

APPENDIX A

Revised (October 2003) Notice of Preparation and Responses



One Cyclotron Road, MS 90K
Berkeley, California 94720

Ernest Orlando Lawrence
Berkeley National Laboratory

October 28, 2003

State of California
Office of Planning and Research
1400 Tenth Street
Sacramento, California 95814

**REVISED NOTICE OF PREPARATION
DRAFT ENVIRONMENTAL IMPACT REPORT**

Project Title: LBNL 2004 Long Range Development Plan
Project Location: Lawrence Berkeley National Laboratory
County: Alameda County, California
SCH#: 2000102046

Project Description:

Lawrence Berkeley National Laboratory (LBNL or Berkeley Lab) proposes to prepare and adopt the 2004 Long Range Development Plan (LRDP). The 2004 LRDP will provide a physical development framework for implementing Berkeley Lab's mission through the year 2025.

Agency Review and Comments:

In compliance with the State and University of California Guidelines for implementation of the California Environmental Quality Act (CEQA), this Notice of Preparation is hereby sent to inform you that the Lawrence Berkeley National Laboratory is preparing a Draft Environmental Impact Report (EIR) on the 2004 LRDP.

As Lead Agency, we need to know the views of your agency as to the scope and content of the environmental information that is germane to your agency's statutory responsibilities in connection with the proposed project. (Anticipated areas of analysis are identified in the attached Initial Study). Please designate a contact person in your agency and send your response to the address below.

Environmental Review Process:

The University of California will be the Lead Agency and will prepare an EIR to evaluate the potential environmental effects of implementing the 2004 LRDP. This will include a programmatic level of environmental review of Berkeley Lab development through 2025.

The 2004 LRDP EIR will replace the 1987 LRDP EIR (as well as the 1992 Supplemental EIR and 1997 Addendum) when it has been certified and the proposed new LRDP has been approved by The UC Regents. The LRDP EIR will be designed to analyze a series of related actions at Lawrence Berkeley National Laboratory under the 2004 LRDP. It will contain a comprehensive and detailed analysis of environmental impacts of the 2004 LRDP. Subsequent activities within the scope of the 2004 LRDP will be analyzed to determine whether there are any impacts requiring further CEQA documentation or instead whether no documentation in addition to the LRDP EIR is required.

An Initial Study has been prepared pursuant to CEQA to identify the environmental issues that will be addressed in Berkeley Lab's 2004 LRDP EIR. The Initial Study is attached to this Notice of Preparation. Copies of the Initial Study are available for review at the main branch of the Berkeley Public Library, 2090 Kittredge Avenue, Berkeley, and on-line at <http://www.lbl.gov/Community/env-rev-docs.html>.[.lbl.gov](http://www.lbl.gov).

Due to time limits mandated by State law, this NOP will include a 30-day comment period that extends from October 28, 2003 to November 26, 2003. Comments must be received before 5:00 pm on November 26, 2003 to be considered in the preparation of the LRDP EIR. They may be e-mailed to LRDP-EIR@lbl.gov or mailed to:

Jeff Philliber
Environmental Planning Group Coordinator
Lawrence Berkeley National Laboratory
One Cyclotron Road, MS 90K
Berkeley, CA 94720

A public scoping meeting for the 2004 LRDP and EIR will be held from 7:00 PM to 9:00 PM on November 17, 2003 at the North Berkeley Senior Center, 1901 Hearst Avenue, Berkeley.

Sincerely,

Laura Chen, Chief
LBNL Facilities Planning

Enclosure: Initial Study Checklist

CC: State Agencies

State Clearinghouse
CA Air Resources Board, Dr. Alan C. Lloyd
CA Department of Fish and Game, Robert C. Hight, Director
CA Department of Health Services, Mr. Edgar Bailey, Chief, Radiological Health Branch, et. al.
CA Department of Water Resources, David Kennedy, Director
CA Environmental Protection Agency, Winston Hickox, Secretary, et. al.
CA EPA, Department of Toxic Substances Control, Sal Ciriello et. al.,
CA Regional Water Quality Control Board, Mr. Lawrence Kolb, Executive, et. al.
CA State Resources Agency, Ms. Mary D. Nichols, Secretary
CA State Water Resources Control Board, Ms. Heidi Temko, et. al.
CalTrans, Gary Adams, Chief, et. al.

