TO MEMBERS OF THE COMMITTEE ON GROUNDS AND BUILDINGS:

ACTION ITEM – CONSENT

For Meeting of January 18, 2012

AMENDMENT OF COASTAL LONG RANGE DEVELOPMENT PLAN AND APPROVAL OF DESIGN FOLLOWING ACTION PURSUANT TO THE CALIFORNIA ENVIRONMENTAL QUALITY ACT, MARINE SCIENCE CAMPUS PROJECTS, SANTA CRUZ MARINE SCIENCE CAMPUS

EXECUTIVE SUMMARY

This item requests the approval of the proposed Marine Science Campus Projects (MSC Projects), five separate proposals to develop research, support facilities, infrastructure and restoration on UCSC’s Marine Science Campus (MSC) consistent with the Coastal Long Range Development Plan (CLRPD) adopted by the Regents in 2004 and subsequently certified by the California Coastal Commission (CCC) in January 2009. Amendment #1 to the CLRPD, consisting of eleven minor actions to amend the CLRPD as summarized in Attachment 1, below, is also proposed. In addition, a minor revision to the mitigation measure adopted in connection with the approval of the 2004 CLRPD to increase the efficacy of construction measures to control fugitive dust is proposed in conjunction with the proposed MSC Projects. If approved, the MSC projects and Amendment #1 to the CLRPD will be submitted to the CCC for a determination of consistency with the certified CLRPD and the policies of the California Coastal Act, which is required prior to implementation of the MSC Projects and the CLRPD Amendment #1. This item also requests a delegation of authority to the President to modify without further Regental approval the proposed CLRPD Amendment or the design of the MSC Projects to respond to comments received by CCC to ensure consistency with the Coastal Act provided the modifications do not result in a substantial change in principles or policies of the CLRPD or MSC Projects design. The five proposed MSC Projects would constitute the first significant development on the MSC undertaken in furtherance of implementation of the CLRPD. The keystone element of the MSC Projects is the proposed Coastal Biology Building, which would be supported by an infrastructure framework.1 In accordance with the California Environmental Quality Act (CEQA), the environmental effects of the project were analyzed in the MSC Project EIR, which is tiered from the UCSC Coastal Long Range Development Plan (CLRPD) Final EIR. Based on the MSC Project EIR analysis it was determined that, with incorporation of all relevant CLRPD EIR mitigation measures, CLRPD implementation measures, and the identified project-specific mitigation measures, the MSC Projects would either have no impact upon the

---

1 Infrastructure component of the CBB Project is discussed as the Marine Science Campus Infrastructure Improvements Phase 3 in the MSC Projects Environmental Impact Report.
environment, would have less-than-significant impact, or the significant or potentially significant impacts identified would be reduced to a less-than-significant level (Attachment 2).

**Marine Science Campus (MSC) Projects:**
- Coastal Biology Building Project (CBB)
- Marine Science Campus (MSC) Environmental Health and Safety (EH&S) Facility Project
- Marine Science Campus (MSC) Parking Phase 1 Project
- Nature Education Facilities (NEF) Project
- Specific Resource Plan Phase 1B Project (SRP)

**Previous Actions:**

**September 2004:** UC Regents approved Coastal Long Range Development Plan (CLRDP) and certified the CLRDP EIR

**December 2006:** Vice President, Budget, of the University approved CLRDP Addendum #1 to the CLRDP EIR.

**July 2008:** UCSC Executive Vice Chancellor approved budget for the SRP 1B Project

**January 2009:** California Coastal Commission approved Final CLRDP

**January 2009:** Executive Vice President – Business Operations approved CLRDP as amended by the CA Coastal Commission

**September 2010:** UCSC Chancellor approved budget for the NEF Project ($2,265,000)

**June 2011:** UCSC Executive Vice Chancellor approved the budget for the Marine Science Campus EH&S Facility Project ($130,000)

**October/November 2011:** UCSC Chancellor approved the budget and UC Executive Vice President and Chief Financial Officer approved external financing for the Marine Science Campus Parking Phase 1 Project ($1,611,000)

**November 2011:** UC Regents accepted UCSC 2011-21 Capital Financial Plan and approved the budget for CBB Project ($61,102,000)

**Proposed Actions:**
- Certify the Marine Science Campus Projects Environmental Impact Report
- Adopt the Mitigation Monitoring and Reporting Program
- Adopt the CEQA Findings
- Amend the Coastal Long Range Development Plan (Amendment #1)
- Modify the Coastal Long Range Development Plan EIR
• Approve the design of the MSC Projects

**Statement of Issues:** The CLRDP contains specific timing for implementation of restoration, public access, and various facilities as a condition of approval. The MSC Projects approval and implementation would satisfy some of those requirements.

