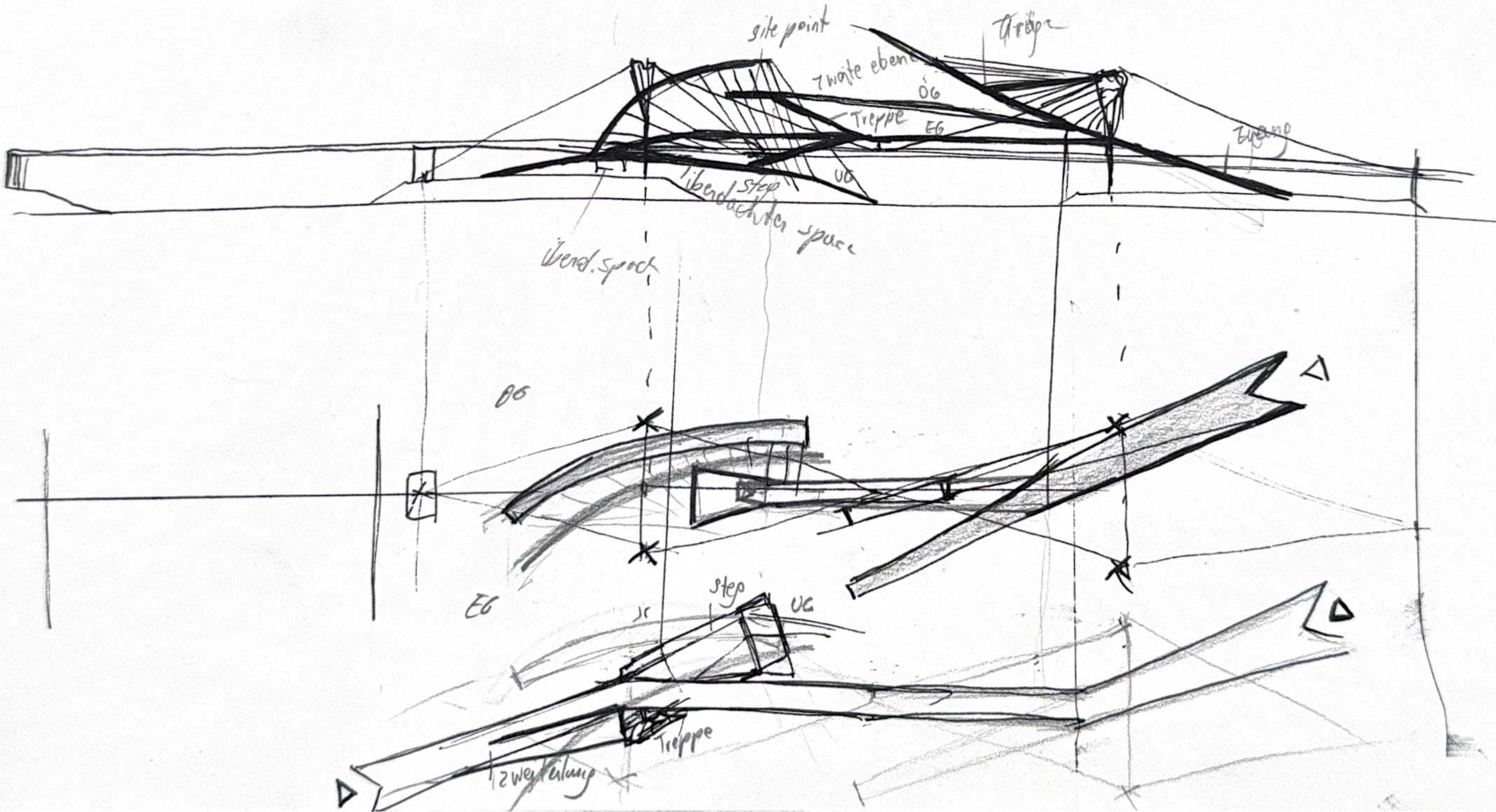
20.04.26 Brückendesign



Phase 1 – Ascending access structure with a 5% gradient.

