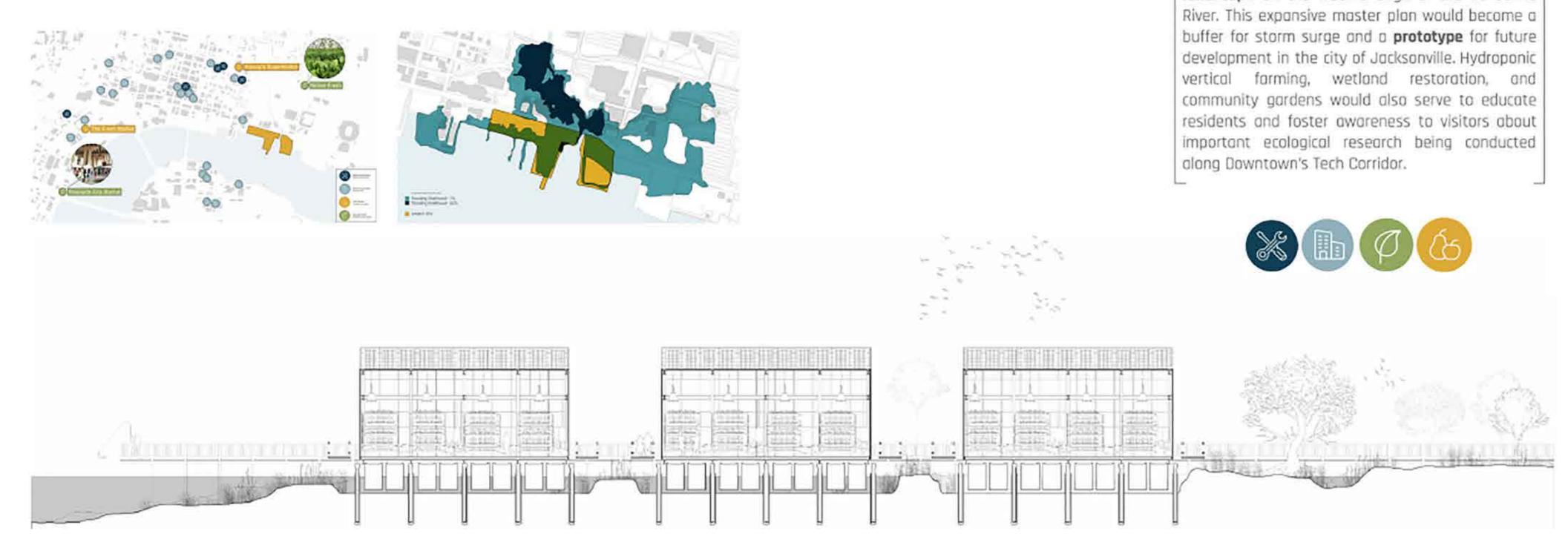
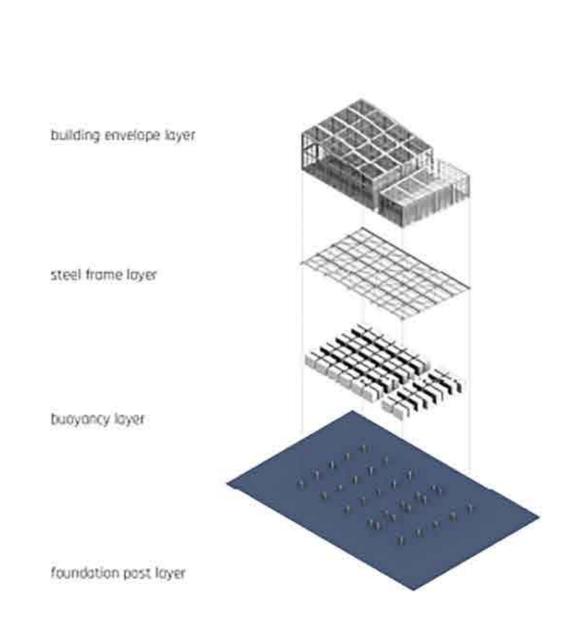
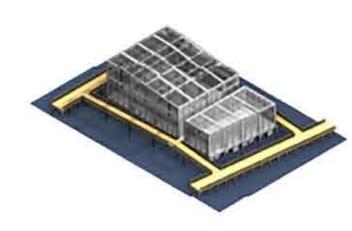
The BioDocks at Jacksonville

