INSTITUTE OF LANDSCAPE ARCHITECTS MALAYSIA (ILAM)

MALAYSIA & REGIONAL LANDSCAPE ARCHITECTURE INDUSTRY UPDATES

FEATURE 5 Nature As Designer PORTFOLIO Ceylonz George Town Esplanade Waste to Wealth PERSONALITY YossaponBoonsom LAr. Zainul Hakim Mohd. Zain Published By:

INSTITUTE OF LANDSCAPE ARCHITECTS MALAYSIA (ILAM)

LAND. SCAPE.

MALAYSIA & REGIONAL LANDSCAPE ARCHITECTURE INDUSTRY UPDATES

EDITORIAL BOARD

CHIEF EDITOR

Asst. Prof. LAr. Gs. Dr. Norhanis Diyana Nizarudin

CONTRIBUTING EDITORS

LAr. Fadzilah Omar (Portfolio)

Asst. Prof. LAr. Dr. Jasasikin Ab Sani (Research and Education)

LAr. Dr. Mohd. Sallehuddin Mat Noor

(Technology and Construction)

Asst. Prof. LAr. Gs. Dr. Norhanis Diyana Nizarudin /

LAr. Charles Teo (Personality)

COPYWRITERS

Asst. Prof. LAr. Gs. Dr. Norhanis Diyana Nizarudin

DESIGNER

Design218 / www.design218.asia

PRINTED BY

Emulate Digital Technology

SPECIAL THANKS / PHOTO CREDIT

LAr. Zainul Hakim Mohd. Zain Yossapon Boonsom / Shma Thailand Landart Design Sdn Bhd Permata Green Sdn Bhd

PUBLISHED BY

Institute of Landscape Architects Malaysia (ILAM) 1-10-3, Presint ALAMI, Pusat Perniagaan Worldwide 2, Persiaran Akuatik, Seksyen 13, 40100, Shah Alam, Selangor, Malaysia. Enquiries:

T:+(60)13-2020 827 / +(60)3-5523 4638

E: land.scape.ilam@gmail.com

KDN No: PP16609/06/2013(033008)

ISSN: 2180-0944



ON THE COVER

Urban and Nature-Based Solutions

SkySanctuary Park is more than just an urban recreational space. Designed as a multifunctional area, it also serves as a stormwater retention system, helping to manage city flooding. Beyond that, it supports biodiversity by acting as an urban forest habitat, blending nature with modern city living to create a sustainable, resilient environment.

