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ENTERED

**DEPARTMENT OF ENERGY**  
National Nuclear Security Administration  
Los Alamos Field Office  
Los Alamos, New Mexico 87544



SEP 18 2015

CERTIFIED MAIL – RETURN RECEIPT REQUESTED



Mr. John Kieling, Chief  
Hazardous Waste Bureau  
New Mexico Environment Department  
2905 Rodeo Park Drive East, Building 1  
Santa Fe, New Mexico 87505-6303

Dear Mr. Kieling:

Subject: Conveyance of Land Conveyance and Transfer Tracts C-2, C-3 and C-4 to the County of Los Alamos

This letter provides the New Mexico Environment Department (NMED) Hazardous Waste Bureau written notice the Department of Energy, National Nuclear Security Administration, Los Alamos Field Office (Field Office) intends to convey Land Conveyance and Transfer Tracts C-2 (White Rock "Y"-1), C-3 (White Rock "Y"-3), and C-4 (White Rock "Y"-4), under section III.Y.1.a of the *Compliance Order on Consent* for Los Alamos National Laboratory. Please withdraw the letter dated August 13, 2015 from Kimberly Davis Lebak to John Kieling regarding the conveyance of tracts C-2, C-3, and C-4. This correspondence includes additional information requested by Ms. Neelam Dhawan of your office.

The Field Office intends to convey these tracts of land to the County of Los Alamos within 120 days. Accordingly, the Field Office is requesting a meeting between NMED, the Field Office and the County of Los Alamos within 30 days of receipt of this letter, to discuss this conveyance, any remedial actions taken, and the County's intended use of the property. The previously stated intended use is transportation.

Enclosed for your use are maps of the tracts and narratives of the history and description of the areas of concern (AOC) that may be within or in close proximity to Tract C-2, C-3 and C-4. Tract C-3 has no AOC within the tract. The sizes of the tracts are approximately 104.10 acres (C-2); 31.05 acres (C-3); and 18.00 acres (C-4).

If you have any questions or comments, please contact Vicki Loucks at (505) 667-6819 or by email at [vicki.loucks@nnsa.doe.gov](mailto:vicki.loucks@nnsa.doe.gov).

Sincerely,

*Handwritten signature: Kimberly Davis Lebak*

Kimberly Davis Lebak  
Manager

Enclosure



cc w/enclosure:

Mr. Neelam Dhawan  
Environmental Specialist, Hazardous Waste Bureau  
New Mexico Environment Department  
2905 Rodeo Park Drive East, Building 1  
Santa Fe, NM 87505

Mr. Harry Burgess  
County Administrator  
Los Alamos County  
1000 Central Avenue, Suite 350  
Los Alamos County, NM 87544

Mr. Brian Bosshardt  
Deputy County Administrator  
Los Alamos County  
1000 Central Avenue, Suite 350  
Los Alamos County, NM 87544

Mr. Seth Kirshenberg  
Kutak Rock, LLP  
1101 Connecticut Avenue, NW  
Suite 1000  
Washington, D.C. 20036

cc w/o enclosure:

I. Valdez, NSM, NA-LA  
V. Loucks, NSM, NA-LA  
C. Gelles, EM, NA-LA  
J. Payne, ENV-ES, LANL, MS-J978  
D. Pava, ENV-ES, LANL, MS-J978  
Records Center, NA-LA  
Official Contract File, NA-LA

4300 NSM:8VL-635792

## **HISTORY AND DESCRIPTION OF AOCs WITHIN OR NEAR TRACTs C-2, C-3, and C-4**

The attached maps show where the AOCs described below are located relative to Tracts C-2, C-3, and C-4. An approximately 0.5-mi section of AOC C-00-005, and an approximately 1.25-mi stretch of AOC C-00-006 are located within Tract C-2. There are no AOCs or SWMUs within Tract C-3. An approximate 0.1-mi stretch of AOC C-00-007 is located within Tract C-4 Tract.

