MINUTE ITEM

This Calendar Item No. 19. was approved as Minute Item No. 19 by the State Lands Commission by a vote of 3 to 0 at its 3-19-80 meeting.

CALENDAR ITEM

19.

3/80
WP 4908
Horn

PRC 4908.1

AMENDMENT OF INDUSTRIAL LEASE PRC 4908.1

APPLICANT: Shell Oil Company
P.O. Box 711
Martinez, California 94533
Attention: M. S. Waller

AREA, TYPE LAND AND LOCATION:
26.87 acres of tide and submerged land in the City of Martinez, Contra Costa County.

LAND USE: Marine petroleum wharf together with necessary appurtenances and dredging of approximately 35,000 cubic yards.

TERMS OF EXISTING LEASE:

Initial period: 15 years from August 1, 1974.

Renewal options: 3 successive periods of 10 years each.

Surety bond: $50,000.

Public liability insurance: $300,000/900,000 per occurrence for bodily injury and $5,000,000 for property damage.

CONSIDERATION: Volumetric rental according to the following schedule:

$0.015 per barrel until the minimum annual rental is equaled, thereafter

$0.001 per barrel for the next 20,000,000 barrels, and thereafter

$0.003 per barrel for each additional barrel that passes over the State's land in that same lease year.

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The current minimum annual rental is $60,000.

TERMS OF PROPOSED AMENDMENT:

All basic terms remain unchanged except the minimum annual rental is increased to $84,000, with the State reserving the right to fix a different rental on each fifth anniversary of the lease.

Royalty $0.15 per cubic yard for spoils placed in approved Corps of Engineers disposal area; $0.25 per cubic yard for spoils sold or deposited on private uplands.

PREREQUISITE TERMS, FEES AND EXPENSES:

Applicant is owner of upland.

Filing fee has been received.

STATUTORY AND OTHER REFERENCES:

A. P.R.C.: Div. 6, Parts 1 & 2.

B. Cal. Adm. Code: Title 2, Div. 3.

OTHER PERTINENT INFORMATION:

1. Shell Oil Company has applied to the Commission for an amendment to its existing wharf site lease at Martinez. Shell proposes to modernize its upland refinery and the existing wharf. The modified wharf would accommodate tankers up to 189,000 DWT (light-loaded). Additional mooring dolphins, fender dolphins and new articulated loading arms would be added. A new 36-inch crude and 16-inch gasoline line as well as other smaller lines would be added. Additional piles would be placed to support the new pipelines and an area around the pier would be redredged to allow the pile-driving barge access to the pier.

2. The Planning Commission of Contra Costa County prepared an EIR on Shell's proposed Manufacturing Complex Modernization Project. On February 5, 1980, Contra Costa County Board of Supervisors accepted

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the Planning Commission's findings and approved the project. A summary of the project, taken from the EIR, is attached as Exhibit "C". The summary describes the modernization project, and lists potential significant environmental impacts associated with the project together with proposed mitigation and project alternatives.

The county found that significant impacts would result from project implementation but that associated mitigation measures to minimize these impacts to the greatest possible degree had been adopted. The areas of environmental concern include: sulfur dioxide impact, energy consumption, fire risk, marsh removal, vehicular traffic, noise and erosion impact.

In addition to the areas of environmental concern listed in the final EIR, staff is recommending that the Commission make two additional findings relative to environmental impacts:

a) Geology/Seismology - the potential exists for geologic/seismic events in the area and therefore the final engineering designs should incorporate the data detailed in Shell's geologic/seismic studies. Design of the project in accordance with such studies will mitigate potential geologic/seismic impacts of the project modifications. Shell will submit final design specifications to staff prior to start of construction.

b) Oil Spills - Spills of crude and/or products at the site are likely. Impacts associated with such spills depend on a number of variables. A comprehensive oil spill contingency plan together with an adequate terminal operations manual generally provide protection from spills. Shell will be required to revise its existing plan/manual

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and submit same to the Commission's staff.