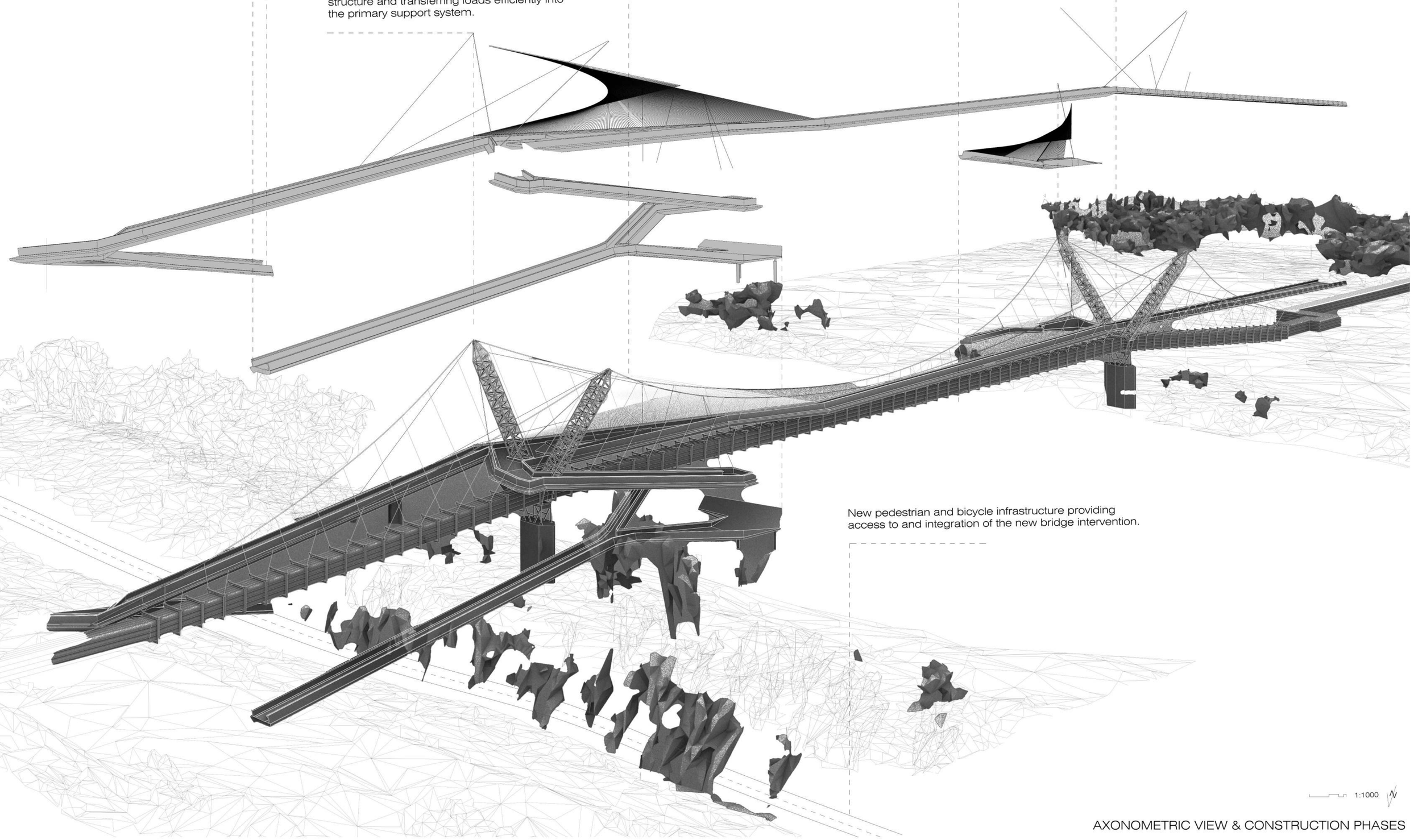
Phase 1 – Descending access structure with a 5% gradient, incorporating seating and resting areas as an alternative to intermediate landings.

Phase 2 – Elevated access route and connection to the riverside boardwalk.

Secondary cable suspensions supporting the tensile shading elements while contributing additional structural stabilization.

Elevated viewing platform introduced in Phase 2, expanding the crossing experience and providing additional social and atmospheric space overlooking the Danube.

