STATE OF CALIFORNIA—THE RESOURCES AGENCY GRAY DAVIS, *GOVERNOR*

CALIFORNIA COASTAL COMMISSION

45 FREMONT, SUITE 2000
SAN FRANCISCO, CA 94105- 2219
VOICE AND TDD (415) 904- 5200
FAX ( 415) 904- 5400

# Th5a



| | |
|---|---|
| Date CDP Filed: | September 11, 2003 |
| 49th Day: | October 30, 2003 |
| 180th Day: | March 9, 2004 |
| Staff: | TRL-SF |
| Staff Report: | September 18, 2003 |
| Hearing Date: | October 9, 2003 |

## STAFF REPORT: REGULAR CALENDAR

| | |
|---|---|
| **APPLICATION FILE NO.:** | **E-03-008** |
| **APPLICANT:** | **Monterey Peninsula Water Management District** |
| **PROJECT LOCATION:** | In a nearshore area of Monterey Bay and on the shoreline near the Cities of Sand City and Seaside. |
| **PROJECT DESCRIPTION:** | Drilling test wells at four of six possible sites, and conducting onshore and offshore surveys using geophysical, geotechnical, and hydrogeological methods to determine the feasibility of the sites for use as beach wells in a desalination facility being considered by the applicant. |
| **LOCAL APPROVALS:** | City of Seaside Conditional Use Permit No. UP-03-09; City of Sand City Coastal Development Permit No. 03-02 and Conditional Use Permit No. 433. |
| **EXHIBIT 1:** | Area Map with Project Location |

---

**1.0 PROJECT SUMMARY:** This staff report evaluates a proposed survey of geologic conditions on and near the Monterey Bay shoreline at the Cities of Sand City and Seaside, and at the former Fort Ord, in Monterey County. The project purpose is to determine the potential for up to six sites to be used as intake or discharge wells for a possible desalination proposal being considered by the Applicant. One proposed test well site is within the Local Coastal Program jurisdiction of the City of Sand City; the rest of the work is within the Coastal Commission's retained permit jurisdiction in the City of Seaside (which does not have a certified Local Coastal Program), and in the former Fort Ord. **Note:** This staff report reviews the proposed test wells and surveys only. The desalination facility, if proposed, will require a separate coastal development permit application, review, and decision by the Coastal Commission.

Staff recommends that the Commission approve the proposed project, as conditioned. **Special Condition 1** would require, before starting staging, drilling, or survey activities, that the Applicant submit for Executive Director review and approval a detailed Spill Prevention and Response Plan. **Special Condition 2** would require project activities to occur only from October 1 to March 1 to protect sensitive plant and animal species in the area. **Special Condition 3** would require that before starting drilling or geophysical tests, a qualified botanist survey the project areas to identify and flag any nearby sensitive plant species, and would also require the botanist be present during project activities to further avoid and reduce potential adverse impacts to those species. **Special Condition 4** would allow up to two vehicles only to be used during the geophysical surveys on the beach area and would allow them to operate only on the beach below areas of vegetation.

Staff has determined that the proposal, as conditioned, will comply with Coastal Act sections 30230 and 30231 (water quality and marine biological resources), 30232 (spill prevention and response), 30240(b) (activities near environmentally sensitive habitat areas), 30211 (public access and recreation), and 30251 (scenic and visual resources).

## 2.0 STAFF RECOMMENDATIONS

The staff recommends conditional approval of the permit application.

Motion:

*I move that the Commission approve Coastal Development Permit E-03-008 subject to conditions specified below.*

Staff recommends a YES vote. Passage of this motion will result in approval of the permit as conditioned and adoption of the following resolution and findings. The motion passes only by affirmative vote of a majority of Commissioners present.

Resolution:

*The Commission hereby approves a Coastal Development Permit for the proposed development and adopts the findings set forth below on grounds that the development as conditioned will be in conformity with the policies of Chapter 3 of the Coastal Act. Approval of the permit complies with the California Environmental Quality Act because either 1) feasible mitigation measures and/or alternatives have been incorporated to substantially lessen any significant adverse effects of the development on the environment, or 2) there are no further feasible mitigation measures or alternatives that would substantially lessen any significant adverse impacts of the development on the environment.*

### *2.1 Standard Conditions*

1. Notice of Receipt and Acknowledgment. The permit is not valid and development shall not commence until a copy of the permit, signed by the applicant or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.