3. This project is situated on State land identified as possessing significant environmental values pursuant to P.R.C. 6370.1, and is classified in a use category, Class "C", which authorizes Multiple Use.

Staff has coordinated this project with those agencies and organizations which nominated the site as containing significant environmental values through the EIR process. The EIR adequately addresses the probable impacts associated with the modernization project. The project has been designed and mitigation proposed to ensure that adequate provisions have been made to protect the significant environmental values at the site.

APPROVALS OBTAINED:
Contra Costa County as lead agency under CEQA.

FURTHER APPROVALS REQUIRED:
BCDC, BAAQMD, SWRCB, Corps of Engineers and City of Martinez.

EXHIBITS: A. Land Description. B. Location Map.
C. EIR Summary.

IT IS RECOMMENDED THAT THE COMMISSION:

1. DETERMINE THAT AN EIR HAS BEEN PREPARED FOR THIS PROJECT AND CERTIFIED BY THE PLANNING COMMISSION OF THE COUNTY OF CONTRA COSTA ON DECEMBER 14, 1979.

2. CERTIFY THAT THE INFORMATION CONTAINED IN THE EIR OF THE PLANNING COMMISSION OF THE COUNTY OF CONTRA COSTA HAS BEEN REVIEWED BY THE COMMISSION.

3. FIND THAT THE PROJECT HAS THE POTENTIAL TO CAUSE SIGNIFICANT EFFECTS ON THE ENVIRONMENT, BUT THAT SUCH IMPACTS HAVE BEEN MITIGATED TO THE MAXIMUM EXTENT FEASIBLE; AND SPECIFICALLY:

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a) DETERMINE THAT IN REGARD TO SULFUR DIOXIDE IMPACT - MITIGATION AND PROJECT CHANGES ARE WITHIN THE RESPONSIBILITY AND JURISDICTION OF THE BAY AREA AIR QUALITY MANAGEMENT DISTRICT AND NOT THE STATE LANDS COMMISSION. SUCH AGENCY HAS ADOPTED REQUIREMENTS FOR THE PROJECT WHICH MITIGATE OR AVOID THE SIGNIFICANT SULFUR DIOXIDE IMPACTS.

b) DETERMINE THAT IN REGARD TO ENERGY IMPACT - MITIGATION MEASURES DESIGNED TO CONSERVE ENERGY HAVE BEEN INCORPORATED INTO THE PROJECT BY SHELL. MANY OF THESE REQUIREMENTS ARE UNDER THE JURISDICTION AND RESPONSIBILITY OF THE BAY AREA AIR QUALITY MANAGEMENT DISTRICT AND NOT THE STATE LANDS COMMISSION. SUCH AGENCY HAS ADOPTED REQUIREMENTS FOR THE PROJECT WHICH MITIGATE THE ENERGY IMPACTS ASSOCIATED WITH THE PROJECT.

c) DETERMINE THAT IN REGARD TO FIRE CONCERNS - FIRE RISKS ASSOCIATED WITH THE REFINERY AND THE NEED FOR ADDITIONAL SERVICES, EQUIPMENT, AND POSSIBLE ANNEXATION TO A CONSOLIDATED FIRE DISTRICT WILL BE THE SUBJECT OF A COUNTY STUDY. THIS ACTIVITY WILL MITIGATE OR AVOID POTENTIAL FIRE IMPACT CONCERNS.

d) DETERMINE THAT IN REGARD TO MARSH REMOVAL - DEDICATION OF A 2.5 ACRE SITE TO A PUBLIC AGENCY AND REOPENING THE SITE TO TIDAL ACTION WILL MITIGATE THE LOSS OF ANY MARSHLAND IN THE DREDGING REQUIRED FOR THE WHARF MODIFICATION. DEDICATION OF DEVELOPMENT RIGHTS TO TWO OTHER SITES FURTHER OFFSET ANY IMPACTS ASSOCIATED WITH MARSH REMOVAL.