Federal Agencies

U.S. Environmental Protection Agency, Region 9, Mr. Michael Bandrowski, et. al.
U.S. Fish and Wildlife Service, Sacramento Field Office, Wayne White, Supervisor,
U.S. Department of Energy, Berkeley Site Office, Mr. Richard Nolan, et. al.
U.S. Department of Energy, NEPA Compliance Officer, Janet M. Neville
U.S. Department of Energy, Oakland Office, Mr. Roger Little, et. al.

Regional/County Agencies

Alameda County, Supervisor District 5, Keith Carson
Alameda County LAFCO, Lon Ann Texeira, Executive Officer
Alameda County, Susan Muranishi, County Administrator
Alameda County, Health Care Agency, Public Health Officer, Arthur Chen et. al.
Alameda County, Clerk, Crystal Hishida
Alameda County Planning Department, James Sorenson, Director, et. al.
Metropolitan Transportation Commission Steve Heminger, Executive Director
Association of Bay Area Governments, Eugene Leong, et. al.
Bay Area Air Quality Management District, Brian Bateman, et. al.
Contra Costa County Department of Health Services, Andy Parsons
East Bay Municipal Utilities District, Dennis Diemer, General Manager, et. al.
East Bay Regional Park District, Pat O'Brien, General Manager, et. al.
Regional Water Quality Control Board, San Francisco Division, Keith Lichten, et. al.

City of Berkeley

Berkeley City Clerk, Ms. Sherry M. Kelly
Berkeley City Manager's Office, Mr. Phil Kamlarz, et. al.
City of Berkeley, City Attorney's Office, Manuela Albuquerque
City of Berkeley, Mayor Tom Bates, et. al.
City of Berkeley, Council Members Breland, Hawley, Maio, Olds, Shirek, Spring, Worthington, Wozniak
City of Berkeley, Department of Planning, Dan Marks, et. al.
City of Berkeley, Toxics Management Division, Dr. Nabil Al-Hadithy
City of Berkeley, Energy Officer, Neal DeSnoo
City of Berkeley, Peace & Justice Commission Secretary, Hector Manual
City of Berkeley, Parks & Waterfront Commission Secretary, Jay Kelekian
City of Berkeley, Solid Waste Management Commission Secretary, Tania Levy
City of Berkeley, Police Chief Roy Meissner
City of Berkeley, Fire Department, Reg Garcia, Chief, et. al.
City of Berkeley, Peter Hilliard, Transportation Manager

City of Oakland

City of Oakland Mayor Jerry Brown
City of Oakland, District 1, Jane Brunner, Councilmember
City of Oakland, City Attorney John Russo
City of Oakland, Planning and Zoning Division, Leslie Gould, Director
Oakland City Clerk's Office, Ceda Floyd
City of Oakland, Deborah Edgerly, Interim City Manager
City of Oakland, Fire Department, Gerald Simon, Chief, et. al.

City of Albany

City of Albany City Clerk Jacqueline Bucholz
City of Albany Administrator, Beth Pollard

Kensington

Kensington Fire District, Paul Wilson

University of California Office of the President (UCOP)

UCOP, Budget and University Relations, Bruce Darling, Vice-President
UCOP, Laboratory Administration, Howard Hatayama, Sr. VP
UCOP Office of General Counsel, Alan Waltner
UCOP Office of Planning, Design, & Construction, John Zimmermann, et. al.
UCOP Facilities Administration, Michael Bocchichio, Assistant Vice President

UC Berkeley

UC Berkeley, Chancellor Robert Berdahl
UC Berkeley, Exec. Vice Chancellor, Paul Gray
UC Berkeley, Vice Chancellor for Research, Beth Burnside
UC Berkeley, Vice Chancellor Business and Administrative Services, Horace Mitchell, et. al.
UC Berkeley, Physical and Environmental Planning, Tom Lollini, Director, et. al.
UC Berkeley, Chancellor's Adv. Committee on Strawberry Creek, G. Mathias Kondolf
UC Berkeley, EH&S Division, Mark Frieberg, et. al.
UC Berkeley, Office of Radiation Safety, Paul Lavelly, Director, et. al.
UC Berkeley, Community Relations, Irene Hegarty, Director
UC Berkeley, Lawrence Hall of Science, Elizabeth Stage, Director et. al.
UC Berkeley, Botanical Garden, Ellen Sims, Director, et. al.
UC Berkeley, Police Chief, Victoria Harrison
UC Berkeley, Campus Landscape Architect, James Horner
UC Berkeley, Emergency Services Manager, Tom Klatt