**RECOMMENDATION**

The President recommends that, upon review and consideration of the environmental consequences of the proposed Marine Sciences Campus (MSC) Projects and Amendment #1 to the 2004 Coastal Long Range Development Plan (CLRDP), the Committee on Grounds and Buildings:

2. Adopt the Mitigation Monitoring and Reporting Program.
3. Adopt the CEQA Findings.
4. Amend the 2004 CLRDP (“CLRDP Amendment #1”) to incorporate eleven minor amendments.
5. Modify CLRDP EIR General Mitigation Measure 4.3-1 to increase the effectiveness of fugitive dust control.
6. Approve the design of the MSC Projects, which include:
   
   A. Coastal Biology Building Project (CBB)
   B. Marine Science Campus Environmental Health and Safety (EH&S) Facility Project
   C. Marine Science Campus (MSC) Parking Phase 1 Project
   D. Nature Education Facilities Project (NEF)
   E. Specific Resource Plan Phase 1B Project (SRP); and

7. Authorize the President to modify, accept and approve revisions to the CLRDP Amendment #1, or design of one or more of the MSC Projects, to ensure consistency with the California Coastal Act, provided that any substantial changes in principles or policies of the CLRDP or design would be brought to the Regents for approval.
BACKGROUND

Site, Purpose and Scope

The proposed five MSC Projects would all be sited on UCSC’s Marine Science Campus in Santa Cruz and include: the Coastal Biology Building (CBB) Project; the EH&S Facility Project; the MSC Parking Phase 1 Project; the NEF Project; and the SRP 1B Project. All of these proposals are within the scope of academic and administrative development or would implement requirements included in the MSC Coastal Long Range Development Plan (CLRDP) previously approved by the Regents and certified by the California Coastal Commission and considered programmatically in the previously certified CLRDP Final Environmental Impact Report (CLRDP EIR). The keystone element of the MSC Projects is the proposed CBB Project, with associated greenhouses.

The five proposed MSC Projects, identified below, would constitute the first significant development on the MSC undertaken in furtherance of implementation of the CLRDP. The Projects support research and education by:

1. Providing additional seawater-equipped teaching and research laboratory space, plant research space, and support space to accommodate enrollment demand for Ecology and Evolutionary Biology (EEB) laboratory classes from declared majors.
2. Providing sufficient faculty office and research laboratory space to accommodate EEB faculty to support enrollment and research demands.
3. Consolidating EEB Department faculty, post-doctoral students, and graduate students, and the research facilities they need at a single location.
4. Co-locating Coastal Science and Marine Science researchers for research efficiencies and to facilitate interdisciplinary research collaboration.
5. Improving and enhancing public coastal access.
6. Providing improved coastal resource protection through development of stormwater infiltration features, enhanced buffering and vegetation screening for the Younger Lagoon Reserve, and enhancement of wildlife movement corridors.
7. Improving native habitat on the MSC to create an ecological mosaic that will support native plants and wildlife.

MSC Projects:

- **Coastal Biology Building** (CBB): This project, with associated greenhouses, would be located on an approximately two-acre site in the central (Middle Terrace) area of the campus, adjacent to existing development. It would consist of development of a 33,300-asf seawater-equipped laboratory and research facility, a greenhouse complex, and associated stormwater management and infiltration facilities. It consists of an expansion to the MSC utility and circulation infrastructure, as required by the CLRDP, and development of a small utility yard and a storage yard, in support of the CBB Project.
MSC Parking Phase 1: would develop two parking lots adjacent to the CBB laboratory building and greenhouses. This would accommodate 115 vehicles including coastal access visitors. Permeable paving and bio-filtration treatment are included in the project, as required by the CLRDP.

MSC Environmental Health & Safety (EHS) Facility: would be sited in a small and visually-screened utility yard on the campus’ Middle Terrace that would be developed as part of the CBB Project. This pre-fabricated storage container is for temporary storage of regulated waste generated by the facilities on the Marine Science Campus.

Nature Education Facilities Project (NEF): would improve existing public access facilities on the campus and also would construct new pedestrian walks with associated interpretive exhibits and signage throughout the campus, and a small visitor parking lot near the campus entrance.

Specific Resource Plan (SRP) Phase 1B: would implement required provisions of the CLRDP Resource Management Plan (RMP), including hydrologic reconnection of wetlands on the northern part of the campus, erosion control improvements, and restoration of native vegetation in wetland areas.

Project Statistics are provided in Attachment 3 to this Action Item.

The construction of the MSC Projects would overlap. Some elements would begin as early as April 2013; construction of all MSC Projects would be completed by June 2015, contingent upon availability of State funding in 2012-13.

DESIGN

Of the five proposed projects, only one, the CBB Project, includes significant building space.² (See Attachment 3, Project Statistics.)

