Students Reinventing Cities

Betawi Cultural Village – Setu Babakan, South Jakarta

Srengseng Sawah, Jagakarsa District, South Jakarta, Jakarta 12640

Perkampungan Budaya Betawi is located in Srengseng Sawah, Jagakarsa, South Jakarta. This area with a total area of 289 Ha was formed and designated as a Betawi cultural preservation area. In addition to its main role related to the preservation of Betawi culture, this area also includes residential areas, facilities, city forests, Setu Babakan, Setu Mangga Bolong and springs which are a single unit managed in an integrated manner.

Of the 289 Ha area designated as Perkampungan Budaya Betawi, around 87,06 Ha are assets of the DKI Jakarta Provincial Government managed by the Department of Culture, the Department of Water Resources and the Department of Parks and City Forests. The other 201,94 Ha are owned and managed by the community/private sector as residential, trade and office areas.

In the area that is an asset of the DKI Jakarta Provincial Government, especially those managed by the Department of Culture, it plays an important role as a Betawi cultural preservation area that fosters ideas and works both physical and non-physical, namely arts, customs, folklore, literature and language, history and buildings with Betawi characteristics.

Betawi cultural preservation activities are carried out and developed in several artificial zones/Kampungs (*Kampung*). There are Embrio Zone, Kampung M. H. Thamrin, Kampung Ismail Marzuki, Kampung K. H. Noer Ali and Kampung Abdulrahman Saleh, all of which are used for preservation activities in different forms.



Approx. site area:
7.5 hectares covering a 10-metre lakeside perimeter and the central island of Setu Babakan, within the 289-hectare Betawi Cultural Village.

Key Information:
The site preserves Betawi cultural identity while serving as a living model of water-adaptive urban design.
It demonstrates how cultural preservation can coexist with ecological restoration and nature-based adaptation in Jakarta's southern watershed area.

Priority areas & main expectations:
Students are expected to propose strategies that harmonize Betawi cultural preservation with ecological and social innovation.
Key priorities include enhancing lakeside corridors for pedestrians and cyclists, restoring the lake ecosystem, and transforming the cultural waterfront into an inclusive, climate-adaptive public space.

Design concepts should integrate Nature-Based Solutions (NBS) such as constructed wetlands and vegetated bioswales to improve water quality and

biodiversity, while celebrating Betawi heritage through adaptive public-space design.

Although Setu Babakan has never experienced flooding, the area faces challenges of water pollution, sedimentation, and solid-waste management from tourism and nearby community activities. Students are encouraged to address these issues through low-impact, sustainable landscape and waste systems.

Presentation of the site and development expectations

The Betawi Cultural Village – Setu Babakan is a designated cultural preservation area located in Srengseng Sawah, Jagakarsa District, South Jakarta, covering a total of 289 hectares. Established under Regional Regulation No. 3 of 2005, the area serves as Jakarta's primary living museum of Betawi culture, integrating residential settlements, cultural facilities, green spaces, and water bodies such as Setu Babakan and Setu Mangga Bolong. Of the total area, approximately 87.06 hectares are assets of the Jakarta Provincial Government, managed by the Department of Culture, Department of Water Resources, and Department of Parks and City Forests.