### **AOC C-00-005**

AOC C-00-005 is the designation for the sediment contamination in the stream channel and flood plain of Pueblo Canyon throughout its entire length. Pueblo Canyon originates on the eastern slope of the Sierra de los Valles within the Santa Fe National Forest at an elevation of 8940 ft. Pueblo Canyon contains an ephemeral stream channel length of 9.7 miles that extends east to the confluence with Los Alamos Canyon in the center of Tract C-2. A small part of Technical Area 74 (TA-74) in Pueblo Canyon was transferred to San Ildefonso Pueblo in 2002, and an approximate ¼-mi section of Pueblo Canyon west of the tract was transferred to Los Alamos County as part of Tracts A-18-a and A-18-b in 2014 and 2008, respectively.

Streamflow in upper Pueblo Canyon is intermittent, resulting primarily from storm water and snowmelt runoff from nearby townsite areas. Regular environmental monitoring has been conducted in Pueblo Canyon since the 1970s as part of the Los Alamos National Laboratory's (Laboratory) Environmental Surveillance Program. The canyon passes through Laboratory TA-72, TA-73, TA-74, and former TA-19, TA-31, and TA-45. The canyon passes through a major portion of the Los Alamos townsite and some former TA-00 sites are adjacent to the canyon. In addition, certain TA-73 sites are associated with the canyon. The principal contamination source in Pueblo Canyon was outfalls in TA-01 in what later became TA-45, site of LANL's first radioactive liquid waste treatment facility (RLWTF) (consolidated unit 45-001-00). Effluent from TA-01 and TA-45 released into Acid Canyon, a tributary of Pueblo Canyon, included untreated liquid waste from 1943 to 1951 and treated liquid waste from 1951 to 1964. Pueblo Canyon currently receives treated sanitary effluent from the LAC's Pueblo Wastewater Treatment Plant.

The first sediment sampling (performed in 1946) documented the presence of plutonium along the full length of Pueblo Canyon downstream of Acid Canyon. Pueblo Canyon has been monitored regularly since 1970 as part of LANL's Environmental Surveillance Program. In addition, the alluvial and regional aquifers in Pueblo Canyon are monitored as part of LANL's Groundwater Protection Management Program. The former Environmental Restoration (ER) Project has conducted numerous investigations in and around Los Alamos Canyon in association with SWMUs and AOCs in TAs within and next to the canyon. The ER Project investigated Los Alamos Canyon pursuant to the 1995 and 1997 work plans for Los Alamos and Pueblo Canyons and their many subsequent modifications and addenda. Canyons Work Plan-related investigations included evaluations of sediments, persistent surface water, and alluvial groundwater. For these investigations, the canyon was divided into reaches from west to east. Reach P-4E is located directly upgradient of the northwest corner of Tract C-2 and partially overlaps the tract boundary.

Sediment, surface water, and alluvial ground water investigations were conducted in Pueblo Canyon (AOC C-00-005) from 1996 to 2003 as part of the Los Alamos and Pueblo Canyons investigation before the Consent Order went into effect in 2005. The results were reported in the 2004 Los Alamos and Pueblo Canyons investigation report, approved by NMED in 2005, and the Los Alamos and Pueblo Canyons supplemental investigation report, approved by NMED in 2007.

The results of ecological and human health risk assessment based on the sediment, surface water, alluvial groundwater, and biota investigation data in Pueblo Canyon were presented in the Los Alamos and Pueblo Canyons investigation report, submitted to NMED in April 2004, and approved in 2005) and the Los Alamos and Pueblo Canyons Supplemental Investigation Report approved by NMED in 2007. The human health and ecological risk assessments determined there is no adverse risk to terrestrial and aquatic receptors and no unacceptable risk to recreational receptors for Reach P-4E.

Los Alamos and Pueblo Canyons have a series of defenses-in-depth to keep stormwater on-site. The Los Alamos Canyon weir, located near Tract C-2, slows the flow of stormwater so contaminants settle to the bottom, allowing cleaner and clearer water to flow to the Rio Grande. The Pueblo Canyon grade control structure was installed to accomplish the same purpose for that watershed.

