



## United States Department of the Interior

### BUREAU OF LAND MANAGEMENT

Las Vegas Field Office  
4701 North Torrey Pines Dr  
Las Vegas NV 89130  
www.blm.gov/nv/



In Reply Refer to:  
N-47748  
2800 (NV-056)

DEC 20 2007

HAND DELIVERED

### DECISION

Department of Energy :  
Office of Civilian Radioactive Waste Management : Yucca Mountain Site Characterization  
1551 Hillshire Drive6321 : Right-of-Way Renewed  
Las Vegas, Nevada 89134-6321 :

### Right-of-Way Grant N-47748 Issued

Enclosed is a copy of your right-of-way grant, N-47748, which allows the use of public land for activities in support of site characterization studies at the Yucca Mountain site.

Within 30 days of receipt of this decision, you have the right of appeal to the Board of Land Appeals, Office of the Secretary, in accordance with the regulations in 43 CFR 4.400. If an appeal is taken, you must follow the procedures outlined in the enclosed Form 1842-1, Information on Taking Appeals to the Board of Land Appeals. Within 30 days after you appeal, you are required to provide a Statement of Reasons to the Board of Land Appeals and a copy to the Regional Solicitor's office listed in Item 3 on the form. The appellants have the burden of showing that the decision appealed from is in error.

If you appeal this decision, please provide this office with a copy of your Statement of Reasons. This decision, under the provisions of 43 CFR 2800 constitutes a final decision and remains in full force and effect during an appeal unless the Secretary rules otherwise. Refer to 43 CFR 2801.10 for the requirements for filing a petition for stay.

If you wish to file a petition pursuant to regulation 43 CFR 4.21 (58 FR 4939, January 19, 1993) or 43 CFR 2801.10, for a stay of the effectiveness of this decision during the time that your appeal is being reviewed by IBLA, the petition for a stay must accompany your notice of appeal. A petition for a stay is required to show sufficient justification based on the standards listed below. Copies of the notice of appeal and petition for a stay must also be submitted to each party named in this decision and to IBLA and to the appropriate office of the Solicitor (see 43 CFR 4.413) at the same time the original documents are filed

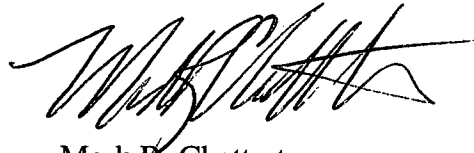
with this office. If you request a stay, you have the burden of proof in demonstrating that a stay should be granted.

Standards for Obtaining a Stay

Except as otherwise provided for by law or other pertinent regulations, a petition for a stay of a decision pending appeal shall show sufficient justification based on the following standards:

1. The relative harm to the parties if the stay is granted or denied,
2. The likelihood of the appellant's success on the merits,
3. The likelihood of immediate and irreparable harm if the stay is not granted, and
4. Whether the public interest favors granting the stay.

If you have any questions, please contact Brenda Warner at 702-515-5084.



Mark R. Chatterton  
Assistant Field Manager  
Nonrenewable Resources

Enclosure: Right-of-Way Grant N-47748  
Form 1842-1

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

**INFORMATION ON TAKING APPEALS TO THE INTERIOR BOARD OF LAND APPEALS**

**DO NOT APPEAL UNLESS**

1. This decision is adverse to you,  
AND
2. You believe it is incorrect

**IF YOU APPEAL, THE FOLLOWING PROCEDURES MUST BE FOLLOWED**

- 
- 1. NOTICE OF APPEAL**..... A person who wishes to appeal to the Interior Board of Land Appeals must file in the office of the officer who made the decision (not the Interior Board of Land Appeals) a notice that he wishes to appeal. A person served with the decision being appealed must transmit the *Notice of Appeal* in time for it to be filed in the office where it is required to be filed within 30 days after the date of service. If a decision is published in the FEDERAL REGISTER, a person not served with the decision must transmit a *Notice of Appeal* in time for it to be filed within 30 days after the date of publication (43 CFR 4.411 and 4.413).
- 
- 2. WHERE TO FILE**
- NOTICE OF APPEAL..... Department of the Interior, Bureau of Land Management, 4701 N. Torrey Pines, Las Vegas, Nevada 89130
- WITH COPY TO SOLICITOR... DOI Office of the Solicitor, Pacific Southwest Region, 2800 Cottage Way, Room E-1712, Sacramento CA 95825-1890
- 
- 3. STATEMENT OF REASONS** Within 30 days after filing the *Notice of Appeal*, file a complete statement of the reasons why you are appealing. This must be filed with the United States Department of the Interior, Office of Hearings and Appeals, Interior Board of Land Appeals, 801 N. Quincy Street, MS 300-QC, Arlington, Virginia 22203. If you fully stated your reasons for appealing when filing the *Notice of Appeal*, no additional statement is necessary (43 CFR 4.412 and 4.413).
- WITH COPY TO SOLICITOR..... DOI Office of the Solicitor, Pacific Southwest Region, 2800 Cottage Way, Room E-1712, Sacramento CA 95825-1890
- 
- 4. ADVERSE PARTIES**..... Within 15 days after each document is filed, each adverse party named in the decision and the Regional Solicitor or Field Solicitor having jurisdiction over the State in which the appeal arose must be served with a copy of: (a) the *Notice of Appeal*, (b) the Statement of Reasons, and (c) any other documents filed (43 CFR 4.413).
- 
- 5. PROOF OF SERVICE**..... Within 15 days after any document is served on an adverse party, file proof of that service with the United States Department of the Interior, Office of Hearings and Appeals, Interior Board of Land Appeals, 801 N. Quincy Street, MS 300-QC, Arlington, Virginia 22203. This may consist of a certified or registered mail "Return Receipt Card" signed by the adverse party (43 CFR 4.401(c)).
- 
- 6. REQUEST FOR STAY**..... Except where program-specific regulations place this decision in full force and effect or provide for an automatic stay, the decision becomes effective upon the expiration of the time allowed for filing an appeal unless a petition for a stay is timely filed together with a *Notice of Appeal* (43 CFR 4.21). If you wish to file a petition for a stay of the effectiveness of this decision during the time that your appeal is being reviewed by the Interior Board of Land Appeals, the petition for a stay must accompany your *Notice of Appeal* (43 CFR 4.21 or 43 CFR 2801.10 or 43 CFR 2881.10). A petition for a stay is required to show sufficient justification based on the standards listed below. Copies of the *Notice of Appeal* and Petition for a Stay must also be submitted to each party named in this decision and to the Interior Board of Land Appeals and to the appropriate Office of the Solicitor (43 CFR 4.413) at the same time the original documents are filed with this office. If you request a stay, you have the burden of proof to demonstrate that a stay should be granted.
- Standards for Obtaining a Stay.** Except as otherwise provided by law or other pertinent regulations, a petition for a stay of a decision pending appeal shall show sufficient justification based on the following standards: (1) the relative harm to the parties if the stay is granted or denied, (2) the likelihood of the appellant's success on the merits, (3) the likelihood of immediate and irreparable harm if the stay is not granted, and (4) whether the public interest favors granting the stay.

Unless these procedures are followed, your appeal will be subject to dismissal (43 CFR 4.402). Be certain that all communications are identified by serial number of the case being appealed.

**NOTE:** A document is not filed until it is actually received in the proper office (43 CFR 4.401(a)). See 43 CFR Part 4, Subpart B for general rules relating to procedures and practice involving appeals.

