

THE DESIGN OF YOUTH COMMUNITY CENTER IN BEKASI CITY WITH A BEHAVIORAL ARCHITECTURE APPROACH

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Abstract. Young people are a vital group in society who face various challenges during the important transition phase from age 15 to their early 30s. In this context, intensive attention and support are needed so that they can develop psychologically, socially, and economically. The Youth Community Center in Bekasi City is designed as a strategic solution to address these needs by creating a creative and collaborative space that supports the exploration of the interests, talents, and skills of young people. Given the rapid growth of the Bekasi City area, with its high level of urbanization, the emphasis on providing facilities that support creativity and innovation is crucial. With the Behaviour Architecture approach, the Youth Community Center is expected to stimulate social interaction and productivity so that it functions not only as a gathering place, but also as a catalyst in facilitating the potential and overcoming the challenges faced by the younger generation in Bekasi City. In the design of the Youth Community Center in Bekasi City using the Behavior Architecture approach, the data used consists of primary and secondary data, which is then analyzed using 5 aspects of the approach, including the functional approach, contextual approach, technical approach, performance approach, and architectural approach. The results of the architectural design aspects that have been analyzed then become guidelines for the next design process.

Keywords: *Youth Community Center, Young Generation, Bekasi City, Behavior Architecture*

INTRODUCTION

The rapid development of urban areas in Indonesia, including the city of Bekasi, has changed the lifestyles, activities, and spatial needs of the community, especially the younger generation. As a satellite city of DKI Jakarta, Bekasi is growing rapidly, but the physical development of the city has not been fully matched by the provision of adequate public spaces and social facilities for the intellectual,

social, creative, and emotional development of the younger generation. As a result, sports, arts, and creativity activities remain fragmented across various locations, limiting opportunities for interaction, collaboration, and the formation of positive character among young people. This condition calls for an integrated facility that can integrate various activities of the younger generation in one adaptive and inclusive area.

The Youth Community Center is proposed as an architectural solution that integrates sports, creativity, and performing arts programs in one interconnected area. This design aims to create an interactive, inclusive, and sustainable environment to support the holistic development of the younger generation's potential. Using the Behaviour Architecture approach—which is based on the principle that

space shapes the behavior of its users—this project manipulates the layout, landscape, and circulation to encourage social interaction, creativity, and positive activities. Through this approach, the Youth Community Center in Bekasi is expected to become a catalyst for social change and a forum for character building and the development of the potential of the younger generation in urban areas.

METHODS

The design of the Youth Community Center in Bekasi City used a qualitative descriptive method based on the Behavior Architecture approach, beginning with a study of design requirements and conditions through literature and regulatory studies, followed by the collection of site data, context, climatology, accessibility, and the needs of the younger generation through observation and precedent studies, which were then analyzed to formulate the basic design concept as the foundation for architectural graphic design development.

CONCEPT

The design concept of the Youth Community Center in Bekasi City is based on the Behaviour Architecture approach, with the principle that architectural space not only accommodates activities, but also shapes the behavior of its users. Within this framework, the reciprocal relationship between architectural design and human behavior becomes the main basis of the design, where space is shaped to trigger certain behavioral responses, and the behavior of users then enriches the meaning of that space.

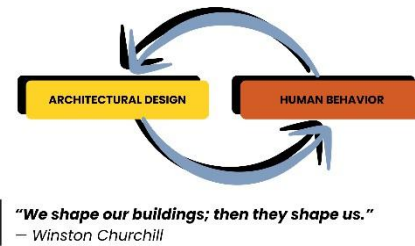


Figure 1 Conceptual Scheme of Behavior Architecture

Based on this principle, the area is designed as an integrated spatial system between buildings and landscapes that encourages social interaction, creativity, and physical activity among the younger generation. The treatment of open spaces, flowing circulation, and the gradation of public-semi-public- private spaces are the main strategies for creating an environment that is inclusive, adaptive, and responsive to the dynamics of user behavior.

