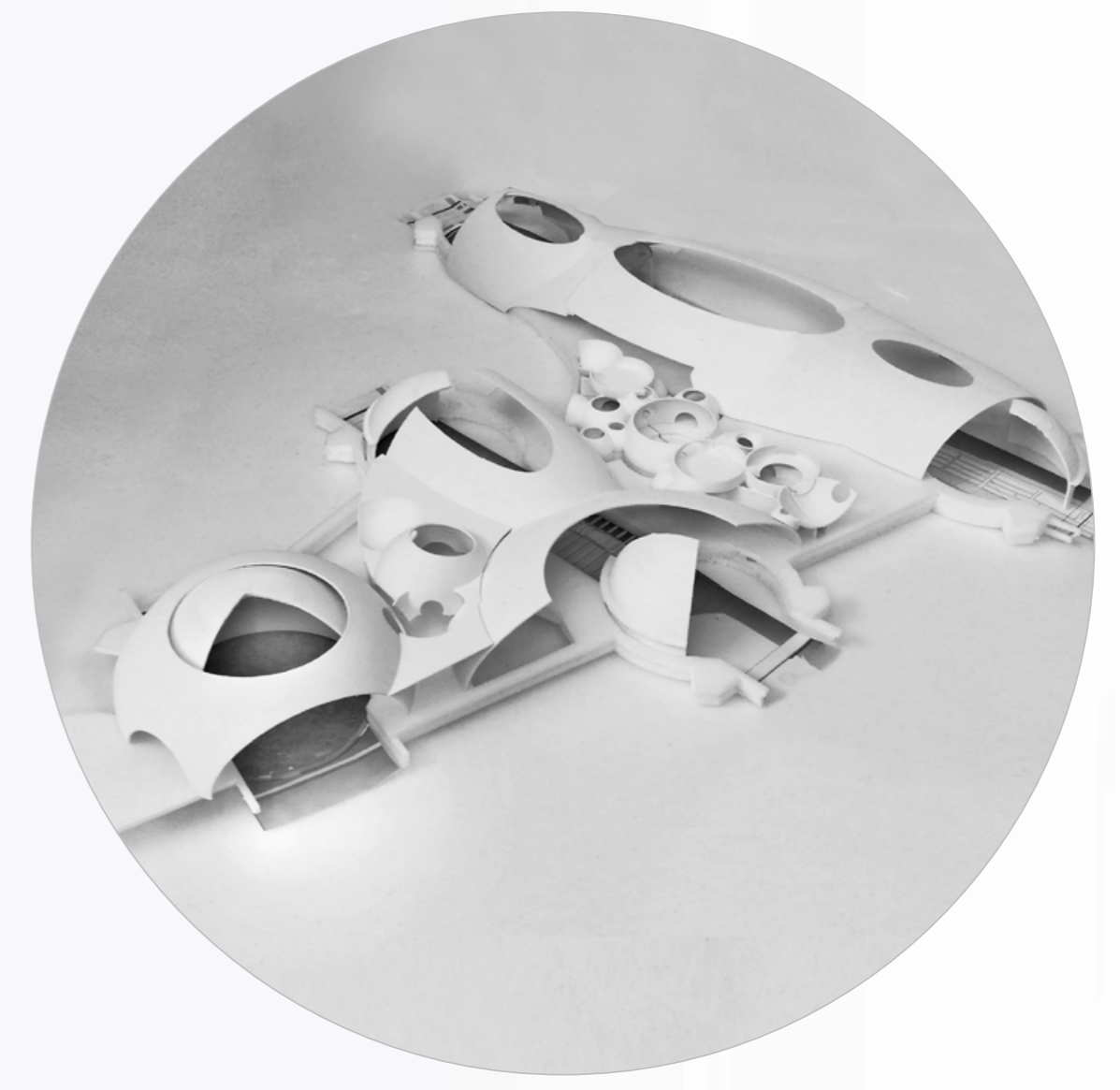
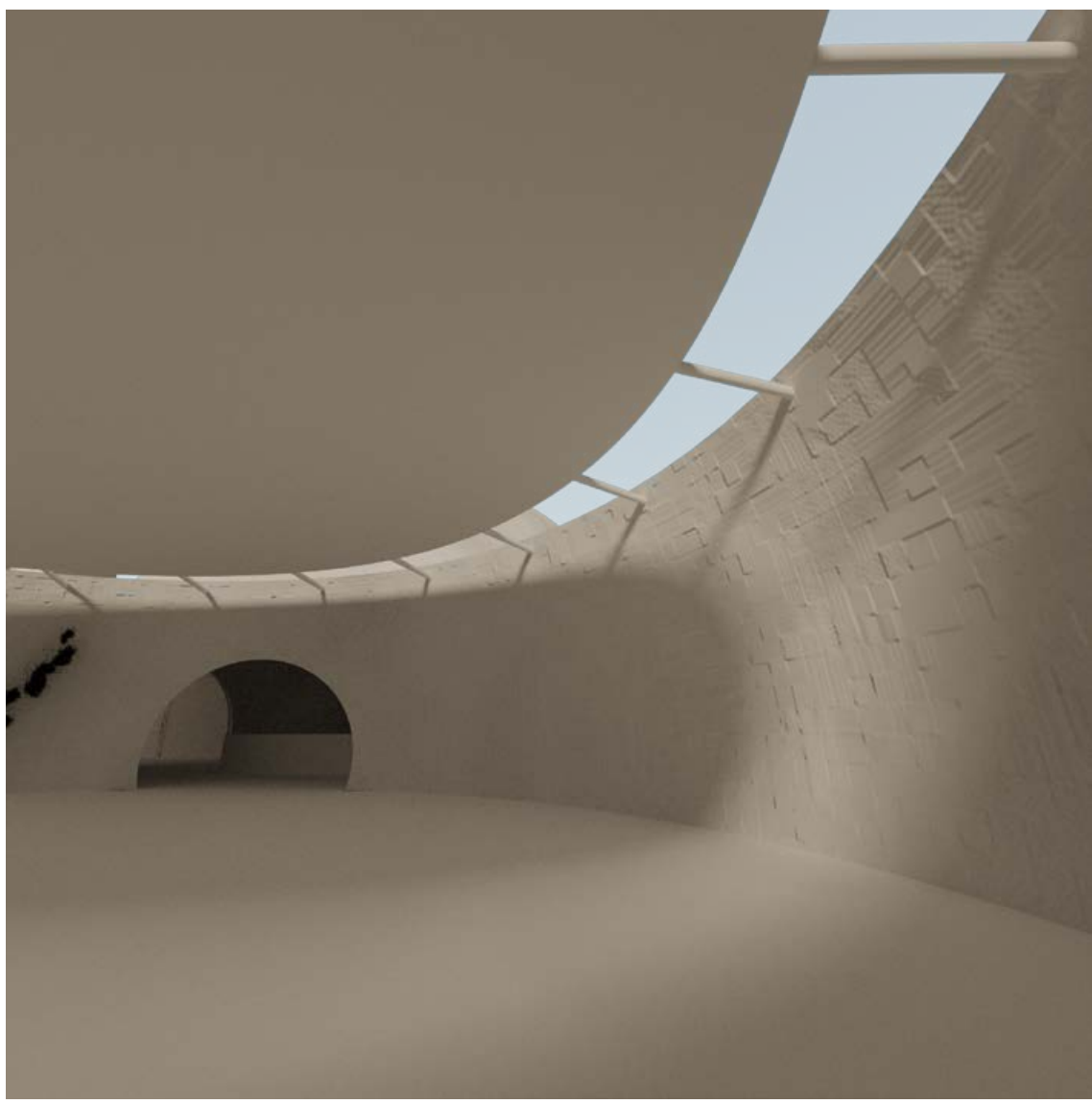
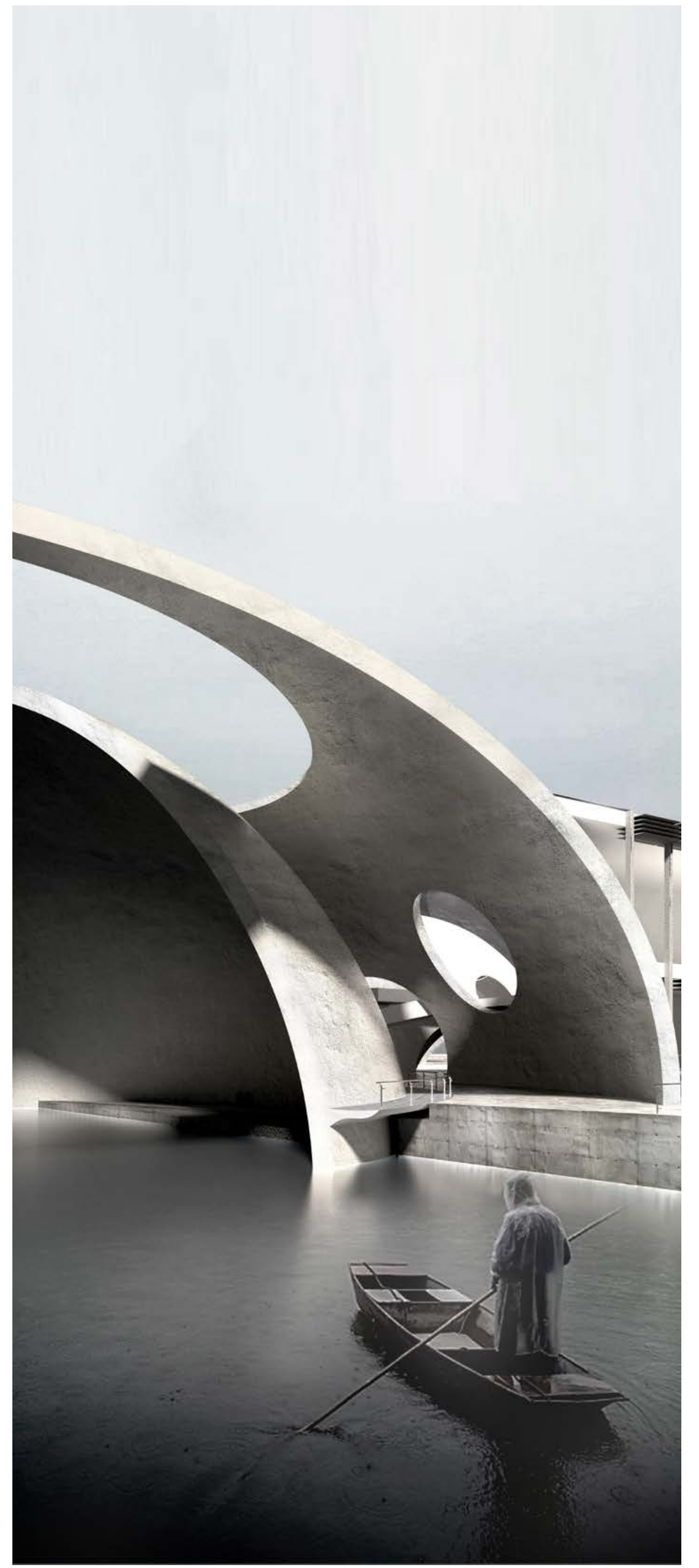
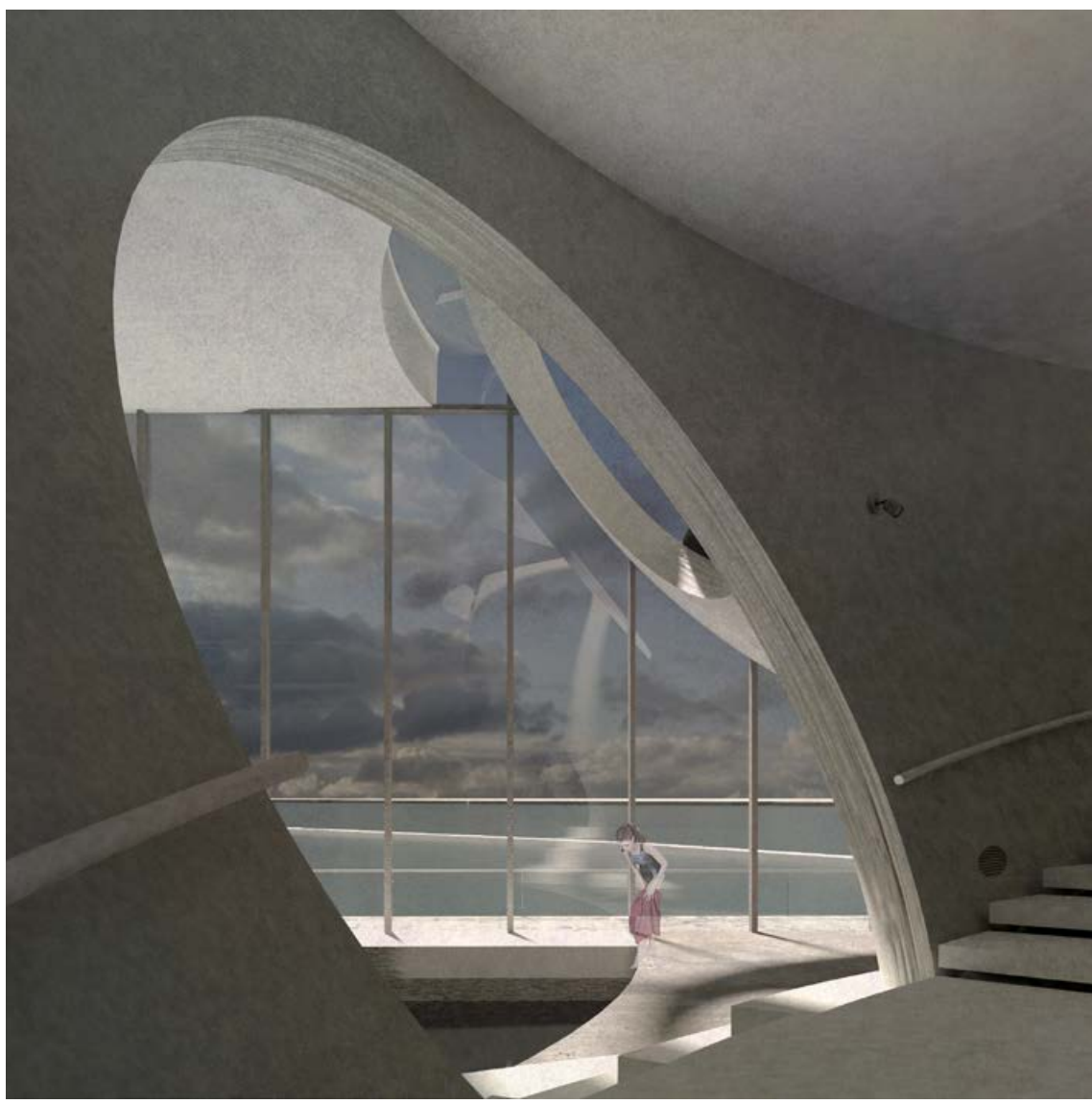
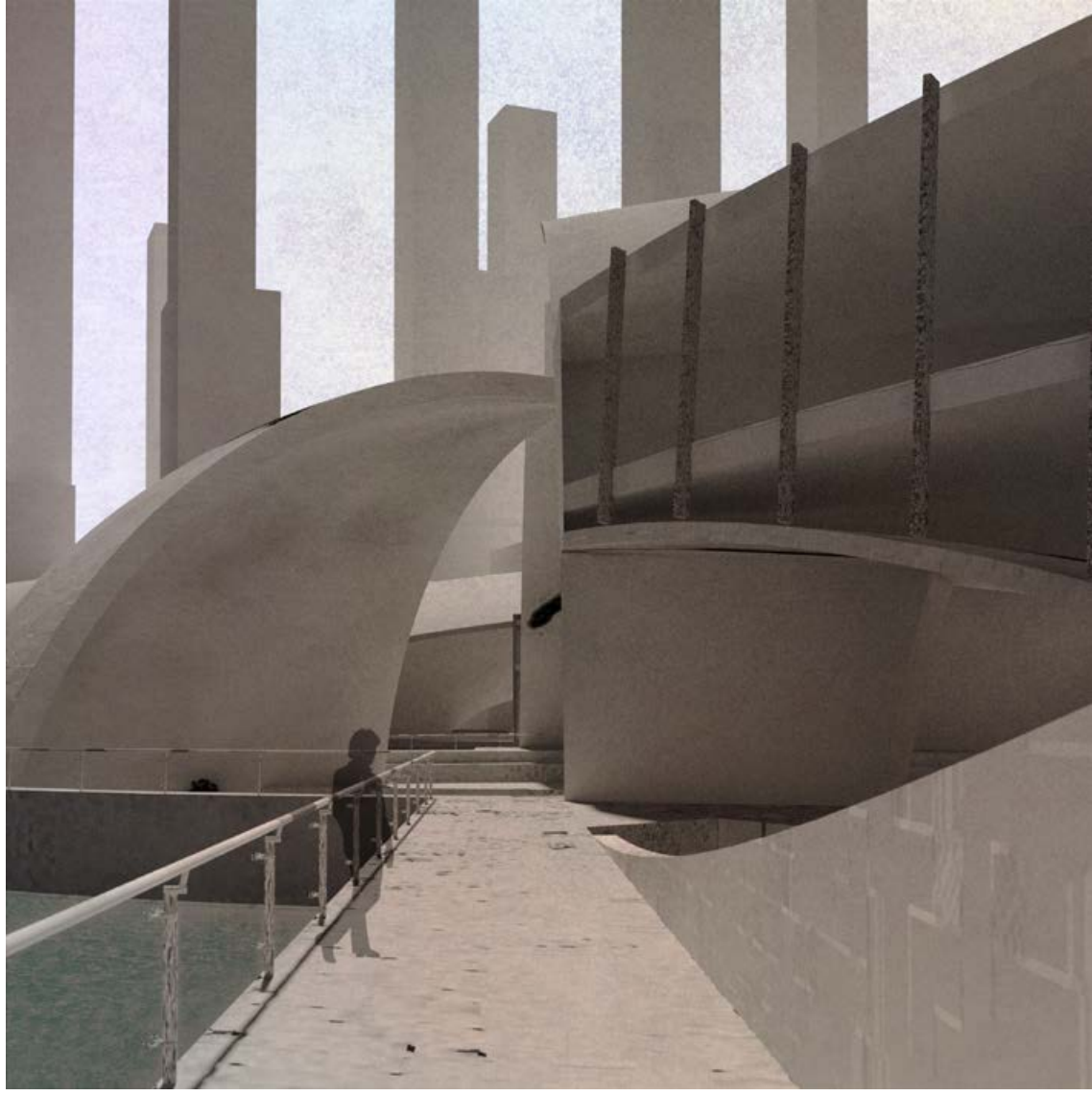
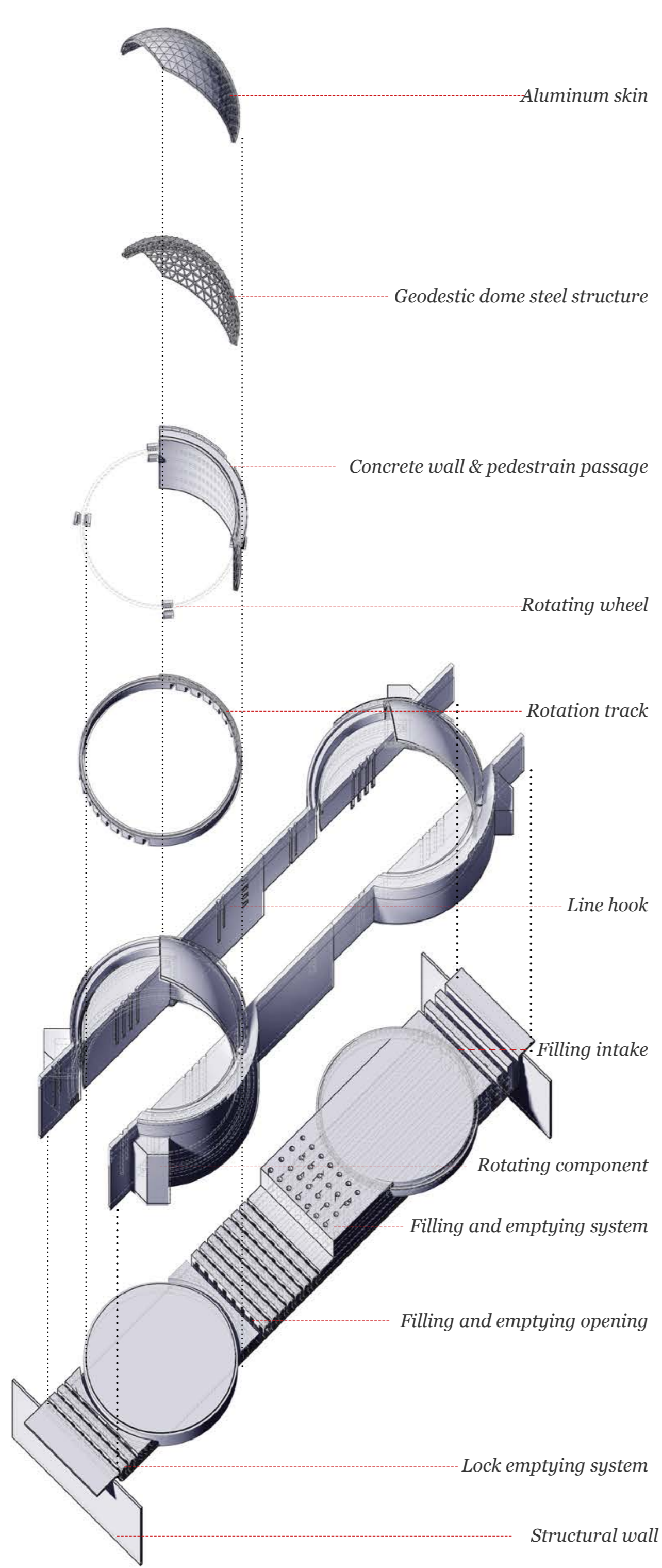


T H E L O C K
Integration Design of Architecture and Hydraulic Infrastructure
X I A N G Q I A N F E N G

