BENJAMIN J. CAYETANO
GOVERNOR

KAZU HAYASHIDA
DIRECTOR

DEPUTY DIRECTORS
BRIAN K. MINAAI
GLENN M. OKIMOTO

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
869 PUNCHBOWL STREET
HONOLULU, HAWAII 96813-5097

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September 7, 1999

TO: GENEVIEVE SALMONSON, DIRECTOR
OFFICE OF ENVIRONMENTAL QUALITY CONTROL
DEPARTMENT OF HEALTH

FROM: KAZU HAYASHIDA
DIRECTOR OF TRANSPORTATION

SUBJECT: FINAL ENVIRONMENTAL ASSESSMENT AND FINDING OF NO SIGNIFICANT IMPACT FOR HAWAIIAN CEMENT TERMINAL AT KALAELOA BARBERS POINT HARBOR, KAPOLEI, OAHU, HAWAII

After careful review of the Final Environmental Assessment (EA), the State Department of Transportation has determined that the project will not result in any significant environmental impacts and thus declares a Finding of No Significant Impact (FONSI) for the Hawaiian Cement Terminal at Kalaeloa Barbers Point Harbor. Please publish the notice of availability for this project in the September 8, 1999 OEQC Bulletin.

We have enclosed a completed OEQC Bulletin Publication Form and four copies of the Final EA and FONSI. Please contact Glenn Soma at 587-2503 if there are any questions.

Enc.

1999-09-23-OA-FEA-



# * HAWAIIAN CEMENT TERMINAL AT KALAELOA/* BARBERS POINT HARBOR OAHU, HAWAII

## Final Environmental Assessment/ Finding of No Significant Impact

Prepared by
Parsons Brinckerhoff Quade & Douglas, Inc.


August 1999

# Executive Summary

This Final Environmental Assessment (EA) was prepared under the requirements of Chapter 343 of the Hawaii Revised Statutes (HRS); and Title 11, Chapter 200 of the Hawaii Administrative Rules (HAR). It identifies and assesses the environmental and social impacts that could result from the construction and operation of the proposed Hawaiian Cement terminal at Kalaeloa/Barbers Point Harbor. This Final EA also contains a record of all correspondence with relevant agencies and organizations, including comments on the Draft EA, which was announced and distributed in June 1999.

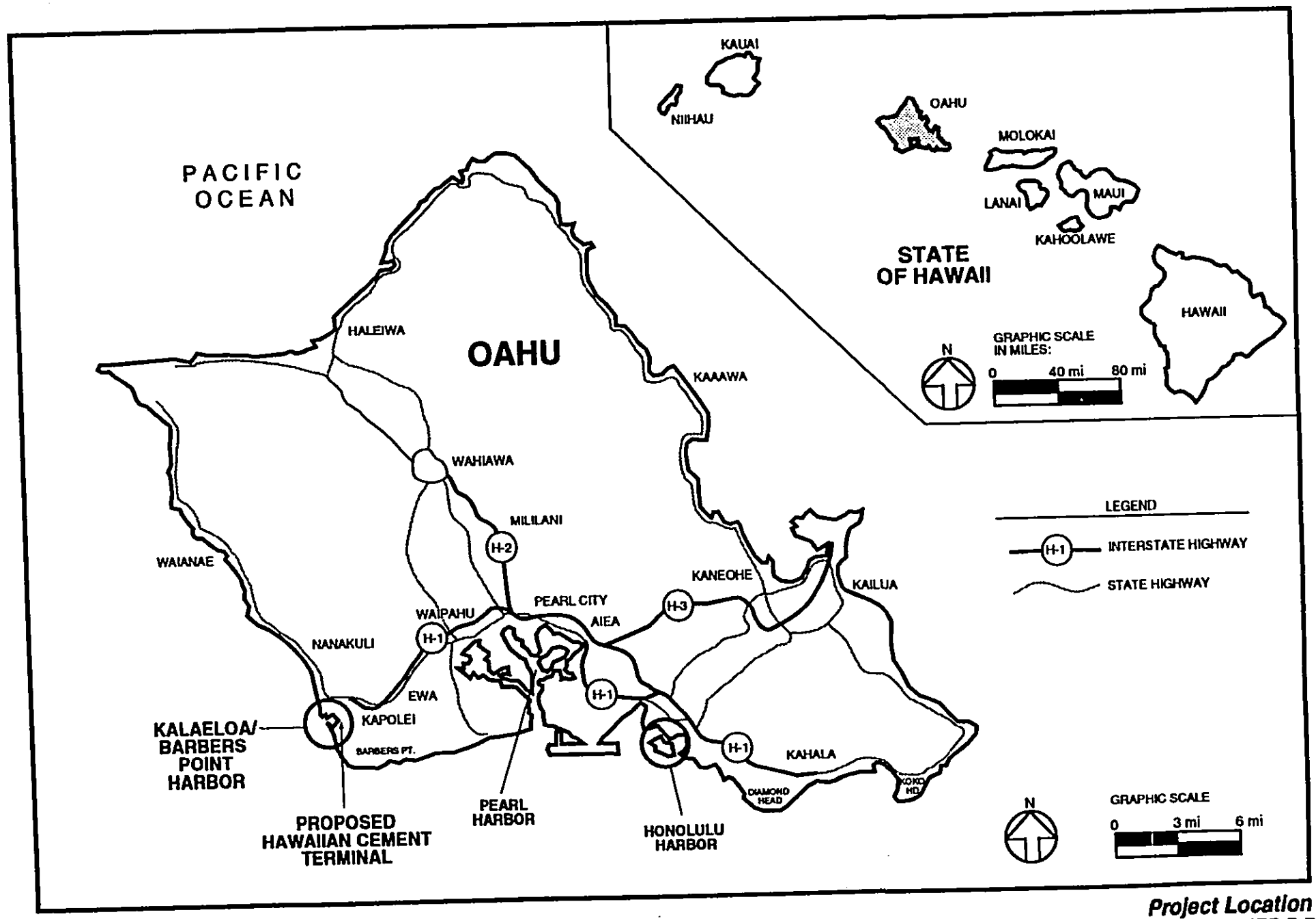
## S.1 PROJECT DESCRIPTION AND LOCATION

Hawaiian Cement is proposing to construct and operate a cement import and transshipment terminal at Kalaeloa/Barbers Point Harbor, Oahu, Hawaii (see Figure S-1). This proposed facility (tax map key 9-1-14:24) will replace Hawaiian Cement's existing clinker grinding, storage, and distribution facility at Campbell Industrial Park. In addition, existing clinker and gypsum unloading activities at the harbor will no longer need to be conducted.

The terminal site will be located on a leased parcel almost four acres in size, controlled by the State of Hawaii Department of Transportation, Harbors Division (HDOT), set back approximately 400 feet from the edge of the future Pier P-7 (see Figure S-2). The terminal site must be lowered by 8 to 10 feet to match the slope and elevation of the adjacent P-6 yard. The lease is contingent upon Hawaiian Cement obtaining all necessary approvals and permits to construct and operate the terminal.

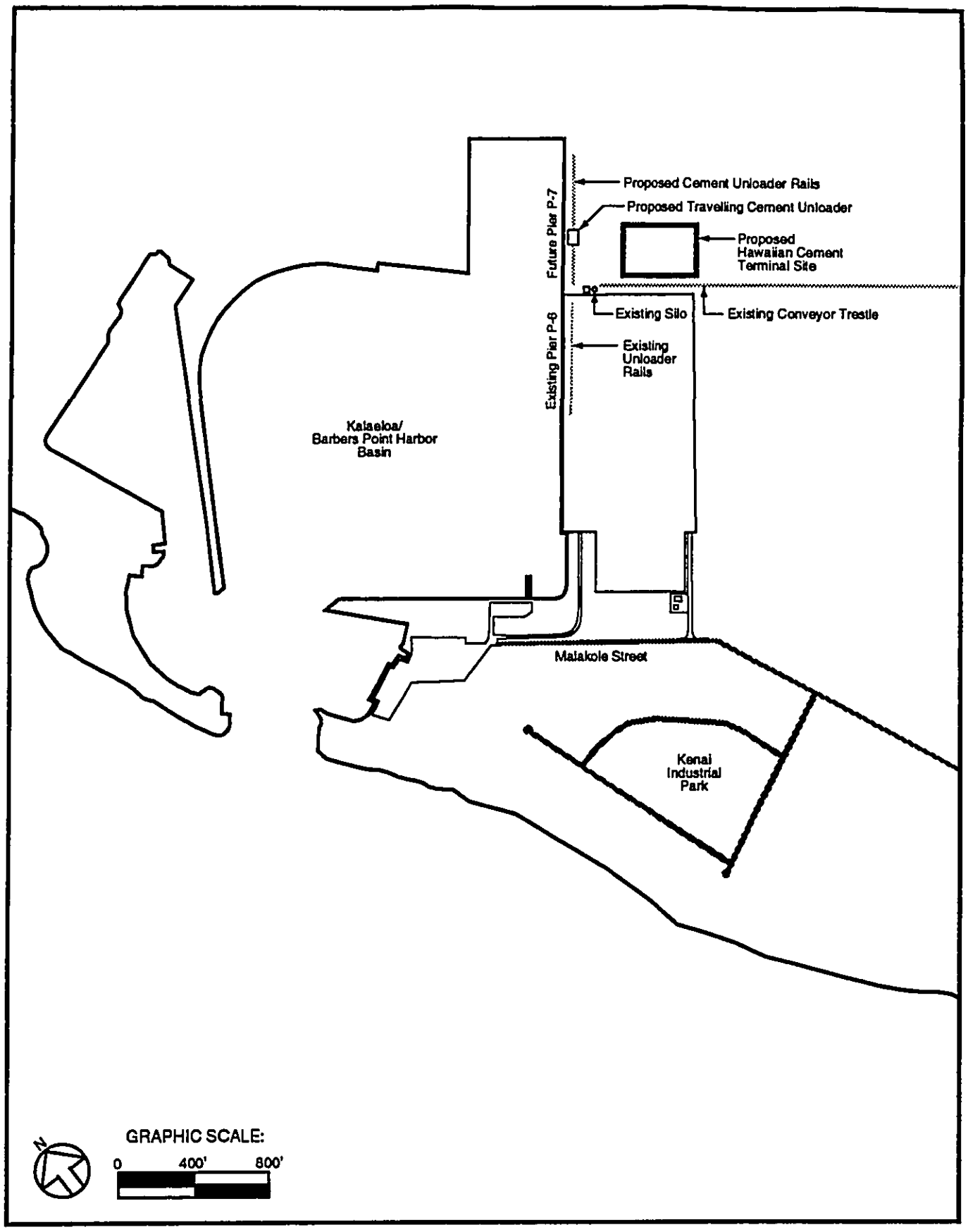
Although the harbor basin has recently been expanded by a section 600 feet by 1,100 feet, construction of the piers for this expanded section has not begun. Therefore, the travelling cement unloader will be initially stationed at the existing Pier P-6, but later moved to P-7 upon completion by HDOT.