Three main buildings SportHaus, CreativeHaus, and ArtivaHaus were developed as activity nodes with different energy characteristics but interconnected through plazas, green open spaces, and pedestrian corridors. Each building has a specific role in supporting the intellectual, social, recreational, and creative development of the younger generation, while forming a dynamic, contextually appropriate, and climate- adaptive district in Bekasi City.

SITE DATA



Figure 2 Site Data

Location	: Jl. Bulevar Bekasi CBD, Marga Mulya, Kec. Bekasi Utara, Kota Bekasi, Jawa Barat.
Land Area	: ±37.806 m ² (3,7 Ha)

Land Boundaries:

- East : Jl. Bulevar Bekasi
- South : Jl. Bulevar Bekasi
- West : Jl. Bulevar Bekasi
- North : Jl. Bulevar Bekasi

Building Code:

- KDB : 60%
- KLB : 1.8
- KDH : >18%
- GSB : 5 m

Road Classification: Urban Road
(Secondary Arterial Road)\

CONTEXTUAL APPROACH

This site has a strategic location because it is located on a secondary urban arterial corridor with high accessibility, close to Bekasi Station (KRL and LRT), served by public transportation, and surrounded by public facilities, educational areas, and government centers. The relatively flat topography and the existence of pedestrian paths support the development of public spaces and landscapes that are in line with the Behaviour Architecture approach.

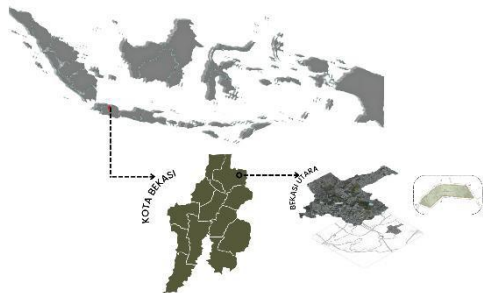


Figure 6 Contextual

CLIMATOLOGY APPROACH

Sunlight and wind patterns guide building orientation, massing, and open spaces to create comfortable and interactive environments.

a) Sun Hours Analysis

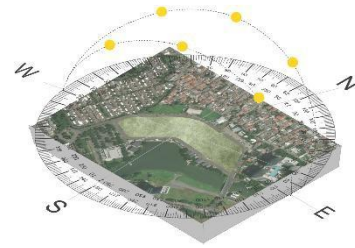


Figure 4 Sun Analysis

Based on the data above, The sun moves from east to west with fairly high heat intensity during the day, with average temperatures in the region ranging from 29–31°C.

b) Wind Analysis

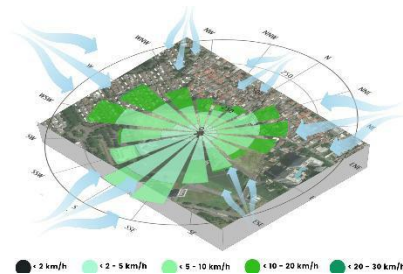


Figure 5 Wind Analysis

Based on the data above, it is known that the wind at the site predominantly comes from the south to southwest with an average speed of 5–20 km/h, occasionally reaching 20–30 km/h.

In this case, the green open spaces designed between the buildings serve as natural wind corridors for cross ventilation and thermal comfort in the area.

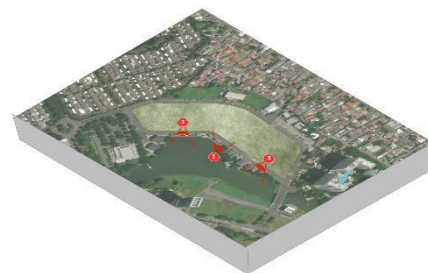
VISIBILITY APPROACH

Figure 3 View Analysis

The site has a clear visual contrast. The view towards the site is dominated by Jalan Bulevar Bekasi CBD with its active and dynamic urban

character, while the view from within the site leads to the lake and open spaces of the area, offering a more peaceful, natural, and open atmosphere. This visual contrast is the basis for architectural responses to the site context.