AOC C-00-005 has not been approved by NMED or EPA for no further action or corrective action complete status.

#### **AOC C-00-006**

AOC C-00-006 is the designation for the sediment contamination in the stream channel and flood plain of Los Alamos Canyon throughout its entire length. Los Alamos Canyon originates northwest of the Laboratory in the Sierra de Los Valles on U.S. Forest Service (USFS) land below the north side of Pajarito Mountain. The canyon extends southeast and enters Laboratory property at its northwest corner, near the Los Alamos townsite. The canyon then runs east across the northern portion of the laboratory and is joined by DP Canyon (AOC C-00-021) in the north central portion of the Laboratory, approximately 3.6 mi west of the Tract C-2. Los Alamos Canyon exits Laboratory property at the eastern boundary.

Streamflow in upper Los Alamos Canyon is intermittent, resulting primarily from storm water and snowmelt runoff from nearby townsite areas. Regular environmental monitoring has been conducted in Los Alamos Canyon since the 1970s as part of the Laboratory's Environmental Surveillance Program. The canyon passes through Laboratory TA-02, TA-03, TA-21, TA-41, TA-43, TA-53, TA-62, TA-72, and TA-73 and former TA-01, TA-26, and TA-32. In addition, some former TA-00 sites are next to the canyon, and certain TA-61 sites are associated with the canyon. The most significant potential sources of contamination for Los Alamos Canyon are former TA-01 and current TA-02, TA-21, TA-41, and TA-53, all of which are within or next to upper Los Alamos Canyon. The Los Alamos townsite is another source of contamination for Los Alamos Canyon. The upper portion of lower Los Alamos Canyon is located on LANL within TA-72, which has no SWMUs/AOCs in the Los Alamos Canyon watershed. The lower portion

of upper Los Alamos Canyon is located on LANL within TA-73, which has no SWMUs/AOCs in the Los Alamos Canyon watershed. The remainder of Los Alamos Canyon is located on San Ildefonso Pueblo land.

The former ER Project has conducted numerous investigations in and around Los Alamos Canyon in association with SWMUs and AOCs in TAs within and next to the canyon. The ER Project investigated Los Alamos Canyon pursuant to the 1995 and 1997 work plans for Los Alamos and Pueblo Canyons and their many subsequent modifications and addenda. Canyons Work Plan-related investigations included evaluations of sediments, persistent surface water, and alluvial groundwater. For these investigations, the canyon was divided into reaches from west to east. Reach LA-3E is located directly upgradient (west) of the southwest corner of Tract C-2 and Reach LA-4W is located directly east of the eastern tract and Laboratory boundaries.

Sediment, surface water, and alluvial ground water investigations were conducted in Los Alamos Canyon (AOC C-00-006) from 1996 to 2003 as part of the Los Alamos and Pueblo Canyons investigation before the Consent Order went into effect in 2005. The results were reported in the 2004 Los Alamos and Pueblo Canyons investigation report, approved by NMED in 2005, and the Los Alamos and Pueblo Canyons supplemental investigation report, approved by NMED in 2007.

The results of ecological and human health risk assessment based on the sediment, surface water, alluvial groundwater, and biota investigation data in Los Alamos Canyon were presented in the Los Alamos and Pueblo Canyons investigation report, submitted to NMED in April 2004, and approved in 2005 and the Los Alamos and Pueblo Canyons Supplemental Investigation Report approved by NMED in 2007. The human health and ecological risk assessments determined there is no adverse risk to terrestrial and aquatic receptors and no unacceptable risk to recreational receptors for Reaches LA-3E and LA-4W.

AOC C-00-006 has not been approved by NMED or EPA for no further action or corrective action complete status.