The terminal facilities will transfer imported cement from ships to two storage domes (see Figure S-3). After storage, the material would be reclaimed through three loadout systems:



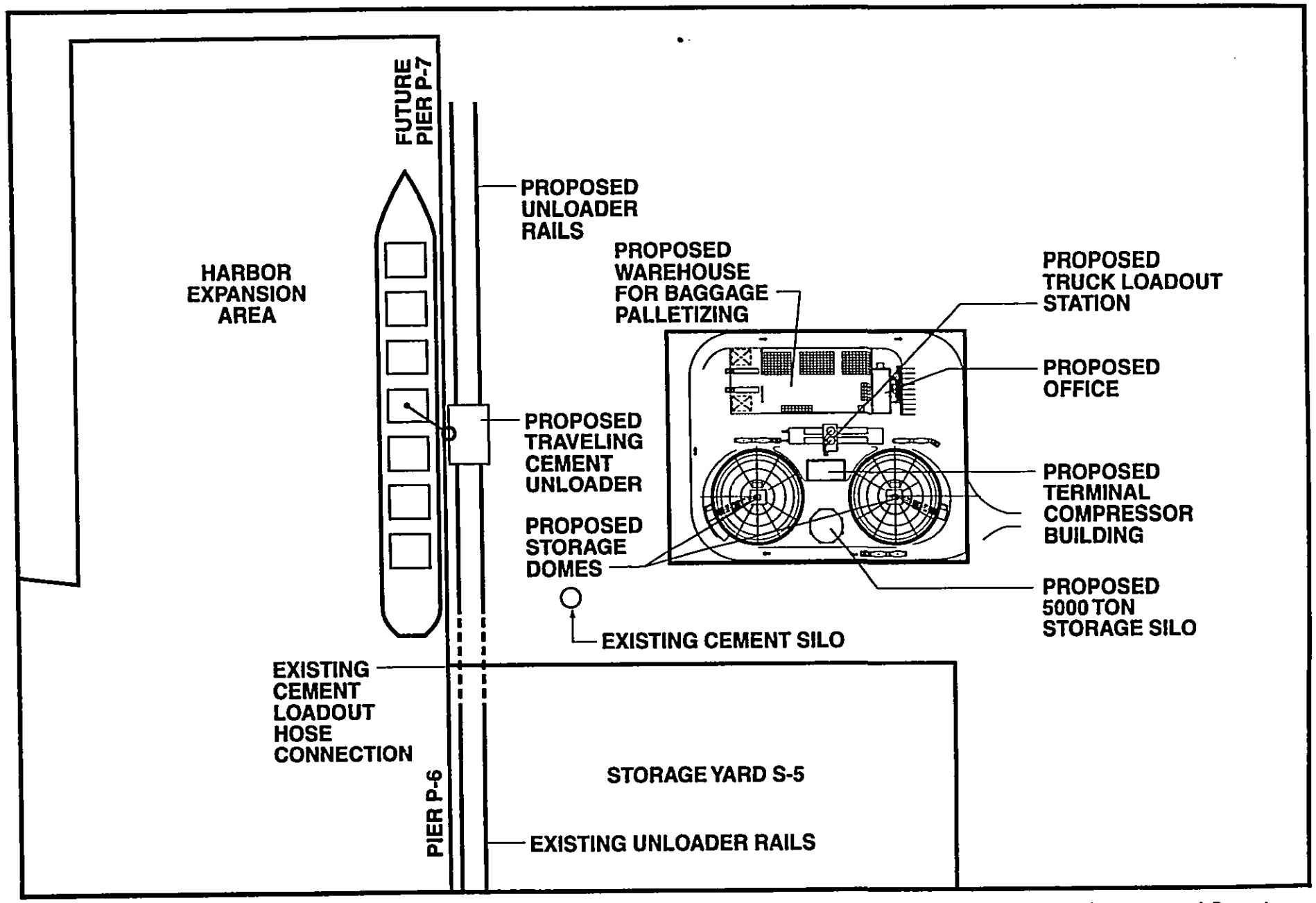

PARSONS BRINCKERHOFF QUADE & DOUGLAS, INC.

**Project Location**
**HAWAIIAN CEMENT TERMINAL AT KALAELOA/BARBERS POINT HARBOR, PIER P-7**
*Final Environmental Assessment*
*FIGURE S-1*




***PARSONS BRINCKERHOFF QUADE & DOUGLAS, INC.***

***Terminal and Unloader Site***
***HAWAIIAN CEMENT TERMINAL AT KALAELOA/BARBERS POINT HARBOR, PIER P-7***
*Final Environmental Assessment*
*FIGURE S-2*




PARSONS BRINCKERHOFF QUADE & DOUGLAS, INC.

*Layout of Terminal Equipment and Structures*
*HAWAIIAN CEMENT TERMINAL AT KALAELOA/BARBERS POINT HARBOR, PIER P-7*
*Final Environmental Assessment*
*FIGURE S-3*

1. two-lane truck loadout station for delivery on Oahu;
2. barge loadout station for transshipment to the neighbor islands (the existing cement silo and pneumatic loader at P-6 would be involved in this operation); and
3. bagging and palletizing station in a warehouse adjacent to the storage domes.

Cement could also pass through a blending station, involving an additional product silo, before transferring to any of the loadout operations above.

The conveyance equipment for cement movements at the terminal include:

- a rail- or tire-mounted travelling pneumatic ship unloader;
- two 30,000-ton-capacity storage domes;
- reclaimers within the domes, which will be used to clear cement from the storage domes; and
- pneumatic pipelines between unloader, storage domes, and loadout systems.

These conveyance systems were selected by Hawaiian Cement because of their operational characteristics (e.g., capacity, energy requirement, reliability) and environmental performance (e.g., extremely low particulate emissions). All conveyance systems will be totally enclosed, are proven in the industry, and are fully modern.

The import vessels would range from 35,000 to 40,000 deadweight tons (DWT), and are projected to call about once per month and spend seven to eight days in port. Up to 50 loaded bulk cement trucks (30 to 35 average) will be dispatched from the terminal daily. Interisland cement barge operations will continue at P-6 where Hawaiian Cement will continue to use the existing pneumatic loader and cement storage silo. Hawaiian Cement's barge, *Punapau*, will be loaded at the terminal about once a week, depending on market conditions. Bagging and palletizing of cement will be done as needed. Peak annual throughput of the terminal is estimated at 500,000 metric tons.

## S.2 PLANNING PROCESS

The proposed project is required to undergo environmental review in accordance with HRS Chapter 343 (the State Environmental Impact Statement (EIS) Law) because State land will be

used and because a portion of the terminal will be within the Special Management Area (SMA).

HDOT, as the approving agency, issued a Finding of No Significant Impact (FONSI) for the proposed project based on Significance Criteria specified in HAR Chapter 200 (see Section S.7). Therefore, this Final EA / FONSI has been prepared, and will be announced in the State Environmental Notice.

Since terminal structures within the SMA will have a capital cost greater than $125,000, a major Special Management Area Use Permit (SMP) will be required. This Final EA / FONSI will be submitted to the City and County of Honolulu Department of Planning and Permitting (DPP), the agency that administers the SMA program, along with an SMP application. DPP will hold a public hearing and provide an assessment and recommendation to the City Council, which will make the decision on granting a major SMP.

## S.3 ENVIRONMENTAL IMPACTS AND MITIGATION

The Hawaiian Cement terminal will not adversely affect the physical or social environment of the project site or surrounding area. The terminal will be consistent with the industrial waterfront appearance and uses of Kalaeloa/Barbers Point Harbor, and will be totally within the confines of HDOT property. A summary of the potential environmental impacts and proposed mitigation measures is provided in Table S-1.

## S.4 CONSISTENCY WITH GOVERNMENTAL PLANS AND POLICIES

The Hawaiian Cement terminal will be consistent with the following State of Hawaii and City and County of Honolulu plans and policies:

- the Hawaii State Plan;
- the Oahu Commercial Harbors 2020 Master Plan;
- the General Plan of the City and County of Honolulu; and
- the Ewa Development Plan.