Organizations

Berkeley Association of Realtors, Donald Clark, Executive Director
Berkeley Chamber of Commerce, Rachel Rupert et. al.
Campus Parnassus Neighborhood Association, Eric Arens
Committee to Minimize Toxic Waste, Pam Sihvola, Co-Chair, et. al.
Community Environmental Advisory Commission, Sara MacKusick
Council of Neighborhood Associations, Marie Bowman, President
Euclid-LeConte Neighbors, Jim Sharp et. al.
League of Women Voters, Nancy Bickel, President, et. al.
Nyingma Institute, Abby Blum
Oakland Metropolitan Chamber of Commerce, Joseph Haraburda
Panoramic Neighborhood Association, Janice Thomas, President
Urban Creeks Council, Carol Schemmerling
Friends of Strawberry Creek, Janet Byron

Individuals and Neighbors

(Various)



One Cyclotron Road, MS 90K
Berkeley, California 94720

Ernest Orlando Lawrence
Berkeley National Laboratory

October 28, 2003

INITIAL STUDY 2004 LONG RANGE DEVELOPMENT PLAN LAWRENCE BERKELEY NATIONAL LABORATORY

I. PROJECT INFORMATION

Project Title: 2004 Long Range Development Plan
Lead Agency: University of California
Contact Person: Jeff Philliber; (510) 486-5257
Project Location: One Cyclotron Road, Berkeley, California 94720
State Clearinghouse #: 2000102046

II. PROJECT DESCRIPTION

See Below.

III. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below may be potentially affected by this project and will be carried forward for full analysis in the LRDP EIR:

<input checked="" type="checkbox"/> Aesthetics	<input type="checkbox"/> Agriculture Resources	<input checked="" type="checkbox"/> Air Quality
<input checked="" type="checkbox"/> Biological Resources	<input checked="" type="checkbox"/> Cultural Resources	<input checked="" type="checkbox"/> Geology/Soils
<input checked="" type="checkbox"/> Hazards & Haz. Materials	<input checked="" type="checkbox"/> Hydrology/Water Quality	<input checked="" type="checkbox"/> Land Use/Planning
<input type="checkbox"/> Mineral Resources	<input checked="" type="checkbox"/> Noise	<input checked="" type="checkbox"/> Population/Housing
<input checked="" type="checkbox"/> Public Services	<input checked="" type="checkbox"/> Recreation	<input checked="" type="checkbox"/> Transportation/Traffic
<input checked="" type="checkbox"/> Utilities/Service Systems	<input checked="" type="checkbox"/> Mandatory Findings of Significance	

IV. DETERMINATION: (To be completed by the Lead Agency)

On the basis of the initial evaluation that follows:

_____ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

_____ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

_____ ■ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

_____ I find that the proposed project MAY have a “potentially significant impact” or “potentially significant unless mitigated” impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. A TIERED ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

_____ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, no further environmental document is required. FINDINGS consistent with this determination will be prepared.

Signature

Date

Laura Chen

Printed Name

Chief, LBNL Facilities Planning

LBLN 2004 LRDP PROJECT DESCRIPTION

Introduction

Lawrence Berkeley National Laboratory (LBLN or Berkeley Lab) is a multi-program national research facility operated by the University of California (UC) for the Department of Energy (DOE)'s missions in fundamental science, energy resources and environmental quality. LBLN's programs advance four distinct goals for DOE and the nation:

- To perform leading multidisciplinary research in the computing sciences, physical sciences, energy sciences, biosciences, and general sciences in a manner that ensures employee and public safety and protection of the environment.
- To develop and operate unique national experimental facilities for qualified investigators.
- To educate and train future generations of scientists and engineers to promote national science and education.
- To transfer knowledge and technological innovations and to foster productive relationships among the Lab's research programs, universities, and industry in order to promote national economic competitiveness.

Classified research is not conducted at LBLN.