CBB Project

The CBB Project is designed to provide 33,300 assignable square feet (asf) within a total area of 47,500 gross square feet (gsf). The CBB Project would provide space for UCSC’s Physical and Biological Sciences Division Ecology and Evolutionary Biology Department, for research, instruction, offices, and related support operations. The CBB Building would be a predominantly two-story laboratory and research office building, composed of a U-shaped configuration sheltering a courtyard and stormwater retention “meadow.” The structure would have a structural steel brace frame and concrete-filled metal deck, supported with a slab on grade and grade beams on 157 drilled piers 20 feet deep with pier caps, which are necessary to accommodate expansive soils and a water table that is within two feet of the natural grade at the site. Gabled and shed roof styles with board-formed concrete foundation partially clad in vertical board and batten

² The EH&S Facility would provide 150-gsf of controlled waste storage and is essentially a storage container. Design, siting and screening for this facility are consistent with CLRDP requirements.
wood or wood-like siding would present a “barn-like” style in keeping with local vernacular architecture.

Some construction challenges include the highly exposed coastal location, which will require special corrosion-resistant materials inside and out. This includes all stainless steel for exterior metals as well as mechanical ductwork and some mechanical equipment. The seawater lab requires particular attention to corrosion-resistant detailing and materials. An exterior seawater tank and fully equipped running seawater and fresh water laboratory support the specialized marine and coastal research functions of the facility. The building includes eight environmental chambers, five equipment rooms, and two analytical labs requiring specialized environmental controls with highly specialized instrumentation due to the nature of the research conducted by Ecology and Evolutionary Biology faculty and graduate students.

The associated greenhouse complex would be a cluster of single-story steel and Plexiglas structures, sited across the street from the lab building. The greenhouses would be equipped with retractable shades to minimize night light spill. All landscape planting material would be native or adapted to the site. Landscaping is designed to come right up to the perimeter of the laboratory building, so the building will appear to have grown out of the landscape with limited site impact. The entire landscape design has been integrated with the campus stormwater management design.

The CBB Project, including the associated greenhouse complex, will comply with the University of California Policy on Sustainable Practices. As required by this policy, the project will adopt the principles of energy efficiency and sustainability to the fullest extent possible consistent with budgetary constraints, regulatory requirements, and programmatic requirements. Planned features include high efficiency mechanical equipment and glazing, shading devices for light control of the adjacent Environmentally Sensitive Habitat area, sustainable materials throughout, and construction waste management. Site sustainable features include permeable paving, stormwater detention and management using bioswales, a green roof area, and low maintenance, drought tolerant natural vegetation. The CBB Project includes California Coastal Commission-required covered bicycle parking and other facilities including improvements for pedestrian access to reduce transportation demand. The Project is targeting a LEED™ Silver rating.

CBB Project design has completed Schematic Design under executive architects EHDD of San Francisco. UC Santa Cruz Physical Planning and Construction (PP&C), a department under UCSC Business and Administrative Services (BAS) will manage the CBB Project with assistance from the Construction-Manager-at-Risk project team. The Associate Vice-Chancellor and Campus Architect and PP&C will perform project oversight. Construction is scheduled to commence in October 2013 with completion anticipated in June 2015, contingent upon availability of State funding in 2012-13.

The CBB Project also consists of vehicle, pedestrian and bicycle circulation improvements, and utility improvements to support development of the campus as set forth in the CLRDP. The project would include underground utility “backbone” and improvement of the roadway above and sidewalks, lighting, and drainage improvements as required by the CLRDP. A new fenced, approximately 11,000-SF, open-air utility yard would house a generator for the CBB facility and
also would include space for future standby generators and storage. Infrastructure expansion
would be located primarily within existing utility corridors or would conform to CLRDP location
restrictions to avoid segmentation of natural habitat areas. Sustainable features of the Project
include stormwater infrastructure that will promote and facilitate on-site filtering and infiltration
throughout the campus. In addition, spoils from utility excavations will be reused on site to
create visual screening berms as feasible, consistent with CLRDP requirements.

MSC Parking Phase 1 Project

The MSC Phase 1 Parking Project, which would provide surface parking lots adjacent to the
CBB Project, consistent with UC’s Sustainable Practices Policy, has been designed with
permeable paving in parking bays to reduce storm water runoff, and bioswales through and
around the lot for storm water filtering and infiltration. The Project is designed to accommodate
the future option of photovoltaic cells mounted over parking stalls to supply part of the electrical
power needed for the CBB facility. Native shrubs will be used for screening around the lots, and
all lighting will be shielded to minimize light spill and protect adjacent natural areas. Also
consistent with Sustainable Practices Policy, parking development at the campus has been
limited, in support of the campus’ Transportation Demand Management policies.

MSC Parking Phase 1 design has completed Schematic Design under executive architects EHDD
of San Francisco. UC Santa Cruz PP&C will manage the MSC Parking Phase 1 with assistance
from the Construction Manager at Risk project team. Construction is scheduled to commence in
October 2013 and to be completed June 2015, contingent upon availability of funding.