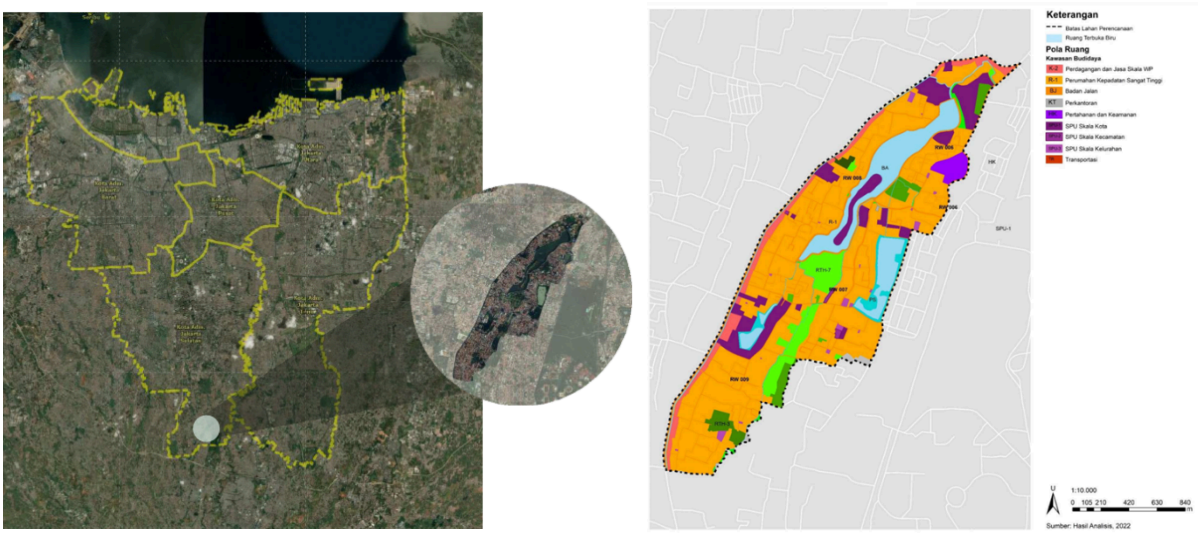


Figure 1) Betawi Cultural Village – Setu Babakan, South Jakarta

The designated competition area for the Students Reinventing Cities 2026 program covers 7.5 hectares, encompassing the 10-metre-wide perimeter around Setu Babakan Lake and the small central island within it. This area is managed by the Betawi Cultural Village Management Unit (UPK PBB) under the coordination of the Department of Culture, while the lakeside perimeter and its drainage system are managed by the Department of Water Resources (SDA).



Figure 2) Satellite Image of the site to development

The wider Betawi Cultural Village functions as a strategic socio-cultural and ecological area under the Regional Spatial Plan (RTRW) 2024–2044, recognized as both a cultural heritage landscape and a water-adaptive urban system. The site remains inhabited by Betawi families, whose settlements, social structures, and traditions have shaped its distinctive spatial pattern—clustered houses, narrow courtyards, and vegetated yards that reflect traditional gardening culture and kinship-based land use.

Public facilities and open spaces within the area include the Betawi Museum, cultural stages, traditional houses, mosques, and urban forests. The lake functions as a central ecological buffer, supporting biodiversity and serving as a natural water reservoir for the surrounding neighbourhoods.

Unlike other urban areas of Jakarta, Setu Babakan has never experienced flooding. A 4.3-kilometre drainage network managed by the Water Resources Agency (SDA) ensures stable water circulation around the lake. However, several sections still require natural filtration and vegetation buffers to prevent sedimentation and surface runoff.

The site now faces increasing pressures from tourism intensity, solid waste generation, and water quality degradation rather than flooding or drainage failure. To address these issues, future planning should incorporate Nature-Based Solutions (NBS) such as vegetated bioswales, constructed wetlands, and riparian planting to enhance water quality, restore habitat diversity, and strengthen the ecological integrity of the cultural landscape.

As Jakarta transitions toward a Global, Resilient, and Culturally Vibrant City, Setu Babakan exemplifies the potential for integrating heritage preservation, sustainable urban design, and community participation. The area offers a living laboratory for students to explore how traditional cultural landscapes can evolve into models of climate adaptation, circular economy, and inclusive urban governance.

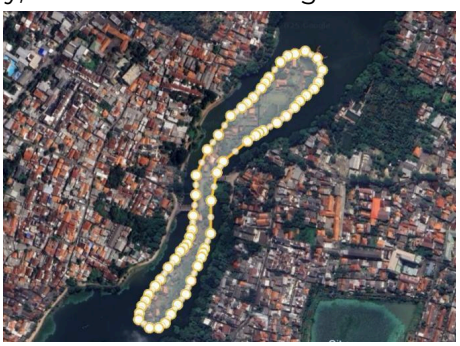


Figure 3) Kampung Ismail Marzuki



Figure 4) The 10-metre-wide perimeter around Setu Babakan (Babakan Lake)

The following are the existing conditions in each area:

- **Kampung Ismail Marzuki (the small island)**
  The 3.3-hectare island is designed as a Replica of a Betawi Kampung, representing the spatial and architectural character of traditional Betawi settlements. Several types of traditional houses and cultural facilities have been constructed on the site. However, the area is still partially open to the public, as supporting facilities are not yet fully completed and no regular educational or cultural programs are currently taking place.

  Key issues to focus on:
  - Limited accessibility to the island due to the absence of shaded pedestrian connections and barrier-free routes.
  - Lack of supporting infrastructure such as toilets, resting areas, and interpretation spaces for cultural education.
  - Need for sustainable landscape design that enhances cultural expression while preventing soil erosion along the island's edges.
  - Opportunity to demonstrate Nature-Based Solutions (NBS) such as small-scale wetlands and native vegetation to improve water quality and biodiversity.

  Students are encouraged to reimagine Kampung Ismail Marzuki as a living classroom where Betawi heritage and environmental awareness coexist, emphasizing low-impact construction and inclusive design.





- **The 10-metre-wide perimeter around Setu Babakan (Babakan Lake)**
  This area is 4.2 Ha and includes roads for pedestrians, water channels and motorized vehicles surrounding Setu Babakan managed by the DKI Jakarta Provincial Water Resources Agency.