Background

University of California campuses, including LBLN, are required to maintain and periodically update Long Range Development Plans (LRDPs). An LRDP is a planning document that establishes a general framework and direction for the physical development of an institution over a span of several years. The University of California further mandates that any new LRDP be accompanied by an Environmental Impact Report (EIR) pursuant to the California Environmental Quality Act (CEQA). An EIR provides a comprehensive review and analysis of a proposed project and of its potential effects on the environment. An EIR analysis is presented for review and comment to the public, to relevant government agencies, and to the Lead Agency (in this case, UC) decision-makers. Any new LBLN LRDP and EIR must be approved by The Regents of the University of California before the EIR can be adopted and the LRDP can be implemented.

LBNL's existing LRDP and EIR were approved in 1987. The EIR was later updated by a Supplemental EIR in 1992 and an Addendum in 1997. Sufficient time has passed that a renewed statement of planning vision is appropriate for Berkeley Lab as it works to address the national scientific challenges and research opportunities at the beginning of this new century.

LBNL had begun the long range planning process with a previous LRDP EIR Notice of Preparation in the fall of 2000. Because the schedule for completion and circulation of the LRDP and EIR was delayed, this revised Notice of Preparation has been issued. With this revised Notice of Preparation, the LRDP and CEQA process recommences. Berkeley Lab expects to complete and circulate the Draft LRDP and Draft EIR for public review in Spring 2004. Berkeley Lab plans to submit the proposed Final LRDP and EIR documents for The UC Regents' consideration during Fall 2004.

Setting

The main LBNL site straddles the border between the cities of Berkeley and Oakland in Alameda County adjacent to the UC Berkeley campus (see Figures 1 and 2). The site is situated on the ridges and in the draws of Blackberry and Strawberry Canyons in the East Bay Hills. To the west are UC Berkeley student and general residential neighborhoods; to the north are single-family residential neighborhoods, the Lawrence Hall of Science, and other rurally set recreational and cultural facilities and parking uses; to the east and southeast are University-owned rural lands including designated ecological study area and botanical gardens; and to the south and southwest are the University of California, Berkeley, recreational facilities, and single-family residential neighborhoods (see Figure 3).

The approximately 200-acre main LBNL site (or "Hill site," see figure 2) includes approximately 1.76 million gross square feet (gsf) of building space consisting mainly of office, laboratory, shop, and storage areas. Additional development includes roads, parking lots, utilities, and infrastructure. Approximately 25 percent of the site is developed (impermeable surface area) while the remaining approximately 75 percent is generally permeable and/or undeveloped, although historically agriculturally-used or otherwise managed areas. The latter areas are hosts to a variety of mostly non-native grasses, brush, and woodlands. LBNL's undeveloped areas are subject to on-going vegetation management for fire control purposes.

LBNL occupies approximately 400,000 gsf of office, laboratory, and storage space off of the LBNL Hill site. This includes approximately 100,000 gsf on UC-owned land on the UC Berkeley Campus, and approximately 295,000 gsf of commercial/industrial lease space primarily in the

cities of Berkeley, Oakland, Walnut Creek, and Washington, D.C. The amount of off-site space occupied and the location of this space changes as needs and market conditions change.

The LBNL Hill site includes three vehicular entry gates and generates several thousand one-way (access and egress) vehicle trips on a typical workday. The site currently contains approximately 2,200 employee parking spaces, and the current objective for Berkeley Lab's parking-to-employee ratio is 1.7 employees for every parking space for the Lab's current adjusted daily population of about 4,300. The Lab offers free employee and guest shuttle service throughout the workday, both on- and off-site, and maintains incentives for carpooling and alternative forms of transportation.

LBNL's landscape management areas include stands of eucalyptus, bay, oak, redwoods, and Monterey pine; scrub and brush; and grasslands. No rare, endangered, threatened, or otherwise listed plant or animal species have been sighted at LBNL. The Berkeley Lab site contains several mostly seasonal and intermittent waterways and drainages and is part of the Strawberry Creek watershed. No jurisdictional wetlands or blue-line streams exist on the site. An on-going vegetation management program for wildland fire control consists of periodic tree-thinning and pruning and regular brush and grass maintenance activities.

The Cooper's hawk, a California species of concern, and the Red-tailed hawk, which is protected under California Fish and Game Code Section 3505.5, have been observed within the Lab environs. In addition, in 2000, the US Fish and Wildlife Service (USFWS) designated a large portion of Alameda and Contra Costa Counties as habitat for the Alameda whipsnake—a species previously listed as “threatened.” This critical habitat listing included areas within the LBNL Hill site. No Alameda whipsnake has been reported at the LBNL site, and a 1996 survey conducted by a whipsnake expert reported that only a small portion of the LBNL site (less than five acres) actually contains any viable or colonizable Alameda whipsnake habitat. The USFWS critical habitat listing for the Alameda whipsnake was vacated by a Federal district court in 2003.