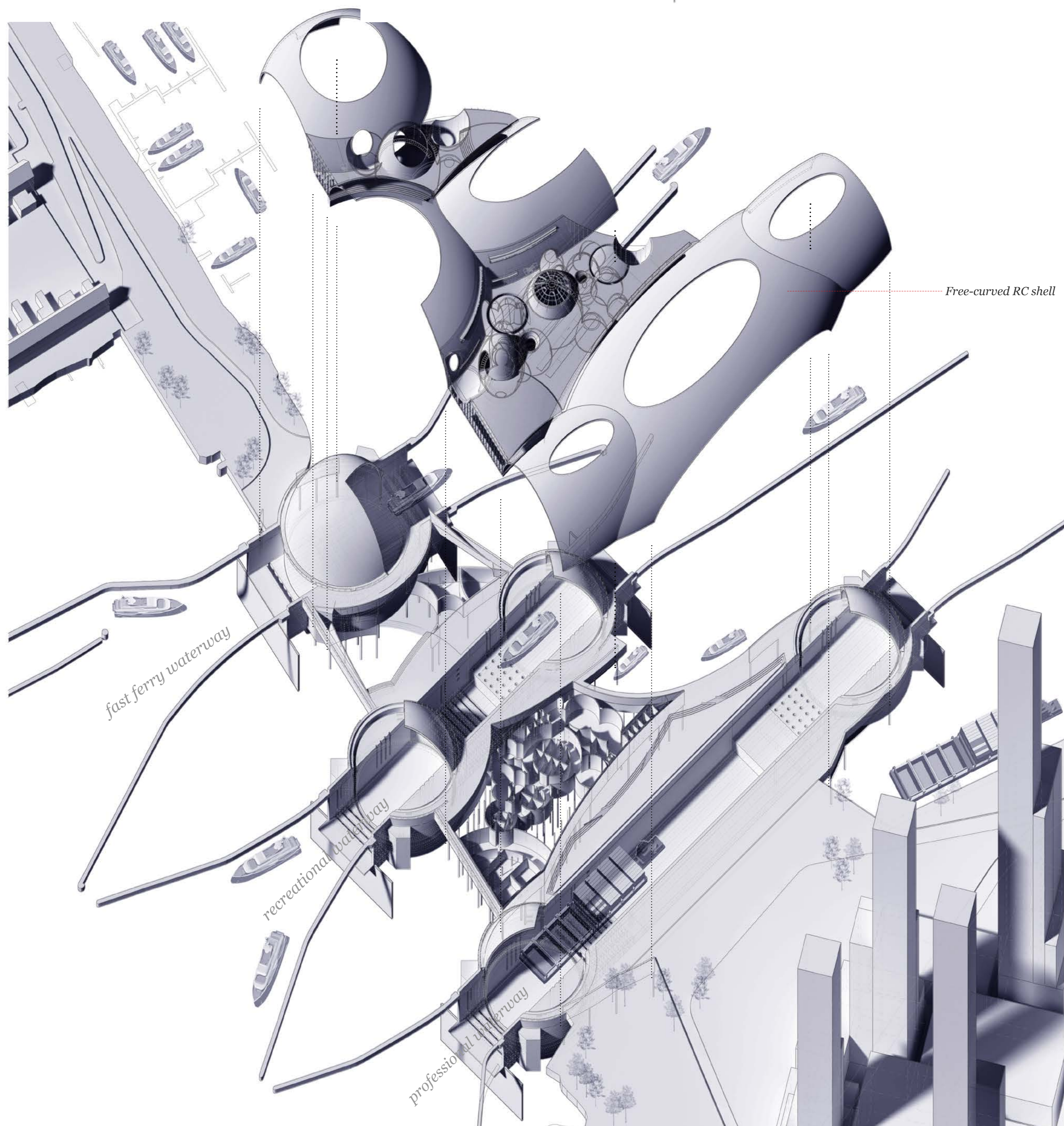
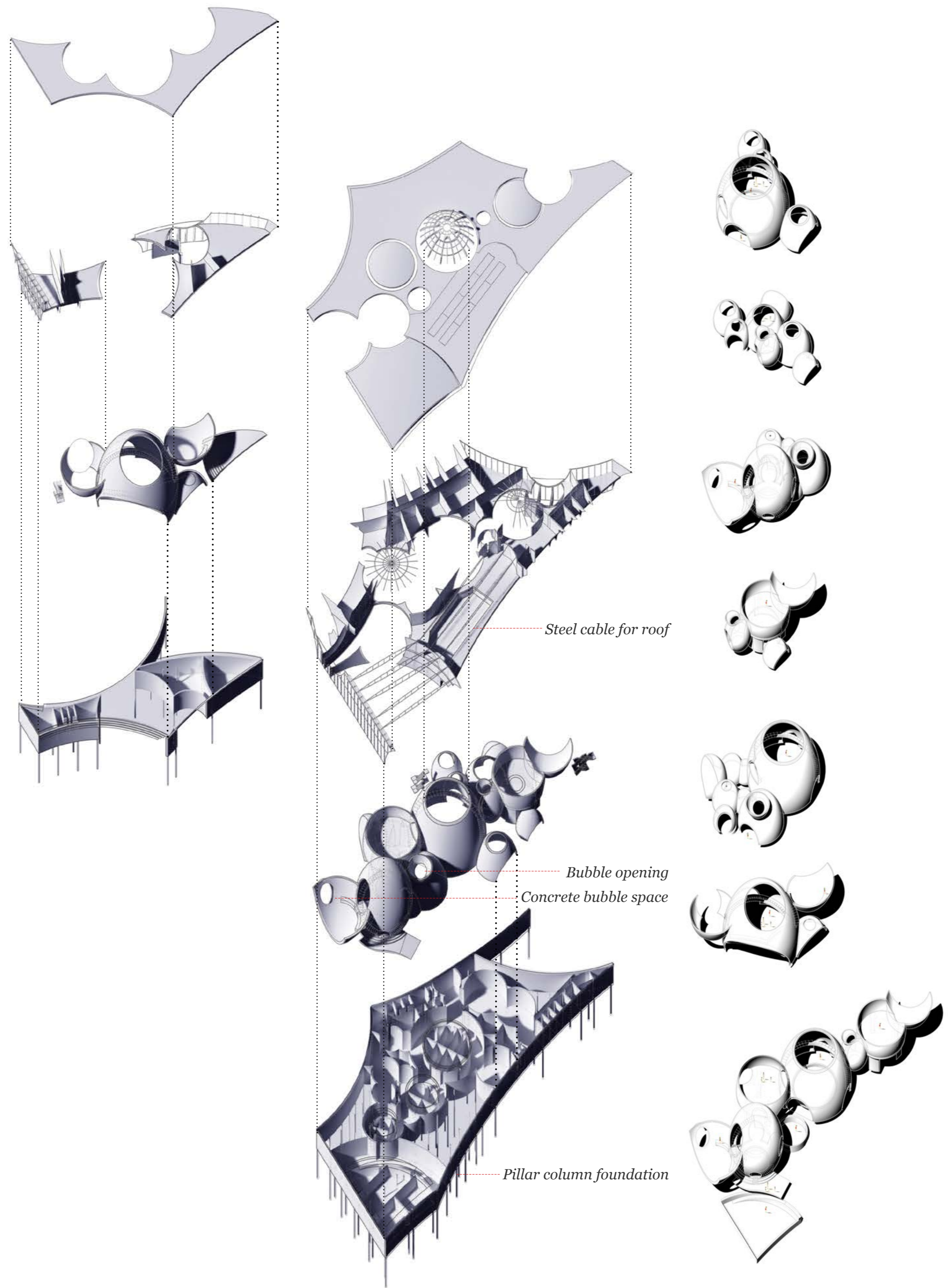




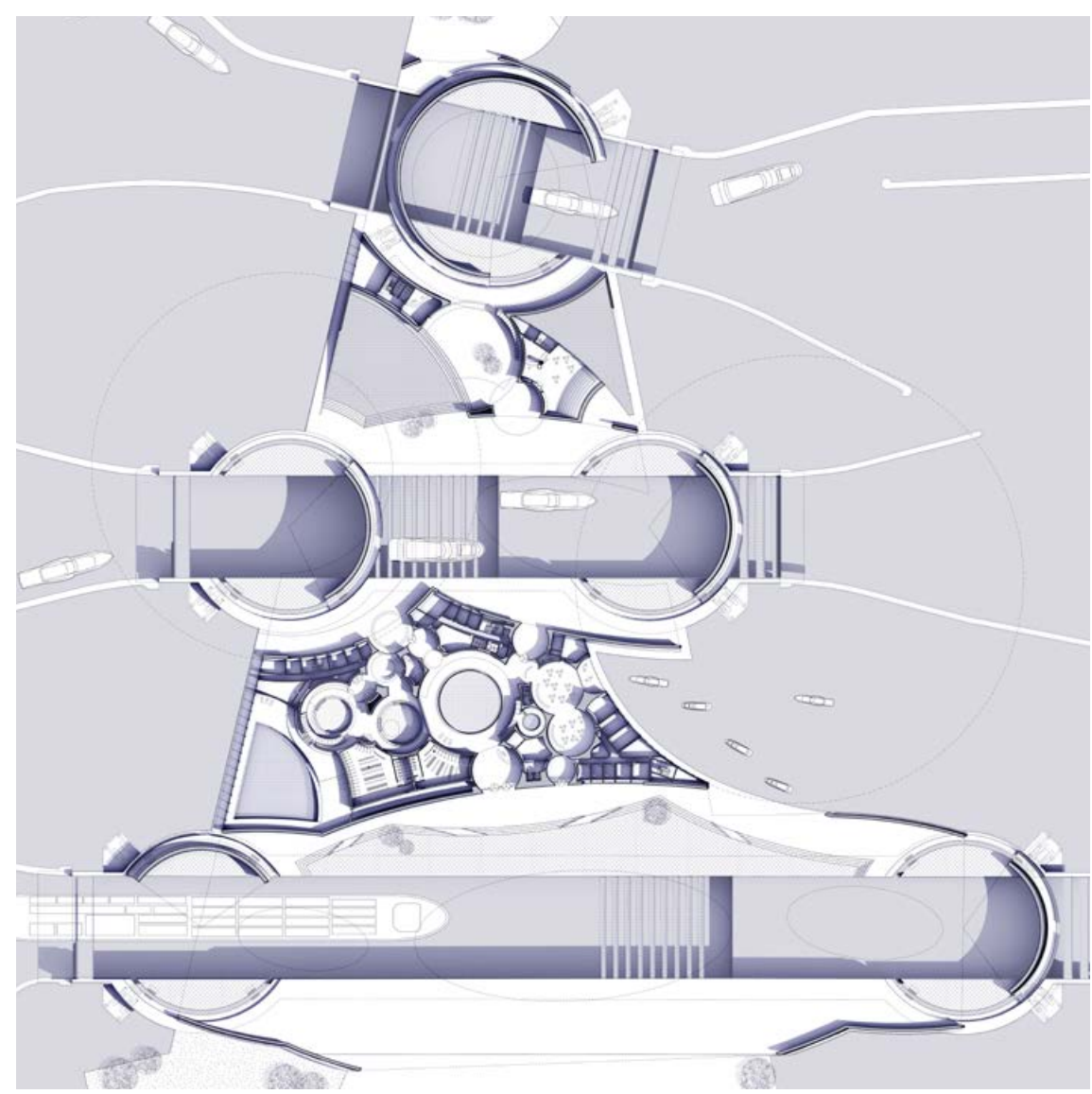
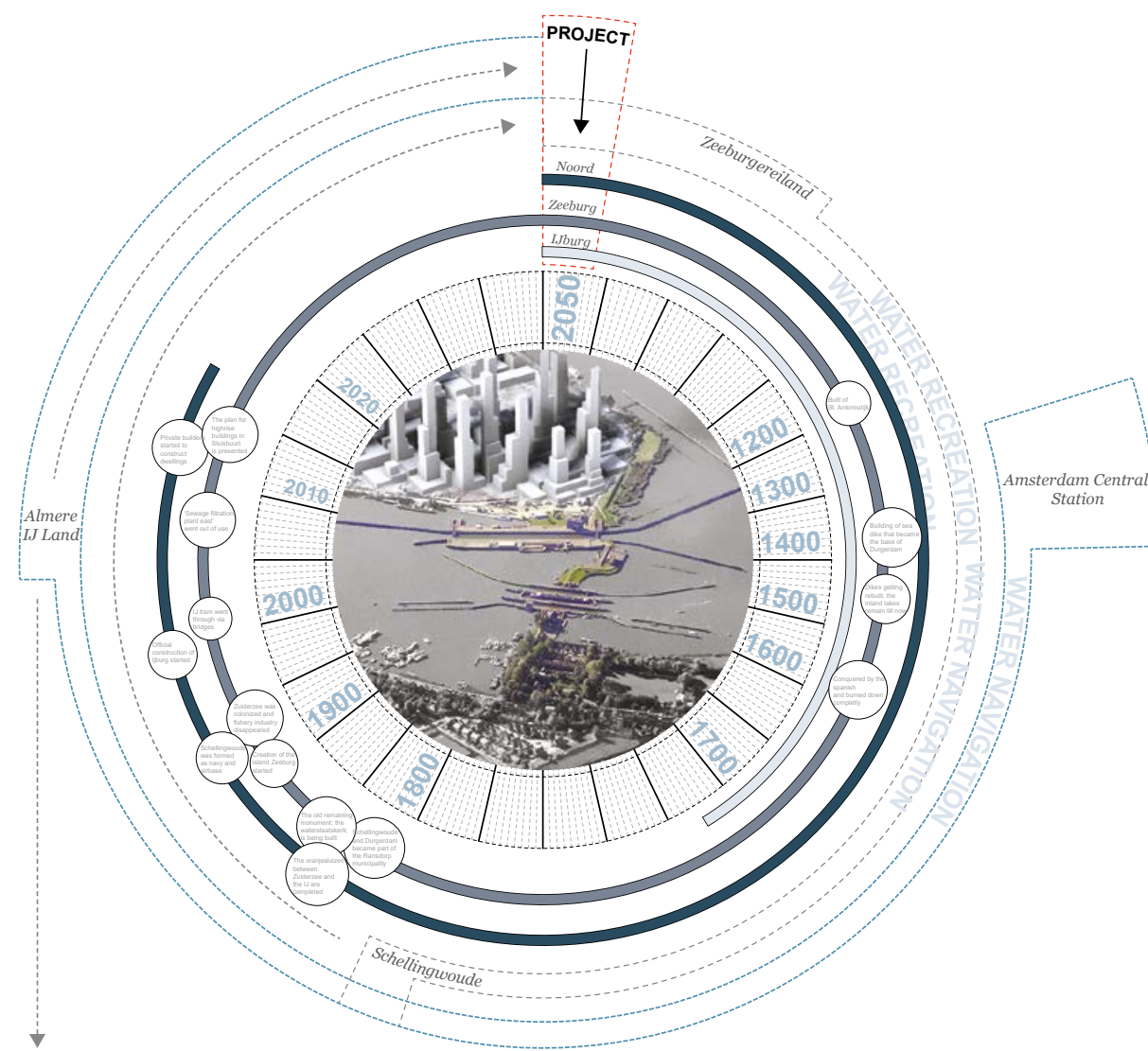
Optimized hydraulic infrastructure



Aquatic center



This proposal provides an additional fast ferry route based on the future transport demand, and also as an optimized water lock, it shifts the emphasis