2. Expiration. If development has not commenced, the permit will expire two years from the date on which the Commission voted on the application. Development shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made prior to the expiration date.

3. Interpretation. Any questions of intent of interpretation of any condition will be resolved by the Executive Director or the Commission.

4. Assignment. The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.

5. Terms and Conditions Run with the Land: These terms and conditions shall be perpetual, and it is the intention of the Commission and the permittee to bind all future owners and possessors of the subject property to the terms and conditions.

### *2.2 Special Conditions*

1. Spill Prevention and Response Plan: Prior to starting construction, the applicant shall submit for review and written approval by the Executive Director a detailed plan describing spill prevention and response measures that will be implemented during project activities. At a minimum, the plan shall describe the spill prevention and response equipment to be stored at the project site, measures to be taken to prevent a spill or respond to a spill should one occur, and emergency responders to be contacted in the event of a spill.

   Upon approval of the plan, the applicant shall implement it as part of the project. Any proposed changes to the plan shall be reported to the Executive Director. No changes to the approved plan shall occur without a Commission amendment to this CDP unless the Executive Director determines that no amendment is legally required.

2. Project Timing: Project activities shall occur only during the period from October 1, 2003 to March 1, 2004.

3. Protection of sensitive plant species: All project activities shall occur outside of vegetated beach or dune areas. All surveys shall be conducted under the direction of a qualified biologist or botanist to ensure activities avoid areas of vegetation. Prior to survey activities, the Applicant shall provide the name and qualifications of the biologist or botanist for Executive Director review and approval. Project equipment, including well drilling rigs and acoustic or seismic survey equipment, shall not be moved to or placed near vegetated areas

until after the approved botanist has surveyed the areas and flagged or otherwise marked sensitive plants to be avoided. The botanist shall also direct project personnel during project activities to ensure they avoid and minimize adverse effects on vegetation.

4. Use of vehicles on beach: No more than two vehicles may be used on the beach during project activities. Vehicles shall be driven or parked only on non-vegetated areas of the beach and below the drift line. Project personnel shall hand carry equipment to be used during the surveys to and from areas with vegetation above the wetted area of the beach.

## 3.0 PROJECT DESCRIPTION, SETTING, AND BACKGROUND

The proposed project involves drilling up to four test wells at six locations and performing various onshore and offshore geophysical, geotechnical, and hydrogeological surveys at several locations along the Monterey Bay shoreline in and near the Cities of Sand City and Seaside and the former Fort Ord (see Exhibit 1). The project purpose is to determine whether the sites are suitable for infiltration or brine disposal wells that would be used for a desalination facility being considered by the Monterey Peninsula Water Management District (the Applicant).

The proposed work would occur within the coastal zone at several sites in, along, and near Monterey Bay. One well site is within the Local Coastal Program jurisdiction of the City of Sand City, which issued its coastal development permit on July 15, 2003. The rest are within the retained permit jurisdiction of the Coastal Commission – one well site is in the City of Seaside (which does not have a certified Local Coastal Program), and four are within the former Fort Ord and subject to the Commission's jurisdiction. The various types of survey activities would occur at onshore and nearshore areas near the Monterey Bay shoreline within the Commission's retained jurisdiction.

Test wells: The well sites within the Commission's retained jurisdiction are east of the primary coastal dune habitat in Seaside and in the former Fort Ord. The site in the City of Seaside is located at the Seaside Beach parking lot. The four sites within the former Fort Ord include two primary sites and two alternate sites, and all are located on the facility's road network.

The wells would allow geotechnical and hydrogeological investigations through placement of piezometers and the use of "slug tests", which quantify groundwater and aquifer characteristics. Each well would be about 12 inches in diameter and between 100 and 150 feet deep. Each would require the use of a mobile drill rig and assorted support vehicles and equipment and would require about seven to ten days of drilling. Once drilled, test equipment would be placed in each well and left for about three months. The surface of the well would be flush with the pre-existing surface and all equipment would be stored beneath the surface within a secured well cover. After the three-month data collection period, the equipment would be removed and the wells would be abandoned pursuant to state and local requirements, which require removal of all surface equipment and well materials (screens, filters, etc.), filling of the well borehole with bentonite, capping the borehole with concrete, and grading and preparing the surface to match the pre-existing condition.