While some LBNL buildings are over fifty years old, virtually all of these have been substantially modified over the years. LBNL is conducting a sitewide review of historic resources in coordination with the Department of Energy and the State Historic Preservation Office. Based on archaeological surveys of the Hill site, as well as on decades of construction-related excavation, no archaeological or Native American sites are thought to exist on the LBNL site.

1987 LRDP and EIR

At present, Berkeley Lab's on- and off-hill site facilities are host to an average daily population of approximately 4,300 staff and guests. Under the current, approved LRDP and LRDP EIR, as amended, Berkeley Lab may grow by approximately 450 staff and guests above current levels to a total of 4,750 staff and guests, and may develop or occupy an additional 238,000 gsf on site to a total of 2 million gsf (see Table I). In addition, the 1987 LRDP and EIR, as amended, project that LBNL off-hill (non-UC-owned land) space use will be 100,000 gsf by an unspecified date within the 21st Century ("20XX").

2004 LRDP

Project Description

The project under consideration in this EIR will be LBNL's proposed new LRDP. The LRDP will be a planning document that will address continuing and future uses and activities at Berkeley Lab. The LRDP planning period will extend through 2025, although the actual pace and nature of projected development will depend on a number of factors that cannot all be predicted at this time; these include future funding levels and the future direction of national research. For the purposes of environmental analysis, an approximately twenty-year timeframe will be used.

While the LRDP planning process is not complete, LBNL has developed some general parameters for the Plan. These parameters, discussed below, are the result of preliminary planning and may be refined or adjusted as a result of the on-going planning process.

The objectives of this proposed LRDP reflect the evolution of the Lab, its mission, and the climate of scientific research since the issuance of the 1987 LRDP. The anticipated primary LRDP objectives are:

- Provide research and support facilities to accommodate research program and associated population growth.
- Secure and sustain investment in research facilities.
- Improve overall operational and scientific efficiencies.
- Strengthen the core site plan concept of multiple, consolidated functional areas.
- Improve research and support operations through proper siting and consolidation of functions, including the relocation of off-site and UCB research activities to the main Hill site.

- Develop facilities that foster innovation and collaboration.
- Protect the environment through exemplary sustainable design and operational practices.
- Plan for site amenities and constraints.
- Provide a setting that attracts and retains leading research talent in a safe, healthful, and attractive work environment.
- Provide a flexible land use policy that accommodates the rapidly changing nature of scientific research.

LRDP Scope

The 2004 LRDP will guide the physical development of Berkeley Lab to achieve the best possible balance among the Lab's mission; staff, user, and visitor needs for state of the art research and support facilities and services; the environmental character of the site; and a harmonious integration with the surrounding community. The LRDP will not be per se an implementation plan; rather, it will be a guide to implementation. Adoption of the LRDP will not constitute a commitment to any specific development projects, construction schedules, or funding priorities. Specifically, this LRDP will:

- Summarize the Laboratory's setting, planning processes, planning concepts and design objectives.
- Identify population growth and space needs projections to the twenty-year horizon year.
- Define the physical context for facilities development on the main Hill site.
- Indicate redevelopment needs for existing buildings and utility systems.
- Summarize site amenities and constraints to protect the environment and natural setting.
- Provide a land use plan and accompanying design principles and themes as a guide for the location and qualitative aspects of new development.

Population Growth Projections

Over the next twenty years, the "adjusted daily population" (ADP) at the Hill site is expected to grow from the current 4,300 to 5,500. The ADP counts both staff and guests and is adjusted to account for the normal fluctuations in guest attendance. This average growth rate of approximately 1.1% per year would be less than LBNL's annual population growth rate of about 1.3% per year since adoption of the 1987 LRDP. This forecasted population would represent an

increase of approximately 28% over the current LBNL population and approximately 16% over the 1987 LRDP population projection of 4,750.¹

Space Needs Projections

Currently, LBNL occupies 2,180,000 gsf, including a combined total of about 1,760,000 gsf at the main Hill site, about 99,000 gsf at the UCB campus, and approximately 295,000 gsf of leased space distributed over multiple sites, for a combined total of 2,155,501 gsf. Implementation of the 2004 LRDP would increase the Lab's main Hill site total building area to approximately 2,560,000 gsf.¹

Table 1

	Current Level	Current Projection (1987 LRDP/EIR)	Projected Future (2025) Level
Population (ADP)	4,300	4,750	5,500
Space ¹			
On-Hill space	1.76 M	2.00 M	2.56 M
Off-Hill space at UCB ²	0.10 M	0.30 M	0.10 M

¹ – in Millions square feet

² – Does not include off-site lease space, which will change as needs and/or market conditions allow.

