



**DOE/EA 1212**

**Mitigation Action Plan**  
for the  
**Lease of Land for the Development of a  
Research Park at Los Alamos National Laboratory**

**Department of Energy  
Albuquerque Operations Office  
Los Alamos Area Office  
Los Alamos, New Mexico**

**MITIGATION ACTION PLAN**  
for the  
**LEASE OF LAND FOR THE DEVELOPMENT**  
**OF A RESEARCH PARK AT**  
**LOS ALAMOS NATIONAL LABORATORY**

**Background on the Lease of Land at Los Alamos National Laboratory:** The U. S. Department of Energy (DOE) has approved an Environmental Assessment (EA) on the *Lease of Land for the Development of a Research Park at Los Alamos National Laboratory* (LANL)(DOE/EA-1212), Los Alamos, New Mexico. The DOE released a Predecisional Draft of this EA for State and Tribal review and made the draft document available to the public on July 24, 1997 for a 28-day review period. The EA for the proposed lease of land and its subsequent development and use as a research park by the County of Los Alamos (the County), or its designee, incorporates measures that DOE considered essential to render the impacts of the proposal to be not significant. The DOE is concurrently issuing a Finding of No Significant Impact (FONSI) and now plans to lease the land to the County.

**Function of the Mitigation Action Plan:** The function of this Mitigation Action Plan (MAP) is to document the potential adverse environmental effects that could result from construction and operation of the Research Park, identify commitments made in the FONSI to mitigate those effects, and to establish Action Plans to carry out each commitment, together with the responsible DOE or LANL organization.

**Environmental Effects:** The *Lease of Land for the Development of a Research Park at Los Alamos National Laboratory EA* indicates that potential adverse effects of the proposed action under normal conditions would be minimal. The EA, however, includes certain project provisions within the analysis of the environmental effects of the proposed site development and subsequent occupation to mitigate any potential adverse effects that could result from future site activities that are related primarily to construction.

Potential adverse environmental effects are as follows:

- (1) Construction activities within the Research Park tract and its subsequent occupancy may adversely affect potential habitat for the Federally threatened bird species: the Mexican spotted owl.
- (2) Research Park construction activities may also adversely affect cultural resources located within the Park boundaries.

**Commitments and Mitigation Actions:** The DOE will have the overall responsibility for insuring the adequate and timely completion of all actions associated with the MAP. The LANL ESH-20 group leader, as a LANL Management and Operations (M&O) contractor to the DOE, will be responsible for conducting the mitigation measures performed by their personnel (or sub-contractors), and for data collection and monitoring activities.

DOE's commitment to mitigate the possibility for adverse site effects related to potential habitat, or cultural resources will be included in appropriate final land lease documents. These will take the form of the DOE's establishment of temporary site exclusion zones related to on-going Mexican Spotted Owl and cultural resource surveys, evaluations and data recovery actions located on and near the site. Additionally, the mitigations will include the establishment of a permanent site buffer zone next to Los Alamos Canyon where site building construction will be excluded.

Specific mitigation actions to be conducted are as follows:

- (1) Mitigations related to the potential nesting and roosting habitat for the Mexican spotted owl:
  - (1a) Completion of the second year of the two year Mexican spotted owl field survey protocol by a LANL ESH-20 biologist licensed to perform these surveys.

(1b) Implementation of a seasonal restriction on Research Park activities within one-quarter mile of the potential Mexican spotted owl nest/roost habitat until the second year of surveys is completed in 1998. If owls are found during that survey time, construction within one-quarter mile of the actual nest site will be restricted from occurring during the duration of the breeding seasons to follow until subsequent protocol surveys determine that the owl no longer occupies the area, or reevaluation of the impacts on the Protected Activity Center (PAC, to be developed) revealed that such measures were not required. Re-initiation of informal consultation by the DOE with the U.S. Fish and Wildlife Service will also occur. If owls are not found during the 1998 breeding season surveys, project activities within one-quarter mile of the habitat may occur and continue uninterrupted over the next 10 year period (ending at the close of the calendar year 2007). The aspects of (1a) and (1b) mitigations will be tracked by the DOE in the MAP Annual Report.

