

**CALENDAR ITEM
C17**

A 34
S 17

10/29/10
W 26427
C. Connor

GEOLOGICAL SURVEY AND SAMPLING PERMIT

APPLICANT:

City of Los Angeles
Department of Water and Power
William T. Van Wagoner
111 North Hope Street
Los Angeles, CA 90012

AREA, LAND TYPE, AND LOCATION:

Sovereign lands in Owens Lake, Inyo County.

AUTHORIZED USE:

Construction of a temporary access road to test location GS-1, and geotechnical and foundation testing at six study areas for information collection purposes for a solar study project.

PERMIT TERM:

One year, beginning October 29, 2010.

CONSIDERATION:

No monetary consideration will be charged as the information collected will result in a public benefit; the State reserves the right at any time to set a monetary rent if the Commission finds such action to be in the State's best interest.

SPECIFIC PERMIT PROVISIONS:

1. Liability insurance with coverage of no less than \$1,000,000. Applicant may satisfy all or part of the insurance requirement through maintenance of a staff-approved
2. Bond: \$25,000

CALENDAR ITEM NO. C17 (CONT'D)

3. Authorized activities shall not occur during periods of rain or when weather conditions otherwise increase the risk of erosion and/or water quality degradation.
4. LADWP shall implement the Best Management Practices Plan and Sampling Plan for Groundwater Protection as described and contained in Exhibit C to application material dated September 10, 2010.
5. Authorized activities shall occur in areas with no vegetation.
6. Prior to conducting authorized activities on State-owned land, LADWP shall provide the proposed temporary road construction route for Commission staff approval.
7. Prior to conducting authorized activities on State-owned land, Applicant shall provide pre-disturbance photographs of the study sites, including the proposed temporary road construction site. Each photograph shall provide the exact location of the photograph, date, time, and photographer's name and contact information.
8. For protection of the snowy plover, Applicant shall implement a Lakebed Worker Education Program, complete preconstruction surveys for western snowy plover, implement a snowy plover nest speed limit, and implement lighting best management practices.
9. Prior to expiration of the Permit, Applicant shall restore the Permit premises to pre-existing conditions unless an application has been filed with the Commission to retain the access road for a longer period of time.

OTHER PERTINENT INFORMATION:

1. Applicant will be required to obtain permission to access the uplands adjoining the Permit premises.
2. The City has applied to the Commission to obtain a Geological/Geophysical Survey Permit to study the specific conditions at the City's preferred solar development sites and to examine the load-carrying capacity of different types of solar panel foundations on different soil conditions. To access one of the study sites (GS-1), the City proposes to construct a temporary access road.

CALENDAR ITEM NO. C17 (CONT'D)

3. Foundation Study Areas: There are three foundation study areas, shown on Exhibit A, designated as FS-1, FS-2, and FS-3. Each area comprises 20 acres. These locations were proposed for study due to their proximity to existing transmission lines, relative ease of access, and potentially more favorable soil conditions compared to other areas of the lakebed. It is anticipated that only one site will be selected and proposed to the Commission at a later date for a future solar demonstration project.
4. Proposed work in the foundation study areas includes vertical and lateral load testing of prototype spread footing and pile foundations. Spread footings will consist of concrete or steel plates of various sizes with the largest dimension not exceeding eight feet. The footing size selected for testing will depend on the soil strength. Vertical loads will be applied by stacking known concrete dead weights on top of the footings or by pushing down with the excavator bucket and measuring the downward force applied. Lateral loads will be applied by pulling or pushing laterally one footing against another adjacent one, or by pushing laterally with the excavator bucket. Applied forces and displacements will be measured and recorded.
5. Pile foundations will consist of poles or tubes 20 feet long by 18 inches in diameter which will be pushed in by using an excavator bucket. The size and depth of piles may be adjusted based on test results. Vertical loads may be applied by placing dead weights on a collar or by pushing with the excavator bucket. Lateral forces may be applied by using an adjacent test foundation as a reaction, or by pushing/pulling laterally with an excavator bucket. Applied forces and displacements will be measured and recorded.
6. Tests will be conducted at and/or below the existing ground surface. Some tests may be done at or near the surface in areas containing softer soils below a harder crust. Other tests may be done below the surface to test the softer soils. Testing below the ground surface will involve excavating down to the desired depth (typically five feet), then creating a level area at that depth which will be slightly larger than the footing size, and proceeding.
7. Geotechnical Studies: For each foundation load test there will be an accompanying geotechnical exploration done adjacent to the test area (refer to Exhibit A, GS-1, GS-2, and GS-3) each on 10-acre sites. Geotechnical exploration will consist of test pits dug by an excavator, and obtaining soil samples at selected depth intervals. Groundwater samples may be obtained. Soil samples will vary from disturbed grab samples to