EH&S Project

The EH&S facility would be sited within the utility yard, which is an element of the CBB
Project. The Project would be a 10 foot by 15 foot prefabricated structure sited in the utility yard
and visually screened by fencing and vegetation as specified in CLRDP. The facility would
provide temporary storage for regulated waste; the project would include the required lighting
and ventilation for the facility.

NEF Project

The NEF Project consists of ADA improvements and additions to pedestrian trails and
development of a 15-car visitor parking lot, as required by the CLRDP. This Project will utilize
permeable or semi-permeable paving on trails and in the parking lot to minimize storm water
runoff, and also will include bioswales and storm water infiltration features. Trails and the
parking lot will include native plantings of disturbed areas. The project will also include
interpretive signage to educate visitors about the campus’ natural habitat, ongoing native
restoration research and campus storm water management features. Trails will be carefully sited
to avoid habitat fragmentation while also providing opportunities to observe and engage with
native habitat.

The EH&S Project and NEF Project design have progressed through 100 percent Design
Development. Winsler & Kelly of San Francisco provided executive engineering services for
project design, and Walker Macy, Portland, OR, provided landscape architectural services. UC
Santa Cruz Business and Administrative Services, through the PP&C department, will manage
the projects, with assistance from the Construction-Manager-at-Risk project team. Construction is scheduled to commence in April 2013 and continue through November 2013.

**SRP Phase 1B Project**

SRP Phase 1B consists of activities proposed to implement the elements of habitat restoration under the Phase 1 Specific Resource Plan (SRP), developed in compliance with the previously approved CLRDP Resource Management Plan. Phase 1B of the SRP elements of this project includes: minor earth moving and/or minor manipulation of the outflow of wetland 1 (W1) to restore the historical connectivity of this agricultural drainage with the adjacent wetland 2 (W2); and habitat improvements to enhance the wildlife movement corridors that extend across the Upper Terrace. The project also would install 10 to 15 piezometers (which measure subsurface water pressure) around the Upper Terrace to monitor wetland hydrology and the effects of the wetland W1/W2 reconnection.

All restoration would be carried out under the direct supervision of Younger Lagoon Reserve (YLR) staff and restoration biologists and would follow SRP Phase 1 specifications (UC Santa Cruz Staff and the Younger Lagoon Reserve Scientific Advisory Committee, June 1, 2010). With the exception of mechanical excavation and earth-moving for wetland reconnection, most project elements would be carried out by small groups of student interns or volunteers under the supervision of YLR staff.

**Project Costs**

Previous budget approvals are detailed in a preceding section of this Item.

Total project costs are as follows:

- CBB Project (State funded): $61,102,000
- MSC EH&S Project (Campus funded): $130,000
- MSC Parking Phase 1 Project (Campus funded and externally financed): $1,611,000
- NEF Project (Campus funded): $2,265,000
- The SRP Phase 1B Project (Campus funded) includes only non-capital costs and would not develop any building space.
- CLRDP Amendment #1 consists only of administrative actions without associated capital costs.

See Attachment 3 (Project Statistics) for more details.

**Other Items**

**Modification to CLRDP EIR Mitigation Measure:** As part of the approval of the MSC Projects, it is also proposed that previously-adopted CLRDP EIR General Mitigation Measure 4.3-1 (which addresses control of fugitive dust) be modified to increase the effectiveness of the
mitigation measure. The text of the modified mitigation measure is included in Section D.3.c. of the CEQA Findings, Attachment 7.

**CLRDP Amendments:** Eleven minor amendments to the CLRDP (collectively, “CLRDP Amendment #1”) are proposed. (See Attachment 1.) These would carry out administrative requirements of the CLRDP, including:

- Adjustment of CLRDP figures to reflect the incorporation of some campus lands into the Younger Lagoon Reserve;
- Adjustment of campus wetland boundaries in response to updated data;
- Adjustment of CLRDP Implementation Measures to reflect recommendations of the Scientific Advisory Committee tasked with implementing the CLRDP Resource Management Plan;
- Amendment of CLRDP parking provisions to ensure that parking development on campus does not exceed demand and that parking is not developed at a level that would conflict with campus Transportation Demand Management efforts.

None of the proposed amendments would affect proposed building siting or shift allocated building space, or (collectively or individually) result in changes in land use boundaries or designations that would affect more than four acres. More detail on the proposed amendments and their applicability to the five MSC Projects is provided in Attachment 1 and in the Final EIR pages 2-43 and 45 through 53 (Attachment 6).

