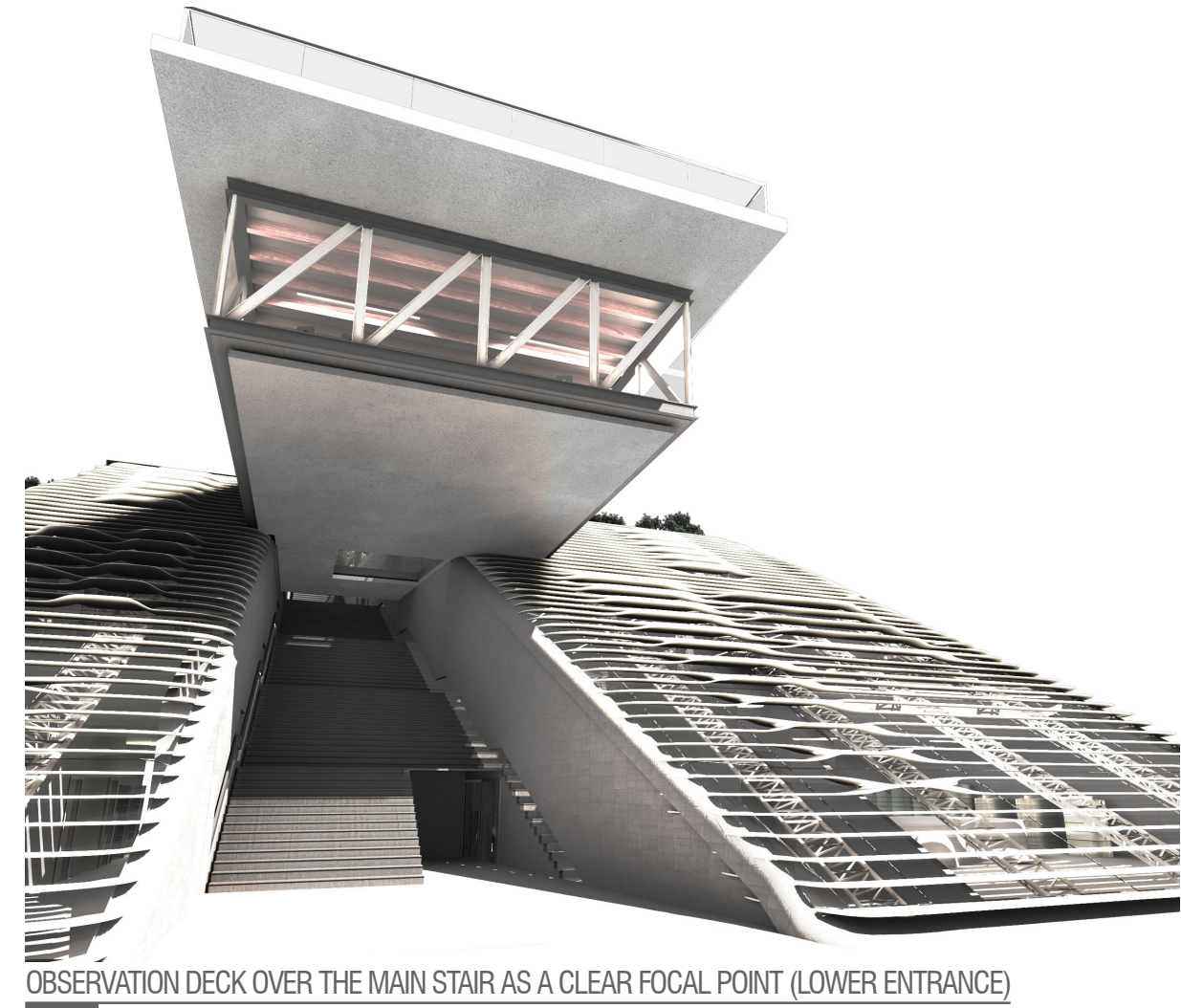