The design response is realized by directing the openings of the main building towards the most potential views, especially the lake and open spaces in the area. In addition, a central park is designed in the middle of the building as a view within the site as well as a space for social interaction, and a visually strong entrance is formed through a gate to emphasize the identity and experience of arriving at the site.

ACCESSIBILITY APPROACH

The site is located in an area completely surrounded by Jalan Bulevar Bekasi CBD, an urban corridor with a one-way road system that makes vehicle movement feel orderly and rhythmic. This circulation pattern gives an impression of order, but on the other hand, it has the potential for traffic conflicts if the entrances and exits to the site are not clearly designed and separated based on their functions.

Nevertheless, reaching the location is relatively easy and convenient. Its proximity to major transportation hubs such as Bekasi Station (KRL and LRT), the Trans Patriot bus stop, and shuttle bus services makes the site easily accessible from various parts of the city. The main road leading to the location has a width of 12.5 meters with a 2-meter shoulder, providing sufficient space for vehicle movement while framing the experience of entering the Youth Community Center area.

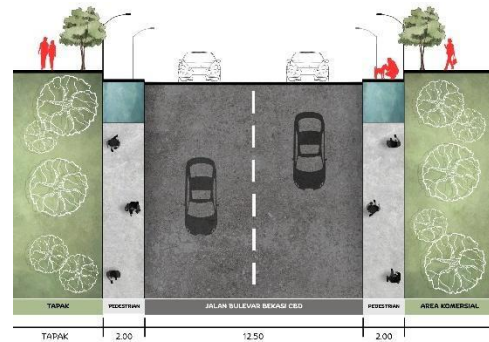


Figure 7 Road Section

ARCHITECTURAL APPROACH

The architectural approach of the Youth Community Center is based on the principles of Behavior Architecture, where form, space, and landscape are designed not only to accommodate activities but also to shape the behavior of its users. The design stems from an understanding of the characteristics of the younger generation—who tend to be emotional, social (in need of belonging), creative-explorative, easily bored, as well as awkward and restless—so that the spaces created can respond adaptively to their psychological and social dynamics.



Figure 8 Characteristics of The Younger Generation

Based on this understanding, the building massing was developed to be responsive to the context of the site, climate, and circulation of the area, with an emphasis on visual and spatial connectivity between indoor and outdoor spaces. The three main buildings SportHaus, CreativeHaus, and ArtivaHaus are designed as activity nodes with distinct yet integrated characters through plazas, green corridors, and pedestrian paths, forming a dynamic, inclusive,

and experience-oriented neighborhood for the younger generation.



Figure 9 Conceptual Massing and Open Space Structure of Youth Community Center

CONCEPT PHILOSOPHY DESIGN

The design philosophy of the Youth Community Center stems from the metaphor of waves and flows as a representation of the dynamics of the younger generation. Waves symbolize the ups and downs in the process of growing, learning, and expressing oneself, while flows represent openness, continuity, and freedom of movement within a space.

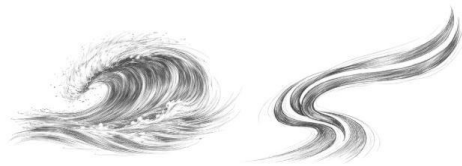


Figure 10 Wave and Flow Sketch

In architecture, this concept is realized through dynamic mass forms, flowing circulation, and green open spaces that connect the three main buildings—SportHaus, CreativeHaus, and ArtivaHaus—as a harmonious whole. Thus, the design not only shapes the aesthetics of the building but also creates an adaptive, inclusive spatial experience that encourages positive behavior among the younger generation..

PRELIMINARY RESULT

The followings are the result of preliminary design stage for area design of Youth Community Center in Bekasi City:

a) Blockplan and Siteplan



Figure 11 Blokplan



Figure 12 Siteplan

The layout plan for the Youth Community Center area consists of three main buildings SportHaus, CreativeHaus, and ArtivaHaus which are integrated into one area with open spaces as the main connecting elements. The three buildings are organized based on different activity characteristics and energy levels, but are interconnected through plazas, green corridors, and pedestrian paths to support interaction, comfortable circulation, and visual and spatial integration of the area.

b) Layout Plan

This building consists of three structures, each of which is a three-story building. The buildings are connected by green open spaces, plazas, and pedestrian corridors that serve as transitional spaces, social interaction spaces, and the main circulation routes between buildings.