  Key issues and design focus:

  - Several segments of the southern and western edges require improved pedestrian safety, vegetation buffers, and better integration between vehicular lanes and public walkways.
  - Drainage and water channels are operational but lack natural filtration zones to treat runoff before entering the lake.

- Informal vending and parking activities occasionally disrupt visual quality and limit accessibility.
- Absence of coherent design identity along the corridor—currently fragmented between recreational, residential, and cultural-use zones.

Students are expected to propose designs that enhance connectivity, integrate shaded pedestrian and cycling paths, and introduce riparian planting and bioswales as part of a comprehensive waterfront design approach.



Development Expectations

The redevelopment of the Betawi Cultural Village – Setu Babakan aims to strengthen its dual role as a center of cultural preservation and a water-adaptive urban landscape, aligning with Jakarta's Spatial Plan 2024–2044 (Regional Regulation No. 7 of 2024) and the Regional Low-Carbon Development Plan (RPRKD) under Governor Regulation No. 90 of 2021.

The City of Jakarta expects design ideas from this competition to contribute directly to the Urban Design Guideline (Panduan Rancang Kota – PRK) for Setu Babakan (2026–2027), which will serve as the operational framework for the area's revitalization and spatial management.

The competition area—comprising the lake's 10-metre-wide perimeter and the central island—represents both the ecological core and the cultural showcase of the Betawi community. The site's future vision integrates heritage protection, climate adaptation, and community-based economic development. Proposals are expected to demonstrate how the traditional spatial character of Betawi settlements—compact clusters, vegetated yards, and open communal spaces—can be reinterpreted through contemporary sustainable design.

Students are encouraged to explore multifunctional interventions that combine eco-hydrological restoration, green mobility, and inclusive cultural programming. Key development expectations include:

1. **Lakeside revitalization** – creation of continuous pedestrian and cycling corridors, shaded by native vegetation, connecting cultural zones and public spaces.
2. **Ecological restoration** – introduction of sustainable drainage systems (SuDS), bio-swales, and rain-harvesting networks to improve water quality and mitigate flood risks.
3. **Cultural activation** – design of community pavilions, open-air learning spaces, and creative markets to strengthen Betawi cultural expression and local livelihoods.
4. **Resilient infrastructure** – application of low-impact materials and energy-efficient design that harmonize with the cultural landscape.
5. **Social inclusion** – ensuring access for all users, including the elderly, children, and people with disabilities, through universal design and safe public realms.

The city intends to use outstanding design concepts as input for detailed planning, public education programs, and cross-departmental coordination between the Department of Culture, Department of Water Resources, and Department of Parks and City Forests. In addition, selected proposals may inform policy updates on lake-edge design guidelines and cultural-heritage landscape management.

Ultimately, this competition seeks to demonstrate how a historic cultural area can become a model of integrated climate resilience, social cohesion, and creative economy growth within a megacity context. By combining ecological sensitivity with cultural continuity, the project will strengthen Jakarta's identity as a global city rooted in local wisdom.

City climate priorities and specific environmental challenges

Jakarta's Climate Action Plan (CAP) and Spatial Plan 2024–2044 (Regional Regulation No. 7 of 2024) emphasize a transition toward a resilient, low-carbon, and water-adaptive city. Within this framework, the Betawi Cultural Village – Setu Babakan plays a pivotal role as both an ecological and cultural node in the southern watershed system. The site contributes to Jakarta's commitment to reduce greenhouse gas emissions by 30% by 2030 while enhancing climate adaptation across urban neighbourhoods.

Environmental and Climate Priorities:
The area's ecological system—consisting of Setu Babakan Lake, Setu Mangga Bolong, and surrounding green corridors—supports groundwater recharge, microclimate regulation, and biodiversity. The City prioritizes:

- Flood resilience and water conservation, through improved drainage, rainwater harvesting, and sediment control;
- Green-blue infrastructure integration, connecting lake edges, wetlands, and public spaces;
- Urban heat mitigation, by expanding tree cover and shaded pedestrian zones; and
- Community-based solid and wastewater management, aligning with the "Zero Run-off" and "Circular Resource" principles in Jakarta's CAP.

Key Environmental Challenges:
Despite its ecological value, the area faces emerging environmental pressures linked to urbanization and tourism activities rather than flooding.

Key challenges identified for the site include:

- Water quality degradation, primarily from greywater discharge and domestic waste generated by surrounding households and culinary areas.