Geophysical surveys: The proposed work includes nearshore and onshore geophysical surveys to determine the characteristics of geological conditions beneath the beach. The nearshore surveys would consist of several profiling transects using low-energy acoustic and seismic reflection methods in relatively shallow water areas close to the shoreline. The surveys would be done using a cabled instrument array to be towed behind an approximately 30-foot long workboat and would be conducted by Thales Geopacific, Inc., a contractor working on behalf of the Applicant. These surveys are expected to take approximately three days.

The onshore surveys would be done using a portable seismograph and geophone array approximately 300 feet long that would be placed along a stretch of beach roughly parallel to the shoreline. Project personnel would use a sledgehammer to strike a small steel plate placed at various locations. The data recorded would be used along with the data collected from the nearshore surveys and data from the test wells drilled further inland to develop lateral velocity profiles describing subsurface conditions. The surveys would take place in the bare sand areas of the beach, although portions of the work may occur near sparsely vegetated areas of the beach area and near dune areas that serve as known or potential habitat to populations of sensitive plant and animal species, including the Monterey spineflower (*Chorizanthe pungens* var. *pungens*), Western snowy plover (*Charadrius alexandrinus nivosus*), Smith's blue butterfly (*Euphilotes enoptes smithi*), and the black legless lizard (*Anniella pulchra nigra*).

The equipment needed for these onshore surveys would be moved to and from the beach in a four-wheel drive vehicle. Access to the beach would be via existing access roads. About six personnel would be required during testing to position the equipment, conduct the tests, and remove the equipment. The surveys are expected to occur from between 7 a.m. to 7 p.m. for approximately 7 to 10 days.

### *3.1 Other Permits and Approvals*

The project is subject to the following permits and approvals:

- City of Sand City:
  - CEQA Negative Declaration (State Clearinghouse No. 2003022015), March 6, 2003.
  - Coastal Development Permit No. 02-32, approved July 15, 2003.
  - Conditional Use Permit No. 433, approved July 15, 2003.

- City of Seaside: Conditional Use Permit No. UP-03-09, issued 8/13/03.

- California Department of Parks and Recreation:
  - Permit to Conduct Well Operations, approved March 21, 2003.
  - Right of Entry Permit, approved July 22, 2003.

- California Regional Water Quality Control Board, Central Coast: Standard water quality certification, issued August 28, 2003.

- California State Lands Commission:
  - General Lease Right Of Way, staff recommendation for approval issued July 9, 2003, scheduled for Commission consideration on August 19, 2003.
  - General Permit to Conduct Geophysical Surveys – issued to Thales GeoPacific, Inc. on July 9, 2002.

- U.S. Army, Fort Ord: Right of Entry, preliminary approval, July 15, 2003.

- U.S. Army Corps of Engineers: Nationwide Permit #6 – Survey Activities.

## 4.0 FINDINGS AND DECLARATIONS

Standard of Review: The standard of review is whether the project complies with the policies of Chapter 3 of the Coastal Act. The Commission may also refer to the provisions of the certified LCP for guidance.

### *4.1 Water Quality and Biological Resources*

Coastal Act section 30230 states:

> *Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.*

Coastal Act section 30231 states:

> *The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas, that protect riparian habitats, and minimizing alteration of natural streams.*

The waters and shoreline of Monterey Bay provide a rich assemblage of habitat types for numerous wildlife species. The Bay is home to several endangered or threatened fish species, numerous marine mammals, and many other plant and animal species. The proposed project involves geophysical surveys in an area of nearshore, shallow waters of the bay. This work consists of conducting a series of nearshore profiling transects using relatively low-energy acoustic and seismic reflection methods. These transects would be conducted by towing a cabled

instrument array from an approximately 30-foot long workboat. The equipment used would generate pulses of sound or energy waves of up to 300 joules to determine substrate characteristics.

These types of surveys have the potential to adversely affect marine mammals if the sounds or energies generated exceed the animal's tolerance, and could result in harm, harassment, or mortality of the animals. The project includes several measures to avoid or minimize potential adverse effects on marine mammals, including:

- Work will be subject to the conditions of the State Lands Commission's General Permit to Conduct Geophysical Surveys[1], which includes a number of requirements meant to avoid and minimize adverse effects on marine mammals, including:
  - Prohibiting the use of air or water compression devices and chemical explosives.
  - Limiting the energy generated by acoustic pulse-generating equipment to 2000 joules or less. [Note: the surveys for this project will generate no more than 300 joules.]