**Table S-1**
**Summary of Potential Impacts and Mitigation Measures**

| Environmental Discipline | Potential Impact | Mitigation |
|---|---|---|
| Topography / Geology / Agriculture | The site will be lowered by eight to ten feet to match the elevation and slope of the adjacent, existing P-6 storage yard. Approximately 100,000 cubic yards will be excavated and added to existing stockpiles surrounding the harbor. Beyond this initial work, the project will not affect geologic conditions beyond the project site. There are no agricultural activities occurring at or near the project site. | Best Management Practices (BMPs) will be employed to minimize and control soil erosion during grading and excavation operations. Planned BMPs include berms and catchment basins to be approved by HDOT. |
| Water Resources | The project will replace the existing pervious surface with up to 3.9 acres of pavement. Because all of the cement handling operations will be totally enclosed, and dust collection systems will be provided throughout the facility, product loss is expected to be minimal. In addition, rigorous housekeeping practices will be employed. Therefore, rainfall drainage will not become contaminated by cement, and the project will not affect existing surface and ground water resources. | Air pollution controls (dust enclosure and collection) and good housekeeping practices will keep open areas of the terminal free of cement product, thereby preventing contamination of stormwater drainage. Drainage structures (trench drains, collection pipes, and outlet structures) will be constructed to conform with HDOT's design plans for Pier P-7. |
| Biology | On-site biological resources are minimal and the project will not affect flora and fauna adjacent to the project site. Alien species invasion from ballast water release is not likely to occur because vessels bringing in cement will arrive in an unballasted condition. Imported cement product is unlikely to contain alien species. | None required beyond standard entry procedures for foreign vessels. |

**Table S-1**
**Summary of Impacts and Mitigation Measures**
**(cont.)**

| Environmental Discipline | Potential Impact | Mitigation |
|---|---|---|
| Air Quality | Dust emissions during construction will be controlled and localized. At normal throughput, the terminal is estimated to generate about four tons of particulates (cement dust) per year, which is a substantial improvement over the 60 to 120 tons per year of particulates generated from the Hawaiian Cement facility at Campbell Industrial Park (CIP). The proposed terminal will replace the CIP facility and clinker unloading at the harbor. With the terminal, there will be a substantial regional reduction in particulate emissions. | Particulate control measures during construction will be consistent with practices at current HDOT construction activities. Air emissions during operation will be controlled by comprehensive dust enclosure and collection systems, supplemented by a rigorous equipment maintenance and housekeeping program. |
| Noise | Although the terminal will have several pieces of equipment generating high noise levels, noise modeling at five different locations surrounding the terminal indicates that the operation of the terminal will not be noticeable. | Sufficient noise attenuation and insulation measures will be included in the facility to control noise. The noise modeling reflects the mitigation measures to be employed at the terminal. |
| Land Use | The project will not adversely affect existing land uses in the vicinity of the project because off-site impacts will be minimal. In addition, the project supports governmental and private land use development plans in the vicinity of the harbor. | None required. |
| Social / Economic | Terminal staffing requirements will be filled by personnel presently at Hawaiian Cement's CIP facility, which will be closed. In addition, the location of the terminal at Kalaeloa/ Barbers Point Harbor supports planned | None required. |

**Table S-1**
**Summary of Impacts and Mitigation Measures**
**(cont.)**

| Environmental Discipline | Potential Impact | Mitigation |
|---|---|---|
| Social / Economic (continued) | development on the western end of Oahu. The project will ensure a long-term reliable supply of cement to the State. | None required. |
| Recreation | The project will not affect any recreational resource in the vicinity of the harbor. | None required. |
| Archaeology / Historic | No archaeological or historic sites will be affected by the proposed project. | None required. |
| Visual / Aesthetic | Although the terminal will be visible from several viewpoints, such as West Beach Marina, the appearance of the facility is consistent with other maritime industrial facilities at the harbor. Night activities will require lighting, which will be observable from areas outside the harbor. | Lighting standards at P-7 and the terminal will be the same as the existing lighting standards at S-4 and S-5. HDOT provides the lighting. |
| Transportation | Vehicles entering and leaving the terminal will not adversely affect levels of service on Malakole Street, the only existing access road to the harbor. Access to the terminal will shift to the future harbor access road when it is completed. | None required. |
| Utilities | The terminal will not require excessive water, solid waste, electrical or communications services. Wastewater will be disposed on-site using a seepage pit, septic tank or holding tank. | None required. |

The terminal will also be consistent with the project site's State land use classification of Urban, and is an allowable land use under the present City and County of Honolulu zoning designation of I-3, waterfront industrial.

## S.5 PERMITS AND APPROVALS

The Hawaiian Cement terminal will require:

- a major SMP, as described in Section S.2;
- building permit (DPP);
- grubbing, grading, and stockpiling permit (DPP);
- zoning height variance (DPP);
- water allocation (State of Hawaii Department of Land and Natural Resources); and
- non-covered source permit for air emissions (State of Hawaii Department of Health).

## S.6 COMMENTS AND COORDINATION

HDOT, DPP, Hawaiian Electric Company and the Kalaeloa/Barbers Point Harbor Users Group were consulted in preparing the Draft EA. The Draft EA was distributed to State of Hawaii and City and County of Honolulu agencies that may have an interest in the proposed project. The Draft EA was also sent to the local libraries, the Kapolei, Makakilo, Honokai Hale Neighborhood Board, utility companies, and existing tenants and facility owners at the harbor.

Hawaiian Cement received 12 letters commenting on the Draft EA. In summary, no agency or organization expressed opposition to the project. One commentor, Ko Olina Resort, expressed environmental concerns about the existing construction activities and operations at the harbor. These comments were not directed at Hawaiian Cement. The only commentor that expressed support for the project was The Estate of James Campbell. The governmental agencies provided information useful to the project, or requested additional information or analyses.

## S.7 FINDING OF NO SIGNIFICANT IMPACT (FONSI)

In accordance with HRS Chapter 343 and HAR Chapter 200, the HDOT, as the approving agency, has rendered a FONSI for the proposed project based on an assessment of project impacts in relation to the Significance Criteria specified in HAR 11-200-12(b). A summary of this assessment is provided in Table S-2.

**Table S-2**
**Summary of FONSI Assessment**

| Criterion | Significant |
|---|---|
| Involves an irrevocable commitment to loss or destruction of any natural or cultural resource | No |
| Curtails the beneficial uses of the environment | No |
| Conflicts with the State's long-term environmental policies or goals and guidelines expressed in Chapter 344, HRS, and any revisions thereof and amendments thereto, court decisions, or executive orders | No |
| Substantially affects the economic or social welfare of the community or State | No |
| Substantially affects public health | No |
| Involves substantial secondary impacts | No |
| Involves substantial degradation of environmental quality | No |
| Is individually limited but cumulatively has considerable effect upon the environment or involves a commitment for larger actions | No |
| Substantially affects a rare, threatened or endangered species, or its habitat | No |
| Detrimentally affects air or water quality or ambient noise levels | No |
| Affects or is likely to suffer damage by being located in an environmentally sensitive area such as a floodplain, tsunami zone, beach, erosion-prone area, geologically hazardous land, estuary, fresh water, or coastal waters | No |
| Substantially affects scenic vistas and viewplanes identified in county or state plans or studies | No |
| Requires substantial energy consumption | No |

Notes: "No" means project impact as it pertains to the criterion is considered to be not significant, and therefore, an environmental assessment is the appropriate HRS Chapter 343 review document. "Yes" would mean project impact as it pertains to the criterion is considered to be significant, and therefore, an environmental impact statement would have been the appropriate HRS Chapter 343 review document.

# Table of Contents

## List of Figures



## List of Tables

# Chapter 1
# Description of the Proposed Project

## 1.1 INTRODUCTION

Hawaiian Cement is proposing to construct and operate a cement import and transshipment terminal at Pier P-7 in Kalaeloa/Barbers Point Harbor, Ewa, Oahu, Hawaii. Hawaiian Cement currently imports cement clinker and grinds it at its Campbell Industrial Park (CIP) facility to produce finished cement. It also stores the cement at this site for distribution to Statewide customers. The proposed terminal will replace this facility and existing clinker and gypsum unloading activities at the harbor will no longer be conducted.