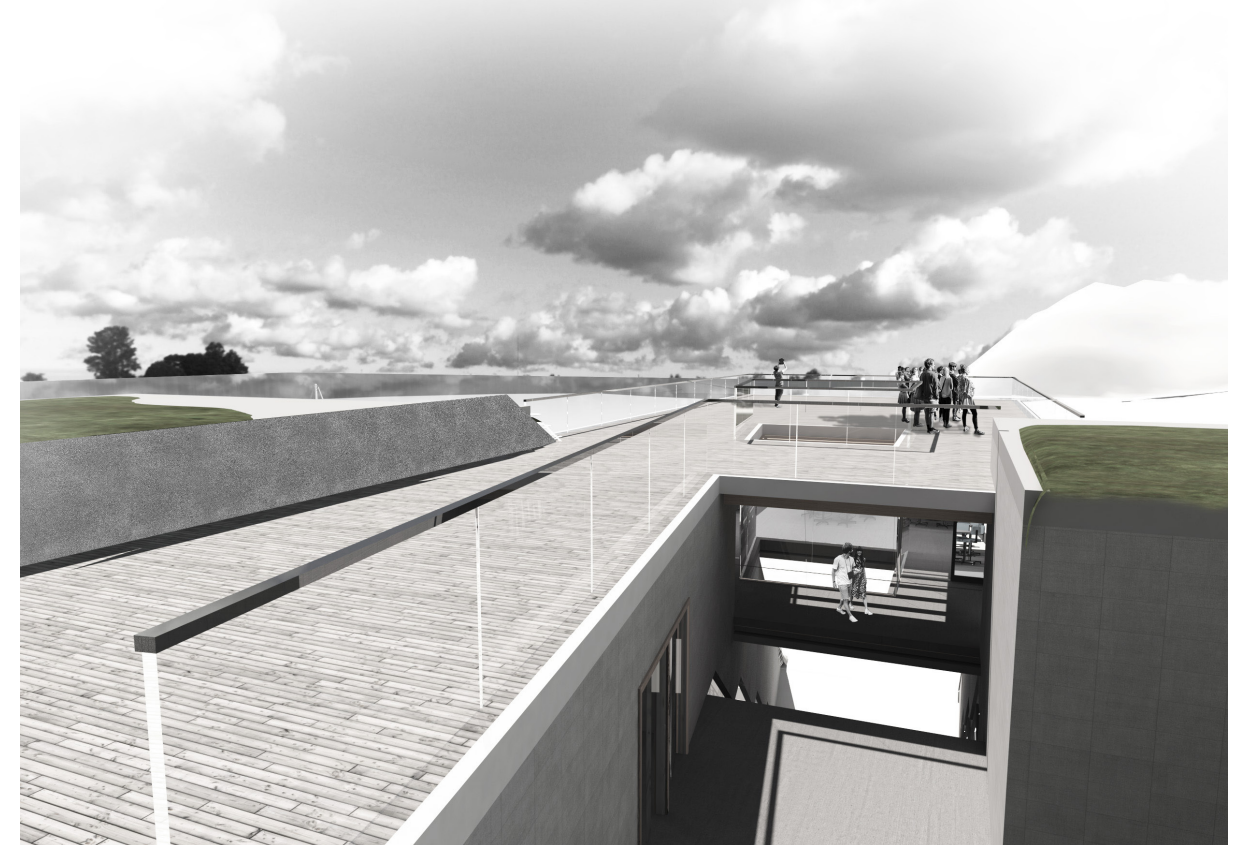


