A RURAL DESIGN STUDIO:
OMSI (Oregon Museum of Science and Industry) COASTAL DISCOVERY CENTER
NEWPORT, OREGON
FALL 2013

The studio project is to develop proposals for a permanent home for the Oregon Museum of Science and Industry’s marine science education programs. OMSI is currently in the process of selecting an architect to develop plans for a Coastal Discovery Center on a 20-acre site overlooking the dunes in Newport, Oregon.

Project | Site - making a unique learning environment on the Oregon coast
This studio will focus on designing a year-round outdoor exploration and educational facility with overnight lodging, dining, and teaching spaces and their necessary support for 150-200 children and families. (OMSI Coastal Discovery Center Preliminary Program from the RFP, Exhibit F, is attached.)

The site is a 20-acre parcel that OMSI was able to purchase thanks to donations from philanthropist John Gray and land owners Investors XII.

Project Design
The project design will emphasize three things:
• Site planning – laying out buildings and outdoor activity areas on a 20 acre parcel
• Building form and rural character | materials and detail and the evocation of place – developing a building vocabulary inspired by the mission to educate children and families in outdoor science settings and the unique character of this section of the Oregon coast
• Innovation in sustainable strategies
How can the Coastal Discovery Center become a model for sustainable and regenerative building? Any new design proposals need to integrate environmental considerations to produce net zero buildings. Design explorations will include siting and orientation, passive / active energy systems, materials and landscaping.

Required Field Trips
The studio will have several required field trips – one to OMSI in Portland to learn about their operations and goals for the Coastal Discovery Center and a second to the Newport, Oregon site. There will be one or two reviews in Portland to benefit from feedback from OMSI staff.
Instructional Methods
Emphasis will be on a mutually supportive studio environment. Studio work will begin with conceptual design and research investigations and continue into design development, recycling to hone ideas and explore appropriate expression. Work must be developed and shared in the Lawrence Hall studio throughout the term. Required field trips, sketch problems, and precedent studies will enrich individual work in developing design proposals. Class meetings include a variety of communication and project-development formats including desk critiques, pin-ups, reviews, in-class discussions, teamwork sessions, lectures, and occasional field trips. Reviews will be organized so that students revolve through small groups over the course of the term. Design critiques will include feedback from peers as well as the instructor. Students are required to keep design journals as an ongoing recording of studio investigations.

Critical process issues
• Conceptual thinking – utilizing imagery, models, drawings, and words to clearly articulate design intentions at each cycle of design.
• Conceptual and analytic diagramming
• Sketching and drawing (both by hand and computer) to explore spatial qualities of site, building, room in plan, section, elevation, and perspective.
• Making models (both physical and digital) to develop three-dimensional design explorations.
• Exploration of materials and color through media.
• Creating a final presentation of high quality.

Evaluation
Performance in will be graded on a pass/no pass (P/NP) basis only. Student work will be evaluated for achievement in all of the areas listed in the Department of Architecture’s studio evaluation form. These forms include a checklist of performance criteria and written evaluations by instructors. At the end of the term, students are required to meet individually with their instructors to discuss their progress and receive their evaluation. Completed evaluation forms are placed in student file; copies are given to students.

Students with Disabilities
If you have a documented disability and anticipate needing accommodations in this course, please let the instructor know so arrangements can be in place. You should also request that the counselor for students with disabilities send a letter verifying your disability.

Attendance Policy
All students are expected to attend all studio meetings, be on time, and stay for the entire scheduled session working on studio activities. Unexcused absences are not permitted. Students with three (3) or more unexcused absences are required to meet with their instructor before returning to studio. Excused absences (such as illness or personal emergency) must be reported to the instructor prior to the missed class if at all possible. Verification of illness forms can be obtained from the Student Health Services.
Exhibit F - OMSI Coastal Discovery Center Preliminary Program
Newport, Oregon

The following program description represents OMSI’s latest thinking on the overall development program for the Coastal Discovery Center and the issues and challenges that remain to be resolved. As described in the RFP document, the Architect will be asked to assist OMSI in the refinement of this program, consistent with the overall project budget, at the outset of the design process.

Programming needs

While the quintessential outdoor camp typically has many cabins and out buildings, this kind of a program possesses certain strengths and weaknesses. It is nice to be able to separate people and groups. One of the challenges in scheduling the schools groups, which represent the majority of income in the Outdoor Education division, is that we often have more than one school at camp at any one time. This requires the ability to assign beds per school and per gender, which may suggest a need for a variety of room sizes and configurations. This does not, however, need to translate into more buildings.

The main programmatic challenge at the OMSI CDC is to be able to adequately separate genders within a school, and provide some kind of separation between schools. This would seem to suggest that the camp should possess enough flexibility with the number of sleeping spaces and beds within those sleeping spaces to minimize the number of unused beds. The location and assignment of bathroom facilities will also play a factor in providing overall camp flexibility for separating genders and schools (are they all in a central building or two like a shower house, or are they rooms within a building, or are they within each room?). Gathering places for schools would also be helpful in these areas such as lobbies or covered courtyards. Places to hang wet clothing so they can dry, and not have to hang the clothing off of bunks, will also be needed as the camp will be in use rain or shine.