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relatively undisturbed tube samples. The soil and groundwater samples will be analyzed in a laboratory.

8. Area of Disturbance: Typically for each test site the load test setups, excavators, measurement systems and test pits would occupy a 100' x 100' area. If only a geotechnical study is being done, the test pits would be about a 10' x 20' area and 20' deep, with approximately a 50' x 50' area being taken by the test pit plus the excavator. Equipment needed to complete the survey will include 4-wheel drive vehicles, up to three excavators, spread footings, piles, dead weights/cables/attachments to load foundations, load and displacement measurement systems, and soil sampling and testing equipment.
9. Restoration of Test Areas: The City proposes to restore all disturbed and/or excavated areas in-kind upon completion of testing. All equipment and testing equipment including but not limited to piles/footings and assorted weights will be removed from each study site.
10. Study Schedule: It is anticipated that the proposed testing program will be completed within a six to eight week period between October and early December 2010.
11. Pursuant to the Commission's delegation of authority and the State CEQA Guidelines (Title 14, California Code of Regulations, section 15061), staff has determined this activity is exempt from the requirements of CEQA as a categorically exempt project. The project is exempt under Class 6, Information Collection (Geological Survey and Sampling); Title 14, California Code of Regulations, section 15306.

Authority: Public Resources Code section 21084 and Title 14, California Code of Regulations, section 15300.

12. This activity involves lands which have NOT been identified as possessing significant environmental values pursuant to Public Resources Code sections 6370, et seq. However, the Commission has declared that all state school lands and submerged lands are "significant" by nature of their public ownership (as opposed to "environmentally significant"). Since such declaration of significance is not based upon the requirements and criteria of Public Resources Code sections 6370, et seq., use classifications for such lands have not been designated. Therefore, the finding of the project's consistency with the use classification as required by Title 2, California Code of Regulations, section 2954 is not applicable.

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APPROVALS OBTAINED:

City of Los Angeles

FURTHER APPROVALS REQUIRED:

California Regional Water Quality Control Board (may be needed, not confirmed).

EXHIBITS:

- A. Site/Location Map
- B. Land Description

PERMIT STREAMLINING ACT DEADLINE:

April 10, 2011

RECOMMENDED ACTION:

IT IS RECOMMENDED THAT THE COMMISSION:

CEQA FINDING:

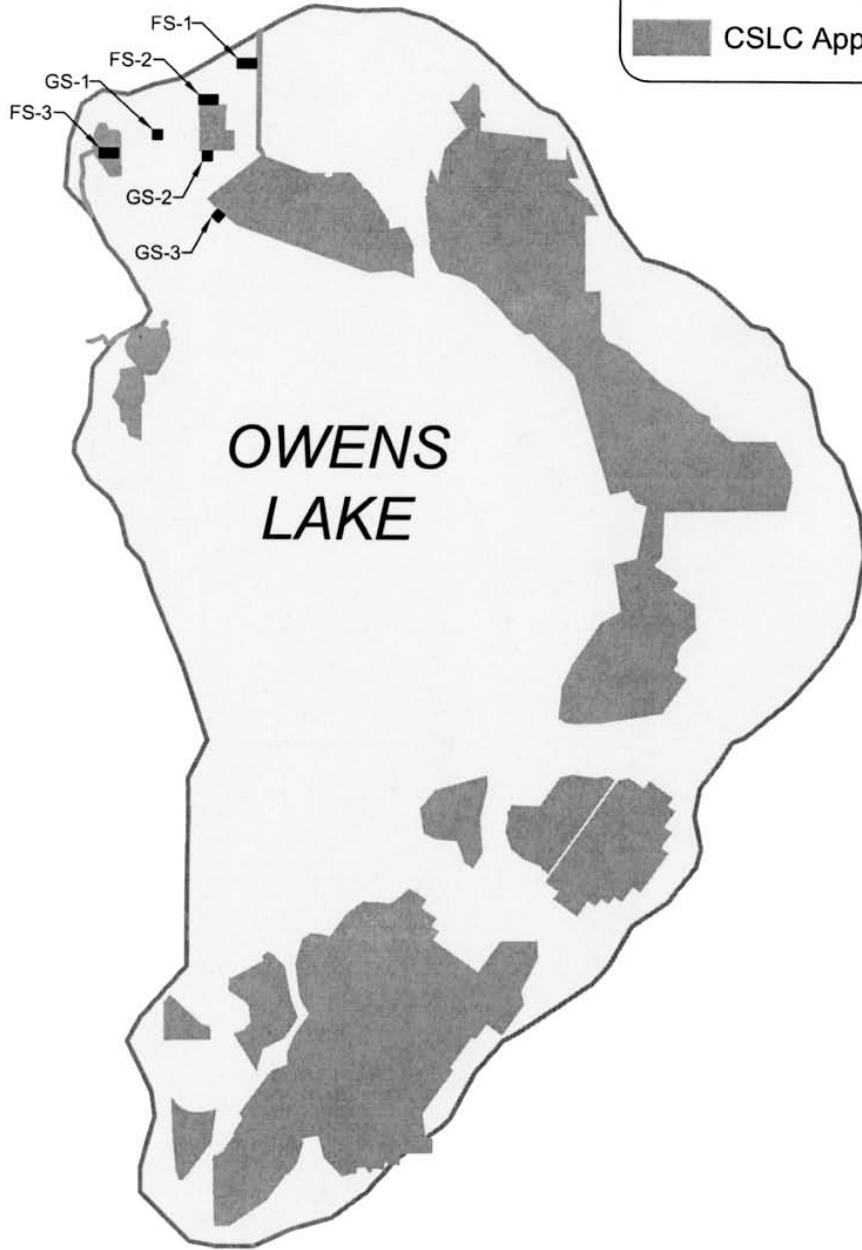
Find that the activity is exempt from the requirements of CEQA pursuant to Title 14, California Code of Regulations, section 15061 as a categorically exempt project, Class 6, Information Collection (Geological Survey and Sampling); Title 14, California Code of Regulations, section 15306.

AUTHORIZATION:

Authorize Issuance of a Geological Survey and Sampling Permit to the City of Los Angeles Department of Water and Power beginning October 29, 2010, for a term of one year, for construction of a temporary access road to study area (GS-1) and for geotechnical and foundation testing within six study areas for information collection for a solar study project as shown on Exhibit A attached (for reference purposes only) and by this reference made a part hereof; no consideration shall be charged as the project will result in a public benefit, but the State reserves the right at any time to set a monetary rent if the Commission finds such action to be in the State's best interest.