e) DETERMINE THAT IN REGARD TO TRAFFIC IMPACTS: ADDITIONAL MEASURES TO MITIGATE PEAK TRAFFIC LOADS GENERATED DURING CONSTRUCTION WILL RESULT FROM A DETAILED TRAFFIC STUDY INITIATED BY SHELL, CITY OF MARTINEZ, AND CONTRA COSTA COUNTY PUBLIC WORKS DEPARTMENTS.

f) DETERMINE THAT IN REGARD TO NOISE IMPACTS - A NOISE IMPACT STUDY WILL BE UNDERTAKEN WHICH WILL LEAD TO MITIGATION FOR ANY NOISE IMPACTS. THIS ACTIVITY IS WITHIN THE RESPONSIBILITY AND JURISDICTION OF THE CITY OF MARTINEZ AND NOT THE STATE LANDS COMMISSION. SUCH AGENCY WILL ADOPT REQUIREMENTS TO MITIGATE NOISE IMPACTS.

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g) DETERMINE THAT IN REGARD TO EROSION IMPACTS - MITIGATION HAS BEEN INCORPORATED INTO THE PROJECT WHICH WILL MITIGATE OR AVOID THE EROSION IMPACTS ASSOCIATED WITH THE PROJECT.

h) DETERMINE THAT IN REGARD TO GEOLOGY AND SEISMOLOGY - THE PROJECT DESIGN WILL BE IN ACCORDANCE WITH SHELL'S GEOLOGIC/SEISMIC STUDIES; WHICH DESIGN CRITERIA WILL MITIGATE THE SIGNIFICANT GEOLOGIC AND SEISMIC IMPACTS OF THE PROJECT.

i) DETERMINE THAT IN REGARD TO OIL SPILLS - SUFFICIENT REQUIREMENTS HAVE BEEN INCORPORATED INTO THE PROJECT WHICH MITIGATE THE POTENTIAL SIGNIFICANT EFFECTS AN OIL SPILL MAY HAVE. IN ADDITION, SHELL WILL BE REQUIRED TO SUBMIT A REVISED OIL SPILL CONTINGENCY SPILL AND TERMINAL OPERATIONS MANUAL TO THE COMMISSION FOR REVIEW PRIOR TO OPERATION OF THE MODIFIED TERMINAL.

4. FIND THAT ADEQUATE PROVISIONS HAVE BEEN MADE FOR THE PERMANENT PROTECTION OF THE SIGNIFICANT ENVIRONMENTAL CHARACTERISTICS IDENTIFIED PURSUANT TO SECTION 6370.1, OF THE P.R.C.

5. AUTHORIZE ISSUANCE TO SHELL OIL COMPANY OF AN AMENDMENT TO LEASE PRC 4908.1 WHICH;

a) CHANGES THE LAND DESCRIPTION TO THAT SHOWN ON EXHIBIT "A" ATTACHED HERETO, AND BY REFERENCE MADE A PART HEREOF;

b) CHANGES THE MINIMUM ANNUAL RENTAL TO $84,000 EFFECTIVE UPON SUBSTANTIAL COMPLETION OF PROPOSED WHARF MODIFICATIONS;

c) AUTHORIZES DREDGING UP TO 35,000 CUBIC YARDS WITH A ROYALTY OF $0.15 PER CUBIC YARD FOR SPOILS PLACED IN AN APPROVED CORPS OF ENGINEERS DISPOSAL AREA OR $0.25 PER CUBIC YARD FOR SPOILS SOLD OR DEPOSITED ON PRIVATELY OWNED UPLANDS.;

d) MAKES OTHER ADDITIONS AND MODIFICATIONS TO THE EXISTING LEASE IN CONFORMANCE WITH EXISTING COMMISSION LEASING PRACTICE;

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CALENDAR ITEM NO. 19 (CONTD)

FOR THE MODIFICATION AND MAINTENANCE OF EXISTING WHARF FACILITIES THAT WILL BE CAPABLE OF HANDLING TANKERS UP TO 189,000 DWT ON THE LAND DESCRIBED IN THE ABOVE-REFERENCED EXHIBIT "A", PROVIDED THAT ALL OTHER TERMS AND CONDITIONS OF LEASE PRC 4908.1 SHALL REMAIN IN FULL FORCE AND EFFECT.

