



Ernest Orlando Lawrence  
Berkeley National Laboratory

March 15, 2005

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

**NOTICE OF PREPARATION  
DRAFT ENVIRONMENTAL IMPACT REPORT**

**Project Title:** Building 51 and Bevatron Demolition  
**Lead Agency:** University of California, Lawrence Berkeley National Laboratory  
**Address:** One Cyclotron Road, Berkeley, California 94720  
**County:** Alameda County  
**Contact Person:** Daniel Kevin  
Environmental Planning Group  
Lawrence Berkeley National Laboratory  
One Cyclotron Road, MS 90K0198  
Berkeley, California 94720

The University of California will be the Lead Agency and will prepare an Environmental Impact Report (EIR) for the proposed Demolition of Building 51 and the Bevatron for Lawrence Berkeley National Laboratory (LBNL, Berkeley Lab, or "the Laboratory"), located in the city of Berkeley, Alameda County, California.

The attached Environmental Checklist – Initial Study includes a description of the project and identifies the potential environmental issues that will be addressed in the Draft EIR. LBNL will hold a Public Scoping Meeting for the EIR on March 31, 2005 at the North Berkeley Senior Center, 1901 Hearst Avenue, Berkeley, from 6:30 p.m. to 8:30 p.m. (Attachment A). A copy of these documents will be placed on the following website:

<http://www.lbl.gov/Community/env-rev-docs.html>

We request your views as to the scope and content of the environmental information on the proposed project. Your response must be received by April 16, 2005. Your name should be included with your response.

Please send your response to: Daniel Kevin, LBNL NEPA/CEQA Program  
Lawrence Berkeley National Laboratory, 90K0198  
One Cyclotron Road, Berkeley, California 94720

If you have any questions about this process, please contact Daniel Kevin at the above address or at [DJKevin@lbl.gov](mailto:DJKevin@lbl.gov).

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Laura Chen, Head, Facilities Planning Group  
Lawrence Berkeley National Laboratory

Attachments: Environmental Checklist – Initial Study  
Public Scoping Meeting Announcement

cc: LBNL CEQA Agency and Public Mailing List

State Clearinghouse

CA Air Resources Board, (vacant) Chairman; Catherine Witherspoon, Executive Officer  
CA Department of Fish and Game, Ryan Broddrick, Director  
CA Health & Human Resources Agency, Kim Belshé, Secretary  
CA Department of Health Services, Sandra Shewry, Director; Edgar Bailey, Chief, Radiological Health Branch,  
CA Department of Water Resources, Lester A. Snow, Director  
CA Environmental Protection Agency, Dr. Alan C. Lloyd, Secretary,  
CA EPA, Department of Toxic Substances Control, B.B. Blevins, Director;  
Mohindar Sandu, Manager Field Office, Waqar Ahmad, Project Manager  
CA State Resources Agency, Mike Chrisman, Secretary  
CA State Water Resources Control Board, Arthur G. Baggett, Chair; Celeste Cantú, Executive Director  
CalTrans, Will Kempton, Director; Bijan Sartipi, District 4 Director; Gary Adams, Chief of Planning;

Federal Agencies

U.S. Environmental Protection Agency, Region 9, Wayne Nastri, Regional Administrator, Enrique Manzanilla, Director Communities & Ecosystems Division, Michael Bandrowski Manager Radiation & Compliance Assurance  
U.S. Dept. of Interior, Fish and Wildlife Service, David Allen, Pacific Region Director; Sacramento Fish & Wildlife Field Office, Wayne White, Supervisor,  
U.S. Department of Energy, Berkeley Site Office, Aundra Richards, Site Manager; Carl Schwab, Environmental Affairs  
U.S. Department of Energy, Oak Ridge Office, James Elmore, David Page

Regional/County Agencies

Alameda County, Supervisor District 5, Keith Carson  
Alameda County LAFCO, Lou Ann Texeira, Executive Officer  
Alameda County, Susan Muranishi, County Administrator  
Alameda County, Health Care Agency, Public Health Officer, Anthony B.Iton, M.D  
Alameda County, Clerk Board of Supervisors, Crystal Hishida  
Alameda County Community Development Agency Planning Department, James Sorenson, Director

Metropolitan Transportation Commission Steve Heminger, Executive Director  
Association of Bay Area Governments, Henry Gardner  
Bay Area Air Quality Management District, Jack Broadbent  
Contra Costa County Department of Health Services, Hazardous Materials Section, Andy Parsons  
East Bay Municipal Utilities District, Dennis Diemer, General Manager  
East Bay Regional Park District, Pat O'Brien, General Manager  
Regional Water Quality Control Board, San Francisco Division, Bruce H. Wolf, Executive Officer

City of Berkeley

City of Berkeley, City Clerk, Sara Cox  
City of Berkeley, City Manager, Phil Kamlarz,  
City of Berkeley, City Attorney's Office, Manuela Albuquerque  
City of Berkeley, Mayor Tom Bates  
City of Berkeley, Council Members Moore, Capitelli, Maio, Olds, Anderson, Spring, Worthington, Wozniak  
City of Berkeley, Planning Department, Dan Marks, Director  
City of Berkeley, Toxics Management Division, Dr. Nabil Al-Hadithy  
City of Berkeley, Energy Officer, Neal DeSnoo  
City of Berkeley, Peace & Justice Commission Secretary, Manuel Hector, Jr.  
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, Deby Pryor Chief;  
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, CEDA Planning and Zoning Division, Claudia Cappio, Development Director  
City of Oakland, CEDA Administration, Dan Vanderpriem, Director of Redevelopment, Economic Development and Housing  
Oakland City Clerk's Office, Ceda Floyd  
City of Oakland, Deborah Edgerly, City Administrator  
City of Oakland, Fire Department, Daniel Farrell, Fire Chief,.

City of Albany

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

Kensington

Kensington Fire Protection District, Mark Scott, Fire Chief

University of California Office of the President (UCOP)

UCOP, University Affairs, Bruce Darling, Senior Vice President  
UCOP, Laboratory Management, S. Robert Foley, Vice President  
UCOP, Laboratory Environment Safety Health, Environment Restoration & Waste Management, Howard Hatayama, Director EHS & ERWM  
UCOP Office of General Counsel, Joseph Jaramillo  
UCOP Facilities Administration, Michael Bocchichio, Assistant Vice President  
UCOP Office of Planning, Design, & Construction, John Zimmermann, Director

UC Berkeley

UC Berkeley, Chancellor Robert J. Birgeneau  
UC Berkeley, Exec. Vice Chancellor & Provost, Paul R. Gray  
UC Berkeley, Vice Chancellor for Research, Beth Burnside  
UC Berkeley, Acting Vice Chancellor Business and Administrative Services, Steve Lustig  
UC Berkeley, Vice Chancellor Facilities Services, Edwards J. Denton  
UC Berkeley, Physical and Environmental Planning, Tom Lollini, Director  
UC Berkeley, Chancellor's Adv. Committee on Strawberry Creek, G. Mathias Kondolf  
UC Berkeley, EH&S Division, Mark Frieberg, Director  
UC Berkeley, E H & S Radiation Safety, Paul Lavelly, Radiation Safety Officer  
UC Berkeley, Community Relations, Irene Hegarty, Director  
UC Berkeley, Lawrence Hall of Science, Elizabeth Stage, Director  
UC Berkeley, Botanical Garden, Dr. Paul Licht, Director  
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, Terry Murphy, Association Executive  
Berkeley Chamber of Commerce, Rachel Rupert, President & CEO  
Campus Parnassus Neighborhood Association, Eric Arens  
Committee to Minimize Toxic Waste, Pam Sihvola, Co-Chair  
Community Environmental Advisory Commission, Mike Toffel, Chair  
Council of Neighborhood Associations, Marie Bowman, President  
Euclid-LeConte Neighbors, Jim Sharp  
League of Women Voters, Sherry Smith, President  
Tibetan Nyingma Institute, Abby Blum, Program Director  
Oakland Metropolitan Chamber of Commerce, Joseph Haraburda, President & CEO  
Panoramic Neighborhood Association, Jerry Wachtel, President  
Urban Creeks Council, Steve Donnelly, Executive Director  
Friends of Strawberry Creek, Jennifer Pearson

Individuals and Neighbors

(Various)