Photo Credit: SkyWorld Development Berhad

CONTENTS



08 EDITOR'S NOTE

The Rise of Nature-Based Solutions

LAr. Gs. Dr. Norhanis Diyana Nizarudin

FEATURE



10 Nature as Designer: The Magic of

Nature-Based Solutions

LAr. Gs. Dr. Norhanis Diyana Nizarudin

PERSONALITY



16 LAr. Zainul Hakim Mohd. Zain

LAr. Dr. Mustafa Kamal bin Mohd. Shariff



18 Yossapon Boonsom

LAr. Gs. Dr. Norhanis Diyana Nizarudin

PORTFOLIO



30 MLAA14 Showcase

Ceylonz Suite George Town Esplanade



38 Angkasanuri

A Bioswale-Infused Neighbourhood Park

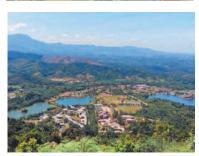
LAr. Mohammad Norfadzly Mohammad Sharif



40 Waste To Wealth

A Waste Management Project

LAr. Amirah Kezuwani



42Striking A Sustainable Balance

Through The Hulu Selangor Landscape Blueprint

LAr. Mohd Fadhil bin Mohd Lani

TECHNOLOGY



44 Tree Protection Legislative Provisions (TPLPS)

A Nature-Based Solution For Sustainable Construction

LAr. Dr. Nik Adlin Nik Mohamed Sukri

RESEARCH



48Green Design Strategies

Assoc. Prof. Ts. Dr. Izawati Tukiman



58Harnessing
Nature's Power

Assoc. Prof. Dr. Mohd Fairuz Shahidan



66 Eco-Inclusive Landscapes

Dr. Raziah Ahmad



70 Urban Green Spaces As a Nature-Based Design For The Mental Health Sustainability

Prof. LAr. Dr. Mohd. Ramzi Mohd. Hussain



74
Microalgae
and Sustainable
Landscape
Architecture

LAr. Noralizawati Mohamed





FROM VISION TO REALITY AN INTERVIEW WITH YOSSAPON BOONSOM

L: Hello Yossapon – it is great to have you for Land.Scape Magazine issue this time. You are well known as the founder of Shma, one of the leading landscape architecture firms in Thailand. As of the beginning, may you entice us what makes you profess landscape architecture?

Y: Thank you for inviting me for this interview. For me, being a landscape architect, I believe in creating positive impacts for the environment. Having said this, with all the resources that we have, we should aim at creating successful and impactful projects for everyone.

L: I love the phrase you used "creating positive impact for a better environment" - which is we are 'glocally' heading towards that, not only for the environment but also for society. How long have you been with Shma Thailand?

Y: I established the firm in 2007 - so this year, it's the 17th year of our business.

L: As the founding director of Shma. vou have been through the high and low of the company for 17 years since the beginning. During the initial foundation of Shma, what were the initial mission and vision?

Y: We have been practising in the firm in Singapore – at that time, we realised the importance of the landscape architecture profession. Not only have we seen the good examples while we were working there, we also have seen how the city, the people and the use of nature as well. We've grown up in Bangkok, Thailand – we've seen a lot of challenges like environmental issues and dense populations. All of these issues have raised questions "As the city centre. how does it make our lives better?".

Also, with an incorporation through academics - when we studied, of course we've started to see this profession can play an important role. So, it is very clear that we would like to establish the firm to be the 'changemaker' and to be part of the solutions to society. In the beginning, we believe that landscape architecture is not only about creating the physical spaces, but also to create impacts to the social and people's behaviour at the same time. It is about engaging with the people - how we can listen to the people and how we are gonna combine nature and people behaviours together. This is our goal.

One thing, we also realised that we've done so much work to serve the commercial projects - kind of capitalism. If the public realm is kind of lacking, then how should we use our knowledge to improve the public realm? It is clear that we would like to use our knowledge to benefit all segments for all our projects.

L: It's very interesting that the goal of Shma is to ensure 'it benefits everyone' throughout all your projects. With that, if you may enlighten us at Land. Scape Magazine, the Shma Thailand's recent projects specifically on 'Nature-Based Solution' (NBS). As you have mentioned, Thailand faces environmental challenges and so on, perhaps any specific project on that and how NBS have become the solution for those particular issues?

Y: I think in the beginning, the way we designed was not really using NBS that much as part of design. I think because of the market and clients that time did not look into that as the selling point. Even though we've tried to introduce how we're going to integrate nature to be solutions of the products. I think it takes time. It is simply because we've seen the real evidence – how bad the situation is. We've been facing lots of flood phenomena, the temperature is rising, the air pollution is getting worse. I think now that people are starting to understand, including clients also have started to understand that landscape

design can do more besides being beautiful. The plants can clear the air and water, play a variety of natural habitats which can benefit the better climate for external use. So. NBS have started to be part of our design.

However, the tricky part is - how are we going to put that to be the selling point and how not to compromise with the people's behaviour and to be sustained for a long time? It will pose the challenge to the designers to put all expectations in one project. As a designer, we need to know how we can push towards that and how far we can go. If I may recall, among the first projects were about incorporating greeneries into vertical spaces with climbers - to minimise the glare and to create cooling effect towards combating Urban Heat Island (UHI). We can't separate our boundaries; we need to integrate our works in the same territory. One thing we need to remember is "if we can't do it alone. we need the other consultants to accommodate us". For example, the engineers help to drain the waters, how to water the plants to survive at the vertical surfaces.

