



Environment: Cultural Resources

Garth Beers



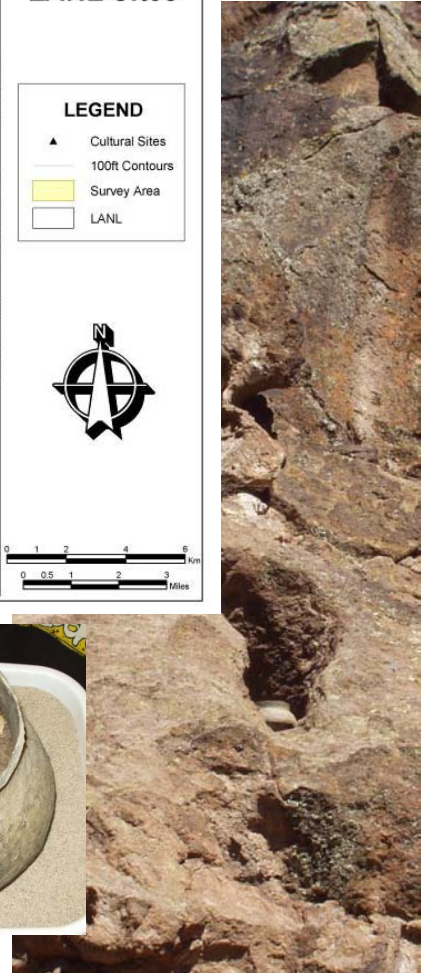
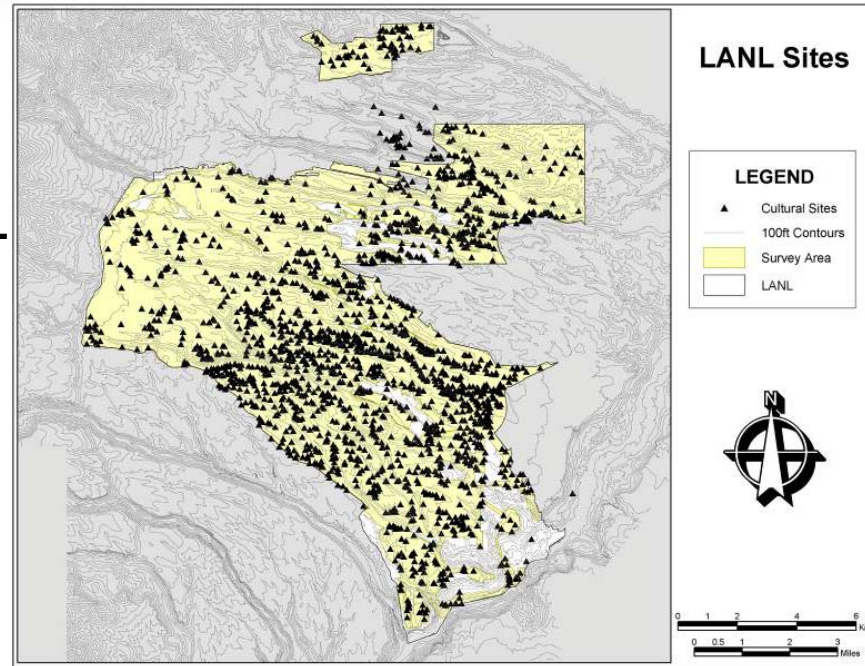
LAUR-09-03466



LANL Archaeological Sites



- **1800 archaeological sites & 350 historic buildings at LANL**
- **Small archaeological projects**
 - 20-30 annual surveys
- **Land Conveyance and Transfer Project**
 - 40 archaeological excavations
- **Historic Building Assessment**
 - 75-100 annual evaluations
- **Native American Consultation**
 - Cultural Affiliation, Traditional Cultural Properties, and Native American Graves Protection and Repatriation Act
- **Project Review for Resource Protection**
 - 800-1000 annual project reviews



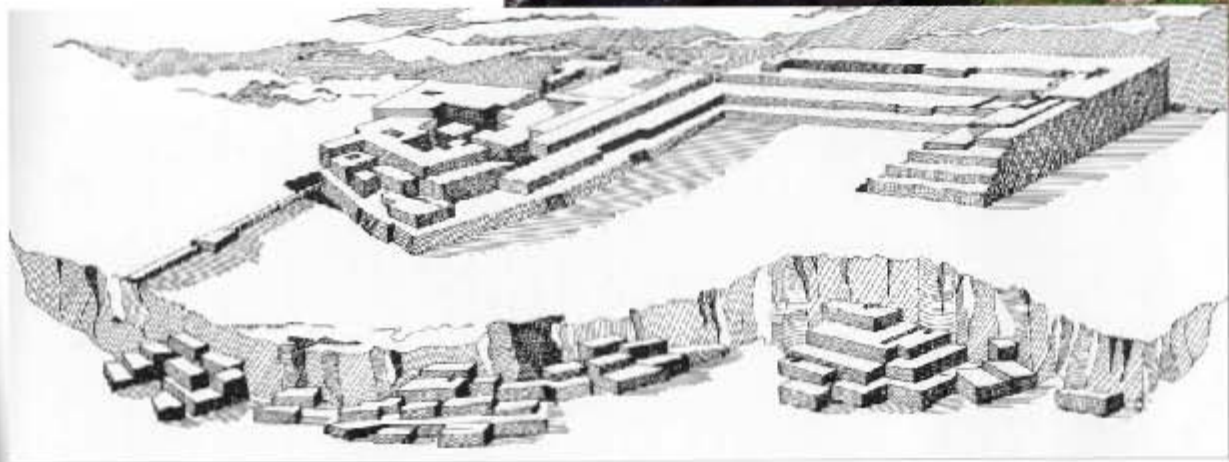
Archeological sites & special discoveries