### Attachment A: Public Scoping Meeting

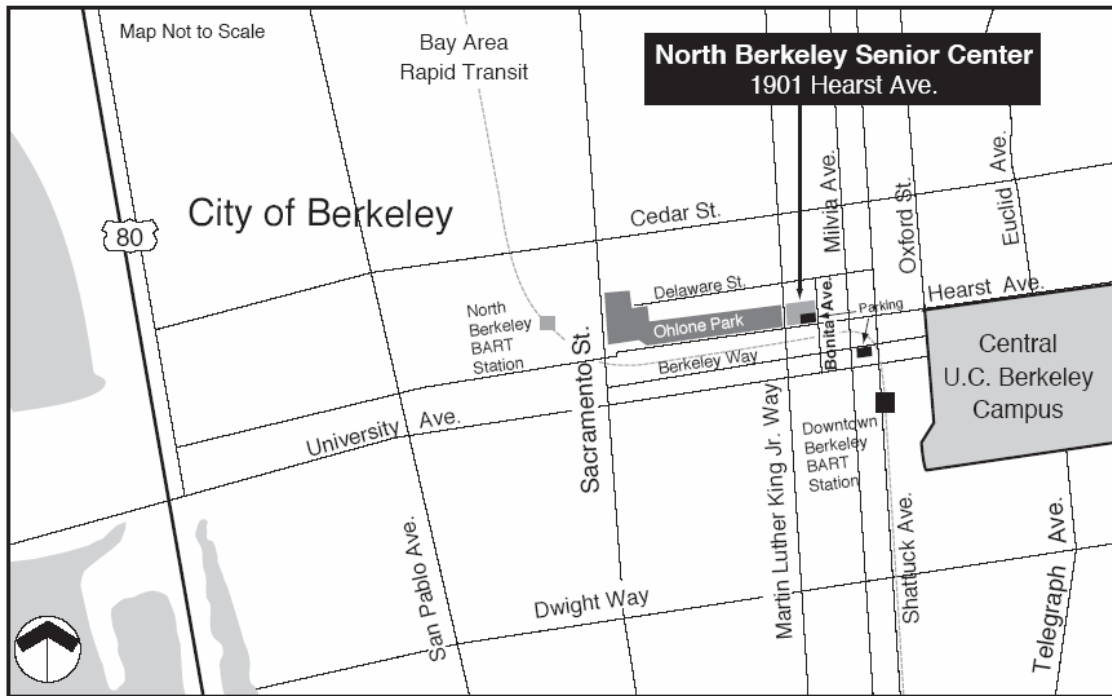
LBNL will hold a public scoping meeting open to all interested agencies and members of the public. The meeting is intended to present a brief overview of the project, to identify environmental impact areas to be analyzed in the Draft EIR, and to invite public comment on the scope of the EIR analysis.

What: Scoping Meeting for Building 51 and Bevatron Demolition EIR

When: March 31, 2005, 6:30 p.m. to 8:30 p.m.

Where: North Berkeley Senior Center  
1901 Hearst Avenue, Berkeley

Parking: Parking is available at or near the North Berkeley Senior Center (see map)



## ENVIRONMENTAL CHECKLIST

### I. PROJECT INFORMATION

1. Project title:

Building 51 and Bevatron Demolition

2. Lead agency name and address:

University of California, Lawrence Berkeley National Laboratory  
One Cyclotron Road, Berkeley, California 94720

3. Contact person and phone number:

Daniel Kevin  
Environmental Planning Group  
Lawrence Berkeley National Laboratory  
One Cyclotron Road, MS 90K0198  
Berkeley, California 94720  
(510) 486-6734

4. Project location:

Building 51, Lawrence Berkeley National Laboratory

5. Project sponsor's name and address:

University of California, Lawrence Berkeley National Laboratory  
One Cyclotron Road, Berkeley, California 94720

6. Custodian of the administrative record for this project (if different from response to item 3 above):

Same as item 3.

7. Identification of previous EIRs relied upon for tiering purposes (including all applicable LRDP and project EIRs) and address where a copy is available for inspection.)

Lawrence Berkeley National Laboratory 1987 Long Range Development Plan (LRDP) Environmental Impact Report, as amended. This consists of the following documents, which are available at the Berkeley Public Library:

- Lawrence Berkeley Laboratory Site Development Plan Environmental Impact Report, August 1987 (SCH #[19]85112610);
- Supplemental Environmental Impact Report for the Proposed Renewal of the Contract between the United States Department of Energy and The Regents of the University of California for Operation and Management of the Lawrence Berkeley National Laboratory, September 1992 (SCH #[19]91093068); and
- Supplemental Environmental Impact Report Addendum for the Proposed Renewal of the Contract between the United States Department of Energy and The Regents of the University of California for Operation and Management of the Lawrence Berkeley National Laboratory, September 1997 (SCH #[19]91093068)].

## II. PROJECT DESCRIPTION

1. Description of project: (Describe the whole action involved, including but not limited to physical characteristics, site, later phases of the project, and any secondary, support, or off- site features necessary for its implementation and site selection process. Attach additional sheets if necessary.

Lawrence Berkeley National Laboratory (LBNL, Berkeley Lab, or "the Laboratory") is a multi-program national research laboratory operated and managed by the University of California under a contract with the U.S. Department of Energy (DOE). DOE and LBNL propose to demolish the Bevatron and the building housing it, Building 51 (Building 51 includes Building 51A, an integral addition to the main building). The Bevatron was a synchrotron accelerator which began operation in 1954, was last operated in 1993, and is now abandoned in place within Building 51. Building 51 is an approximately 126,500 gross square foot steel frame structure built in the early 1950s. The Bevatron is approximately 180 feet in diameter. Because of the significant contributions in the fields of particle and nuclear physics that were made there (in particular, four Nobel Prizes were awarded for particle physics research conducted in whole or in part at the Bevatron), the building is eligible for listing in the National Register of Historic Places. The site is located on 1.44 acres in the west-central part of LBNL. See Figures 1 through 4.

The objective of the project is to remove a substandard building and its contents from Berkeley Lab. Neither the Bevatron nor Building 51 are needed by LBNL. The Bevatron has not operated in over ten years and is non-functional. The Building 51 structure housing the Bevatron is seismically inadequate, and, as it is relatively old and deteriorating, it consumes disproportionate maintenance resources. In addition, removal of the building and its contents would free up the site for future, alternate development. However, while future reuse of the site is contemplated by LBNL, no specific plan or project has been identified to date.

In brief, the principal project activities would be as follows: the approximately 50 employees currently working in Building 51 would be relocated to other buildings at Berkeley Lab. Utilities would be disconnected, blocks that shielded the accelerator would be removed from around the Bevatron apparatus, the Bevatron itself (including steel yokes, magnets, and beamline pipes) would be disassembled and removed from the site, and the Building 51 structure and components (including slabs, foundations, and subsurface structures, as well as equipment therein, e.g., cranes), would be demolished and removed. Project equipment (including excavators, front end loader, graders, and mobile crane), and demolition materials would be staged at or nearby the project site. Demolition personnel not taking public transit and the Berkeley Lab shuttle would park nearby the project site or elsewhere at LBNL.

Soil and groundwater contamination are known to be present in some areas beneath Building 51. The primary known chemicals of concern are chlorinated volatile organic compounds (VOCs) in soil and groundwater. In addition, polychlorinated biphenyls (PCBs) have been detected in some groundwater samples. Contaminants in soil outside of the plume source areas have included primarily chlorinated VOCs, petroleum and aromatic hydrocarbons, polycyclic aromatic hydrocarbons, PCBs, and mercury. Contaminated soil and groundwater would be dealt with in accordance with regulatory agency-approved clean-up standards. The site would then be backfilled to approximately its current grade, compacted, and hydroseeded. Demolition would take place over a several year period, beginning in FY 2006 or FY 2007 and ending in FY 2010 to FY 2012. All work would be accomplished in accordance with applicable regulatory requirements and DOE policies.

The bulk of the materials that would be removed would consist of non-hazardous construction debris and other items typical of demolition projects. The project would seek to reuse or recycle

such materials (e.g., uncontaminated metals and concrete) where feasible. Items that could not be salvaged would be sent to appropriate municipal landfills, such as the Altamont Landfill in Livermore, California. However, some materials are not suitable for salvage and cannot be sent to ordinary landfills. For example, portions of the Bevatron apparatus, its concrete block shielding, and other items have low levels of radioactivity above naturally-occurring levels due to their exposure during operation of the Bevatron. Also, some non-radioactive hazardous materials would or might be encountered, including asbestos, mercury, lead, machine oils, and PCBs.