(1c) Implement approximately a 100-meter buffer area that is to be a building exclusion zone between the nesting/roosting habitat and the Research Park building and construction locations (see attached map for the location of this buffer zone).

(2) A Memorandum of Agreement (MOA) between the DOE Los Alamos Area Office and the New Mexico State Historic Preservation Officer (SHPO) will be prepared and executed to ensure the protection of cultural resources in the Research Park Lease tract of land. The MOA will discuss the fencing of the National Register eligible sites by either DOE or LANL; monitoring of the site condition by the LANL ESH-20 archeology team; preparation of a data recovery plan by the LANL ESH-20 archeology team; notification of Native American groups on the intent to recover data from the sites by DOE; consultation with the SHPO by DOE; and completion of analysis report required by the data recovery plan by the LANL ESH-20 archeology team. The aspects of implementing the measures agreed upon in this MOA will be tracked by the DOE's Los Alamos Area Office (LAAO) in the MAP Annual Report.

**Mitigation Action Plan Annual Report:** Activities associated with the MAP will be reported in a DOE Mitigation Action Plan Annual Report (MAPAR) to be issued by January 31st of each year for the preceding LANL fiscal year (October

through September), beginning one year after the lease of the Research Park tract of land to the County has been signed. The MAPAR will be continued annually thereafter, until all of the mitigation actions are complete. The MAPAR will reflect new information or changed circumstances. If major changes to mitigation or the MAP are necessary, these changes will be noted in the MAPAR. The MAPAR will be placed in the Los Alamos and the Albuquerque DOE Public Reading Rooms. A DOE Mitigation Tracking System (MTS) will be developed to document the progress of fulfilling commitments described in the MAP.

Results of the MTS will be reported in the MAPAR. The MTS will continue until all mitigation commitments are approved, verified and are considered closed. A completion Report will be issued by the DOE at the time of completion of all mitigation. DOE will approve and verify progress or closure on mitigation measures and evaluate the success of various mitigation measures over time. These efforts will be reported, as appropriate in the MAPAR.

**Attachment A to the MAP** has been included to record site actions or uses that are additional to those considered as Mitigation Actions, and that should also form the basis for provisions of the executed document(s) related to the lease of the tract. In some instances lease vernacular may require descriptive phrases that are somewhat different from the language of the EA or this attachment. These other actions are integral parts of the project description for development and use of the leased tract and are vital to defining the proposal. This MAP, together with Attachment A, will facilitate the authors of the lease(s) in their task of writing the lease provisions.

