MINUTE ITEM

This Calendar Item No. C39 was approved as Minute Item No. 39 by the California State Lands Commission by a vote of 3 to 0 at its 6-2-03 meeting.

INFORMATIONAL CALENDAR ITEM
C39

A) 54, 55

S) 27, 28

06/02/03
W 10436
V. Duda

STAFF REPORT ON THE MONITORING FOR POSSIBLE SUBSIDENCE, LONG BEACH UNIT, WILMINGTON OIL FIELD, LOS ANGELES COUNTY

PARTY:

California State Lands Commission
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825-8202

BACKGROUND:

The City of Long Beach conducts surveys twice each year, in May and November, for the purpose of monitoring changes in ground elevation of the Long Beach tidelands and adjacent areas. The Commission's staff reviews and interprets the benchmark elevation data from these semi-annual surveys.

The May 2002 elevation survey was the first use of only Global Positioning System (GPS) satellite equipment. Reprocessing of the May 2002 benchmark data has shown that these elevation results lack the accuracy required for the elevation monitoring. The older GPS survey equipment used for this survey was unreliable in linking and networking to the five permanent new technology GPS stations. Therefore, there is no six-month comparison.

The November 2002 survey was delayed for almost two months while waiting for new GPS survey equipment purchased in December 2002. This report covers benchmarks surveyed in January 2003 and compares elevation changes that have occurred since completion of the survey in November 2001.

Minor elevation changes occurred in the Harbor District over the past year. Slight elevation losses of up to 0.05 feet (0.60 inches) were measured throughout the

harbor. These minor losses centered on Piers B, C, E, F, and T. Elevation losses of up to 0.09 feet (1.08 inches) were measured along Pier J. A component of these losses can be attributed to surface loading and development of the new Carnival Cruise Ship Terminal near the Queen Mary and Spruce Goose Dome. Changes in water injection rates due to well realignments also contributed to the elevation losses.

Elevation losses of up to 0.16 feet (1.92 inches) continued over the curtailed Tar steam flood area west of Henry Ford Avenue. The steam flood, initiated in the 1980's, was terminated in 1999 because of loss of surface elevation due to subsurface shale compaction caused by high temperatures derived from the steam injection.

The Civic Center remained stable except south of Ocean Boulevard at the Pike Redevelopment area. Elevation losses approaching 0.05 feet (0.60 inches) were related to surface loading and pile driving during construction. Alamitos Bay, the Central City, Naples Island, and the Oil Islands remained stable.

The results of the next regular elevation survey, to be conducted in May 2003, will be reported to the Commission after the data have been received and analyzed by the Commission's staff.

EXHIBIT:

A. Location Map

PERMIT STREAMLINING ACT DEADLINE:

N/A

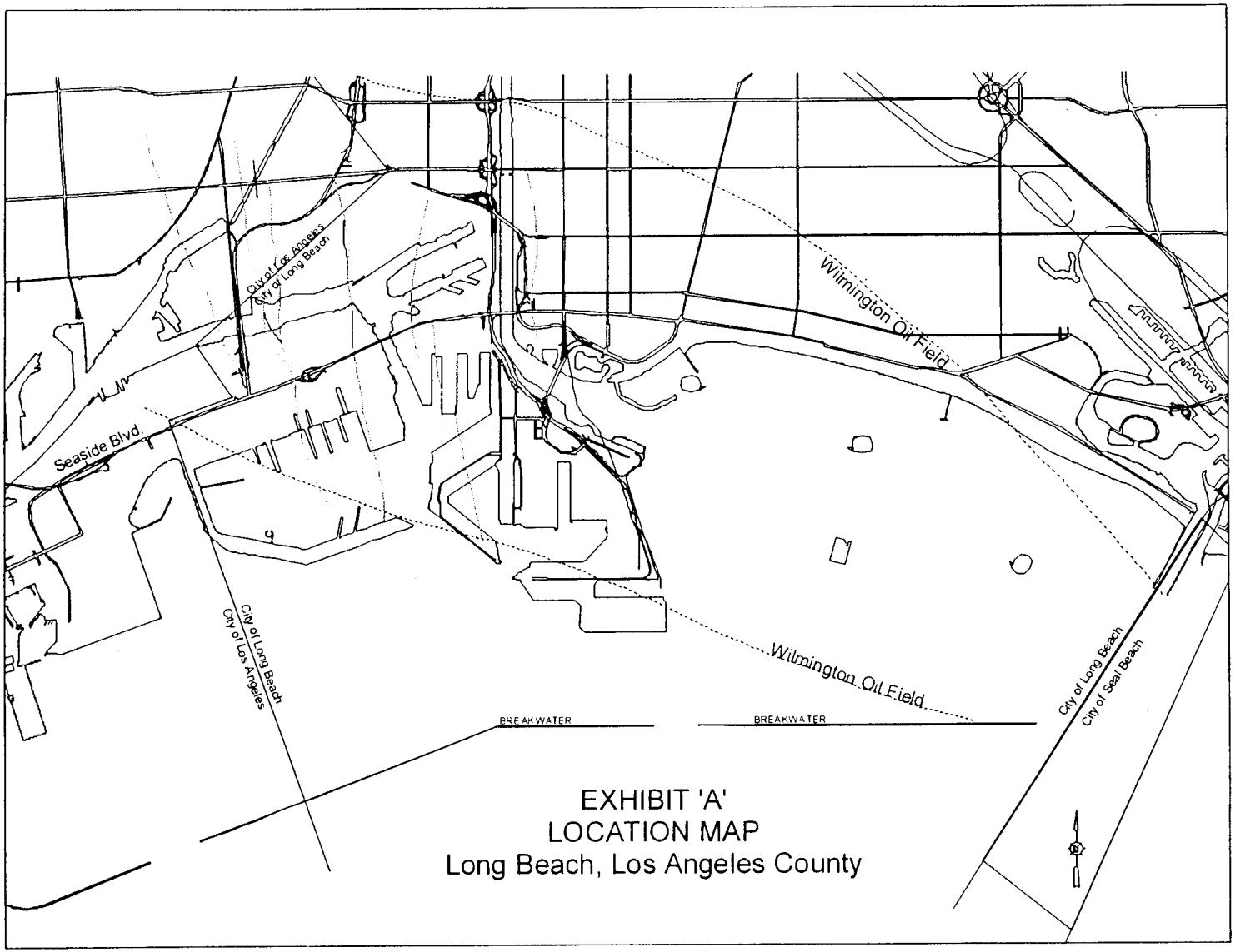

EXHIBIT 'A'
LOCATION MAP
Long Beach, Los Angeles County