- Work would occur only in areas of shallow water (less than 50 feet deep) and sandy substrates, where the sound and energy generated by the survey equipment will be attenuated relatively quickly due to the dispersing effects of the surface waves and the interaction with the seafloor. Because the equipment to be used is relatively low-energy and because the surveys will take place in shallow, nearshore waters, energy generated by the equipment is expected to dissipate to very low levels with a few dozen feet of the vessel.

With these measures, the Commission therefore finds that the project will not adversely affect water quality and marine biological resources.

**Conclusion:**

For the reasons above, the Commission finds the project consistent with Sections 30230 and 30231 of the Coastal Act.

### *4.2 Spill Prevention and Response:*

Coastal Act section 30232 states:

> *Protection against the spillage of crude oil, gas, petroleum products, or hazardous substances shall be provided in relation to any development or transportation of such materials. Effective containment and cleanup facilities and procedures shall be provided for accidental spills that do occur.*

---

[1] **Note:** Surveys done pursuant to conditions of this permit are generally below the threshold of concern that would require an Incidental Harassment Authorization from the National Marine Fisheries Service for any "take" of marine mammals under the federal Marine Mammal Protection Act.

The proposed project could potentially increase the risk of oil spills on or adjacent to coastal waters due to its use of motor vehicles and vessels. Coastal Act section 30232 requires an applicant to undertake measures to prevent an oil spill. For the onshore drilling work, the Applicant has included a number of measures as part of the project to avoid or reduce the potential for oil or fuel spills. The Applicant will construct a containment area at each well site to enclose the drill rig, fluid truck, and other equipment used for storing or handling hazardous fluids, and will maintain a supply of absorbent materials to use should a spill occur. For the project's nearshore work, the vessel used for the surveys will be subject to requirements of the U.S. Coast Guard and the California Office of Spill Prevention and Response regarding spill prevention, containment, notification, and responses. The potential for oil or fuel spills is considered very low, due in part to the short duration of the project work at any site, and due in part to the Applicant's mitigation measures.

To further ensure the project includes adequate measures to prevent spills and to respond to them should they occur, **Special Condition 1** would require the Applicant to provide for Executive Director review and approval a detailed Spill Prevention and Response Plan that describes all measures that will be taken during both onshore and offshore project activities to prevent and respond to spills, as well as the necessary notification and contact information should a spill occur.

With these measures, and as conditioned, the Commission therefore finds that the project will provide adequate protection against spills and will ensure necessary containment should a spill occur.

**Conclusion:**

For the reasons above, the Commission finds that, as conditioned, the project is consistent with Section 30232 of the Coastal Act.

### *4.3 Environmentally Sensitive Habitat Areas*

Section 30240(b) of the Coastal Act states:

> *Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.*

Project activities will occur near areas of known or potential sensitive habitat areas, including coastal dunes and vegetated areas near the beach, and have the potential to cause adverse effects to these areas or to sensitive species in those areas. The dune area includes known or potential habitat for a number of species, including several sensitive species – the Monterey spineflower (*Chorizanthe pungens* var. *pungens*), Western snowy plover (*Charadrius alexandrinus nivosus*), Smith's blue butterfly (*Euphilotes enoptes smithi*), and the black legless lizard (*Anniella pulchra nigra*).

Drilling the test wells will require staging, equipment use, and personnel on existing roads but near possibly sensitive habitat areas. The geophysical surveys in the beach area will require operating up to two four-wheel drive vehicles on the beach, laying out cabled geophones up to 300 feet long, and performing seismic tests using the geophone array. The Applicant has incorporated several measures into the project to avoid or reduce potential adverse impacts. The staging and drilling activities at each of the well sites will be limited to existing roads and disturbed areas. Work on the beach will minimize the use of vehicles, hand carry equipment when feasible, and avoid vegetated areas. Additionally, all onshore project sites and nearby areas have been surveyed for sensitive species.

