3.2 Capital Projects

Summarized below are the needed facility and infrastructure projects for the next five and ten year periods followed by a description/justification for each project. Total project budgets include design fees, construction costs, and equipment purchase in 2012 dollars.

TABLE 3.1 Capital Project Budgets*

<table>
<thead>
<tr>
<th>Project</th>
<th>5 Year Program</th>
<th>Post 5 Year Program</th>
<th>Total Project Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coastal Dynamics Laboratory (CDL)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1,995,000</td>
<td>$20,815,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$17,319,000</td>
<td>(P)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$1,500,000</td>
<td>(C)</td>
</tr>
<tr>
<td>Morris Marine Lab Renovation</td>
<td></td>
<td>1,323,000</td>
<td>$14,980,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$12,457,000</td>
<td>(P)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$1,200,000</td>
<td>(C)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(E)</td>
</tr>
<tr>
<td>Total:</td>
<td></td>
<td></td>
<td>$35,795,000</td>
</tr>
</tbody>
</table>

* Information for Table 3.1 was obtained from UMCES Capital Budget Information System (C.B.I.S 2012).

1. Coastal Dynamics Laboratory

The CDL, a new two story building sited somewhere between Coastal Science and the AREL building, will serve as a new hub for the HPL campus. The current growth projections require additional laboratory space as well as a new science collaboration space that will serve the HPL research community as well as visiting scientists. Presently, there is no existing space that could be modified to be a major meeting hall to accommodate approximately 100-200 attendees.

Suggested program includes:

- Lecture Hall with 150 tiered seats.
- Twelve research labs that can be reconfigured for various researchers.
- Analytical Lab for water quality testing. (to be relocated and expanded from Morris Marine Laboratory.)
• Offices (25-30) for Faculty, FRAs, grad students, post-doctoral candidates and visiting faculty.

• Conference rooms: Two conference rooms for small groups (6-8 people). One room for medium size group (12-14 people). One large conference room for a group of 20-25 people.

• Kitchen/pantry for catered events.

• Lobby/Dining area for campus wide use.

• Utility area to house fiber cable inter-connectivity (eliminates a weak link in HPL fiber system).

This building would be constructed to meet LEED Silver certification at a minimum. Because this building will be part of a tour route on campus, windows between the hallway and the labs would be incorporated into the design.

2. Morris Marine Laboratory

When the CDL building is constructed the Morris Marine Building could be repurposed for:

• Machine Shop to relocate from Maintenance Complex to serve the needs of the adjacent labs in Coastal Science, CDL and AREL.

• Small employee gymnasium / indoor recreational area.

• “Incubator” space for new labs.

• New labs that require high bay space and seawater infrastructure.

Approximately 75% of the building space would be available for these purposes by moving or decommissioning laboratories and removing the seawater systems and filters. The Physical Oceanography Lab(s) would not move from this building because the high bays and overhead doors are ideal for the equipment they work with.
The diagram illustrates a strategy to site a new facility for the Coastal Dynamics Lab and have it act as a bridge and link between two significant clusters of research activity on the campus. The key to this approach is to think of the site and landscape design in conjunction with the building design so that building entries, parking lots and paths to entrances work together to create a campus environment. The building is sited so that a path between AREL and the Coastal Estuarine Science Lab goes right past the entrance to this new facility.

The building is also conceived of as a low scale structure to enable a number of extremely sustainable strategies:

- Daylighting from the roof to save on electricity
- Large roof area available for both green roof to effectively treat and hold rainwater and provide a possible platform for PV panels for renewable power generation. The green roof is also a great insulator in both summer and winter.
- Building footprint configured to enclose outdoor space, (courtyard) as an amenity space for the campus.

Legend:
- Existing Buildings
- Coastal Dynamics Laboratory
- Future Parking Locations
- Landscaped Areas
- Suggested Pedestrian Circulation

Illustration 3.2
Coastal Dynamics Laboratory - Location Option 1
The diagram illustrates a variation on how to site a new facility for the Environmental Sustainability Lab. In this option the building courtyard space opens to the main drive and creates an entry court for the facility. The path between AREL and the Coastal Estuarine Science Lab goes right past the front entrance to this new facility, along the main road and proposes a large front porch to anchor the building to the main entry axis of the campus. There are other variants on this diagram, including options to bring campus circulation between the two research clusters right through the building itself.

The approach also depends upon making positive spaces of the new parking areas. The parking areas proposed are well landscaped with trees to shade the cars, permeable paving to allow water to be recharged into the ground and paths that will link to the main research clusters. This approach can turn what are often eyesores into important and useful spaces that help improve the overall image of the campus.