- Artiva Haus
- Kreasi Haus
- Sport Haus

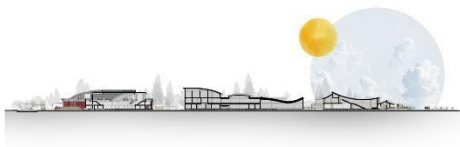
c) Elevation Plan

Overall elevation for the Youth Community Center Building Area

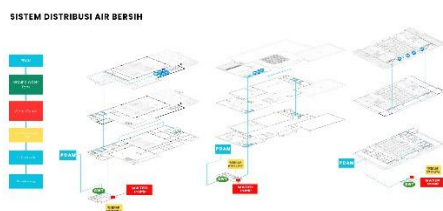


Figure 13 North Elevation**Figure 14** South Elevation**Figure 15** West Elevation**Figure 16** East Elevation

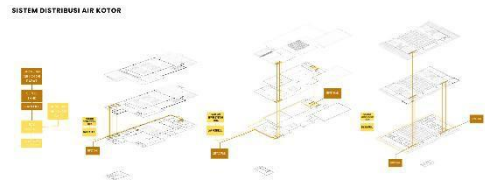
- d) Section Plan
Overall elevation for the Youth Community Center Building Area

**Figure 17** Section A-A**Figure 18** Section B-B

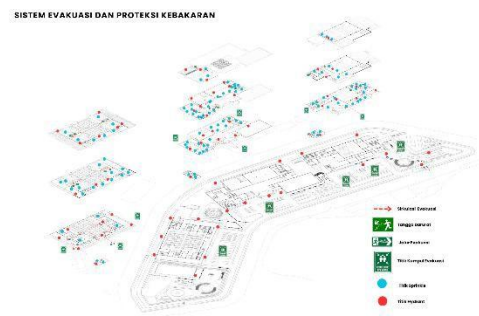
- e) Schematic Design of Area Utilities

**Figure 19** Clean water management

The water source on site is supplied directly by PDAM (Regional Water Company). It is then stored in a Ground Water Tank (GWT). It is pumped by a Water Pump to every room that needs water. Power Supply is used to help deliver water to all buildings and the Roof Tank.

**Figure 20** Waste water disposal

Solid waste water is directly channeled to the septic tank. Meanwhile, liquid waste water goes to the control tank before flowing into the city sewer system.

**Figure 21** Fire protection and evacuation

The evacuation system is designed with clear, easy-to-read, and quick-to-reach routes through the placement of separate emergency stairs in each main building and assembly points in safe green open spaces. Evacuation routes are equipped with signs, emergency lighting, and floor markers to ensure the safety of all users. Fire protection is implemented through active systems such as sprinklers, hydrants, alarms, and smoke detectors, as well as passive systems such as fire-resistant materials and compartmentalization of spaces to prevent the spread of fire.

Special access for firefighters is provided around the area to support effective emergency response.

The followings are the result of preliminary design stage for each building mass of Youth Community Center in Bekasi City:

a) Artiva Haus

This building is a center for performing arts and creative expression that accommodates dance, music, theater, and performance activities, with flexible and acoustically designed spaces to support the creativity and collaboration of the younger generation.