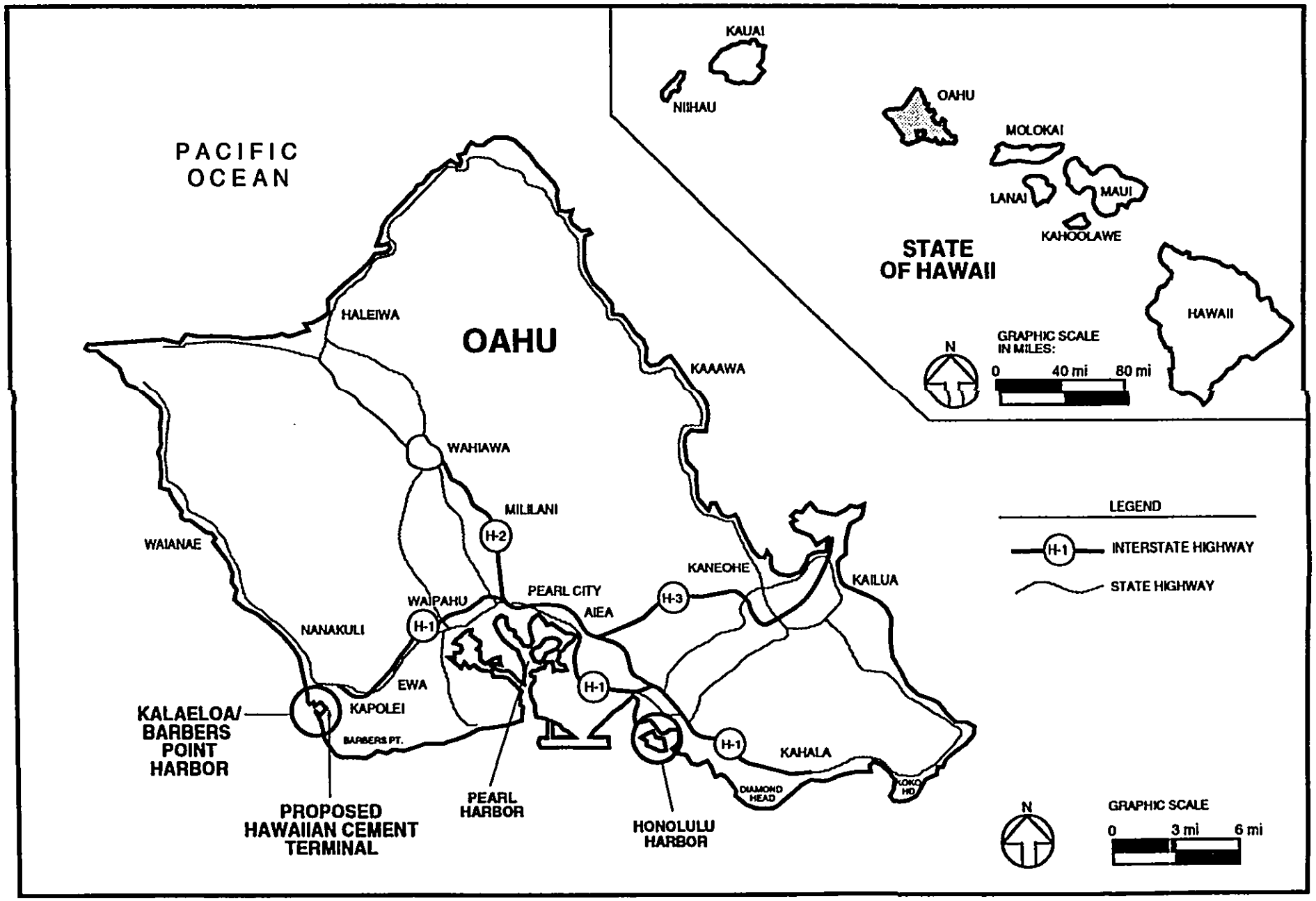
Cement is a powdery substance made from lime (calcium oxide, obtained from limestone) and clay. Cement clinker is an aggregated form of cement. Cement becomes mortar when mixed with water and sand, and becomes concrete when mixed with water, sand and aggregate.

This chapter provides a description of the physical and operational characteristics of the project. This chapter also provides an explanation of why an environmental assessment (EA) was prepared in accordance with Hawaii Revised Statutes (HRS), Chapter 343 (the State Environmental Impact Statement (EIS) law).

## 1.2 EXISTING AND FUTURE HARBOR FACILITIES

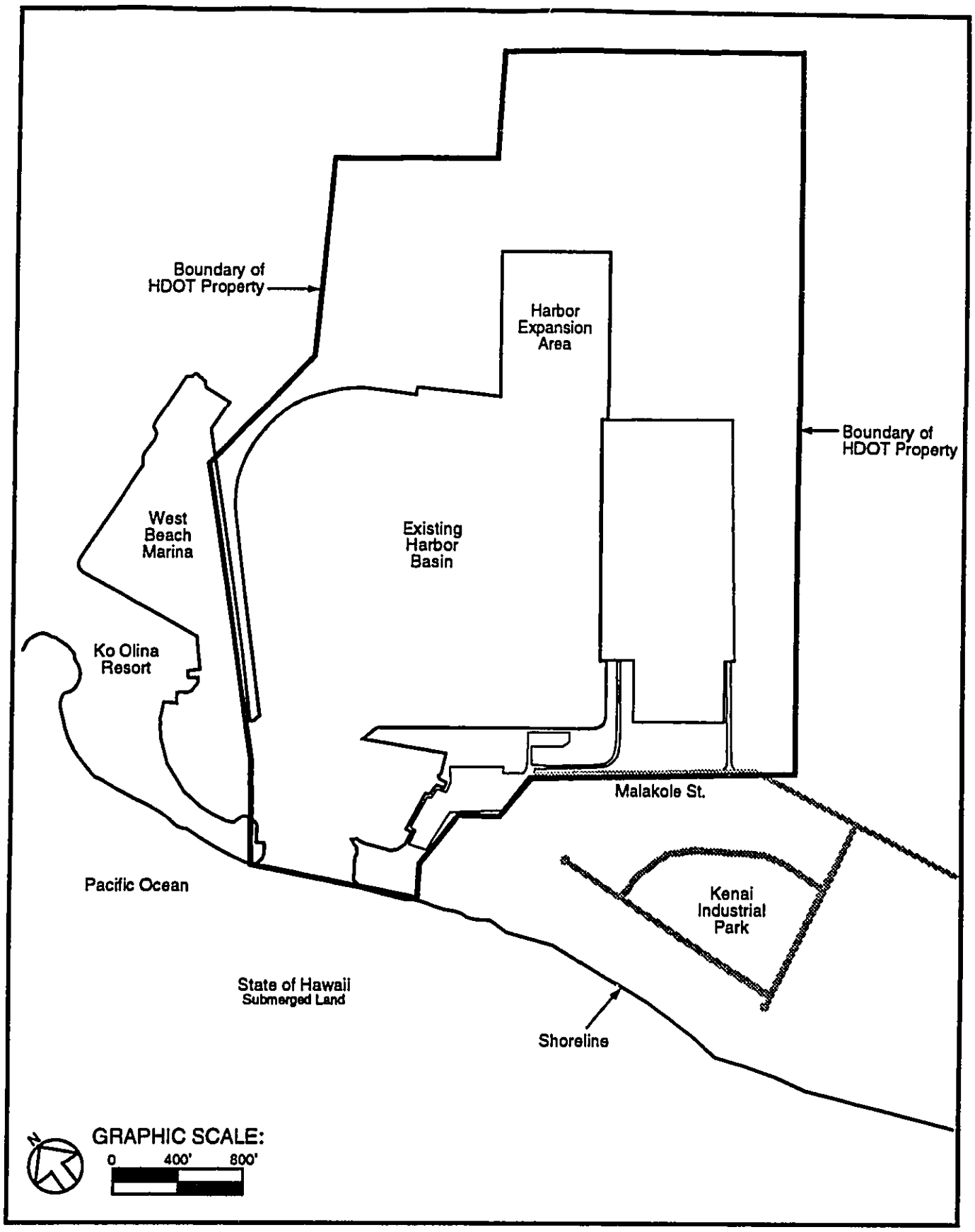
The proposed Hawaiian Cement terminal will be in Kalaeloa/Barbers Point Harbor, Ewa, Oahu. The port is the second busiest commercial harbor in the State, behind Honolulu Harbor (see Figure 1-1). The State of Hawaii Department of Transportation, Harbors Division (HDOT) owns the port (see Figure 1-2).

The harbor entrance channel is 450 feet wide, 4,280 feet long, and 38 to 42 feet deep (see Figure 1-3). At the mouth of the harbor, the entrance to West Beach Marina is to the northwest and a barge basin is to the southeast. West Beach Marina is currently unoccupied, but is being developed to accommodate approximately 300 slips. The barge basin is 21 feet