Restoring Coastal Wetlands of the St. Johns River | Developing a Culinary Hub



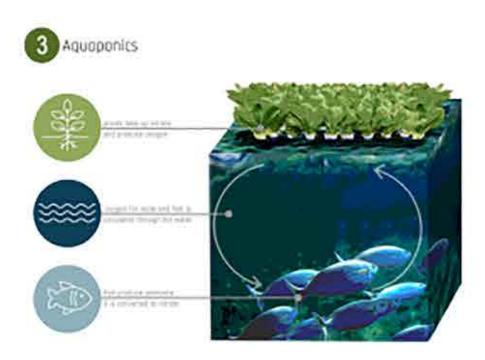
East Facing Amphibious Hydroponics Greenhouses Section



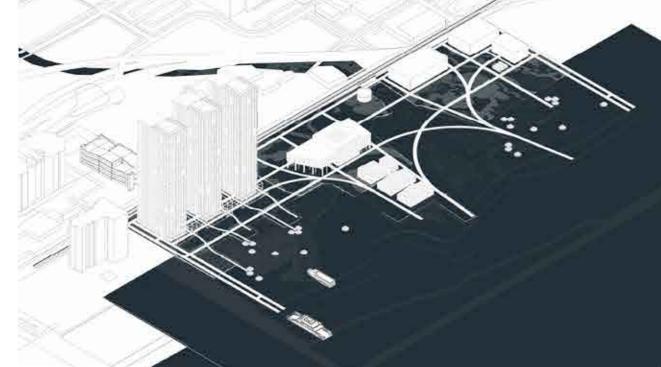








Shipyards Existing Site- Storm Surge Flooding



BioDocks Wetland Restoration Site- Storm Surge Flooding



restoration, and community gardens would also educate residents and foster awareness to visitors about important ecological research conducted as part of the BioDocks research labs. The research arm of the project enhances the emerging Downtown Tech Corridor along East Bay Street.

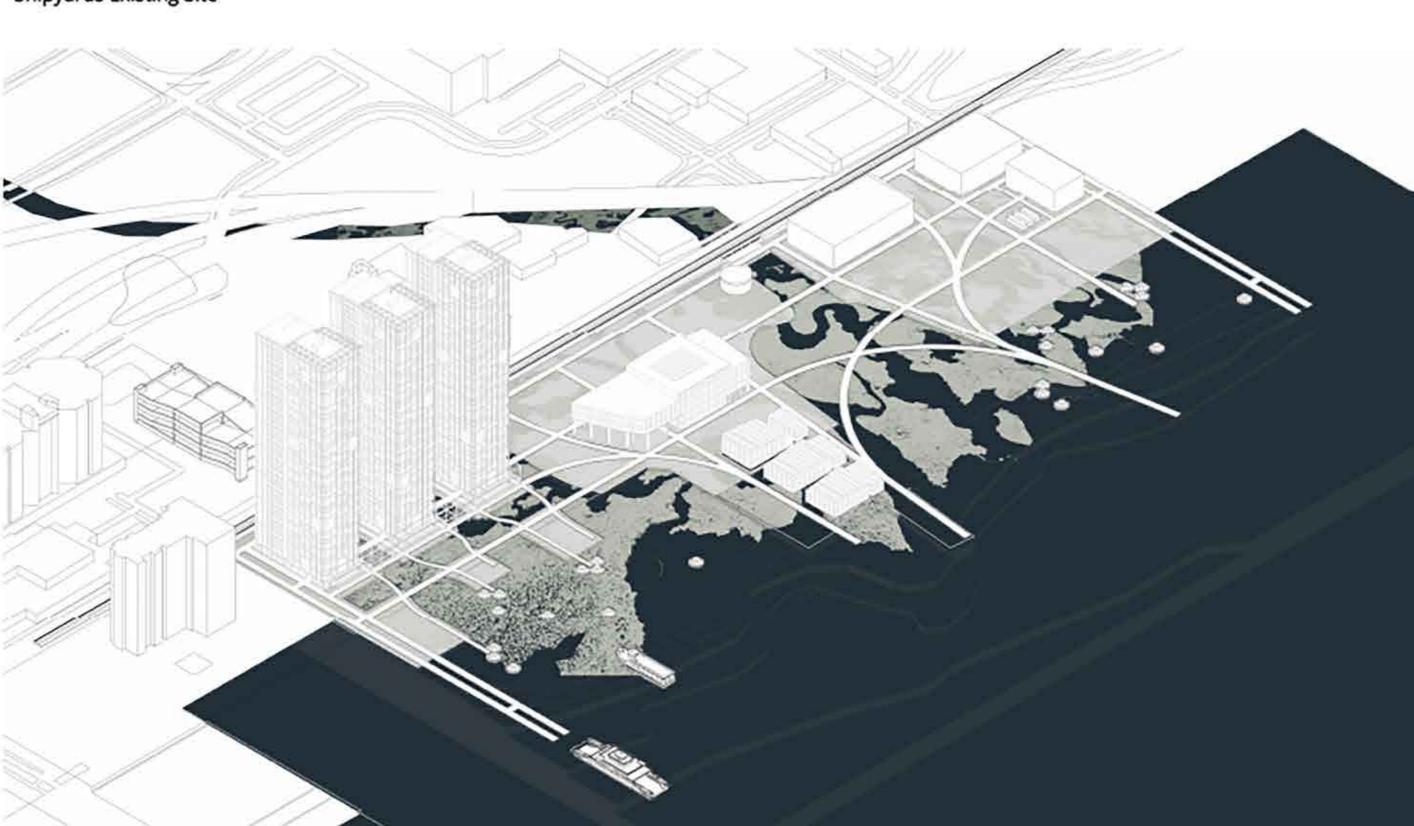
The BioDocks campus sits atop a major wetlands restoration project and a creek clean-up effort. A critical aspect of this proposal is managing the wetlands along waterways and tributaries that flow throughout Jacksonville. It serves to restore ecological diversity where there once existed while cleaning Hogan's Creek flow into the St Johns River. The project creates a gradient edge along the site through the introduction of mangroves and marshlands. By partially removing the existing hard infrastructure and impervious surfaces and creating a green porous edge, flooding from seasonal heavy rains or storm surges can be buffered and filtered. It would also make a beautifully landscaped river setting at the city's edge with diverse habitats and ecosystems. BioDocks can serve as a prototype for green water management infrastructure, appropriate for many sites along the river and tributaries throughout Jacksonville.

