

## B. Core Planning Area

### 1. General Descriptions

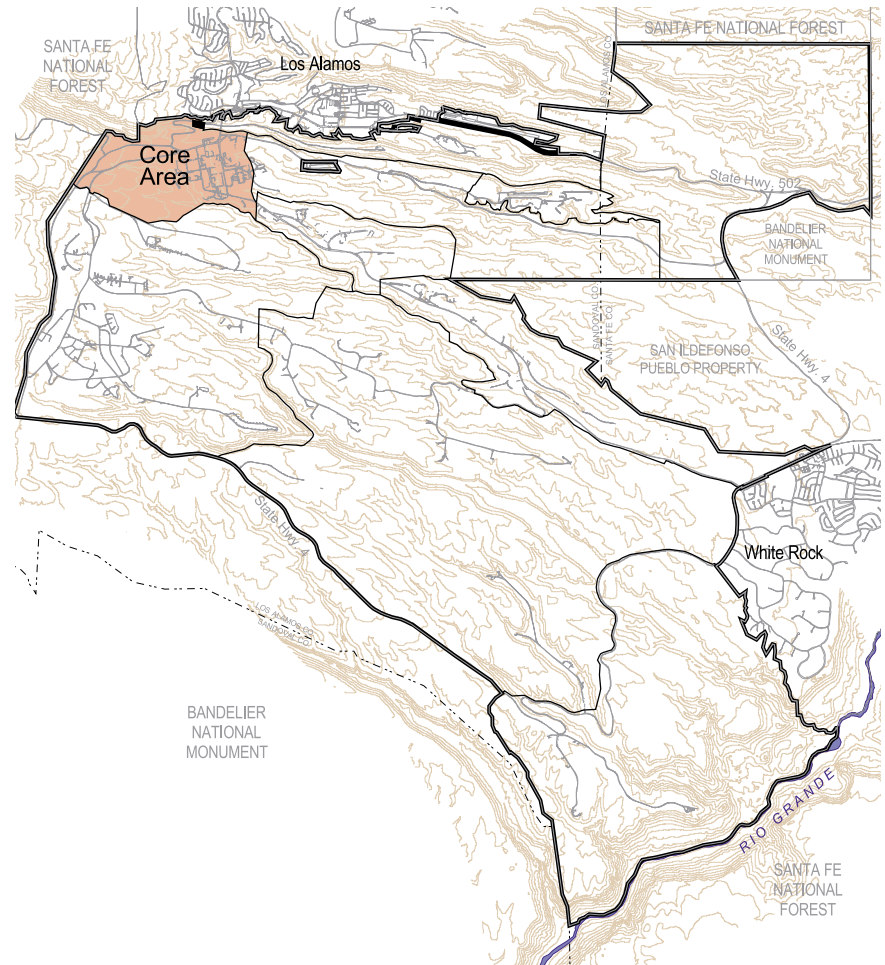
The Core Planning Area is in the northwest corner of the Laboratory. The area encompasses 2 square miles of land of which 60% of the land is developed. It is bounded on the north by the Los Alamos town site; to the east by Sigma Mesa, Omega and Pajarito West Planning Areas; to the south by the Experimental Engineering Planning Area; and to the west by land owned by the US Forest Service. All the major roads within the Laboratory lead to or from the Core Planning Area. The Omega Bridge, northeast of the Core Planning Area, is the focal point of all traffic through Los Alamos County.

The Core Planning Area includes the following technical areas (TA):

- TA-03: Central administrative area
- TA-06: An undeveloped technical area
- TA-58: Two-Mile Mesa North, an undeveloped technical area
- TA-59: Environment, Safety, and Health Division (ESH) facilities
- TA-60: Sigma Mesa, physical support
- TA-61: East Jemez Road, physical support and infrastructure
- TA-62: An undeveloped technical area
- TA-03: Contains the majority of the Laboratory's population, buildings and infrastructure.

The Core Planning Area is considered the heart of the Laboratory and its central business district.

Map IV-B1: Key Map

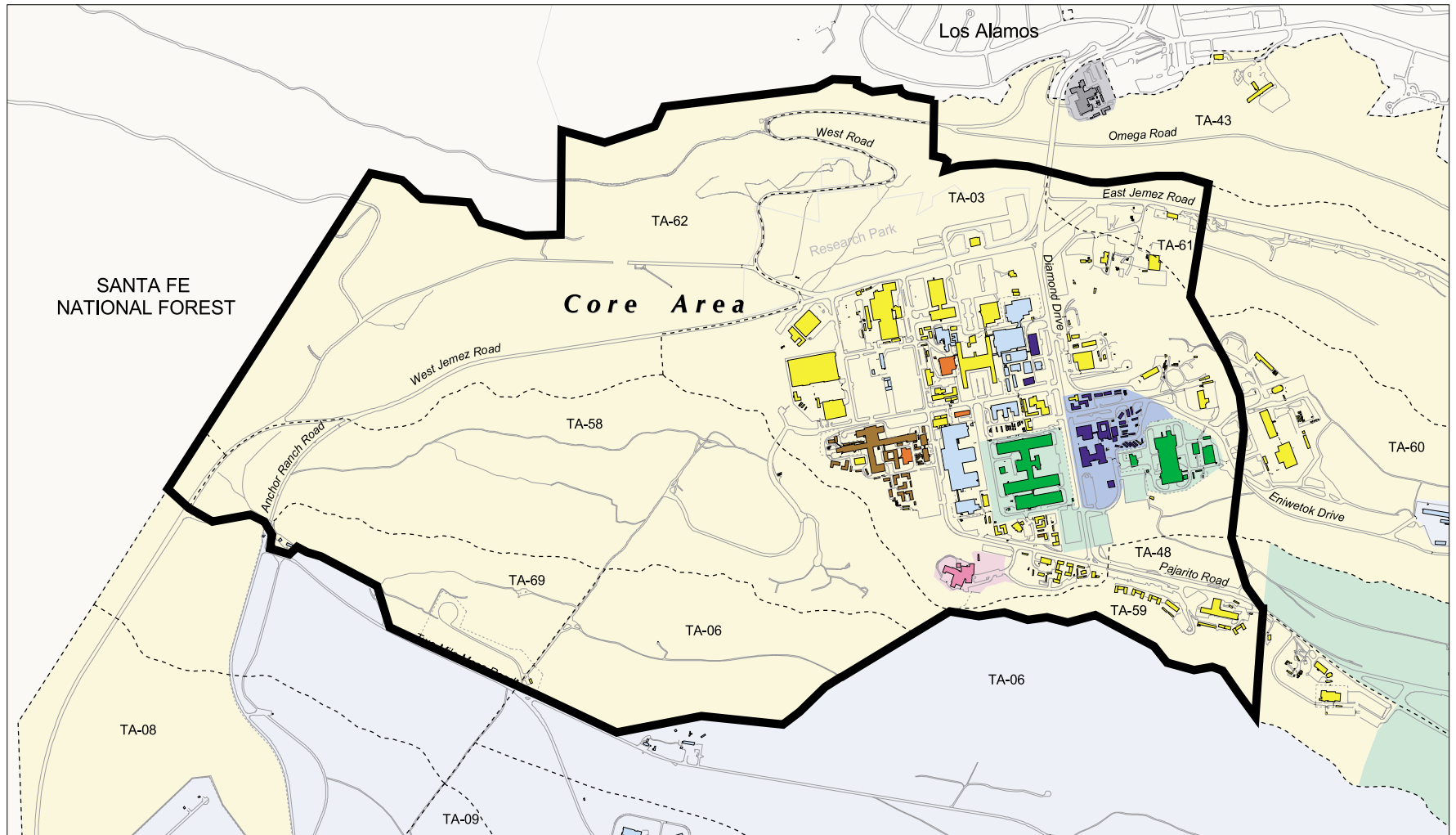


## 2. *Specific Planning Assumptions*

The following assumptions will guide physical planning within the Core Planning Area for the next ten years.

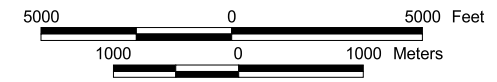
- The Core Planning Area will continue to be the administrative center of the Laboratory.
- Chemical and Metallurgy Research (CMR) has planned to curtail all stored nuclear materials activities within ten years. It is not clear whether demolition or reuse is the best strategy for disposition of the CMR Building.
- The Core Planning Area shall house the theoretical and computational sciences.
- The Core Planning Area will continue to house some experimental science.
- The SCC and NISC facilities shall be located in the Core Planning Area.
- The growth of Bioscience as the “third pillar” of the Laboratory is envisioned to be housed within the TA-03 area.
- Major support functions, such as warehousing and contractor support services, are to be relocated to a new technical area within the Sigma Mesa Planning Area.
- The Core Planning Area is the primary public interface area.
- The proposed Research Park north of TA-03 shall be the primary area for interface with private research and development companies.
- The Core Planning Area will be the focus of the Laboratory’s revitalization efforts to replace many older facilities. The expectation is to remove the majority of the older buildings, trailers and transportables in TA-03, and replace them with new facilities.

Map IV-B2: Core Area Programmatic Associations



AREA / STRUCTURE	PROGRAM
	Defense Program / Stockpile Stewardship
	Defense Program / Stockpile Weapons Management
	Defense Program / Landlord or Institutional
	Office of Science
	Laboratory Directed Research & Development

AREA / STRUCTURE	PROGRAM
	Multiple Programs
	Nonproliferation & National Security
	Non DOE Programs
	Environmental Restoration & Waste Management
	County or Private within DOE Boundary

