

KHALID ABUNAYYAN

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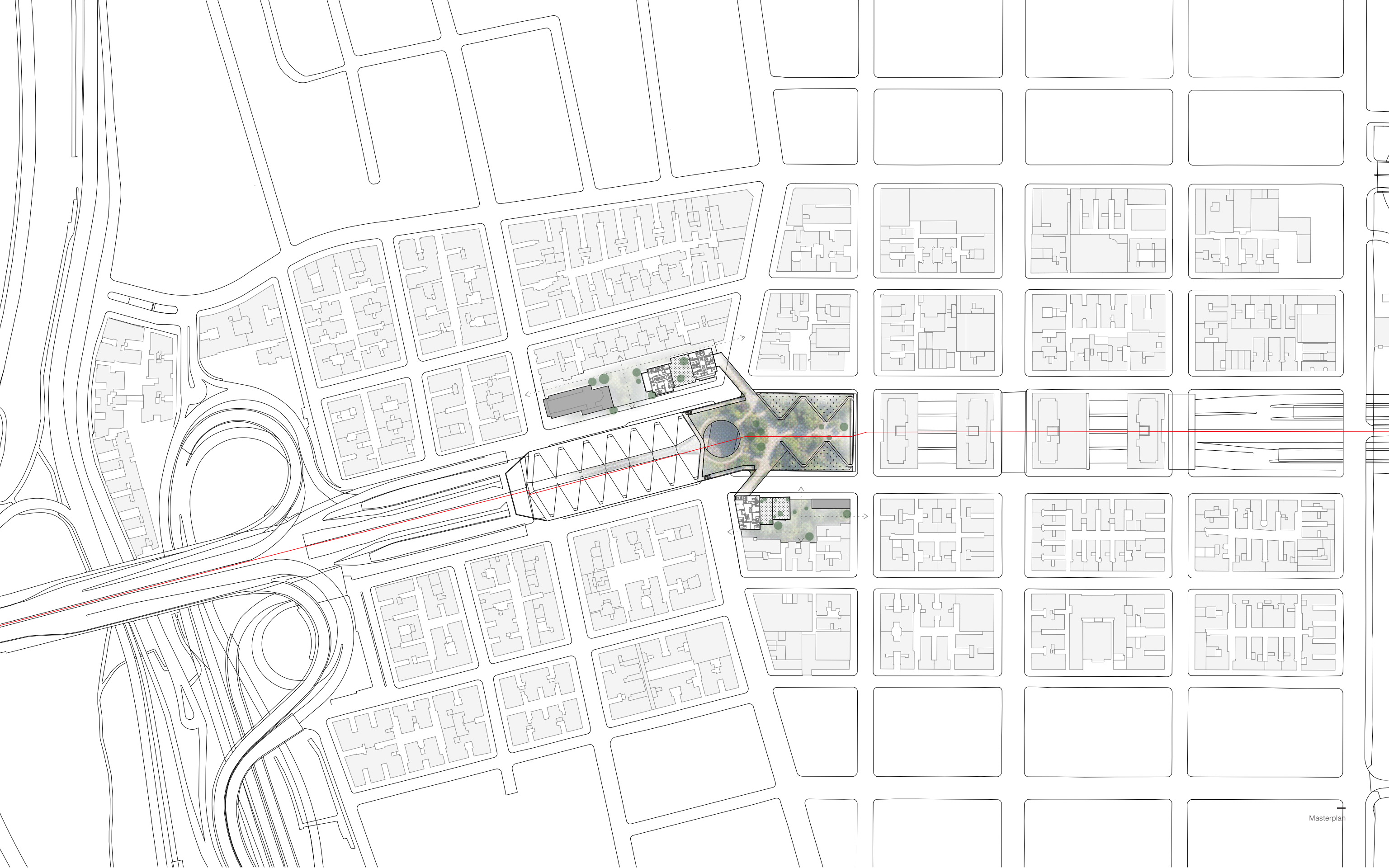
BROADWAY AS CIVIC SEAM

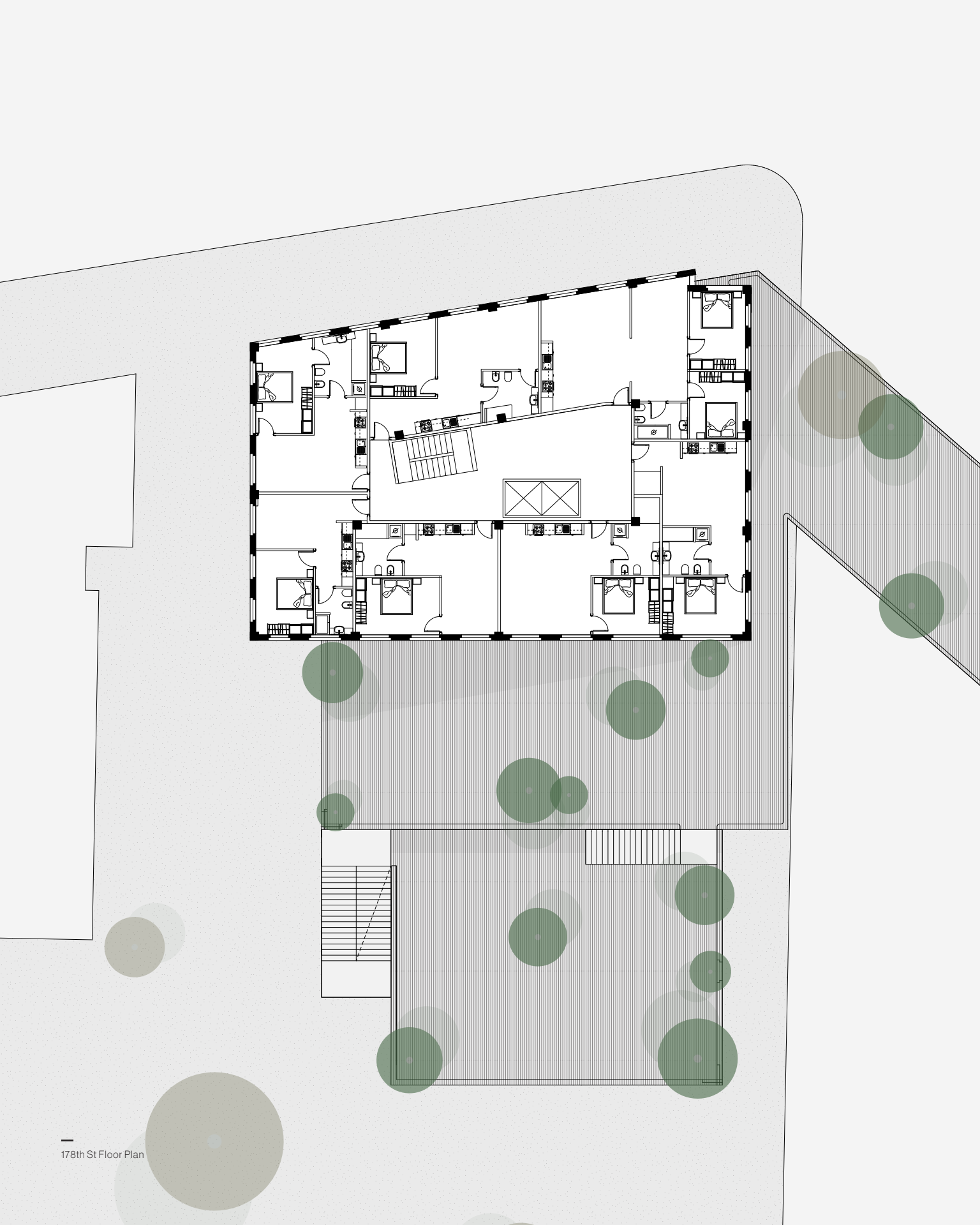
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CRIT: GALIA SOLOMONOFF | INDIVIDUAL | SPRING 2026