Items would be screened and characterized based on their location and the associated degree of potential hazard. For example, the possibility exists that some of the shielding blocks have some increased radioactivity beyond the radioactivity that is naturally present; in contrast, it is already known that there is no increased radioactivity above naturally-occurring levels in the outer structure of Building 51. In general, characterization of potentially radioactive materials would be accomplished by taking external radiation measurements using appropriate survey instrumentation and/or swipe samples. Items showing detectable radioactivity would be sent to an approved disposal site, such as the Nevada Test Site (a DOE facility approximately 65 miles from Las Vegas) or Envirocare in Clive, Utah (a privately operated facility). Based on prior experience, the Laboratory anticipates that less than one-third of the shielding blocks, and a smaller fraction of other items, would have detectable human-added radioactivity above the DOE limit. Items contaminated with non-radioactive hazardous materials would be sent to treatment and disposal facilities or landfills permitted to receive such items. If any mixed waste (i.e., waste that is both hazardous and radioactive) was found, it too would be handled in accordance with applicable regulations and DOE policies. The project would comply with the DOE Metals Recycling Moratorium, which restricts metals from radiological areas from being recycled.

Over the four to six year term of the project, several thousand one-way truck trips would be generated, including inbound trips with empty trucks, outbound trips with demolition debris, and inbound trips delivering clean backfill. Shipments are planned to proceed westward down Hearst Avenue, south on Oxford, and then west on University Avenue to Interstate 80.

Actions to reduce potential environmental impacts to less than significant would be included either as part of the project or as mitigation measures. As indicated in the attached Checklist, it is known in advance that if implemented, the project would have a reasonably foreseeable significant environmental impact in the area of cultural resources – the demolition of a historic structure eligible for listing in the National Register of Historic Places – that for the purpose of this analysis cannot be mitigated to less than significant under CEQA. The site is not listed on the CAL/EPA Hazardous Waste and Substances Sites List, also known as the Cortese List.

As stated earlier, the EIR for the proposed project will be tiered off of LBNL's 1987 Long Range Development Plan EIR, as amended, and will incorporate applicable mitigation measures from that EIR. The CEQA concept of "tiering" refers to the coverage of general environmental matters in broad program-level EIRs, with subsequent focused environmental documents for individual projects that implement the program. The EIR for the proposed project will incorporate by reference the analyses in the 1987 LRDP EIR, as amended, and will concentrate on project-specific issues. CEQA and the CEQA Guidelines encourage the use of tiered environmental documents to reduce delays and excessive paperwork in the environmental review process. This is accomplished in tiered documents by eliminating repetitive analyses of issues that are adequately addressed in the Program EIR and by incorporating those analyses by reference.

Section 15168(d) of the CEQA Guidelines provides for simplifying the task of preparing environmental documents on later parts of the program by incorporating by reference factors that apply to the program as a whole. Consistent with CEQA Guidelines Section 15152(d), where an



EIR has been prepared or certified for a program or plan, the environmental review for a later activity consistent with the program or plan should be limited to effects that were not analyzed as significant in the prior EIR or that are susceptible to substantial reduction or avoidance. Accordingly, the tiering of the environmental analysis for the proposed project will allow this Tiered EIR to rely on the 1987 LRDP EIR, as amended, for the following:

- a discussion of general background and setting information for environmental topic areas;
- issues that were evaluated in sufficient detail in the 1987 LRDP EIR, as amended, for which there is no significant new information or change in circumstances that would require further analysis;
- long-term cumulative impacts assessment; and
- mitigation measures from the 1987 LRDP EIR, as amended, which are applicable to the proposed project.

2. Project Objectives:

See project description, above.

3. Surrounding land uses and environmental setting: Briefly describe the project's surroundings:

LBNL is located in the cities of Berkeley and Oakland in Alameda County on property owned by the University of California (UC). The project site is located within the City of Berkeley portion of LBNL. Laboratory, office, engineering, and computing functions occupy the LBNL buildings immediately adjacent to Building 51. Surrounding land uses include residential areas to the north of the LBNL property line, LBNL buildings and UC Berkeley athletic fields to the south, LBNL buildings and UC Berkeley student housing, amphitheater, and classrooms to the west, and additional LBNL buildings and the UC Berkeley Lawrence Hall of Science Museum to the east.

4. Discretionary approval authority and other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement.)

The LBNL Director has discretionary authority for approval of the project. The Department of Energy is funding the project. An asbestos demolition notification to the Bay Area Air Quality Management District would be required; if regulated asbestos is present, an asbestos renovation notification would also be needed. Additional historical documentation (an addendum to an existing Historic American Engineering Record report for the facility) would be completed and accepted by the National Park Service prior to demolition of the facility.

5. Consistency with the LRDP: (Describe the project's consistency with: the scope of development projected in the LRDP; campus and community population levels projected in the LRDP; LRDP designation for this type of project; and applicable policy objectives and goals of the LRDP).

LBNL's current Long Range Development Plan and LRDP EIR were approved in 1987. The EIR was later supplemented in 1992 and an Addendum was prepared in 1997 (these documents are referred to collectively as the "1987 LRDP EIR, as amended"). The proposed project will be analyzed for consistency with the current LRDP and 1987 LRDP EIR, as amended. Preliminary analysis indicates that the project is consistent with these documents. Demolition of outmoded

structures is envisioned in the latter, and no land use conflict would be presented by the demolition of the structure involved. No new buildings or permanent personnel would be added, and the project would be within the space and population levels anticipated in the current 1987 LBNL LRDP and analyzed in the 1987 LRDP EIR, as amended. The EIR for the proposed project will be tiered off of LBNL’s 1987 Long Range Development Plan EIR, as amended, and will incorporate applicable mitigation measures from that EIR.

LBNL is undergoing a multi-year process to prepare a new LRDP and LRDP EIR. If adopted by The Regents of the University of California, these documents would guide future development at LBNL for approximately 20 years. It is expected that draft versions of these documents will be available for public review later in 2005. Although the current LRDP and 1987 LRDP EIR, as amended, are the applicable guiding documents for this proposed Project, it is anticipated that the proposed Project would be consistent with the new LRDP and LRDP EIR.

**III. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:**

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a “Potentially Significant Impact” as indicated by the checklist on the following pages.

<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 & Hazardous 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 type="checkbox"/>	Population/Housing
<input checked="" type="checkbox"/>	Public Services	<input 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.

X \_\_\_\_\_ 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

Printed Name

For

## Initial Study

The following is a preliminary assessment of potential environmental impacts, prepared in compliance with CEQA, that will be analyzed in the Building 51 and Bevatron Demolition EIR. This assessment will be used as part of the information considered in determining the scope of environmental issues to be evaluated in preparing the EIR.<sup>1</sup> The EIR will consider all areas below. Topic areas that are expected to be impacted by the proposed project will be fully analyzed. Topic areas not expected to be impacted will be addressed briefly or in depth as appropriate.





	Will be Analyzed in EIR	No Additional Analysis Required
<b>1. AESTHETICS</b> -- Would the project:		
a) Have a substantial adverse effect on a scenic vista?	■	
The City of Berkeley has designated two scenic view corridors: Cedar Street and Dwight Way. The City of Oakland has designated two scenic corridors: Skyline Boulevard and Shepherd Canyon Road. Demolition and removal of Building 51 would reveal the hillside behind Building 51 to some viewpoints resulting in a new vista, which would be a beneficial impact. Temporary aesthetic impacts on scenic vistas, as well as temporary aesthetic impacts related to the demolition and removal of Building 51 and the Bevatron, will be analyzed in the EIR.		
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?		■
Regional access to the LBNL hill site is provided by Interstate Highways 80 and 580, and State Routes 24 and 13. The California Department of Transportation has designated 8.9 miles of Highway 24, from the east portal of the Caldecott Tunnel to the I-680 near Walnut Creek, as a Scenic Highway under the California Scenic Highway Program. No LBNL on-site resources are within or in the vicinity of a state scenic highway. Therefore, no impact would occur to a state scenic highway. This topic will not be discussed further in the EIR.		
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	■	
The existing visual character consists of disjointed buildings of varying architecture. The original Bevatron has been altered numerous times since its construction. Removal of the structures would alter the character of the site by replacing a large building complex with a vacant lot, which would not result in an adverse impact to the project site and its surroundings. The EIR will evaluate the project's temporary impact to the existing visual character of the site and its surroundings that would occur during demolition of Building 51 and the Bevatron.		
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	■	
If demolition activities occur during hours when it is dark outside, additional temporary lighting would be required that could affect views. The EIR will address the project's potential to create a new source of light or glare which could adversely affect day and/or nighttime views in the project area.		

<sup>1</sup> Explanations are provided in shaded boxes. These explanations represent a best estimate based on the current definition of the proposed demolition and its likely effects.