For all onshore activities, the Applicant has identified the critical times for the sensitive species to avoid or reduce adverse effects:

- For the Monterey spineflower, work can occur only from July 1 to January 1 to avoid flowering season. Additionally, the Applicant will survey the area before project activities begin and will flag or mark any plants in the project area.
- For the Western snowy plover, work can occur only from October 1 through March 1 to avoid nesting season.
- For Smith's blue butterfly, work can occur only from October 1 through early August.

In sum, the overall allowable work period would be from October 1st through March 1st of any year. Additionally, to reduce potential adverse impacts on the black legless lizard, the applicant would conduct daily morning and evening surveys using biologically acceptable methods such as raking and coverboards. Any lizards found in or near areas where they could be affected by project activities will be relocated to nearby similar habitat.

To ensure project activities occur outside of the critical times for the sensitive species, **Special Condition 2** would allow project work to occur only during the period from October 1 to March 1st. To further ensure the project avoids or minimizes adverse impacts to sensitive plant species, **Special Condition 3** would require that a qualified botanist, approved by the Executive Director, determines whether any sensitive plants are in the area of the project activities, marks those plants, and directs personnel on placement of survey equipment to avoid the plants. To further reduce potential impacts, **Special Condition 4** would allow no more than two vehicles on the beach during project activities, would require the vehicles stay on the wetted areas of the beach, and would require that project equipment be hand carried to areas near where vegetation is present.

With these measures, and as conditioned, the Commission therefore finds that the project will not significantly degrade nearby environmentally sensitive habitat areas, and is compatible with continuance of these areas.

**Conclusion:**

For the reasons above, the Commission finds that, as conditioned, the project is consistent with Section 30240(b) of the Coastal Act.

### *4.4 Public Access and Recreation*

Coastal Act Section 30211 states:

> *Development shall not interfere with the public's right of access to the sea where acquired through use or legislative authorization, including, but not limited to, the use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation.*

Coastal Act Section 30220 states:

> *Coastal areas suited for water-oriented recreational activities that cannot readily be provided at inland water areas shall be protected for such uses.*

The project will take place on shoreline and nearshore areas used by the public for coastal access and recreation, with portions of the onshore work to occur within the Monterey Beach State Park.

Test wells: One of the test well sites is within the parking lot of the Seaside State Beach. The staging and drilling area for the well would occupy up to 15 of the 42 available spaces at the parking lot for up to approximately one week. The Applicant will confine the use of this space to weekdays and low-use times to the fullest extent possible, and would ensure that activities do not block the parking lot entrance or affect other spaces. This use would be further controlled by the California State Parks and Recreation Department. These project activities would result in a minor and temporary increase in personnel and vehicle traffic on and near the beach; however, the increase will be short-term and is not expected to cause significant adverse effects to coastal access.

Geophysical surveys: Project activities will involve the use of one or two vehicles on the beach area and a single vessel offshore over a period of seven to ten days. These project activities would result in a minor and temporary increase in personnel and vehicle traffic on and near the beach; however, the increase will be short-term and is not expected to cause significant adverse effects to coastal access.

The Commission therefore finds that the project will not significantly interfere with public access to the coast and public recreation.

**Conclusion:**

For the reasons above, the Commission finds the project consistent with Sections 30211 and 30220 of the Coastal Act.

### *4.5 Scenic and Visual Qualities*

Coastal Act Section 30251 states:

> *The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded area.*

The proposed project activities will result in minor and temporary visual effects due to the use of vehicles and test equipment on and near the beach area and a vessel offshore. Because the activities are temporary and relatively minor, the proposed project will not result in significant adverse impacts to coastal views. The Commission therefore finds that the proposed development will not adversely affect views to and along the scenic coastal area where it is located.

**Conclusion:**

For the reasons above, the Commission finds the project consistent with Section 30251 of the Coastal Act.

## 5.0 CALIFORNIA ENVIRONMENTAL QUALITY ACT

Section 13096 of the Commission's administrative regulations requires Commission approval of CDP applications to be supported by a finding showing the application, as modified by any conditions of approval, to be consistent with any applicable requirements of the California Environmental Quality Act (CEQA). Section 21080.5(d)(2)(A) of the CEQA prohibits approval of a proposed development if there are feasible alternatives or feasible mitigation measures available that would substantially lessen any significant impacts that the activity may have on the environment. Mitigation measures that will minimize or avoid all significant adverse environmental impacts have been required. As conditioned, there are no feasible alternatives or feasible mitigation measures available, beyond those required, which would substantially lessen any significant adverse impact that the activity would have on the environment. Therefore, the Commission finds that the proposed project, as conditioned to mitigate the identified impacts, can be found consistent with the requirements of the Coastal Act and to conform to CEQA.