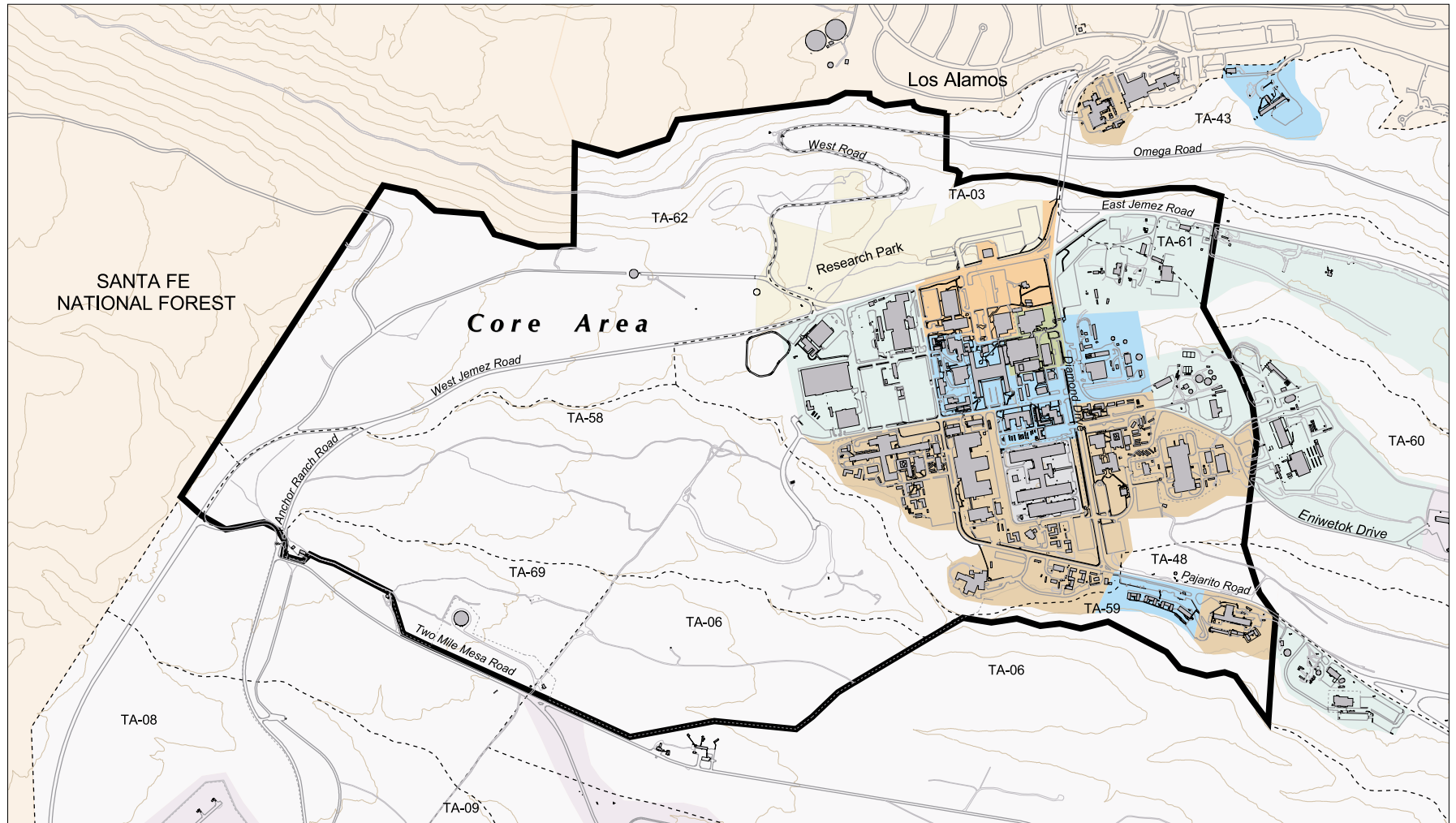


### 3. *Land Use*

#### a. *Existing Land Use*

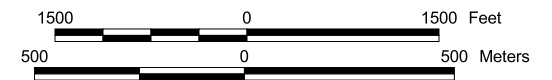
The predominant land use in the western portion of the planning area is Reserve. In and near TA-03 the dominant land uses are: Administration, Public/Corporate Interface, Physical/Technical Support, Experimental Science, Nuclear Materials R&D, and a small area of Theoretical/Computational Science.

Map IV-B4: Core Area Existing Land Use



LEGEND

- |                              |                            |                                   |
|------------------------------|----------------------------|-----------------------------------|
| LANL Buildings               | Experimental Science       | Reserve                           |
| Non Dept. of Energy Property | High Explosive R&D         | Theoretical/Computational Science |
| Planning Area                | High Explosive Testing     | Waste Management                  |
| Research Park                | Nuclear Materials R&D      |                                   |
| Administration               | Physical/Technical Support |                                   |
| Airfield                     | Public/Corporate Interface |                                   |



**b. Future Land Use**

The Core Planning Area’s TA-03 will remain the central campus of the Laboratory. TA-03 also will continue to house the majority of the Laboratory’s population. It will continue to support the administrative functions of the Laboratory and house key facilities representing the core mission of the Laboratory. It is planned that the Core Planning Area’s growth will be within the TA-03 area and not expand into the undeveloped TA-58 in the foreseeable future.

If TA-03 revitalization is funded, the majority of the existing square footage within TA-03 will, over a four phase process, be replaced with fewer but larger more efficient buildings.

Phase One removes the existing Administration Building, Sherwood, Scylac, JCNM shops and numerous small trailers and transportables. These structures will be replaced by 1) a new administration building, 2) an office building for classified work, 3) an office building for unclassified work and 4) a parking garage. Along with these new facilities, Phase One would build external open spaces to begin the development of a pedestrian campus environment for TA-03. To support these changes, the transportation patterns within TA-03 will be modified to accommodate better traffic circulation, increase parking, improve pedestrian movement and enhanced security.

Phases Two, Three and Four address the remainder of the central area of TA-3, including removing most of the remaining older buildings and all trailers and transportables. These subsequent phases would replace them with fewer, larger, more efficient buildings and continue the development of a campus environment.

Significant changes proposed in this planning area are based on the Laboratory’s TA-03 Revitalization Plan. In the north, the Public/Corporate Interface land use area in TA-03 will be redeveloped with several new structures sited opposite the Research Park as existing Physical/Technical Support functions relocate to other planning areas. The northeastern portion of the Planning Area will become Administration land use with the development of a “Gateway Area,” the main entrance to the Laboratory. The southern and western portions of

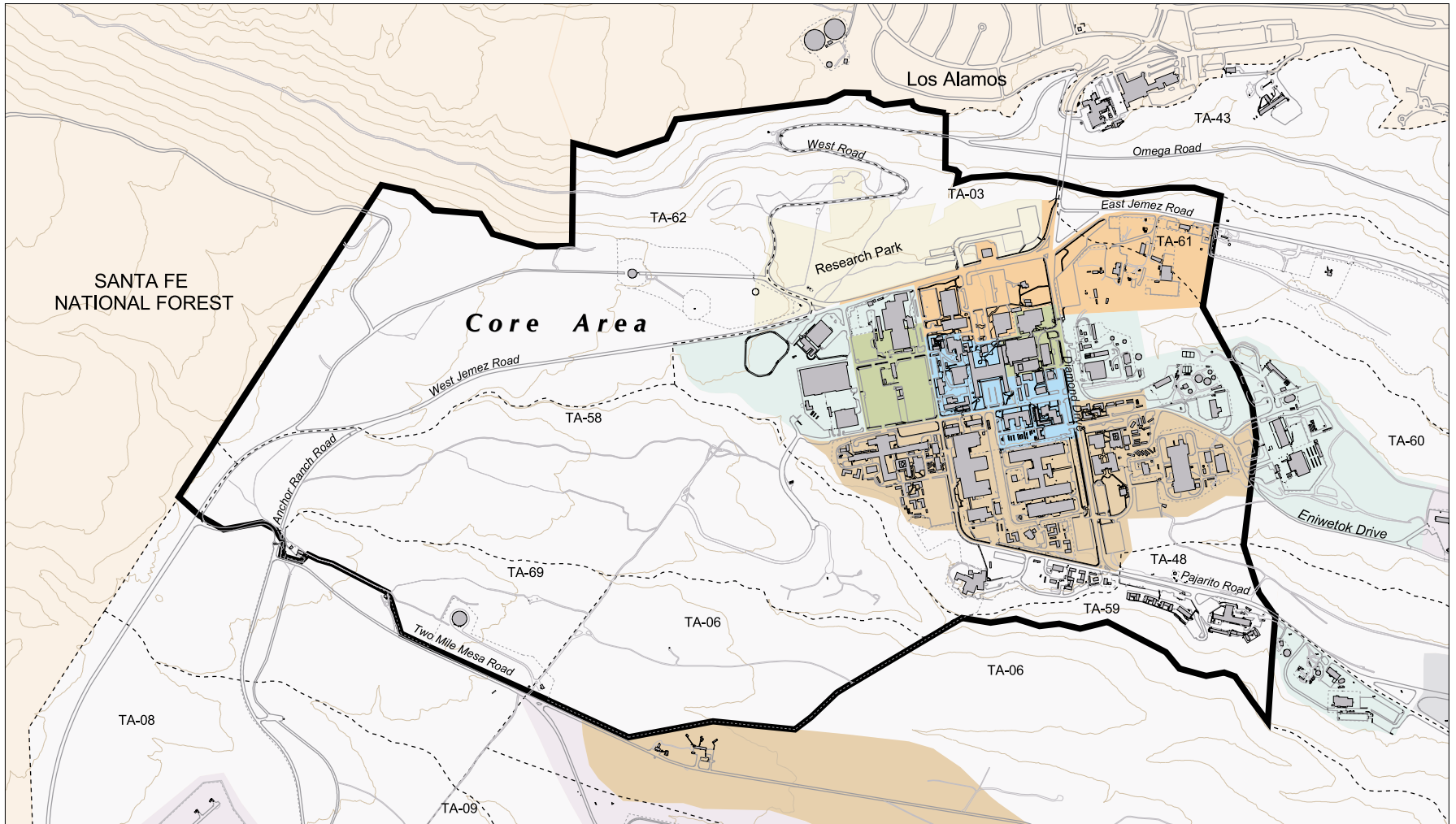
TA-03 will become areas of Theoretical/Computational and Experimental Science uses as Nuclear Materials R&D relocates to the Pajarito Corridor West Planning Area.

TA-58 will continue as Reserve but remains a prime area for major expansion as needed for functions from TA-03. TA-59 should be cleared of all temporary and permanent structures and remain Reserve, unless otherwise needed.

Table IV-B1: Core Area Land Use

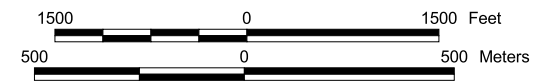
Existing Land Use		Future Land Use	
Land Use Category	Acreage	Land Use Category	Acreage
Administration	49	Administration	23
Public/Corporate Interface	31	Public/Corporate Interface	69
Physical/Technical Support	83	Physical/Technical Support	71
Experimental Science	130	Experimental Science	98
Nuclear Materials R&D	11		
Theoretical/Computational Science	7	Theoretical/Computational Science	22
Reserve (Capable of development: 200 ac.)	<u>728</u>	Reserve (Capable of development: 185 ac.)	<u>756</u>
<b>Total</b>	<b>1,039</b>	<b>Total</b>	<b>1,039</b>

Map IV-B5: Core Area Future Land Use



LEGEND

- |                              |                            |                                   |
|------------------------------|----------------------------|-----------------------------------|
| LANL Buildings               | Experimental Science       | Reserve                           |
| Non Dept. of Energy Property | High Explosive R&D         | Theoretical/Computational Science |
| Planning Area                | High Explosive Testing     | Waste Management                  |
| Research Park                | Nuclear Materials R&D      |                                   |
| Administration               | Physical/Technical Support |                                   |
| Airfield                     | Public/Corporate Interface |                                   |



#### **4. *Transportation/Circulation***

The existing and future transportation networks within the Core Planning Area are shown on pages 105 and 107.