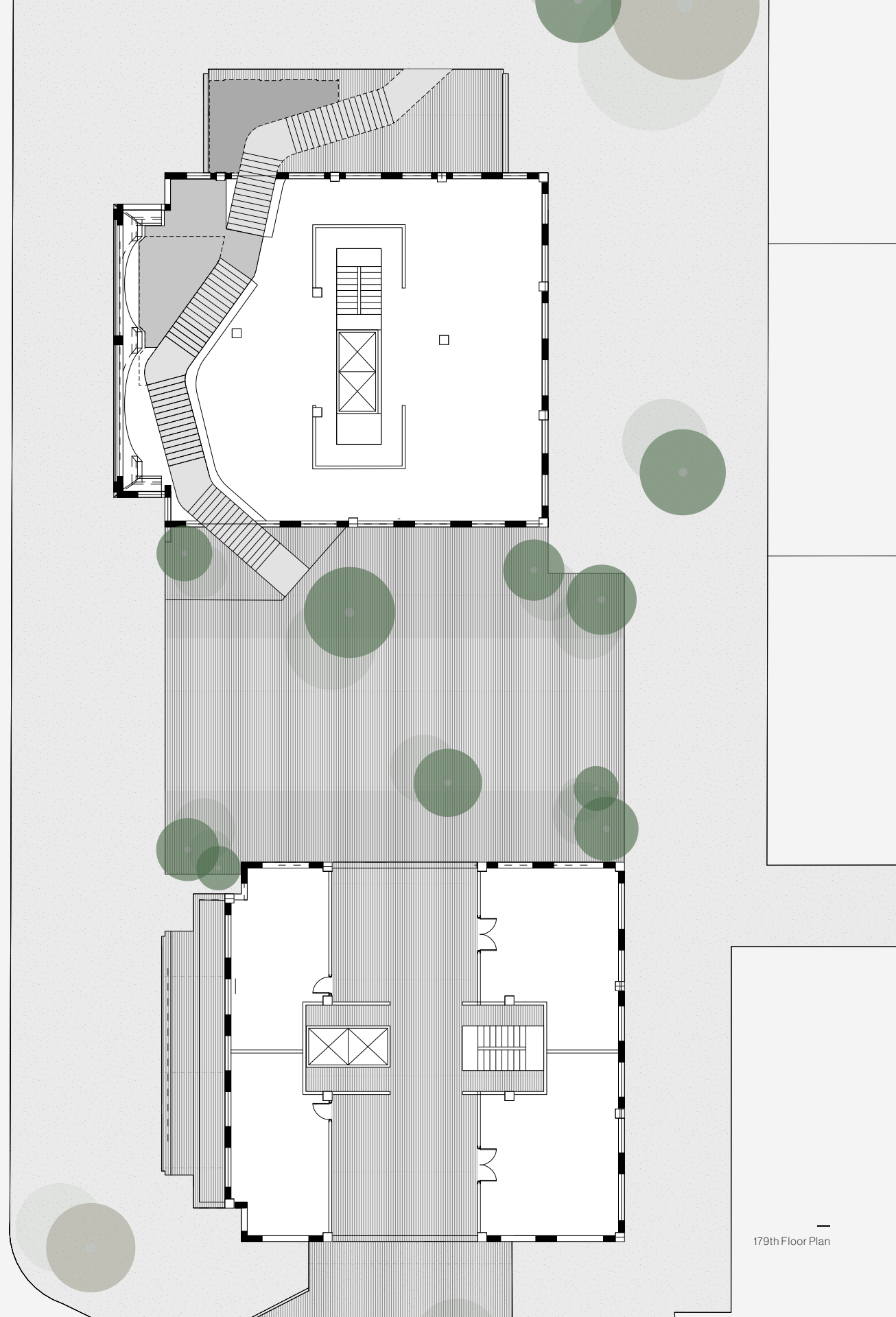
Broadway as Civic Seam reframes the George Washington Bridge Bus Station corridor between West 178th Street and West 179th Street as a point of connection rather than division. Anchored by the historic presence of Holyrood Episcopal Church and Primera Iglesia Bautista Church, the project establishes an expanded public landscape across ground-level plazas and an elevated park deck, forming a continuous civic terrain that reconnects landscape, housing, and public life. Residential towers rise as contemporary counterparts to these landmarks, framing this terrain and transforming infrastructure into a shared platform that links past and present.



