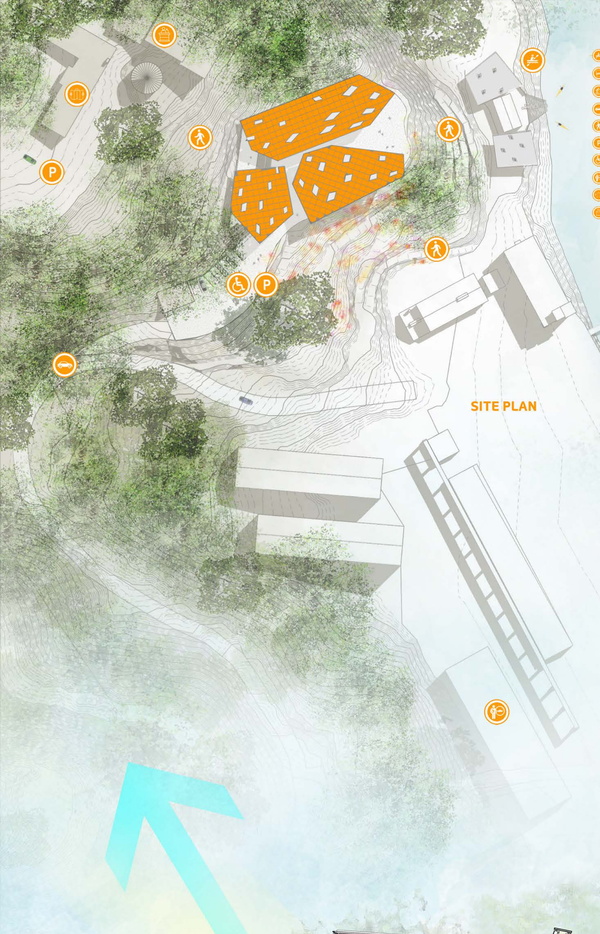
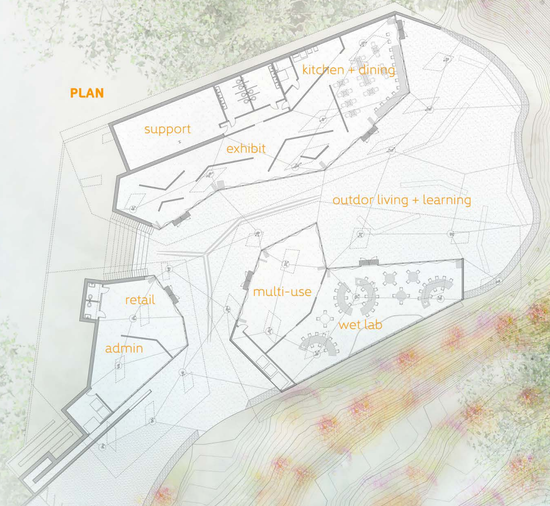


SITE PLAN



PLAN

PROGRAM DIAGRAM

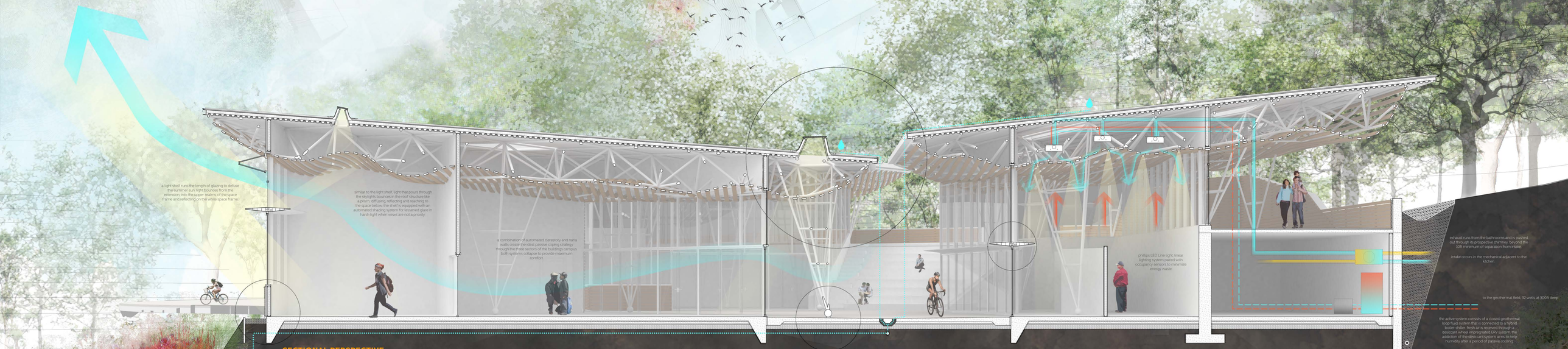
program hub + circulation delta

TERRA DELTA brings together the poetics of design and the integration of systems to develop an architecture that is conducive to both its environment and its inhabitants.