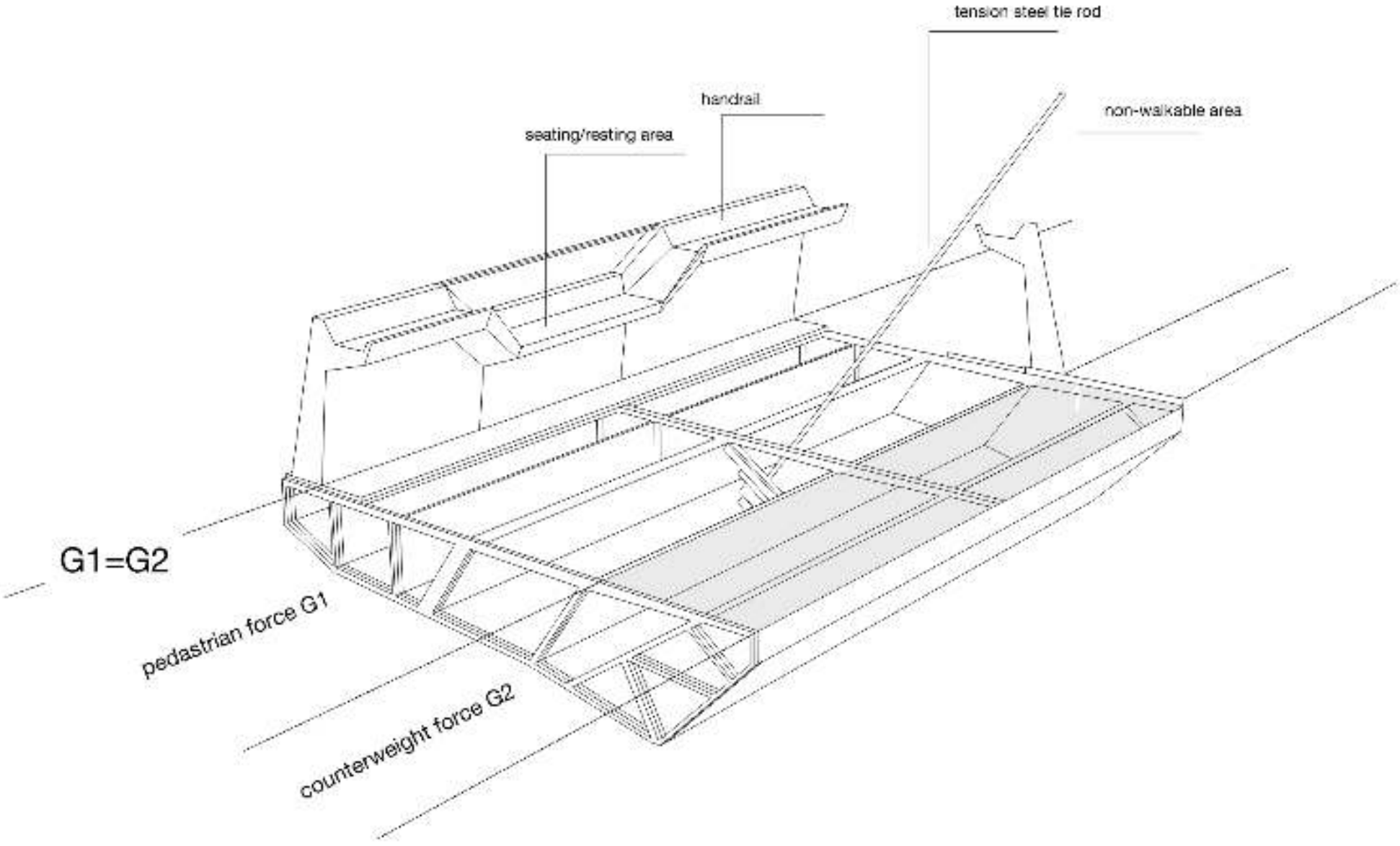
Steel tension rods suspending the pathway structure and transferring loads efficiently into the primary support system.

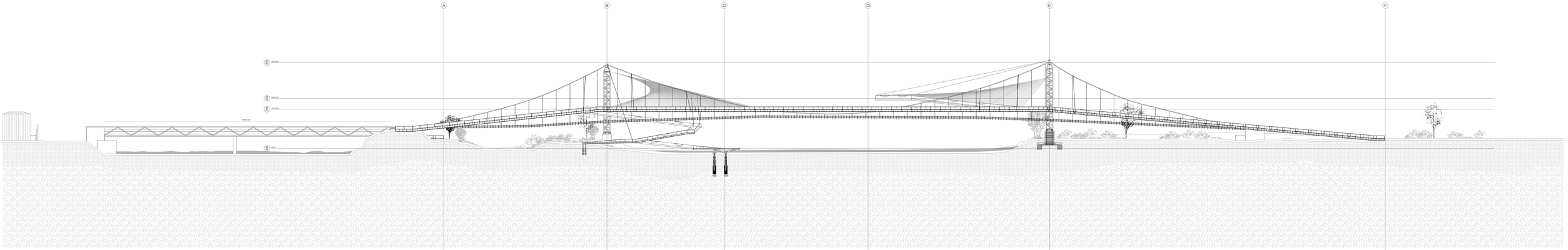


New pedestrian and bicycle infrastructure providing access to and integration of the new bridge intervention.