##### **a. Existing Transportation/Circulation/Parking**

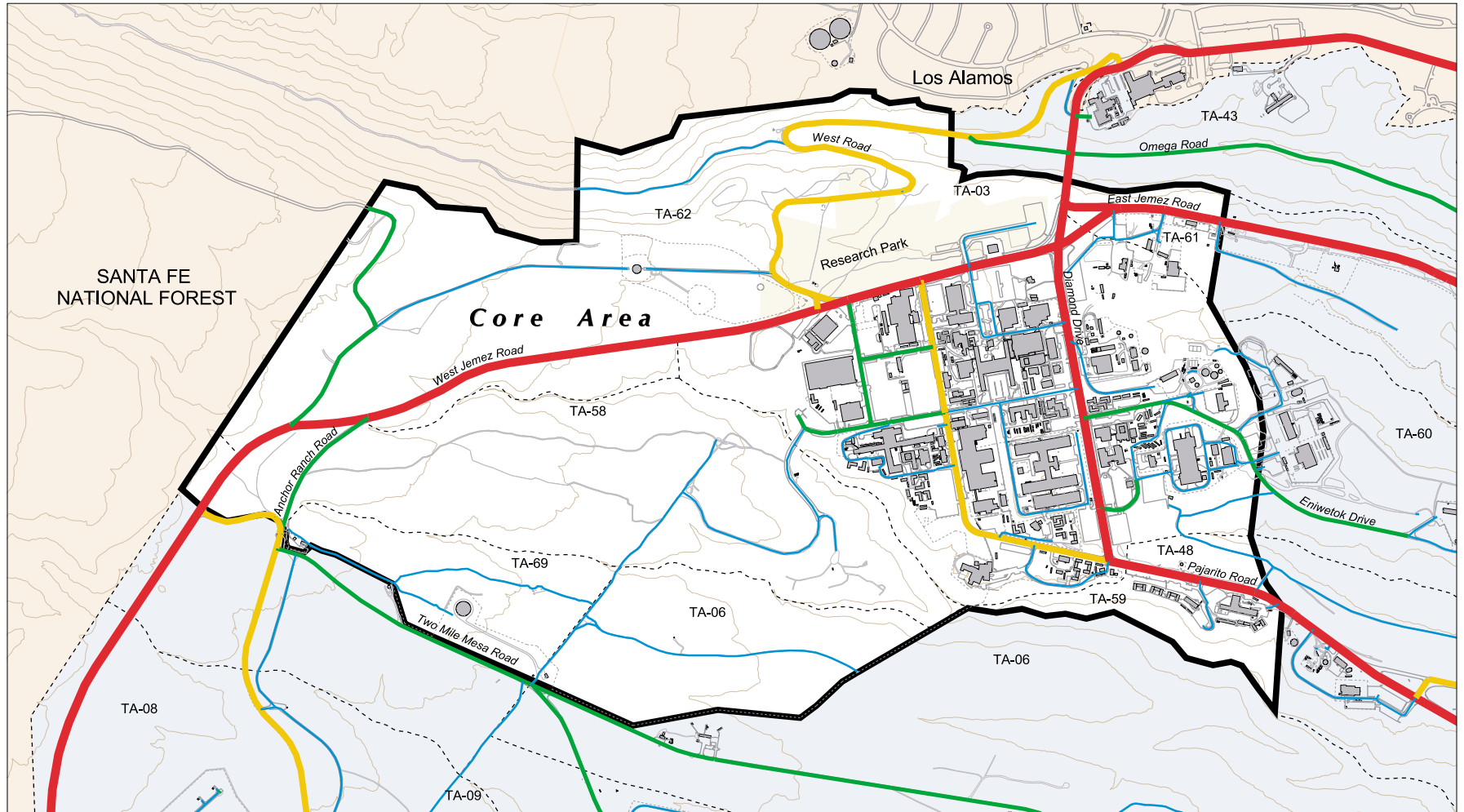
Narrow roads, continual program growth and infilling, numerous small parking lots, and existing facilities (to include the many temporary structures) restrict traffic flow in TA-03. The inefficient design of the busy entrance to the Laboratory at Omega Bridge and in the intersection of Diamond Drive and Jemez Road also contributes to traffic congestion.

Existing parking which is already at or near capacity may be further aggravated with the loss of major lots due to the construction of the Strategic Computing Complex (SCC) and the Nonproliferation and International Security Center (NISC). Temporary parking lots located on future construction sites or in open space will help alleviate potential parking problems during the course of the various construction projects. Multiple small parking lots spread throughout the Core Planning Area create management problems for land use planning, security and safety.











Major roads crisscross the central sector of TA-03. These roads conflict with best management for security and safety. Particular problems are associated with Diamond Road and its proximity to CMR and other secure nuclear and computational facilities.

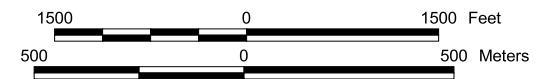


Map IV-B6: Core Area Existing Transportation



LEGEND

- |  |  |
|--|--|
|  Arterial         |  Dept. of Energy Property     |
|  Collector        |  LANL Buildings               |
|  Local            |  Non Dept. of Energy Property |
|  Access / Service |  Planning Area                |
|  Emergency Lanes  |  Research Park                |



### ***b. Future Transportation/Circulation/Parking***

The following are recommendations for future transportation, circulation and parking improvements in the Core Planning Area.

- **Build a perimeter loop road around TA-03** to improve site circulation, access, and security in the Core Planning Area. This perimeter road would begin at the intersection of East Jemez Road near the entrance of the current county landfill and proceed south until it intersected Pajarito Road near the eastern end of TA-59. This new section of road would be approximately 5,100 feet long. The perimeter road will then incorporate Pajarito Road to the northwest. This section of Pajarito Road will require improvement. At the point where Pajarito Road turns north, new construction would continue the perimeter road in a northwesterly direction, south of the current Physics Complex (Building 40). The road would then turn north until it intersected West Jemez Road near the existing Wellness Center. This section of the proposed perimeter road would be approximately 3,500 feet long.

New road construction at TA-58 will allow for future development in that area as the Core Planning Area grows. Proposals for this area include a road that runs east-west through TA-58 and another running north-south into TA-06.

Construction of the SCC, completion of the Perimeter Road and other Revitalization projects will consequently eliminate some existing roads within TA-03. These are depicted in MapIV.B7.

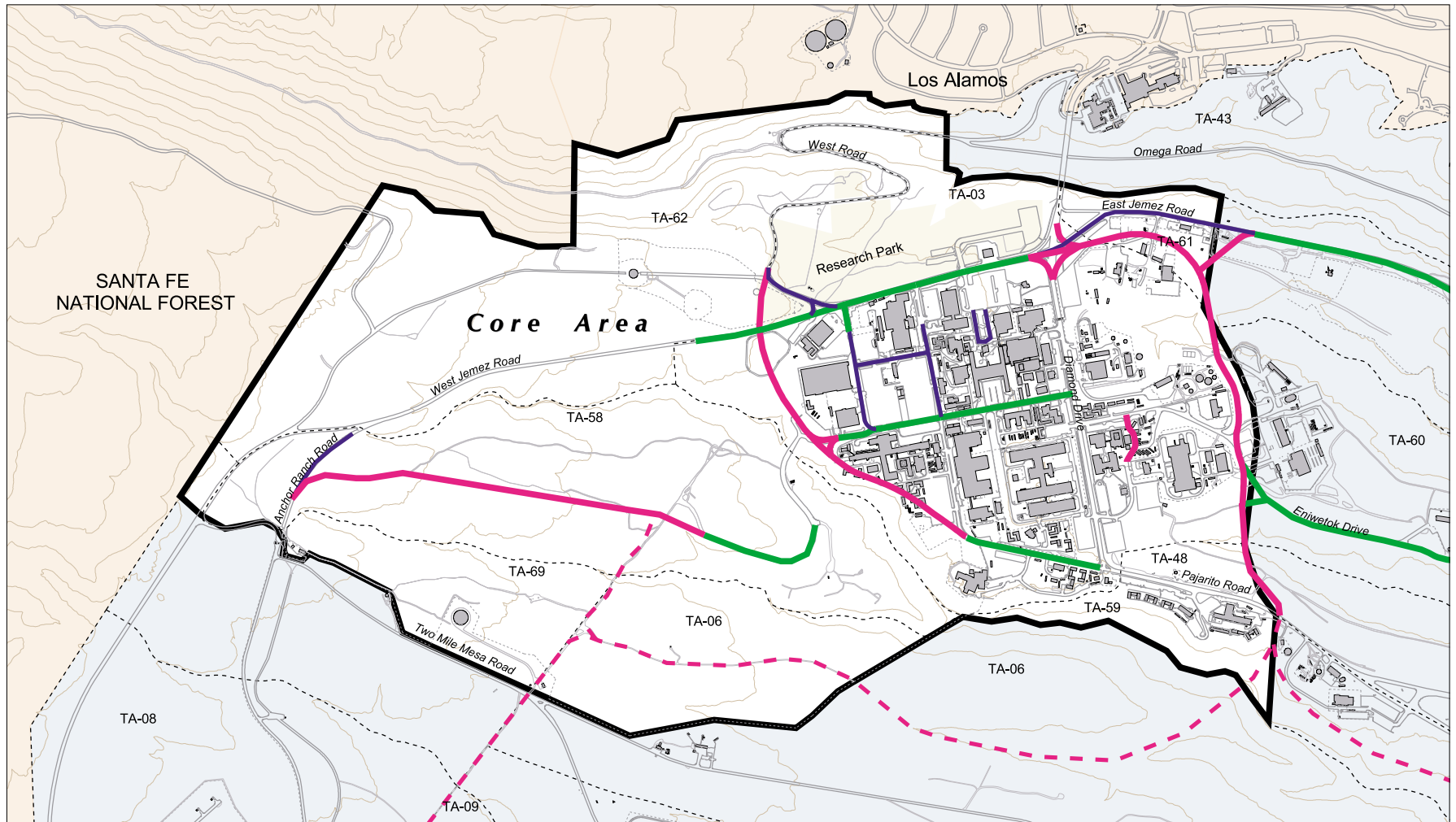
The eastern section of the perimeter road will travel through areas constrained by wetlands, streambeds, floodplains, and threatened and endangered species habitat buffer zones. Therefore, environmentally sensitive construction techniques will be required.

The road improvements in TA-03 will also contribute to security in the area. Road closures involving Special Nuclear Materials (SNM) will be accommodated without causing major traffic disruptions site-wide. The perimeter road will also allow traffic to enter and exit the town site without driving through the middle of TA-03.

- **Redesign the Omega Bridge/Diamond Drive and Jemez Road Intersection** area to improve traffic circulation. Exits from the perimeter road would access properly sized parking lots as well as TA-58 and the Sigma Mesa Planning Area.
- **Cluster Parking Lots Along the Proposed Loop Road** to organize parking away from the core secure area of TA-03.
- **Add traffic control devices and upgrade intersections along Jemez Road** to improve traffic flow during morning and evening rush hours and to accommodate traffic generated by the Research Park and Gateway developments.
- **Widen Bikini Atoll Road and the western portion of Mercury Road** to improve interior circulation.
- **Improve the existing access/service road in TA-58** to allow development of this area. Access improvements would traverse east-west across TA-58 from an intersection with the proposed perimeter road to West Jemez Road.
- **Provide for alternate transportation** including:
  - 1) bicycle and pedestrian routes, especially along the perimeter road,
  - 2) dedicated bus/shuttle stops,
  - 3) separate bicycle parking areas in parking lots.