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
**RIGHT- OF- WAY GRANT RENEWAL**

| Issuing Office  
| Las Vegas Field Office  
| Serial Number  
| N-47748 Renewal

- 
1. A right-of-way is hereby granted pursuant to:
- a.  Title V of the Federal Land Policy and Management Act of October 21, 1976 (90 Stat. 2776; 43 U.S.C. 1761);
  - b.  Section 28 of the Mineral Leasing Act of 1920, as amended (30 U.S.C. 185);
  - c.  Other (describe) \_\_\_\_\_.
2. Nature of Interest:
- a. By this instrument, the holder, The United States of America, Department of Energy, receives a right to construct, operate, maintain, and terminate all activities in support of site characterization studies at the Yucca Mountain site, on public lands described as follows:  
  
Mount Diablo Meridian, Nevada,  
  
T. 12 S., R. 48 E.,  
secs. 13, 25 through 29, and 32 through 36.  
  
T. 13 S., R. 48 E.,  
secs. 10 through 15, 22 through 27 and 34 through 36.  
  
T. 14 S., R. 48 E.,  
secs. 1 through 3, 10 through 15, 22 through 27 and 36, except patent # 27-83-0002.  
  
T. 15 S., R. 48 E.,  
secs. 1.  
  
T. 13 S., R. 49 E.,  
Secs. 7 through 9;  
sec. 10, W $\frac{1}{2}$ ;  
sec. 15, W $\frac{1}{2}$ ;  
secs. 16 through 21;  
secs. 22, W $\frac{1}{2}$ ;  
secs. 27, W $\frac{1}{2}$ ;  
secs. 28 through 33,  
sec. 34, W $\frac{1}{2}$ .  
  
T. 14 S., R. 49 E.,  
sec. 3, W $\frac{1}{2}$ ;  
secs. 4 through 9;  
sec. 10, W $\frac{1}{2}$ ;  
sec. 15, W $\frac{1}{2}$ ;  
secs. 16 through 21;  
sec. 22, W $\frac{1}{2}$ ;  
sec. 27, W $\frac{1}{2}$ ;  
secs. 28 through 33;  
sec. 34, W $\frac{1}{2}$ .

T. 15 S., R. 49 E.,  
sec. 3, W½;  
secs. 4 through 6.

Containing 51,790 acres more or less. and shown on Exhibit "B", "attached hereto and made a part thereof.

- b. The right-of-way area granted herein is N/A feet in length and N/A feet in width consisting of N/A acres more or less. If a site type facility, the facility contains 51,790 acres.
- c. This instrument shall terminate on ~~be granted in perpetuity~~ December 31, 2014, 6 years from its effective date unless, prior thereto, it is relinquished, abandoned, terminated, or modified pursuant to the terms and conditions of this instrument or of any applicable Federal law or regulation.
- d. This instrument  may  may not be renewed. If renewed, the right-of-way or permit shall be subject to the regulations existing at the time of renewal and any other terms and conditions that the authorized officer deems necessary to protect the public interest.
- e. Notwithstanding the expiration of this instrument or any renewal thereof, early relinquishment, abandonment, or termination, the provisions of this instrument, to the extent applicable, shall continue in effect and shall be binding on the holder, its successors, or assigns, until they have fully satisfied the obligations and/or liabilities accruing herein before or on account of the expiration, or prior termination, of the grant.

3. Rental:

For and in consideration of the rights granted, the holder agrees to pay the Bureau of Land Management fair market value rental as determined by the authorized officer unless specifically exempted from such payment by regulation. Provided, however, that the rental may be adjusted by the authorized officer, whenever necessary, to reflect changes in the fair market rental value as determined by the application of sound business management principles, and so far as practicable and feasible, in accordance with comparable commercial practices.

4. Terms and Conditions:

- a. This grant or permit is issued subject to the holder's compliance with all applicable regulations contained in Title 43 Code of Federal Regulations parts 2800 and 2880.
- b. Upon grant termination by the authorized officer, all improvements shall be removed from the public lands within 120 days, or otherwise disposed of as provided in paragraph (4)(d) or as directed by the authorized officer.
- c. Each grant issued pursuant to the authority of paragraph (1)(a) for a term of 20 years or more shall, at a minimum, be reviewed by the authorized officer at the end of the 20th year and at regular intervals thereafter not to exceed 10 years. Provided, however, that a right-of-way or permit granted herein may be reviewed at any time deemed necessary by the authorized officer.

- d. The stipulations, plans, maps, or designs set forth in Exhibit(s) A, B and C dated DEC 19 2007 attached hereto, are incorporated into and made a part of this grant instrument as fully and effectively as if they were set forth herein in their entirety.
- e. Failure of the holder to comply with applicable law or any provision of this right-of-way grant or permit shall constitute grounds for suspension or termination thereof.
- f. The holder shall perform all operations in a good and workmanlike manner so as to ensure protection of the environment and the health and safety of the public.

IN WITNESS WHEREOF, The undersigned agrees to the terms and conditions of this right-of-way grant.

Charles W. Montan Jr.

(Signature of Holder)

Mark R. Chatterton

(Mark R. Chatterton)

Realty Officer

(Title)

Assistant Field Office Manager, Non-Renewable Resources

(Title)

12/11/07

(Date)

12/19/2007

(Date)

*JM off*  
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U.S. Department of Energy  
Nevada Operations Office  
P. O. Box 98518  
Las Vegas, NV 89193-8518

RIGHT-OF-WAY RESERVATION

KNOW ALL MEN BY THESE PRESENTS, that in accordance with Section 507 of the Federal Land Policy and Management Act of 1976 (90 Stat. 2781, 43 U.S.C. 1767) that the United States of America acting by and through the Bureau of Land Management (BLM), U.S. Department of the Interior, does hereby issue and reserve to the U.S. Department of Energy (DOE) and its assigns, a right-of-way to conduct site characterization studies upon, over, under, and through the following described federal lands situated in the State of Nevada, to wit:

Mount Diablo Meridian, Nevada

- T. 12 S., R. 48 E.,  
secs. 13, 25 through 29, and 32 through 36.
- T. 13 S., R. 48 E.,  
secs. 10 through 15, 22 through 27, and 34 through 36.
- T. 14 S., R. 48 E.,  
secs. 1 through 3, 10 through 15, 22 through 27, and 36,  
except patent number 27-83-0002.
- T. 15 S., R. 48 E.,  
sec. 1
- T. 13 S., R. 49 E.,  
secs. 7 through 9;  
sec. 10, W $\frac{1}{2}$ ;  
sec. 15, W $\frac{1}{2}$ ;  
secs. 16 through 21;  
sec. 22, W $\frac{1}{2}$ ;  
sec. 27, W $\frac{1}{2}$ ;  
secs. 28 through 33;  
sec. 34, W $\frac{1}{2}$ .

Record Posted	Date	By
MT Plat	2-9-88	BCW2/4/58
OG Plat	"	"
USE Plat	"	"
HI Plat	"	"
CDI Filming		

Exhibit A  
Stipulations  
N-47748  
page 1

DEC 19 2007

T. 14 S., R. 49 E.,  
 sec. 3, W $\frac{1}{2}$ ;  
 secs. 4 through 9;  
 sec. 10, W $\frac{1}{2}$ ;  
 sec. 15, W $\frac{1}{2}$ ;  
 secs. 16 through 21;  
 sec. 22, W $\frac{1}{2}$ ;  
 sec. 27, W $\frac{1}{2}$ ;  
 secs. 28 through 33;  
 sec. 34, W $\frac{1}{2}$ .

T. 15 S., R. 49 E.,  
 sec. 3, W $\frac{1}{2}$ ;  
 secs. 4 through 6.

The federal lands to which the description applies contains 51,632 acres, more or less. (A map showing the right-of-way described above is attached hereto as a part of the Plan of Development, Exhibit A of this grant.)

The right-of-way herein granted and reserved is for the limited use of site characterization activities as described in the Plan of Development, Exhibit A. The activities in the "core area" include, but are not limited to, installation of environmental monitoring facilities, geological and hydrological studies, access roads, power lines and drill pads, and trenching, coring, drilling, boring, seismic and other geophysical support activities; and exploratory shaft facilities including site surface preparation, support facilities, and exploratory shaft construction and subsurface construction of research facilities.