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EXHIBIT "A"

LAND DESCRIPTION

WP 4908

A parcel of tid and submerged land lying in the bed of Carquinez Strait, situated within the City of Martinez, Contra Costa County, State of California, and being more particularly described as follows:

BEGINNING at a point on the boundary between State submerged land and Shell Oil Company tidelands, as said boundary is shown upon that certain map entitled, "Boundary of State Submerged Lands, Vicinity of Martinez," as recorded under Number 48615 on June 14, 1962, in Volume 20 of Licensed Survey Maps, Page 14, Official Records of Contra Costa County; said point bears N 03° 27' 06" E, 1,369.32 feet from a monument being a 3" diameter brass cap in concrete in iron pipe having coordinates of X = 1,530,983.14, Y = 558,754.24; said monument being designated as J.C. Number 1, and shown on the aforementioned map; thence from said point of beginning proceeding waterward N 07° 33' 31" W, 847.19 feet to a point on the U.S.E.D. bulkhead line as shown on a map of "Harbor Lines for Carquinez Strait," U.S. Engineers Office, approved April 22, 1941; thence along said bulkhead line S 58° 16' 45" W, 230.16 feet; thence leaving said bulkhead line along the following nine courses:

1. N 07° 33' 31" W 930.00 feet;
2. S 58° 16' 45" W 1210.00 feet;
3. N 31° 43' 15" W 250.00 feet;
4. N 58° 16' 45" E 935.72 feet;
5. N 31° 43' 15" W 90.00 feet;
6. N 58° 16' 45" E 1285.00 feet;
7. S 31° 43' 15" E 340.00 feet;
8. S 58° 16' 45" W 592.32 feet;
9. S 07° 33' 31" E 1763.54 feet to the above-mentioned boundary line between the State and Shell Oil Company; thence along said boundary line S 54° 36' 29" W, 194.22 feet to the point of beginning.

The bearings and distances used in the above description are based upon the California Coordinate System, Zone 3.