	Will be Analyzed in EIR	No Additional Analysis Required
e) Exceed an applicable LRDP or Program EIR standard of significance?	■	
The EIR will evaluate whether the proposed demolition would exceed an applicable LRDP or Program EIR standard of significance related to aesthetics and/or visual quality.		
<b>2. AGRICULTURE RESOURCES:</b> In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:		
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?		■
No active agriculturally used lands occur on the LBNL site and the project site does not contain Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. Therefore, this topic will not be discussed further in the EIR.		
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?		■
No active agriculturally-used lands occur on the LBNL site. In addition, LBNL is not zoned for agricultural use and is not associated with a Williamson Act contract. Therefore, this topic will not be discussed further in the EIR.		
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use?		■
No active agriculturally-used lands occur on the LBNL site. Demolition of the existing structures would not alter or cause the conversion of farmland within the greater community. This topic will not be discussed further in the EIR.		
d) Exceed an applicable LRDP or Program EIR standard of significance?		■
No standards of significance would be affected since there is no agriculture on the project site. This topic will not be discussed further in the EIR.		
<b>3. AIR QUALITY</b> -- Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:		

	<b>Will be Analyzed in EIR</b>	<b>No Additional Analysis Required</b>
a) Conflict with or obstruct implementation of the applicable air quality plan?	■	
<p>The project site is under the jurisdiction of the Bay Area Air Quality Management District (BAAQMD). The BAAQMD's jurisdictional area is currently designated a non-attainment zone for PM<sub>10</sub> (particulate matter with a nominal diameter of 10 microns or less), and for ozone. Project-related demolition activities would be likely to add incrementally to regional ambient air pollutant emissions, including short- and long-term emissions of criteria air pollutants from mobile and stationary sources, including PM<sub>10</sub> and ozone. The EIR will evaluate the project's potential to conflict with or obstruct implementation of applicable air quality plans.</p>		
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	■	
<p>The EIR will examine the potential for vehicle and stationary source emissions under the project to violate state and federal air quality standards or contribute to existing air quality violations. Control measures, such as BAAQMD-recommended PM<sub>10</sub> controls, would be implemented. The potential for mobile source and construction emissions associated with the proposed demolition to influence air quality will also be analyzed.</p>		
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	■	
<p>The BAAQMD is designated as a non-attainment area for ozone and PM<sub>10</sub> standards. Therefore, any increased LBNL contribution of these emissions to the region may constitute an adverse cumulative impact of the project. The EIR will examine the cumulative projection of total emissions through 2025 to determine whether project increases in non-attainment criteria pollutants would be cumulatively considerable.</p>		
d) Expose sensitive receptors to substantial pollutant concentrations?	■	
<p>The EIR will evaluate whether demolition activities would expose sensitive receptors, including nearby residences and schools, to substantial pollutant concentrations.</p>		
e) Create objectionable odors affecting a substantial number of people?	■	
<p>Ongoing activities from the proposed project are not expected to create nuisance or objectionable odors affecting substantial numbers of people, particularly people off-site. The prevailing wind directions measured on site typically do not blow in the direction of nearby populated areas during normal LBNL operating hours. Nevertheless, the EIR will examine the potential for objectionable odors resulting from the proposed project.</p>		
f) Exceed an applicable LRDP or Program EIR standard of significance?	■	

	Will be Analyzed in EIR	No Additional Analysis Required
<p>The EIR will evaluate whether the proposed demolition would exceed an applicable LRDP or Program EIR standard of significance related to air quality.</p>		
<p><b>4. BIOLOGICAL RESOURCES</b> – Would the project:</p>		
<p>a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?</p>	<p>■</p>	
<p>The area that would be demolished is already developed or otherwise disturbed, and the general vicinity experiences a high level of human activity. Thus, the potential for listed or special status species to occur in the project area is considered to be low. However, the EIR will examine the potential for the proposed demolition to adversely affect candidate, sensitive, or special status species or their habitat.</p>		
<p>b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?</p>	<p>■</p>	
<p>There is no known riparian habitat or other sensitive natural community in the vicinity of the project site. The EIR will identify any relevant riparian or sensitive natural communities and analyze potential project impacts.</p>		
<p>c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?</p>	<p>■</p>	
<p>There are no known wetlands in the vicinity of the project site. The EIR will identify any relevant jurisdictional wetlands as defined under Section 404 of the Clean Water Act and analyze potential project impacts.</p>		
<p>d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?</p>	<p>■</p>	
<p>The project site is not known to serve as a migratory corridor or nursery site to any native resident or migratory species. However, the EIR will evaluate whether project demolition would substantially interfere with the movement of any native resident or migratory species or with established native wildlife nursery sites.</p>		
<p>e) Conflict with any local applicable policies protecting biological resources?</p>	<p>■</p>	

	Will be Analyzed in EIR	No Additional Analysis Required
<p>LBNL is a federal facility conducting work within the University of California's mission and as such, is generally exempt under the federal and state constitutions from compliance with local requirements. However, LBNL seeks to cooperate with local jurisdictions in addressing the physical consequences of its activities. The EIR will evaluate the consistency of the proposed demolition with federal and state plans, policies, laws and regulations, such as the Migratory Bird Treaty Act, that are relevant to potentially occurring onsite biological resources.</p>		
<p>f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other applicable habitat conservation plan?</p>		
<p>The LBNL site is not subject to or designated for any adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved conservation plan. Therefore, this topic will not be discussed further in the EIR.</p>		
<p>g) Exceed an applicable LRDP or Program EIR standard of significance?</p>		
<p>The EIR will evaluate whether the proposed demolition would exceed an applicable LRDP or Program EIR standard of significance related to biological resources.</p>		
<p><b>5. CULTURAL RESOURCES</b> -- Would the project:</p>		
<p>a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?</p>		
<p>Building 51 is eligible for listing on the National Register of Historic Places. The Bevatron was among the world's leading particle accelerators during a forty-year period from 1954 to 1993 and is associated with significant contributions in the fields of particle and nuclear physics. Four Nobel Prizes were awarded for particle physics research conducted in whole or in part at the Bevatron. The impact on historical resources from demolition of Building 51 would be lessened by already-completed Historic American Engineering Record (HAER) documentation for the building that has been accepted by the National Park Service (NPS). Berkeley Lab has extensive photographic documentation of the facility, and, should the proposed project proceed, LBNL plans to commemorate the facility with a monument and/or a display that would list the historic discoveries that occurred there. In addition, as stated in a Memorandum of Agreement among DOE, the California State Historical Preservation Officer, and the Advisory Council on Historic Preservation, with the acceptance of the HAER report by NPS, DOE may demolish Building 51 provided that DOE contact the Historic American Building Survey (HABS) of the NPS to determine what level and kind of recordation is required for the buildings, and that such documentation is completed and accepted by HABS prior to demolition. LBNL has consulted with NPS, and as agreed to by the latter, an addendum to the HAER would be submitted that would meet HABS requirements prior to demolition.</p> <p>Although these measures would reduce the impact on the historic resources, CEQA Guidelines Section 15126.4(b)(2) states that, “[i]n some circumstances, documentation of a historical resource, by way of historic narrative, photographs, or architectural drawings as mitigation for the effects of demolition of the resources will not mitigate the effects to a point where clearly no significant effect on the environment would occur.” Based on the above considerations, for the purposes of conservative impact analysis, the proposed demolition of Building 51 will be considered in the EIR to have a potentially significant impact.</p>		
<p>b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?</p>		







	<b>Will be Analyzed in EIR</b>	<b>No Additional Analysis Required</b>
<p>There are no known archaeological resources in the project vicinity that could be affected by the proposed demolition activities. However, there is a remote possibility of accidental discovery of prehistoric archaeological resources during demolition, as Native American settlements were prolific in this part of California. As demolition activities could damage or destroy such resources if they exist on the project site, this issue will be addressed in the EIR.</p>		
<p>c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?</p>	■	■
<p>The project site is not located in an area with the potential to contain unique paleontological resources, nor are there unique geologic features on the site. Therefore, these topics will not be discussed further in the EIR.</p>		
<p>d) Disturb any human remains, including those interred outside of formal cemeteries?</p>	■	
<p>There are no known human remains on the project site, including those interred outside of formal cemeteries. Nonetheless, the EIR will evaluate the potential for accidental discovery of human remains during project demolition.</p>		
<p>e) Exceed an applicable LRDP or Program EIR standard of significance?</p>	■	
<p>The EIR will evaluate whether the proposed demolition would exceed an applicable LRDP or Program EIR standard of significance related to cultural resources.</p>		
<p><b>6. GEOLOGY AND SOILS -- Would the project:</b></p>		
<p>a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:</p>		
<p>i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.</p>	■	
<p>The LBNL site is near the Hayward Fault. The EIR will examine the relationships between the proposed demolition and known faults, and will analyze potential impacts from the project due to seismic shaking, ground failure, and landslides. In general terms, however, the removal of Building 51 would improve safety on the site, as by removing the structure, the risks associated with seismic and other geologic events would be diminished.</p>		
<p>ii) Strong seismic ground shaking?</p>	■	
<p>See above. The EIR will analyze the potential increased seismic shaking-related impacts from the project.</p>		