LANL Archaeological Sites



TA-54 Tsirege Pueblo (AD 1300-1600)



Tsirege Pueblo



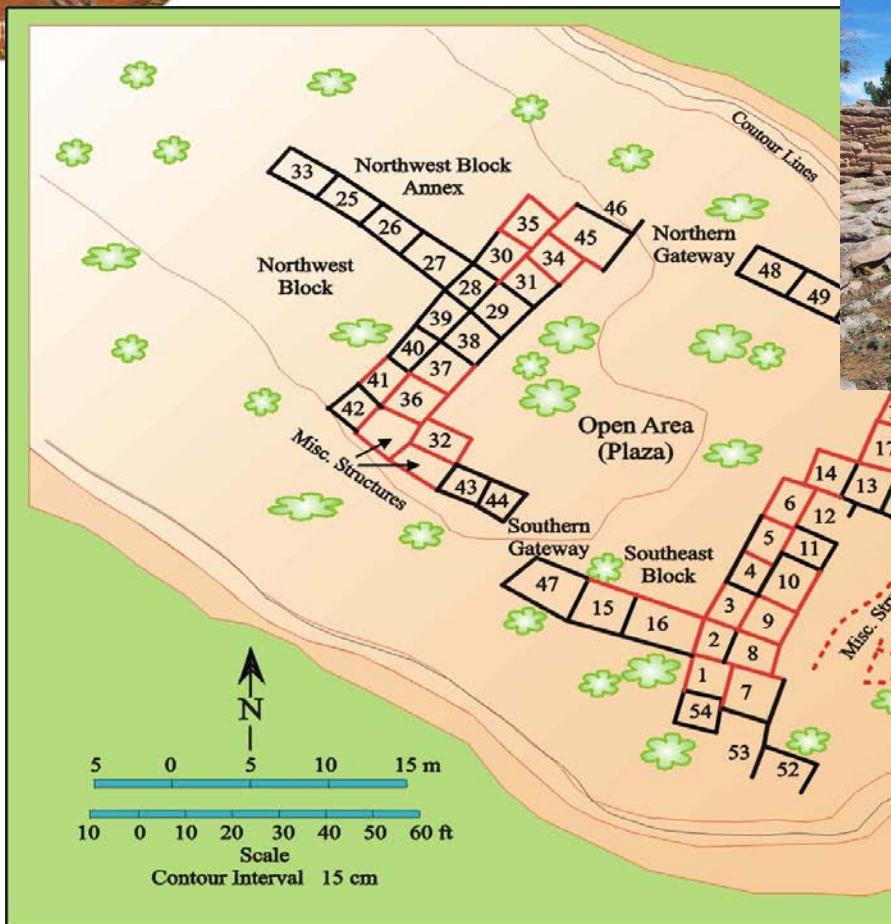
LANL Archaeological Sites



Cavates & petroglyphs



LANL Archaeological Sites



Nake'muu Pueblo

LANL pre-Manhattan Project aspects



*Ranch School
Fuller Lodge*

*Homestead –
Romero cabin*



pre-war bean field



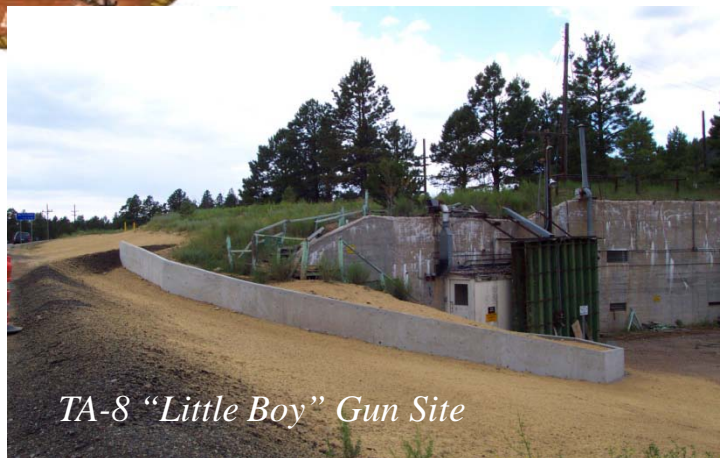