The program includes three 500-foot-tall residential towers. These towers are lifted off the ground by concrete pilotis. Lightly engaging the restored wetland landscape with minimal enclosure at street level, the design leaves the space open to storm surge and rising tides while still maintaining structural integrity. Much like the other buildings on the proposed campus, having floodable access is crucial to extending the life of coastal and riverine development. These residences are also fitted with vertical farming hydroponic walls from the 2nd floor to the penthouse level. Vegetables, herbs, and other produce could be sold on the market floors to residents and visits to the site. Due to Jacksonville's urban core food desert, The BioDocks is tasked with filling the void and supplying fres h groceries to the area at an affordable cost. A new transit skyway stop connected to the expanding U2C AV public transit is included in the BioDocks proposal to facilitate access to the site and amenities.

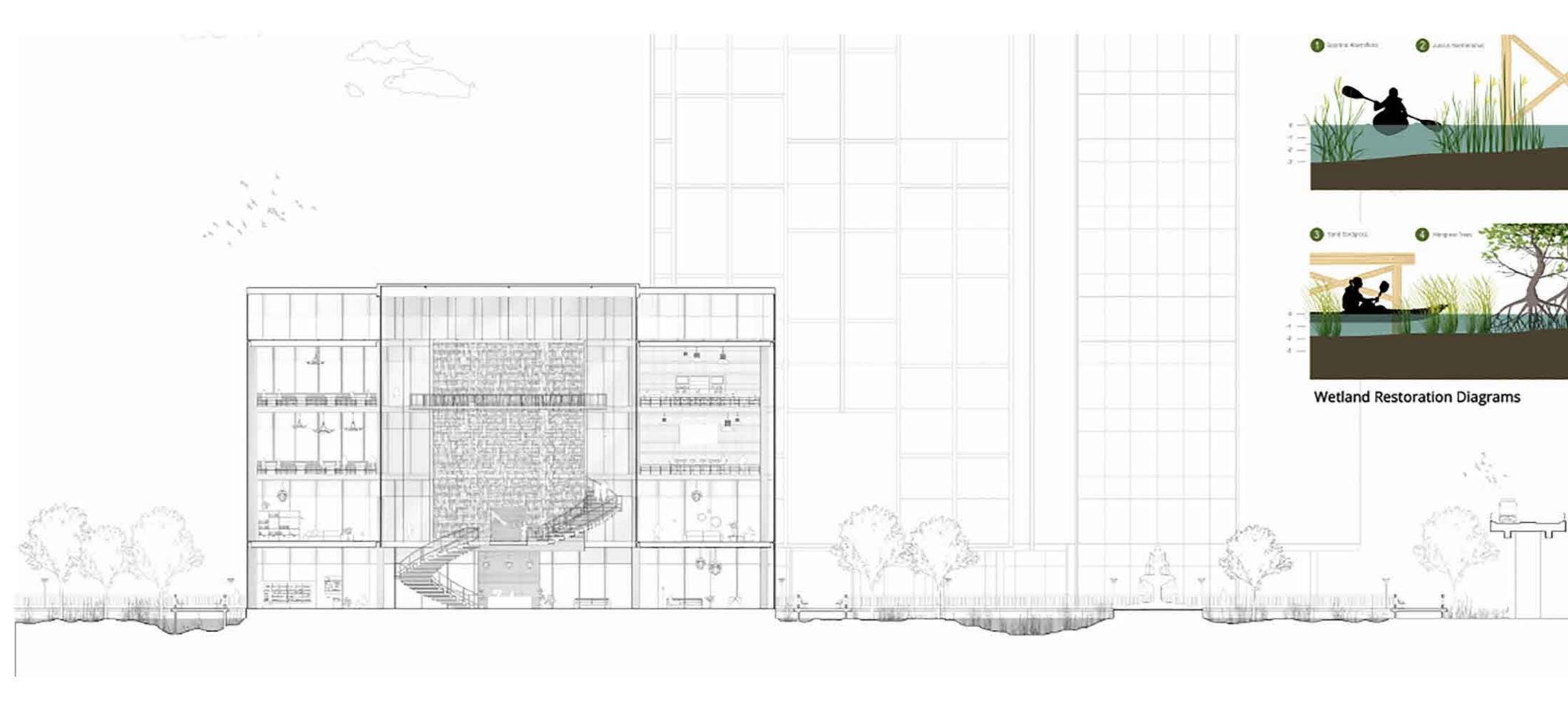
To the east of the residential towers and centrally located on the site is the welcome hydroponics culture within the site. The hydroponics also serve a farm-to-table fine dining restaurant and culinary arts space located within the BioHub, leveraging local food sources' availability.

Toward the south side of the site, along the St. Johns River, stands three amphibious greenhouses, growing the bulk of the hydroponic production for the BioDocks site. The expansive and adaptable buildings allow scientists and growers to maintain hundreds of varieties of produce fresh year-round. The buildings' adaptability continues down to the foundations, including a buoyancy layer that supports the base of the construction. The structures are tethered to moorings and can rise with the tides and as the water levels change over time. They will be able to adjust during storm surges and for permanent sea

The far East side of the campus houses the educational portion of the BioDocks site. These are buildings where students, professors, researchers, residents, and tourists have the chance to engage in lessons hosted to educate others about the importance of fresh food production and wetland restoration, as visible across the site. Adjacent community gardens serve to give children the opportunity to tend to gardens and learn about the process of cultivating fresh foods.