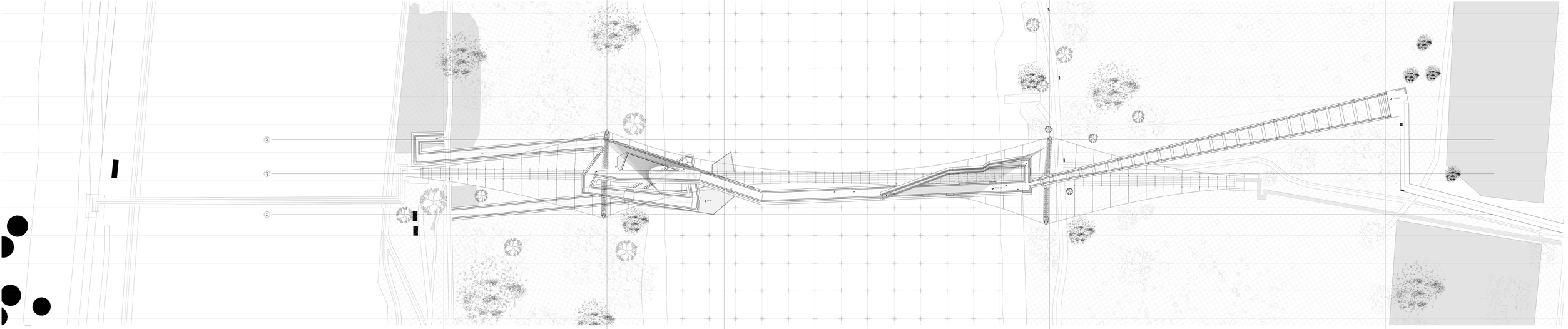
1:1000

AXONOMETRIC VIEW & CONSTRUCTION PHASES

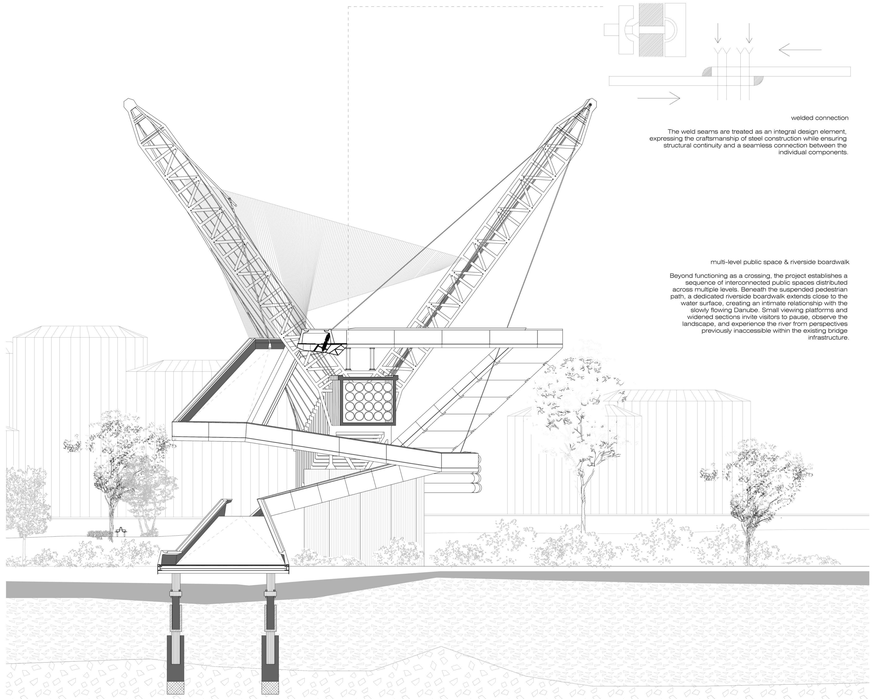

tension steel tie rod
handrail
seating/resting area
non-walkable area
G1=G2
pedastrian force G1
counterweight force G2