#### **AOC C-00-007**

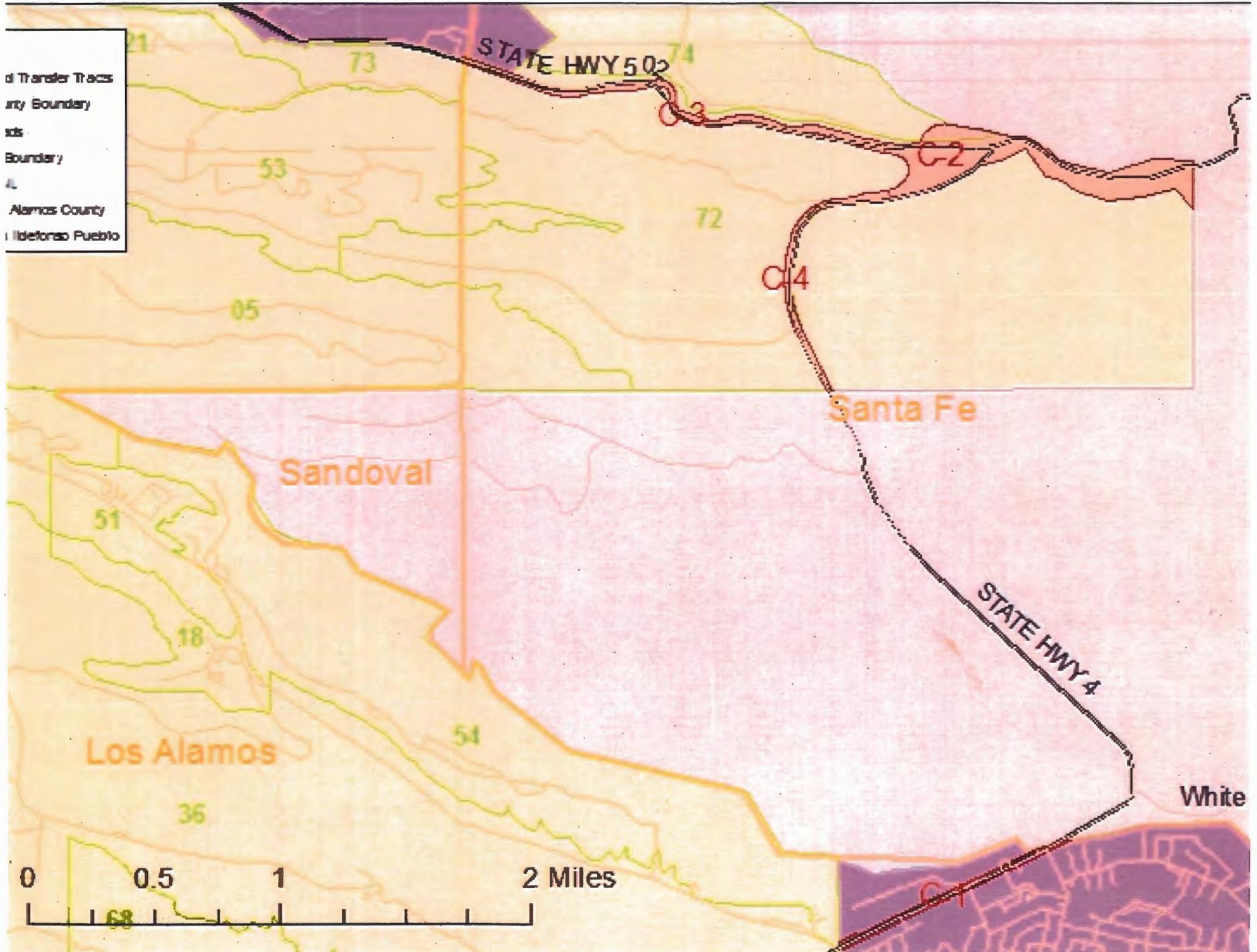
AOC C-00-007 is the designation for the sediment contamination in the stream channel and flood plain of Sandia Canyon throughout its entire length. Sandia Canyon originates on LANL property within TA-03 and trends east-southeast across LANL. Sandia Canyon crosses the east LANL boundary and briefly crosses Bandelier National Monument property before entering San Ildefonso Pueblo land. The canyon continues east-southeast across land held in trust by the Department of Interior for San Ildefonso Pueblo before joining the Rio Grande in White Rock Canyon. Sandia Canyon has a watershed area of 5.5 square miles and a channel length of 9.6 miles. Streamflow in upper Sandia Canyon is continuous due to discharges from the TA-03 power plant. These discharges have created a wetland area in upper Sandia Canyon. Other contributions to flow in the canyon are surface runoff from rainfall and snowmelt. Also, a small reach with continuous flow in lower Sandia Canyon is fed by Sandia Spring. The width of the canyon on LANL property ranges from approximately 1700 ft to 2500 ft and the canyon is up to 200-ft deep. Two municipal water supply wells (PM-1 and PM-3) are located within Sandia