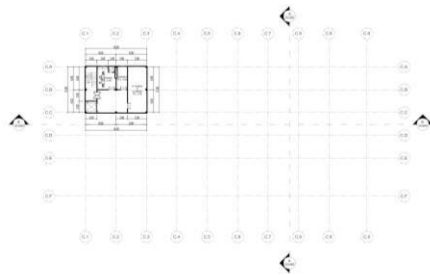


Figure 22 Under Ground Floor Plan



Figure 23 First Floor Plan

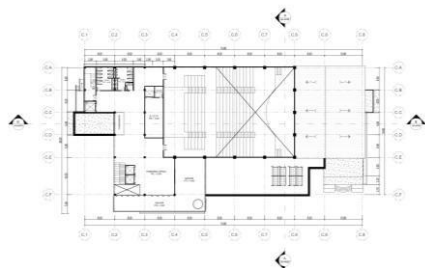


Figure 24 Second Floor Plan

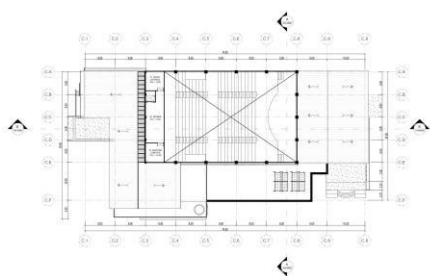


Figure 25 Third Floor Plan

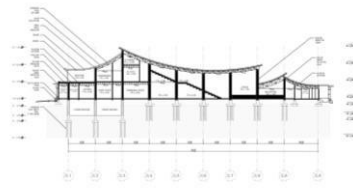


Figure 26 A-A Section Plan

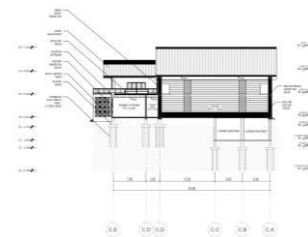


Figure 27 B-B section Plan

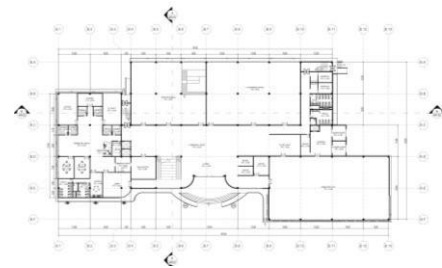


Figure 31 First Floor Plan

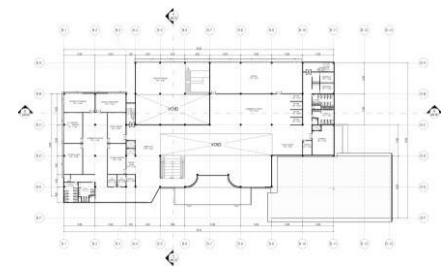


Figure 32 Second Floor Plan

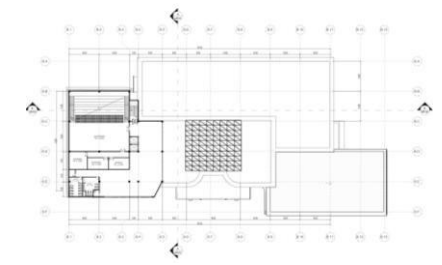


Figure 33 Third Floor Plan

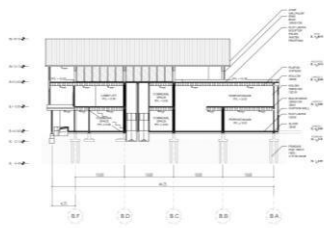


Figure 34 A-A Section Plan

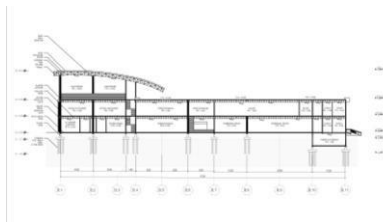


Figure 37 B-B Section Plan

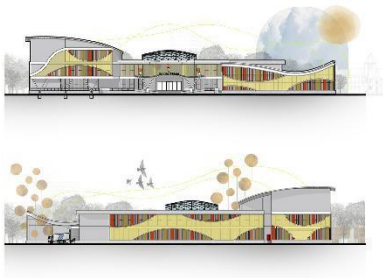


Figure 35 Front and Behind Elevation Plan



Figure 36 Left and Right Elevation Plan

c) Sport Haus

This building is a center for sports and fitness activities, including indoor fields, gyms, and training facilities, with dynamic and safe spaces to encourage physical activity and social interaction.