LANL Manhattan Project Historical Sites



V-Site rehabilitation



LANL Manhattan Project Historical Sites



TA-8 "Little Boy" Gun Site



TA-22 "Fat Man" Assembly Quonset Hut

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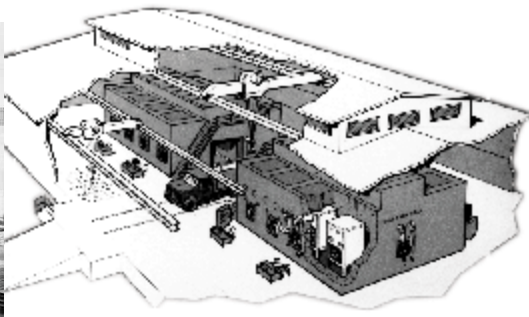
TA-18 Slotin Criticality Accident Building



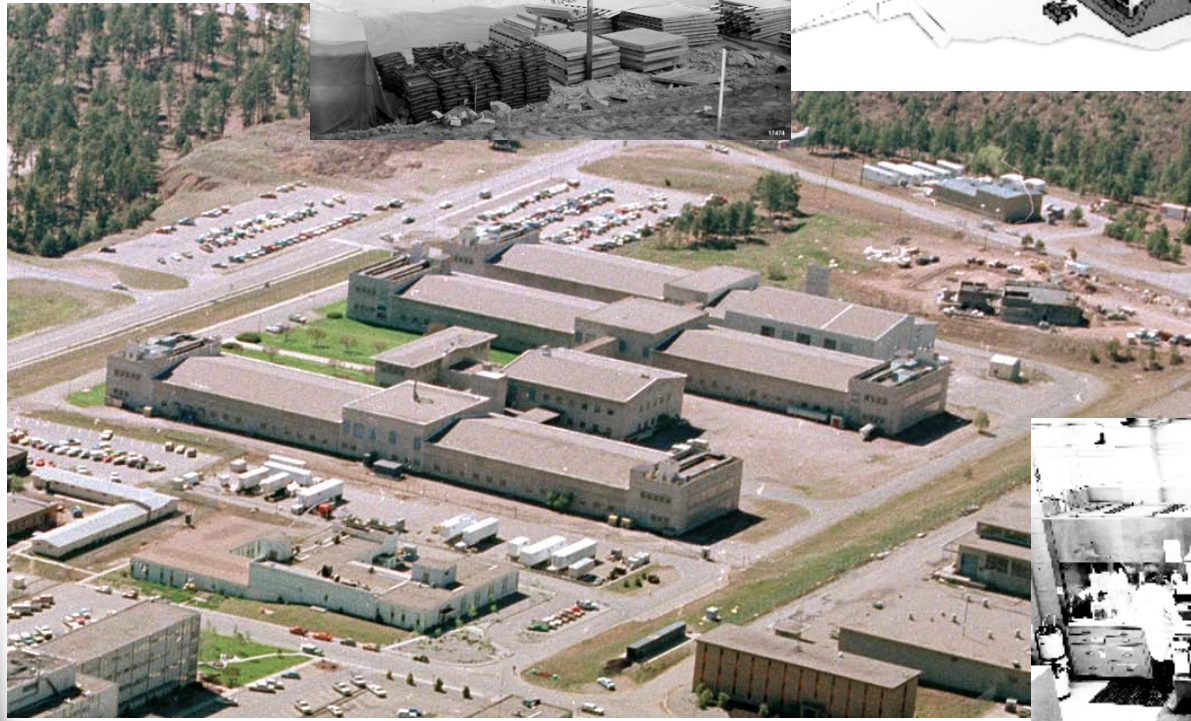
TA-6 Concrete Bowl for Plutonium Recovery