Canyon. The former ER Project has conducted numerous investigations in and around Sandia Canyon in association with SWMUs and AOCs in TAs within and next to the canyon. The ER Project investigated Sandia Canyon pursuant to the 1999 and 2007 work plans for Sandia Canyon and Cañada del Buey and subsequent modifications and addenda (LANL 2007a; LANL 2007b; LANL 2009). For these investigations, the canyon was divided into reaches from west to east. Reach S-5E is located directly upgradient (west) of the southwestern boundary of Tract C-4.

Sediment, surface water, and alluvial ground water investigations were conducted in Sandia Canyon (AOC C-00-005) from 1999 to 2007. The results were reported in the 2007 "Summary of Sandia Canyon Phase 1 Sediment Investigations" (LANL 2007), and the Sandia Canyon investigation report (LANL 2009a), approved by NMED in 2010 (NMED 2010). The human health and ecological risk assessments determined there is no unacceptable risk to recreational receptors and no adverse risk to terrestrial and aquatic receptors for Reach S-5E.

AOC C-00-007 has not been approved by NMED or EPA for no further action or corrective action complete status.

Transfer Tracts  
County Boundary  
City Boundary  
Alamos County  
Delorsado Pueblo



STATE HWY 502

Santa Fe

Sandoval

Los Alamos

White

STATE HWY 4

0 0.5 1 2 Miles



1851500

1853000

1854500

1856

# PUEBLO de SAN ILDEFONSO INDIAN RESERVATION

## Land Tract C-2

# BANDELIER NATIONAL MONUMENT

502

-  Drainage
-  Paved road
-  Surrounding land boundary
-  LANL property
-  Land Tract C-2
-  PRS boundary