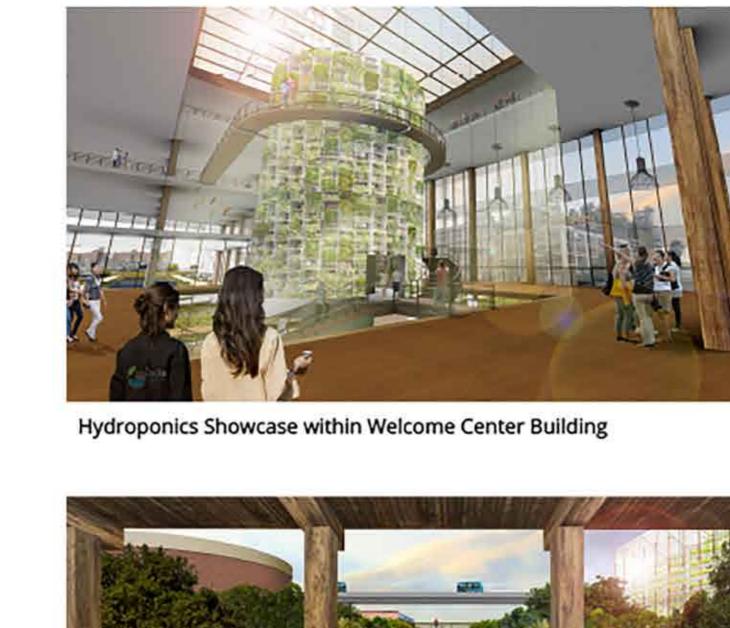
BioDocks Wetland Restoration Site



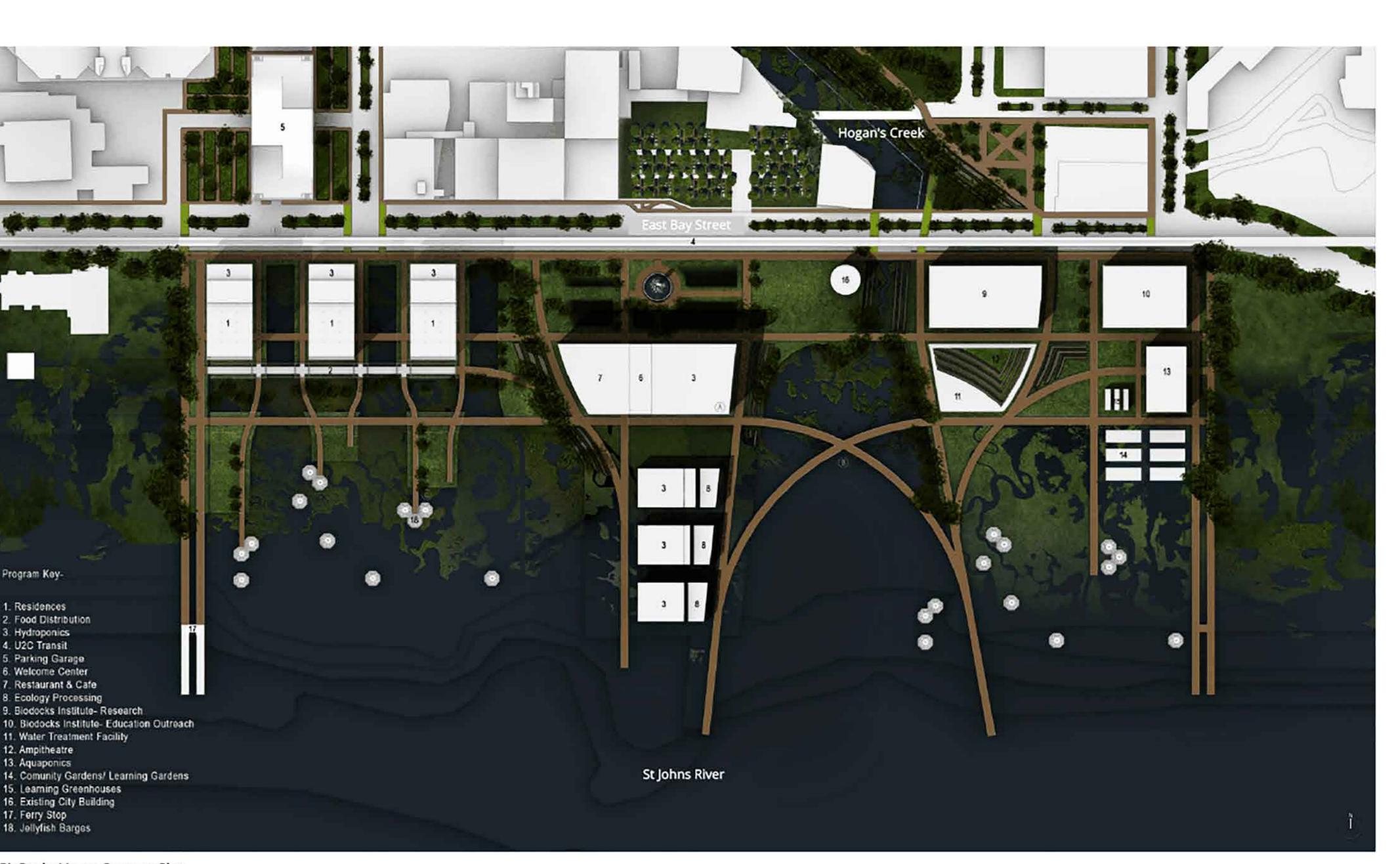
East Facing Welcome Center Building Section



Amphibious Hydroponics Greenhouses Plan



Gateway to Hogan's Creek below Walkways



BioDocks Master Program Plan



East Facing Residential Building Section