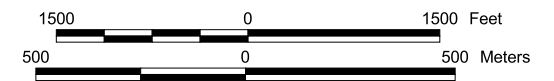
These improvements are needed in the Core Planning Area to accommodate the transportation needs of the large population base within TA-03 and to reduce vehicular traffic site-wide.

Map IV-B7: Core Area Future Transportation



LEGEND

- |  |                                      |  |                              |
|--|--------------------------------------|--|------------------------------|
|  | New Construction                     |  | Dept. of Energy Property     |
|  | Long Range Proposed New Construction |  | LANL Buildings               |
|  | Road Improvements                    |  | Non Dept. of Energy Property |
|  | Long Range Proposed Improved Roads   |  | Planning Area                |
|  | Road Elimination                     |  | Research Park                |



## 5. Security

Existing security in the Core Planning Area consists of the following:

1. A special nuclear materials area (CMR Building) bounded by a cohesive limited-security area on the west and north, and a large controlled-security area to east;
2. Two limited-security areas separated from the central limited-security area by public access roads; and
3. A large buffer area to the northwest.

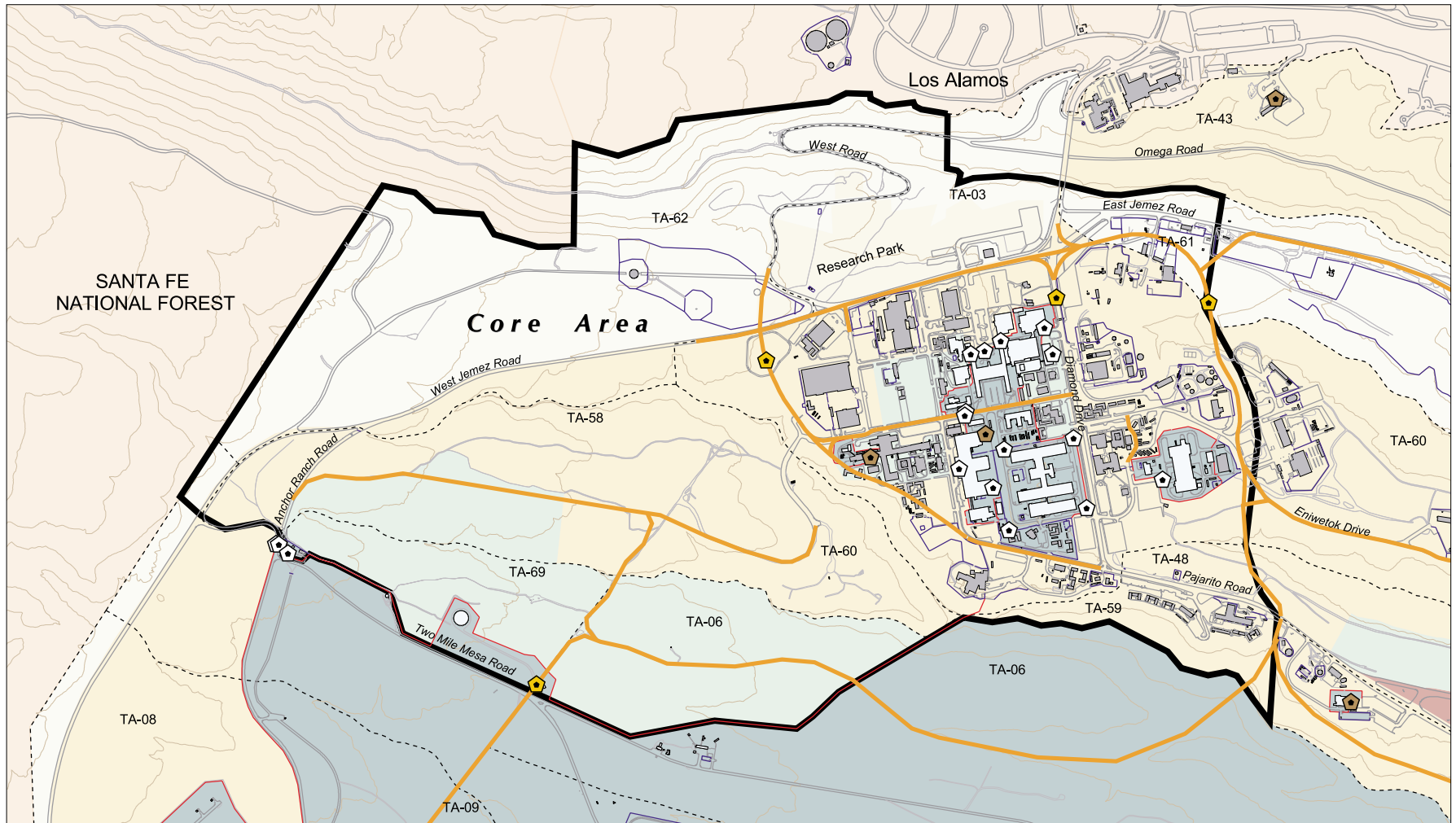
The Core Planning Area and Two-Mile Mesa North will remain primarily limited-security areas surrounded by controlled areas and security buffers.

The TA-03 Revitalization Plan increases aspects of physical security including graded layering and concentric security zones, setbacks from vehicular access, and increased access control with controlled access gates on primary thoroughfares. Along with an increase in security, a campus design is planned to enhance the work environment. More specifically, future limited security areas are planned to support the Strategic Computing Complex (SCC) and Nonproliferation and International Security Center (NISC) projects.

### a. Recommendations

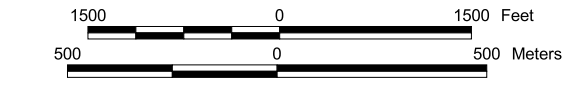
- A long-term goal could be to consolidate the TA-03 limited-security islands into one expanded limited-security area.
- Relocate the existing SNM functions at CMR to TA-55 and convert the area to limited security. All programs requiring Category I and II SNM security should be eliminated from the Core Planning Area.
- Develop Two-Mile Mesa North similar to the Core Planning Area with one expandable limited-security area surrounded by controlled-security areas.
- Develop TA-43 into a public access area as current functions are moved to Two-Mile Mesa North.
- Retain TA-59 as a controlled access area with a small internal limited-security area.

Map IV-B8: Core Area Existing and Future Security Areas



LEGEND

- |                              |                         |                                |
|------------------------------|-------------------------|--------------------------------|
| Industrial Fences            | Proposed Guard Stations | Secured Building               |
| Security Fences              | Active Guard Station    | Existing Limited Security Area |
| Proposed/Improve Roads       | Closed Guard Station    | Existing Protected Area        |
| Roads                        | Planning Area           | Future Limited Security Area   |
| Technical Area Boundaries    | Research Park           | Future Protected Area          |
| Non Dept. of Energy Property |                         | Security Buffer                |



## 6. *Utilities*

### a. *Water System*

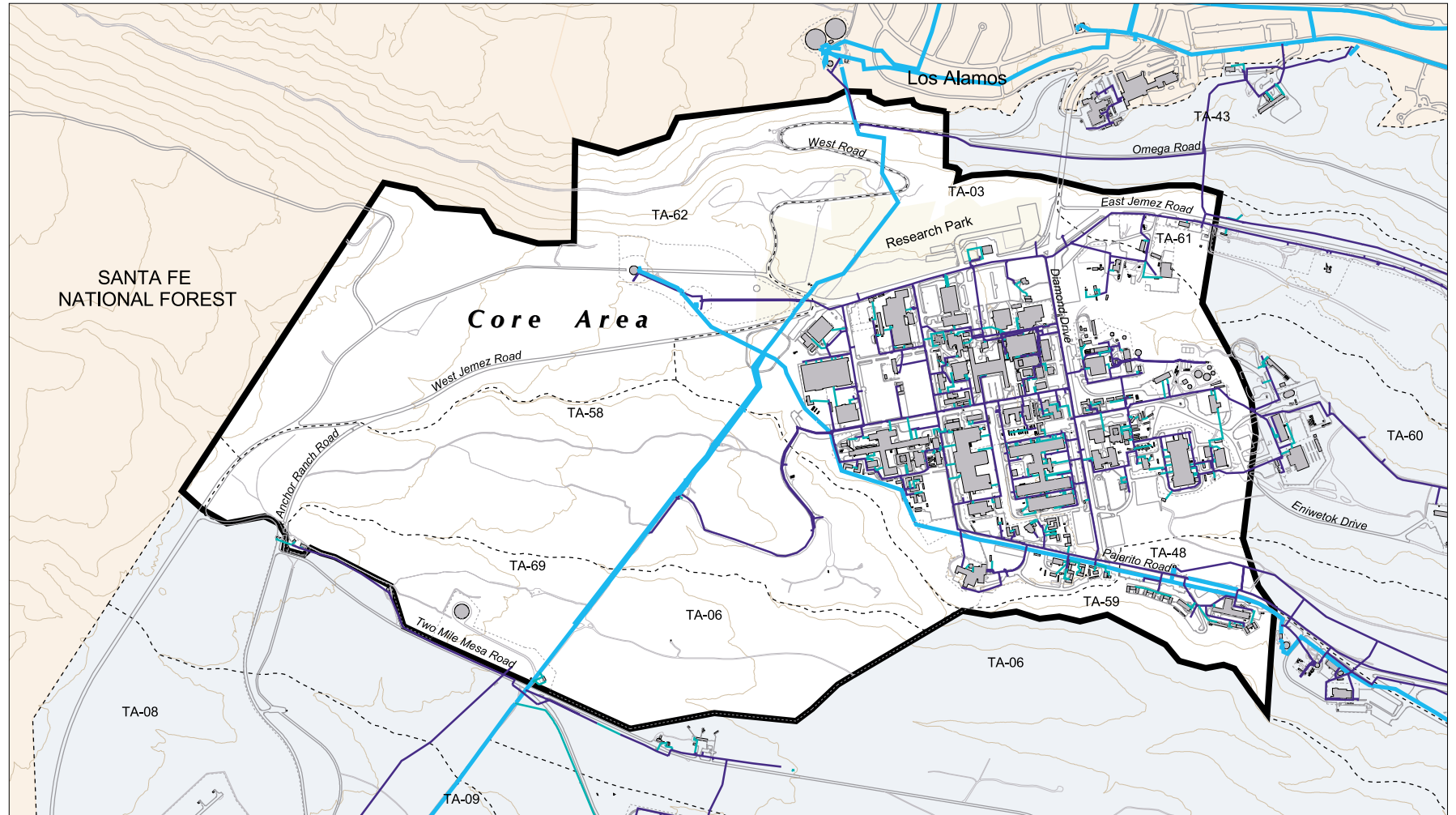
**Condition of Systems:** The water distribution system is in good condition throughout this planning area. No projects are required to improve any water system conditions.