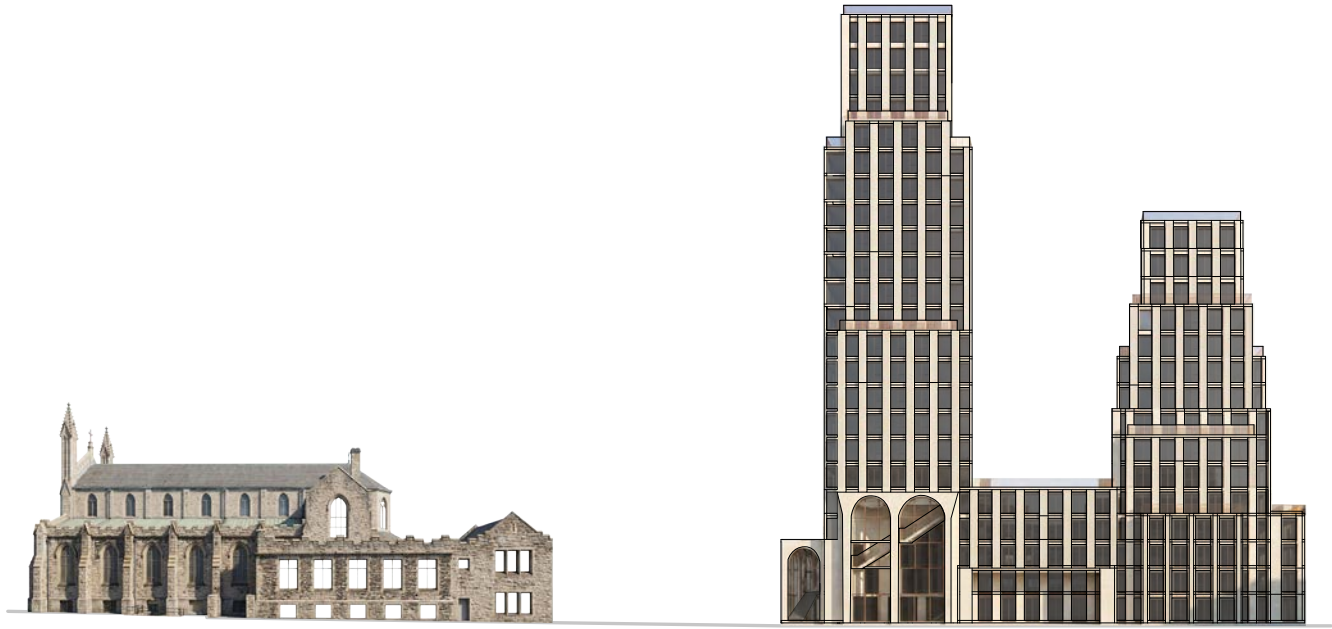




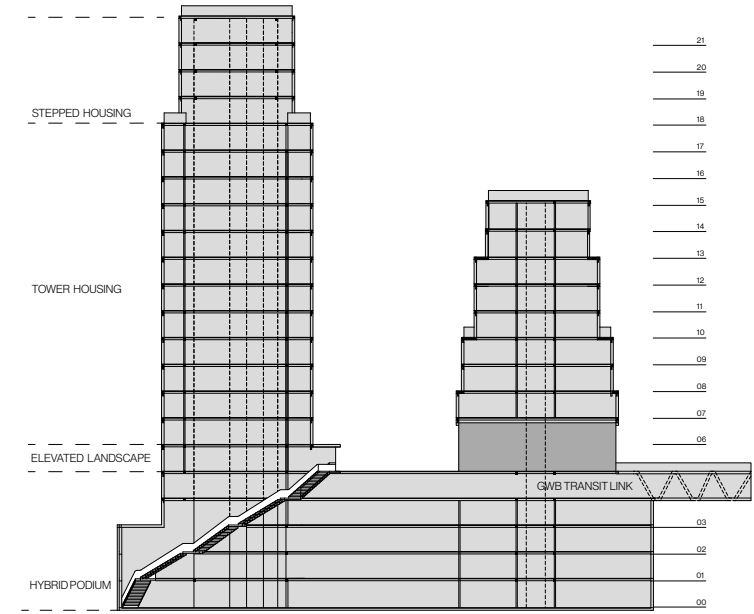
178th St Floor Plan



179th Floor Plan



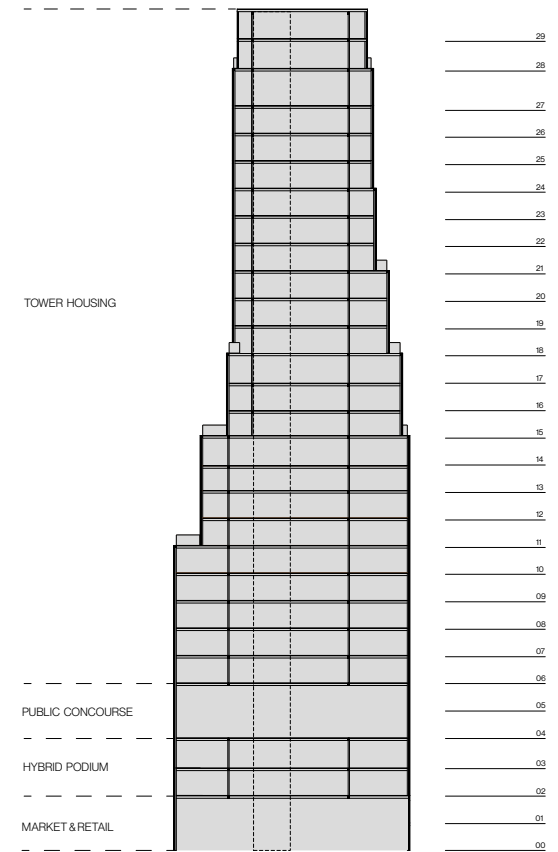
179th St Elevation



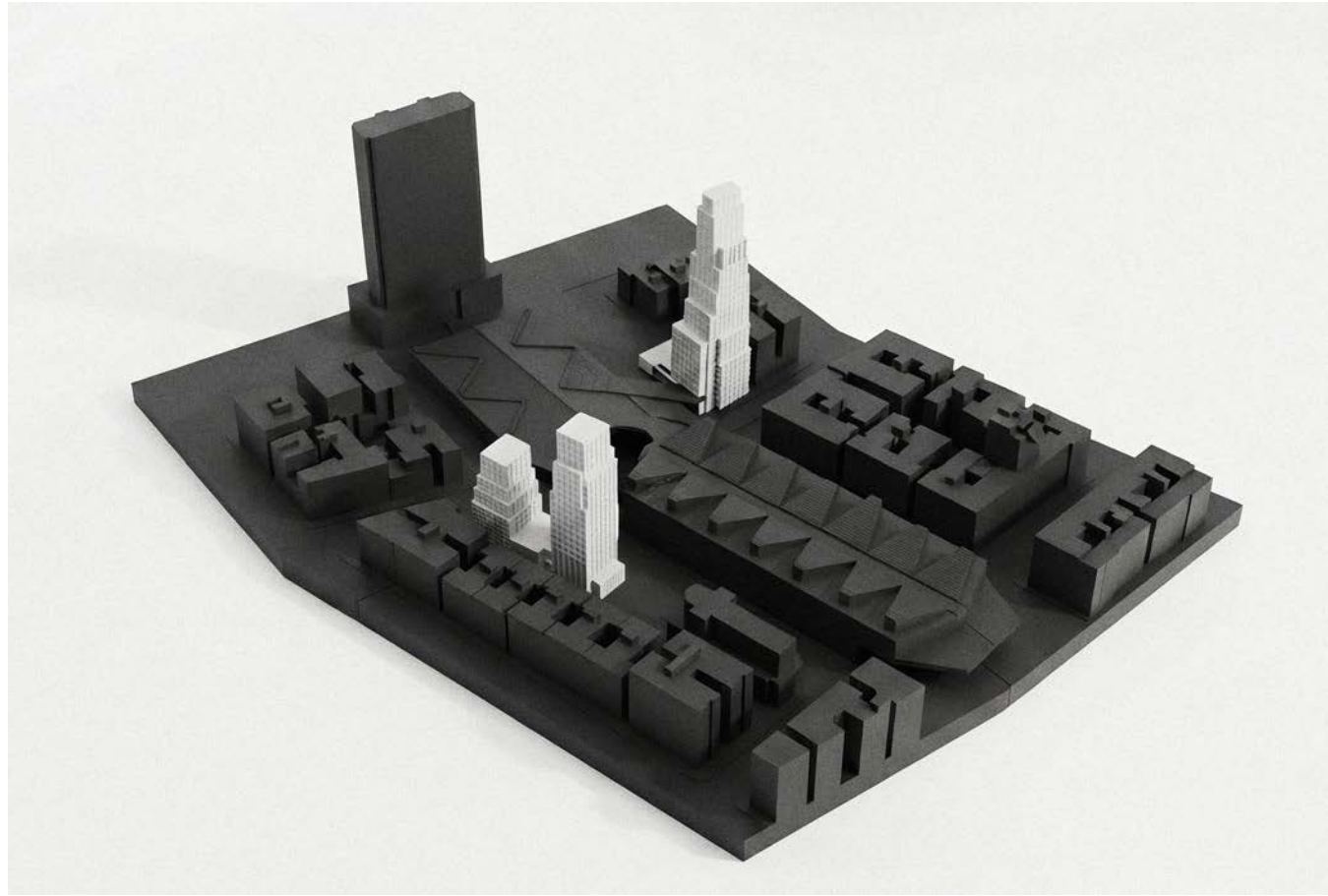
179th St Section



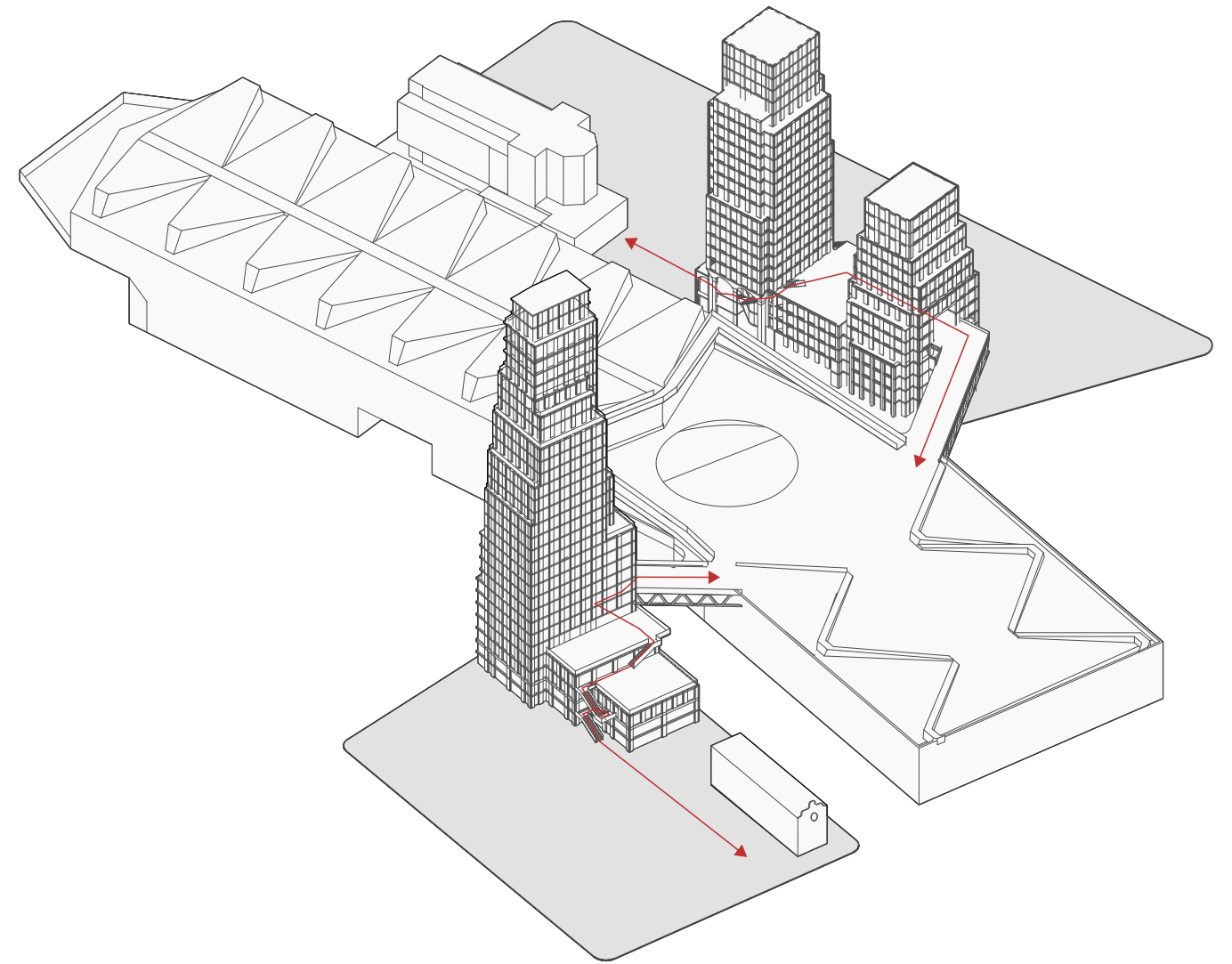
178th St Elevation



178th St Section



1:600 Physical Site Model



Circulation Diagram



Site Axonometric View



Perspective Rendering



Infrastructure is commonly perceived as the passive background against which daily life unfolds, a neutral substrate serving utilitarian needs. Yet, beneath its ostensibly inert appearance, infrastructure actively narrates profound social, political, and environmental conditions, revealing stories that often remain deliberately obscured or implicitly accepted. Architecture, through its physicality, embedded technologies, and spatial logic, emerges as a powerful storyteller, encoding, projecting, and amplifying these invisible narratives.

One of the most insidious yet illuminating narratives infrastructure articulates is that of surveillance, visibility, and control. Surveillance infrastructures do more than simply observe; they regulate bodies, shape behaviors, and define geographies of exclusion. Stephen Mueller's examination of biosurveillance at the U.S.-Mexico border vividly illustrates this dynamic. Mueller describes "biosurveillance territories" where invisible geopolitical borders proliferate, not defined by walls but by biological data and surveillance capitalism. Here, the act of observing bodies, tracking their biological and environmental data, becomes a new form of spatial control and biopolitical regulation (Mueller, 2021). The interactive platform PurpleAir offers a contemporary parallel, visualizing real-time air quality data globally. Such platforms enable us to grasp how infrastructures of visibility and surveillance not only represent but actively produce environmental injustices, demonstrating the profound biopolitical implications inherent in the seemingly benign act of monitoring air quality.

Environmental injustice itself is another critical story narrated through infrastructure. Ersela Kripa and Stephen Mueller's exploration of the ultraviolet border highlights how invisible environmental conditions like ultraviolet radiation are weaponized against vulnerable populations at the U.S.-Mexico border. Migrants, deliberately left exposed in areas without shade infrastructure, endure severe UV damage, while border agents inhabit protected, shaded spaces (Kripa & Mueller, 2020). This inequitable distribution of shade is not incidental but deliberately embedded within the infrastructural logic of exclusion and control. Critical cartographic visualizations from Kripa and Mueller's "Ultraviole(n)t Border" mapping project vividly render these hidden injustices visible, spatializing inequality in a way that textual descriptions alone cannot.

Parallel to these visible forms of injustice, infrastructure increasingly narrates invisible, multispectral, and subperceptual stories. Contemporary sensing technologies render urban environments legible beyond human perception, capturing thermal footprints, infrared signatures, and hidden electromagnetic patterns. Jingru Cyan Cheng and Chen Zhan's exploration of hydroelectric infrastructures provides a vivid demonstration of this narrative potential. Through immersive film and sensory storytelling, Cheng and Zhan uncover the intricate ecological and cultural entanglements embedded within large-scale transnational energy networks. Their work meticulously reveals how communities and landscapes are invisibly linked by the unseen flows of water and energy, highlighting the human and environmental consequences that infrastructures impose upon distant yet interconnected regions (Cheng & Zhan, 2025).

Infrastructure as **Storytelling**

Spatializing Power, Surveillance, and Memory

At an architectural scale, the capacity of buildings to articulate these hidden narratives is further illustrated by projects such as Kripa and Mueller's "Spectral." Here, the architectural form itself becomes an active agent, shaping and revealing multispectral shadows and signatures. As captured eloquently in the video documentation of "Spectral," these installations render urban environments simultaneously physical and digital, confronting observers with pressing questions about visibility, surveillance, and control. By employing architectural interventions that engage directly with multispectral data, infrastructures become tangible storytellers, prompting critical reflection on the complexities of contemporary spatial practices.