LANL Cold War Historical Sites



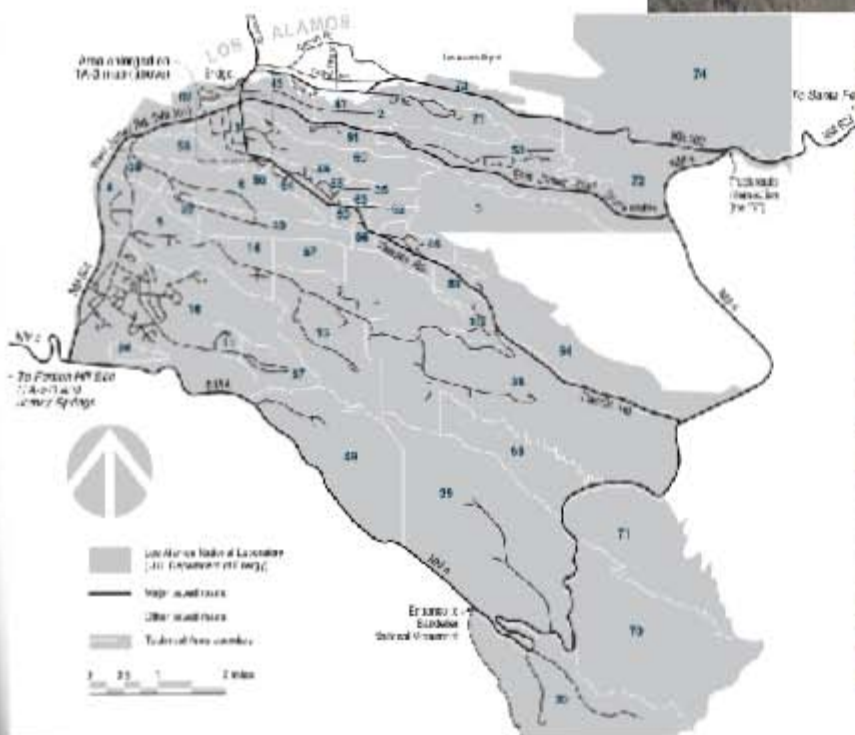
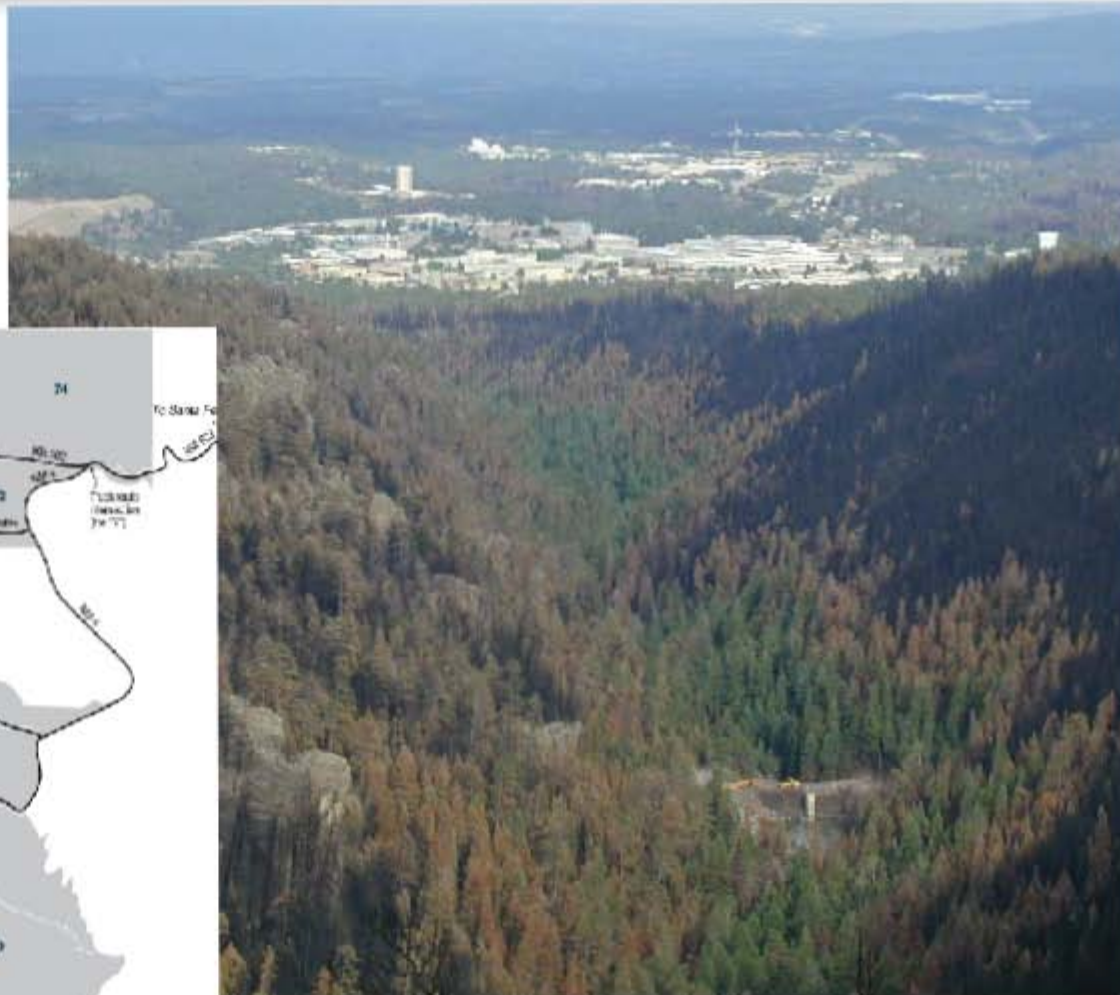
TA-55 Plutonium Facility