Off-Hill functions may continue to operate at their current locations or at the other sites as conditions warrant. LBNL does not expect to increase space occupied on the UC Berkeley campus park, but the mix of office and laboratory space may change over time. It is anticipated that LBNL's special status space in Calvin and Donner laboratory buildings on the UC Berkeley campus will continue in these or other negotiated buildings on the UC Berkeley campus. LBNL's off-Hill Commercial lease space will fluxuate as needs and market conditions allow.

Land Use

The Land Use Plan will identify general zones of development intensity rather than areas of specific use types. The three development zones that will comprise the plan are expected to be:

- **Facilities Development Area** – research and support activities. Would encompass primarily the already developed central portion of the Lab. New development of

¹ Revisions to text were made to correct overstatements in NOP, per errata sheet issued to the State Clearinghouse on October 31, 2003.

laboratory, office, and support structures would be allowed throughout this zone. Final building locations and massing would not be dictated by the land use plan but would be the result of a comprehensive planning process. The LRDP would promote development on infill and existing building sites and would look to consolidating research activities.

- **Vegetation Management Areas** – managed landscape, wildland fire and natural areas. Would be located entirely along the perimeter of the LBNL site and would provide an open space buffer to neighboring land uses. Vegetation in these areas would continue to be managed to reduce wildland fire risks. Environmental monitoring structures and access roadways would be allowed in these areas.
- **Special Habitat Protection Areas** – no regular vegetation management or development is anticipated. Would provide for protection of identified special status species habitats and riparian zones.

Since the 1987 LRDP, approximately 66 acres of Regents'-owned land formerly managed by UC Berkeley have been added to LBNL's management area. These acres are currently managed under existing land use designations provided under the current UC Berkeley LRDP until LBNL's new LRDP is adopted by The Regents. At such time, these acres will be assigned new land use designations by the Berkeley Lab LRDP. This land currently includes "Ecological Study Area" zone and "Natural" area designations under the UC Berkeley LRDP, and it is actively managed by LBNL for vegetation and fire management purposes. The lands currently designated as Ecological Study Area zones under the 1990 UC Berkeley LRDP are anticipated to be designated "managed areas" under the new Berkeley Lab LRDP.

Proposed Major Planning Policies

Based upon the Lab's mission, population growth projections, and space needs forecast, policies are being formulated to serve as a guide to the continuing development of the LBNL main site. These draft policies include the following:

Facilities

- Develop flexible facilities that meet changing needs of research programs
- Design buildings to work with hillside topography
- Design buildings as leading examples of sustainable design principles
- Develop and maintain flexible and accessible utility infrastructure

Environmental Character

- Establish the built form as a strong sense of place to facilitate interactive work and social life that will help to attract and retain top researchers
- Commit to integrate natural and man-made environments

- Optimize the potential of open space, views, and landscape as valuable, distinguishing amenities
- Continue vegetation management to minimize wildland fire risk

Growth & Development

- Accommodate changing space and support needs of scientific research
- Accommodate program population and space growth
- Balance approach to new development
- Replace old low density with new space efficient facilities
- Promote sustainable development
- Promote opportunities for third-party development

Land Use

- Co-locate interdependent research programs in clusters
- Promote infill development sites reinforcing the cluster concept
- Assign land use in accordance with sustainable guidelines
- Site development adjacent to existing development and utilities

Circulation and Transportation

- Promote alternative forms of transportation
- Provide parking to support a campus like setting and increased population
- When possible, segregate service and employee/visitor traffic

Plan Concept: Hill Town Research Clusters

The 2004 LRDP will advance the concept of development in research clusters defined by the hillside topography, natural features, and the character of the built environment. These clusters will be known as individual “hill towns” with their own unique character and themes. The Lab campus as a whole will maintain a cohesive sense of place primarily from the unifying force of the natural setting. Further development of common elements such as pedestrian walkways, site structures, landscaping and signage will further bind the unique hill town settings into a unified whole.

