

**MINUTE ITEM**

This Calendar Item No. C88 was approved as  
Minute Item No. 88 by the California State Lands  
Commission by a vote of 3 to 0 at its  
6-27-00 meeting.

**CALENDAR ITEM  
C88**

A 54, 55

06/27/00

S 27, 28

W 10434

C. Duda

**CONSIDER PRIOR APPROVAL OF SUBSIDENCE COSTS FOR  
VERTICAL AND HORIZONTAL MEASUREMENTS AND STUDIES,  
2000-2001 FISCAL YEAR, CITY OF LONG BEACH,  
LOS ANGELES COUNTY**

**APPLICANT:**

City of Long Beach  
Department of Oil Properties  
Attn.: Mr. Dennis M. Sullivan, Director  
211 E. Ocean Blvd., Suite 500  
Long Beach, CA 90802

**BACKGROUND:**

The City of Long Beach (City) conducts ground elevation and horizontal distance measurement surveys and studies twice each year throughout the Harbor District for the purpose of monitoring changes that may be attributable to subsidence. The project consists of vertical and horizontal measurements and studies in the City of Long Beach between July 1, 2000 and June 30, 2001. A major portion of the work effort and cost is in the vertical measurement (elevation) surveys and studies. The City estimates the cost of the work to be:

Vertical Measurements and Studies	\$450,000
Consultants and Contingencies	\$265,000
Horizontal Measurements and Studies	<u>\$ 15,000</u>
	\$730,000

This includes the Harbor Department expenditures related to the cost associated with obtaining differential leveling data, GPS data acquisition, and horizontal strain measurements. The estimated cost for consultants and contingencies

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includes the evaluation of synthetic aperture radar (SAR) interferometry, and idle reservoir monitoring and surveillance, and includes the State's share of the civil engineering study in the Naples/Alamitos Bay area (\$175,000).

Synthetic aperture radar (SAR) interferometry is an imaging radar device, which images the radar backscatter of the surface of the earth over large areas. It has been used for remote monitoring of surface deformation at the millimeter level for subsidence assessment in major oil fields. Evaluation of this technology may lead to decreased costs for vertical measurements in the future.

Last year, the Commission agreed to split the cost of an independent evaluation of the Naples' seawall deterioration estimated at \$150,000 (Subsidence and Civil Engineering Studies). Part of that study, the subsidence portion, is in the completion stage. The other part, the civil engineering study, was not completed this year because only one bid was received for \$322,000. The City plans to reissue the Request for Proposal with hope of receiving a more reasonable bid. With the subsidence proposal, the City and State were able to negotiate a lower fee (\$100,000) than originally submitted. We expect the same will hold true for the civil study, and recommend approval of a maximum of \$150,000 instead of the requested \$175,000. The recommended expenditures are included in Exhibit B, attached.

**FISCAL IMPACT:**

Subsidence costs for vertical and horizontal measurements and studies conducted in Long Beach are deducted from the Long Beach tidelands oil revenues, with the prior approval of the California State Lands Commission in accordance with Chapter 138/64 1st E.S., Section 1(e).

**STATUTORY AND OTHER REFERENCES:**

- A. The proposed expenditures are authorized by Chapter 138/64 1st E.S., Section 1(e) subject to prior approval by the California State Lands Commission.

**OTHER PERTINENT INFORMATION:**

- 1. The City of Long Beach has determined that the project is exempt from the requirements of the CEQA as a categorically exempt project under Class 6, Information Collection, Title 14, California Code of Regulations, section 15306.

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2. Pursuant to the Commission's delegation of authority and the State CEQA Guidelines (Title 14, California Code of Regulations, section 15061), staff recommends that the Commission concur with the City's determination.

**EXHIBITS:**

- A. Location Map
- B. Cost Estimate

**PERMIT STREAMLINING ACT DEADLINE:**

N/A

**RECOMMENDED ACTION:**

IT IS RECOMMENDED THAT THE COMMISSION:

**CEQA FINDING:**

CONCUR WITH THE CITY OF LONG BEACH'S DETERMINATION THAT THE PROPOSED ACTIVITY IS EXEMPT FROM THE REQUIREMENTS OF CEQA AS A CATEGORICALLY EXEMPT PROJECT, CLASS 6, INFORMATION COLLECTION; AND

**AUTHORIZATION:**

APPROVE SUBSIDENCE COSTS, AS DEFINED IN CHAPTER 138/64 1ST E.S., SECTION 1(e) AND AS SHOWN ON EXHIBIT B ATTACHED AD BY THIS REFERENCE MADE A PART HEREOF, PROPOSED TO BE EXPENDED BY THE CITY OF LONG BEACH, FOR SUBSIDENCE VERTICAL AND HORIZONTAL MEASUREMENTS AND STUDIES TO BE CONDUCTED IN THE LONG BEACH BETWEEN JULY 1, 2000 AND JUNE 30, 2001, SUBJECT TO THE CONDITION THAT THE WORK CONFORMS IN ESSENTIAL DETAILS TO THE DEFINITIONS AND PROCEDURES FOR SUCH WORK ESTABLISHED BY THE COMMISSION ON JUNE 27, 1979, MINUTE ITEM 27