The activities in the "use area" include, but are not limited to, installation of environmental monitoring facilities, survey, access to and location of study sites, surface stratigraphic studies, meteorological monitoring studies, installation of rain and steam flow gauges, and geologic mapping.

Core and use areas are as described in the Plan of Development, Exhibit A of this grant.

This use is for the DOE, its agents and contractors, subject to the regulations of the Secretary of the Interior at 43 CFR 2800 and to the following terms and conditions:

1. DOE shall reimburse the BLM for the costs incurred in processing and administering this right-of-way reservation.
2. The BLM retains the right to occupy and use the right-of-way, and to issue or grant rights-of-way or other land uses for other purposes, upon, over, under, and through the lands, provided that the occupancy and use will not unreasonably interfere with the rights granted herein. BLM may authorize other uses on the core area after initiating consultation with DOE. DOE will initiate consultation for proposed uses on the use areas.

Ex. A  
 paged  
 N-47748

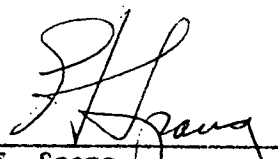


3. This reservation is for site characterization studies only and does not convey any rights for the construction or initial operation of a nuclear waste repository.
4. The holder shall construct, operate, and maintain the facilities, improvements, and structures within this right-of-way in strict conformity with the Plan of Development which is approved and made part of the grant and identified as Exhibit A. Any relocation, additional construction, or use that is not in accord with the approved Plan of Development, shall not be initiated without the prior written approval of the authorized officer. A copy of the complete right-of-way grant, including all stipulations and approved Plan of Development, shall be made available on the right-of-way area during construction, operation, and termination to the authorized officer. Noncompliance with the above will be grounds for an immediate temporary suspension of activities if it constitutes a threat to public health and safety or the environment.
5. DOE is required to fulfill all requirements of the National Environmental Policy Act and all requirements for mitigation, stabilization, and rehabilitation as described in the Plan of Development and further listed in Sections 4.1.1.4 and 4.1.2.6 of the Environmental Assessment. This responsibility will continue until the requirements are met, regardless of expiration of the right-of-way reservation.
6. Any required site specific environmental analyses necessary for DOE activities will be conducted by DOE and will be coordinated with BLM.
7. No hazardous materials will be disposed of on public lands.
8. Archeological and threatened and endangered species surveys will be conducted by DOE prior to start of surface disturbing activities. If antiquities including, but not limited to, archeological items, paleontological objects, or other objects of historical or scientific interest are discovered on the subject sites, the District Manager, BLM, in consultation with the State Historical Preservation Officer and Manager, DOE, will determine the appropriate action to be taken. Until such action has been decided, DOE will ensure these items, objects, or conditions are left intact. Cultural resource reports will be made available to the BLM prior to surface disturbance at site.
9. All desert tortoise found in areas where their continued presence constitutes a hazard to themselves, will be removed to a safe shady area (at least 150 yards from surface disturbance). Construction personnel will be informed that collection of tortoises is prohibited and punishable by a minimum \$100.00 fine.
10. Trenches, shafts, and bores shall be marked, fences, or otherwise protected so as not to constitute a hazard to the public or to wildlife.

Ex. A  
page 3

- 11. Core holes or wells containing potentially usable water should be left in a manner which facilitates their development as water sources and prior to termination of the agreement or abandonment of the holes/wells, DOE will consult with BLM to determine if they will be sealed and capped, plugged back, or turned over to the BLM as is.
- 12. The District Manager, Las Vegas District Office, Las Vegas, Nevada, shall act as BLM's authorized officer for implementation of this right-of-way reservation.
- 13. The Director, Waste Management Project Office, Nevada Operations Office, Las Vegas, Nevada shall act as DOE's contact for implementation of this right-of-way reservation.
- 14. This reservation shall remain in effect for a period of thirteen (13) years from the date shown below and is subject to amendment, adding conditions to the right-of-way reservation in consultation with DOE, and/or renewal.

Dated this 6<sup>th</sup> day of January, 1988

  
 \_\_\_\_\_  
 Edward F. Spang  
 State Director, Nevada  
 Bureau of Land Management

**PLAN OF DEVELOPMENT**  
**Right-of-Way Reservation N-47748 Extension**

**PURPOSE**

This plan of development was written to accompany the renewal application for Right-of-Way Reservation N-47748 that requests an extension of six years from the current January 6, 2008, expiration date for additional studies at the potential Yucca Mountain high-level nuclear waste repository. It provides background, procedural, and historical information along with planned activities including mitigation and reclamation of previously disturbed areas.

**BACKGROUND**

The U.S. Department of Energy (DOE) has responsibilities under Title I of the Nuclear Waste Policy Act of 1982, as amended (NWPA), for the development of repositories for the disposal of high-level radioactive waste and spent nuclear fuel. Finding an area suitable for the disposal of these materials is of high national interest. In February 1982, nine potentially acceptable sites were identified, including Yucca Mountain in Nye County, Nevada. In December 1984, DOE issued final siting guidelines (10 CFR Part 960). Five sites, of the original nine, were nominated for site characterization, including Yucca Mountain.

The nomination of each site was accompanied by an environmental assessment (EA) that included an evaluation of the site in terms of the siting guidelines. Final EAs were published in May 1986. On May 28, 1986, three sites, including Yucca Mountain, were recommended by the Secretary of the DOE and were approved by President Reagan for site characterization. Later amendments of the NWPA specified that the only site to be characterized was Yucca Mountain. The U.S. Department of the Interior, Bureau of Land Management, initially issued Right-of-Way Reservation (ROWR) N-47748 to the DOE for access to public lands in order to conduct the required testing.

As long as the site continues to be considered for development as a repository, the activities specified in DOE's Plan of Development will continue. The ROWR, thereby, authorized activities including, but not limited to, installation of environmental monitoring facilities, geological and hydrological studies, access roads, power lines and drill pads, and trenching, coring, drilling, boring, seismic and other geophysical support activities; exploratory studies facilities and subsurface construction of research facilities; survey, access to and location of study sites, surface stratigraphic studies, meteorological monitoring studies, installation of rain and stream flow gauges, and geologic mapping.

The activities on the public lands take place within an area of 51,632 acres, more or less, and this application requests an extension of the ROWR for this area. DOE requests consultation by BLM on any activities proposed by others for the area after the ROWR is granted. It is not anticipated that these activities will interfere with other current or planned activities on the lands within the ROWR.

Ex A  
page 5

DEC 19 2007.

**LEGAL DESCRIPTION, N-47748**

Mount Diablo Baseline and Meridian, Nevada

Public Lands

- T.12S. R.48E., unsurveyed,  
Section 13;  
Sections 25 through 29 inclusive;  
Sections 32 through 36 inclusive.
- T.13.S R.48E., unsurveyed,  
Sections 10 through 15 inclusive;  
Sections 22 through 27 inclusive;  
Sections 34 through 36 inclusive;
- T.14.S R.48E., unsurveyed,  
Sections 1 through 3 inclusive;  
Sections 10 through 15 inclusive;  
Sections 22 through 27 inclusive;  
Sections 36, except patent #27-83-0002.
- T.15S. R.48E., unsurveyed,  
Section 1.
- T.13S. R.49E., unsurveyed,  
Section 7 through 9 inclusive;  
Sections 10 and 15 exclusive of those portions within Public Land Order 2568;  
Sections 16 through 21 inclusive;  
Section 22 and 27, exclusive of those portions within Public Land Order 2568;  
Sections 28 through 33 inclusive;  
Section 34, exclusive of those portions within Public Land Order 2568.
- T.14S. R.49E., unsurveyed,  
Section 3, exclusive of those portions within Public Land Order 2568;  
Sections 4 through 9 inclusive;  
Sections 10 and 15, exclusive of those portions within Public Land Order 2568;  
Sections 16 through 21 inclusive;  
Sections 22 and 27, exclusive of those portions within Public Land Order 2568;  
Sections 28 through 33 inclusive;  
Section 34, exclusive of those portions within Public Land Order 2568.
- T.15S. R.49E., unsurveyed,  
Section 3, exclusive of those portions within Public Land Order 2568;  
Sections 4 through 6 inclusive.