These hill towns provide a place to concentrate research activities either by research Division or by project into “research clusters.” The hill town analogy provides a framework to guide the site planning strategies, development principles, and design themes unique to each hill town. Further, as hill towns, by necessity, tend to concentrate activities and space, these development

principles and themes reinforce a primary LRDP objective to provide higher density facilities that foster opportunities for collaboration.

Construction Program

The 2004 LRDP will envision project construction as a series of activities that takes place sequentially and, at times, simultaneously at the Lab site. Consequently, the 2004 LRDP EIR will analyze construction as an on-going activity based upon expected annual averages as opposed to as a series of discrete, temporary, and unrelated actions that are deferred to future, segregated analyses.

Environmental Impact Report

The 2004 LRDP EIR will replace the 1987 LRDP EIR (as well as the 1992 Supplemental EIR and 1997 Addendum) when it has been certified and the proposed new LRDP has been approved by The UC Regents. The 2004 LRDP EIR will be designed to analyze a series of related actions at Lawrence Berkeley National Laboratory under the 2004 LRDP. It will contain a comprehensive and detailed analysis of environmental impacts of the 2004 LRDP. Subsequent activities within the scope of the 2004 LRDP will be analyzed to determine whether there are any impacts requiring further CEQA documentation or instead whether no documentation in addition to the LRDP EIR is required.

The EIR analyses of potential LRDP effects on environmental resources shall include the following areas: Aesthetics; Air Quality; Biological Resources; Cultural Resources; Geology, Seismicity, and Soils; Hazards and Hazardous Materials; Hydrology and Water Quality; Land Use and Planning; Noise; Population and Housing; Public Services; Recreation; Transportation; and, Utilities and Service Systems. The EIR will include analysis of other considerations required by CEQA.

The LRDP EIR will also consider the combined effects of the proposed LRDP program in concert with past, present, and probable future projects producing related or cumulative impacts. Among these are LBNL's on-going activities, UC Berkeley's projected new Long Range Development Plan, and the City of Berkeley's recently-approved General Plan update.

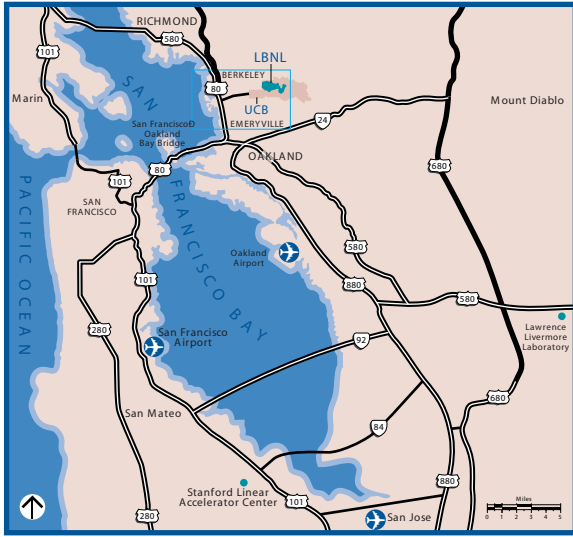
Alternatives

The LRDP EIR will include an examination of alternatives to the project, including the “no project” alternative required by CEQA. While the final list of alternatives will be developed in conjunction with the environmental analyses, likely alternatives to be included are:

- **Reduced On-Site Population Growth:** Under this alternative, space growth would be similar to that of the proposed project, but population growth would be limited.
- **Reduced On-site Space Growth:** Under this alternative, population growth would be similar to that of the proposed project, but space growth would be limited. Staff compression and/or off-site leases of space would be emphasized under this alternative.
- **Reduced or No New On-site parking growth:** Under this alternative, growth of population and space would continue as projected, but fewer or no new parking spaces would be provided. Alternative modes of transportation would be emphasized to a greater degree under this alternative than under the proposed LRDP.
- **Satellite or Second Campus Development Off-site:** Under this alternative, LBNL would concentrate new facilities and population growth in an off-site area such as in an industrial park.
- **No Project :** Under this alternative, LBNL would not develop beyond the parameters described in the 1987 LRDP.