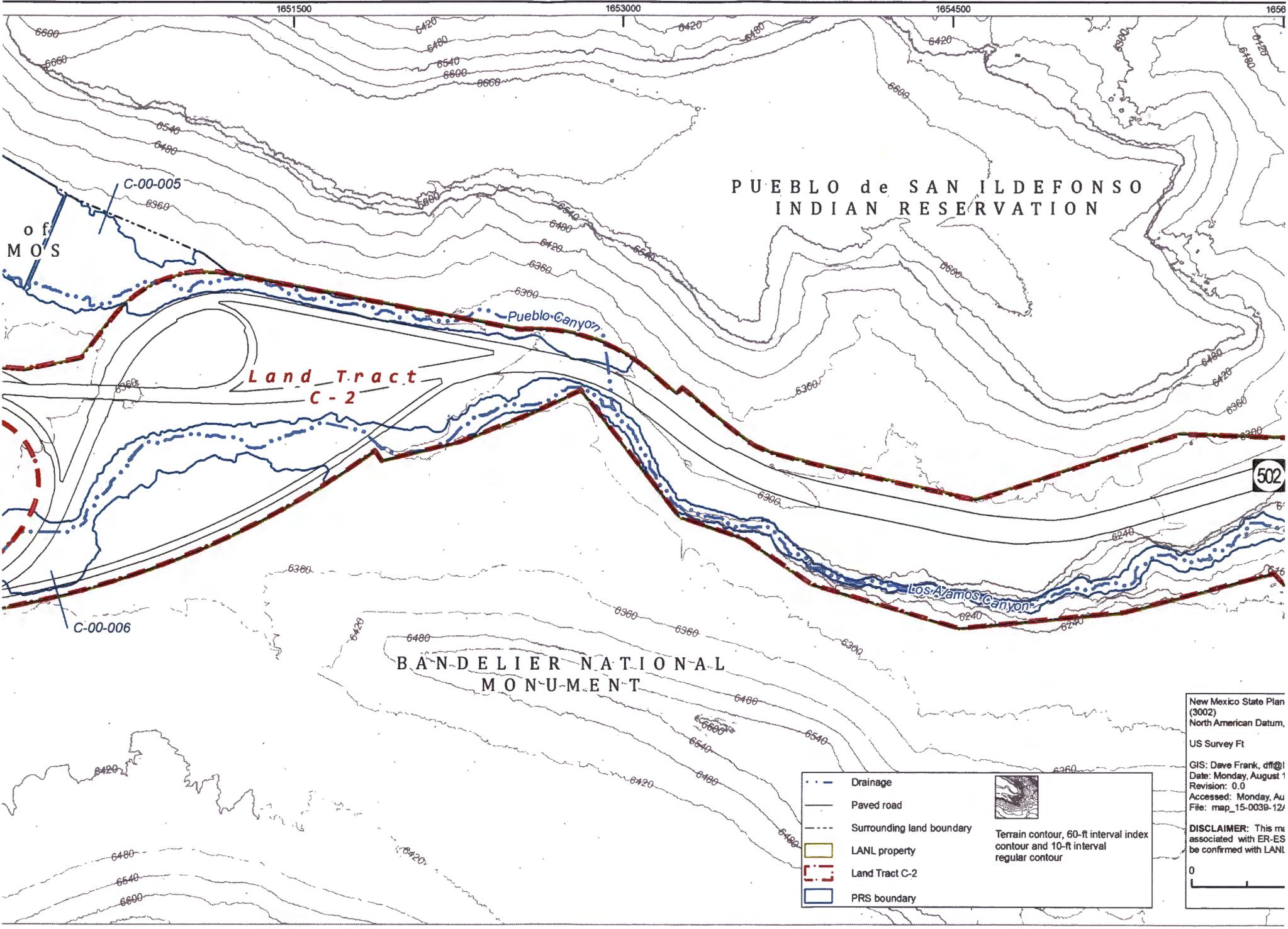
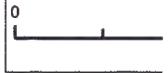


Terrain contour, 60-ft interval index  
contour and 10-ft interval  
regular contour

New Mexico State Plan  
(3002)  
North American Datum,  
US Survey Ft

GIS: Dave Frank, dff@l  
Date: Monday, August 1  
Revision: 0.0  
Accessed: Monday, Au  
File: map\_15-0039-12/

**DISCLAIMER:** This m  
associated with ER-ES  
be confirmed with LANL



1642500

1644000

1645500

1647000

1648500

TA-74

TA-74

COUNTY of  
LOS ALAMOS

PUEBLO  
SAN ILDE  
INDIA  
RESERVA

19-002

C-19-001

C-00-005

Land Tract

C-3

502

C-00-006

TA-72

New Mexico State Plan  
(3002)  
North American Datum,

US Survey Ft

GIS: Dave Frank, dff@l  
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associated with ER-ES  
be confirmed with LANL