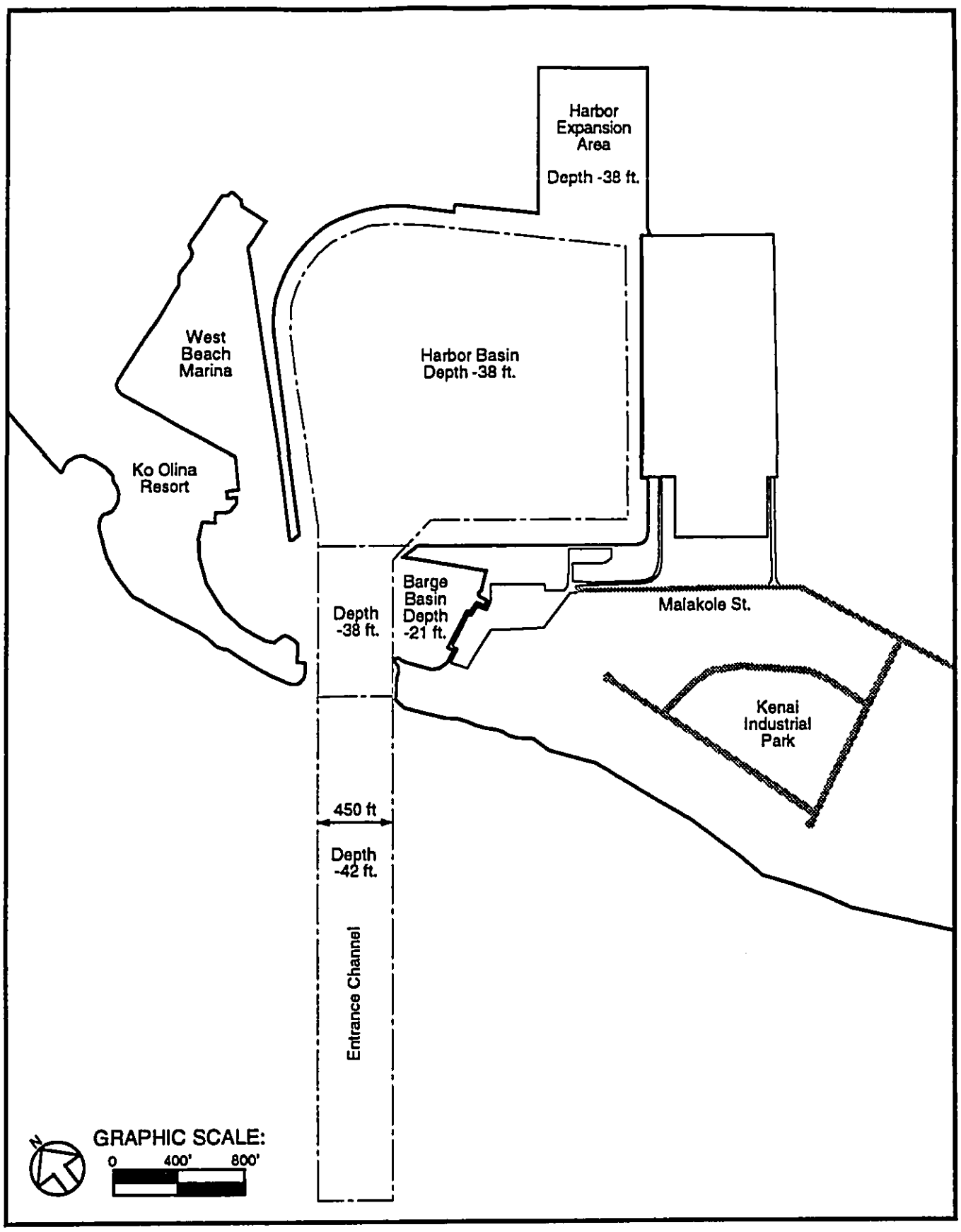

*PARSONS BRINCKERHOFF QUADE & DOUGLAS, INC.*

***Project Location***
***HAWAIIAN CEMENT TERMINAL AT KALAELOA/BARBERS POINT HARBOR, PIER P-7***
*Final Environmental Assessment*
*FIGURE 1-1*




***PARSONS BRINCKERHOFF QUADE & DOUGLAS, INC.***

***HDOT Property at Kalaeloa/Barbers Point Harbor***
***HAWAIIAN CEMENT TERMINAL AT KALAELOA/BARBERS POINT HARBOR, PIER P-7***
*Final Environmental Assessment*
*FIGURE 1-2*




PARSONS
BRINCKERHOFF
QUADE &
DOUGLAS, INC.

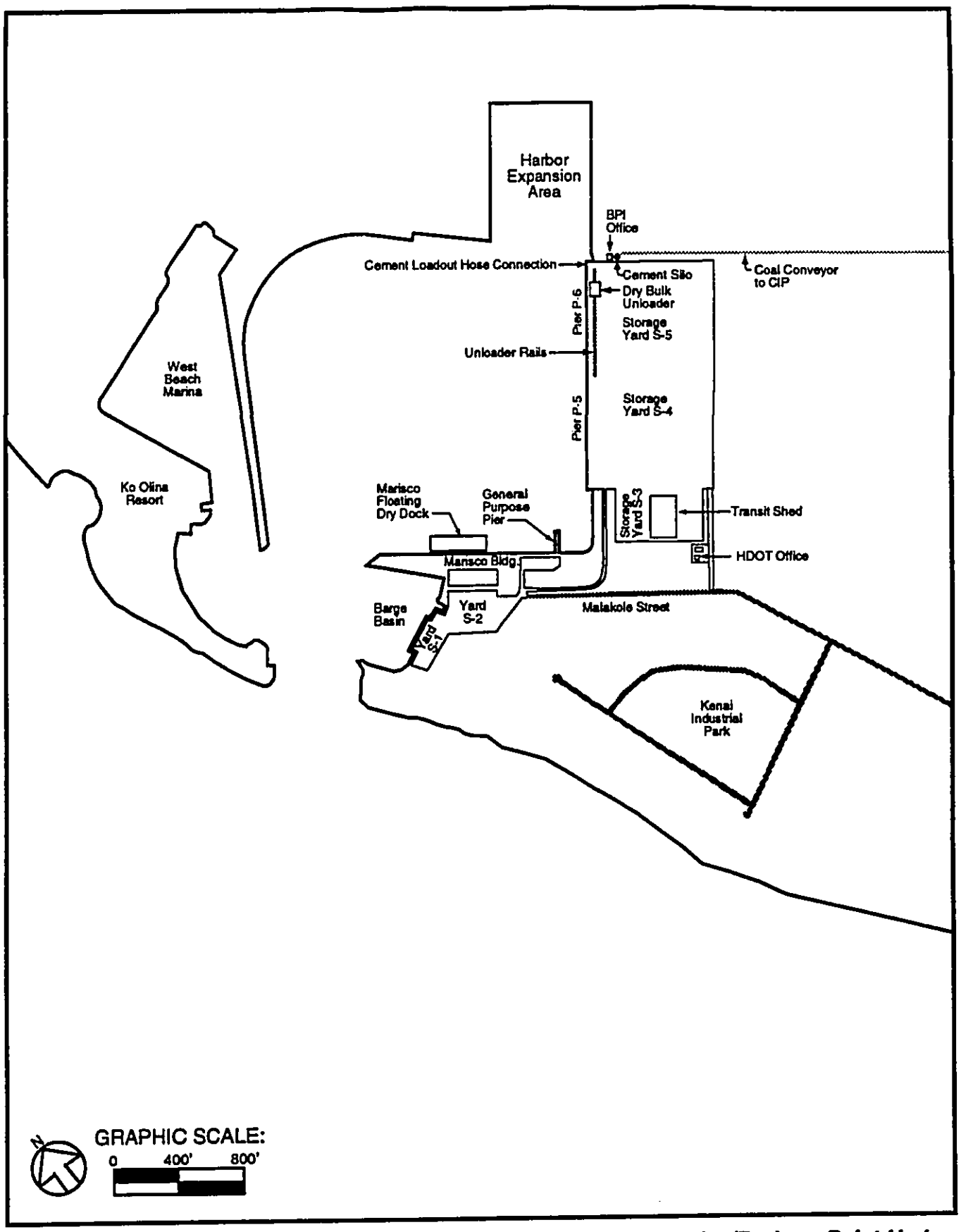
***Entrance Channel and Basin at Kalaeloa/Barbers Point Harbor***
***HAWAIIAN CEMENT TERMINAL AT***
***KALAELOA/BARBERS POINT HARBOR, PIER P-7***
*Final Environmental Assessment*
*FIGURE 1-3*

deep and includes a barge pier approximately 250 feet long, and five acres of storage yard (S-1 and S-2). The main harbor basin is approximately 2,300 feet long by 1,800 feet wide and 38 feet deep. HDOT is currently expanding the northeast part of the main basin by a section 600 feet wide by 1,100 feet long and 38 feet deep.

The two main piers of Kalaeloa/Barbers Point Harbor are P-5 and P-6 (see Figure 1-4). They form a continuous wharf approximately 1,600 feet long. Behind P-5 and P-6 is a 30-acre concrete-paved storage yard (S-4 and S-5) that is used to store and handle general cargo. The storage yard has hooded lights mounted on 90-foot-high poles, and a transit shed for cargoes that require protection from wind and rain. At the south corner of the basin is a 150-foot-long general purpose pier. At P-6, Hawaiian Cement currently uses a pneumatic loading system and storage silo that are owned by Briggs Pacific Industries (BPI). This equipment is used to load cement onto the Hawaiian Cement barge *Punapau*, which services the neighbor islands. Also at P-6, BPI operates a dry-bulk mechanical ship unloader, which is used primarily for clinker, sand, gypsum and coal. BPI also owns a small office adjacent to the cement silo. Imported coal is transferred directly from the ship onto a pipe conveyor that runs from P-6 to a co-generation electric power plant in CIP. P-5 and P-6 also contain petroleum pipelines owned by Chevron U.S.A. and Tesoro Hawaii. These pipelines carry outbound diesel, gasoline, fuel oil, naphtha and jet fuel from the two refineries at CIP to vessels serving the neighbor islands and other countries..