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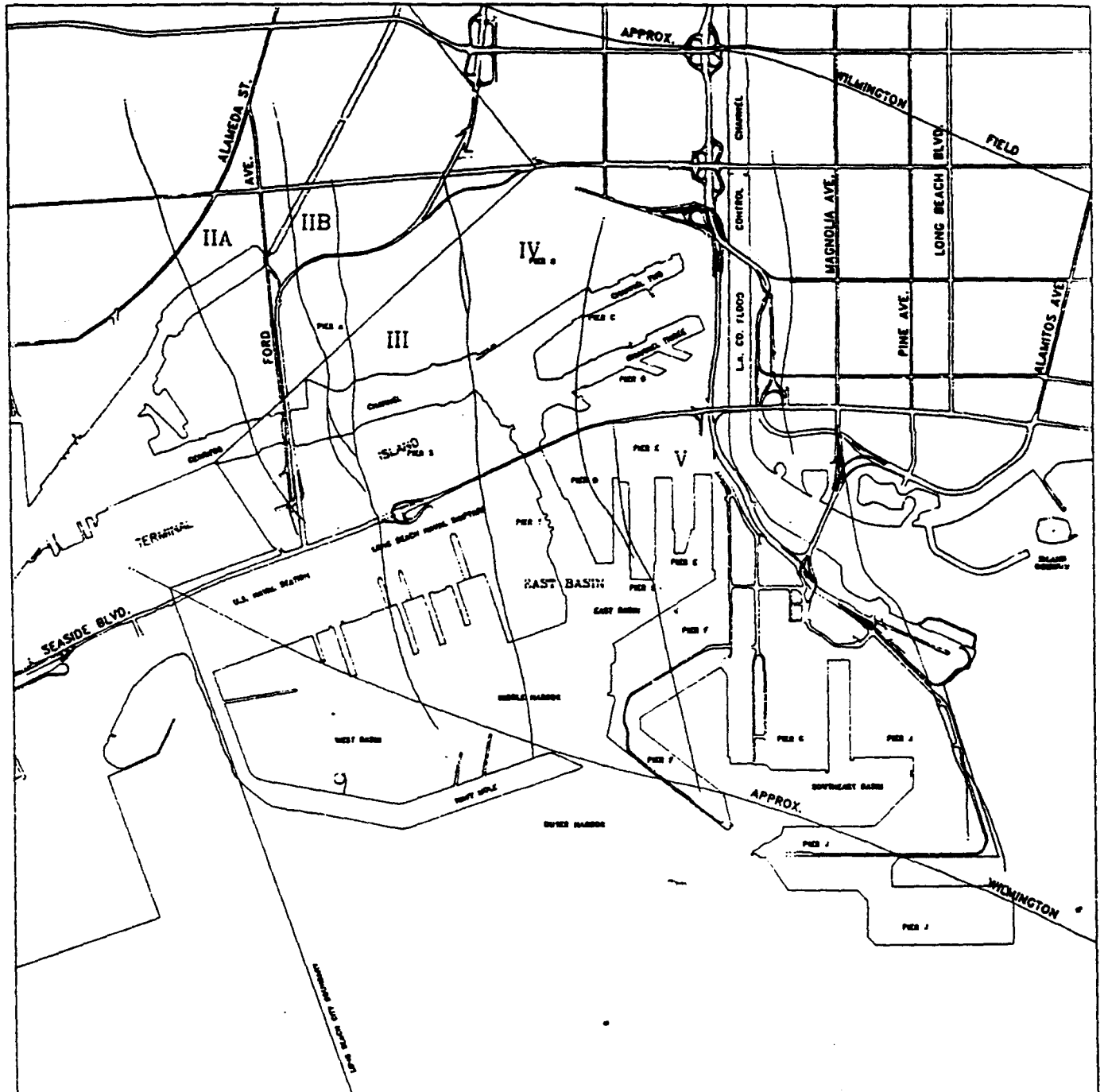
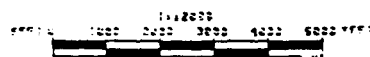


EXHIBIT 'A'  
LOCATION MAP

PORT OF LONG BEACH



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**EXHIBIT B  
COST ESTIMATE  
LONG BEACH WORK ORDER NO. 10431**  
Proposed and Recommended Expenditure for  
Subsidence Vertical and Horizontal Surveys  
2000-2001 Fiscal Year

<b>ITEM</b>	<b>PROPOSED WORK</b>	<b>PROPOSED EXPENDITURE</b>	<b>RECOMMENDED EXPENDITURE</b>
1.	Vertical Measurements and Studies	\$450,000	\$450,000
2.	Synthetic Aperture Radar (SAR) interferometry	\$ 50,000	\$ 50,000
3.	Idle Reservoir Monitoring and Surveillance <sup>1</sup>	\$ 40,000	\$ 40,000
4.	State's Share of Civil Engineering Study	\$175,000	\$150,000
5.	Horizontal Measurements and Studies	\$ 15,000	\$ 15,000
	Total	\$730,000	\$705,000

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<sup>1</sup>Consultants and contingencies as proposed include SAR, idle reservoir monitoring and State's share of Civil Engineering study.

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