes such as seating, kiosks, bicycle parking, and water features. All nodes are connected with clear circulation routes to create a smooth and engaging user flow.

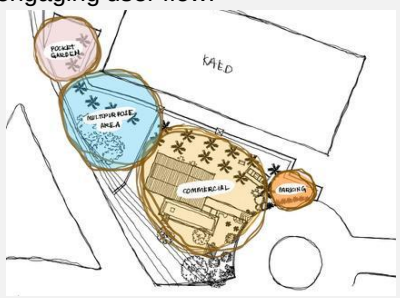

Figure 24: Laman KAED's Zoning
(Source: Authors, 2025)

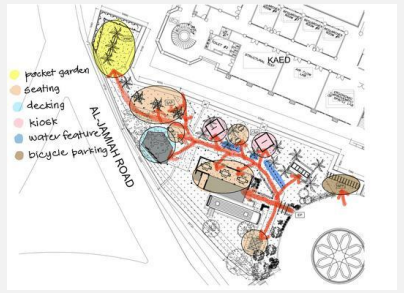

Figure 25: Laman KAED's Bubble Diagram
(Source: Authors, 2025)

2) GRIDLINE AND SPACE PLANNING

A gridline system is introduced to provide structure and proportion to the layout. It organizes pathways, seating, and kiosks into a balanced rhythm across the site. Space planning ensures the multipurpose area remains central with other functions arranged around it. This stage creates a practical and flexible plan that can adapt to different activities.

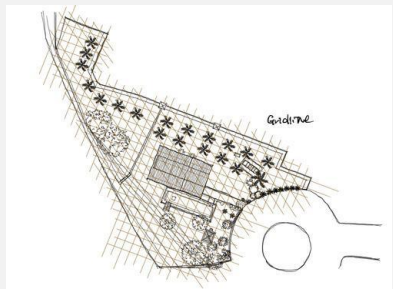

Figure 26: Laman KAED's Gridline
(Source: Authors, 2025)

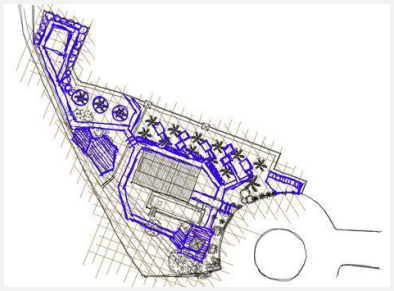

Figure 27: Laman KAED's Space Planning
(Source: Authors, 2025)

3) FINAL DESIGN

The final design combines zoning, bubble diagrams, and gridlines into a cohesive layout. Circulation is clear and connects the entrance, commercial spaces, multipurpose hub, and pocket garden seamlessly. Landscape and water features are distributed to create comfort, harmony, and visual interest. The result is a sustainable and inclusive design that supports both daily use and community events.

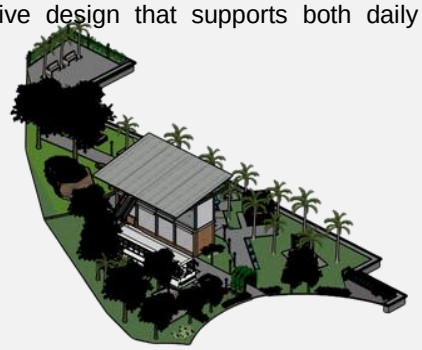

Figure 28: Laman KAED's Final Design
(Source: Authors, 2025)

8.0 DESIGN FINALISATION

This concept of Reviving Souls in these student spaces revolves around fostering a collaborative and inspiring environment where ideas can thrive. These spaces are intentionally designed to cater to various activities that support idea generation, such as self-study, group discussions, and moments of rest. Additionally, they allow students to engage with and appreciate the work of others, further fueling creativity. By accommodating diverse interests and needs, the spaces create a dynamic ecosystem that encourages students to connect with ideas and each other, ultimately enhancing their academic and personal growth.

