I. INTRODUCTION

A. RELATIONSHIP TO LABORATORY VISION AND MISSION

The vision for the physical development of the Laboratory is to create an exceptional work environment that supports the mission, and attracts and retains the quality personnel needed to meet that mission.

The Laboratory mission is to ***serve the nation by applying the best science and technology to make the world a better and safer place***.

The core missions are:

- to ensure the safety and reliability of the U.S. nuclear weapons stockpile;
- to develop technical means for reducing the global threat of weapons of mass destruction or terrorism; and
- to solve national problems in energy, environment, infrastructure, and health security, ***utilizing the investment in people and facilities implied by the first two missions.***

The Laboratory must revitalize and develop its physical assets using the standard of a world-class working environment. The *Site and Architectural Design Principles* sets the principles and guidelines for development and architectural design to achieve that vision.

B. RELATIONSHIP TO LABORATORY PLANNING DOCUMENTS

The *Site and Architectural Design Principles* document is one of a series of planning documents that guide project development and site improvements at the Laboratory.

The ***Comprehensive Site Plan*** (CSP) is the institutional long-range site development plan for Los Alamos National Laboratory. As such, the CSP portrays the large-scale concepts for site-wide development and the current activities proposed and planned to achieve them.

The ***Area Development Plans*** (ADPs) are site development plans created for each of the ten planning areas at the Laboratory. The ADPs refine the concepts of the CSP at the planning area level. The ADPs prioritize developable areas and illustrate more detailed concepts for security, safety, environmental, infrastructure and circulation development for each planning area.

The ***Specific Area Master Plans*** are master development plans for specific sites within a planning area or for diverse areas managed by a program or division.

The ***Site and Architectural Design Principles*** *(Design Principles)* establish the detailed planning principles and guidelines for site and architectural development at the project scale.

C. GOALS OF THE DESIGN PRINCIPLES DOCUMENT

This *Design Principles* document has these goals:

- Articulate the planning and design principles and guidelines to be incorporated in each Laboratory development project to continue to improve the functionality, safety, security and physical appearance of the Laboratory environment.
- Provide a basis for evaluating project designs in support of achieving the long-range physical development vision of the Laboratory.
- Provide planning and design guidance to planners, consultants, contractors and groups responsible for the physical development and maintenance of the Laboratory.

D. THE DESIGN PRINCIPLES

The following are the design principles for site-wide development and revitalization at the Laboratory.

Image and Entrance

- Establish a distinct Laboratory identity.
- Establish clear points of arrival and effective wayfinding systems for the Laboratory.

Land Use and Infrastructure

- Incorporate the land use goals from the *CSP*, *ADPs* and *Specific Area Master Plan* to organize project development.
- Utilize the land use and siting process in all development activities.
- Efficiently use available building sites and infrastructure.
- Improve functional relationships between adjacent uses.
- Identify and use utility corridors.

Security, Safety and Environment

- Incorporate security, safety and environmental needs early in project planning.
- Support the Integrated Security and Safeguards process (ISSM).

Road and Parking System

- Create a comprehensive road and parking system.
- Establish roadway easements to allow for future improvements to the road system.
- Design roadways for safe vehicular, pedestrian and bicycle use.
- Adopt road and parking development standards that incorporate transit, signage, lighting, water harvesting and landscaping.

Pedestrian System

- Establish and implement design standards for pedestrian system improvements.
- Design pedestrian sidewalks and trails as a connective looped system.
- Connect the pedestrian system to open space and lands adjacent to the Laboratory.
- Create pedestrian environments conducive to personal interaction that in turn encourages generation of creative science.

Bicycle Trail System

- Design a bike network that coordinates with road and pedestrian systems.
- Provide bike facilities to encourage bicycle use as part of a complete multi-modal Laboratory circulation network.

Transit System

- Develop a transit system that facilitates circulation within the Laboratory and links with Los Alamos County and other regional transit systems.
- Plan, coordinate, and construct transit facilities part of new Laboratory development projects.

Landscape and Site Improvements

- Establish and implement site-wide standards for landscaping and site furnishings.
- Create a landscape that is water conserving and easily maintained.

Architectural Character

- Develop a unique architectural character that is based on the Laboratory's regional context, history, function, and vision for the future. The character should reflect a science and technology image.
- Design buildings and structures to be flexible for long-term changes in use.
- Design buildings and structures to incorporate energy conservation, durability and maintenance efficiency.
- Implement a unifying design palette for architectural design.