Recently, the project that we did was Jin Wellbeing, the senior living residence in the outskirts of Bangkok. We proposed to do the 'ditch and dike' concept - not to fill up the land totally. We provide this reservoir and clay to collect the rainwater. At the same time, it can also become a setting for the residents to enjoy watching the habitat growth. I think with the same amount of investment, it can benefit a lot - not only to manage the water but also to birds, insects and the surrounding. It is more evidence-based - in which after that project, we saw that "Oh, it can be done". Clients start to feel confident and start to realise that things can be complied.





L: Shma believes in providing evidence and track records in convincing the clients that the NBS approach is feasible to continue for the next projects. From that notion, it is nothing new when it comes to clients having expectations. How does Shma negotiate your design ideas to meet in the middle with the clients' demands and expectations, in this context?

Y: I think when we have proven records, especially lots of projects that we had in the past, we need to showcase not only the advantages of that, but also the disadvantages. For example, we need to put more maintenance on this, we need to do more monitoring and so on. I think we need to also put the clients' concerns on the proposal at the same time – could it be the cost issue or others? If we can collect those data and listen to the clients carefully, we can propose ideas that can be achievable for both sides – the mutual agreement.

L: The ecosystem will always go back to square one where the clients are humans, designers are humans, and the end users are humans. Are there any community projects done by Shma that use the NBS approach? Have you ever been on the ground meeting with the community – to conduct the needs analysis and start to propose your design based on the findings? Also, have you ever done any community follow-up upon the completion of the project – to know their level of acceptance?

Y: Most of our public projects are more on parks and sport facilities. With those kinds of projects, we need to start off with public consultation in the form of focus group discussions. It is the participatory process in making sure that we know the community's insights on the requirements and needed programme for us to customise the spaces. This is the way that we would like to engage them from the beginning – especially in initiating the programme or coding the design or even inviting them to be part of the implementation. In some of the projects, we also asked them to comment with the local government district. Along the way, the community will have the 'sense of belonging' as they are the ones who create the programmes, responsible to maintain and manage the spaces. But of course, some of the projects may face difficulties and challenges that may not succeed due to lack of funding, policy changes and more population is coming into the community – it is more dynamic.

We have carried out a project called The ParQ – we came out with a kind of process that involves public consultation. The project will be taken care of by the local district and the community. But along the way, there are many factors that will change the process.

L: It is interesting to know that because we know dealing with communities could also pose challenges especially when it comes to public projects. Have you encountered any of that in finding good outcomes for your inventory stage before the design proposal?

Y: There were many challenges, of course. I think first on finding the right programmes for the projects. We need to come up with different tools, events or interventions. Some of the interventions or methods might not work in some locations, so we need to adapt to each location. Another challenge is to find mutual agreement among the communities. Of course, we cannot please everyone. But we'll try to make sure that we have open dialogue with them, so that things can change and evolve better. I think it's more like a process – we need to keep everyone in the loop and find the stakeholders who are going to benefit from this development. If we can find the right stakeholders around the site, they will be the persons who will bond the sense of appreciation as they will be affected the most by this development. This will also help us to form a good outcome. However, the challenge to produce the outcome is to find the budget. The last challenge would be how to maintain the spaces and make sure it will last long. The physical space is not the final outcome - it is just a 'tool' to enable the community to live and have better wellbeing. Physical space can change - as long as you form the right process and find the right stakeholders, it will be a backbone for the project to sustain longer.

L: The right process, the right programmes, the right persons - I love these 3Ps that need to be set up or planned in the firsthand, so that things will be going on smoothly. I also love it when you said that physical space is just a manifestation where it can change dynamically in some ways. In terms of relating back to the NBS approach, how is awareness about this approach among the public in Thailand?

Y: I guess it is still limited to certain groups of people like the professionals, landscape architects and academics. I think it is simply because we still need to empower ourselves with this knowledge - what kind of NBS that we can do or what kind of technology that we should learn? And of course, how to evaluate the interventions that we do. I think even among the professionals, we are still not very familiar with the process. In the end, it goes back to the professionals or the designers to choose if they wanted to use it or not. Another reason it is not spread out to the society is perhaps due to the policy. The government authority does not set the NBS as the guideline to ensure that the developers will look into that. We lack proper regulation to support this idea. It is also lacking in terms of communication to raise awareness among the society. That is why we are still lacking on having projects of its kind that can be a showcase of examples to the public. The government sector should set the thought that the NBS projects need to be the 'mainstream' - if we can adopt NBS design throughout the city, I believe many could live healthier and longer.