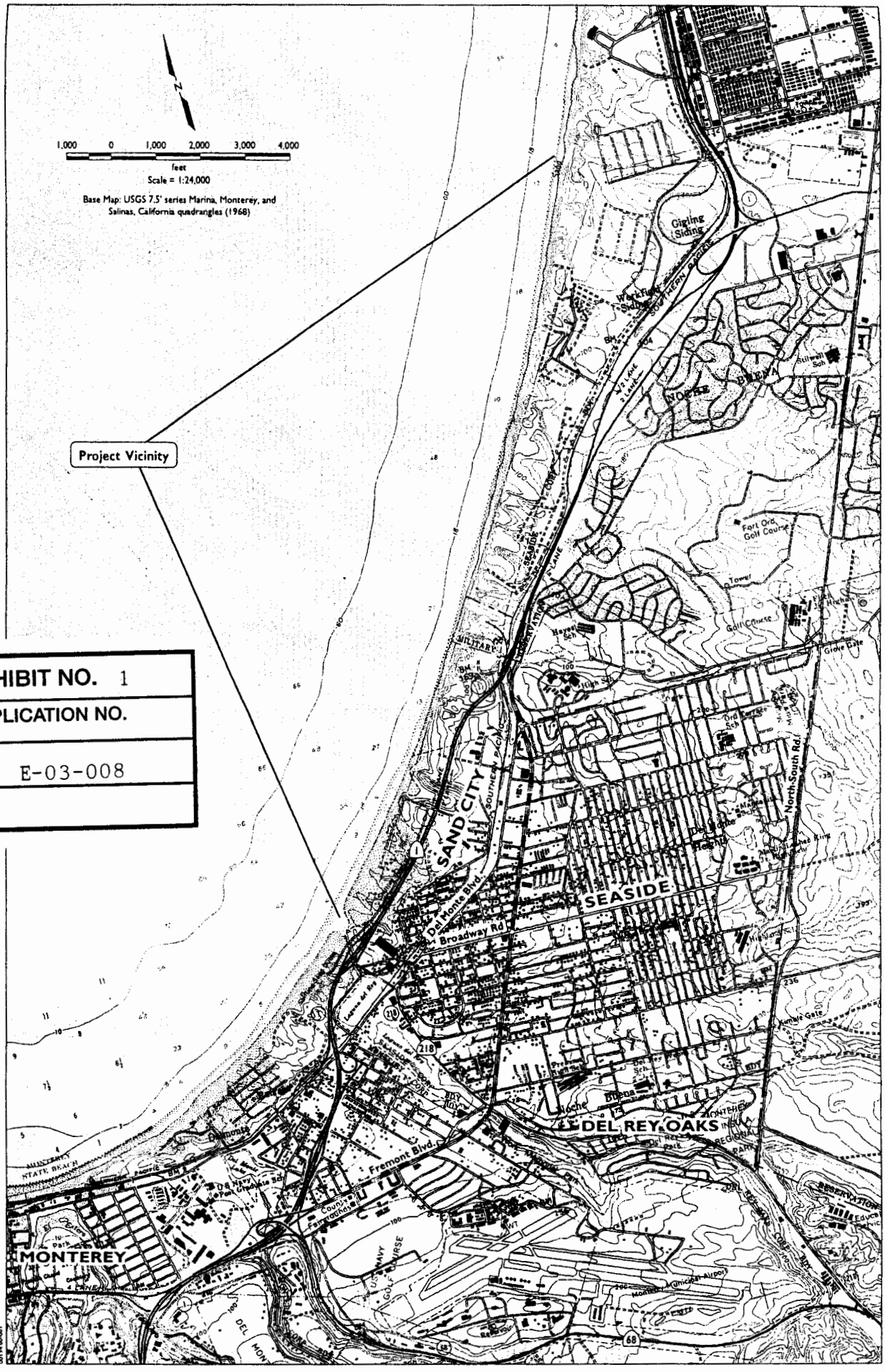


EXHIBIT NO. 1

APPLICATION NO.

E-03-008

Jones & Stokes

**Figure 1**
**Project Vicinity**