	<b>Will be Analyzed in EIR</b>	<b>No Additional Analysis Required</b>
iii) Seismic-related ground failure, including liquefaction?	■	
See above. The EIR will analyze the potential increased ground failure-related impacts from the project.		
iv) Landslides?	■	
Portions of the project site are bordered by steep slopes. The EIR will analyze the potential increased landslide-related risk impacts from the project.		
b) Result in substantial soil erosion or the loss of topsoil?	■	
Topsoil has already been removed from the site to construct the existing buildings to be demolished. Erosion could occur during demolition activities. The EIR will examine the potential loss of topsoil and potential for substantial soil erosion that could result from the project.		
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	■	
The EIR will evaluate the project’s potential to result in an on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse.		
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1997), creating substantial risks to life or property?		■
The soil on the site is Maymen loam, which is not expansive and is commonly used for urban development. Also, no structure would be developed on the site under this proposed project, minimizing the risk to life and property. Therefore, this topic will not be discussed further in the EIR.		
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?		■
The project site is served by sanitary sewer systems. The project would not result in the use of septic tanks or alternative waste water disposal systems. Therefore, this topic will not be discussed further in the EIR.		
f) Exceed an applicable LRDP or Program EIR standard of significance?	■	
The EIR will evaluate whether the proposed demolition would exceed an applicable LRDP or Program EIR standard of significance related to geology and soils.		

	Will be Analyzed in EIR	No Additional Analysis Required
<b>7. HAZARDS AND HAZARDOUS MATERIALS –</b> Would the project:		
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	■	
The proposed demolition would result in the transportation and disposal of hazardous waste, low-level radioactive waste, and possibly, mixed waste. The project would comply with LBNL hazardous materials policies and programs, in addition to applicable DOE requirements, and the Laboratory undertakes detection, investigation, and remediation activities in accordance with applicable regulatory requirements. The EIR will characterize on-site hazardous materials use, transport, and disposal and will evaluate potential impacts associated with these activities.		
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	■	
As stated above, the project would comply with LBNL hazardous materials policies and programs, in addition to applicable DOE requirements, and the Laboratory undertakes detection, investigation, and remediation activities in accordance with applicable regulatory requirements. The EIR will characterize hazardous waste handling and hazardous materials use in demolition activities, along with their transport, handling, and disposal, and will consider the potential for their release to the environment. Also, the project site includes some areas of soil and groundwater known to contain solvents and/or other contaminants; this issue will be analyzed in the EIR.		
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?		■
The project site is approximately 1,500 feet (approximately 0.28 miles) north of the UC Berkeley campus. The Lawrence Hall of Science, which is not a school, but rather an educational institution (science museum) serving many school-aged visitors, is approximately 1,300 feet northeast of the project site. No existing or proposed kindergarten-12th grade schools are located within one-quarter mile of the project site. While the project would involve handling of certain hazardous materials, those materials and their handling protocols are subject to extensive regulations and procedures and oversight. Therefore, this topic will not be discussed further in the EIR.		
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?		■
The project site is not within a portion of LBNL that is classified as a hazardous waste site under Government Code Section 65962.5. Therefore, this topic will not be discussed further in the EIR.		

	Will be Analyzed in EIR	No Additional Analysis Required
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?		■
The project site is neither within an airport land use plan nor within the vicinity of an airport. This topic will not be discussed further in the EIR.		
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?		■
The project site is not within the vicinity of a private airstrip. This topic will not be discussed further in the EIR.		
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	■	
The EIR will evaluate the project's potential to impair implementation of or physically interfere with LBNL's site emergency response and evacuation plans.		
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	■	
The EIR will analyze the project's risks associated with wildland fires. LBNL has considerable on-site fire suppression capabilities and its on-site fire department, which is maintained under contract with Alameda County, maintains mutual assistance arrangements with neighboring fire districts. The Laboratory also has implemented a fuel reduction/vegetation management program that has greatly reduced the risk of wildland fire in the vicinity of the Lab.		
i) Exceed an applicable LRDP or Program EIR standard of significance?	■	
The EIR will evaluate whether the proposed demolition would exceed an applicable LRDP or Program EIR standard of significance related to hazards and hazardous materials.		
<b>8. HYDROLOGY AND WATER QUALITY – Would the project:</b>		
a) Violate any water quality standards or waste discharge requirements?	■	

	<b>Will be Analyzed in EIR</b>	<b>No Additional Analysis Required</b>
<p>The EIR will evaluate impacts to water quality from runoff and evaluate whether the project would result in a violation of applicable standards or waste discharge requirements. The project would comply with LBNL's existing Storm Water Pollution Prevention Plan. Demolition-related ground disturbance and other activities would comply with the Association of Bay Area Governments' Manual of Standards for Erosion and Sediment Control Measures, and with the State of California's Best Management Practices for Construction Activity Handbook.</p>		
<p>b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?</p>		
<p>LBNL does not use on-site groundwater nor does its steep terrain allow it to be an important site for groundwater recharge. Except for monitoring wells, there are no groundwater wells on-site or nearby that support existing or planned land uses. Groundwater is not a local supply source for Berkeley. Therefore, this topic will not be discussed further in the EIR.</p>		
<p>c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?</p>		
<p>There are no natural drainages on the currently developed site; therefore, no streams or rivers would be altered. With the removal of the structures and the impervious surface coverage, the natural infiltration would be restored. Existing stormwater drainages would not be removed. Removal of impervious surfaces could result in the potential for erosion or siltation during a storm event. The EIR will evaluate the project's potential to result in increased erosion or siltation during a storm.</p>		
<p>d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?</p>		
<p>There are no natural drainages on the currently developed site; therefore, no streams or rivers would be altered. With the removal of the structures and the impervious surface coverage, the natural infiltration would be restored. Existing stormwater drainages would not be removed, providing drainage in addition to natural infiltration that would be added or recovered on the site. The EIR will evaluate the project's potential to result in or contribute to flooding on- or off-site.</p>		
<p>e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?</p>		

	Will be Analyzed in EIR	No Additional Analysis Required
<p>Demolition would result in the removal of existing impervious surfaces; therefore, the timing and duration of runoff may be altered, which would also alter any existing demand on drainage systems. In general, the removal of impervious surfaces tends to slow the rate of runoff. The EIR will analyze the project’s runoff contribution and evaluate whether it would exceed the capacity of the stormwater drainage systems and whether it would provide substantial additional sources of polluted runoff to the stormwater drainage system.</p>		
f) Otherwise substantially degrade water quality?	■	
<p>Erosion would be minimized with implementation of control practices, including hydroseeding the site after demolition is complete. Contaminated soils beneath the building would be dealt with in accordance with regulatory agency-approved clean-up standards. The EIR will evaluate the overall impact to water quality that would result from the proposed project.</p>		
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?		■
<p>The project site is not within a 100-year flood hazard area nor would the project involve construction of residential housing. Therefore, this topic will not be discussed further in the EIR.</p>		
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?		■
<p>No structures would result from the demolition, nor is the site within a flood hazard area. This topic will not be discussed further in the EIR.</p>		
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?		■
<p>See responses to 8g and 8h, above. This topic will not be discussed further in the EIR.</p>		
j) Inundation by seiche, tsunami, or mudflow?		■
<p>Seiche and tsunami typically occur in enclosed or semi-enclosed water bodies. Because of the location of the project site, neither seiche nor tsunami is considered to be a realistic risk to the project site due to its elevation and proximity to surrounding geographic features. Based on the project site’s soil and other site conditions, mudflows do not present a significant potential risk. Therefore, this topic will not be discussed further in the EIR.</p>		
k) Exceed an applicable LRDP or Program EIR standard of significance?	■	
<p>The EIR will evaluate whether the proposed demolition would exceed an applicable LRDP or Program EIR standard of significance related to hydrology and water quality.</p>		
<p><b>9. LAND USE AND PLANNING</b> - Would the project:</p>		