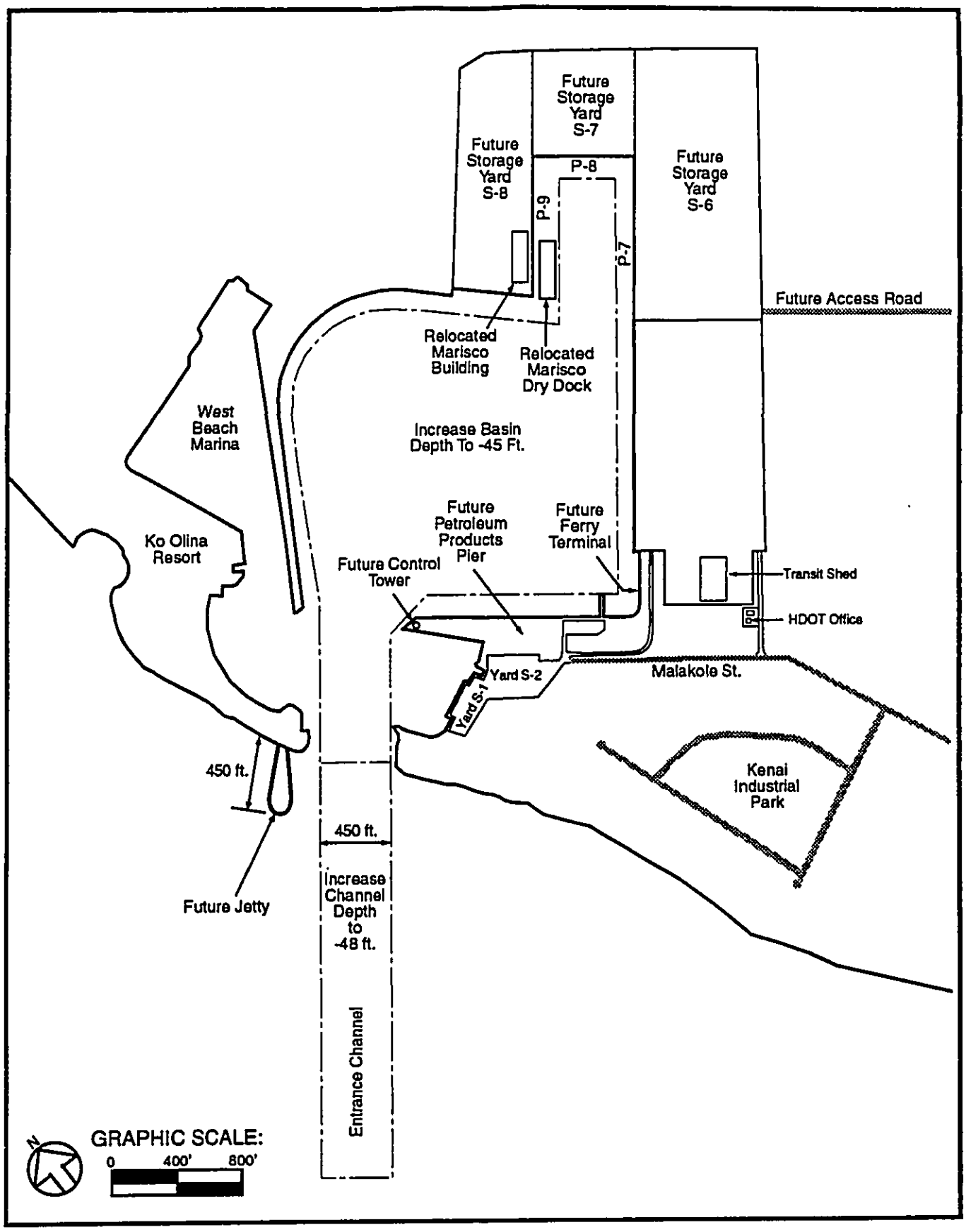
Other existing facilities at Kalaeloa/Barbers Point Harbor include a small HDOT administration building, a cargo shed, and ship repair facilities owned by Marisco Ltd. (see Figure 1-4). The Marisco facility includes a building on the southwestern side of the basin, and a floating dry dock adjacent to the building. In the next few years the Marisco facility is expected to relocate to the new expansion area, opposite P-7.

HDOT is currently and will continue to make substantial improvements to Kalaeloa/Barbers Point Harbor (see Figure 1-5). Shortly after completing the basin expansion, HDOT will construct new piers (P-7, P-8 and P-9) and storage yards (S-6, S-7 and S-8) surrounding the expanded section. In the long term, additional storage yards will be constructed along S-4 and S-5. P-7 is expected to be completed by 2002.




**PARSONS BRINCKERHOFF QUADE & DOUGLAS, INC.**

***Existing Facilities at Kalaeloa/Barbers Point Harbor***
***HAWAIIAN CEMENT TERMINAL AT KALAELOA/BARBERS POINT HARBOR, PIER P-7***
*Final Environmental Assessment*
*FIGURE 1-4*




**PARSONS BRINCKERHOFF QUADE & DOUGLAS, INC.**

***Future Facilities at Kalaeloa/Barbers Point Harbor***
***HAWAIIAN CEMENT TERMINAL AT KALAELOA/BARBERS POINT HARBOR, PIER P-7***
*Final Environmental Assessment*
*FIGURE 1-5*

The U.S. Army Corps of Engineers (USACE) is also planning improvements to the harbor, including deepening the channel to a maximum depth of 48 feet, deepening the main basin to 45 feet, and constructing a 450-foot-long jetty on the northwest side of the harbor mouth (see Figure 1-5). The improvements are intended to facilitate the use of the harbor by bulk carriers and other vessels, and improve wave and current conditions in the channel and basin.

Other future harbor improvements include (see Figure 1-5):

- the extension of petroleum pipelines to P-4 and the construction of a fuel pier in this area;
- a control tower between the barge basin and main basin to manage potential marine traffic conflicts between the harbor and West Beach Marina;
- a ferry terminal on the south side of the main basin; and
- a new access road between the harbor and Kalaeloa Boulevard.

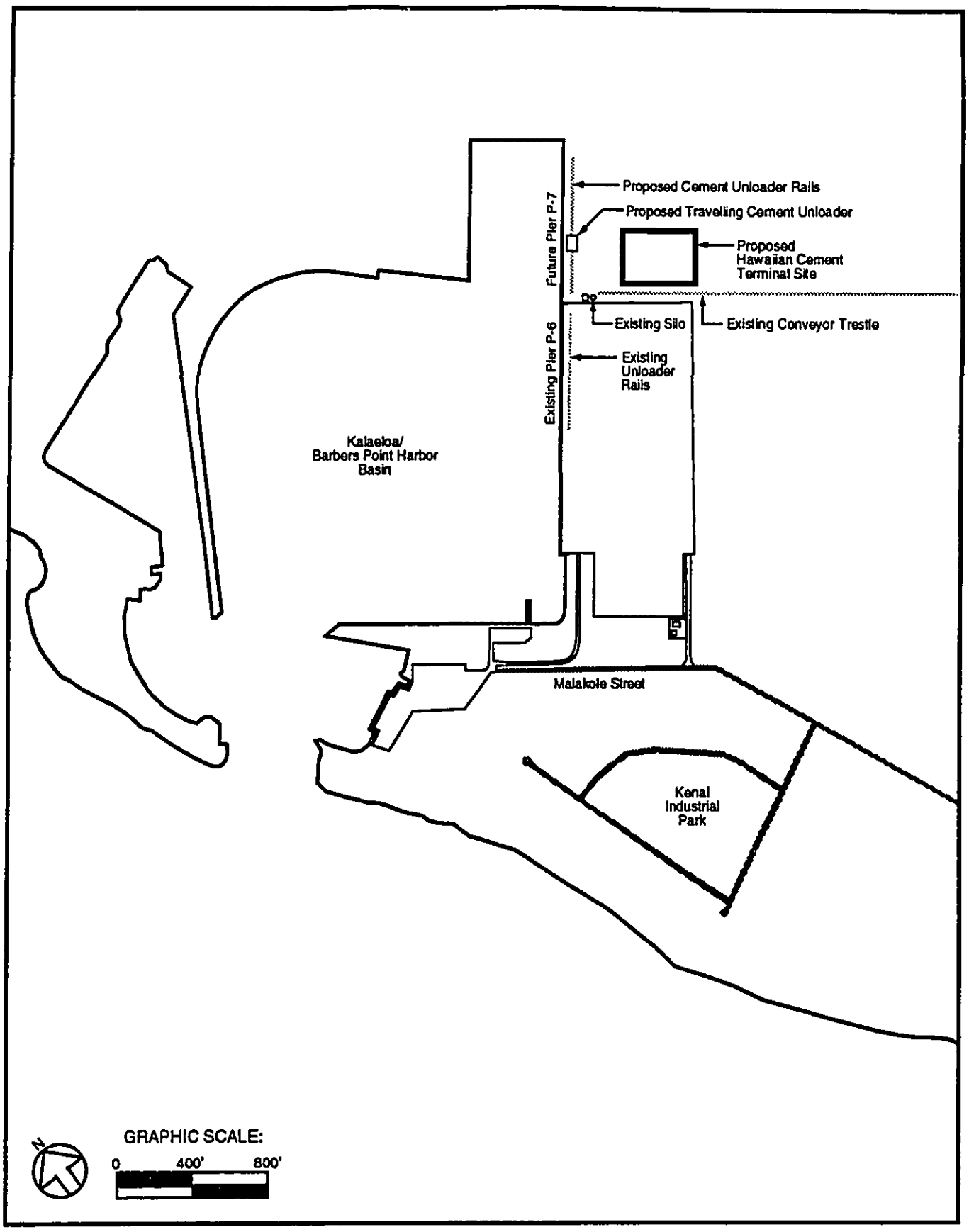
## 1.3 DESCRIPTION OF THE PROPOSED PROJECT