from the lock gate as a moving part into a space they envelope. Two key moving elements, the lock and gantry, are reinterpreted in their means of motion and form, as a set of rotating conic domes. One 120 degree revolution of the gate causes the water level within it to gradually fill and conversely drain, allowing boats to reach both river levels.



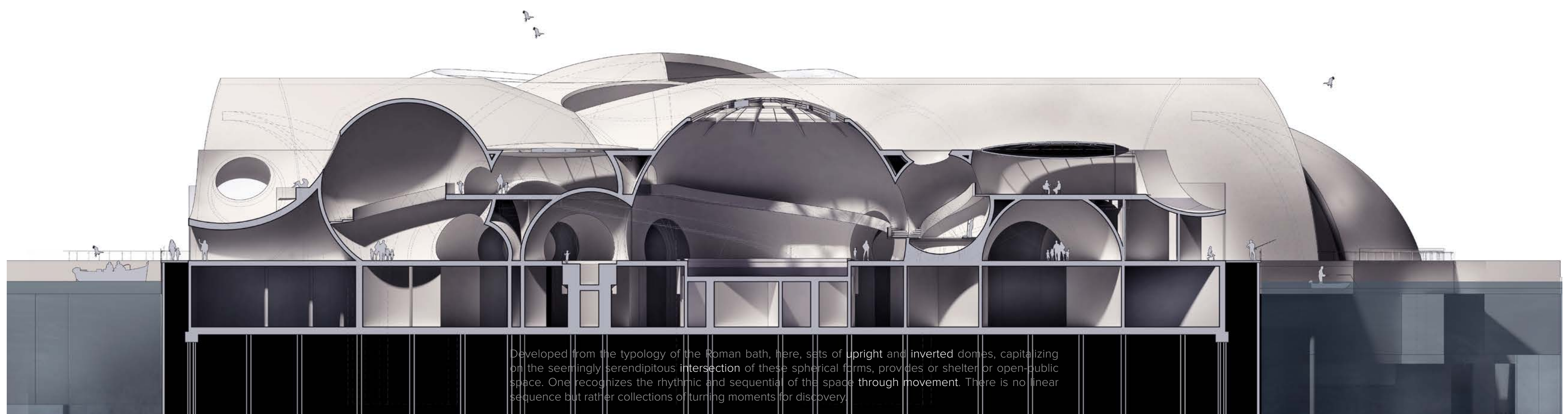
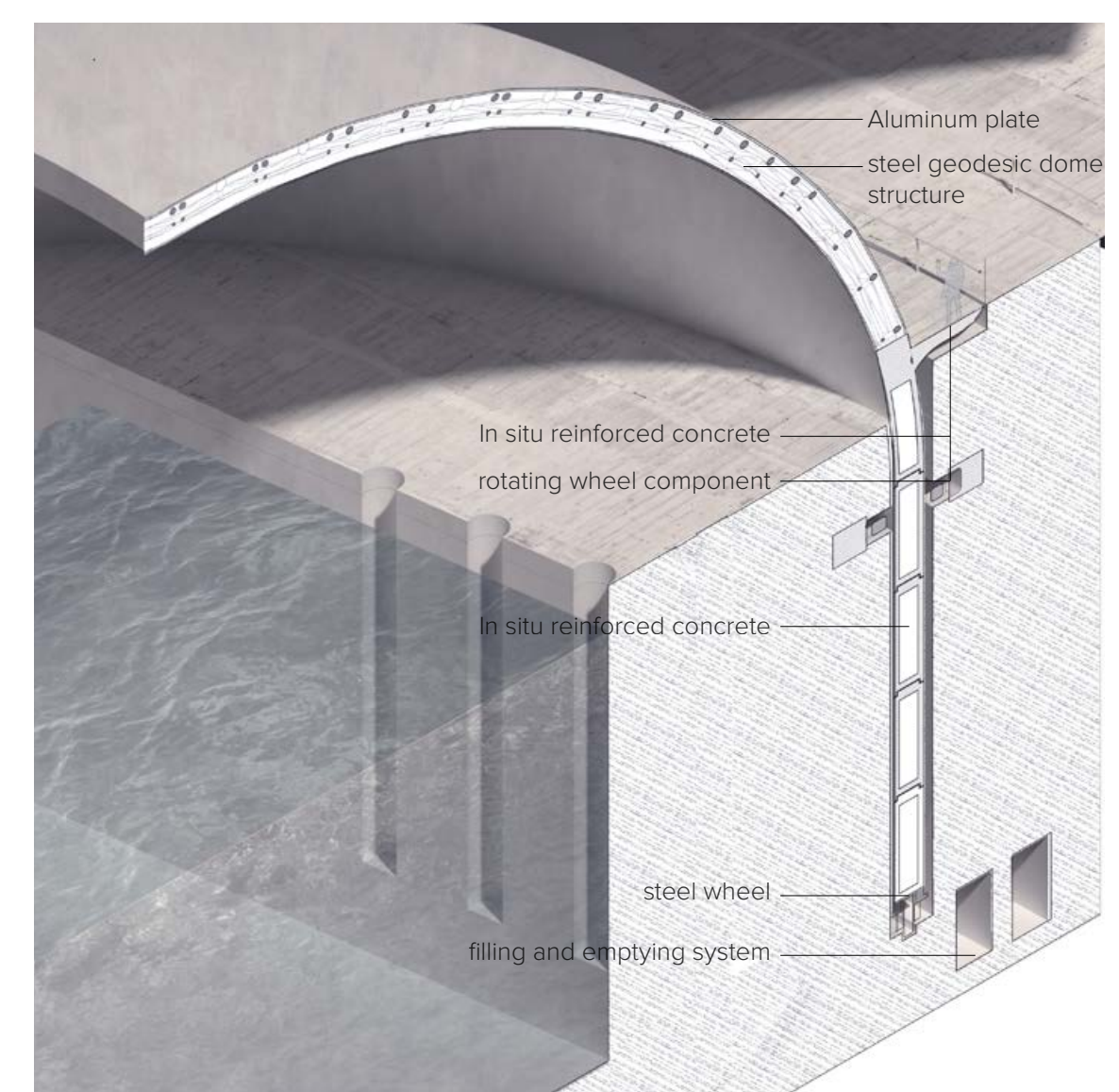
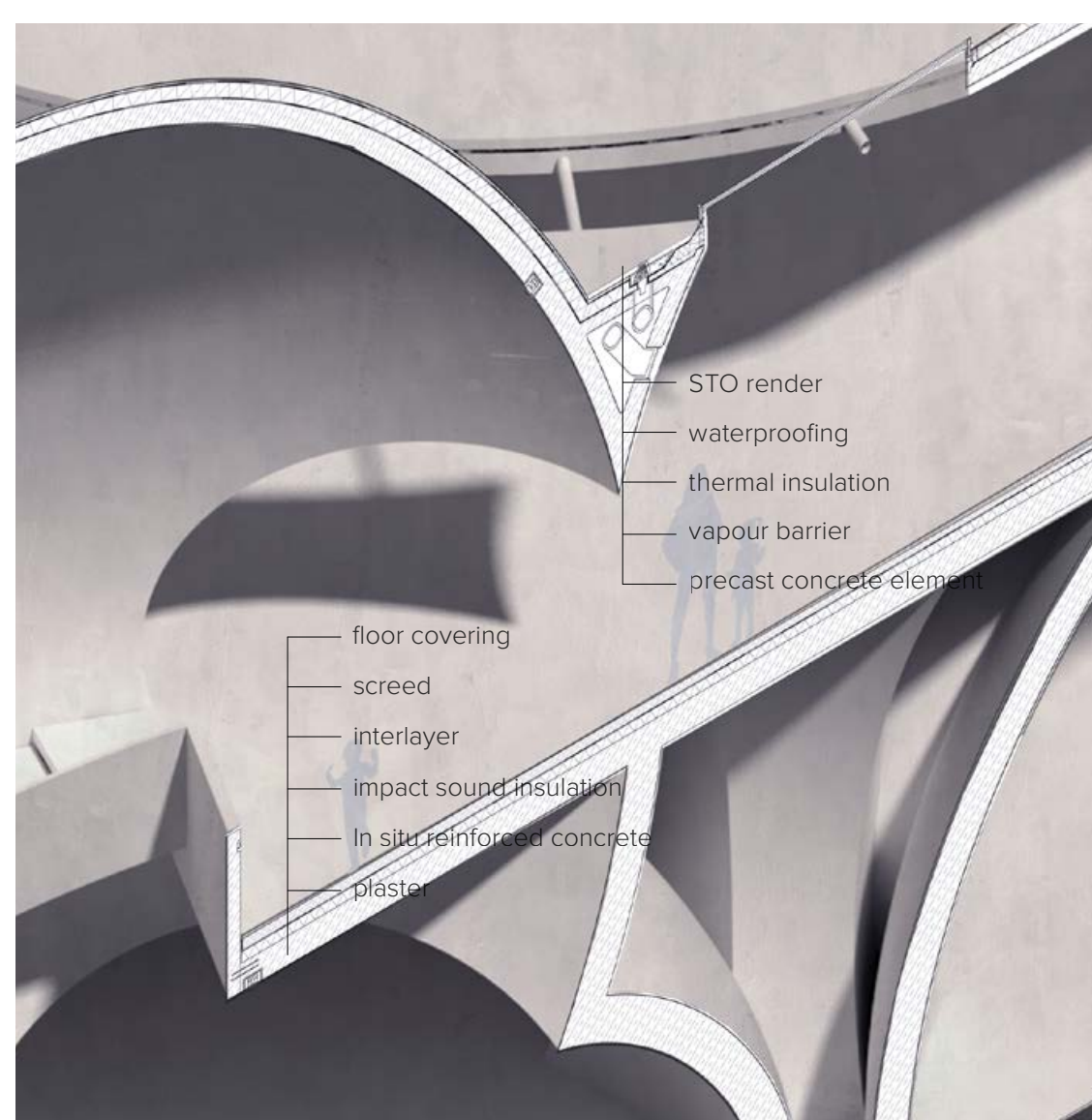
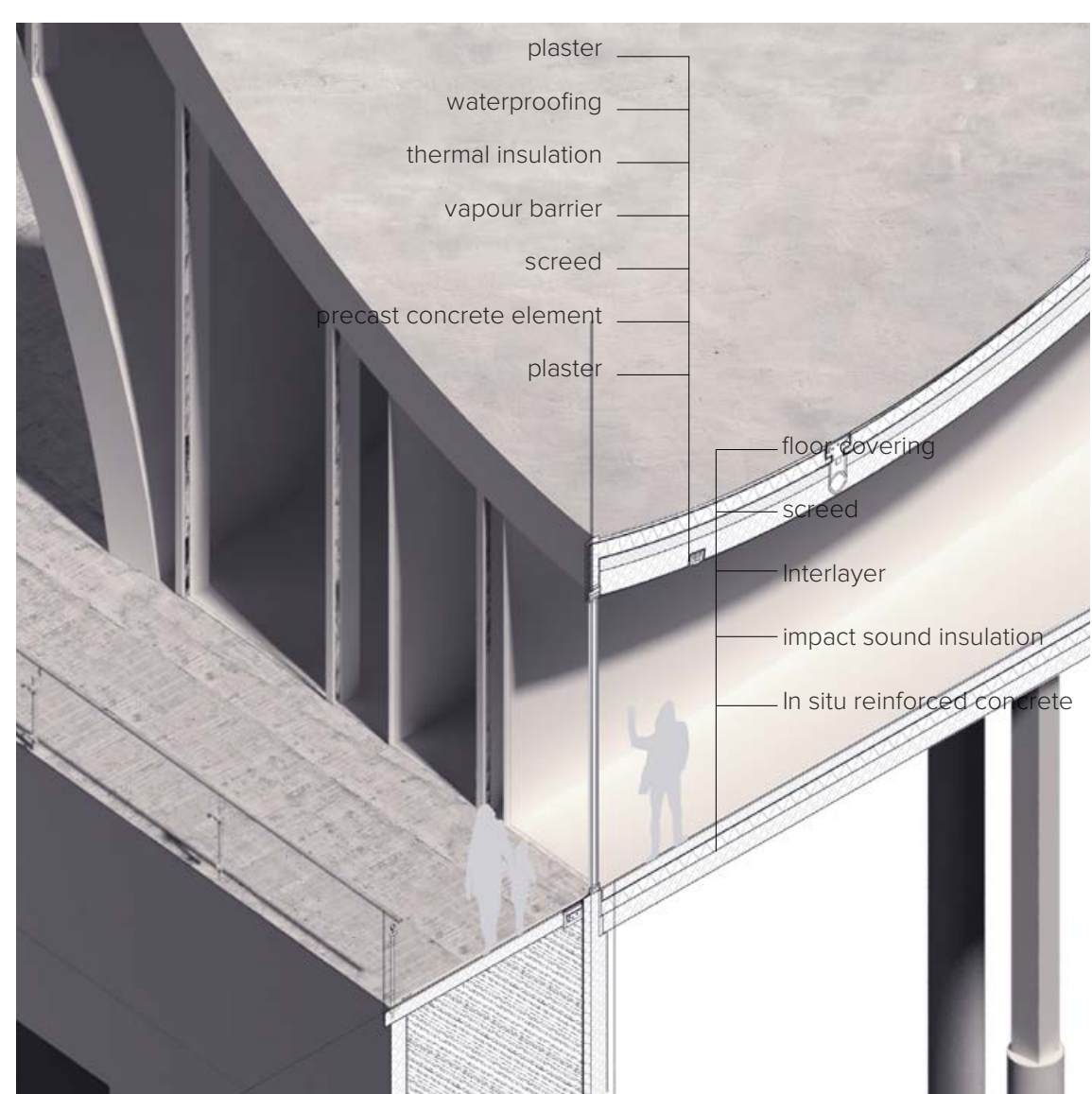
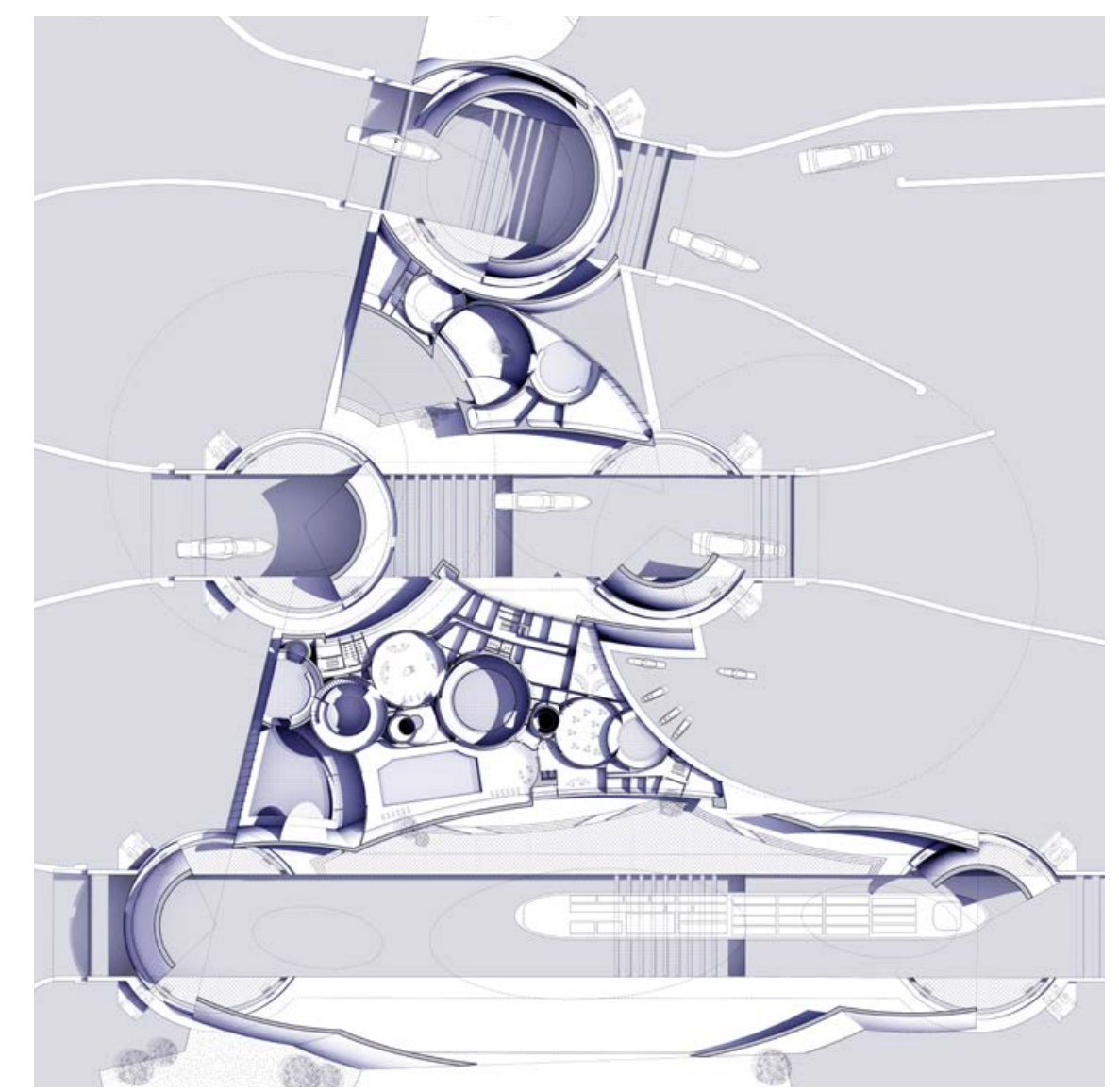
THE LOCK
Integration Design of Architecture and Hydraulic Infrastructure
XIANGQIAN FENG

Water lock built in the 19th century utilized grand structure to monumentalize the ingenuity of man. This project is trying to test the potential of transforming the traditional hydraulic infrastructure into a new water public space based on time horizon 2050.

As a crossing stop for boats from Almere to Amsterdam, it provides an additional waterway and redesigns the locking process. With boats approaching, the geodesic dome lock's gate begins to rotate. The effect of five large moving objects on the exterior is a temporally transforming facade.

As a physical connection for Zeeburgerreiland and Amsterdam-Noord, it develops several crossing route. The mixing of the gates' rotation and people's movement on multiple scales changes the observer's perception of time.

In the interior of the aquatic center, sets of upright and inverted domes, capitalizing on the seemingly serendipitous intersection of these spherical forms, provides or shelter or open-public space for swimming. One recognizes the rhythmic and sequential of the space through movement. There is no linear sequence but rather collections of turning moments for discovery.



Developed from the typology of the Roman bath, here, sets of upright and inverted domes, capitalizing on the seemingly serendipitous intersection of these spherical forms, provides or shelter or open-public space. One recognizes the rhythmic and sequential of the space through movement. There is no linear sequence but rather collections of turning moments for discovery.