Yet infrastructure's storytelling is not confined to modes of control and exclusion. It also harbors potentials for intimacy, vulnerability, and empathy, particularly when intentionally mobilized for collective narrative projection. Jingru Cyan Cheng and Chen Zhan's 'Swamplands' uses immersive film installations to contrast the spectacular presentation of infrastructure with the hidden ecological and social realities behind hydroelectric power generation. This approach sensitively narrates infrastructure as an entanglement of cultural imaginaries and environmental disruptions, shifting attention from the spectacular to the submerged and marginalized voices often silenced by infrastructure's narrative of progress (Cheng & Zhan, 2025) . Infrastructure here becomes a shared, intimate storyteller, reorienting public architecture away from authoritarian surveillance toward empathetic connection.

Making these invisible conditions tangible and spatially legible requires deliberate and thoughtful visualization strategies. Kripa and Mueller's "Drawn Across Borders" project illustrates how distributed networks of sensors can document invisible airborne particulates across political boundaries. These sensors transcribe shared environmental risks into real-time collective drawings, confronting viewers with the stark, tangible impacts of infrastructural neglect and environmental injustice (Kripa & Mueller, 2023). Their speculative cartographic mappings not only render these invisible conditions visible but also spatially articulate narratives of neglect, vulnerability, and resistance.

Ultimately, infrastructure's storytelling potential must move beyond theoretical recognition into architectural and spatial practice. Documented physical installations like Kripa and Mueller's "Spectral" and "Irradiated Shade Pavilion" provide tangible examples of architecture consciously engaging with these hidden narratives. These installations demonstrate how infrastructural design can actively narrate stories of surveillance, multispectral visibility, and environmental injustice, embedding critical reflection and social consciousness directly into physical environments.

Lastly, infrastructure is never neutral. It actively shapes and narrates the conditions of visibility, control, environmental justice, and collective memory. Recognizing this active narrative capacity challenges architects and designers to intentionally shape these stories toward greater equity, transparency, and care. Whether visualized through real-time interactive maps, critical cartography, multispectral videos, intimate collective narratives, or spatially explicit visual essays, these media forms offer compelling entry points to explore, reveal, and actively rewrite infrastructure's hidden stories. Architecture, thus, emerges not merely as shelter or enclosure but as a profoundly narrative medium; capable of confronting us with uncomfortable truths, illuminating unseen inequities, and ultimately, inviting us toward more empathetic and just spatial futures.

Reference:

Jingru Cyan Cheng & Chen Zhan (2025). "Swamplands: How Much Wattage is One Handbreadth of Water?" Storefront for Art and Architecture, 2025.

Kripa, Ersela, & Mueller, Stephen. (2020). "An Ultraviolet Border," e-flux Architecture. <https://www.e-flux.com/architecture/at-the-border/325756/an-ultraviolet-border/>

Kripa, Ersela, & Mueller, Stephen. (2021). "Spectral," Architectural Review. <https://www.architectural-review.com/awards/ar-public-2022-shortlist-spectral-by-agency>

Kripa, Ersela, & Mueller, Stephen. (2023). "Drawn Across Borders," in Design for Vulnerable Communities. Springer. https://link.springer.com/chapter/10.1007/978-3-031-30174-1_21 Mueller, Stephen. (2021). "Biotic Borderlands," Manifest Journal. <https://www.manifestproject.org/>

Interactive:

PurpleAir. "US EPA PM2.5 Air Quality Standards Interactive Map by PurpleAir." Accessed August 7, 2025. <https://map.purpleair.com/air-quality-standards-us-epa-aqi>.

"DepthEye - iOS LiDAR Point Cloud Scanner." Accessed August 8, 2025. <https://deptheye.com>

An aerial, black-and-white photograph of a dense urban landscape, likely New York City. The image shows a complex grid of streets and buildings. A large, dark, irregularly shaped area in the foreground, possibly a body of water or a large park, separates the viewer from the dense urban fabric. The perspective is from a high angle, looking down at the city.