- Solid waste mismanagement, as waste is still not segregated at source and is transported directly to the Bantar Gebang landfill, without a TPS3R (Reduce-Reuse-Recycle facility) in the vicinity.
- Sedimentation and nutrient loading caused by surface runoff entering the lake, leading to declining water clarity and depth.
- Insufficient green and riparian buffers along certain southern and western segments of the lake perimeter.
- Unregulated informal uses—temporary parking, vending, and small commercial stalls—that disrupt public access and reduce landscape quality.

Most parts of the area are already connected to the wastewater network and supported by an operational Water Treatment Plant (WTP) and Wastewater Treatment Plant (WWTP), although optimization and regular maintenance are still needed to ensure continuous operation and complete service coverage. The environmental challenges in Setu Babakan therefore relate not to flood risks, but to water quality, sediment management, and solid waste governance, all of which directly influence the ecological health of the lakes.

Participants should propose integrated nature-based solutions (NbS) that restore ecological performance while enhancing social use. Strategies may include constructed wetlands, bioswales, infiltration gardens, and vegetated embankments. The city also encourages the inclusion of low-carbon mobility networks—cycling routes, shaded walkways, and accessible public transport connections—to strengthen low-emission travel.

Moreover, proposals should reflect Jakarta's broader climate priorities:

- Mitigation: reducing emissions through renewable energy and passive design;
- Adaptation: restoring water retention and ecological connectivity;
- Equity: empowering local communities and ensuring inclusivity in climate actions.

By demonstrating how cultural heritage landscapes can serve as living models of urban resilience, this project supports Jakarta's ambition to become a Global Water-Adaptive City and a leading example within the C40 network.

Specific planning rules and regulations

All design proposals must comply with the prevailing urban planning, cultural preservation, and environmental protection regulations governing the Betawi Cultural Village – Setu Babakan. These frameworks ensure that future development respects both the ecological functions of the lake and the cultural integrity of the Betawi community.

1. **Regional Regulation No. 3 of 2005**
   Concerning the Establishment of the Betawi Cultural Village in Srengseng Sawah, Jagakarsa, South Jakarta
   This regulation formally designates Setu Babakan as the Betawi Cultural Village, providing the legal foundation for cultural preservation. It defines the area as a living cultural space dedicated to the protection and promotion of Betawi traditions—architecture, arts, folklore, and customs—while integrating education, tourism, and community empowerment.

2. **Regional Regulation No. 7 of 2024 on Jakarta Spatial Plan 2024–2044**
   This is the overarching legal framework that recognizes the Betawi Cultural Village as a Strategic Socio-Cultural Area and part of the city's Cultural Heritage Landscape Network. The regulation mandates that all spatial interventions within the site maintain harmony between cultural identity, environmental sustainability, and community well-being. It also introduces principles of water-adaptive design, zero run-off, and 30% green open space (RTH) as mandatory planning parameters.

3. **Governor Regulation No. 151 of 2007**
   On the Development of the Betawi Cultural Village in Srengseng Sawah
   This regulation operationalizes the 2005 Regional Regulation by detailing physical development guidelines—cultural zones, tourism facilities, and environmental management—and promoting interagency coordination between the Department of Culture, Water Resources Agency, and Parks and City Forest Agency.
4. **Governor Regulation No. 57 of 2022**
   On the Organization and Work Procedures of Regional Government Apparatus
   This regulation establishes the institutional structure responsible for site governance, including the Betawi Cultural Village Management Unit, which functions as an integrated management body ensuring coordination across sectors and consistency with provincial spatial policies.
5. **Environmental and Technical Provisions**
   Design proposals must comply with national environmental regulations, including Law No. 32 of 2009 on Environmental Protection and Management, and follow Jakarta's Environmental Impact Assessment (AMDAL) procedures. A 15–50 metre waterbody buffer zone must be preserved around Setu Babakan, as stipulated by Ministerial Regulation of Public Works No. 28/2015, ensuring ecological safety and public access.

Collectively, these regulations form a coherent legal framework guiding sustainable, inclusive, and culturally sensitive development for Setu Babakan. Students must demonstrate compliance while proposing innovative yet contextually respectful solutions.

Language requirements

Proposals must be submitted in English.

City-specific awards

The winning proposals of Students Reinventing Cities 2026 – Betawi Cultural Village (Setu Babakan) will be presented at the Cultural Festival 2026, organized by the Jakarta Provincial Government through the Department of Culture. Outstanding designs will serve as key input for the preparation of the Setu Babakan Revitalization Master Plan, in collaboration with the Department of Water Resources and the Department of Parks and City Forests.

In addition to public exhibition and promotion through Jakarta's Information and Knowledge Access (JIKA) platform, selected proposals may be showcased in relevant local and international forums on urban resilience and cultural heritage. These recognitions aim to celebrate innovation, strengthen student participation, and bridge academic design ideas with the city's long-term sustainable development agenda.