## METHOD OF APPROVAL FOR TEST ACTIVITIES

Prior to conducting a test or land disturbing activities within Right-of-Way Reservation N-48602, a number of procedural tasks are accomplished.

In accordance with appropriate DOE procedures, and in order to control individual test activities within the right-of-way reservation, the Requestor of a land disturbing or test activity is required to submit a form with information about the activity including location, description of land disturbance, estimated duration, hazardous materials to be used, and means of access to the location. Submittal of the form starts an 11-step process:

- (1) A determination of conformation to the Plan of Development. If the activity does not conform, action is initiated to modify the Plan of Development through coordination with the BLM.
- (2) A determination of conformation to appropriate DOE environmental management requirements and the National Environmental Policy Act.
- (3) A determination of whether the activity is subject to permit or consultation requirements. If it is subject to these requirements, action is initiated to obtain or modify appropriate permits.
- (4) Initiation, as required, of pre-activity surveys, to include biological and cultural (i.e., archeological) resources, and reclamation inventories.
- (5) Using the results of 1 through 4 above, the activity is approved or disapproved. If approved, an approval letter listing environmental stipulations is returned to the Requestor. If disapproved, the reasons are explained to the Requestor, who has the option to move or modify his project and reinitiate the process.
- (6) Once approval is granted, the activity is monitored during performance in accordance with the appropriate DOE environmental compliance surveillance procedure to verify that environmental requirements are met.
- (7) Within three months of initial land disturbance, and after every additional disturbance at an activity site, the amount of land disturbed is measured.
- (8) Upon completion of the activity, the Requestor is required to submit a form requesting decommissioning and reclamation of the site.
- (9) Post-activity biological and archeological resources surveys are initiated and a final reclamation plan is developed.
- (10) An approval letter is issued to the Requestor specifying environmental stipulations, removal of equipment, regulated materials cleanup, and other items pertinent to the decommissioning and reclamation of the activity site.

Ex A  
page 7

(11) The activity location is decommissioned and final reclamation is implemented. The location is monitored until reclamation is deemed successful.

## PERMITS AND CONSULTATIONS

The DOE maintains several permits with the State of Nevada for activities within Right-of-Way Reservation N-47748. They include the following:

- (1) Underground Injection Control
- (2) Air Quality
- (3) Stormwater Discharge
- (4) Water Appropriation
- (5) RCRA EPA Registration and ID Number

The DOE maintains three free use permits with the BLM for construction aggregates for activities within Right-of-Way Reservation N-47748:

- (1) N-51530
- (2) N-63370
- (3) N-82254

An annual report is submitted for each of these permits.

Other programmatic permits of the DOE that are required for activities within Right-of-Way Reservation N-47748 include:

- (1) Endangered Species Act compliance is maintained through consultations with the U.S. Fish and Wildlife Service. A biological opinion regarding the Desert Tortoise was issued for the Yucca Mountain Project in 1997.
- (2) The Project maintains a Cultural Resources Management Program to meet its responsibilities to protect and manage historic properties and other objects or locations of historic, cultural, archaeological, or religious significance. Consequently, the DOE is in full compliance with all applicable laws, regulations, and other requirements regulating the protection of historic properties and cultural resources at Yucca Mountain. All survey reports, data recovery plans, and other cultural resources reports are provided to the Nevada State Historic Preservation Office and the Bureau of Land Management, as appropriate.
- (3) A Floodplain Assessment and Federal Register Notice for both Surface Based Testing and the Exploratory Studies Facility was issued.
- (4) A Nationwide General Permit (Section 404) was obtained from the Corps of Engineers as required by the Clean Water Act.
- (5) Prime Farmland consultation was completed with the National Resource Conservation Service as required by the Farmland Protection Policy Act.

More information and greater detail about these permits and consultations and the programs that have been developed to implement them may be found in the *Site Environmental Report* for the Yucca Mountain site which is published annually by DOE. The most recent edition is available at the following website address: <http://www.ocrwm.doe.gov/documents/ser2004/ser2004.pdf>.

EX A  
page 8

## **ACTIVITIES TO DATE WITHIN N-47748**

The Yucca Mountain Project has disturbed a total of about 34.94 acres of land in conducting its activities within the area of N-47748.

Site activities are divided into two broad groups: Surface Based Testing (SBT) and the Exploratory Studies Facility (ESF). Additionally, there are construction support facilities for site activities; however, none are located within the N-47748 area.

### **Exploratory Studies Facility**

The ESF was constructed to allow in-situ studies of a potential location for the disposal of high-level radioactive waste. The ESF consists of a north and south portal; a 4.9-mile long, 25-foot diameter tunnel connecting the portals; and a 16-foot diameter cross drift. There are a number of test alcoves and niches in both the main and cross drifts for study purposes. Both portals and their ancillary support facilities are located on the Nevada Test Site. About 30-percent of the main tunnel is located underground within the N-47748 area.

### **Surface Based Testing**

SBT is designed to determine geologic, hydrologic, geophysical, geochemical, paleoclimatic and meteorological properties of the site using equipment on the surface.

#### Geologic Studies

Four geologic boreholes have been drilled within the area of N-47748.

Sixteen quaternary faulting trenches, four soil trenches, six quaternary faulting test pits, one volcanic test pit, and five volcanic trenches have been constructed within the area of N-47748. Thirteen of the quaternary faulting trenches and four of the volcanic trenches have been backfilled and reclaimed. All of the others will be backfilled and reclaimed in the future. The open trenches are fenced and inspected regularly.

#### Hydrologic Studies

Seven hydrologic boreholes, used to determine the properties, distribution and circulation of water in the soil and underlying rock, have been drilled within the area of N-47748.

Forty-eight natural infiltration boreholes have been drilled within the area of N-47748. These boreholes are 50- to 100-feet deep and infiltration of precipitation is monitored periodically with neutron moisture meters and gamma-gamma density logging tools.

There is a Borehole Security system in place to ensure that boreholes are not tampered with or otherwise become a hazard to the public. Procedure PA-PRO-0204, *Borehole Security and Access*, govern this security system.

Ex A  
page 9

### Geophysical Studies

The University of Nevada, Reno, Seismology Laboratory installed a Digital Seismic Network, consisting of 27 stations centered on Yucca Mountain, in 1999-2002. Five of the network's stations are within the area of N-47748.

A number of seismic reflection traverses and refraction lines and surveys have been run within the area of N-47748. Those that used explosive-charged boreholes have undergone reclamation.

### Geochemical Studies

An extensive number of geochemical analyses have been conducted using samples obtained during drilling and trenching activities.

### Meteorological Studies

A number of meteorological, air quality, and precipitation monitoring stations have been installed within the N-47748 area. Most of these stations are now inactive and have been removed; however, there are three precipitation gauge stations and one meteorological monitoring station still active and in use.

## **EXPECTED FUTURE ACTIVITIES WITHIN N-47748**

Activities expected to occur during the extension phase of N-47748 are the same as the activities carried out to date, only fewer in number. Many of the surface based test studies are long term and monitoring will continue during the extension. Long-term monitoring within the ESF will continue. Additional underground construction within alcoves and niches may occur as needs for scientific studies dictate.