**System Materials:** Pipe materials used in the water distribution system include cast iron, steel, asbestos cement, reinforced concrete, copper, ductile iron, and plastic. Cast iron has been replaced by ductile iron for distribution sized pipe. Steel and reinforced concrete are not common in today's systems of the Laboratory's size (greater than 24 inches diameter). Plastics and ductile iron dominate the water supply market for these sizes and fittings. Concerns regarding materials include:

- Replacement of asbestos cement pipe, particularly in areas where pipe may be disturbed for repair or replacement.
- Replace aged cast iron or steel pipe.

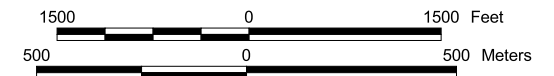
**System Capacities:** Fire hydrants should typically be connected to 6-inch-diameter pipe. Laboratory water service lines that provide for fire protection need to be replaced if they have diameters that are less than 6 inches.

Map IV-B9: Core Area Existing Water System



LEGEND

- Water Distribution Lines
- Water Service Lines
- Water Transmission Lines
- Planning Area
- Dept. of Energy Property
- LANL Buildings
- Non Dept. of Energy Property
- Research Park



**b. Sanitary Sewer System**

**Condition of System:** The sewer system is generally in good operating condition with the exception of a gravity pipe segment between manholes 769 and 770 in TA-16. The pipe in this segment appears to be collapsed, and the line requires daily pumping and hauling to the TA-03 truck collection drop-off. This line is scheduled for replacement.

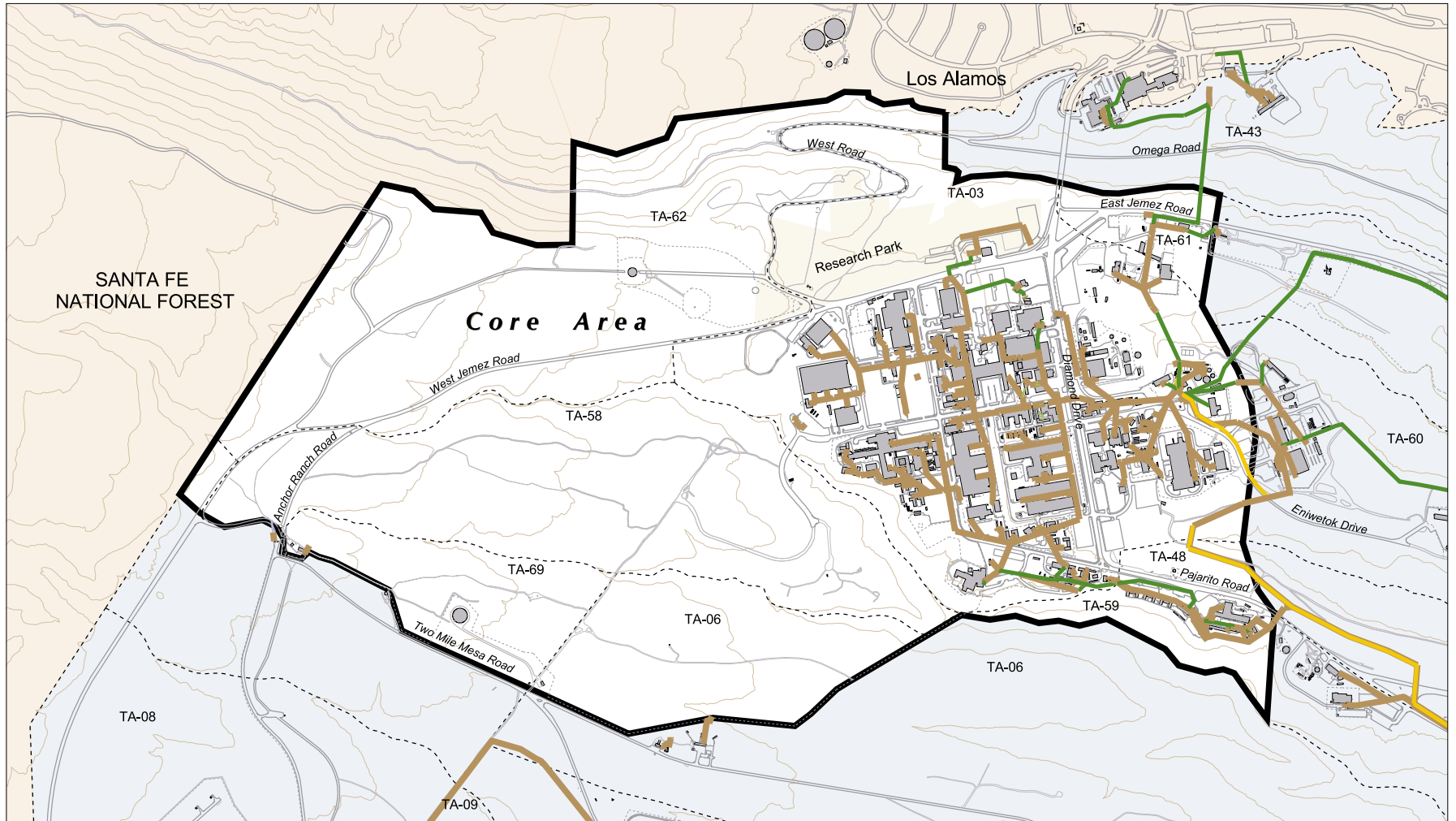
**System Materials:** Pipe materials used in the sewer system include cast iron, vitrified clay, steel, asbestos cement, reinforced concrete, copper, ductile iron, and plastic. Material concerns are:

- Replacement of concrete pipe that has shown evidence of interior deterioration from exposure to sewer gases.
- Replacement of asbestos cement pipe, especially where it could be disturbed by maintenance operations.
- General condition of aged vitrified clay pipe.











**System Capacities:** The sewer system has no capacity issues, with the exception of limitations set by lift station pumps. There is currently a strategy in place to abandon lift stations where economically feasible and replace with gravity flow. Those gravity systems will accommodate increased demands and require considerably less maintenance.

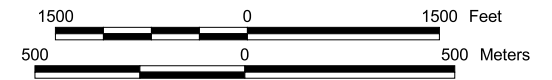


Map IV-B10: Core Area Existing Sanitary Sewer System



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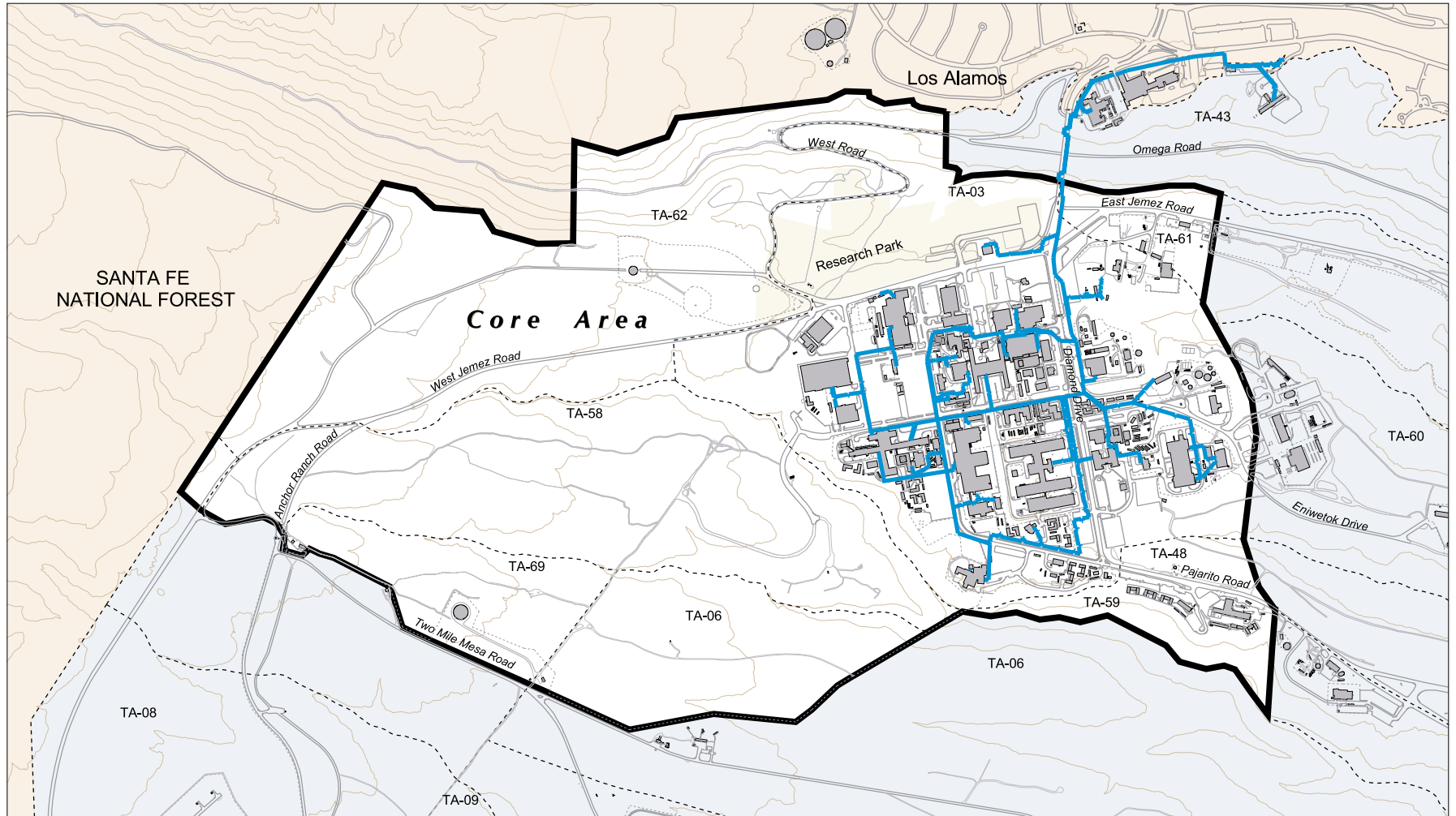
- |  |  |
|--|--|
|  Gravity Lines    |  Dept. of Energy Property     |
|  Effluent Lines   |  LANL Buildings               |
|  Force Main Lines |  Non Dept. of Energy Property |
|  Drain Lines      |  Planning Area                |
|  Service Lines    |  Research Park                |



**c. *Steam System***

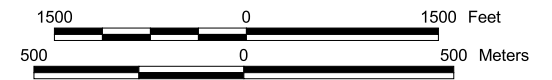
This planning area demonstrates areas of the worst condensated pipe condition. Steel pipe sections, just south of the Omega Bridge, have required five repairs during the past 24 months of 1988 and 1999. Damage could be caused by surface conditions and will be controlled when the total area is replaced with insulated sections.