Cortese List

As required by Public Resources Code Section 21092.6, information regarding LBNL locations on the CAL/EPA Hazardous Waste and Substances Sites List, or “Cortese List,” are provided at the following URL: <http://www.lbl.gov/Community/env-rev-docs.html>



LBNL Regional Location



LBNL Local Location



LBNL Site

Figure 1: Regional, Local, and Site Location Maps

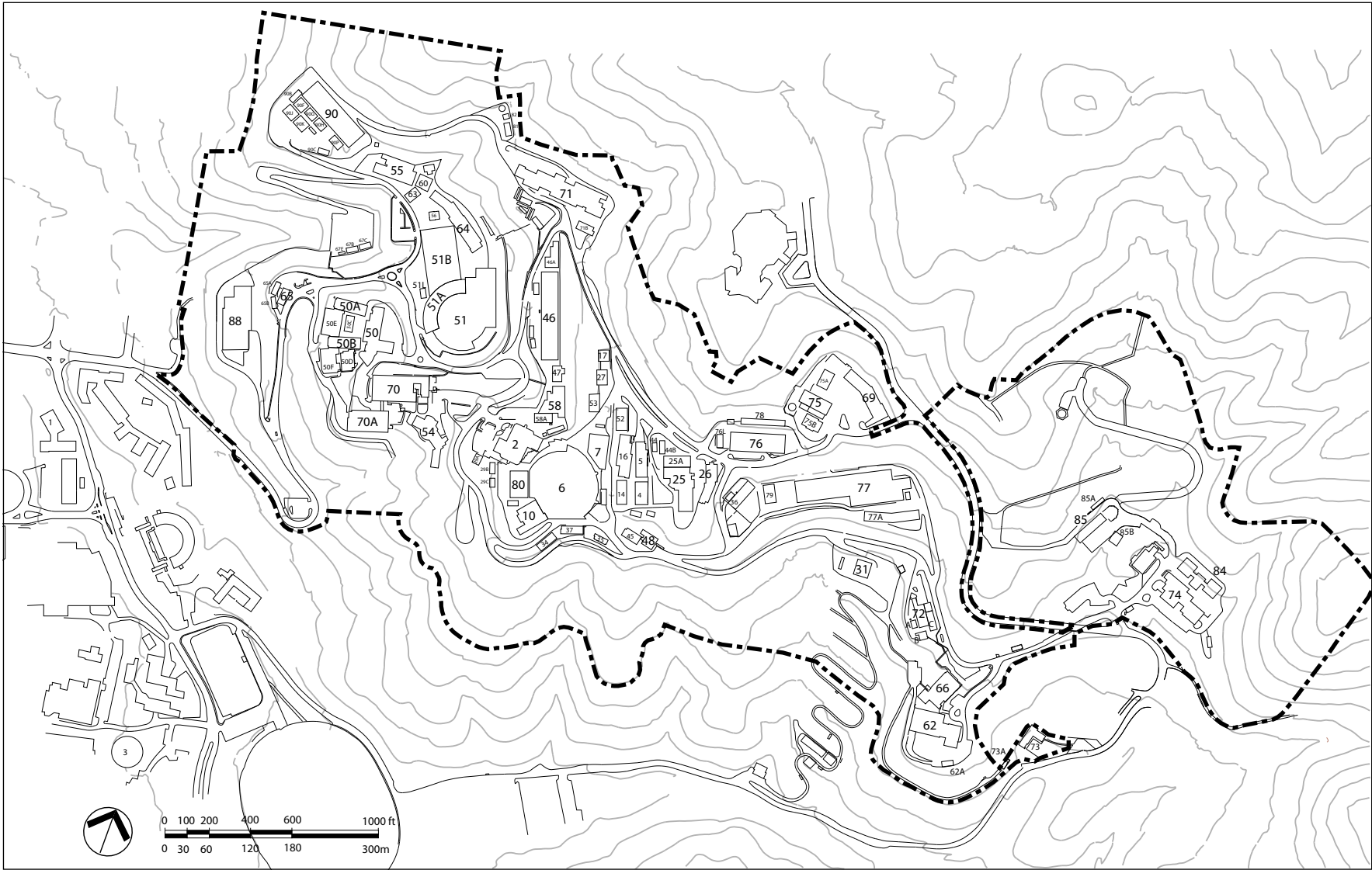


Figure 2: LBNL Site Map