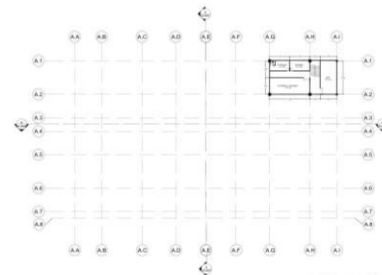


Figure 38 Under Ground Floor Plan

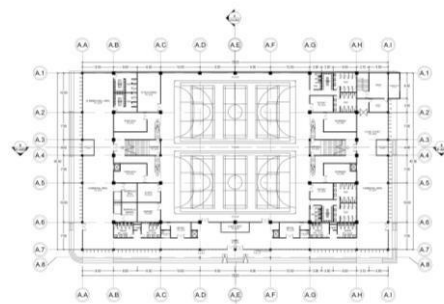


Figure 39 First Floor Plan

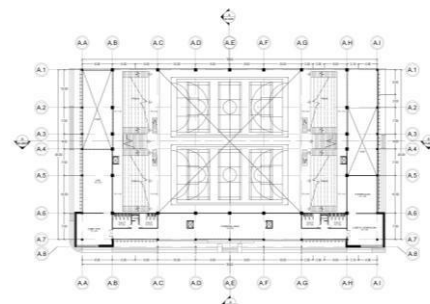


Figure 40 Second Floor Plan

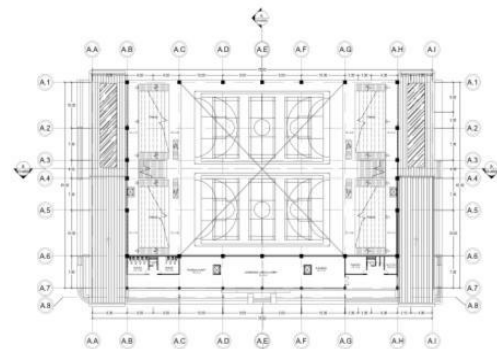


Figure 41 Third Floor Plan

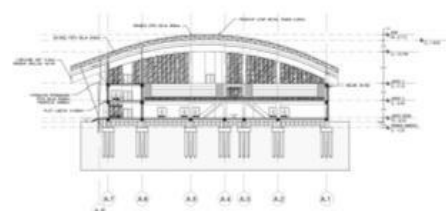


Figure 42 A-A Section Plan

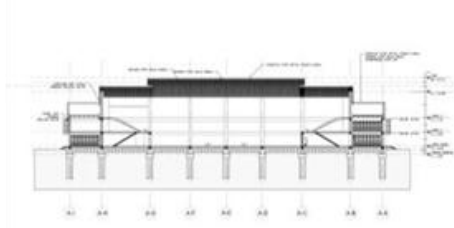


Figure 43 B-B Section Plan



Figure 44 Front and Behind Elevation Plan

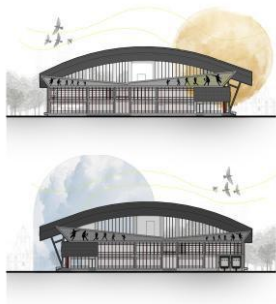


Figure 45 Right and Left Elevation Plan

The followings are the result of preliminary design stage for 3d rendering visualization



Figure 46 Aerial View of Youth Community Center



Figure 47 Exterior visualization of gate

The main gate serves as an identity marker, circulation regulator, and transitional space connecting the area with the surrounding public spaces.



Figure 48 Exterior visualization of Golf-Car Area

Golf carts as internal transportation that supports environmentally friendly mobility and public space comfort.



Figure 49 Exterior visualization of Amphitheater

The amphitheater is designed as a stage for interaction: the physical space facilitates performances as well as social interaction among the younger generation.



Figure 50 Exterior of visualization Artiva Plaza

Plaza Artiva is designed as an open social space that accommodates interaction, collaboration, and creative activities for the younger generation through tiered seating areas, multifunctional wooden decks, and shaded landscapes.