NO SCALE

SITE



■ Geotechnical and Foundation Study Areas
■ CSLC Approved Phases of Dust Control

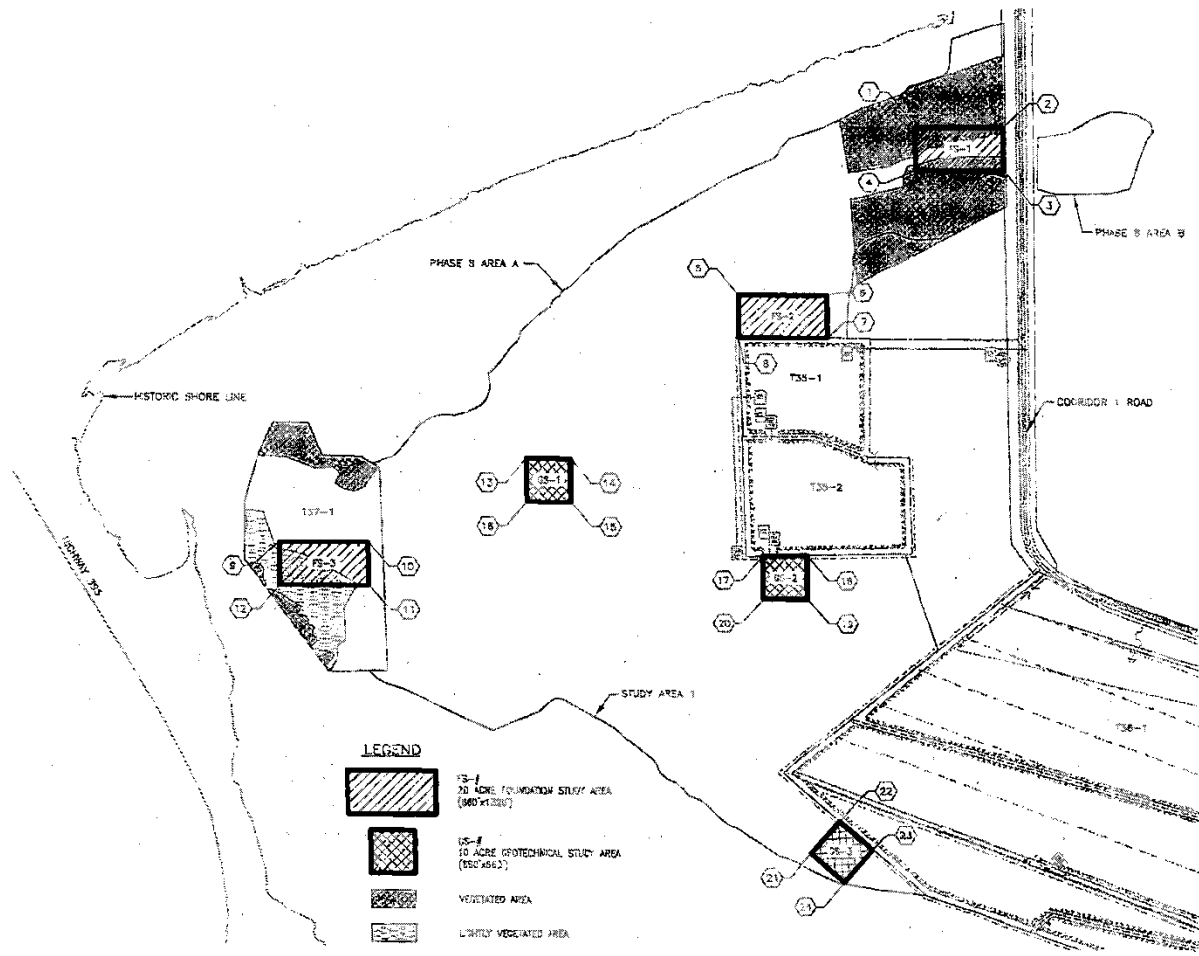
Exhibit A-1
W26427
LADWP
OWENS LAKE
GEOLOGICAL SURVEY
AND SAMPLING
INYO COUNTY



This Exhibit is solely for purposes of generally defining the lease premises, is based on unverified information provided by the Lessee or other parties and is not intended to be, nor shall it be construed as, a waiver or limitation of any State interest in the subject or any other property.

NO SCALE

SITE



GEOTECHNICAL AND FOUNDATION STUDY AREAS

NO SCALE

LOCATION



MAP SOURCE: USGS QUAD

Exhibit A-2

W26427
 LADWP
 OWENS LAKE
 GEOLOGICAL SURVEY
 AND SAMPLING
 INYO COUNTY



JAK 10/10

This Exhibit is solely for purposes of generally defining the lease premises, is based on unverified information provided by the Lessee or other parties and is not intended to be, nor shall it be construed as, a waiver or limitation of any State interest in the subject or any other property.

EXHIBIT B

W26427

LAND DESCRIPTION

Owens Lake Solar Study Geotechnical and Foundation Study Areas

Six parcels of State-owned sovereign land in the bed of Owens Lake in the County of Inyo, State of California, being more particularly described as follows:

Parcel FS-1 (Foundation Study Area)

BEGINNING at a point from whence Mineral Monument No. 58, a white marble stone monument with a metal plate cross stamped "MM #58", as said monument is shown on that map filed in Book 11, of Record of Surveys at page 7, Official Records of the County of Inyo, State of California, bears South 64°26'51" East, a distance of 35,766.43 feet; thence along the following described courses:

North 00°00'00" East, 660.00 feet;
North 90°00'00" West, 1,320.00 feet;
South 00°00'00" West, 660.00 feet;
South 90°00'00" East, 1,320.00 feet to the point of
BEGINNING.