END OF DESCRIPTION

Prepared Carlos Moreira Checked Edward S. Zimmerman

Reviewed [signature] Date 4/16/79

No. 3702

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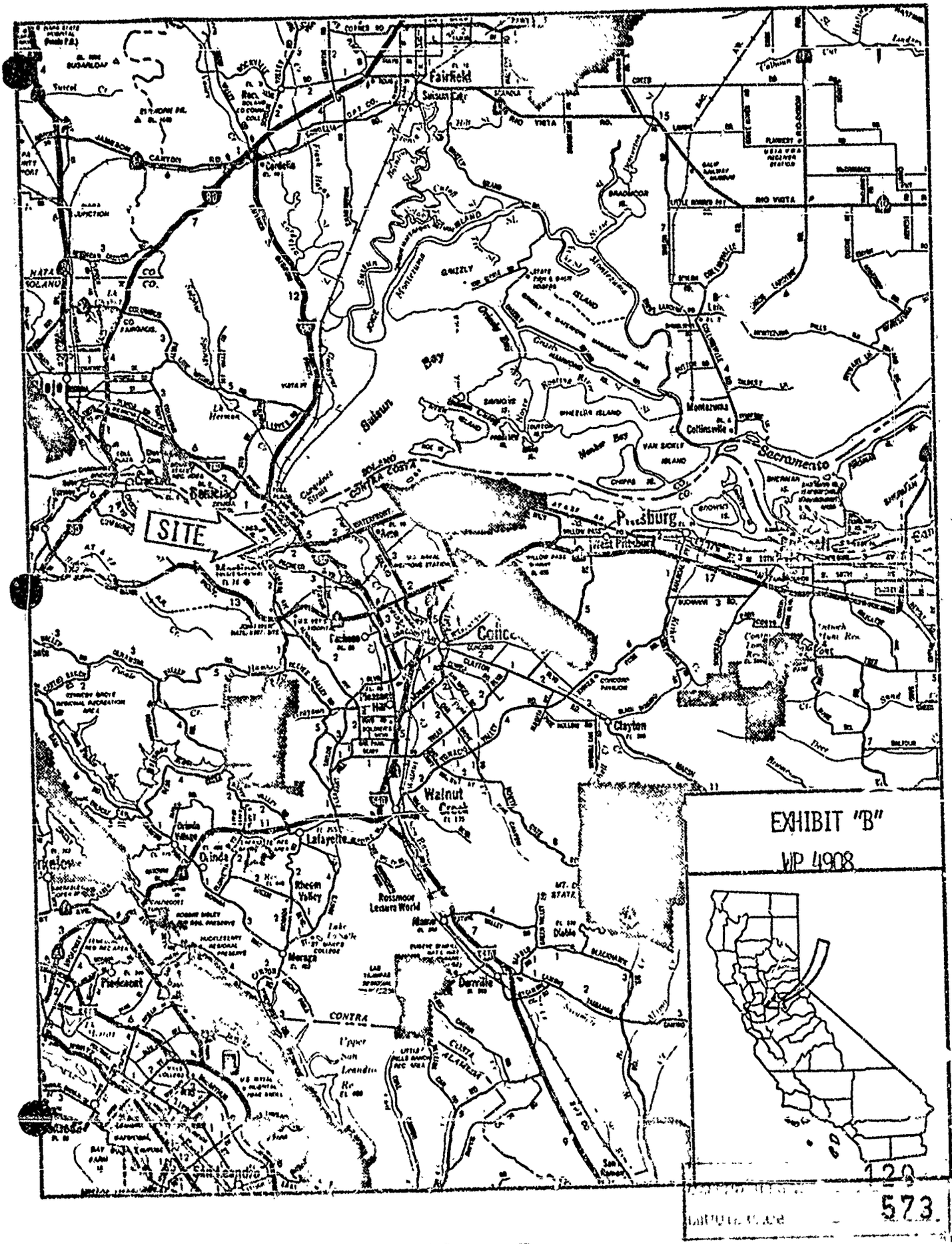
SITE
Fairfield
Suisun City
Cordelia
Benicia
Pittsburg
West Pittsburg
Concord
Clayton
Walnut Creek
Lafayette
Orinda
Moraga
Pleasant Hill
Rheem Valley
Rossmoor Leisure World
Danville
Alamo
Mt. Diablo State
Martinez
Pleasant
Crockett
Port Costa
Collinsville
Montezuma
Suisun Bay
Grizzly Bay
Honker Bay
Sacramento
Solano
Contra Costa
Napa
Yolo
Upper San Leandro Res.
EXHIBIT "B"
WP 4908
N

EXHIBIT "C"

1. SUMMARY

Shell Oil Company (Shell) proposes to modernize its Martinez refinery. The facilities to be modernized occupy a 581-acre site located roughly between Interstate Highway 680 (I-680), Pacheco Boulevard and the Carquinez Strait. About 20% of the refinery lies within the corporate limits of the City of Martinez. The remainder is in an unincorporated area of Contra Costa County (see Figures 1 and 2).

The proposed project would consist of the modernization of existing process equipment, construction of new process equipment and storage tanks, and modification of the existing wharf (see Figure 6). The project would permit Shell to replace foreign crude oils with domestic crudes, and would reduce inter-refinery shipments of partially refined oil.

The production capacity of the refinery is 128,000 barrels per day. Plant modernization would not increase total production capacity, but would produce more gasoline and aviation fuel and less high-sulfur residual fuel (mostly used by ships at sea). The production of gasoline and aviation fuel would be increased by 15,000 barrels per day; the production of high-sulfur residual fuel would be reduced by 13,000 barrels per day. The 2,000 barrel difference between the increased production of gasoline and aviation fuel and the decreased production of residual fuel would be due to the change in density of the products during processing and the change in the refinery's raw materials. The project would cost an estimated $300 million and would require up to five years to complete. If the project is approved, construction would begin in 1980.