### 1.3.1 Physical Characteristics

#### 1.3.1.1 Project Site and Layout

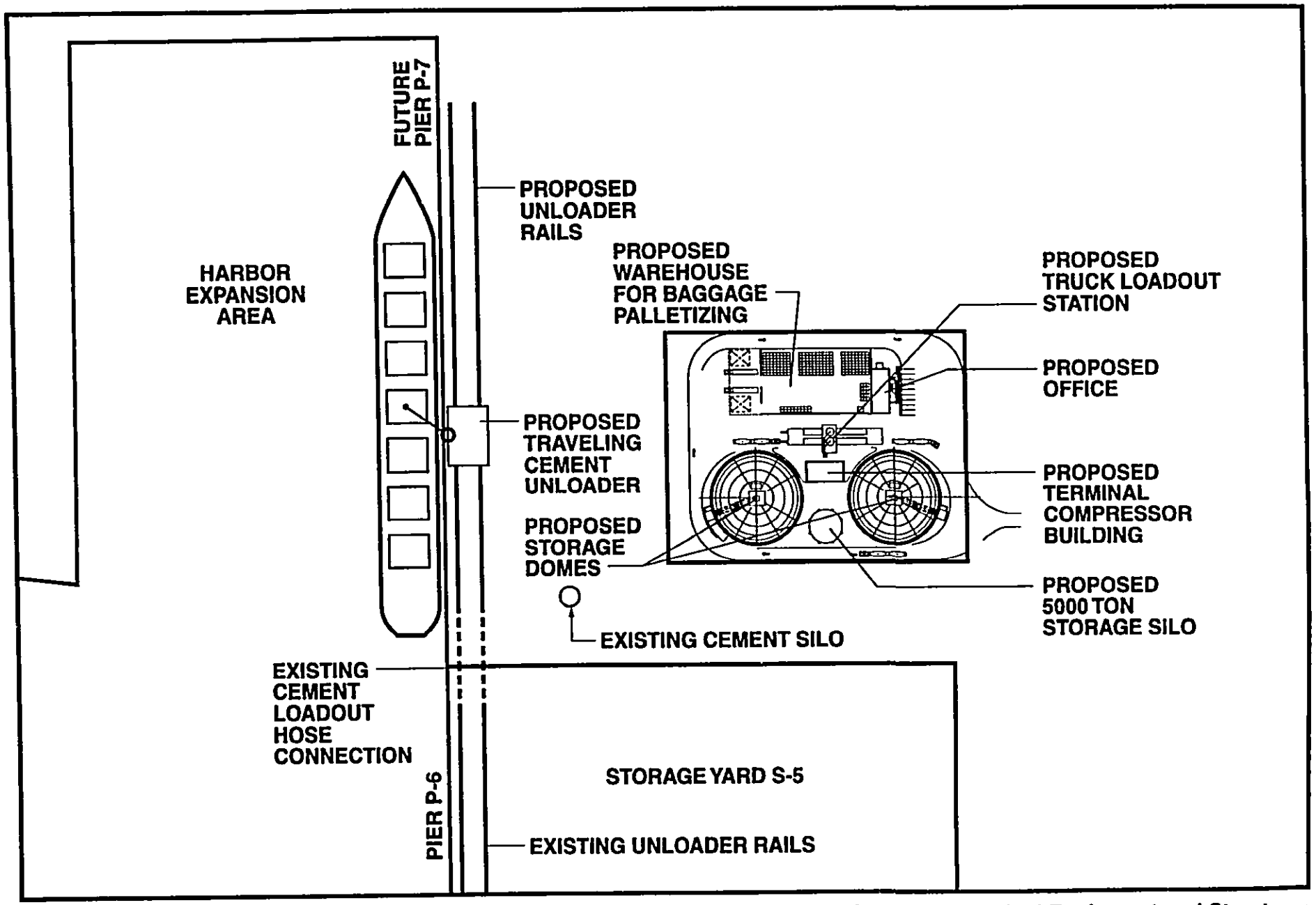
The proposed cement terminal will be on a leased parcel approximately 3.9 acres in size behind the future P-7 dock (see Figure 1-6). HDOT owns the property (tax map key 9-1-14:24), and has awarded a 35-year lease to Hawaiian Cement. The signing of the lease is contingent upon Hawaiian Cement obtaining all the necessary approvals and permits to construct and operate the terminal.

The layout of the terminal buildings and structures is shown on Figure 1-7. Since the terminal will be approximately 400 feet from the edge of the dock, it will not interfere with truck access to the BPI unloader, the operation of the coal conveyor, or other harbor operations. Section 1.3.1.3 contains information about the terminal's structures.




***PARSONS BRINCKERHOFF QUADE & DOUGLAS, INC.***

***Terminal and Unloader Site***
***HAWAIIAN CEMENT TERMINAL AT KALAELOA/BARBERS POINT HARBOR, PIER P-7***
*Final Environmental Assessment*
*FIGURE 1-6*




PARSONS BRINCKERHOFF QUADE & DOUGLAS, INC.

*Layout of Terminal Equipment and Structures*
*HAWAIIAN CEMENT TERMINAL AT KALAELOA/BARBERS POINT HARBOR, PIER P-7*
*Final Environmental Assessment*
*FIGURE 1-7*

#### 1.3.1.2 Material Flow

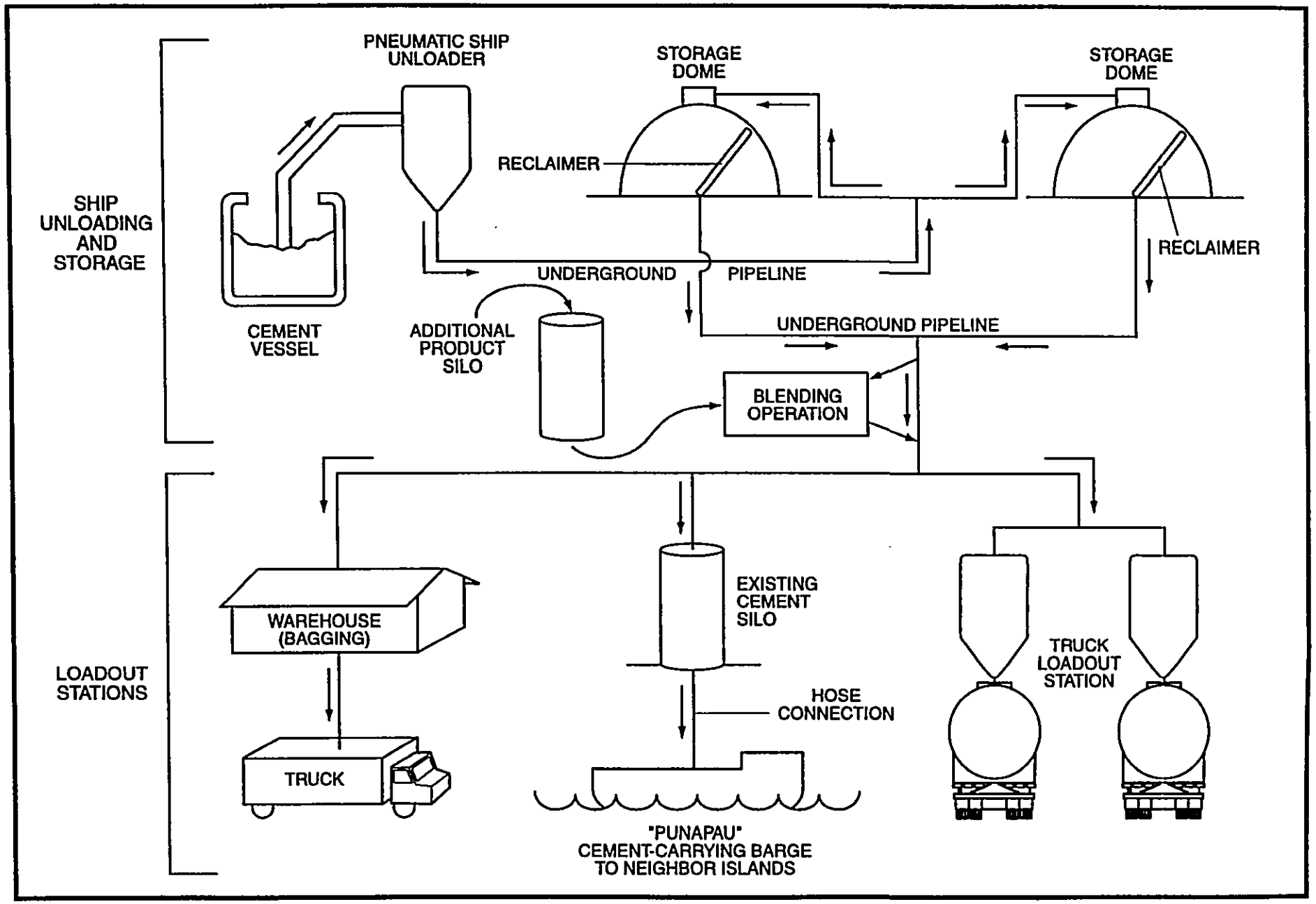
The proposed terminal will be an intermodal facility that transfers finished cement from ocean-faring vessels to truck or barge for distribution throughout the State. Figure 1-8 is a material flow diagram illustrating the intermodal transfers.

#### 1.3.1.3 Equipment and Structures

This section describes the equipment, systems and structures of the proposed terminal. Hawaiian Cement staff visited several terminals on the U.S. mainland to review various technologies with regards to operational characteristics and environmental performance. Based on a thorough evaluation of technologies, Hawaiian Cement staff chose equipment and systems that will be totally enclosed, are proven in the industry, and offer excellent environmental performance. Listed below are the major components and structures of the cement terminal (see Figure 1-7).