Map IV-B11: Core Area Existing Steam System



LEGEND

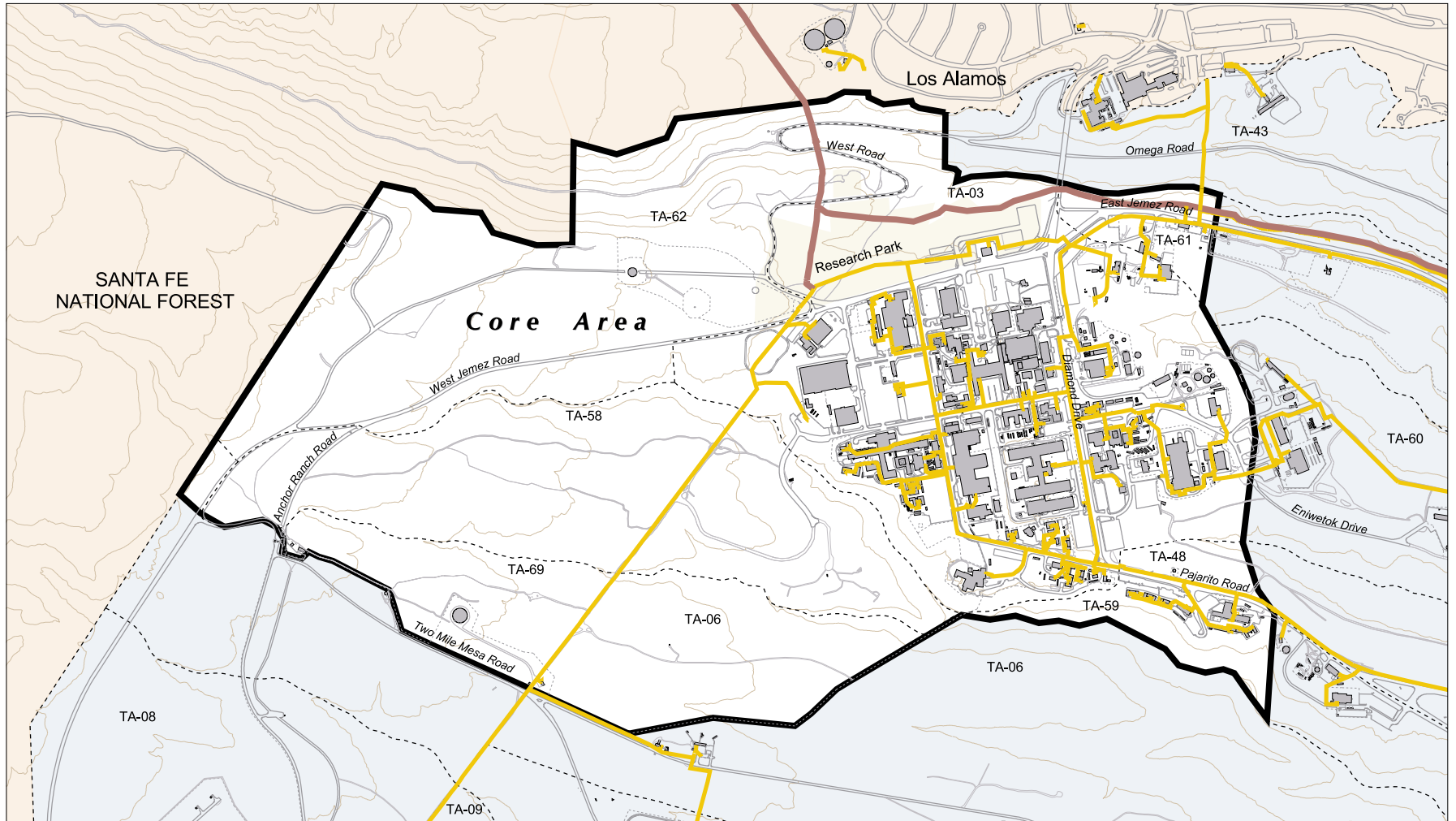
-  Steam Lines
-  Planning Area
-  Research Park
-  Dept. of Energy Property
-  LANL Buildings
-  Non Dept. of Energy Property





***d. Natural Gas System***

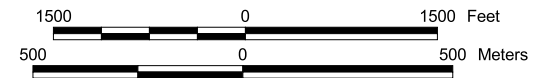
No issues have been identified.

Map IV-B12: Core Area Existing Natural Gas System



LEGEND

-  Natural Gas Distribution
-  Natural Gas Transmission
-  Planning Area
-  Research Park
-  Dept. of Energy Property
-  LANL Buildings
-  Non Dept. of Energy Property



### ***e. Electric Transmission and Distribution System***

The 13.8kV switchgear at several locations is over 40 years old and is obsolete for the current system. Replacement parts are no longer available. A budget item must be placed in each fiscal year business plan to continually replace inadequate switchgear with the latest vacuum interrupter equipment until all have been replaced. Hazardous failures have already occurred and will continue unless corrective action is taken.

The oil circuit breakers (OCBs) at the 115kV substations are 30 years old and approaching need for replacement. In their present configuration, the OCBs may be inadequate for backup switching for the SF<sub>6</sub> power circuit breakers (PCBs) on the 115kV capacitor banks of for the Static Var Compensator (SVC).

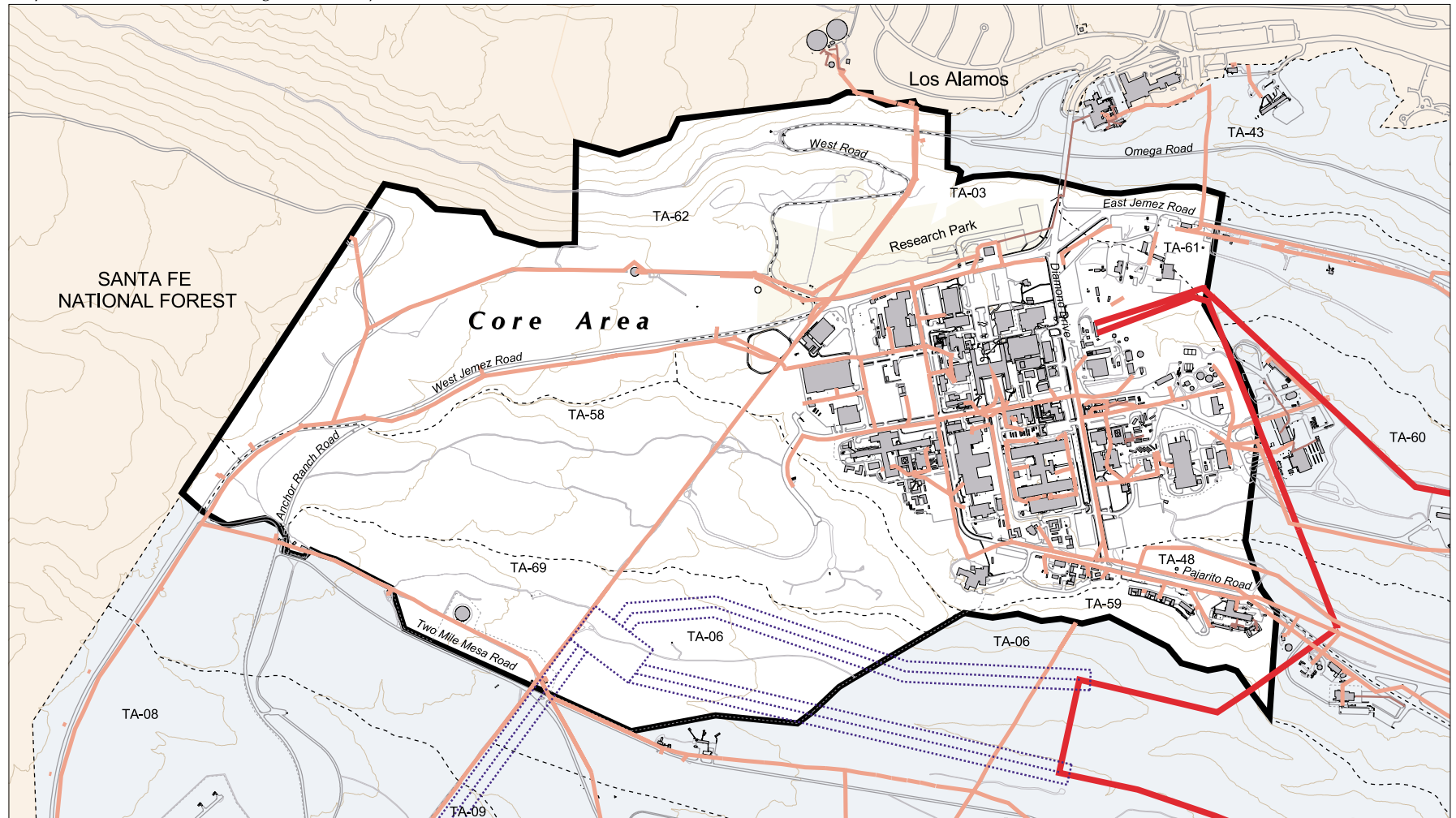
One-third of the lightning-caused interruptions occur on the single S-17 13.8 kV distribution circuit. Improved insulation coordination on this circuit, the longest aerial circuit at the Laboratory, is a typical example of specific upgrades that can improve distribution system reliability for the entire site.

There are eight remaining transformers that are PCB contaminated. These transformers should either be replaced or refilled with a suitable dielectric fluid to mitigate the PCB concerns.









Two 115kV/13.8kV step-down transformers provide electric power delivered to the Laboratory and the Los Alamos town site. The transformers were installed in 1957 and 1964 and should be on a program for replacement. Further, transformer capacity redundancy is presently inadequate. Consideration should therefore be given to adding additional units prior to replacing older units so that shortfalls in redundancy are corrected as soon as practicable.

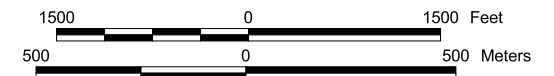
The present on-site generation plant will have been restored to its original nameplate rating of 20MW when a replacement cooling tower is completed in the fall of 1999. Prospects for enhancement of on-site cogeneration capability by as much as 20-40MW would lower the demands on imported power.

Map IV-B13: Core Area Existing Electrical System



LEGEND

-  Proposed 155 kv Transmission Line
-  Electrical Transmission
-  Electrical Distribution
-  Electrical Service
-  Dept. of Energy Property
-  LANL Buildings
-  Non Dept. of Energy Property
-  Planning Area



### 7. Facilities

The Core Planning Area houses approximately 50% of the total Laboratory population. About 3.3 million GSF of space and 42% of the Laboratory’s total footage is contained in 291 structures. In terms of facility space and population, it is the largest of the planning areas. Fully 54% of the facility space is rated as poor, and 57% of the Core Planning Area workforce is housed in poor or failing buildings. Almost half of the facility space is used for laboratories. Service is the next largest space usage, with approximately 26% of the total gross square footage.

The Core Planning Area contains more square footage than the rest of the Laboratory. However, almost all of the space is 40 years old or older as is typical of facilities within the Laboratory. Many facilities need to be demolished due to seismic vulnerability or poor/fail condition assessment ratings. These facilities need replacement. Some facilities are to be removed due to their location where future development is planned. In addition, a number of facilities are to be removed because they are trailers or transportables. Sheds and transportainers also are to be removed or relocated to eliminate excess clutter.