## **MITIGATION AND RECLAMATION**

Land disturbance will be first mitigated by controlling access and limiting the area disturbed to the minimum needed to perform work. Reclamation will be used to return lands disturbed by site activities to conditions that approximate the form and productivity of the pre-disturbance state. The standard operating practices described in YMP/91-14, *Reclamation Implementation Plan*, will be followed. Reclamation activities will occur in four phases: pre-disturbance surveys, interim reclamation and site stabilization that will occur during site preparation and construction; final reclamation following abandonment or termination of sites; and post-reclamation monitoring.

The DOE has reclaimed 248 sites, totaling 83.8 acres, to date. Of this total, 36 sites totaling 9.2 acres, are located within the area of N-47748.

Ex A  
page 10



## **Pre-Disturbance Surveys**

Surveys will be conducted prior to site development to assess soil and vegetation conditions and to gather information for reclamation recommendations. Information on soil properties will be used to make recommendations for salvaging topsoil for use in post-activity reclamation. Vegetation assessments will be used to identify which plant species to use for reclamation. Site conditions and characteristics will be used to determine if soil erosion control measures are needed, where to place salvaged topsoil, and what reclamation techniques are most appropriate for the site.

## **Interim Reclamation and Site Stabilization**

Several land reclamation procedures will be implemented prior to site development and during site use, which will enhance surface soil stabilization, control erosion, provide wildlife habitats, and reduce the cost of construction site maintenance. These measures will include removing and stockpiling topsoil; installing or constructing erosion control devices prior to or during site development; and establishing vegetative cover or chemical stabilizer over topsoil stockpiles as soon as possible.

## **Final Reclamation**

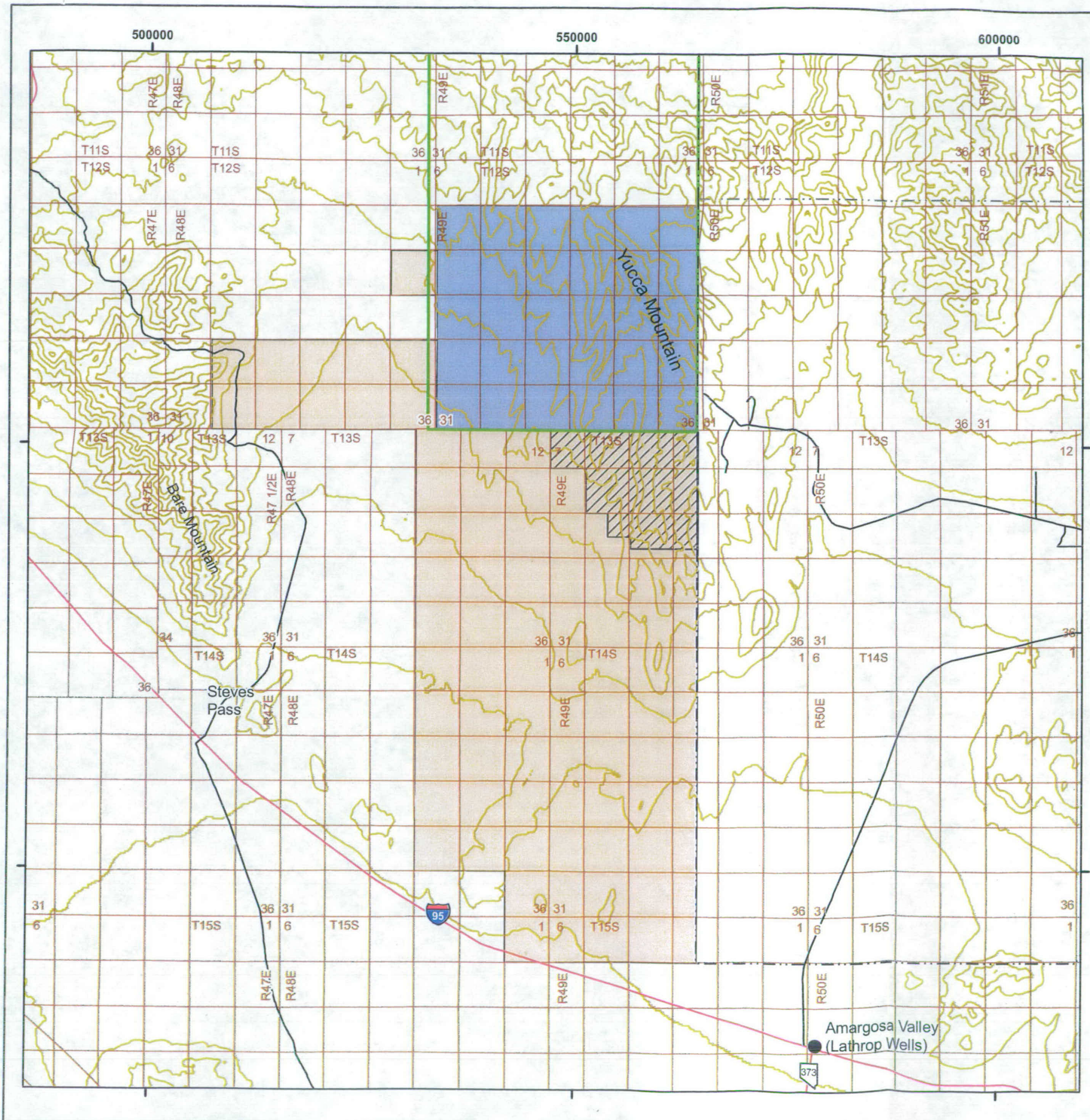
Restoring disturbed sites to productive use will commence after all activities have ceased and the sites are no longer needed for current activities. Soils from each abandoned site and the topsoil stockpile may be analyzed to determine the chemistry and nutrient levels present. This information, along with information gathered during pre-disturbance surveys, will be used to prepare a reclamation plan describing how sites will be prepared for revegetation and what reclamation methods will be used. After abandonment, all wastes including garbage, concrete, asphalt, equipment, pipes, drilling muds, sewage, waste-water, etc., will be removed. Next, rough site preparation will relieve soil compaction and install erosion controls. After rough site preparation, the stockpiled topsoil will be spread; the seedbed prepared; and seeding, planting, and mulching accomplished. Some sites may be fenced to exclude herbivores during the initial years of vegetation growth.

## **Post Reclamation Monitoring**

Each reclaimed site will be permanently and visibly marked with an identification stake. These sites will be visited periodically to monitor vegetative growth and animal use. Additional reclamation actions or remediation will be taken, as necessary. Quantitative site monitoring will generally begin the sixth spring after reclamation, provided that reseeding has not been necessary. Quantitative monitoring may be initiated earlier if deemed appropriate. Sites will be released from monitoring when vegetation is similar to that of the pre-disturbance state. Any remaining materials such as fencing and fence posts will be removed when the site is released from monitoring.

Ex A  
page 11




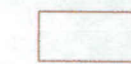


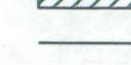







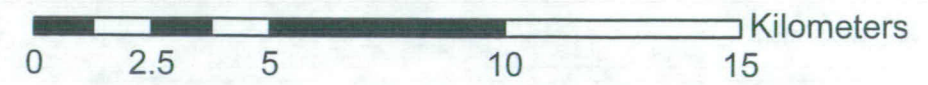
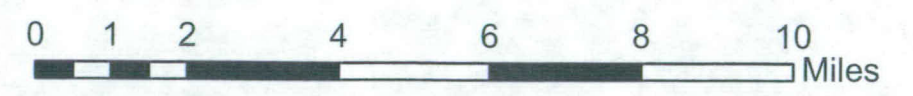
# YUCCA MOUNTAIN PROJECT LOCATION MAP



## Legend

-  Nevada Test & Training Range (NTTR) Boundary
-  Nevada Test Site (NTS) Area Boundary
-  NTS Boundary
-  Township, Range, & Section
-  N-47748
-  N-48602
-  N-50250 (PLO6802)
-  Paved Road
-  Highway
-  100 Meter Contour Interval

Complete legal description is provided in the Plan of Development



August 8, 2006

YMP-06-048.0

DEC 19 2007

Exhibit B  
N-47748



UNSURVEYED TOWNSHIP 12 SOUTH RANGE 48 EAST OF THE MOUNT DIABLO MERIDIAN, NEVADA

PROTRACTION DIAGRAM No 90

NYE COUNTY

BATTLE MTN GR DIST

STATUS OF PUBLIC DOMAIN  
LAND AND MINERAL TITLES

MT PLAT



INDEX TO SEGREGATED TRACTS

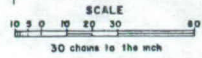
RESURVEY		ORIGINAL SURVEY		
TRACT NO	T	R	SEC	SUBDIVISION

FOR ORDERS EFFECTING DISPOSAL OR USE OF UNIDENTIFIED LANDS WITHDRAWN FOR CLASSIFICATION MINERALS, WATER AND/OR OTHER PUBLIC PURPOSES, REFER TO INDEX OF MISCELLANEOUS DOCUMENTS.