The more buildings we have the higher the maintenance costs and more difficulty in upkeep. A smaller footprint is easier to maintain. At the same time we also want to have lodgings that will appeal to an adult audience for family weekends and potential rentals.

All buildings will need to take sand into consideration. There needs to be a space upon entering a building for sand to be knocked off, and flooring types should be specified that hold up to sand and can be easily cleaned daily with a broom and weekly with a mop. Given the coastal location, strong winds and rains will require special design consideration, to protect both the buildings and visitors from the weather as well as provide a positive experience on site.

Based on a $4.66 million hard cost budget:

Guests
• 150 beds for guests, including students, chaperones, and teachers for Outdoor Science school in the spring and fall and campers and counselors in the summer.
• Need a variety of groupings. Ideally 10 beds, 8 beds, and 4 beds. The smaller units are used for teachers and chaperones and ideally these smaller units will have a kitchenette.
• We are always required to provide a place for sick kids. Providing flexibility to accommodate sick campers is important.
• The varied bed groupings will allow us to book different sized groups for our Outdoor Science school in the spring and fall. It is common to have a couple of different school groups on site at the same time and we need to be able to assign sleeping arrangements by school and gender.
• Space is needed for parking for the assorted vehicles that schools will use to transport students. A space where buses can pull in load/unload students and gear will be needed year round, including adequate space to park buses.

Staff
• 12 beds for seasonal instructors. Most staff will live on-site for nine months of the year. They will need some privacy and storage. Staff lodging is a critical factor in retention.
• 2 lodging opportunities for 1 camp manager and 1 program assistant. These are year-round positions.
• 2 lodging opportunities for 1 camp cook (there will be three total; the other 2 will live in Newport) and 1 maintenance person.
• Ideally, there would be a separate space for staff to hang out away from guests, and that also has laundry facilities.
Dining Hall

- Seat between 150 and 175 people and have the capacity to be both a dining hall and gathering space for evening presentations.
- Large kitchen space is also needed. Walk in freezer and refrigerator, ample prep space (counters, racks, etc.), a large griddle, 8-10 burners, 2 conventional ovens, 2 convection ovens, some kind of a serving window, three sink cleaning system, dishwasher/sanitizer, dry food storage space, cooking utensils storage space, pots and pans storage, a closet to store mops, rags, and cleaning supplies for the kitchen and the dining hall.
- A clean up space in the dining hall where campers can help to wash the dishes used during the meals (a separate KP washing station from what the cooks use).
- The dining hall will also need storage for the plates, cups, bowls, and silverware that is used during meals.
- The kitchen should also have some kind of a loading dock so that food and supplies can be easily dropped off and then moved to where they will be stored within the kitchen-preferably this is located at the back of the dining hall.
- Screened space for a garbage dumpster and recycling to be housed.
- A small laundry facility would also be needed here for kitchen laundry.
- Bathrooms for diners/events. Separate bathroom for kitchen staff?

Teaching space

- **Ideal** – large room for presentations and gathering, plus 4 classrooms
- **Manageable** – 2-4 classrooms, plus outdoor covered teaching spaces or areas for wall tents.
- **Not acceptable** – no protected teaching spaces
- Storage for teaching supplies. The programming at this new site will involve lots of supplies for both summer (mainly camping type gear, coolers) and outdoor school programming. An indoor storage space that can be easily organized will be needed for these things.
- We can count on the weather being wet and windy much of the time. When there are 100 or so people on site, which there will likely be much of the time we need to provide some protection so that we can teach and alternate guests’ time inside and outside. It is possible that some of the teaching spaces are protected, but not completely closed in. Camp Namanu has a variety of examples.

Store

We always sell OMSI products, sweatshirts, water bottles, etc. While not a huge source of revenue, we feel we have the possibility to increase that at the Coastal Discovery Center. This does not need to be fancy. Right now at our Hancock location it is a shed that is opened by one of the staff once or twice a week. It is not planned to have a full-time staff person operating the store. Primarily we need a secure place to store inventory and money. Even a window that opens to sell items would be fine.

Administrative

- Some space will be needed for administrative tasks. An office with desk/office space and enough room for a small meeting, 2-4 people. It is often necessary to meet with parents and teachers. This will be used extensively by the camp manager and Program Coordinator.
- There is a need for administrative space with the kitchen to take care of ordering, etc.
- We also like a meeting space for staff meetings/events/training.

Maintenance

Ideally we have an area to house maintenance equipment and a workshop, which will be important to the upkeep of the facility. This could be a pole barn, though it would be ideal to have it heated and insulated. The maintenance person will also need a small office space for research, ordering, and project management. Space for storage of equipment and facility maintenance is also required - supplies such as lumber, piping, fasteners, landscaping equipment, roofing materials, electrical supplies, etc.

OMSI Vehicles

Space to park/store 4 OMSI vans, 1 pickup truck, a canoe trailer, 4 cargo trailers, and 8 canoes. These vehicles will also need a space to store the supplies (fluids, small hand tools, cones, etc) that are needed in the vehicles (should be in Maintenance Building). While a garage may not be necessary, a covered parking area for the OMSI vehicles would be nice.