L: It is great to know that the awareness is slowly crawling in throughout the cities and citizens of Thailand, of which I hope that is the same for our Malavsia nation building too. As to wrap your magnificent insights for us – since Shma has various success stories and projects, does Shma have any measurement tools to measure the impacts of your successful projects?

Y: We have yet to do that, but our goal this year is to set up the Shma Index - to ensure that we have a proper checklist on many aspects of assessment for that. We would like to use the index to evaluate what we have achieved and what kinds of impacts that our projects have produced. We need to know our success or failure rate. Otherwise. we will repeat the same mistakes for another development again and again. As a company, we need to obtain feedback with an open mind - otherwise, as a designer, we won't be able to improve our design. As for the index development, we can do it by ourselves. We will set up a research team that includes the academic side - they are the specialists, and we look forward to working together with the academics.

L: Wonderful! That is basically the helix ecosystem - we have the government, the industry, the academics and also the community to work together. I cannot wait to hear more about the Shma Index soon! Last but not least, if you could share with us your hope in seeing NBS' future in the landscape architecture field, not only in Thailand but South East Asia in general?

Y: We grew up in the environment where we go to shopping malls, mostly in the cities with concrete built-up or houses. In order to understand the NBS, we need to be in nature - to appreciate and connect with nature. I think this is important. The NBS will come naturally, and we can adopt it naturally and immerse it to the society by communicating with them and letting them experience it. Everything will become natural and become the norm

L: Thank you very much for spending your time with Land.Scape, Yossapon.



FOREST DISTRICT

LIVE, WORK, PLAY& BEHEALEDINTHE FOREST

THE PARQ

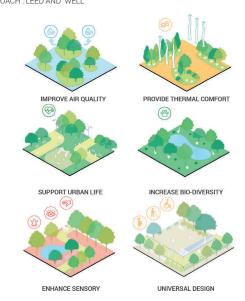
Situated in the unique location on Rama IV Road near Bangkok's major park, Benjakitti Park, THE PARQ is a new mixed-use project that aims to promote work-life balance for future lifestyle through innovative and sustainable designs aspiration to become the 'Forest District'. The landscape design concept is "The Continuity of Greenery", extending greenery from the nearby park onto the site. This allows for greenery to become a tool used to define different functions for employees and visitors, whilst also create a desirable microclimate and connect green corridors for the city on a larger scale.

The PARQ takes on the LEED Standard of Sustainability and Wellness living as the biggest challenge to the design. With sustainable energy resources embedded as chosen species of plants, construction materials that reduce reflection of heat, designing around the flow of natural light and wind direction, water management, and the reduction of the concrete surface around the building have improved the wellness living of visitors with beautiful scenery, suitable programs, and spatial designs. Altogether, this site has successfully become an ideal Privately Owned Public Space, also known in short as POPS, where it is both beneficial to landowners and surrounding community lifting not only the wellness quality of customers and employees but also shares this wellness to the neighborhood.

The forest starts with a mountainous space on the west ground area, forming series of landforms with a variety of dense plantations integrated with a rain garden where stormwater is retained and can be reused as a sustainable resource in the future. Here, visitors can sit and escape from the busy city of Bangkok for a while.



LIFE - WELL - BALANCE







The narrative of the forest leads to the main atrium space with a dry creek being a multifunctional gathering space for various activities. As the creek continues toward the main drop-off on the east, space becomes more open like a meadow. It is surrounded by gradient landforms and transplanted existing trees in the middle. During festive times, this drop-off plaza can hold a large number of people and be used for open-air events. Along the edge of the site, feature walls curving in and out between dense tall trees are designed to create a visual impact on the main road and forest settings comply with wellness living.