The County of Contra Costa is the lead agency and the requested action by the Board of Supervisors is the issuance of encroachment, building and grading permits. A use permit would have to be obtained from the City of Martinez for planned modifications within the City. In addition, the State Lands Commission, Bay Area Air Quality Management District, Bay Conservation and Development Commission, Regional Water Quality Control Board, U.S. Army Corps of Engineers and U.S. Coast Guard would all have to issue permits or approvals before the project could proceed. The proposed project would be consistent with the Contra Costa County and City of Martinez general plan and zoning designations.

Significant adverse impacts that have been identified in the main body of this report are summarized below. Each significant adverse impact is followed by appropriate mitigation measures, both those proposed by Shell and those suggested by the report authors. A more detailed discussion of the significant adverse impacts and mitigation is provided in the sections which follow.

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That discussion (but not this Summary) contains also certain other measures that Shell has incorporated into the project. They include mitigation measures and project improvements for impacts not deemed significant by the report authors. The measures and improvements would, however, make the proposed project more acceptable to the public and to governmental agencies.

SIGNIFICANT ADVERSE IMPACTS AND MITIGATION MEASURES

1. The occasional offloading of Very Large Crude Carriers (VLCC) during unusual atmospheric conditions might lead to a sulfur dioxide emission rate that could cause ambient air standards to be exceeded in a small area north and west of Saint Catherine's Cemetery on the hill west of Martinez.

An Intermittent Control Strategy should be considered by the Bay Area Air Quality Management District to insure compliance with air quality standards. The controls would require the use of 0.5% sulfur fuel for unloading of the VLCC at times specified by District staff. (See Section V.B, Air Quality, page 29.)

2. The project would cause significant increases in energy consumption. Total energy consumption (electrical and fuel) before mitigation would be the equivalent of 21,000 barrels of oil per day, or a 5,300 barrel per day (34%) increase over existing equivalent fuel use of 15,700 barrels per day. Mitigation would reduce the increase in energy consumption by the equivalent of 2,400 barrels of oil per day, so that the project would increase existing fuel use by the equivalent of 2,900 barrels per day (18%).

Shell has incorporated mitigation measures to conserve energy in the design of the new equipment and the proposed modifications to existing equipment. The equivalent of 2,400 barrels of oil per day would be saved by the proposed conservation measures. (See Section V.I, Energy Use by the Transportation and Refinery Process, page 92.)

3. There would be an increased fire risk from the project, since there would be more process units and more storage facilities. This increased hazard, by itself, is not considered to be significant. Because not all of the refinery is in a public fire district, the increased hazard is considered to be significant when added to the already existing hazard of Shell's not having a backup public fire-fighting force available to handle very large conflagrations.

Shell and the Consolidated Fire District should be required to develop an agreement concerning joint training, inspection and equipment use; the remainder of the Shell Oil property should be annexed to the Consolidated Fire District. (See Section V.C, Health and Safety, page 45.)

4. Dredging required for wharf modifications would have a temporary adverse effect on ecology during the construction phase. About two acres of tidal marsh would be removed during construction: the marsh could require up to 10 years to become reestablished. Dredging would increase the amount of soil suspended in the water and could interfere with aquatic organisms.

By reduction of the width of the area to be dredged, barges would be accommodated back to back instead of side by side. This action would reduce the area to be dredged by as much as 50%. Dedication of 2.5 acres of wetlands northwest of the proposed crude oil tank to either the City of Martinez or the East Bay Regional Park District would compensate for the wetlands temporarily destroyed by dredging. Allowing the dredged area to re-silt would permit wetland vegetation cover to be reestablished. To preserve