02

FUGITIVE ECOLOGIES

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CRIT: NEREA CALVILLO | PARTNERS: KARLA & SHIPENG XUE | SUMMER 2025

Fugitive Ecologies investigates the Gansevoort Peninsula in New York as a site shaped by cycles of construction, erasure, and regeneration. Through research into histories, industrial residues, abandoned infrastructures, and ecological growth, the project critiques the sanitization and redevelopment of the waterfront. The proposal imagines a landscape that resists control and visibility, allowing weeds, birds, soil, and marginalized communities to reclaim space through processes of fugitivity, refusal, and ghostly return. Rather than preserving the site as a curated public image, the project embraces decay, concealment, and uncontrolled growth as forms of ecological and social resistance.





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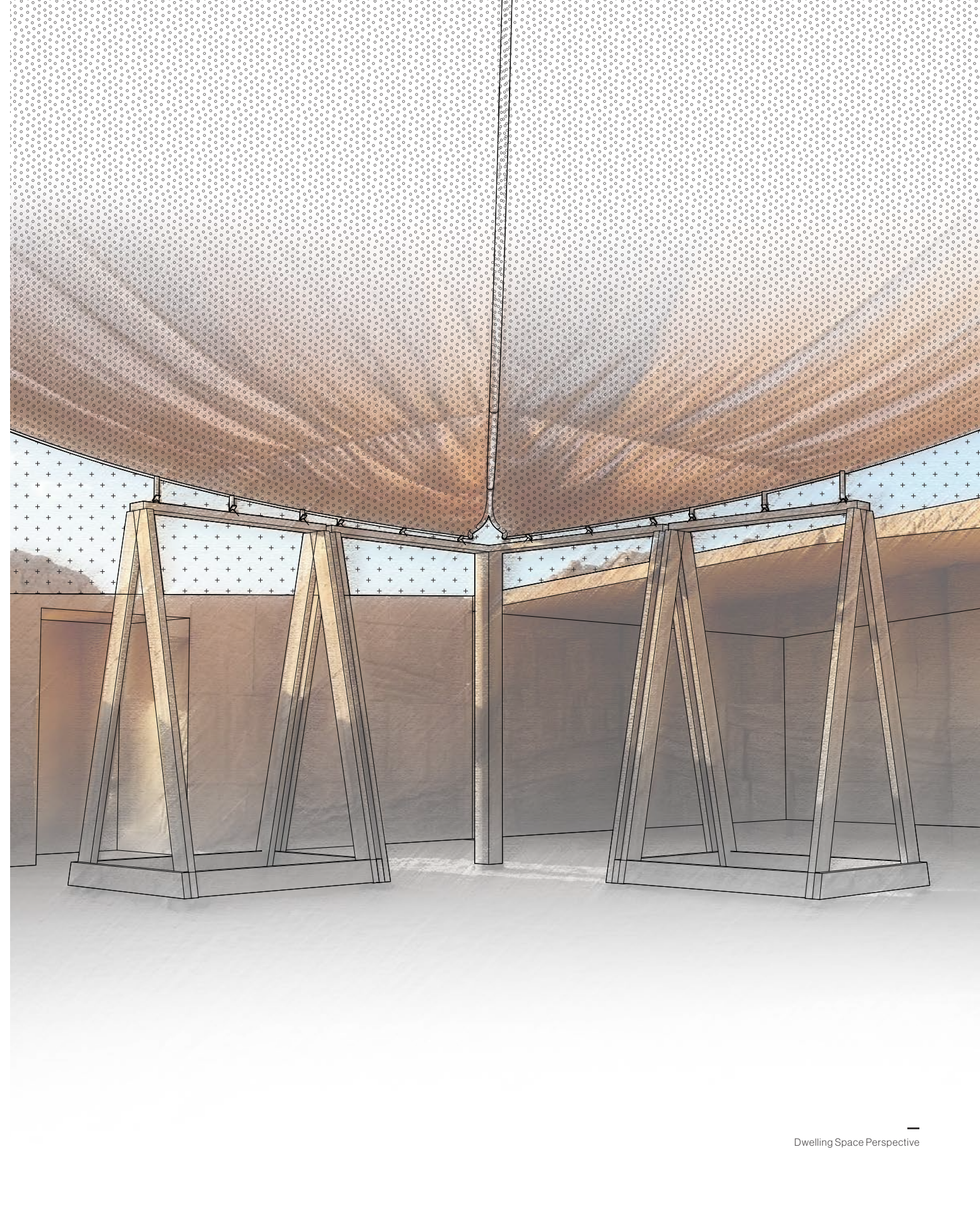
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HEGRA: ATMOSPHERIC TRACES

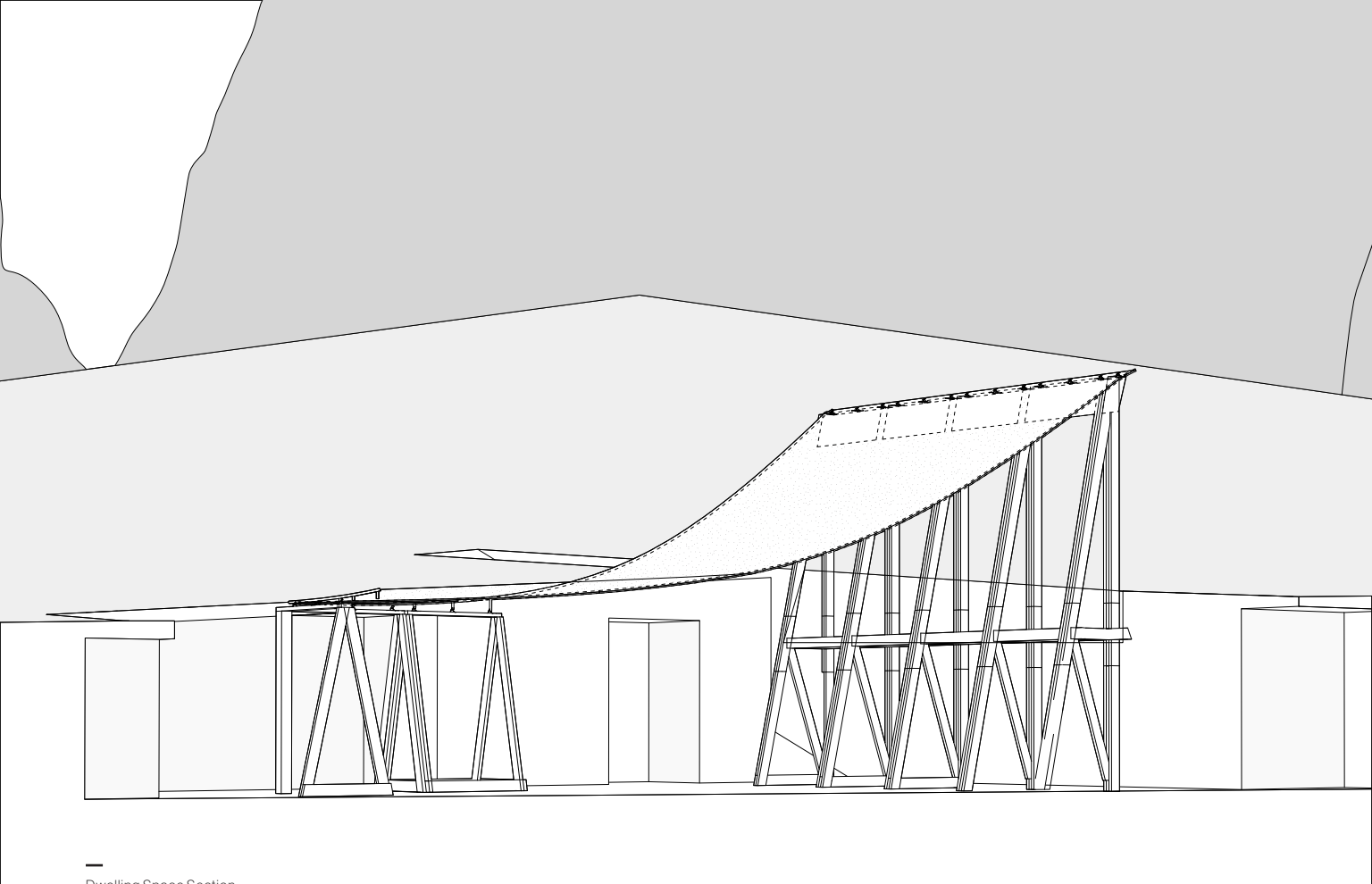
Copper as Environmental Witness

CRIT: MARIO GOODEN | INDIVIDUAL | FALL 2026

This project uses copper as a forensic material to reveal the invisible environmental pressures shaping Hegra's UNESCO protected desert landscape. Positioned around Daughter's Palace, three interventions, a shingle wall, a canopy, and a mesh walkway, act as evidentiary surfaces that record diesel exhaust, agricultural ammonia, dust, and moisture through gradual patination. Rather than treating the site as a static monument, the work frames Hegra as an active ecology where tourism, farming, and infrastructure converge. Copper's transformation makes these forces visible, presenting the heritage