In appreciation of the drastic landscape of Tiburon and its vantage points of the bay, **TERRA DELTA** became a reflection of observation after visiting the site. Its structure not only mimics the undulations of the topography, but it gives way for an optimum renewable strategy to all systems.

The architecture is stitched into the Romberg Tiburon urban fabric, nestling itself into the hillside for ideal views of the San Francisco bay. Shown in the diagram to the left, programmatic elements frame these views, as well as, face one another for a permeable circulation. These choices emphasize the need for a self-guided campus and interactive learning with the bay.

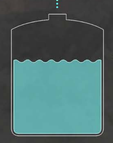
TERRA DELTA receives its name from the two main fascinations: the dramatic topography and the circulation of its inhabitants. The architecture acts as a delta to its visitors, pulling people in and feeding them to the bay with the outdoor terrace as its palette.



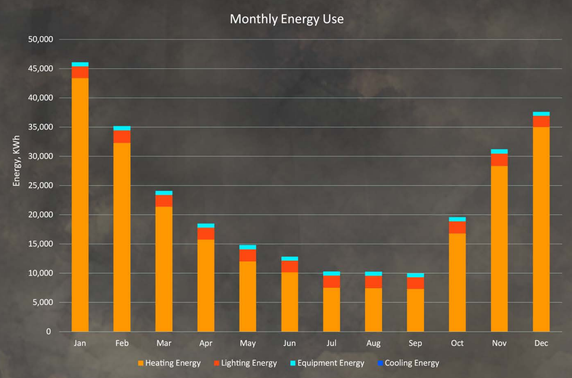
SECTIONAL PERSPECTIVE

a switchback system carves itself into the landscape with ease, allowing visitors to nestle into the rugged landscape on their self-guided journey through the romberg tiburon facilities.

drought-resistant vegetation blankets the sharp drops of the site's topography, creating a system for storm water management and a bold, year-round color palette for the terra delta topography.



rainwater catchment is distinctly highlighted in terra delta, as its outdoor draining system narrates the path of circulation on its campus. during tiburon's brief, yet strenuous, wet season, underground cisterns will collect the water for toilet flushing and irrigation purposes. estimated 5,000 to 10,000 gallon tank.



	Calculated Energy Use (kBtu/sf/year)
HVAC	81 kBtu/sf/year
Lighting	8 kBtu/sf/year
Appliances and Plug Loads	2.8 kBtu/sf/year
Domestic Hot Water	7.5 kBtu/sf/year
Total Building Consumption	99.3 kBtu/sf/year
Total Exhibit Consumption	2 kBtu/sf/year
Gross EUI	101.3 kBtu/sf/year
Renewable Production	114 kBtu/sf/year
Net EUI	-12.7 kBtu/sf/year

Modeling Software	REVIT 2018.2
Building Envelope	
Wall R-value	R-25
Window to Wall Ratio	50%
Window U-value, SHGC	0.26
Roof R-value	R-33
Space Conditioning	
Heating System Type	Closed Loop Chilled Beam
Heating System Efficiency	0.96 EF
Cooling System Type	Natural ventilation
Cooling System Efficiency	N/A
Ventilation Strategy	Natural ventilation
Water Heating	
Water Heating System Type	Solar thermal, condensing boiler
Water Heating System Efficiency	boiler 0.96 EF
Domestic Hot Water Demand (gal/person/day)	15
Lighting, Appliances, and Plug Loads	
Lighting Type	LEDs
Lighting Power Density (W/sf)	0.7
Lighting Controls	occupancy sensors
Appliance and Plug Load Power Density (W/sf)	0.7
Plug Load Controls	none
Renewables	
Renewable System Type	PV
Renewable Capacity (kW)	6,000 kW

HVAC PLAN

TERRA DELTA

ARCHITECTURE AT ZERO