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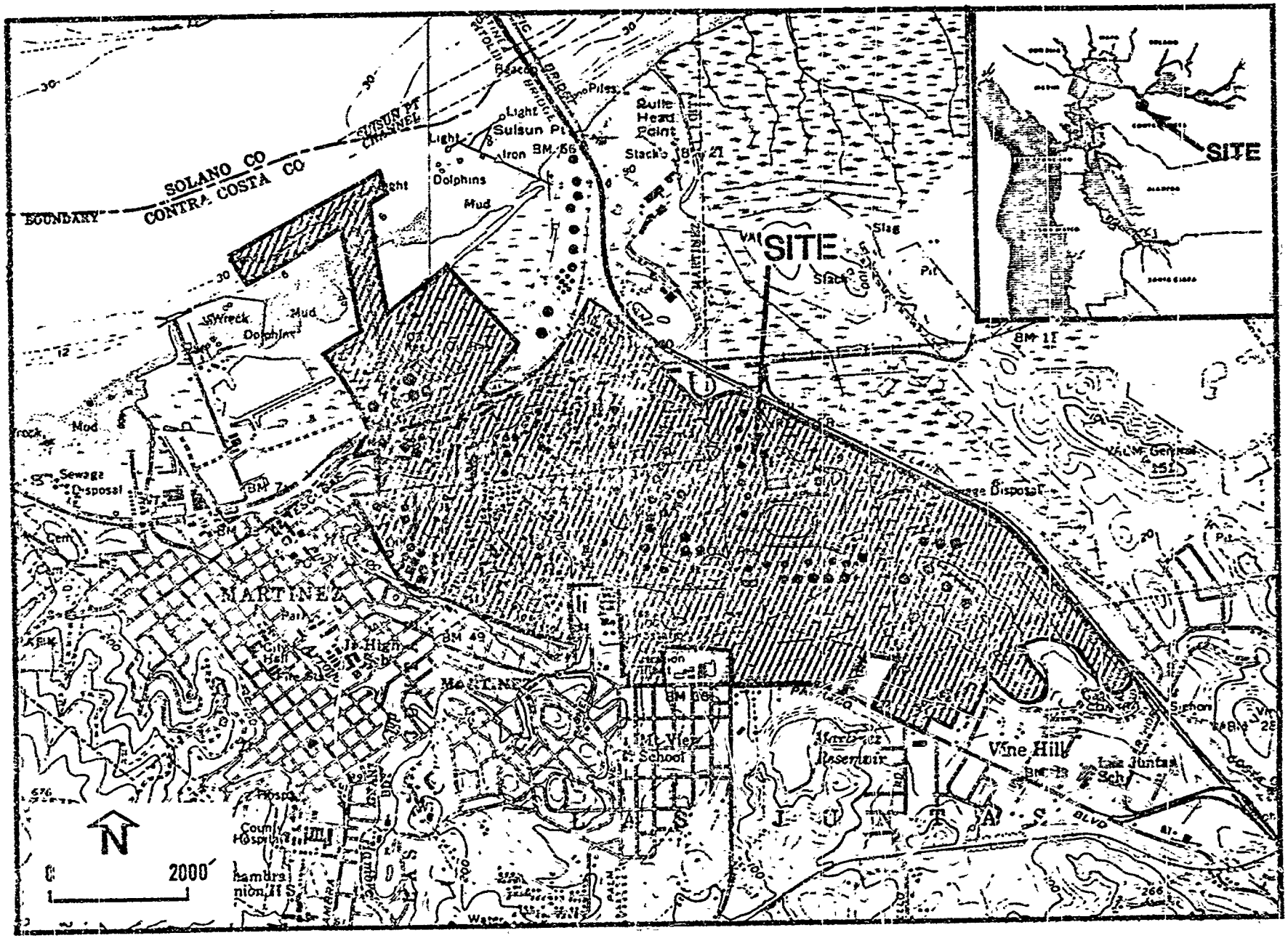

SOURCE: USGS 7.5 minute series, Benicia and Port Chicago Quadrangles

FIGURE 2 : REGIONAL AND SITE LOCATION

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the remaining high-value habitat areas of Zones A and B (tidal mudflats and tidal marsh), not included in this project, consideration should be given to deeding the development rights on the remaining areas of Zones A and B to a unit of local government. (See Section V.F, Ecology, page 74.)

5. During construction, large traffic backups could occur at the intersections of Howe Road and Shell Avenue with Pacheco Boulevard. During the period of peak activity, about 2,000 construction workers would enter and leave the site in their cars each day.

