The building consists of two distinct elements, a spine or vertebrae, and ribs. The vertebrae support the whole structure. The rib elements are a support structure to create enclosure, much like in the physiology of a mammal. The vertebrae are comprised of 14 concrete arches, which support themselves, the second floor slab, and the steel ribs. The steel ribs connect to the tops of the arches and their cantilevered arms. The ribs support the envelope of the building.

The moment of connection between the ribs and vertebrae is integral. The intention was for this moment to be subtle, thus indicating a fluid threshold, as opposed to a distinct, jarring one. The two elements, land and water, meet at the threshold of the building. Yet, the individual has already experienced four arches prior to the moment when these elements meet, denoting an autonomy and separateness in the spine. The ribs only appear with the spinal arches, expressing the ribs' subordinate role. The threshold becomes a transitional moment: an entrance of duality becoming unity. Much like the ocean and shells creating sand at a coastal threshold, the vertebrae and ribs create inhabitable space at this threshold of the river.
The distinction of land and water, the primary duality, was achieved by a distinction of material and a central core versus the periphery.

The material distinction of land versus water was made to denote each element’s characteristics. Concrete is fluid once it is mixed. Formwork must be used to dictate this liquid’s frozen form. Therefore, concrete seemed like a perfect material to represent water. Steel was used to indicate the earth element. The ribs come out of the earth to connect with the concrete arches. The steel is rigid to human touch, and derived from iron, which is mined from the earth. The water element grows through repetition and augmentation, much like a ripple in a pond. The earth element grows out of the surface of the earth, like a sprouting tree, with roots creating a foundation, and tendrils growing up toward the concrete arches.

The two elements converge and grow until the building is entirely over the water. At this moment, the river’s threshold, the earth elements can no longer touch the ground. They wrap around the second floor slab to the concrete arches’ arms for support. The two elements become one thing in support of a structure elevating over the river.
After studying the fabric of Alexandria, it seemed necessary to respond to the difference in scale of the town and that of the Potomac River. The gridiron plan of Old Town Alexandria creates a condition of densely packed row houses and stores lining narrow streets. This condition ends at the waterfront, where there is open space for almost a mile, the width of the Potomac River.

I wanted to acknowledge this change in scale in the building. The most appropriate way to do this was through the water element, or concrete arches. The arches would grow as the building approached the river, as shown in these drawings. The tallest part of the building would be the terminus over the river, indicating the threshold of land to water.
Due to the rigid gridiron plan of the town and the fluid nature of the river, a reconciliation of the two was necessary for the duality to become singular and indicate a threshold of land to water. The arches, made of concrete which represent a fluid form that has become frozen and static, create a diagonal that is pulled Southeast in response to the current of the river. The ribs, or earth element, made of steel, are aligned in a parallel succession, thus responding to the gridiron plan of the town. Both come together to create a focus along the building’s main axis, which grows toward the river.
As the building approaches the river, it becomes less opaque. This change in material indicates a geographic threshold.
This is the second floor plan. Center stalls are indicated in light grey. Eating areas are elevated from the floor level and indicated in dark grey.