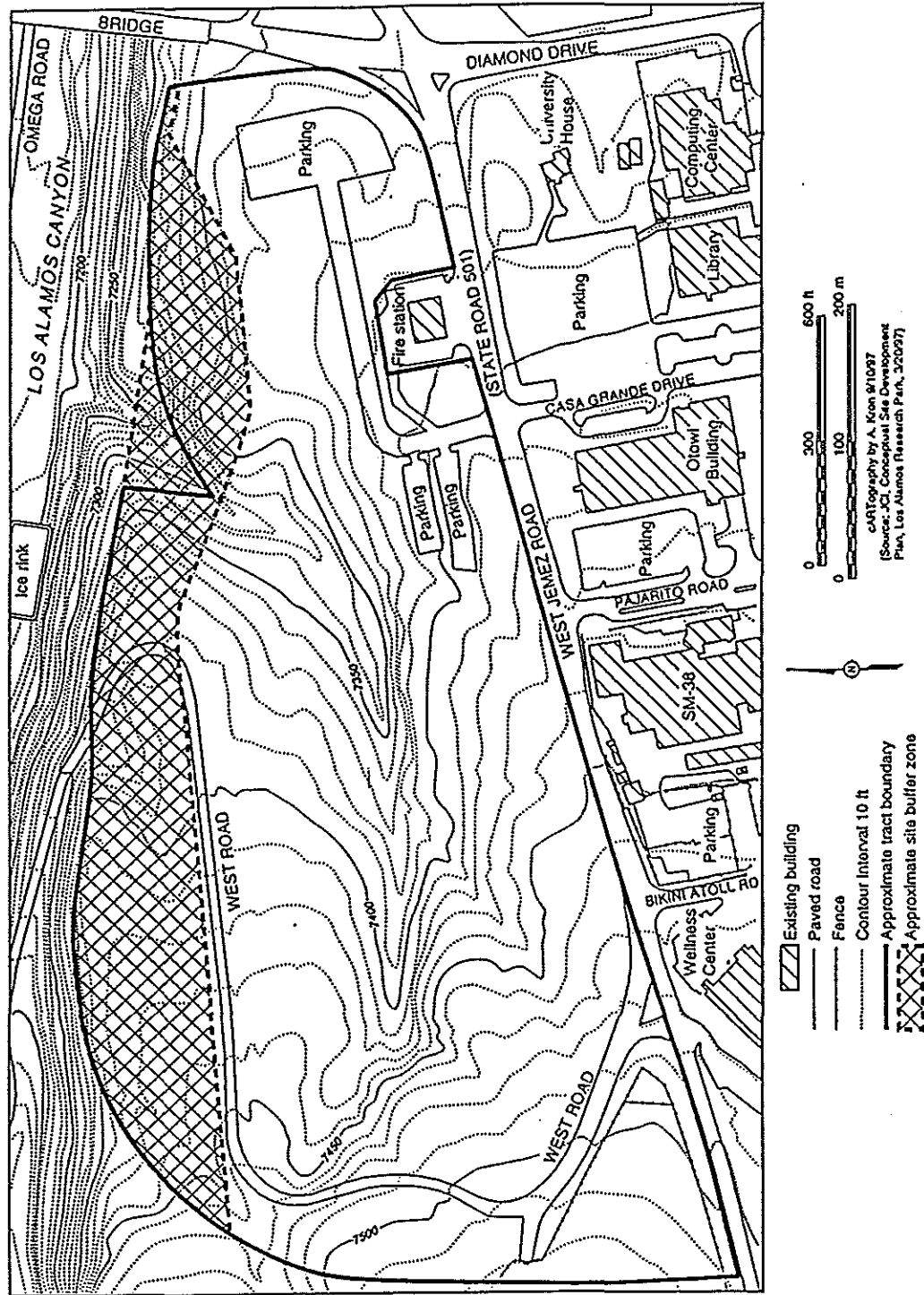
MAP Authorization Date:

Los Alamos Area Manger:

October 15, 1997

J. Thomas Redd

### MAP OF RESEARCH PARK BUFFER ZONE LOCATION



Location of proposed Research Park.

## Attachment A

It is the DOE's intention that effects to the human environment projected for the Research Park project analyzed in the EA should match the reality of those associated with the completed Research Park. To achieve this goal, certain site actions, activities or considerations that have been included as integral parts of the proposal for developing and operating the Research Park should form the basis for developing lease provisions included in the executed Research Park tract lease. These items are listed below in simplified form, and may be described in more detail within the Proposed Action in the EA document (see Chapter 2.1):

- The Research Park will not be developed for residential uses<sup>1</sup>, heavy industrial uses<sup>2</sup>, or any other uses that will be inconsistent with or limiting to LANL mission operations. DOE will review and may reject proposed specific site uses by potential tenants that are inconsistent with LANL mission operational needs.
- The Research Park will be developed over the next 10 years from the date of the execution of the lease. It will be designed to accommodate a maximum of about 1500 employees.
- Construction activities, including that of supporting infrastructure, will follow County and State building codes, and operation of the Research Park will conform to appropriate local, state and federal laws and regulations. Construction of the Research Park site improvements will not occur over portions of the tract with slopes of more than 20 percent. Standard dust suppression methods (such as use of water spraying) will be used to minimize the generation of dust during all phases of construction activities. If buried materials or items of cultural significance are found during any subsurface construction activity, standard procedures should call for construction to be halted until their significance is determined and appropriate action(s) are taken, if needed.
- Site activities that occur within or in the vicinity of a LANL Environmental Restoration Solid Waste Management Unit (SWMU) or Potential Release Site (PRS) will be