C-C
section 1:500



plan 1:500

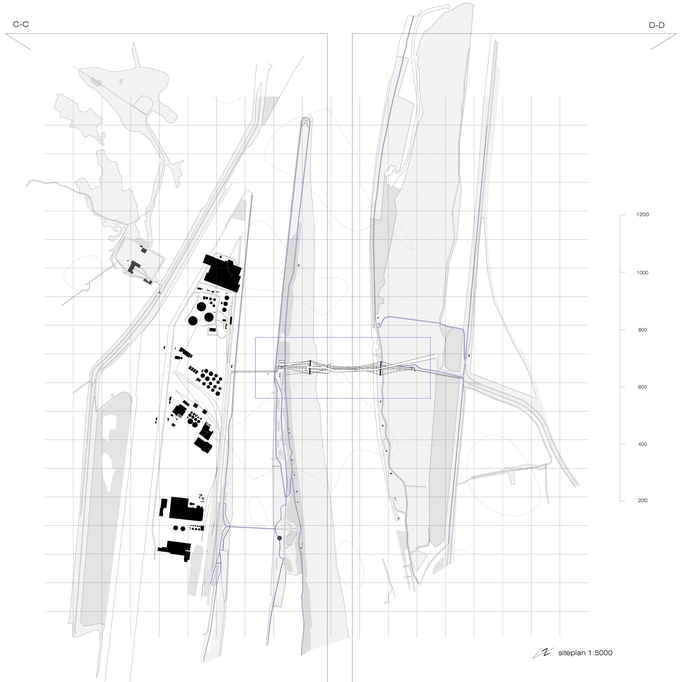


welded connection

The weld seams are treated as an integral design element, expressing the craftsmanship of steel construction while ensuring structural continuity and a seamless connection between the individual components.

multi-level public space & riverside boardwalk

Beyond functioning as a crossing, the project establishes a sequence of interconnected public spaces distributed across multiple levels. Beneath the suspended pedestrian path, a dedicated riverside boardwalk extends close to the water surface, creating an intimate relationship with the slowly flowing Danube. Small viewing platforms and widened sections invite visitors to pause, observe the landscape, and experience the river from perspectives previously inaccessible within the existing bridge infrastructure.

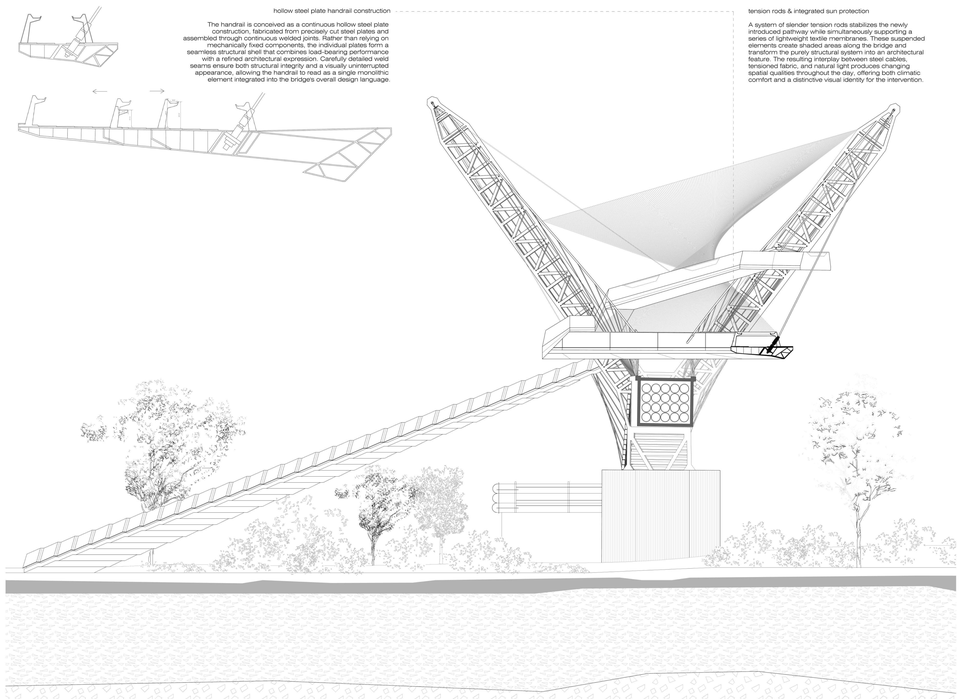


hollow steel plate handrail construction

The handrail is conceived as a continuous hollow steel plate construction, fabricated from precisely cut steel plates and assembled through continuous welded joints. Rather than relying on mechanically fixed components, the individual plates form a seamless structural shell that combines load-bearing performance with a refined architectural expression. Carefully detailed weld seams ensure both structural integrity and a visually uninterrupted appearance, allowing the handrail to read as a single monolithic element integrated into the bridge's overall design language.

tension rods & integrated sun protection

A system of slender tension rods stabilizes the newly introduced pathway while simultaneously supporting a series of lightweight textile membranes. These suspended elements create shaded areas along the bridge and transform the purely structural system into an architectural feature. The resulting interplay between steel cables, tensioned fabric, and natural light produces changing spatial qualities throughout the day, offering both climatic comfort and a distinctive visual identity for the intervention.



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