TA-3 Chemistry & Materials Research



LANL site today



LA-UR- 09-03466

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Title: Environmental Cultural Resources

Author(s): David Janecky, Ellen McGehee, Steve Hoagland, Kari Garcia, Bruce Masse, Gerald Martinez, Leslie Hansen, Garth Beers

Intended for: Bechtel Environmental, Safety and Health Conference Attendees



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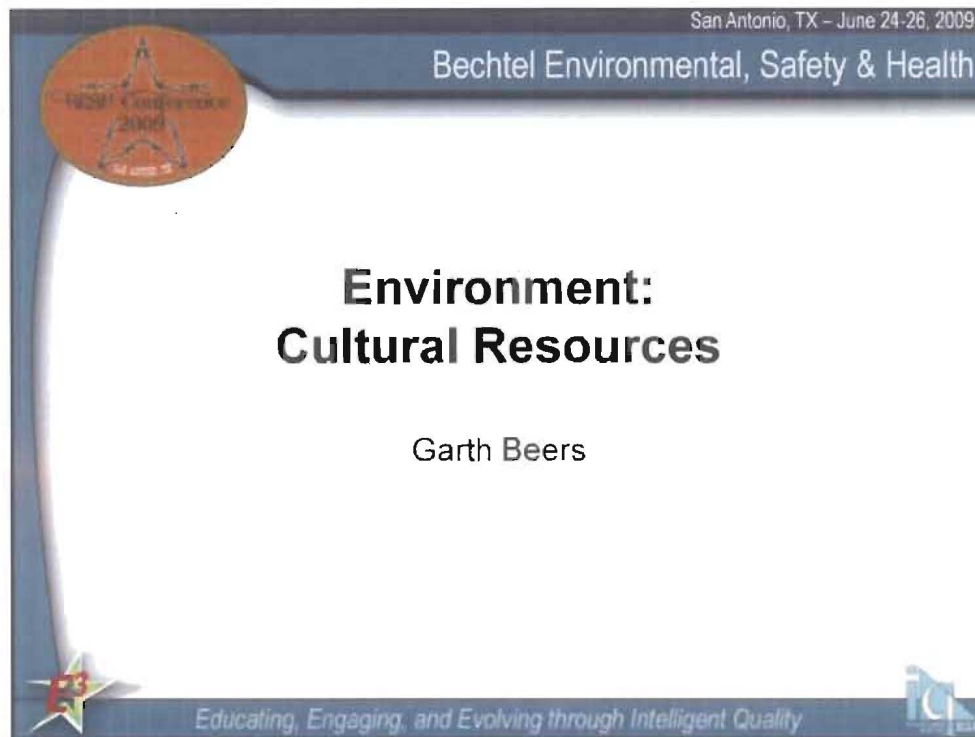
From: "Garth W Beers" <gbeers@lanl.gov>
To: <dmgarcia@lanl.gov>
Subject: Abstract

09-3466

Hi Debra, how's this look. The BESH dates are June 25 and 26.

"This presentation is being given as an opening "environmental message" preceding a day of other Bechtel Environment, Safety and Health (BESH) conference topics. This message describes the management of Cultural Resources at the Los Alamos National Laboratory (LANL). Photographs, maps and drawings depict the varied types of Cultural Resources present at LANL and are meant to stimulate thought about the various types of cultural resources that should be anticipated on other projects that the attendees might encounter around the country and internationally."

Thanks, Garth



At LANL, Cultural Resources are an important component of the Environment
Similar to the layering of LANL mission components in National Security (nuclear weapons, deterrence, non-proliferation, weapons of mass destruction/disruption, energy, ...),

the environment of Cultural Resources at LANL is layered from ongoing activities and facilities where history is being made,

back through Cold War aspects (CMR ...),

through the Manhattan Project aspects,

to the preceding Ranch School and homestead community,

to the Native American cultural and archeological resources.

Credits for this area in ENV-EAQ:

Ellen McGehee -- Historic Buildings & Manhattan Project cultural resources lead

Steve Hoagland -- Archeology cultural resources lead

Kari Garcia -- Historic Buildings

Bruce Masse -- Archeology

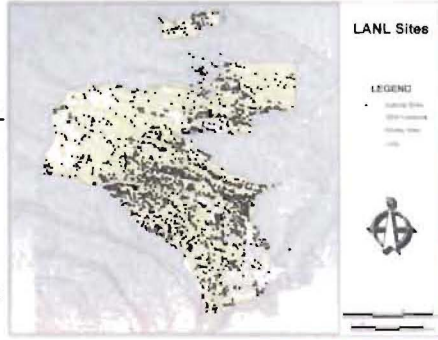
Gerald Martinez -- Archeology

Leslie Hansen -- Team Leader for Biological & Cultural Resources Compliance

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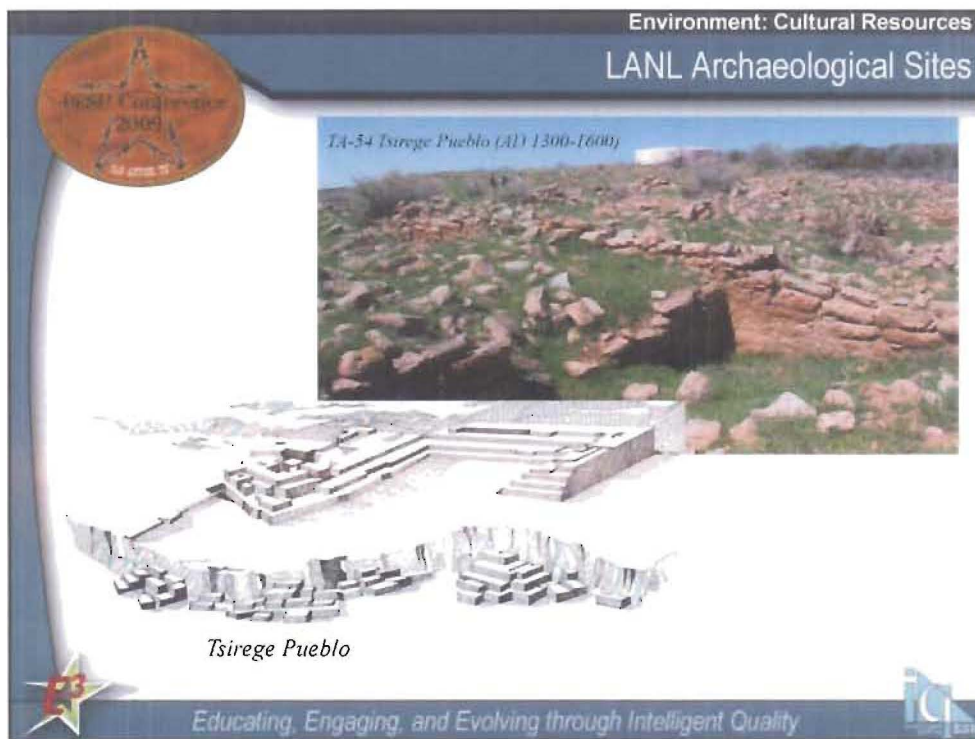


Archeological sites & special discoveries

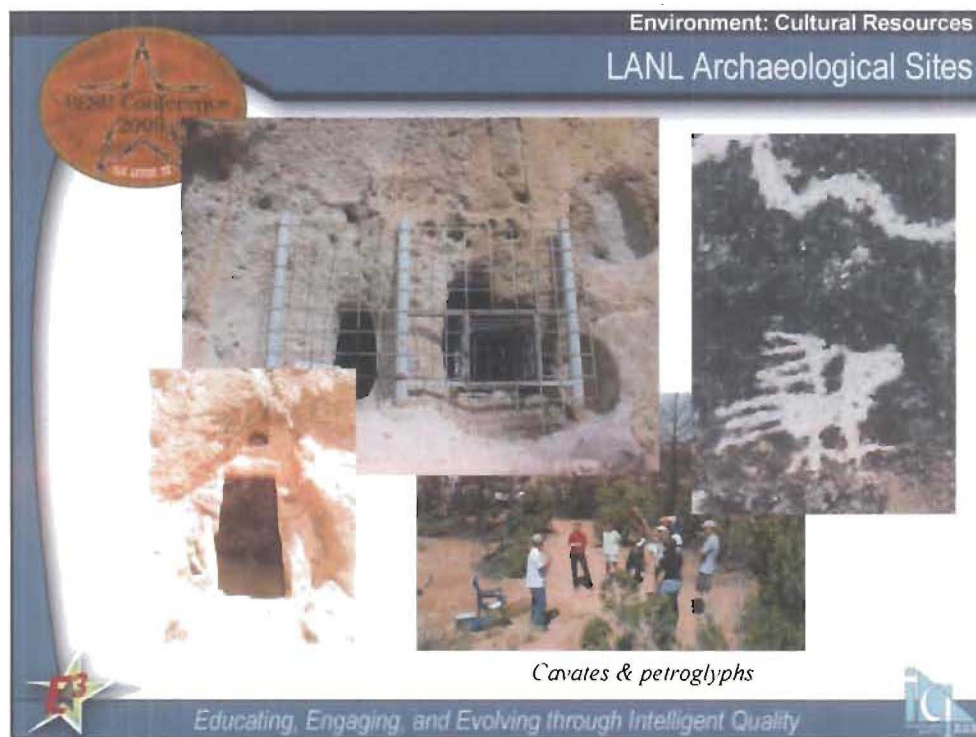


Educating, Engaging, and Evolving through Intelligent Quality





This ancestral pueblo ruin is near the bottom of Pajarito Rd (the actinide corridor). The main pueblo (photo) is on the mesa, with smaller ruins along the cliff faces which include cavates.