	Will be Analyzed in EIR	No Additional Analysis Required
a) Physically divide an established community?		■
The LRDP would not expand or substantially change either the project site’s nor LBNL’s borders. Surrounding communities would not be subject to physical division by the proposed demolition. Therefore, this topic will not be discussed further in the EIR.		
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the LRDP, general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	■	
The EIR will analyze the project’s consistency with the 1987 LBNL LRDP and other applicable land use plans, policies, and regulations. The 1987 LRDP EIR, as amended, recognized that some LBNL facilities space is substandard and requires replacement, and one of the LBNL site-planning concepts is to redevelop obsolete buildings and infrastructure. The proposed project is consistent with and would advance this site-planning concept. LBNL is a federal facility conducting work within the University of California's mission and as such, is generally exempt under the federal and state constitutions from compliance with local requirements. However, LBNL seeks to cooperate with local jurisdictions in addressing the physical consequences of its activities.		
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?		■
The LBNL site is not subject to or designated for any adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved conservation plan. Therefore, this topic will not be discussed further in the EIR.		
d) Exceed an applicable LRDP or Program EIR standard of significance?	■	
The EIR will evaluate whether the proposed demolition would exceed an applicable LRDP or Program EIR standard of significance related to land use and planning.		
<b>10. MINERAL RESOURCES</b> -- Would the project:		
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?		■
There are no known mineral resources of regional or state value at LBNL, including the project site. Therefore, this topic will not be discussed further in the EIR.		
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?		■

	Will be Analyzed in EIR	No Additional Analysis Required
There are no locally-important mineral resource recovery sites at LBNL, including the project site. This topic will not be discussed further in the EIR.		
c) Exceed an applicable LRDP or Program EIR standard of significance?		■
No standards of significance would be affected since, according to the 1987 LRDP EIR, there are no mineral resources or mineral resource recovery sites on the project site. This topic will not be discussed further in the EIR.		
<b>11. NOISE</b> – Would the project result in:		
a) Exposure of persons to or generation of noise levels in excess of standards established in any applicable plan or noise ordinance, or applicable standards of other agencies?	■	
Use of mechanical equipment associated with demolition activities as well as increased truck traffic could result in noise increases that might create temporary noise effects in nearby areas. The EIR will analyze the magnitude of these noise increases, and will evaluate whether the increased noise levels would exceed applicable standards of significance.		
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	■	
The EIR will address vibration and groundborne noise issues that could result from demolition activities.		
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?		■
The project involves demolition of Building 51 and the Bevatron; the project would result in vacant land at the project site. Therefore, because there would be no increase in on-site population and no continuing operations would occur as part of the project, the project would not result in increased permanent noise levels and thus, this topic will not be discussed further in the EIR.		
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	■	
See 11a, above.		
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?		■
The project site is neither within an airport land use plan nor within two miles of a public airport. Therefore, this topic will not be discussed further in the EIR.		



	Will be Analyzed in EIR	No Additional Analysis Required
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?		■
The project site is not within the vicinity of a private airstrip. Therefore, this topic will not be discussed further in the EIR.		
g) Exceed an applicable LRDP or Program EIR standard of significance?	■	
The EIR will evaluate whether the proposed demolition would exceed an applicable LRDP or Program EIR standard of significance related to noise.		
<b>12. POPULATION AND HOUSING --</b> Would the project:		
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?		■
No new homes, permanent employment, or infrastructure would be created as a result of the demolition of Building 51. As a result, no increases in permanent population levels are anticipated. However, demolition activities would require employment of a number of temporary construction employees. For example, a typical demolition crew may consist of one foreman, two equipment operators, and three to five laborers. The dismantling of the Bevatron and its encasing would likely require two to five crews working in parallel. As the demolition effort would not employ a substantial number of employees and because it is anticipated that the demolition workers would be retained from the regionally-available labor pool, this would be a less than significant impact and therefore, this topic will not be discussed further in the EIR.		
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?		■
There is no existing housing on the project site. Therefore, no housing would be displaced as a result of the demolition activities and thus, this topic will not be discussed further in the EIR.		
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?		■
There is no existing housing on the project site. Therefore, the proposed demolition would not result in the displacement of people and thus, this topic will not be discussed further in the EIR.		
d) Exceed an applicable LRDP or Program EIR standard of significance?		■
No standards of significance would be affected since the project would not result in an increased permanent population and would not displace existing housing or people. Therefore, this topic will not be discussed further in the EIR.		

	Will be Analyzed in EIR	No Additional Analysis Required
<b>13. PUBLIC SERVICES</b>		
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:		
Fire protection?	■	
The EIR will analyze impacts to both on- and off-site fire protection providers.		
Police protection?	■	
The EIR will analyze impacts to both on- and off-site security and police protection providers.		
Schools?		■
No permanent increase in LBNL or employee population would occur; therefore, no increase in demand for schools would occur. Thus, this topic will not be discussed further in the EIR.		
Parks?		■
No permanent increase in LBNL or employee population would occur; therefore, no increase in demand for parks would occur. Thus, this topic will not be discussed further in the EIR.		
Other public facilities?		■
No permanent increase in LBNL or employee population would occur; therefore, no increase in demand for other public facilities would occur. Thus, this topic will not be discussed further in the EIR.		
b) Exceed an applicable LRDP or Program EIR standard of significance?	■	
The EIR will evaluate whether the proposed demolition would exceed an applicable LRDP or Program EIR standard of significance related to public services.		
<b>14. RECREATION --</b>		

	Will be Analyzed in EIR	No Additional Analysis Required
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?		■
No permanent increase in LBNL or employee population would occur; therefore, no increase in demand for parks or recreational facilities would occur. Thus, this topic will not be discussed further in the EIR.		
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?		■
The project does not include any recreational facilities, nor would it require the construction or expansion of recreational facilities. Thus, this topic will not be discussed further in the EIR. See 14a, above.		
c) Exceed an applicable LRDP or Program EIR standard of significance?		■
The 1987 LRDP EIR does not include any standards of significance for recreational facilities.		
<b>15. TRANSPORTATION/TRAFFIC -- Would the project:</b>		
a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	■	
Project-related traffic would include temporary employee trips to and from the site each workday and truck traffic that would be required to haul demolition-related material off-site and clean fill on-site. The project would include measures to reduce potential impacts on off-site traffic levels of service, e.g., restrictions on the hours and routes of construction trucks. Increases in traffic will be addressed in the EIR.		
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	■	
The EIR will analyze the impact of additional project-related and cumulative traffic on the local street networks, including intersection capacity, the regional highway network, and including roads and highways designated by the Alameda County Congestion Management Agency.		
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?		■
The proposed project would not alter existing air traffic patterns. Therefore, this topic will not be discussed further in the EIR.		

	Will be Analyzed in EIR	No Additional Analysis Required
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? Create unsafe conditions for pedestrians or bicycles?	■	
The project would not result in any changes to roadway design features, and would thus not increase any hazards due to roadway design. The transportation associated with the project could increase roadway hazard potential for pedestrians and bicycles. This issue will be addressed further in the EIR.		
e) Result in inadequate emergency access?	■	
The EIR will analyze impacts to emergency access and egress resulting from the demolition activities.		
f) Result in inadequate parking capacity?	■	
Construction workers would require parking areas for their vehicles. As part of the project, Berkeley Lab would require that construction workers park on-site within the construction staging area. The EIR will address the project's ability to accommodate parking demand.		
g) Conflict with applicable policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	■	
The EIR will analyze whether the project would conflict with applicable LRDP policies supporting alternative transportation.		
h) Exceed an applicable LRDP or Program EIR standard of significance?	■	
The EIR will evaluate whether the proposed demolition would exceed an applicable LRDP or Program EIR standard of significance related to transportation and traffic.		
<b>16. UTILITIES AND SERVICE SYSTEMS</b> – Would the project:		
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	■	
The EIR will address the project's potential to exceed wastewater treatment requirements of the San Francisco Bay Regional Water Quality Control Board.		
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	■	

	Will be Analyzed in EIR	No Additional Analysis Required
After Building 51 is demolished, water would no longer be regularly used on the site and wastewater would no longer be produced from these facilities. Therefore, no new water or wastewater treatment facilities would be required. However, the EIR will evaluate the wastewater demand that could result from demolition activities.		
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	■	
No new impervious surface coverage would result from the demolition project. Existing coverage would decrease at completion of the project, allowing more water to be absorbed into the ground. The existing storm water drainage system would remain intact. However, potential impacts to this system will be addressed in the EIR.		
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	■	
Demolition would have only minor effects on water consumption at LBNL. Approximately 50 employees currently located at Building 51 would be relocated to other portions of the Laboratory, and their consumption of water would be maintained at the current rate. Water would be used for construction needs, such as dust suppression; however, the water supply is ample for this purpose. Water demands associated with demolition activities will be addressed in the EIR.		
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	■	
See 16c, above.		
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	■	
The project would result in the generation of various types of waste, primarily construction debris and other non-hazardous solid waste, and lesser quantities of hazardous waste, low-level radioactive waste, and possibly, mixed waste. These would be trucked to different landfills or treatment and disposal facilities permitted to take the specific types of wastes involved. The EIR will evaluate the availability of landfill space to accommodate the project's demolition waste.		
g) Comply with applicable federal, state, and local statutes and regulations related to solid waste?	■	
The EIR will evaluate the impact of the project's compliance with applicable statutes and regulations related to solid waste.		
h) Exceed an applicable LRDP or Program EIR standard of significance?	■	