- N 44684 3 Ground-Water Recharge Test Wells Sec 1: S1/2 NE 1/4
- N 47748 R/W Res 5th Characterization Studies Secs: 13, 25-29, 32-36
- N 48248 Civil Action Filed 3/20/7988 Secs: 13, 25-29, 32-36

DEC 19 2007

Exhibit C  
N-47748  
page 1



WARNING STATEMENT  
This plot is the Bureau's representation of the Record of Title and should be used only as a graphic display of the township survey data. Records hereon do not reflect title changes which may have been affected by lateral movements of rivers or other bodies of water. Refer to the cadastral surveys for official survey information.

CURRENT TO	BY	CURRENT TO	BY
4/20/2004	TR		
1/18/05	MS		
1/20/06	MS		
5/25/07			

LOG PLAT  
GEO PLAT

UNSURVEYED TOWNSHIP 13 SOUTH RANGE 48 EAST OF THE MOUNT DIABLO MERIDIAN, NEVADA

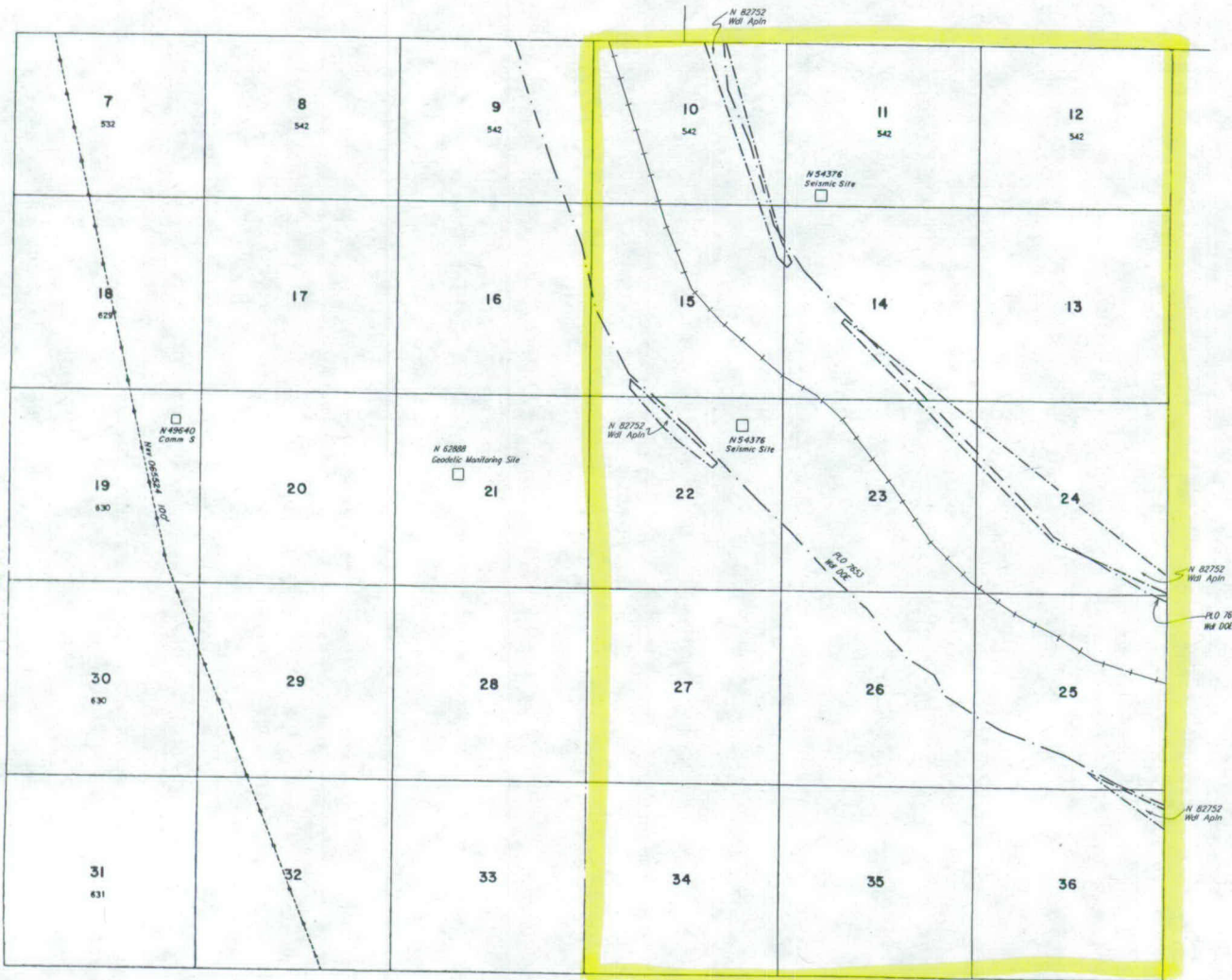
PROTRACTION DIAGRAM NO 43

NYE COUNTY

STATUS OF PUBLIC DOMAIN  
LAND AND MINERAL TITLES

MT PLAT

INDEX TO SEGREGATED TRACTS				
RESURVEY	ORIGINAL SURVEY			
TRACT NO	T	R	SEC	SUBDIVISION



FOR ORDER'S EFFECTING DISPOSAL OR USE OF UNIDENTIFIED LANDS WITHDRAWN FOR CLASSIFICATION, MINERALS, WATER AND/OR OTHER PUBLIC PURPOSES, REFER TO INDEX OF MISCELLANEOUS DOCUMENTS.

N 47748 R/W Res Site Characterization Studies  
Sec 10-15, 22-27, 34-36

N 51230 R/W Seismological Sta  
Sec 21- NW 1/4

N 57523 R/W Res Test Pit Site

Sec 10: SE 1/4 SW 1/4, NW 1/4

Sec 21: SE 1/4 NW 1/4, NE 1/4 NW 1/4, NW 1/4

Sec 29: SW 1/4 NE 1/4, NW 1/4 SW 1/4, NW 1/4

CURRENT TO	BY
4/30/2004	SL
1/20/06	MS
5/25/07	SLL

OG PLAT

N-050  
T. 13S.  
R. 48E.

