WORKING TIDAL

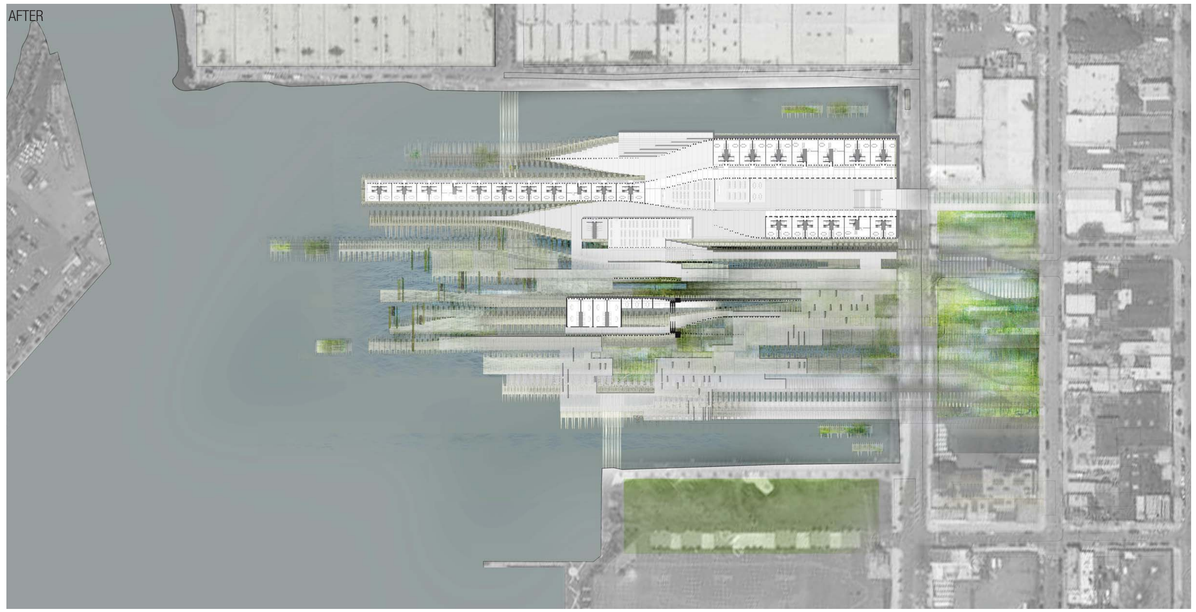
ARMATURE FOR GROWTH

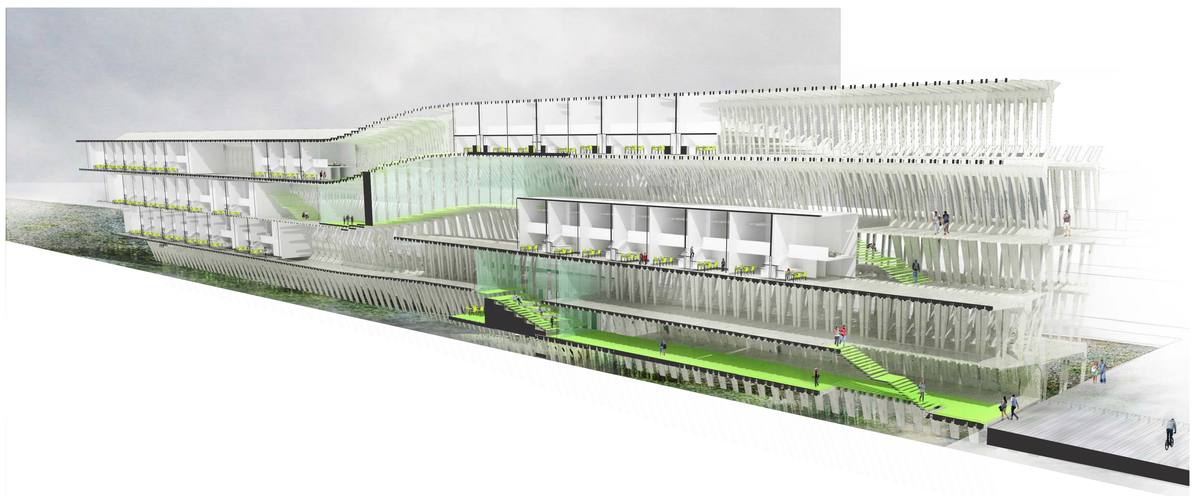
RED HOOK
BROOKLYN, NY

BEFORE

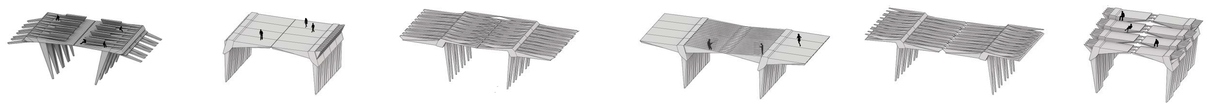
In the wake of Hurricane Sandy, it has become imperative that architects respond to climate change by rethinking the role of infrastructure and responses to the water's edge. Working Tidal seeks to provide a systematic yet flexible framework to accommodate high density housing, emerging aquatic field research, and natural habitats through the creation of a habitable constructed wetland. By proposing a field of modules that incorporate fundamental characteristics of both a murex shell and pier housing typologies, Working Tidal provides the framework for a constructed wetland to activate the ground plane with a gradient of porosity, structure, and surface. The proposal responds to entropic conditions by considering the varying water level conditions of tides and the potential for natural growth over time. While the design responds to the flexibility of natural conditions and events through its shifting and rotational nature, the structural system offers both stability and balance.