Tiburon Treasure is a project with a sustainable approach not only in terms of building performance but also improving the user experience through the creation of an iconic environment for learning about ecology, biology, restoration, and oceanography, all in the context of sustainable design. Inspired by its unique location, this project pays careful attention to preserving the site values without interrupting the future program of the RTC. The key factors that were considered for siting the project are proper building orientation for the solar access, maintaining the remarkable views to and from the wharf, providing universal access to the building and making the building geometry as a natural extension of the site to minimize its impact.

According to the climate analysis, most hours of the year fall within the human comfort zone, with the exception of the early morning and late afternoon conditions which are expected to be quite cold. According to the psychometric chart, the most effective passive strategy to improve the building performance would be to maximize internal heat gain. In order to reduce the exposed surfaces for preserving energy and increasing the program efficiency, the two programs are combined into a single building. The whole structure is then embedded into the ground to benefit from earth sheltering and provide a vast glazed facade that faces the views to the southeast. To achieve the ZNE building, an integrated photo-voltaic shading system is employed to generate the needed electricity while controlling the natural daylight, enhancing natural ventilation, framing the outside view and providing sufficient shade throughout the year. The PV panels are intentionally visible to the students inside as well as the observation deck to help demonstrate the sustainable strategies of the project.

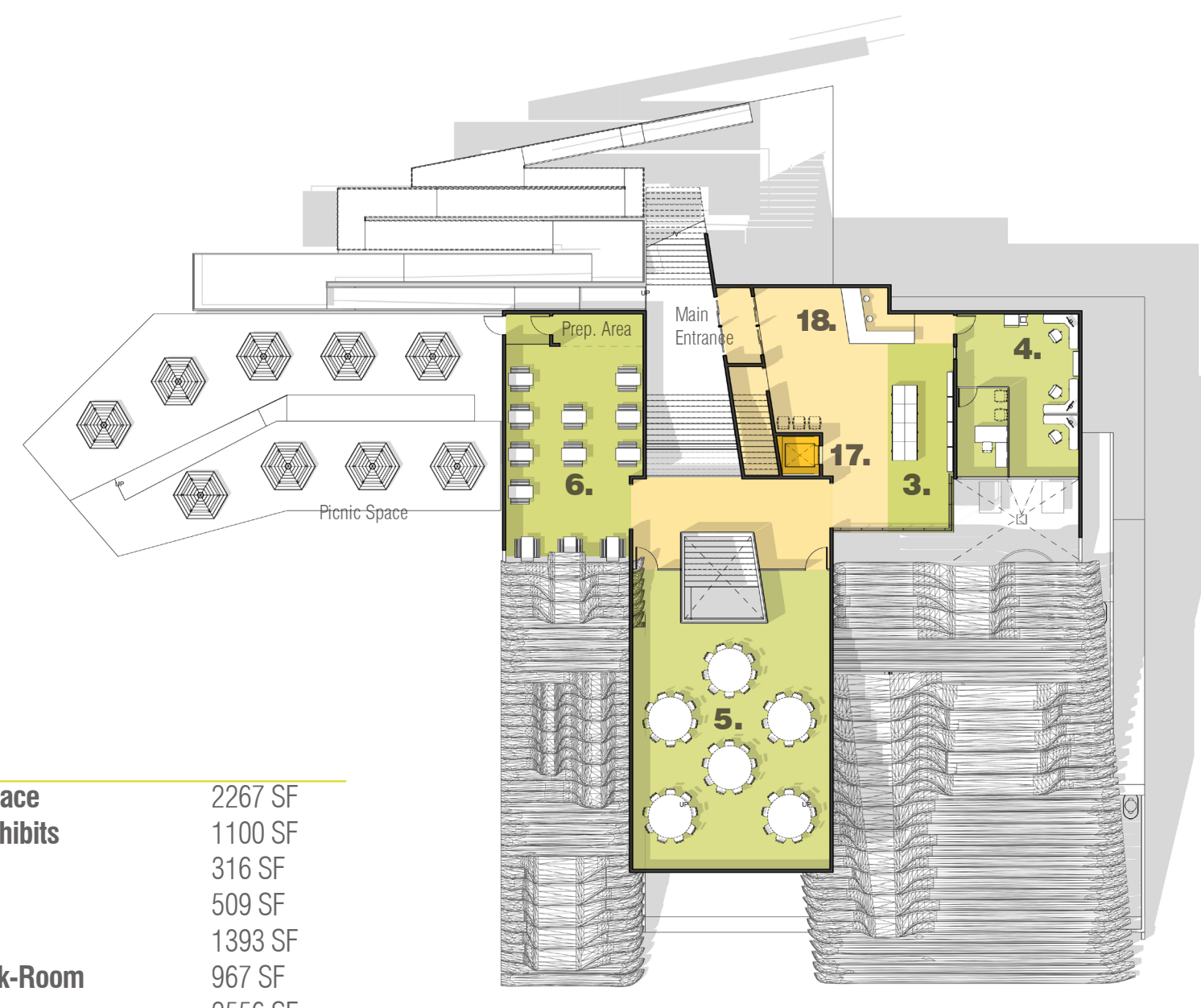
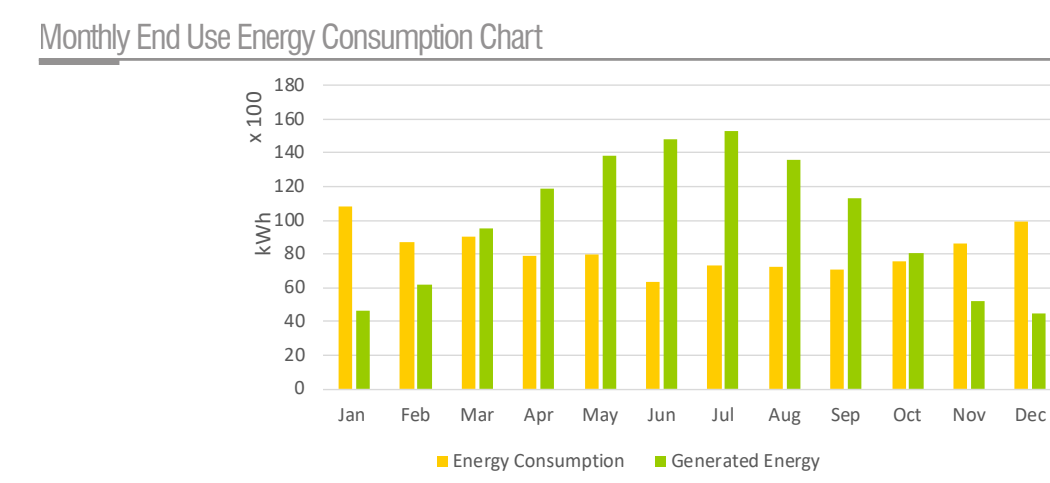
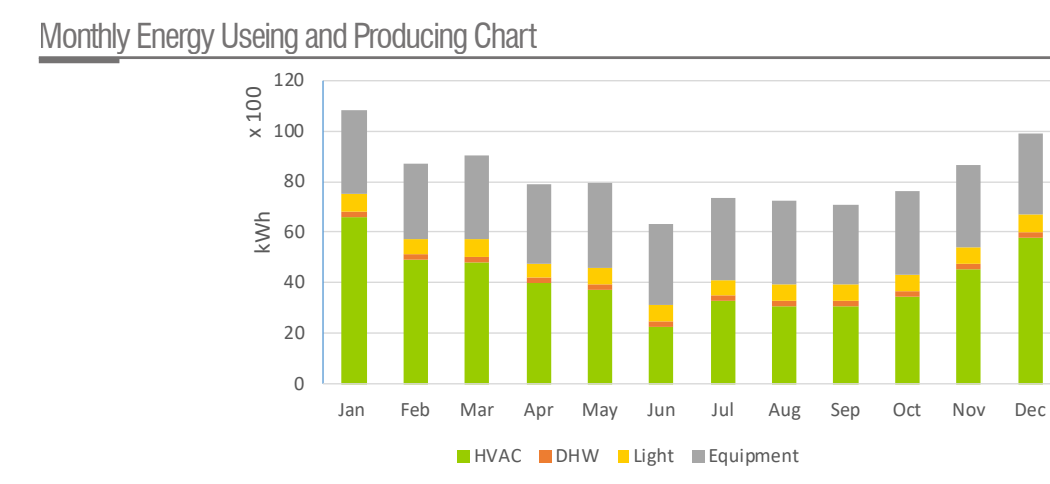