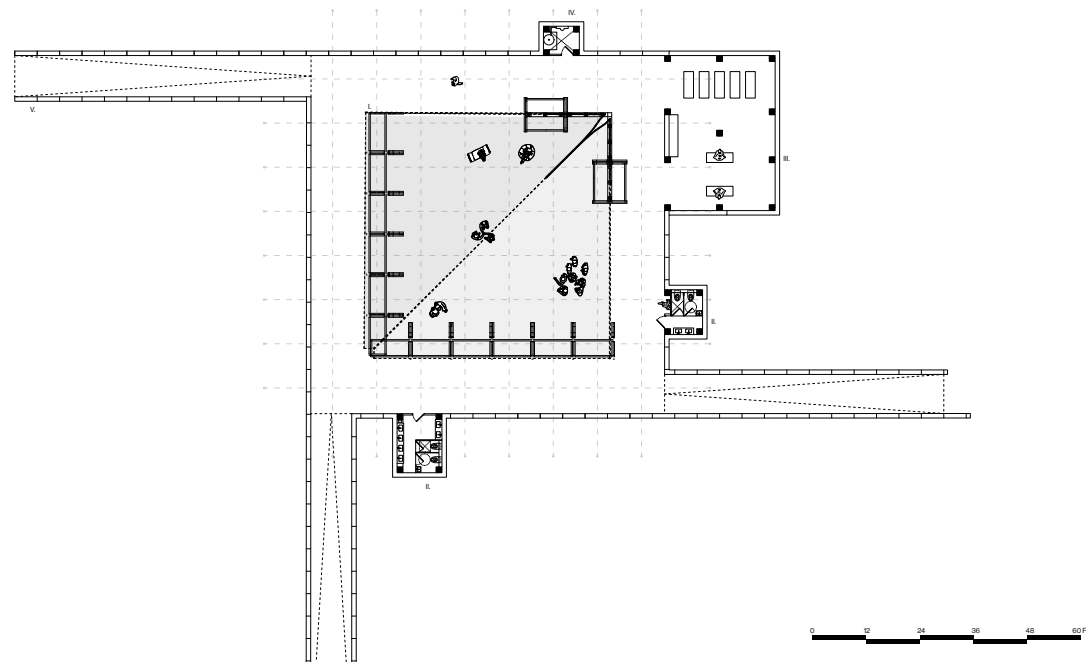




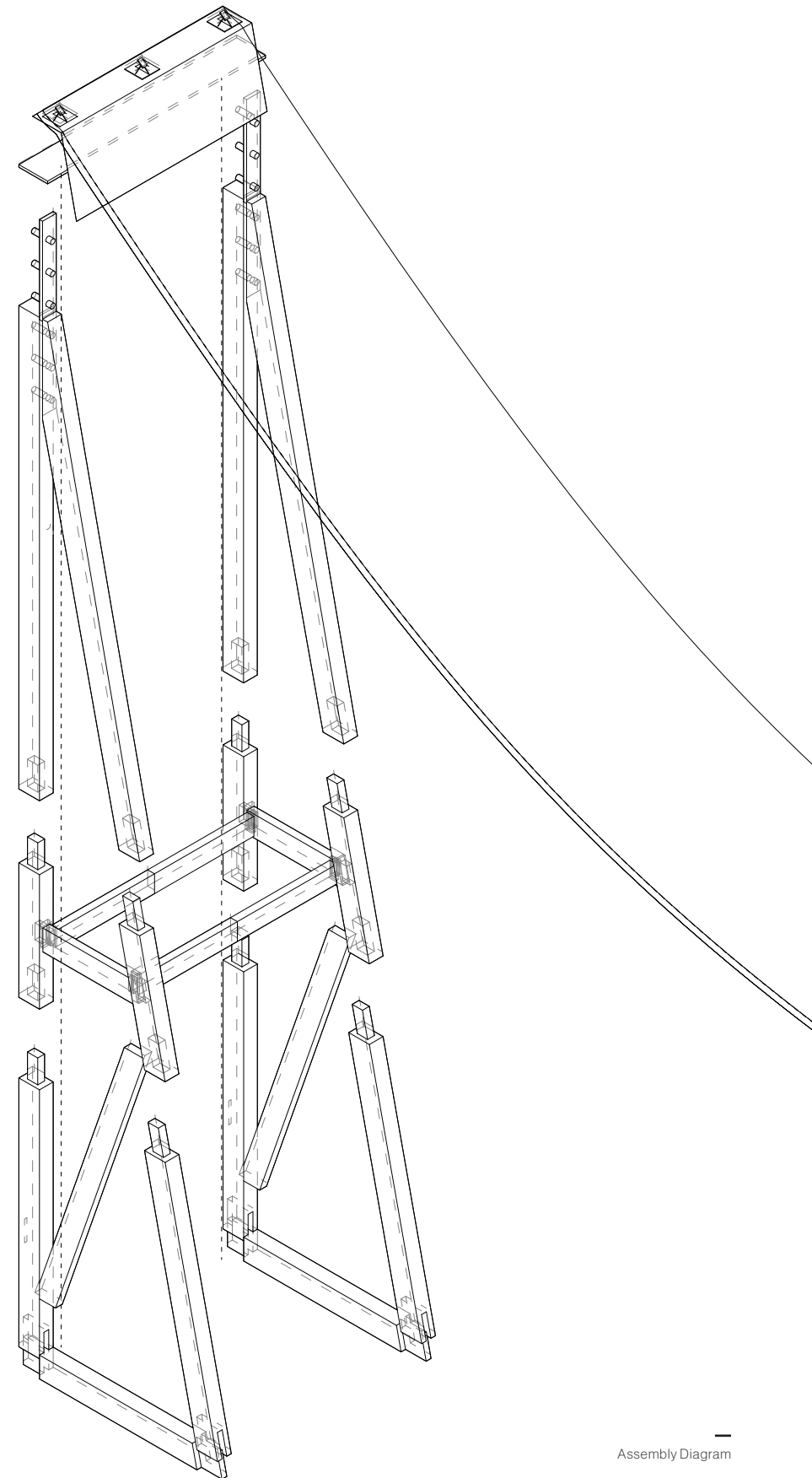


Dwelling Space Section

- 1/8" = 1'-0"
- I. Dwelling Space (Copper Mesh/Fabric Canopy)
 - II. Washroom and Media Area
 - III. Hydroponic Chamber/Prayer/Meditation Space
 - IV. Well/Lobby Room
 - V. Retaining Wall