**ATTACHMENTS:**

- Attachment 1: Summary of CLRDP Amendment #1
- Attachment 2: California Environmental Quality Act Compliance
- Attachment 3: Project Statistics
- Attachment 4: Design Graphics
- **Attachment 5: Executive EIR Summary**
- Attachment 6: Complete CEQA documentation (CLRDP EIR, MSC Projects Final EIR including Mitigation Monitoring and Reporting Program)
- Attachment 7: CEQA Findings
### SUMMARY OF CLRDP AMENDMENT #1

<table>
<thead>
<tr>
<th>Action</th>
<th>Text(^3)</th>
<th>Required as condition of CLRDP</th>
<th>Needed for ongoing land management</th>
<th>Proposed Projects</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Amend CLRDP land use diagram to indicate inclusion of terrace lands outside development areas into Younger Lagoon Reserve (YLR)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Amend CLRDP references to Younger Lagoon Reserve to distinguish between references to original YLR and YLR terrace lands</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Update CLRDP wetland boundaries and buffers to reflect updated delineation.</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>4</td>
<td>Amend reference to windbreak trees to &quot;windbreak plantings&quot;</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>5</td>
<td>Extend the area from which plant cuttings and seeds for landscaping on the MSC can be collected to include similar habitats on the first and lower second marine terrace.</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>6</td>
<td>Revise public access routes.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Revise main entry road route.</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Revise utility corridor locations.</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Extend timing of reconnection of wetlands W1 and W2.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Slightly revise configuration of fence, plantings and berm along McAllister Way.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>On-campus parking need not accommodate all parking demand from campus-affiliate, so long as campus-related parking does not impede coastal access.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\(^3\) Full text of each proposed amendment and explanation of why amendment is proposed is provided in Chapter 2, Section 2.6 of the MSC Projects FEIR; See Attachment 6.
ATTACHMENT 2

CALIFORNIA ENVIRONMENTAL QUALITY ACT COMPLIANCE

Environmental Review Process:
In accordance with University procedures and the requirements of the California Environmental Quality Act (CEQA), the environmental effects of the proposed project were analyzed in the MSC Project EIR (State Clearinghouse No. 2010062090) (Attachment 6). The MSC Project EIR was tiered from the CLRDP Final EIR (http://planning.ucsc.edu/lrdp/library/marsci/) as detailed in the MSC Projects CEQA Findings (Attachment 7). The purpose of the EIR for the MSC Projects is to evaluate the potential environmental impacts of the MSC Projects in the context of the CLRDP EIR analysis and to augment the environmental review provided in that document with project-level and updated cumulative analysis, as needed.

The analysis in the MSC Projects Final EIR incorporates all applicable CLRDP implementation measures identified in the CLRDP, and applicable CLRDP EIR mitigation measures, which are identified in the MSC Projects EIR and, in addition, fifty-three (53) project-specific mitigation measures, which also are identified in the MSC Projects EIR. Based on the project-specific analysis presented in the MSC Projects EIR, it was determined that with incorporation of all relevant CLRDP EIR mitigation measures, CLRDP implementation measures, and the identified project-specific mitigation measures, the MSC Projects either would have no impact upon the environment, would have a less-than-significant impact, or the significant or potentially significant impacts identified would be reduced to a less-than-significant level. Mitigation measures will be implemented and monitored through the Mitigation Monitoring Program, which is included as Chapter 9 of the MSC Projects FEIR (Attachment 6).

The Draft EIR for the MSC Projects was released for public review for a 45-day review period from May 13, 201, through June 27, 2011. A public hearing on the Draft EIR was held on May 25, 2011. The EIR and/or Notice of Availability was provided to about 250 interested agencies and individuals; it was also made available on the UCSC Physical Planning and Construction website, at two on-campus libraries and at the City of Santa Cruz public library. Comments on the MSC Projects EIR were received from two State agencies, one local agency, and two private individuals.

Environmental Impacts
As detailed in the CEQA Findings (Attachment 7), the MSC Projects EIR determined that the MSC Projects would contribute to the previously-identified significant cumulative water supply impact, but that the direct impact of the MSC Projects would be less than significant and the MSC Projects contribution to the cumulative impact would not be cumulatively considerable. The MSC Projects EIR also determined that the MSC Projects would result in a significant project-level impact and make a significant contribution to a cumulative level of service impact at one City of Santa Cruz intersection. While the CLRDP EIR identified this impact as

---

4 Infrastructure component of the CBB Project is discussed as the Marine Science Campus Infrastructure Improvements Phase 3 in the MSC Projects Environmental Impact Report.
significant and unavoidable because the necessary improvements were outside of the authority of
the University, under a 2008 Comprehensive Settlement Agreement between the University and
the City of Santa Cruz subsequent to certification of the CLRDP EIR, a mechanism to mitigate
the off-campus traffic impacts of UCSC development to less-than-significant levels was
identified. In accordance with this agreement, the University has contributed its fair share of the
cost of necessary traffic improvements and will make additional contribution to City traffic
improvements based on trips generated by the MSC Projects. The traffic impacts of the MSC
Projects are reduced to a less-than-significant level through these University fair share payments.