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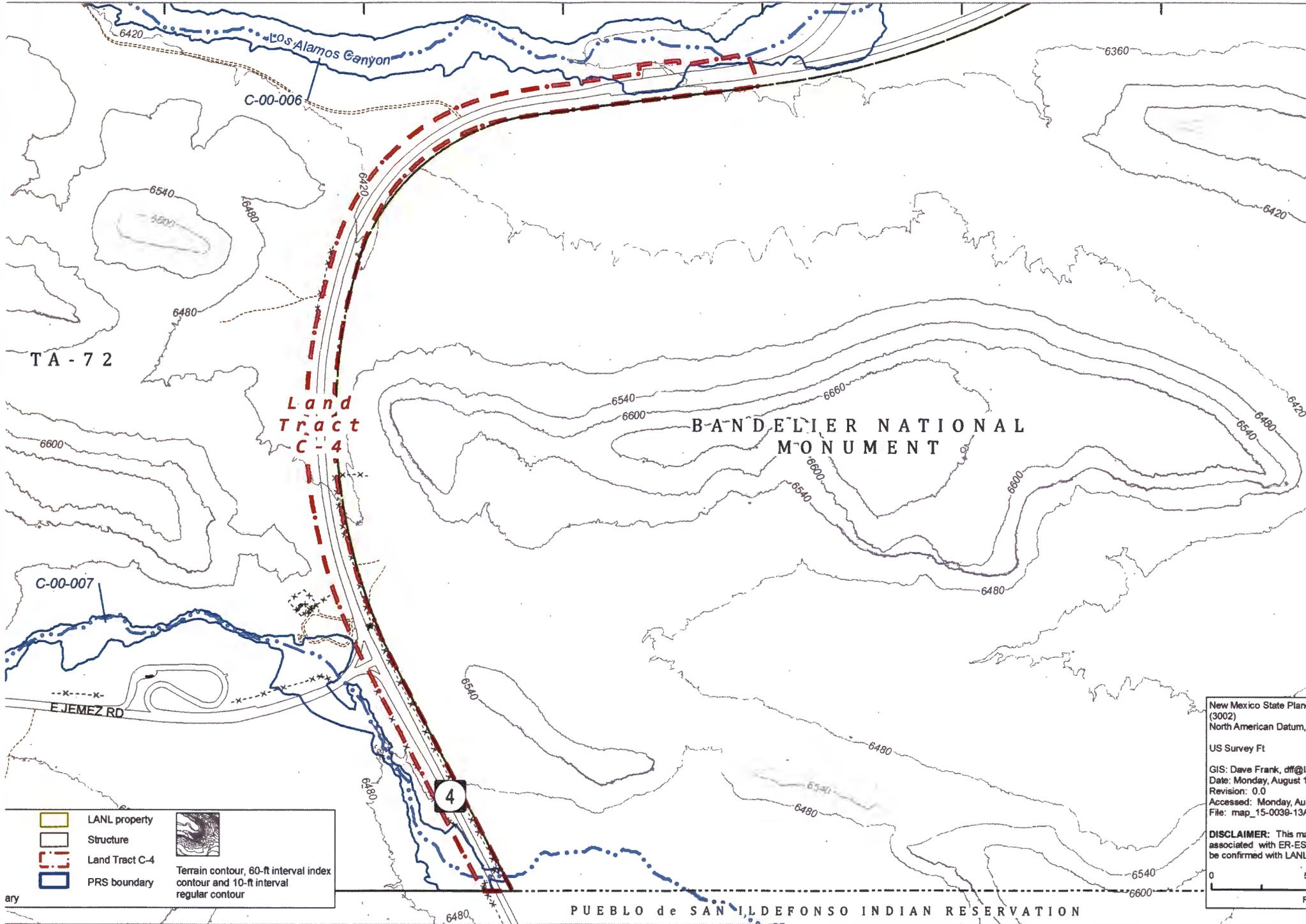


Terrain contour, 60-ft interval index  
contour and 10-ft interval  
regular contour

4

ary

1647000 1648000 1649000 1650000 1651000 1652000



TA - 7 2

Land Tract C-4

BANDELIER NATIONAL MONUMENT

C-00-007

EJEMEZ RD

4

PUEBLO de SAN ILDEFONSO INDIAN RESERVATION

	LANL property		Terrain contour, 60-ft interval index contour and 10-ft interval regular contour
	Structure		
	Land Tract C-4		
	PRS boundary		

New Mexico State Plan (3002)  
 North American Datum,  
 US Survey Ft

GIS: Dave Frank, dff@l  
 Date: Monday, August 1  
 Revision: 0.0  
 Accessed: Monday, Au  
 File: map\_15-0039-13/

**DISCLAIMER:** This map associated with ER-ES be confirmed with LANL