Figure 29: Exterior perspective of Laman Kaed

Figure 30: Exterior perspective of Laman Kaed

Figure 31: Exterior perspective of Laman Kaed

Figure 32: View of Kiosks at Commercial Area

Figure 33: View of Stage at Multipurpose Area

Figure 34; View of Seating at Multipurpose Area

Figure 35: View of Pocket Garden

Figure 36: View of Arches at Entrance

Figure 37: Bird's-eye perspective view

Figure 29 to 37 shows the perspective views of the Laman KAED
(Source: Author)

TECHNICAL DRAWINGS

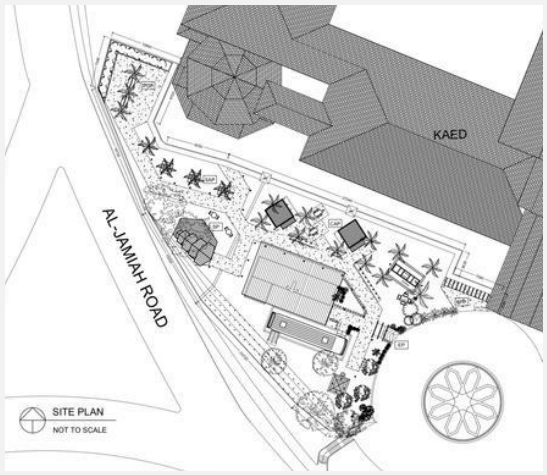

Figure 38 : Site Plan

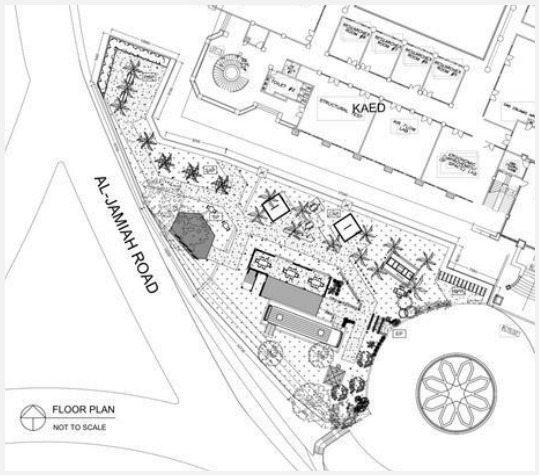

Figure 39 : Floor Plan

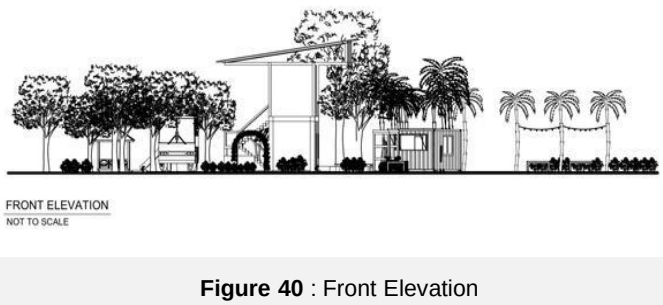

Figure 40 : Front Elevation

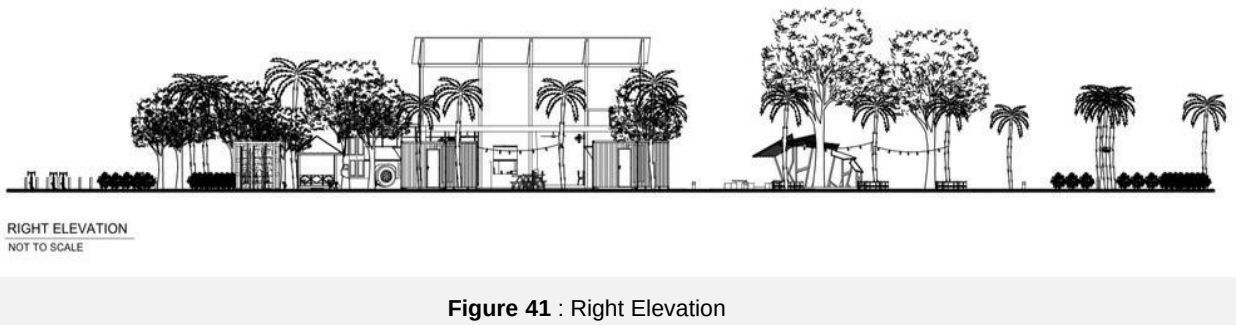

Figure 41 : Right Elevation

Figure 42 : Rear Elevation

Figure 43 : Left Elevation

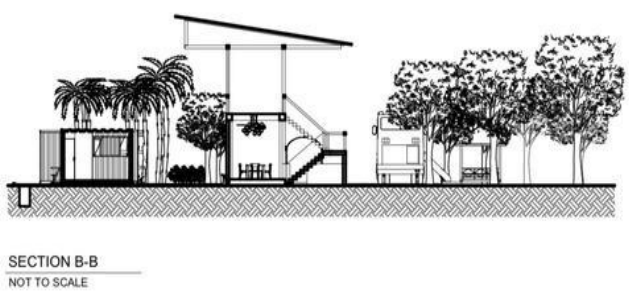

Figure 44 : Section B-B

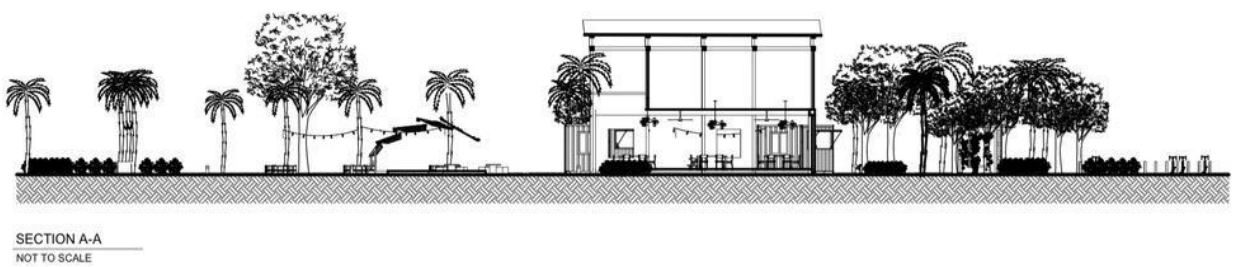

Figure 45 : Section A-A

Figure 38 to 45: The Rendered Drawings for Laman Kaed
(Source: Authors)

CONCLUSION

Revive redefines Laman KAED as a purposeful, dynamic, and sustainable space that restores both the physical and symbolic value of the site. Rooted in principles of renewal and community, it harmonizes ecological resilience with academic and social engagement. By integrating passive systems, multifunctional structures, and biophilic design, the space evolves into a living environment that adapts to changing needs while nurturing creativity, interaction, and well-being. Anchored in Islamic values and inspired by the spirit of growth from Surah Al-Baqarah (2:261), Revive aspires to multiply its benefits academically, socially, and spiritually, creating a long-lasting impact on the KAED community and beyond.

ACKNOWLEDGEMENT

This project has been a transformative experience for the members of Group 5, Bayu Bentala Corp. We are eager to apply the insights we've gained and the relationships we've built in future projects, aiming to achieve outstanding results. We extend our sincere appreciation to the lecturers of BAQS 2300 Integrated Multi-Disciplinary Project, 2025, at the Kulliyyah of Architecture and Environmental Design (KAED), IIUM, for their continuous guidance, constructive feedback, and encouragement throughout the process, and to all other contributing parties and institutions for their significant role in making this project a success.