The MSC Projects also would contribute to a number of potentially significant impacts with
respect to air quality, biological resources, land use, noise, transportation and traffic, and
utilities. However, previously adopted CLRDP EIR mitigation measures or measures identified
in the MSC Projects EIR in each case would reduce the impact to a less-than-significant level.
The MSC Projects therefore would not result in any significant or significant unavoidable
impacts.

Alternatives Analyzed

MSC Projects alternatives are analyzed in detail in Chapter 4 of the MSC Projects Final EIR.
(See Attachment 6.)

The MSC Projects EIR considered three Project alternatives and a No Project alternative to the
CBB and MSCI projects, and considered the EH&S Project and the MSC Parking Phase 1
Project within the context of these larger projects, because they share footprints. Alternatives
considered for these projects are the Main Campus CBB Project/ Minimal MSCI Project
Alternative, the 2300 Delaware CBB/MSCI Seawater Extension Alternative, and the Reduced
CBB/MSCI Alternative.

No alternatives to the proposed CLRDP Amendment #1 were analyzed, as only one of the
proposed actions, Action 11 (a proposed revision of MSC parking provisions), has any potential
to result in physical effects upon the environment. The potential environmental effects of Action
11 are addressed in Section 3.10, Land Use, and Section 3.15, Transportation and Traffic, of the
MSC Projects EIR, which identify mitigation measures that would reduce to less-than-significant
levels the potentially significant land use plan inconsistency and related physical effects to the
environment that could result from this amendment. Any of the alternatives analyzed for the
CBB/MSCI Projects also would reduce or eliminate the potentially significant impacts related to
this amendment.

Public Comments

Two individuals, two state agencies, and one local agency commented on the Draft EIR. No
comments were made at the public hearing for the Draft EIR. No major controversial issues were
raised in comments. Topics discussed in comment letters included construction noise and dust
emissions from construction (“fugitive dust”), potential railroad hazards, potential parking
conflicts, and wildlife and wetlands issues. The MSC Projects Final EIR, Chapter 8 includes
copies of each comment letter received and responses to each comment. (See Attachment 6.) The
Final EIR includes minor changes to several mitigation measures to clarify and strengthen
mitigation, and text regarding railroad safety was added to the traffic section. Changes to the text of the EIR are tabulated in Chapter 8 of the Final EIR. A modification to the text of previously-adopted CLRDP EIR Mitigation Measure 4.3-1, which was included in the MSC Projects, is proposed for Regents’ action. Dust control measures suggested by the regional air district would be added to the measure. Added language would ensure that fugitive dust is adequately controlled during construction under the windy conditions common at the MSC. The full text of the revised measure is included in the CEQA Findings, Attachment 7.

Findings

The attached Findings (Attachment 7) provide more detail on the relation of the MSC Projects to the MSC CLRDP EIR, the MSC Projects’ environmental review process, identified environmental impacts and mitigation measures, and recommendations regarding approval of the EIR for the MSC Projects, in conformance with CEQA.
PROJECT STATISTICS

COASTAL BIOLOGY BUILDING

PROJECT BUDGET

<table>
<thead>
<tr>
<th>Category</th>
<th>Building</th>
<th>Infrastructure</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site Clearance</td>
<td>$634,000</td>
<td>0</td>
<td>1.1%</td>
</tr>
<tr>
<td>Building</td>
<td>37,814,000</td>
<td>0</td>
<td>63.0%</td>
</tr>
<tr>
<td>Exterior Utilities</td>
<td>1,204,000</td>
<td>5,122,000</td>
<td>10.5%</td>
</tr>
<tr>
<td>Site Development</td>
<td>2,162,000</td>
<td>2,200,000</td>
<td>7.3%</td>
</tr>
<tr>
<td>A/E Fee(^{(a)})</td>
<td>3,530,000</td>
<td>658,000</td>
<td>7.0%</td>
</tr>
<tr>
<td>Campus Administration(^{(b)})</td>
<td>1,589,000</td>
<td>317,000</td>
<td>3.2%</td>
</tr>
<tr>
<td>Surveys, Tests</td>
<td>316,000</td>
<td>100,000</td>
<td>0.7%</td>
</tr>
<tr>
<td>Special Items(^{(c)})</td>
<td>1,207,000</td>
<td>688,000</td>
<td>3.1%</td>
</tr>
<tr>
<td>Contingency</td>
<td>2,092,000</td>
<td>389,000</td>
<td>3.1%</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td>50,548,000</td>
<td>9,474,000</td>
<td>100.0%</td>
</tr>
<tr>
<td>Group 2 &amp; 3 Equipment</td>
<td>1,080,000</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td><strong>Project Total</strong></td>
<td>$51,628,000</td>
<td>$9,474,000</td>
<td>$61,102,000</td>
</tr>
</tbody>
</table>