Table IV-B2: Core Planning Area Facilities Condition

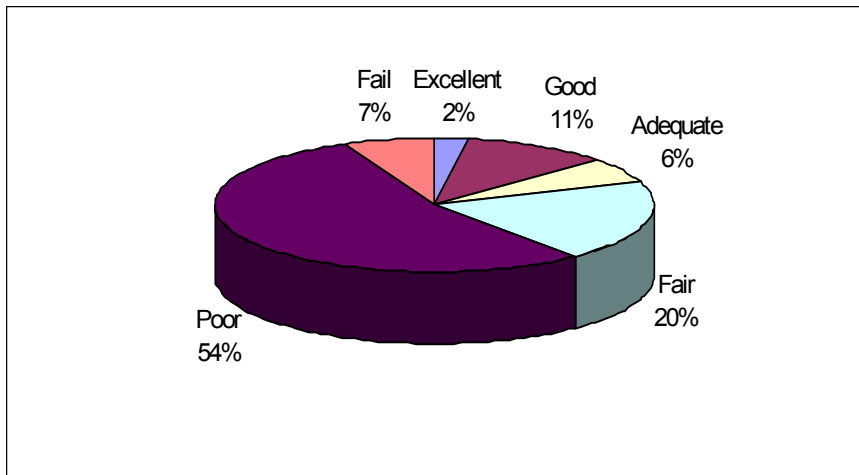


Table IV-B3: Facilities Employee Environment Condition Chart

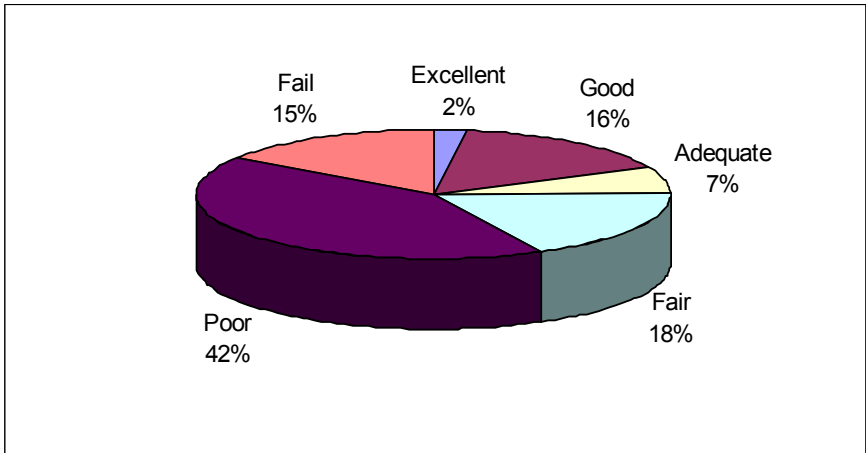
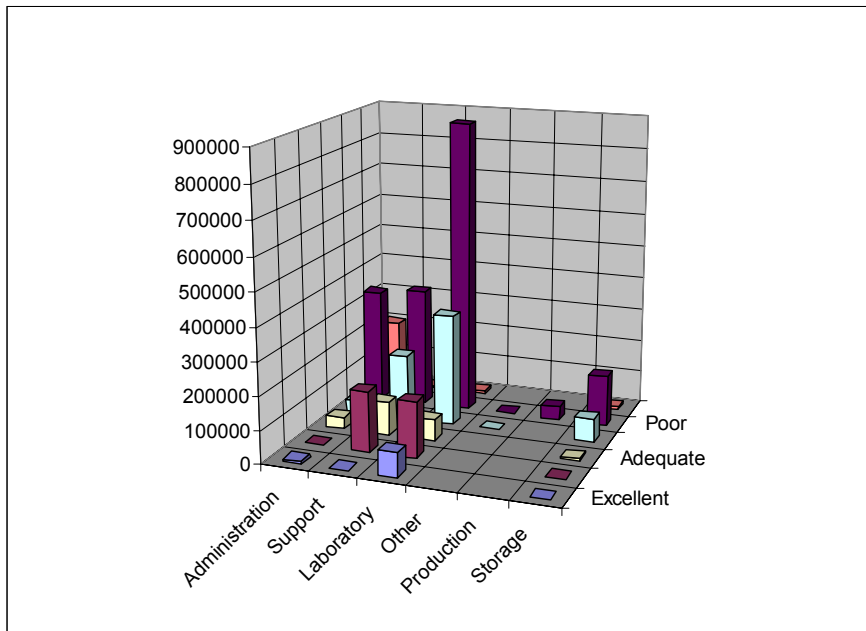


Table IV-B4: Facilities Use Chart





## 8. *Environment, Safety, and Health*

The Core Planning Area houses the CMR Building, the Sigma Complex, the Laboratory's chemical warehouse and numerous laboratories. These facilities contain hazardous materials of various types. The JCNNM shops, steam plant and roads and grounds are within the Core Planning Area. The physics building, the DX shops and the BUS warehouse buildings are within TA-03. All these facilities contain numerous industrial hazardous materials of various types.

To the north and south of TA-03 are canyons. To the west is the undeveloped TA-58 area and to the east are several undeveloped canyons. Some developments on mesa tops and others are undeveloped. All of these surrounding areas contain habitat that supports local wildlife and plant life. The northern portion of TAs-03, -61, and -62 lie within federally protected species habitat. Hundred year floodplains and associated and isolated wetlands run through the area. All of these Planning areas can be impacted by activities within the Core Planning Area.

TAs-58, -62 and portions of TAs-06 and 69 in this planning area are essentially Reserve but contain on-going archeological survey areas. In addition, TAs -06, -58, and -69 suffer from severe to moderate topographic (slope) constraints.

Although the probabilities for seismic surface rupture are extremely low, the Rendija Canyon fault zone, the Pajarito fault zone, and the east-southeast trending cross faults must be considered potentially active, or "capable" in the definitions for the Code of Federal Regulations. If a seismic event were to occur, damage would almost exclusively be due to shaking and not to surface rupture.

For facility siting and new construction, these capable fault zones should be treated in a fashion similar to the special study zones of California, site-specific fault investigations for new construction should be conducted, and siting new facilities over the trace of a potentially active fault should be avoided.

## 9. *Quality Environment*

Within the urban area of TA-03, there is very little that is undeveloped. The central area of TA-03 is consumed in structures, parking lots, roads or infrastructure. The site is very industrial in character with very few human scale, aesthetically pleasing environments. Most sidewalks are substandard in size and do not allow two people to comfortably pass each other.

One notable natural area within TA-03 is the forested land around the University House. This is an area defined by past senior management to be left undisturbed and the trees uncut. In the TA-03 Revitalization Plan, these native trees are to provide a strong visual image at the entrance to the Laboratory.

The Core Planning Area is situated in a forested mountain environment. It is the strongest positive image of the area. However, within TA-03, the lack of trees is indicative of the lack of outdoor human scale spaces. For the most part TA-03 has not been developed in harmony with its surrounding environment. The TA-03 Revitalization Plan proposes aggressive redevelopment of the TA-03 outdoor areas to reflect the surrounding natural environment. The end goal is to produce a quality pedestrian campus environment in the Core Planning Area of the Laboratory. In the aggressive hiring climate and given the high quality campuses of competitive corporate employers, enhancing the quality of the Laboratory toward a pleasing human environment is a necessary component of attracting quality staff.

<b>Core Planning Area Assessment/Needs Summary</b>			
<b>Current Functions/Capability</b>	<b>Current Mission Activity</b>	<b>Forecasted Functions/Capabilities</b>	<b>Plan Discussion</b>
<b>Computing Facilities</b>			
High Capacity Computing	Weapons Design and Modeling	Significant expansion in capability needed	Build a new facility with flexible high computing capabilities
General Central Computing	Support Data Management	Continue as current	Existing facilities are adequate but SM132 and SM200 are approaching end of their life cycle.
Computing Labs & Research	Weapons Programs, Bio Science, General Science	Expansion of capability needed	As more research migrates from labs to modeling/analysis, more computing office/lab space is needed.
<b>Chemical Metallurgy Research Facility</b>			
Analytical Chemistry & Characterization	-NWP manufacturing -NWP surveillance -NWP certification -NWP nuclear materials	Continue as current Remove Category I/II SNM from CMR by 2010.	Function is expected to continue however, CMR facility is not suitable as a nuclear facility and the NW manufacturing and surveillance programs are planning to be out of CMR in less than 10 years. Upgrades will continue over the next 10 years to maintain building functionality for NW. Reuse alternatives to demolition should be considered.
<b>Van de Graaf Facility</b>			
Ion Beam Experiments	None	None	Decontaminate and decommission this surplus facility.
<b>Material Science Facilities</b>			
Materials Research	NWP non-nuclear materials and components  Work for Others	Continue as current	MSL is a relatively new facility. CMS complex is older. No plans at this time to expand or refurbish these facilities.

<i>Needed Development</i>	<i>Proposed Projects</i>	<i>Land Use</i>	<i>Transp.</i>	<i>Security</i>	<i>Utilities</i>	<i>Facilities</i>	<i>Quality</i>	<i>ESH</i>
Strategic Computing Complex	Strategic Computing Complex	○	○	○	○	○	○	○
TA-03 Phase II Revitalization space	No project							
TA-03 Phase II Revitalization space	No project							
Move SNM activities at CMR to TA-55  All category I/II SNM security eliminated from Core Planning Area  Reuse plan for CMR	CMR Relocation  No project  No project	●	●	●	●	●	●	●
Van de Graaf D&D	Van de Graaf D&D	●	○	○	○	●	●	○
Remove trailers, transportables, and sheds	No project							

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<i>Current Functions/Capability</i>	<i>Current Mission Activity</i>	<i>Forecasted Functions/Capabilities</i>	<i>Plan Discussion</i>

<i>Needed Development</i>	<i>Proposed Projects</i>	<i>Land Use</i>	<i>Transp.</i>	<i>Security</i>	<i>Utilities</i>	<i>Facilities</i>	<i>Quality</i>	<i>ESH</i>

<b><i>Core Planning Area Assessment/Needs Summary</i></b>			
<b><i>Current Functions/Capability</i></b>	<b><i>Current Mission Activity</i></b>	<b><i>Forecasted Functions/Capabilities</i></b>	<b><i>Plan Discussion</i></b>
<b>Sigma Complex</b>			
Material Fabrication and Assembly	NWP manufacturing	Continue as current	The CMIP project and pit rebuild programs may require additional parts manufacturing capabilities.
<b>ESA Shops Facility</b>			
Parts Machining	NWP manufacturing	Continue as current	The CMIP project and pit rebuild programs may require additional parts manufacturing capabilities.
Records Storage	NWP Surveillance and more	Continue as current	Future use of high bays in facility may include records storage. NWP classified documents plan to move into the shops building.
<b>Science/Programmatic Labs and Offices - P/NIS Divisions</b>			
Laboratories and Research Offices	-Inertial confinement fusion and radiation physics -Basic/applied research & technology development	Continue as current	Replace temporary structures with permanent facilities.
<b>Science/Programmatic Labs and Offices - T/Misc. Divisions</b>			
Laboratories and Research Offices	Basic/applied research & technology development	Continue as current	Replace aged and temporary spaces with permanent.