AFTER





MODULE FLEXIBILITY + POTENTIALITIES

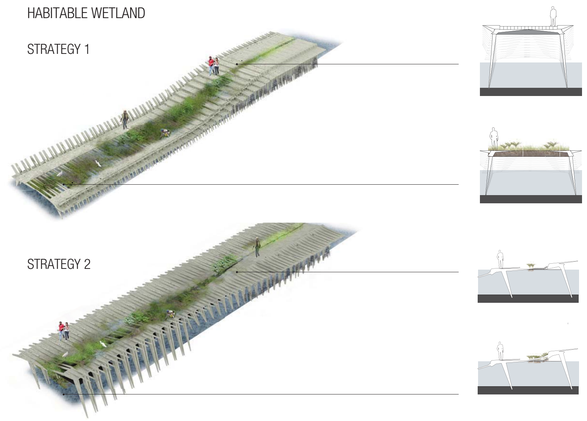


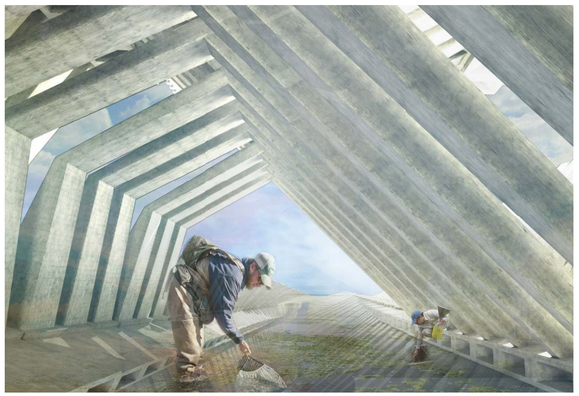
SITTING/EATING | DECKING | RESEARCH | FISHING | WETLAND | PERFORMANCE

HABITABLE WETLAND

STRATEGY 1

STRATEGY 2

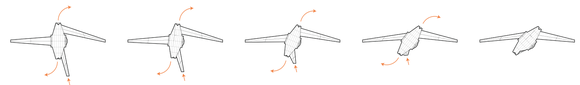




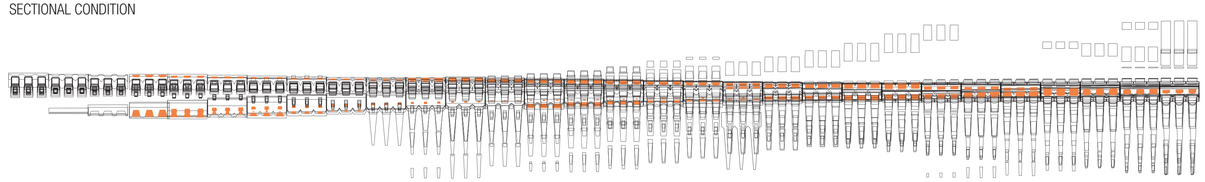
CIRCULATION INTERSECTIONS

MODULE 1

MODULE 2



SECTIONAL CONDITION

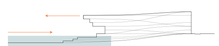


SITE STRATEGY + RESPONSE TO WATER

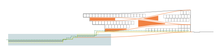
TYPICAL INDUSTRIAL PIER

BREAKDOWN MASSING

CIRCULATORY WEAVING

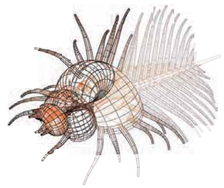


REORIENT RELATIONSHIPS

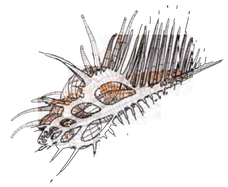


PUBLIC INFILL + UNIT CLUSTERS

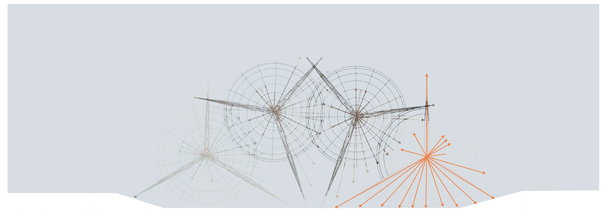
BIOLOGICAL MODEL



AXONOMETRIC_GROWTH PATTERN



AXONOMETRIC_SECTION



STRUCTURAL PERFORMANCE

THIRD FLOOR PLAN