SCALE  
10 0 10 20 30 40  
30 chains to the inch

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DEC 19 2007

Exhibit C  
N-47748  
page 2





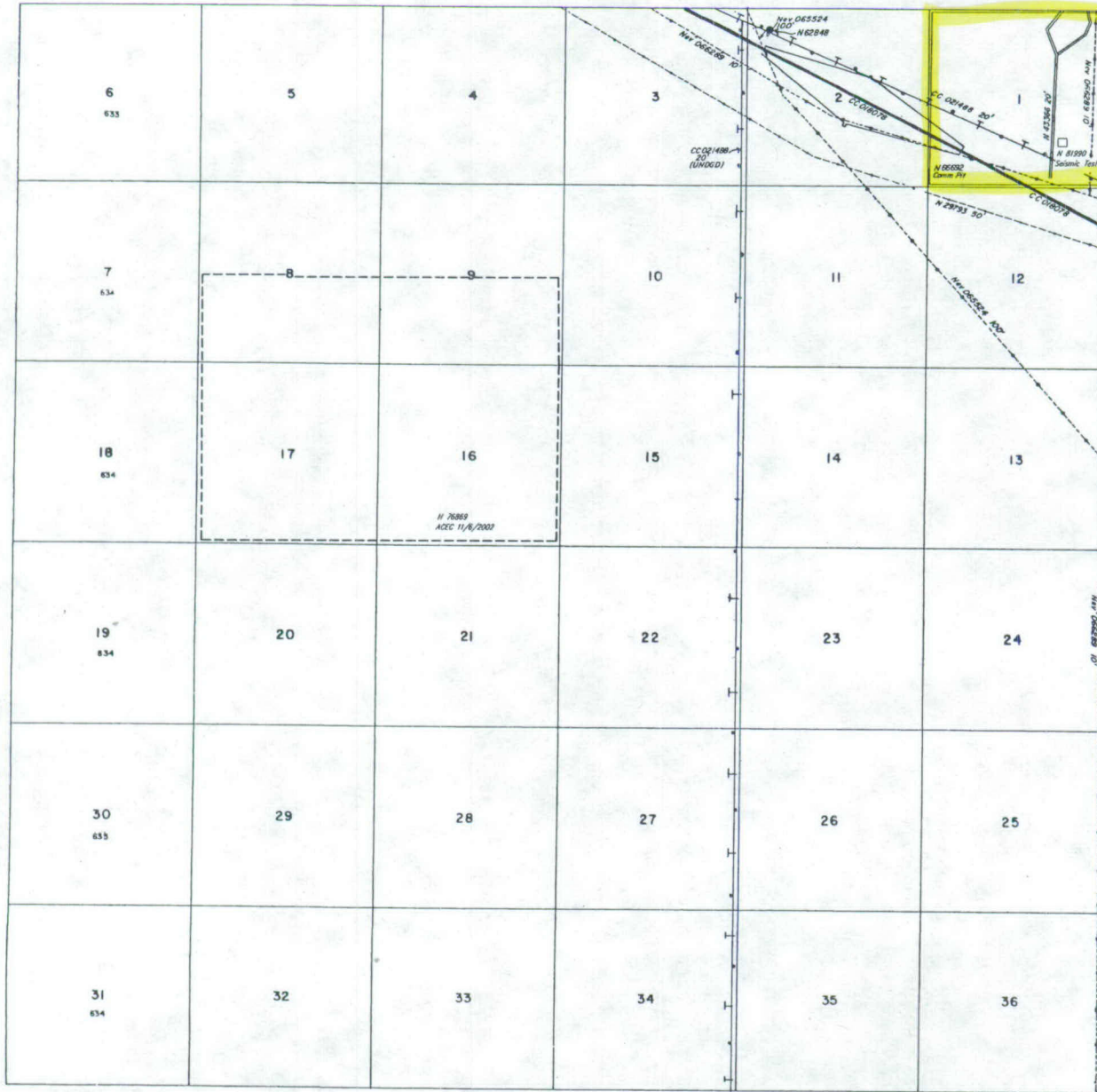
UNSURVEYED TOWNSHIP 15 SOUTH RANGE 48 EAST OF THE MOUNT DIABLO MERIDIAN, NEVADA

PROTRACTION DIAGRAM NO 43

NYE COUNTY

STATUS OF PUBLIC DOMAIN  
LAND AND MINERAL TITLES

MT PLAT



INDEX TO SEGREGATED TRACTS				
RESURVEY		ORIGINAL SURVEY		
TRACT NO	T	R	SEC	SUBDIVISION

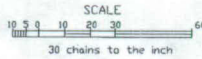
DEC 19 2007

FOR ORDERS EFFECTING DISPOSAL OR USE OF UNIDENTIFIED LANDS WITHIN ANY FOR CLASSIFICATION MINERALS, WATER AND/OR OTHER PUBLIC PURPOSES REFER TO INDEX OF MISCELLANEOUS DOCUMENTS.

N 47792 R/W See Site Characterizing Studies  
Sec. 1

N 48246 ChII Action filed 3/29/1988  
Sec. 1

Exhibit C  
N-47748  
page 4



WARNING STATEMENT

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CURRENT TO	BY
7/18/03	MS
8/18/06	MS