PROJECT COST DATA

<table>
<thead>
<tr>
<th>Analytical Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross Square Feet (GSF)(^{(d)})</td>
</tr>
<tr>
<td>Assignable Square Feet (ASF)</td>
</tr>
<tr>
<td>Efficiency Factor (ASF/GSF)</td>
</tr>
<tr>
<td>Building Cost/GSF(^{(e)})</td>
</tr>
<tr>
<td>Project Cost/GSF</td>
</tr>
</tbody>
</table>

Comparable University Projects

UCSC Biomedical Sciences Facility, 59,728 ASF; @ 4890 CCCI = $631/GSF building cost, and $820/GSF project cost;
UC Berkeley Solar Energy Research Center, 21,471 ASF; @ 4890 CCCI = $928/GSF building cost and $1,307/GSF project cost.

\(^{(a)}\) Fees include Executive Architect and other professional design contract costs.
\(^{(b)}\) Campus Administration includes project management and inspection.
\(^{(c)}\) Special Items include environmental document preparation and reviews, value engineering/constructability review, lab/code consultant, biology/hydrology/paleontological consultants, telecom consultant, seawater consultant, geotech consultant, permits and agency reviews, air quality consultant, acoustical consultant, independent seismic review and hazardous materials monitoring.
\(^{(d)}\) Gross square feet (gsf) is the total area, including usable area, stairways, and space occupied by the structure itself. Assignable square feet (asf) is the net usable area.
\(^{(e)}\) Cost per square foot is impacted by challenges including 5-8 percent geographic markup, 2' water table requiring 20' deep drilled piers for foundation, seawater research lab, 8 environmental chambers, coastal adjacency requires corrosion-resistant materials, greenfield site next to ESHA requiring night light pollution reduction, Coastal Commission requirements (such as sheltered bike parking), and adjacency to the reserve which adds strict stormwater management requirements (project includes a green roof and detention basin).
### PROJECT STATISTICS

**MARINE SCIENCE CAMPUS PARKING PHASE 1**  
**PROJECT BUDGET**  
**CCCI 6059**

<table>
<thead>
<tr>
<th>Costs</th>
<th>Total</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site Clearance</td>
<td>$80,000</td>
<td>5.0%</td>
</tr>
<tr>
<td>Building</td>
<td>27,000</td>
<td>1.7%</td>
</tr>
<tr>
<td>Exterior Utilities</td>
<td>520,000</td>
<td>32.3%</td>
</tr>
<tr>
<td>Site Development</td>
<td>671,000</td>
<td>41.6%</td>
</tr>
<tr>
<td>A/E Fee (a)</td>
<td>95,000</td>
<td>5.9%</td>
</tr>
<tr>
<td>Campus Administration (b)</td>
<td>67,000</td>
<td>4.2%</td>
</tr>
<tr>
<td>Surveys, Tests</td>
<td>11,000</td>
<td>0.7%</td>
</tr>
<tr>
<td>Special Items (c)</td>
<td>72,000</td>
<td>4.5%</td>
</tr>
<tr>
<td>Contingency</td>
<td>68,000</td>
<td>4.2%</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td>1,611,000</td>
<td>100.0%</td>
</tr>
<tr>
<td>Group 2 &amp; 3 Equipment</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Project Total</strong></td>
<td><strong>$1,611,000</strong></td>
<td></td>
</tr>
</tbody>
</table>

### PROJECT COST DATA

<table>
<thead>
<tr>
<th>Analytical Data</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross Square Feet (GSF) (d)</td>
<td>NA</td>
</tr>
<tr>
<td>Assignable Square Feet (ASF)</td>
<td>NA</td>
</tr>
<tr>
<td>Efficiency Factor (ASF/GSF)</td>
<td>NA</td>
</tr>
<tr>
<td>Building Cost/GSF</td>
<td>NA</td>
</tr>
<tr>
<td>Project Cost/GSF</td>
<td>NA</td>
</tr>
</tbody>
</table>

Cost per parking space = $14,200 (2 surface lots)

### Comparable University Projects

The Office of the President Benchmarks for Parking projects lists only parking structures, whether above or below ground, none of which are comparable. Other surface lot parking at UCSC has been recently estimated at $16,500 per space for 55 spaces and $16,000 per space for 95 spaces (parking for Social Sciences).