Parcel FS-2 (Foundation Study Area)

BEGINNING at a point from whence Mineral Monument No. 58, a white marble stone monument with a metal plate cross stamped "MM #58", as said monument is shown on that map filed in Book 11, of Record of Surveys at page 7, Official Records of the County of Inyo, State of California, bears South 69°48'04" East, a distance of 37,235.05 feet; thence along the following described courses:

North 00°00'00" East, 660.00 feet;
North 90°00'00" West, 1,320.00 feet;
South 00°00'00" West, 660.00 feet;
South 90°00'00" East, 1,320.00 feet to the point of
BEGINNING.

Parcel FS-3 (Foundation Study Area)

BEGINNING at a point from whence Mineral Monument No. 58, a white marble stone monument with a metal plate cross stamped "MM #58", as said monument is shown on that map filed in Book 11, of Record of Surveys at page 7, Official Records of the County of Inyo, State of California, bears South $77^{\circ}45'27''$ East, a distance of 42,823.41 feet; thence along the following described courses:

North $00^{\circ}00'00''$ East, 660.00 feet;
North $90^{\circ}00'00''$ West, 1,320.00 feet;
South $00^{\circ}00'00''$ West, 660.00 feet;
South $90^{\circ}00'00''$ East, 1,320.00 feet to the point of
BEGINNING.

Parcel GS-1 (Geotechnical Study Area)

BEGINNING at a point from whence Mineral Monument No. 58, a white marble stone monument with a metal plate cross stamped "MM #58", as said monument is shown on that map filed in Book 11, of Record of Surveys at page 7, Official Records of the County of Inyo, State of California, bears South $75^{\circ}02'37''$ East, a distance of 40,175.65 feet; thence along the following described courses:

North $00^{\circ}00'00''$ East, 660.00 feet;
North $90^{\circ}00'00''$ West, 660.00 feet;
South $00^{\circ}00'00''$ West, 660.00 feet;
South $90^{\circ}00'00''$ East, 660.00 feet to the point of
BEGINNING.

Parcel GS-2 (Geotechnical Study Area)

BEGINNING at a point from whence Mineral Monument No. 58, a white marble stone monument with a metal plate cross stamped "MM #58", as said monument is shown on that map filed in Book 11, of Record of Surveys at page 7, Official Records of the County of Inyo, State of California, bears South $75^{\circ}51'21''$ East, a distance of 36,398.75 feet; thence along the following described courses:

North $00^{\circ}00'00''$ East, 660.00 feet;
North $90^{\circ}00'00''$ West, 660.00 feet;
South $00^{\circ}00'00''$ West, 660.00 feet;

South 90°00'00" East, 660.00 feet to the point of
BEGINNING.

Parcel GS-3 (Geotechnical Study Area)

BEGINNING at a point from whence Mineral Monument No. 58, a white marble stone monument with a metal plate cross stamped "MM #58", as said monument is shown on that map filed in Book 11, of Record of Surveys at page 7, Official Records of the County of Inyo, State of California, bears South 81°35'02" East, a distance of 34,747.02 feet; thence along the following described courses:

North 48°59'11" West, 660.00 feet;
South 41°00'51" West, 660.00 feet;
South 48°59'11" East, 660.00 feet;
North 41°00'51" East, 660.00 feet to the point of BEGINNING.

The Bearings used in this description are on the California Coordinate System, NAD83, (CCS83/92), Zone 4. The Coordinate values, in U.S. Survey Feet, of said Mineral Monument No. 58, also known as Triangulation Station "Keeler" are: Northing 2,064,076.37, Easting 6,890,187.91. All distances shown herein are grid distances in U.S. Survey Feet. To obtain ground surface distances, multiply the distances shown by 1.000228742.

END OF DESCRIPTION



Pat R. Maddock
7-7-10