<i>Needed Development</i>	<i>Proposed Projects</i>	<i>Land Use</i>	<i>Transp.</i>	<i>Security</i>	<i>Utilities</i>	<i>Facilities</i>	<i>Quality</i>	<i>ESH</i>
Interior alterations/upgrades as necessary	CMIP Improvements	○	○	●	○	●	○	●
Interior alterations/upgrades as necessary	CMIP Improvements	○	○	●	●	●	●	●
Secure record storage for inactive classified documents	Secure record storage for inactive classified documents	○	○	●	○	●	●	○
Construct NISC  TA-03 Revitalization Phase II spaces to remove and replace trailers, transportables, and sheds	NISC Building  No project	○	○	○	○	○	○	○
-Remove trailers, transportables and sheds  -Remove Sherwood Building  -Remove Scylac Building	Line Item/Other buildings Revitalization Program (Series of GPP buildings)  Remove Sherwood, Scylac	○	○	○	○	○	○	○

<b><i>Core Planning Area Assessment/Needs Summary</i></b>			
<b><i>Current Functions/Capability</i></b>	<b><i>Current Mission Activity</i></b>	<b><i>Forecasted Functions/Capabilities</i></b>	<b><i>Plan Discussion</i></b>
<b>Lab Administrative &amp; Support Facilities</b>			
General Office Space	General program support functions	Limited and/or no new general office space for support functions	Move support organizations into suitable new or modified space in DOE facilities. This results in more efficient and secure land use and traffic patterns
General Office, Meeting, and Display Space	Community relations, education, and interfaces	Continue general office, meeting, and display space	Continue to utilize leased facilities for community relations and public/corporate interface functions.
General Offices	Administrative Support and General Administration	Continued need for general administrative space	The majority of administrative and support office space is in substandard and temporary facilities. Lack of adequate space has driven many organizations out of DOE owned facilities. There is a significant need to revitalize space for these functions.
General Offices	Program Research Offices and Labs	Increased need for program research offices.	Laboratory general administration and program research is co-located in the Administration Building. Substandard program research space needs to be replaced with facilities that better accommodate collaborative work and attract the next generation of researchers. This space should be separated from general administrative space.



<i>Needed Development</i>	<i>Proposed Projects</i>	<i>Land Use</i>	<i>Transp.</i>	<i>Security</i>	<i>Utilities</i>	<i>Facilities</i>	<i>Quality</i>	<i>ESH</i>
No project	No project							
Auditorium facility to accommodate public and staff information and training needs	No project							
TA-03 Revitalization - Remove Administration Building (03-43)  - Construct new administration building  - Remove trailers and transportables  - Construct new classified and unclassified offices	TA-03 Revitalization - Remove Administration Building (03-43)  - Construct new administration building  - Remove trailers and transportables  - Construct new classified and unclassified offices	○	○	○	○	○	○	○
TA-03 Revitalization  - Theoretical Studies  - Computational Physics	TA-03 Revitalization  - Theoretical Studies  - Computational Physics	○	○	○	○	○	○	○

<b>Core Planning Area Assessment/Needs Summary</b>			
<i>Current Functions/Capability</i>	<i>Current Mission Activity</i>	<i>Forecasted Functions/Capabilities</i>	<i>Plan Discussion</i>
<b>Research Park (LAEDC) Facilities</b>			
Collaborative Research Offices and Labs	Basic research and technology development	Collaborative efforts are anticipated to increase	This is a private venture of the LAEDC on leased DOE lands.
<b>CIC Support Facilities</b>			
Graphic, Media, & Information Support Offices and Labs	Program, supporting, and administrative missions	Continue as current	Some space is in the way of TA-03 revitalization and will need to be relocated/replaced.
<b>Warehousing &amp; Material Distribution Facilities</b>			
Just-in-Time Receiving and Distribution	Admin supplies	Reduction in space required for functions	Current warehouse space is much larger than needed and obsolete. New, smaller, more efficient facilities are being planned.
Parts and Materials Receiving, Storage, and Distribution	Program research supplies/materials	Continue as current	Some capacity may be included in the new warehousing plans. Other space such as the gas plant functions are likely to be maintained as current.

<i>Needed Development</i>	<i>Proposed Projects</i>	<i>Land Use</i>	<i>Transp.</i>	<i>Security</i>	<i>Utilities</i>	<i>Facilities</i>	<i>Quality</i>	<i>ESH</i>
Research Park projects	Research Park projects	○	○	○	○	○	○	○
TA-03 Revitalization Phase I	TA-03 Revitalization Phase I	○	○	○	○	○	○	○
Warehouse relocation	Warehouse relocation	○	○	○	○	○	○	○
No project	No project							

<b>Core Planning Area Assessment/Needs Summary</b>			
<i>Current Functions/Capability</i>	<i>Current Mission Activity</i>	<i>Forecasted Functions/Capabilities</i>	<i>Plan Discussion</i>
<b>JCN Central Support Shops</b>			
SSS Administrative & Work Control Space	Support of all facility and some program activities	Continue as current	Administration functions for a prime SSS contractor is expected to continue. Size of the SSS administration is somewhat dependent on the level/quantity of services requested. Location of admin functions should be close to the central shops and craft areas.
Central Shops	Support of all facility and some program activities	Some central & specialty shops for the facilities and programs is to continue but needs to be evaluated	FMUs with FWO need to assess the level and quantity of services of the SSS.
<b>Central Steam/Power Plant</b>			
Generate Steam and Supplemental/Backup Electricity	TA-03 program and admin facilities	Increased electric demand is anticipated. Steam demand to remain constant or decrease with newer facilities	Steam plant future demand is unclear and the distribution systems are suspect. Revitalization plans will address some of the issues that will require this facility.
<b>Infrastructure/Grounds Support Facilities</b>			
Yards/ Storage/ Maintenance Areas for Equipment and Materials	Roads and Grounds supporting services	Function is to be maintained although some specific functions may be eliminated or reduced upon further evaluation.	Relocate these functions away from the Laboratory's front door and co-locate with other SSS facilities on Sigma Mesa.

<i>Needed Development</i>	<i>Proposed Projects</i>	<i>Land Use</i>	<i>Transp.</i>	<i>Security</i>	<i>Utilities</i>	<i>Facilities</i>	<i>Quality</i>	<i>ESH</i>
JCNNM Consolidation to possible sites at Sigma Mesa. - East section of loop road at TA-03 to access JCNNM relocation sites at Sigma Mesa  - Demolition of current JCN areas for other development  - Relocation to Sigma Mesa sites	East section of loop road at TA-03 to access JCNNM relocation sites at Sigma Mesa  Demolition of current JCN areas for other development  Relocation to Sigma Mesa sites	○	○	○	○	○	○	○
JCNNM Consolidation	JCNNM Consolidation	○	○	○	○	○	○	○
No projects	No projects	○	○	●	●	●	●	○
JCNNM Consolidation	JCNNM Consolidation	●	●	○	○	●	●	●

<b>Core Planning Area Assessment/Needs Summary</b>			
<b>Current Functions/Capability</b>	<b>Current Mission Activity</b>	<b>Forecasted Functions/Capabilities</b>	<b>Plan Discussion</b>
<b>Infrastructure Facilities</b>			
Transportation/Parking	Provide access and parking to programs and support functions in the area	Increased parking demand and increase security need to separate public circulation from secure facilities	Parking and road improvements are needed to accommodate TA-03 Revitalization Plan. Development of the TA-03 perimeter loop road is priority for the plan. Relocation of parking to the perimeter of the core area of TA-03 is desired for reduction of security and safety concerns. As parking facilities move to the perimeter of the site, shuttle bus, pedestrian and bicycle facilities will be needed to move employees from the edges of the site to the core. General improvements for aging local roads, intersections and traffic controls must continue.

<i>Needed Development</i>	<i>Proposed Projects</i>	<i>Land Use</i>	<i>Transp.</i>	<i>Security</i>	<i>Utilities</i>	<i>Facilities</i>	<i>Quality</i>	<i>ESH</i>
Construct parking structure	TA-03 Revitalization Phase 1 Parking Structure	○	○	○	○	○	○	○
Replace parking due to construction of SCC-NISC	Satellite Parking/ Intersection	○	○	○	○	○	○	○
Construct perimeter loop road	East Loop Road Phase 1 (Gateway Connection)	○	○	○	○	○	○	○
	West Road Connector to Pajarito Road	○	○	○	○	○	○	○
	West Road Connector to Mercury	○	○	○	○	○	○	○
Upgrade traffic controls and intersections along Jemez Drive	Traffic & Parking Upgrades	○	○	○	○	○	○	○
Widen Bikini Atoll Road and western Mercury Road	No project							
Redesign Omega Bridge/Diamond Drive intersection	No project							
Construct parking lots at TA-58	No project							
Improve access road to TA-58	No project							
Build pedestrian and bicycle routes	No project							
Build transit improvement with roads	No project							

<b><i>Core Planning Area Assessment/Needs Summary</i></b>			
<b><i>Current Functions/Capability</i></b>	<b><i>Current Mission Activity</i></b>	<b><i>Forecasted Functions/Capabilities</i></b>	<b><i>Plan Discussion</i></b>
<b>Infrastructure Facilities</b>			
Utility/Infrastructure Systems	Provide utility services to facilities and programs	Demand to remain constant but distribution locations to be highly changed.	Systems to be replaced with the TA-03 Revitalization and new facilities planned in the area. Consolidation of TA-03 Category I/II security into one area is a goal. A safe pedestrian network of sidewalks and trails is desired by employees. Site improvement of the core area is an important component creating a quality environment that will help to retain and attract current and future employees.



<i>Needed Development</i>	<i>Proposed Projects</i>	<i>Land Use</i>	<i>Transp.</i>	<i>Security</i>	<i>Utilities</i>	<i>Facilities</i>	<i>Quality</i>	<i>ESH</i>
Replace steam steel pipe section south of Omega Bridge	On-going utility maintenance	○	○	○	○	○	○	○
Upsize undersized sewer lines in TA-03: - Mercury collector pipe and 10” line to WW treatment facility.	On-going utility maintenance	○	○	○	○	○	○	○
General utility improvements: - Replace transite, aged cast iron or steel, and deteriorated concrete pipes - Replace less than 6” firelines - Repair misc. sections of sewer at TA-03 - Abandon lift stations, convert to gravity flow where feasible. - Replace 13.9kV switch gear, oil circuit breakers, (2) 115kV/13.8kV stepdown transformers - Improve insulation on S-17 13.8kV distribution circuit - Replace or refill 8 PCB transformers - Add transformer redundancy	On-going utility maintenance	○	○	○	○	○	○	○
Close Pajarito Road to public access	No project							
Consolidate TA-03 security into one area	No project							
Improve sidewalks system in TA-03	No project							
Develop landscaping and pedestrian malls	No project							