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	ASSOCIATE PROFESSOR IR. DR. MOHD. FAIRULLAZI AYOB
	ASSISTANT PROFESSOR SR DR. ROZIHA CHE HARON
ARCHITECTURE	PROFESSOR DATO' SRI AR. DR. ASIAH ABDUL RAHIM
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	ASSISTANT PROFESSOR DR. SITI NOORFAIRUS CHE ABDULLAH
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Table 2: Lecturers' list

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3	ADRIANA ADAWIYAH BINTI ACHDIYAT	2313504	ARCH
4	MUHAMMAD ALIF BIN MOHD HISHAM	2313569	ARCH
5	NURUL AINA BINTI ABDULLAH	2313608	ARCH
6	NIK RUWAIDAH BINTI NIK MOHD NIZAM	2313640	ARCH
7	AMIR FAIZ BIN AHMAD FADZIL SUMBANDY	2311765	AQS
8	MUHAMMAD HAFAZLIE BIN HASAN	2311791	AQS
9	WAN ALIYA NADZIFAH BINTI WAN KAMARUZAMAN	2311984	AQS
10	DEWI NAF'AN QUZANDRIA BINTI KAMAL	2312028	AQS
11	AYSHA BINTI MUSTAFA	2312092	AQS
12	HASYA DINA BINTI NUZRA EFENDI	2312146	AQS
13	SITI HAJAR IRIS BINTI SAHID	2312602	AQS
14	ILHAM TSAQIEF BIN SANUSI	2214801	AAD
15	DAMIA BATRISYIA BINTI MOHD RAFI	2215098	AAD
16	MUHAMMAD AMIR NASRULLAH BIN ZABIDI	2215407	AAD
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Table 3: Students' list

REFERENCES

Khan, R. A. J. (2025). Building for human experiences: An in-depth exploration of biophilic design outcomes. Journal of Urban Design & Architecture. https://www.sciencedirect.com/science/article/pii/S2352710225007302

Manan, A. M. A., Artha, P. P. D. N., & Anasta Putri, N. P. R. (2025). Impact of implementing biophilic design principles in high-rise buildings in Kuala Lumpur, Malaysia, on public perception. Malaysia Architectural Journal, 7(6), 161–174. https://www.majournal.my/index.php/maj/article/download/290/180/538

Quran.com. (2024). Surah Al-Baqarah [2:261]. https://quran.com/2/261

Saki, S. R. M. D. (2024). The impact of biophilic design on cognitive enhancement in university libraries. Planning Malaysia Journal. https://www.planningmalaysia.org/index.php/pmj/article/view/1648

Syafinaz, F., & Md Sidik, S. I. (2025). Biophilic design in Malaysian urban spaces: Strategies for incorporating local nature elements into indoor environments in cities. In Proceedings of the International Conference on Urban Planning & Architectural Design for Sustainable Development. https://www.researchgate.net/publication/376042871

Tekin, B. H., Izmir Tunahan, G., Disci, Z. N., & Ozer, H. S. (2025). Biophilic design in the built environment: Trends, gaps, and future directions. Buildings, 15(14), 2516. https://doi.org/10.3390/buildings15142516

Thani, S. (2024). Exploring the restorative spaces of biophilic landscapes in campus design. Malaysian Journal of Sustainable Environment, 11(1), 23–41. https://journal.uitm.edu.my/ojs/index.php/MySE/article/view/1666

Tharim, A. H. A., Idris, S. N., Saraf, M. H. M., Ahmad, A. C., Purwanto, E., Tafridj, I., Purisari, R., & Prasetio, T. (2023). Biophilic design strategies performance in Malaysian green-rated office buildings. International Journal of Academic Research in Business and Social Sciences, 13(4), 1343–1351. https://doi.org/10.6007/IJARBSS/v13-i4/16673

Zahir, A. Z. A. (2024). Biophilic architecture and spatial perception in Geoffrey Bawa's works. Malaysian Journal of Sustainable Environment. https://journal.uitm.edu.my/ojs/index.php/MySE/article/view/1616

Zamri, Z. (2025). The influences of biophilic design on mental health: Stress, depression, and anxiety. Arteks: Jurnal Teknik Arsitektur, 10(2), 295–308. https://journal.unwira.ac.id/index.php/ARTEKS/article/view/3574