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<sup>1</sup>In general the term "residential use" is intended to include such possible uses as high-density multifamily dwellings (e.g., apartments, condominiums, or town homes), single-family dwellings, motels, hotels, hospitals, nursing homes, child-care centers, and halfway houses.

<sup>2</sup> The term "heavy industrial use", as adapted for the County zoning ordinance, includes industrial activities that create noise, smoke, odor, dust, or similar emissions and generate truck traffic.

performed by DOE or other designated parties such as LANL's Environmental Restoration (ER) staff acting on DOE's behalf. They will review these activities and stipulate procedures for working within the specific site area. These areas will be temporarily fenced to protect them from being inadvertently disturbed during construction activities until they are released to the County for development purposes by the DOE. The DOE, or their representatives, may enter the Research Park for the purpose of sampling or remediation activities at these PRSs as needed.

- No construction will be conducted within a floodplain or wetland. The small pond located within the Research Park boundary will be retained and enhanced. A Storm Water Pollution Prevention (SWPP) Plan will be executed under a National Pollutant Discharge Elimination System (NPDES) construction permit obtained by the County or their designee. After construction excess soil will be removed and the site will be restored to natural-like contours and reseeded. Permanent site engineering controls for stormwater run-off should be part of the site overall design. If site actions necessitate activities within or near floodplains or wetlands, additional protective measures may be required and DOE will review that action for any regulatory compliance that may be needed on their own behalf.
- Disturbance and removal of vegetation at the Research Park will be limited to those areas necessary to accommodate building, roadway, and parking area footprints and work areas; total tree removal will only be allowed within 20 ft (6 m) from building footprints and 10 ft (3m) from parking lots and roadways. No trees greater than 10 in (25 cm) in diameter measured at 4.5 feet from ground surface will be cut and removed from any areas with less than a 20 degree slope. No tree cutting or disturbance will be allowed in areas of the tract with a 20 degree slope or greater.
- Tree thinning for the purpose of wildfire management procedures would be conducted at the direction of the Interagency Wildfire Management Team (or in the future absence of this team, a corresponding LANL site maintenance organization or other DOE designated party).
- Only appropriately licensed radioactive sources, materials that are less than Nuclear Facility Category 3 levels of radioactive materials (DOE-STD-1027-92) and ionizing radiation producing equipment that have been reviewed and approved by DOE will be used and stored at the Research Park. Sources of radioactive materials will be used only for research and quality control purposes. No special nuclear materials will exist, be used, or generated within the Research Park laboratories.
- All waste types (hazardous, non-hazardous, radioactive or mixed wastes) will be disposed of off-site at permitted commercial or County facilities as appropriate. During



the operational phase of the Research Park, no liquid effluents will be discharged directly to the environment via NPDES-permitted outfalls.

- The Research Park tenants will be required to comply with LANL's emergency and evacuation plans, and with LANL road closures for the purpose of intrasite materials movement. Tenants will be required to employ appropriate engineering controls, radiation protection and safety training, along with radiation monitoring and standard operation procedures for the protection of their workers and site visitors.
- At the end of each facility's useful life final D&D will be performed as needed. Prior to conducting any D&D activities, the DOE will be contacted and will review the proposed actions and conduct any necessary regulatory compliance actions necessary on their own behalf.

The MAP contains additional specific actions considered as mitigation actions that must be implemented by the DOE to insure that potential affects of the Research Park on the environment are rendered insignificant; these actions, which are listed in the body of the MAP and not repeated herein, should also be the basis for developing lease provisions included in the tract lease.