N 050  
T. 155  
R. 48E







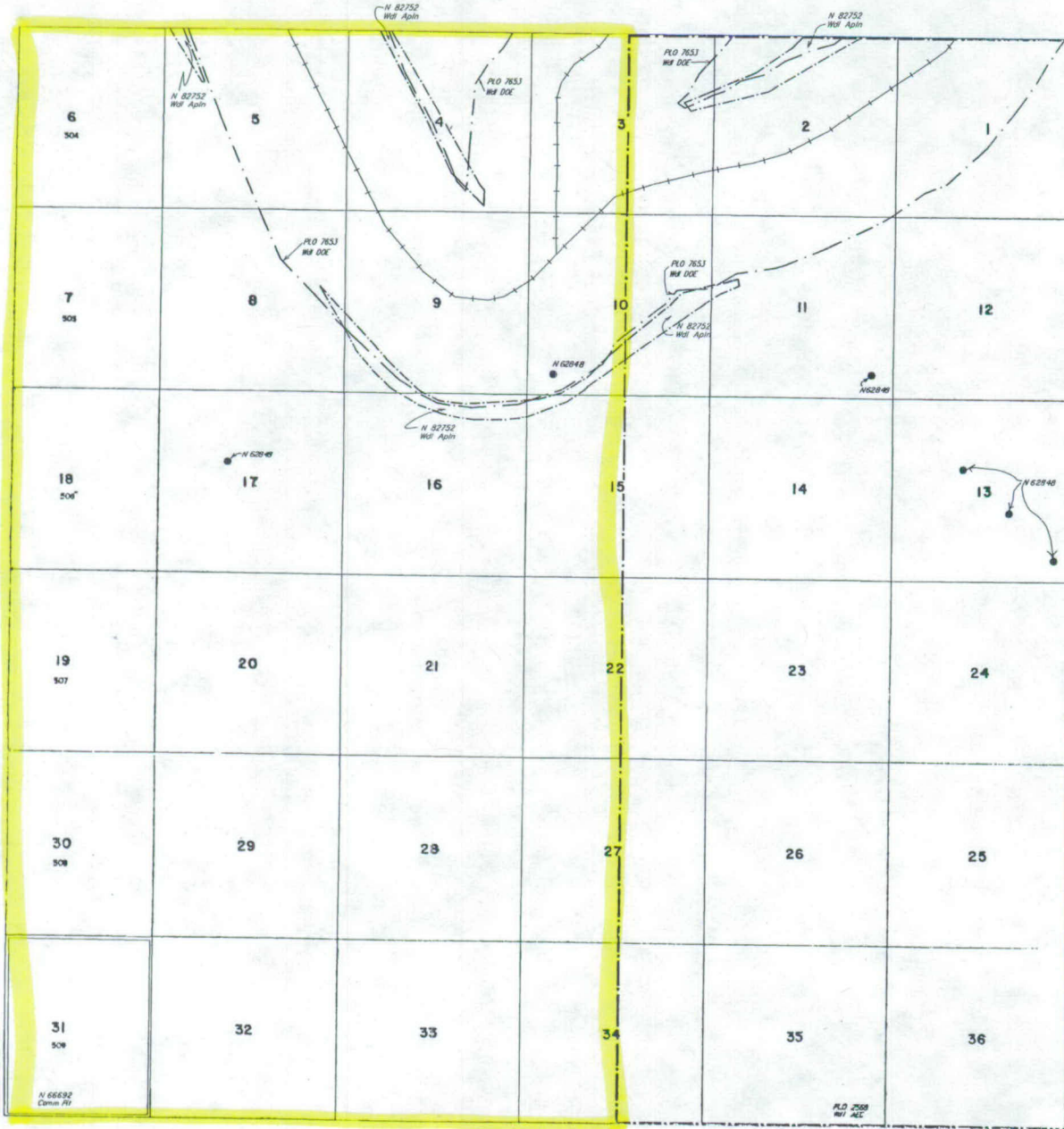
UNSURVEYED TOWNSHIP 14 SOUTH RANGE 49 EAST OF THE MOUNT DIABLO MERIDIAN, NEVADA

PROTRACTION DIAGRAM NO 44

NYE COUNTY

STATUS OF PUBLIC DOMAIN LAND AND MINERAL TITLES

MT PLAT



INDEX TO SEGREGATED TRACTS				
RESURVEY TRACT NO	ORIGINAL SURVEY			SUBDIVISION
	T	R	SEC	

DEC 19 2007

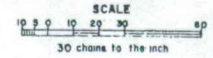
FOR ORDERS EFFECTING DISPOSAL OR USE OF UNIDENTIFIED LANDS WITHBOLDEN FOR CLASSIFICATION, MINERALS, WATER AND/OR OTHER PUBLIC PURPOSES, REFER TO INDEX OF MISCELLANEOUS DOCUMENTS.

- N 47748 R/W Res Site Characterization Studies
- Sec 3: W/2
- Sec 4-9
- Sec 10: W/2
- Sec 15: W/2
- Secs 16-21
- Sec 22: W/2
- Sec 27: W/2
- Secs 28-33
- Sec 34: W/2
- N 48246 Civil Action filed 3/29/1988
- Sec 3: W/2
- Secs 4-9
- Sec 10: W/2
- Sec 15: W/2
- Secs 16-21
- Sec 22: W/2
- Sec 27: W/2
- Secs 28-33
- Sec 34: W/2
- N 48327 R/W Site Characterization Studies
- Sec 8: SE 1/4 NW 1/4 NW 1/4

Exhibit C  
N-47748  
page 6

CURRENT TO	BY
4/30/2004	SL
1/20/06	MS
5/25/07	SLG

OG PLAT



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N-050  
T. 14S  
R. 49E



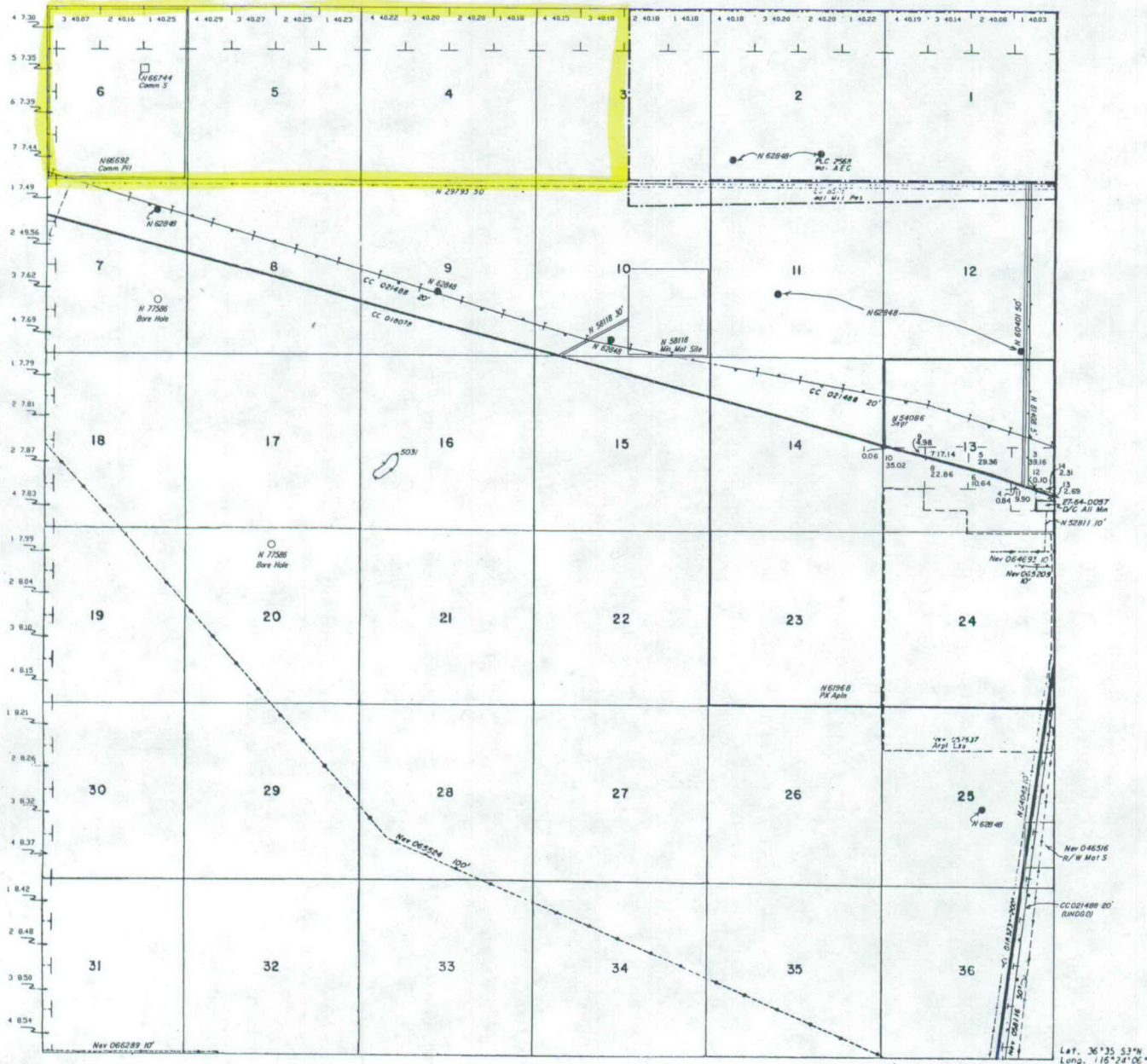
TOWNSHIP 15 SOUTH RANGE 49 EAST OF THE MOUNT DIABLO MERIDIAN, NEVADA

NYE COUNTY

STATUS OF PUBLIC DOMAIN  
LAND AND MINERAL TITLES

MT PLAT

INDEX TO SEGREGATED TRACTS				
RESURVEY		ORIGINAL SURVEY		
TRACT NO	T	R	SEC	SUBDIVISION



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BLM O.C.I. Notwithstanding DLE:  
Sec 8 N1/2, Sec 7 All, Sec 9 S1/2, Sec 10 S1/2, Sec 11 S1/2, Sec 12 S1/2, Sec 13 N1/2, Sec 14 S1/2, Sec 15 All, Sec 16 All,  
Sec 17 N1/2, Sec 18 All, Sec 19 NW 1/4, S1/2, Sec 20 N1/2, SW 1/4, Sec 22, E 1/2 NW 1/4, NE 1/4, S1/2, Sec 34-36 All.

N 47748 R/W Res. Site Characterization Studies  
Sec 3, W1/2  
Sec 4-6

N 48246 Civil Action Dike 3/29/1988  
Sec 3, W1/2  
Sec 4-6

Blank lines for additional survey references.

CURRENT TO	BY
10/1/02	SLL
9/15/03	MS
9/28/04	MS
6/26/06	MS
OG PLAT	

DEC 19 2007

Exhibit C  
N-47748  
page 7

SCALE  
10 5 0 10 20 30 60  
30 chains to the inch

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N-050  
T. 155  
R. 49E