Stepping to the 3rd floor, the forest narrative is translated into a more humid and serene environment as a lagoon, a pleasant water feature surrounded by tropical and aquatic plants. The garden is aimed to be people's sanctuary, a hideaway space for daily relaxation away from stress. This area is an urban oasis, with a healthy environment from the sound of water, extreme green and shade, inspiration quotes on the floor, and outdoor air condition to accommodate the people's lifestyle, living, working, and other activities. During working hours, Employees can come out to take a rest, gather up, stroll around, or even hold some outdoor meetings. Moreover, there's also a small urban farm on the terrace, which uses sustainability to lifts the urban lifestyle.

Overall, with THE PARQ's lush living space, the landscape on the ground floor is designed to blend seamlessly with context, allowing pedestrian and bicycle traffic to flow into the site, while also conveniently connecting to the subway station. Regenerating the green environment into forests encourages people to use outdoor space for working, hanging out, and staying healthy. A new quality of urban life happening at THE PARQ.











JIN WELLBEING COUNTY



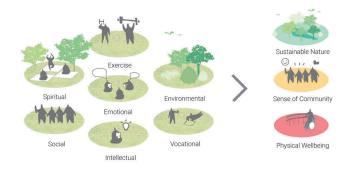
EXCELLENCE AWARD / LANDSCAPE DESIGN INTERNATIONAL PROFESSIONAL CATEGORY

As many parts of the world are becoming an aging society - where more than 20% of the population are older than 60 years old, we need to rethink how we build our city for everyone to live meaningfully after retirement.

Seeking a new typology of future communities, 'Jin Wellbeing County' has become the first senior oriented mixed-use development in Thailand comprising residence, commercial unit, and hospital. Its planning focuses on 3 principles - 'Sustainable Nature', 'Physical Wellbeing', and 'Sense of Community', responding to seniors' needs. Diverse activity dynamics are designed through 'Retreat', 'Engage' and 'Create' concepts which enhance all-round living experience. Together with our initial research on "The Seven Dimensions of Wellness," marking beneficial approaches for aging life, all aspects are embedded in the landscape design to truly achieve "Community in the Ravine Forest."

Located in the Chao Phraya Flood Plain, the site of Jin Wellbeing County in Pathum Thani, the suburb of Bangkok, is previously known for agricultural lowland, which gets flooded seasonally. Nonetheless, as time passed by, the area gradually became urbanized by rows of buildings, housings, and infrastructure, leaving the possibility of severe flooding. By blocking the flow of

water, Bangkok and its suburbs have faced critical phenomena such as 2011 Thailand Floods and regular flash floods during the rainy season. As a result, Jin Wellbeing County is designed thoughtfully with a consideration to the public and surrounding site, by adopting "Polder System," which helps retain water before releasing to public amenity, apart from doing typical landfill methods. This approach potentially helps maintain flood in urban areas, leading to a resilient living, if used in every site around the city.

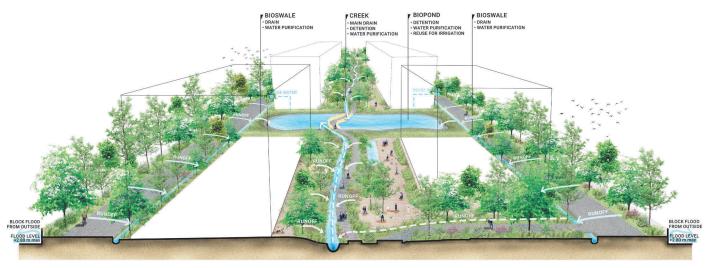


SENIOR'S NEED
THE SEVEN DIMENSIONS OF WELLNESS

DESIGN PRINCIPLES

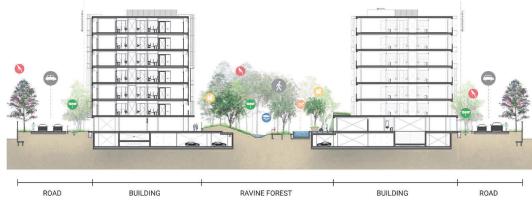
Despite the full-phase masterplan with all mixed use facilities, the project is now completed within 58,332 square meters of Phase I which comprises Jin Wellness Institute and Thonburi Burana Hospital and Low-rise Residential Cluster 1 and 2. The project exclusively offers 22,485 square meters of green spaces - both on-ground and on-structure, which equals to 40% of the site area, exceeding the 30% standard requirement.