Dwelling Space Floor Plan



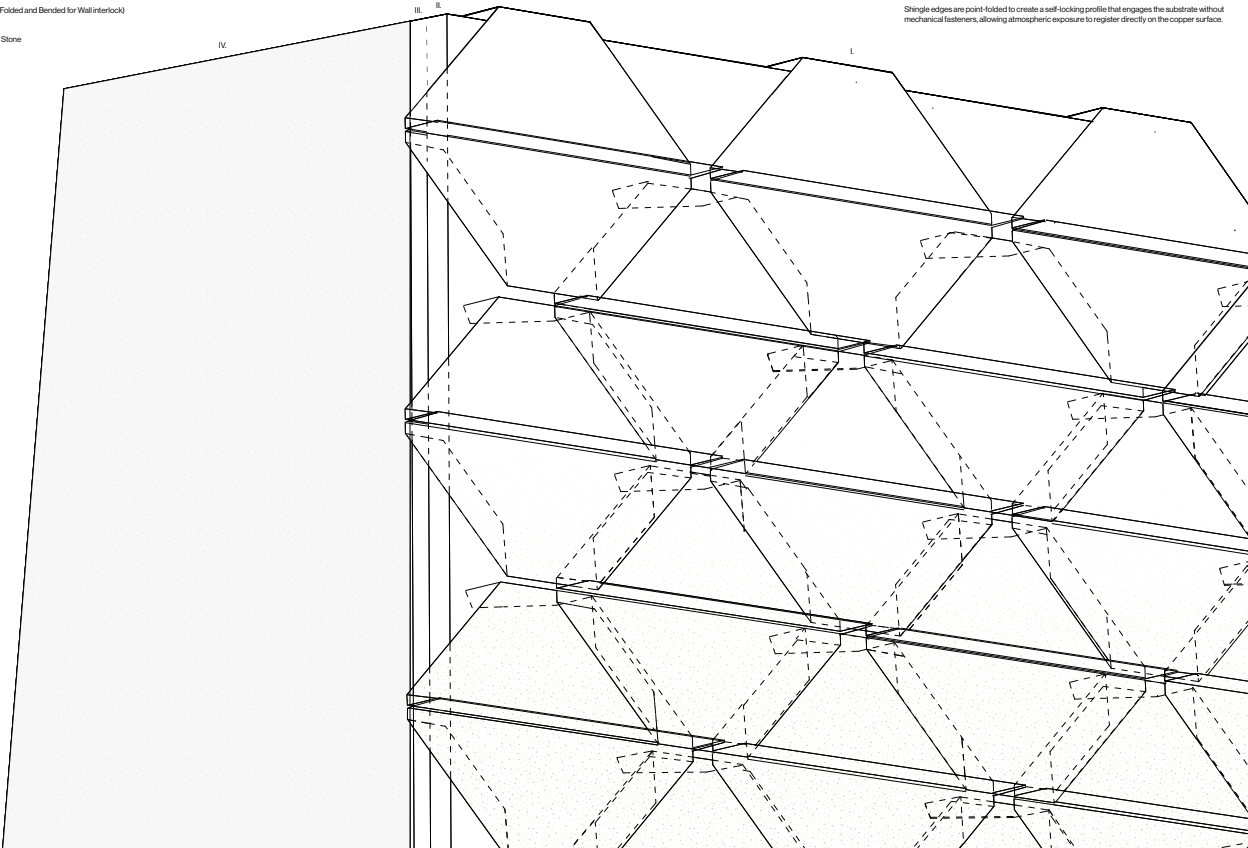
Assembly Diagram



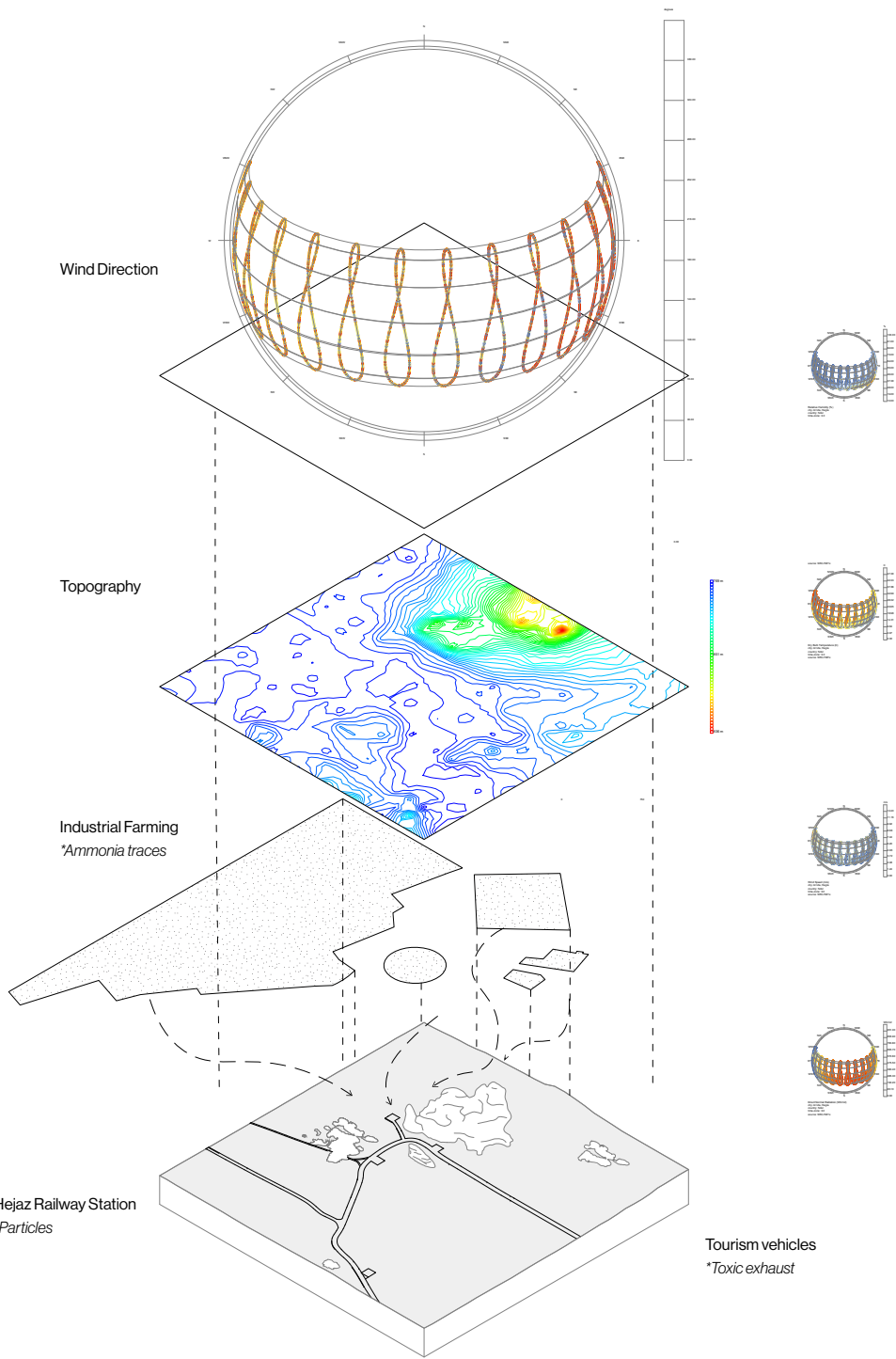
Physical Interlocked Copper Shingle

- I. Copper Shingle (Folded and Bended for Wall Interlock)
- II. Cork Sheet
- III. Sheathing Panel
- IV. Recovered Sand Stone