Figure 51 Exterior of Visualization Collaboration Corridor

The Collaboration Corridor is designed as a transitional space and open social space that connects Kreasi Haus and Artiva Haus through a shaded pedestrian walkway, water features, and communal benches that encourage interaction.



Figure 52 Exterior of visualization Plaza Interaksi

Plaza Interaksi is designed as an open social space that encourages young people to meet, engage in dialogue, and collaborate through communal seating areas, water features, and an inclusive shaded landscape.



Figure 53 Exterior of visualization Green Spine Plaza

Green Spine Plaza serves as a green corridor for the area, connecting activity spaces while also facilitating social interaction among the younger generation.



Figure 54 Exterior of visualization Active Play Park

Active Play Park is designed as an active recreation space that integrates running tracks, play areas, and artistic landmarks to encourage physical activity, social interaction, and a dynamic spatial experience for the younger generation.



Figure 55 Exterior of visualization Outdoor Field

A multifunctional outdoor sports area that accommodates various activities such as basketball and badminton, and encourages an active lifestyle, sportsmanship, and social interaction among the younger generation.



Figure 56 Exterior of visualization Skatepark

Skate Park, an active recreation space that accommodates the creative movements of the younger generation through a skateboard arena, while also serving as an open social space for interaction, expression, and activities under a shaded landscape.



Figure 57 Interior of visualization Practice Room

The rehearsal space is designed as a flexible space that supports dance activities, performance rehearsals, and movement exploration for the younger generation.



Figure 58 Interior of visualization performance stage

The Performance Stage is designed to support various artistic activities with an optimal audience layout and acoustic and visual qualities that enhance the experience.



Figure 59 Interior of visualization Spectator Stands

The spectator stands are designed in tiers to ensure optimal visibility of the stage and to support a collective viewing experience and interaction between performers and audience.



Figure 60 Interior of visualization Library

The library is designed as a comfortable and flexible informal reading space, encouraging casual interaction, literacy, and freer ways of learning for the younger generation.



Figure 61 Interior of visualization Library Amphitheater

The Library Amphitheater is designed as an informal study space and social interaction area. The stepped stairs serve as flexible seating that encourages reading, discussion, and relaxation in a quiet and warm atmosphere.



Figure 62 Interior of visualization FoodCourt

The food court is designed as a communal dining space that encourages social interaction, informal activities, and gathering patterns among the younger generation through flexible table arrangements, green elements, and open circulation.



Figure 63 Interior of visualization Gym

The gym is designed as an active training space that encourages movement, discipline, and social interaction among the younger generation through an open, structured, and easy-to-understand layout.



Figure 64 Interior visualization of Indoor Field

The indoor field is designed as a flexible sports space that supports play, exercise, and socialization activities for the younger generation. It is open, safe, and adaptable to various types of activities.

CONCLUSION

The design of the Youth Community Center in Bekasi City proves that the Behaviour Architecture approach is relevant as a conceptual basis for designing public spaces for young people in urban areas. Space is not only understood as a venue for activities, but as an instrument that can influence the behavior patterns, social interactions, and character formation of its users. Through the processing of spatial layout, landscape, circulation, and the relationship between indoor and outdoor spaces, the design is able to create an environment that is adaptive to the needs and dynamics of the younger generation.

The integration of climatological aspects, site context, and accessibility is key to producing a comfortable, inclusive, and accessible area. The utilization of sun and wind patterns through green corridors and building massing improves thermal comfort while encouraging activity in open spaces. The response to the visual context—between the urban character of Jalan Bulevar Bekasi CBD and the tranquil atmosphere leading to the lake—creates a balanced spatial experience. A hierarchical and integrated access system ensures the site's connectivity to the city network as well as the safety and comfort of users.

Overall, the presence of three main buildings SportHaus, CreativeHaus, and ArtivaHaus connected by plazas, green open spaces, and pedestrian paths forms a dynamic and

collaborative area. Thus, the Youth Community Center not only functions as a physical facility but also as a catalyst for interaction, creativity, and character building among the younger generation, contributing to the quality of social life in the city of Bekasi.

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