	Will be Analyzed in EIR	No Additional Analysis Required
<p>The EIR will evaluate whether the proposed demolition would exceed an applicable LRDP or Program EIR standard of significance related to utilities and service systems.</p>		
<p><b>17. MANDATORY FINDINGS OF SIGNIFICANCE --</b></p>		
<p>a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?</p>	<p>■</p>	
<p>The EIR will address the project’s potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory.</p>		
<p>b) Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?</p>	<p>■</p>	
<p>Cumulative environmental impacts will be evaluated in the EIR.</p>		
<p>c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?</p>	<p>■</p>	
<p>As discussed in the checklist sections above, the project would have the potential to result in significant impacts. The EIR will evaluate if these impacts have the potential to result in substantial adverse effects on human beings, either directly or indirectly.</p>		

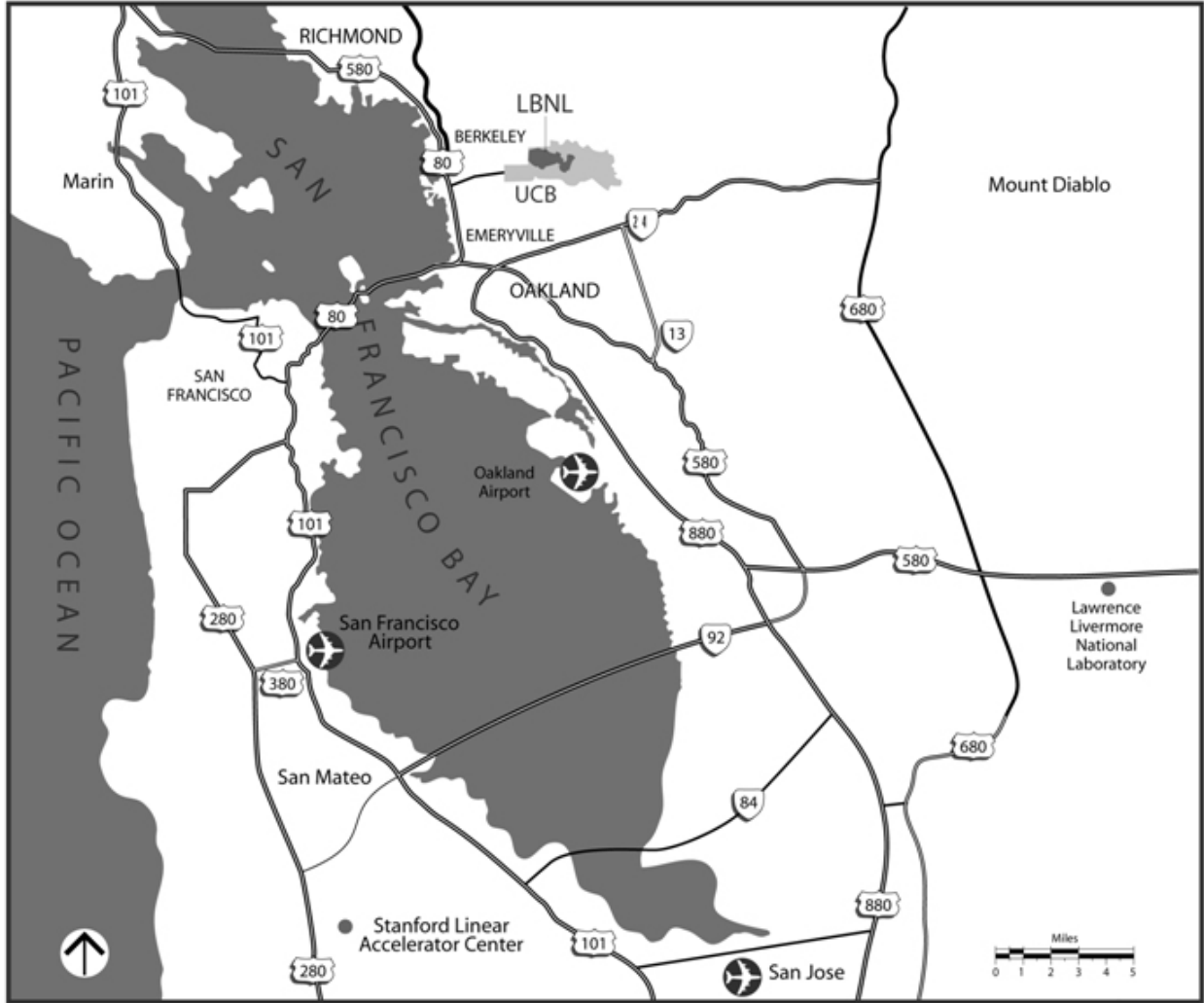


Figure 1 - Berkeley Lab Regional Context

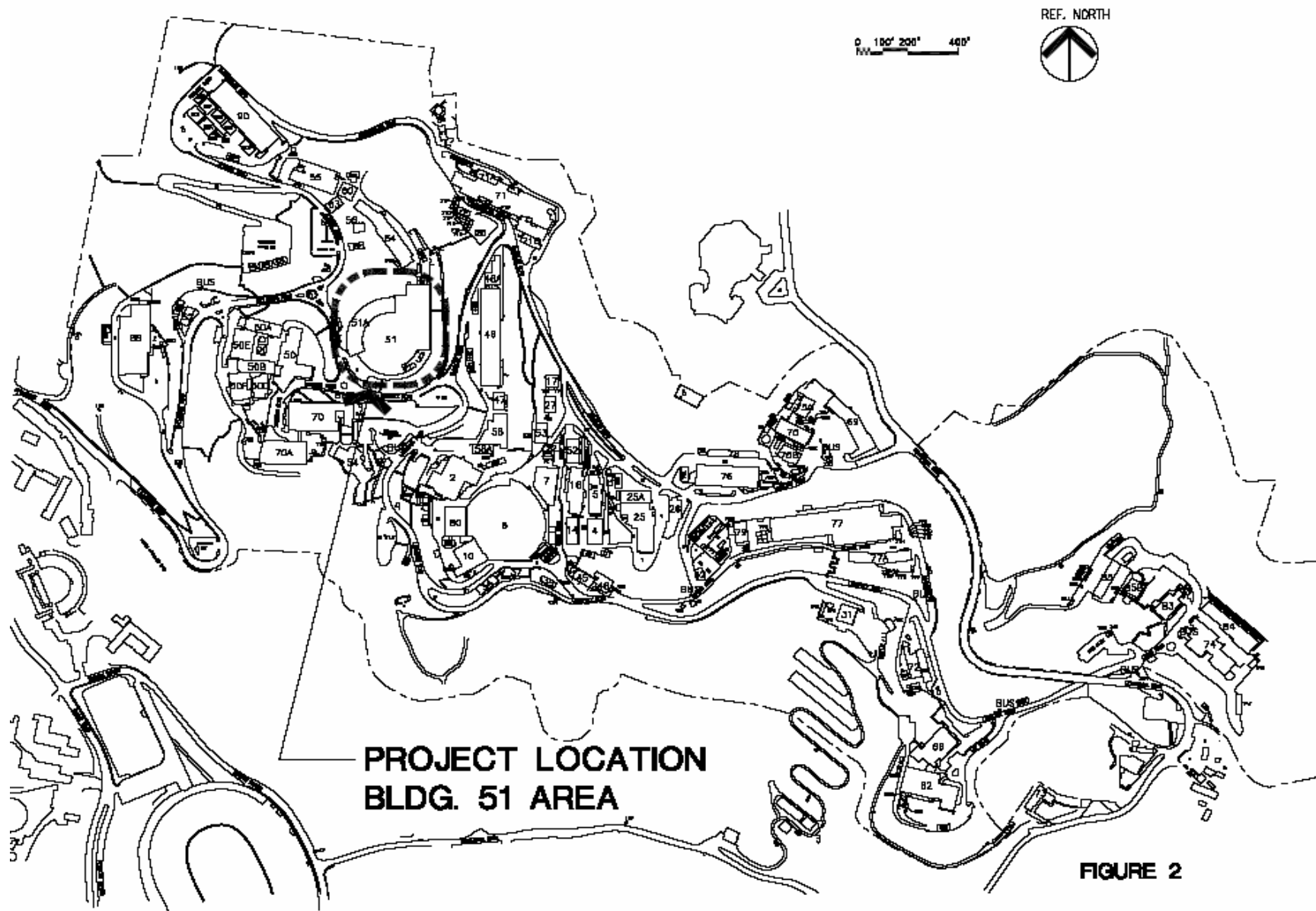


Figure - 2



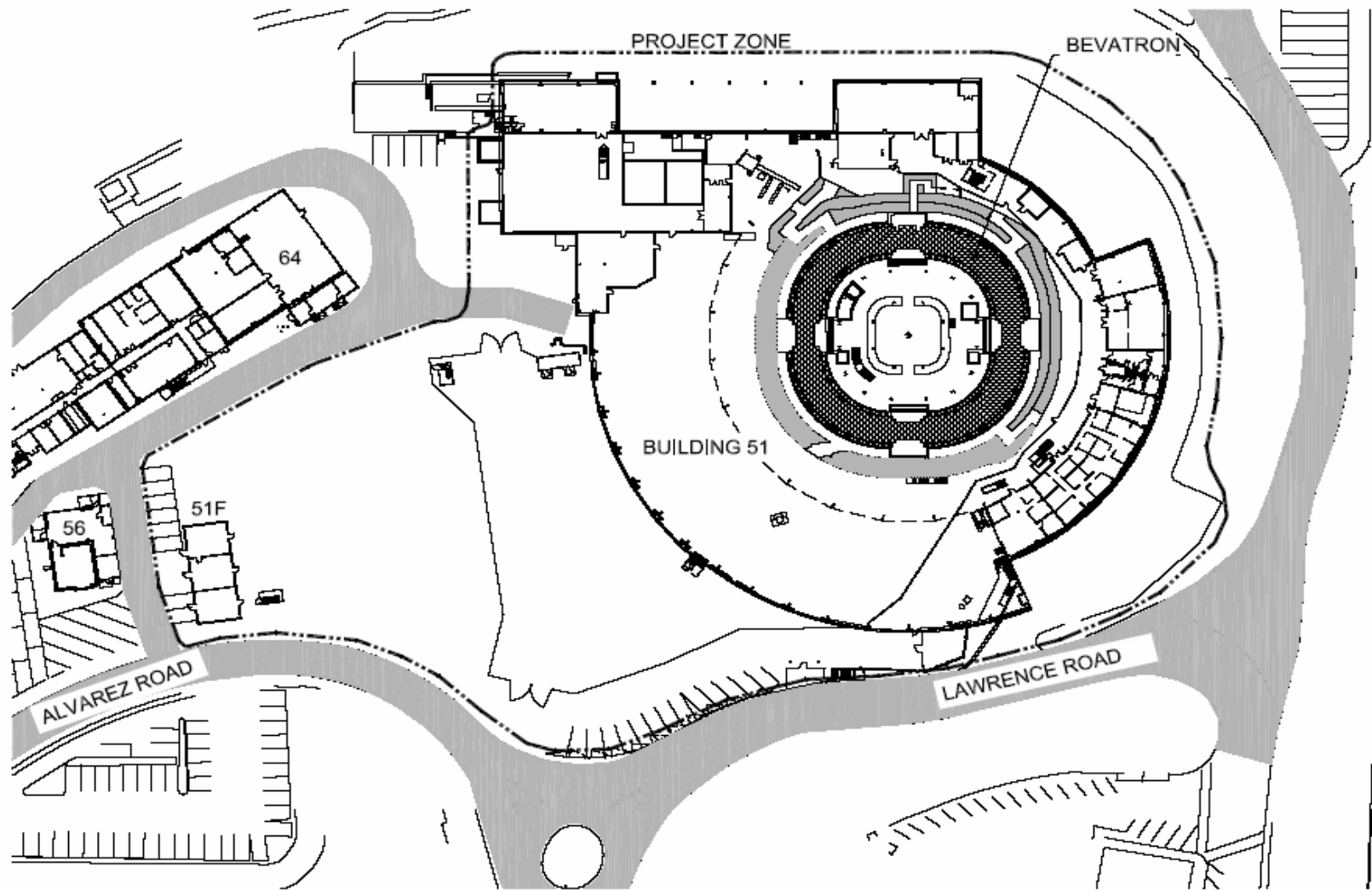


FIGURE 3  
BEVATRON WITHIN BUILDING 51  
PROJECT AREA



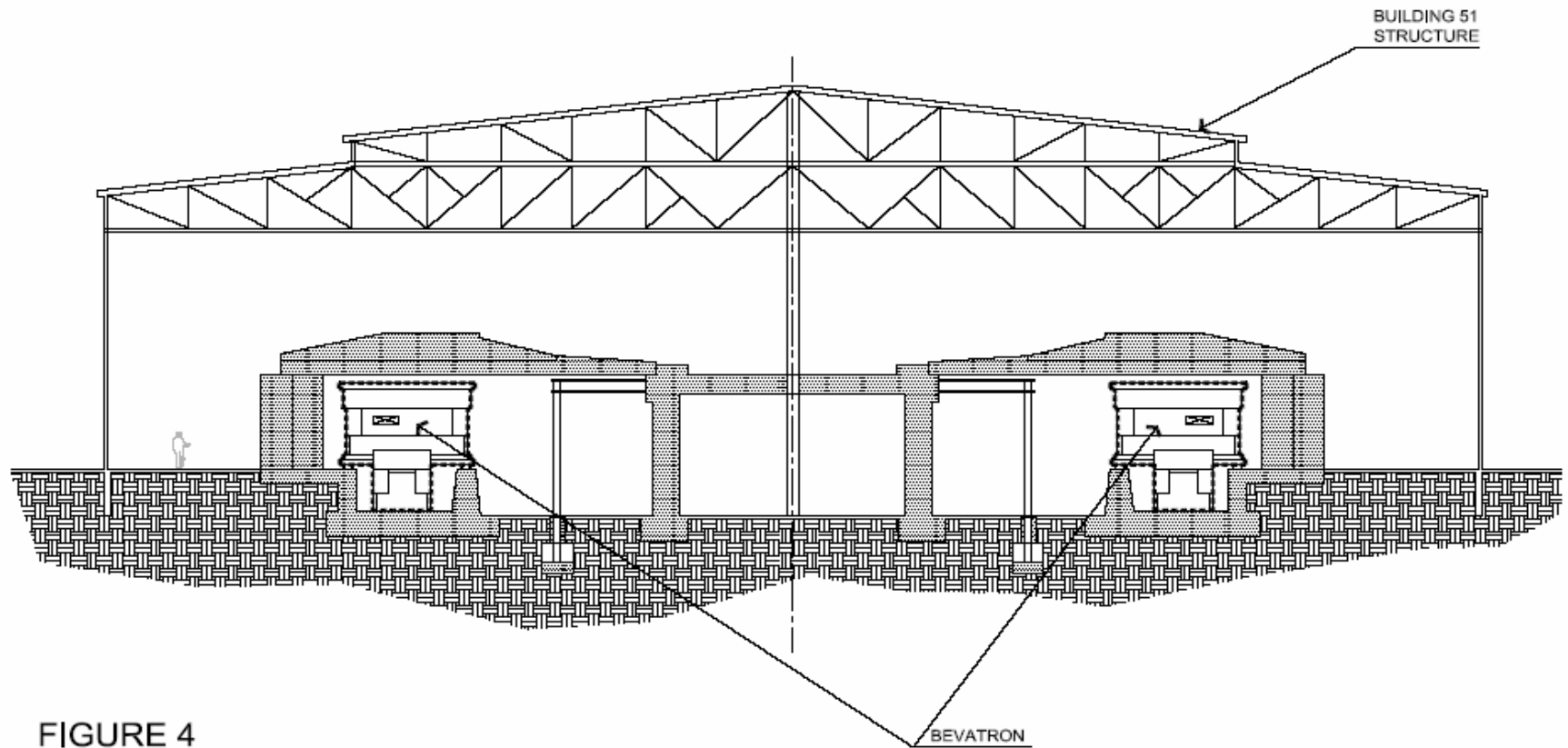


FIGURE 4  
BEVATRON WITHIN BUILDING 51  
SECTION DIAGRAM