UPCYCLE WATER MANAGEMENT DIAGRAM





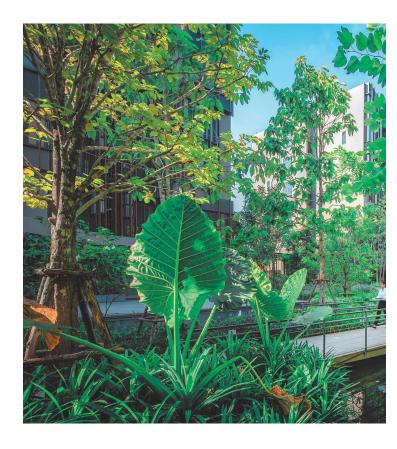
CROSS SECTION

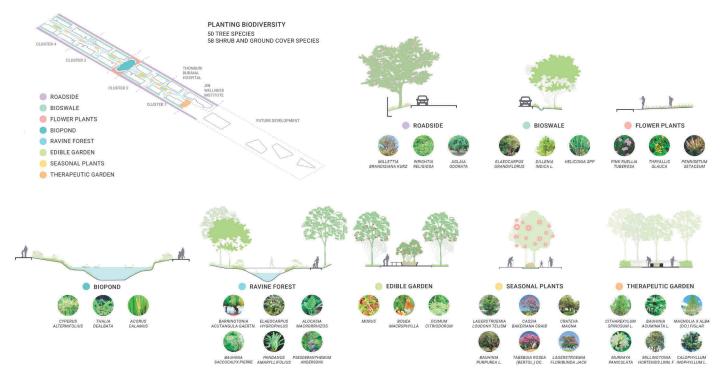


SUSTAINABLE NATURE

A perfect harmony with nature will surely enhance people's physical and mental health. Plants selection varies in heights, forms and flower colors, including Perennials, Shoreline Trees, Groundcover plants. To imitate a forest, they are arranged all over softscape areas by mixing up, rather than in an orderly composition. They can trigger the 'ecological succession' process, allowing every species to grow mutually and substitute the older ones naturally over time.

Water management system functions in handling flooding on wet seasons and supplying adequate water on dry seasons. 'Creek' is proposed through the middle of the site as a main drainage and treatment system, along with 'Bioswale,' gathering runoff water from the outer part. Primarily purified water will flow along the way into 'Biopond,' used for retention and secondary treatment. It, therefore, provides reused water for irrigation and keeps the project green all year. This resilient ecosystem essentially becomes food sources and habitats for 'urban wildlife' such as birds, aquatic animals, insects and squirrels, playing a role in maintaining biodiversity and even exchanging such systems with nearby areas.