OBSERVATION DECK OVER THE MAIN STAIR AS A CLEAR FOCAL POINT (LOWER ENTRANCE)

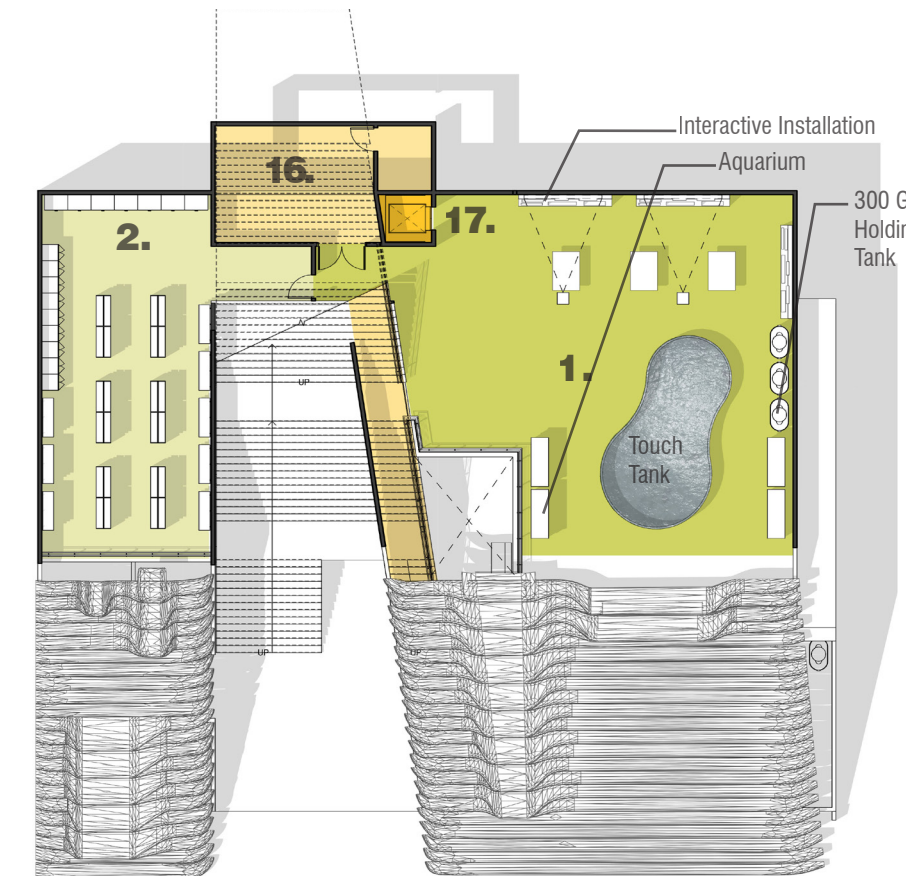


ESTABLISHING VISUAL CONNECTION WITH THE OCEAN AND BEYOND (UPPER EN-)