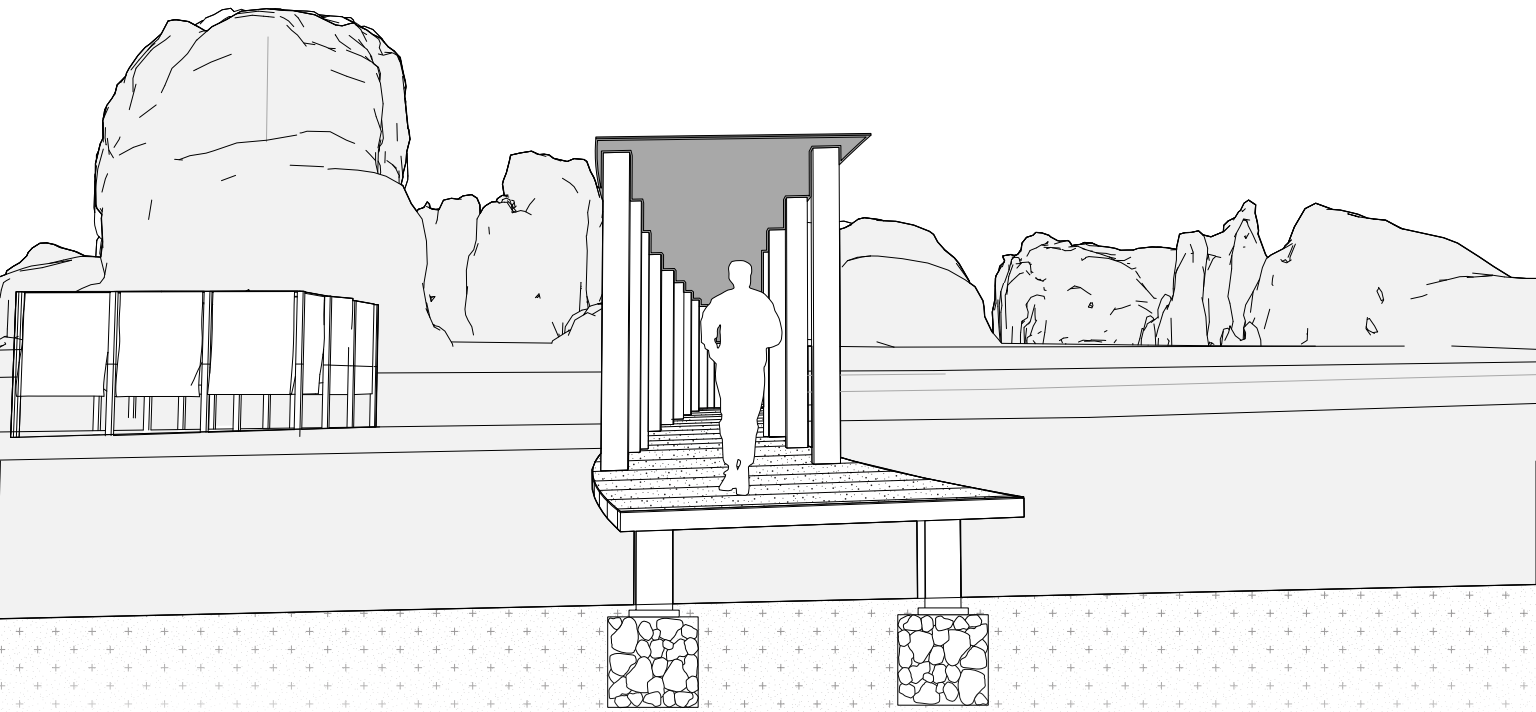
Shingle edges are point-folded to create a self-locking profile that engages the substrate without mechanical fasteners, allowing atmospheric exposure to register directly on the copper surface.



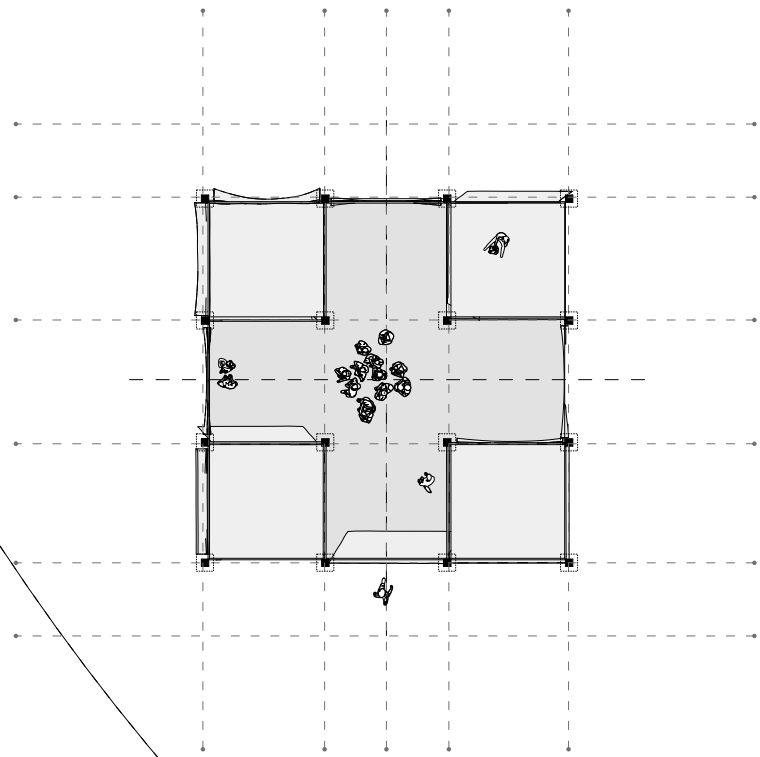
Copper Shingle Diagram



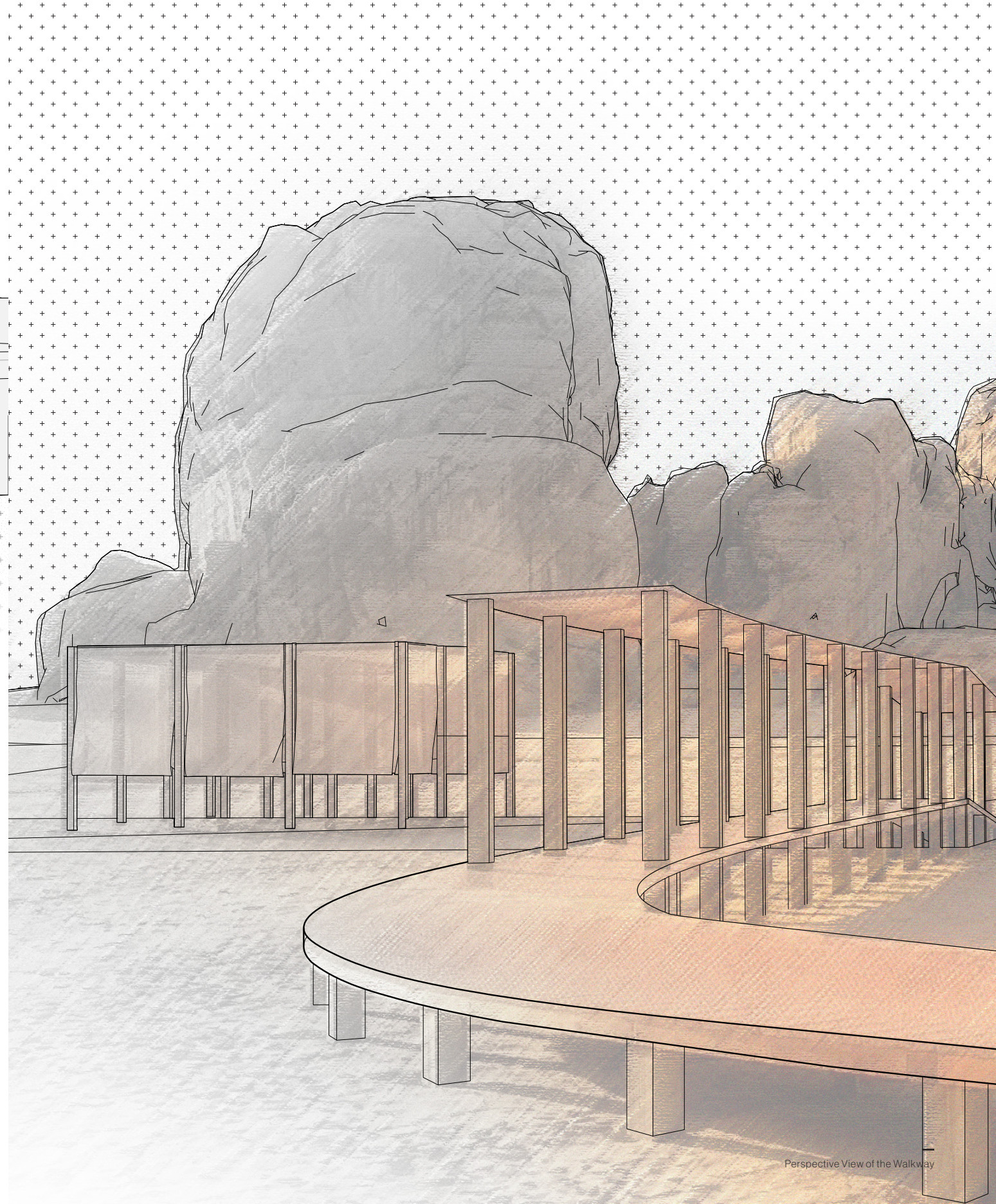
Forensic Site Analysis



Walkway Section



Installation Floor Plan



Perspective View of the Walkway