Shell would institute staggered starting and quitting times for the construction workers and would conduct a detailed traffic control study to further refine appropriate mitigation measures. Shell would also investigate the feasibility of sponsoring a vanpool program for construction workers and of establishing a van pool program for permanent employees. The County Department of Public Works, in concert with the Martinez Community Development Department, would review the recommendations of the detailed traffic control study and might mandate additional measures as recommended by the study.

Additional mitigation measures suggested in this report include: restricting heavy truck traffic from Shell Avenue; instituting a traffic control program at the access points to the proposed construction worker parking lots; constructing a right turn lane on Marina Vista from the proposed Fairview construction worker parking lot to the I-680 on-ramp; constructing all improvements to Shell-owned frontage on Pacheco Boulevard in accordance with County ordinance requirements; and, improving the intersection of Shell Avenue and Pacheco Boulevard with a signal and striping as appropriate. (See Section V.G, Traffic and Circulation, page 79.)

6. The proposed project would create significant noise during construction and operation. The modernization would include new pumps that could be clearly audible at nearby residences in the Miller Street area. Earthmoving and other construction activities would be clearly audible at the nearest residences on Miller Street. Pile driving at the wharf would be audible along Miller Street and at the public marina west of the wharf.

Shell proposes to design all new equipment so that noise levels do not exceed 55 dBA at night or 60 dBA during the day at nearby residences. (The sound of a normal conversation from 4 feet away would measure about 60 dBA.) Shell further proposes to shield the Wygal Drive residential area from parking lot noise by constructing a temporary wooden barrier wall and to limit construction activities to daytime hours between 6 a.m. and 8 p.m. An additional mitigation measure recommended in this report would be to reduce noise levels from existing process equipment, thereby offsetting the 1 dBA increase attributable to the project. (See Section V.H, Noise, page 86.)

7. At present, severe erosion is taking place in several locations on the site. The proposed project includes plans for grading new slopes; this would result in increased dust and erosion.

Shell proposes: to conduct mass grading during the dry period of the year to reduce the amount of erosion; to stabilize all disturbed areas prior to the onset of winter rains; to develop a specific erosion control plan for all disturbed areas, to be reviewed by the County Department of Public Works; and, to adhere to strict dust control measures, such as watering open areas and temporary parking lots. Additional mitigation measures proposed by Shell include developing appropriate dewatering procedures in compliance with the soil engineers' reports and County Department of Public Works requirements and continuing the on-going groundwater monitoring program to detect any potential detrimental changes in water quality. (See Section V.K, Drainage and Flooding, page 106.)

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8. The project would involve grading and the removal of trees and other vegetation from the Fairview construction worker parking lot site. The site is visually prominent from Marina Vista and the Benicia Bridge and provides visual relief from industrial uses.

Suggested mitigation measures include: developing a grading and landscaping plan for the Fairview parking lot which conforms to the City of Martinez urban design goals; landscaping the additional areas proposed for major new construction to partially screen and soften the visual effect; placing fences behind landscaping, where compatible with security requirements; and, making required signing unobtrusive. (See Section V.O, Visual and Aesthetic, page 125.)

ALTERNATIVES TO THE PROJECT

Two alternatives which would reduce the significant adverse impacts discussed above are the No-Project Alternative and the Project Without Wharf Modifications Alternative. Detailed discussions of the impacts of both alternatives to the proposed project appear at the end of each subject section. In summary, the impacts of these projects would differ from those of the proposed project as follows:

No-Project Alternative: No additional hazardous equipment or materials would be located on the site. Not dredging would eliminate the need for temporary removal of tidal marshes or for disturbing water quality. There would be no impacts from construction traffic, parking, or noise. Existing noise levels would remain. The program for public access to the marsh would not be implemented. Some beneficial impacts in the areas of marine traffic, air quality and economic, labor and fiscal matters would be foregone.

Project Without Wharf Modifications Alternative: Some wetlands area would be preserved and no dredging would disturb the aquatic environment. Noise impacts from pile drivers and pumps would be avoided. No public access to the marsh would be provided. Beneficial impacts in areas of marine traffic and oil spills would be foregone.

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