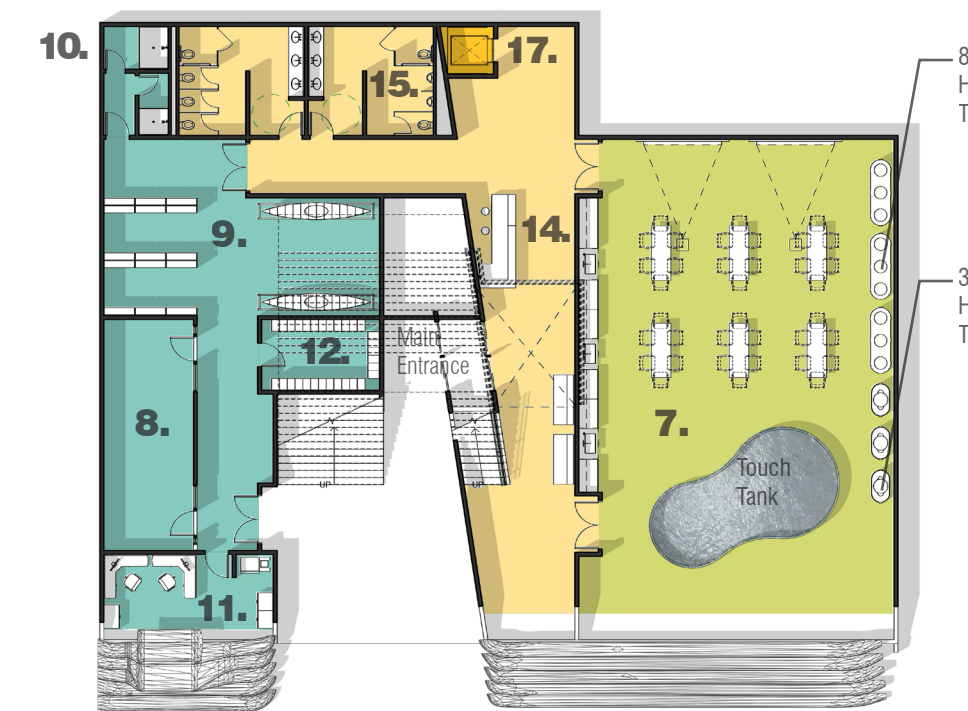
VISITOR CENTER		
1. Interactive Exhibit Space	2267 SF	
2. Support Space for Exhibits	1100 SF	
3. Retail Space	316 SF	
4. Admin/Offices	509 SF	
5. Multipurpose Room	1393 SF	
6. Lunchroom and Break-Room	967 SF	
7. Wet Lab Classroom	2556 SF	
SCIENCE-ON-THE-BAY		
8. Equipment Check-In/Check-Out	345 SF	
9. Gear Storage/Equipment Clean-up	934 SF	
10. Showers	116 SF	
11. Small Administrative Office	237 SF	
12. Lockers	138 SF	
PUBLIC SPACES		
13. Visitor Center Lobby/Reception	656 SF	
14. Science-on-the-Bay Lobby/Reception	438 SF	
15. Restrooms	440 SF	
16. Mech. Room	369 SF	
17. Elevator	-	