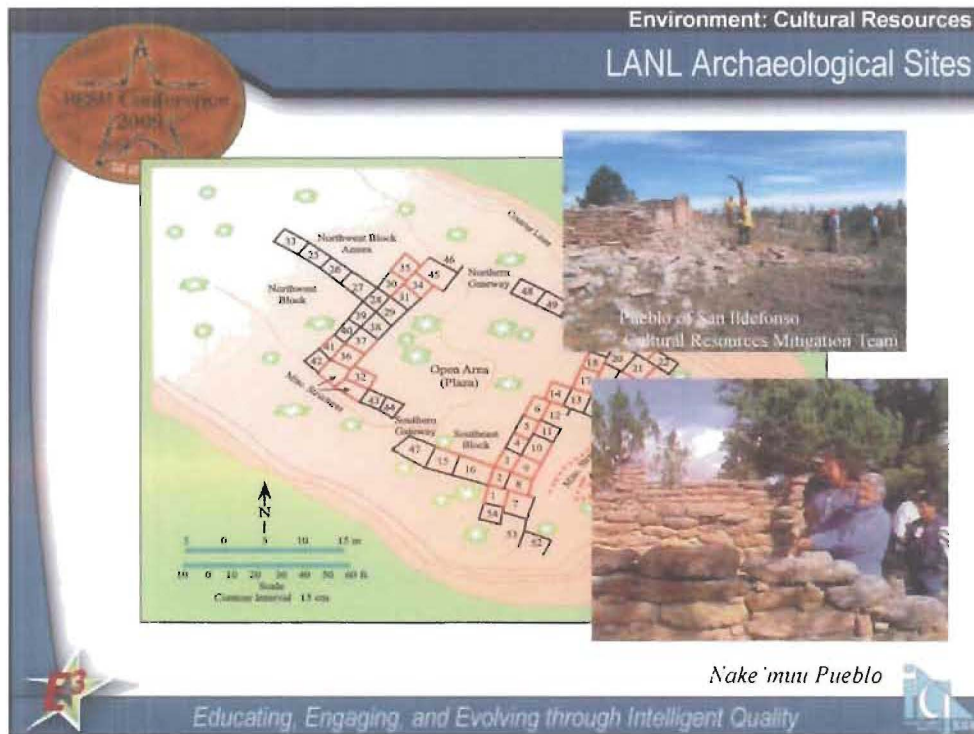


Cavates are common along the cliffs in the LANL area, probably due to the “ease” of development in the soft tuff.

Mortandad Canyon contains some very well developed examples, complete with plastered walls, smoke blackened ceilings and petroglyphs.

The Mortandad Cave Kiva is a particularly spectacular example.

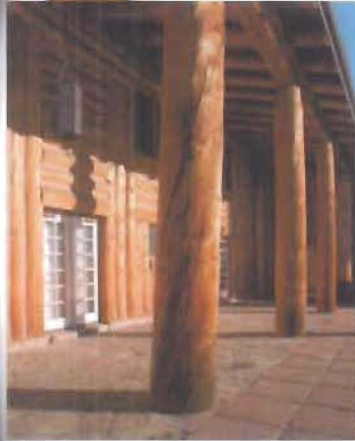
Often the cavates were behind other built-out room structures as storage facilities, and the walls above them contain holes for roof logs.



Nake'muu Pueblo is on a finger mesa across a canyon from the DARHT facility
 This is a unique archeological site at LANL from the Ancestral Pueblo Period
 (AD 600 to AD 1600) with standing walls. It was reoccupied during the Pueblo
 Revolt (1680)