(a) Fees include Executive Architect and other professional design contract costs.
(b) Campus Administration includes project management inspection.
(c) Special Items include hazardous materials, survey & monitoring, environmental document preparation and reviews, value engineering/constructability review, permits and agency reviews, environmental monitoring, and interest during construction.
(d) Gross square feet (gsf) and assignable square feet (asf) are not calculated for parking projects.
### PROJECT STATISTICS

**MARINE SCIENCE CAMPUS EH&S FACILITY**  
**PROJECT BUDGET**  
**CCCI 6038**

<table>
<thead>
<tr>
<th>Costs</th>
<th>Total</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site Clearance</td>
<td>$2,000</td>
<td>1.5%</td>
</tr>
<tr>
<td>Building</td>
<td>70,000</td>
<td>53.8%</td>
</tr>
<tr>
<td>Exterior Utilities</td>
<td>16,000</td>
<td>12.3%</td>
</tr>
<tr>
<td>Site Development</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A/E Fee(^{(a)})</td>
<td>10,000</td>
<td>7.7%</td>
</tr>
<tr>
<td>Campus Administration(^{(b)})</td>
<td>14,000</td>
<td>10.8%</td>
</tr>
<tr>
<td>Surveys, Tests</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Special Items(^{(c)})</td>
<td>11,000</td>
<td>8.5%</td>
</tr>
<tr>
<td>Contingency</td>
<td>7,000</td>
<td>5.4%</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td>130,000</td>
<td>100.0%</td>
</tr>
<tr>
<td>Group 2 &amp; 3 Equipment</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Project Total</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**PROJECT COST DATA**

<table>
<thead>
<tr>
<th>Analytical Data</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross Square Feet (GSF)(^{(d)})</td>
<td>150</td>
</tr>
<tr>
<td>Assignable Square Feet (ASF)</td>
<td>126</td>
</tr>
<tr>
<td>Efficiency Factor (ASF/GSF)</td>
<td>84%</td>
</tr>
<tr>
<td>Building Cost/GSF</td>
<td>467</td>
</tr>
<tr>
<td>Project Cost/GSF</td>
<td>867</td>
</tr>
</tbody>
</table>

**Comparable University Projects**

No comparable projects

---

\(^{(a)}\) Fees include Executive Architect and other professional design contract costs.  
\(^{(b)}\) Campus Administration includes project management inspection.  
\(^{(c)}\) Special Items include hazardous materials, survey & monitoring, environmental document preparation and reviews, value engineering/constructability review, fire protection/life safety consultant, agency reviews, environmental monitoring, and existing conditions documentation.  
\(^{(d)}\) Gross square feet (gsf) is the total area, including usable area and space occupied by the structure itself. Assignable square feet (ASF) is the net usable area.
## Project Statistics

### Nature Education Facilities

#### Project Budget

<table>
<thead>
<tr>
<th>Costs</th>
<th>Total</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site Clearance</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Building</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Exterior Utilities</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Site Development</td>
<td>$1,166,000</td>
<td>51.5%</td>
</tr>
<tr>
<td>A/E Fee&lt;sup&gt;(a)&lt;/sup&gt;</td>
<td>109,000</td>
<td>4.8%</td>
</tr>
<tr>
<td>Campus Administration&lt;sup&gt;(b)&lt;/sup&gt;</td>
<td>68,000</td>
<td>3.0%</td>
</tr>
<tr>
<td>Surveys, Tests</td>
<td>32,000</td>
<td>1.4%</td>
</tr>
<tr>
<td>Special Items&lt;sup&gt;(c)&lt;/sup&gt;</td>
<td>172,000</td>
<td>7.6%</td>
</tr>
<tr>
<td>Contingency</td>
<td>72,000</td>
<td>3.2%</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td>$1,619,000</td>
<td>71.5%</td>
</tr>
<tr>
<td>Group 2 &amp; 3 Equipment</td>
<td>646,000</td>
<td>28.5%</td>
</tr>
<tr>
<td><strong>Project Total</strong></td>
<td><strong>$2,265,000</strong></td>
<td><strong>100.0%</strong></td>
</tr>
</tbody>
</table>

### Project Cost Data

#### Analytical Data

<table>
<thead>
<tr>
<th>Analytical Data</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross Square Feet (GSF)</td>
<td>0</td>
</tr>
<tr>
<td>Assignable Square Feet (ASF)</td>
<td>0</td>
</tr>
<tr>
<td>Efficiency Factor (ASF/GSF)</td>
<td>0</td>
</tr>
<tr>
<td>Building Cost/GSF</td>
<td>0</td>
</tr>
<tr>
<td>Project Cost/GSF</td>
<td>0</td>
</tr>
</tbody>
</table>

#### Comparable University Projects

No comparable projects

---

(a) Fees include Executive Architect and other professional design contract costs.
(b) Campus Administration includes project management and inspection.
(c) Special Items include environmental document preparation and reviews, constructability review, biology/paleontological consultants, hydrology/wetland delineation consultants, permits and agency reviews, geotech consultant, environmental monitoring, and existing conditions documentation.