UPPER LEVEL



MIDDLE LEVEL

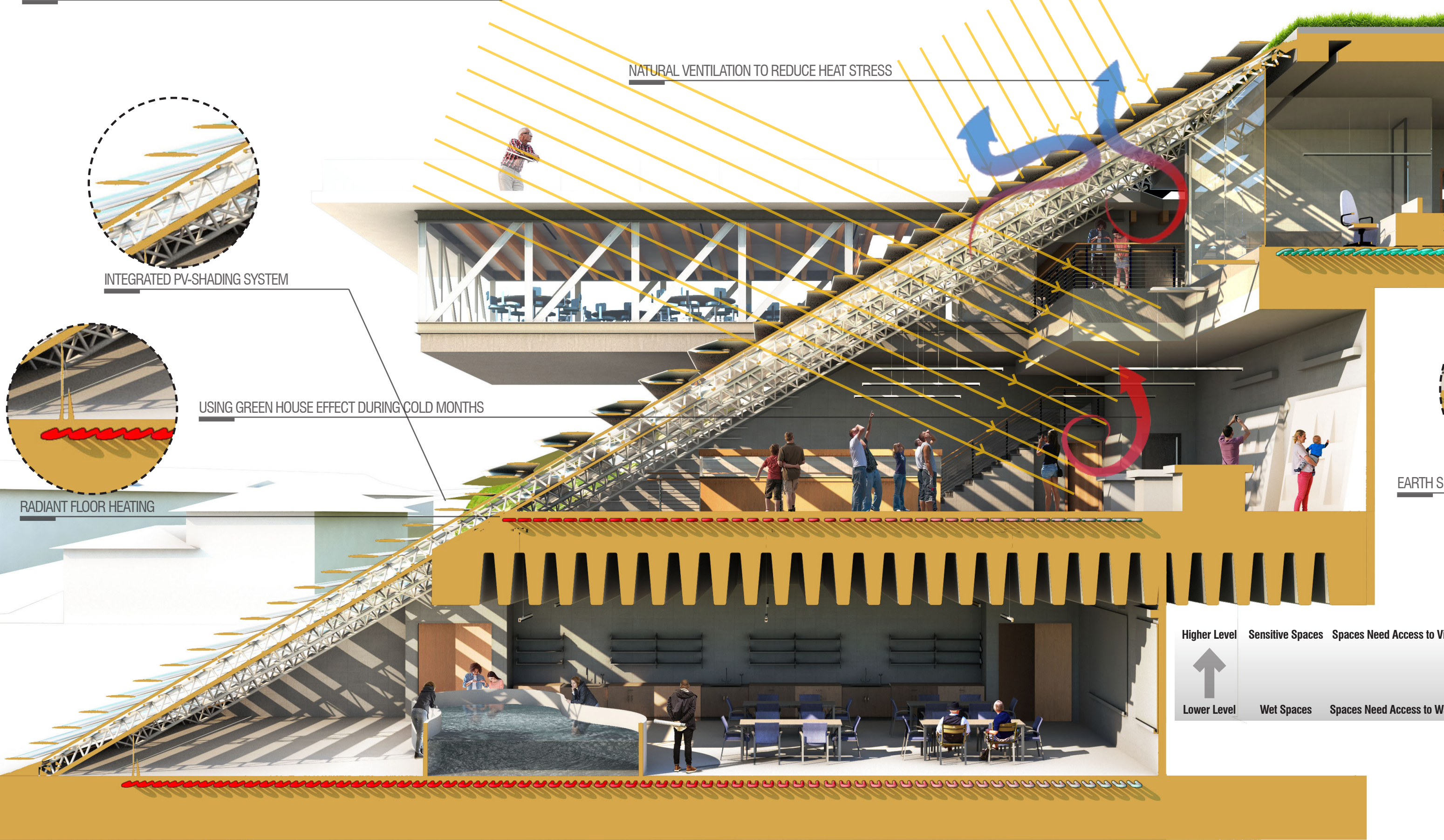


DOWN LEVEL



WINTER SOLAR RAYS PENETRATION

SUMMER SOLAR RAYS PROTECTION



SUFFICIENT AMOUNT OF DAYLIGHT FOR MAJOR SPACES

EARTH SHELTERING TO PRESERVE ENERGY



	Energy Use (kWh/yr)
HVAC	10.12
Lighting	15.57
Equipment	7.93
DHW	0.53
Total	20.15
Exhibition Consumption	2.7
Gross EUI	22.15
PV Production	24.26
Net EUI	2.11



1. PHOTOVOLTAIK PANELS. 6,177 SF
2. OBSERVATION DECK
3. PICNIC AREA
4. TEMPORARY PARKING
5. DROP-OFF AREA
6. ACCESSIBILITY RAMP
7. FUTURE WHARF
8. TOWARD THE FUTURE SHORE LINE RESTORATION
9. OUTDOOR KAYAK STORAGE ZONE
10. MAIN PARKING