PLANTING DESIGN STRATEGY





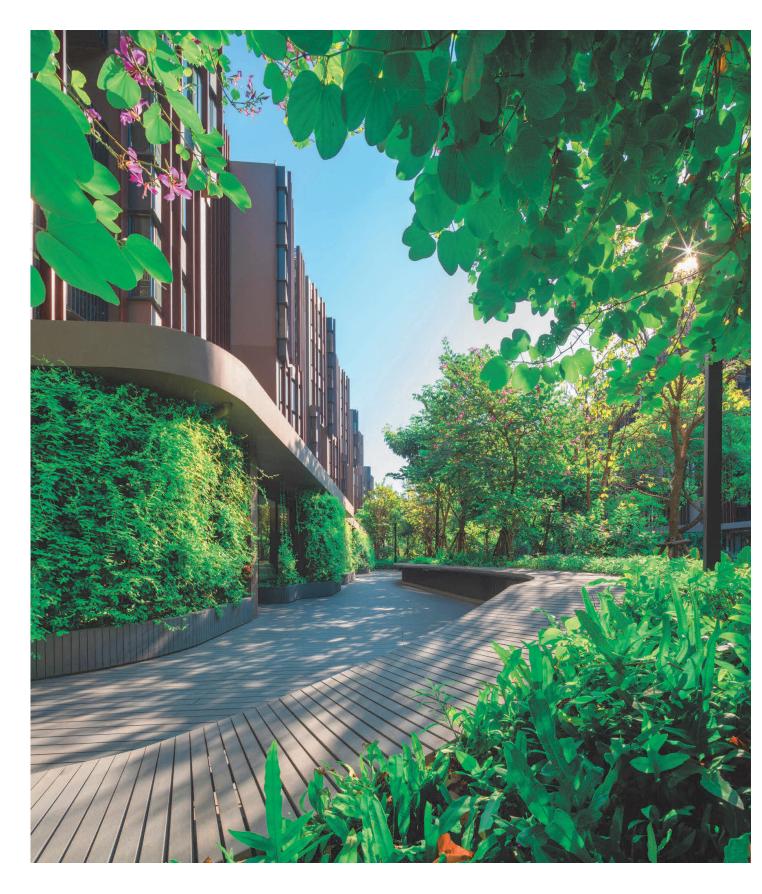
PHYSICAL WELLBEING

As 'Universal Design' is another main priority, all programs are connected with 'All-ramp access,' sloping up and down with equipped handrails and no additional steps. These pathways allow seniors and handicaps to stroll around safely. Ambulance can also easily pass through during an emergency. Seatings are placed at every 30-50 meters distance along the paths, where elderly can take a rest from time to time. Rough surface materials are used to reduce the risk of slippering, along with adequate lighting for night time usage.

The Therapeutic Garden, located nearby Jin Wellness Institute and Thonburi Burana Hospital is one highlight that ensures physical wellness. It encourages users to exercise their five senses - sight, hearing, taste, smell and touch to achieve holistic health, among colorful and fragrant species. Here, doing feet massage is attainable at the reflexology path designed with various sets of rough stones. There are also special trails for physical therapy designed in 3 patterns - flat road, slope path, steps. All are equipped with handrails, allowing caretakers to walk together and encourage them to rebuild their strengths.











SENSE OF COMMUNITY

"Multi-generation living" is another key feature, where independent living, family, and assisted living are united to build community spirit with activity dynamics. In order to 'engage,' space planning is designed to add a 'chance of meeting,' encouraging cross activity interaction such as exercise area and enclaves of gathering spots along the creek. Yet, there are also private seating niches and secluded outdoor tables among greenery, offering a sense of 'retreat.' After all, an edible garden allows to 'create' some dining and workshop together, leading to lifelong learning.

Moreover, in front of Jin Wellness Institute are the cascade, offering moisturized forest atmosphere, green lawn and swimming pool for group exercise, where people can enjoy taking time, as well as running along the site's jogging track. Likewise, at the 2nd floor, there are meters standard lap pool, hydrotherapy pool, hot-cold tub and pool deck, suitable for different needs and lifestyles.

To conclude, Jin Wellbeing County surely is a living complex full of serenity and multi-generation spirit amidst a seamless harmony with nature and biodiversity, flourishing good quality of life.



ACTIVITIES DYNAMIC

SENSE OF MULTI-GENERATION COMMUNITY

LAr. Gs. Dr. Norhanis Diyana Nizarudin is an assistant professor at the Department of Landscape Architecture, KAED, International Islamic University Malaysia. Her interest in urban design brings herself to explore people places through spatial and behavioural mapping. She is also passionate about technology-embedded landscape architecture via technical applications such as Geographical Information System (GIS). Plein air and travel sketching are another spectrums of life that she enjoys doing to the fullest. She shares her artworks at @sketchwalkHD on Instagram and can be contacted via norhanisdiyana@iium.edu.my

Written by LAr. Gs. Dr. Norhanis Diyana Nizarudin