<http://www.lanl.gov/environment/cultural/arch.shtml>

LANL pre-Manhattan Project aspects



*Ranch School
Fuller Lodge*

*Homestead
Romero cabin*



pre-war bean field

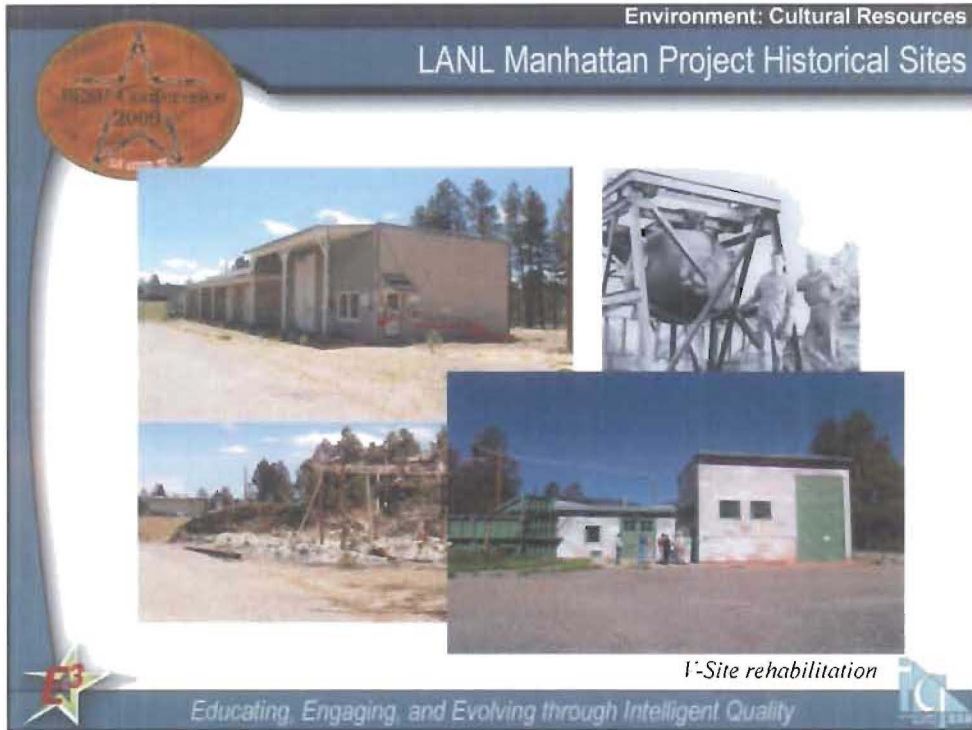


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The Romero cabin was at TA-55, but has been moved into Los Alamos next to the Historical Museum

LANL Manhattan Project Historical Sites



I-Site rehabilitation

V-site is where the “gadget” was assembled for the Trinity Test at White Sands. Some of the historic buildings in this area were destroyed by the Cerro Grande Fire in May 2000, including the building in the pictures to the left (before and after the fire).

The rehabilitated building (lower right picture) includes the Trinity assembly high bay.

LANL Manhattan Project Historical Sites



TA-8 "Little Boy" Crater Site



TA-22 "Fat Man" Assembly Quonset Hut



TA-18 Slotm Criticality Accident Building



TA-6 Concrete Bowl for Plutonium Recovery



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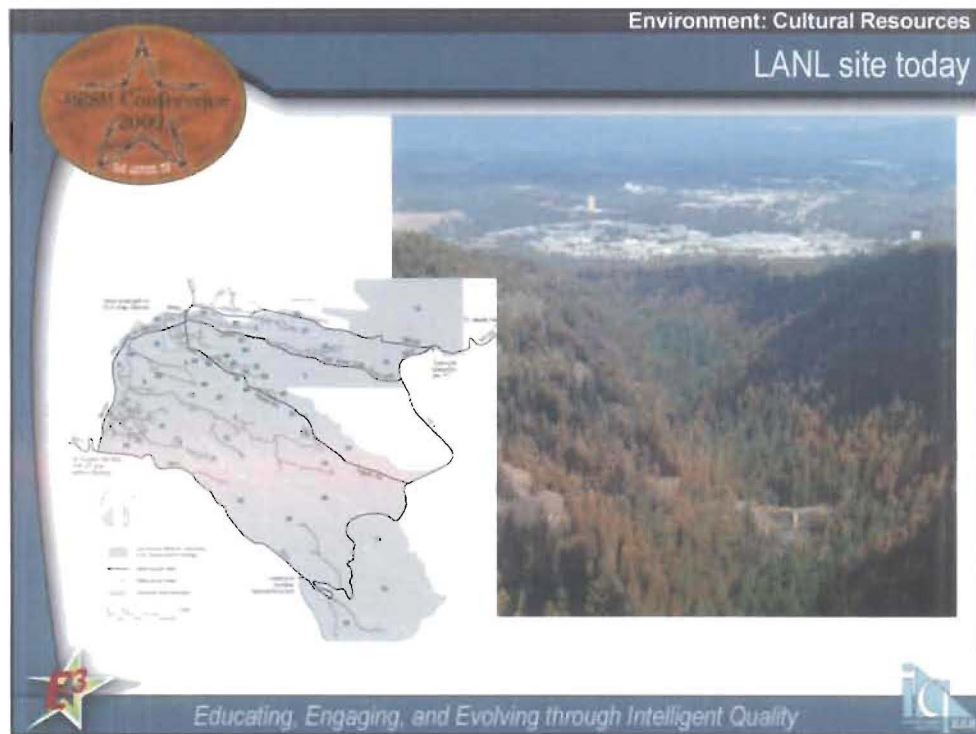




"The combined materials and chemistry capabilities and the intellectual power housed in these two facilities (TA-55 and CMR) are essential for the continued success of DP's stockpile stewardship programs at Los Alamos."

Vic Reis, Assistant Secretary for Defense Programs, Department of Energy
1998

Diagram of Wing 9 facility



Map of LANL technical areas and picture of TA-3 with continuation to ESE out along actinide corridor to TA-54 Area G.

Burned trees from 2000 Cerro Grande Fire in upper Los Alamos Canyon in foreground.