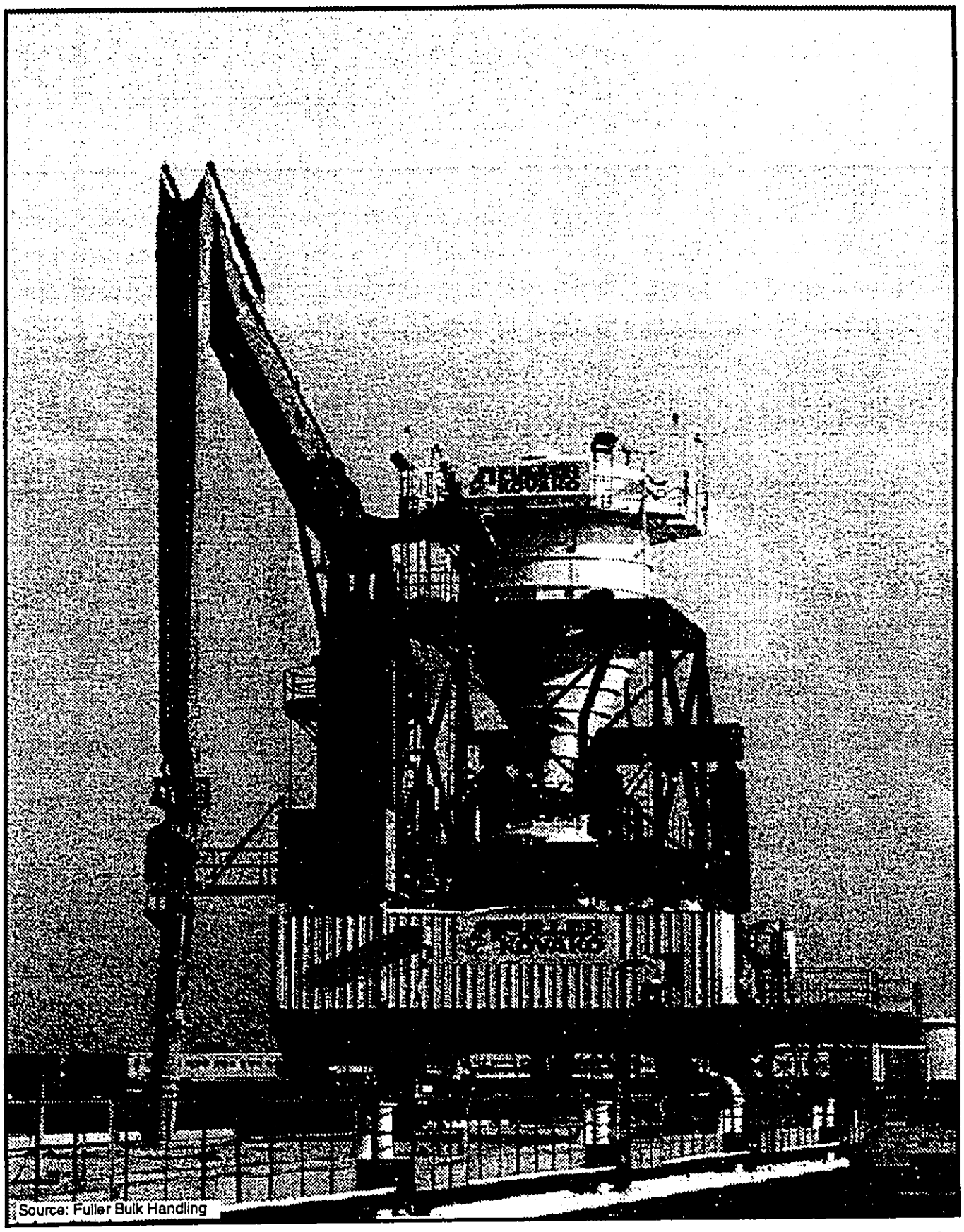
- a rail- or tire-mounted pneumatic ship unloader;
- two 30,000-ton-capacity concrete storage domes;
- reclaim system used to clear cement from the domes;
- pneumatic pipelines between the unloader, storage domes, and loadout systems;
- a two-lane bulk truck loadout station;
- the existing pneumatic barge loading system and cement silo;
- a bagging plant;
- an additional product silo and blending system; and
- office, shop and warehouse facilities.

Cement will be unloaded using a rail- or tire-mounted, 600-ton-per-hour (tph) capacity pneumatic ship unloader (see Figure 1-9). Pneumatic conveying operates by moving fine dry bulk material via a pipeline using compressed air. The pneumatic unloader would suction cement from cargo holds by creating a vacuum in the conveying line. Excess air will be vented through a baghouse. By moving along the rails or on tires, the cement unloader would reach all vessel holds. Below grade piping, with stubbed outlets for connections to the unloader, will be installed along the length of the rails. While HDOT constructs P-7, the cement unloader would share the existing rails on P-6 with the BPI unloader. The rails and




PARSONS BRINCKERHOFF QUADE & DOUGLAS, INC.

***Materials Flow at the Proposed Terminal***
***HAWAIIAN CEMENT TERMINAL AT KALAELOA/BARBERS POINT HARBOR, PIER P-7***
*Final Environmental Assessment*
*FIGURE 1-8*




PARSONS
BRINCKERHOFF
QUADE &
DOUGLAS, INC.

**Pneumatic Unloader**
HAWAIIAN CEMENT TERMINAL AT
KALAELOA/BARBERS POINT HARBOR, PIER P-7
Final Environmental Assessment
FIGURE 1-9

piping will be extended to P-7 when this pier is completed. Upon completion, P-7 will be Hawaiian Cement's principal pier and the permanent location of the unloader.

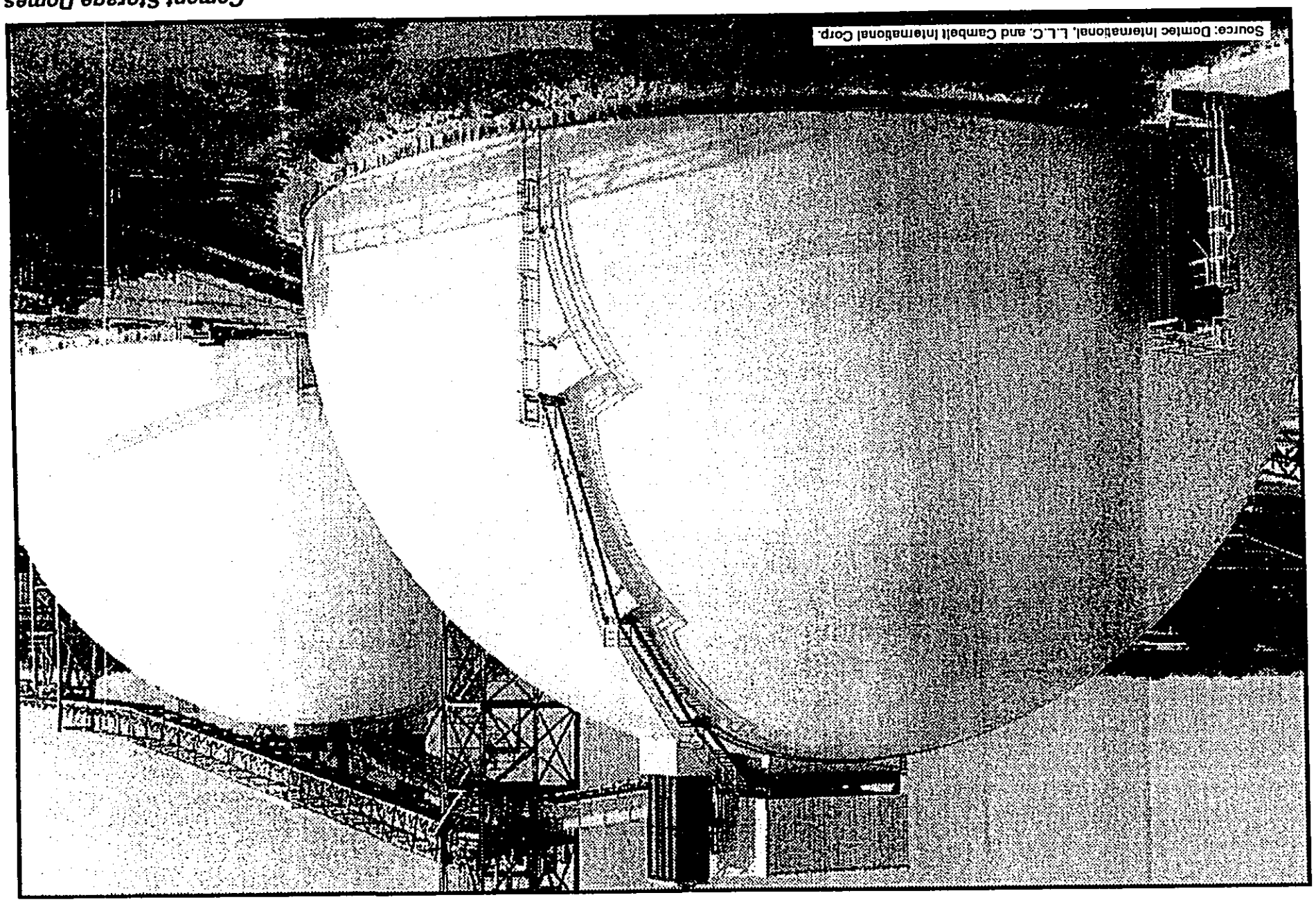
The cement will be conveyed pneumatically from the pier area to the two storage domes via an underground product pipeline (see Figure 1-10). Compressors for conveying cement through the pipeline will be in an enclosed concrete structure adjacent to the domes (see Figure 1-7). All underground piping will be protected from corrosion. Excess air will be vented through baghouses at the tops of.the domes.

Cement will be stored in two 30,000 ton capacity concrete storage domes (see Figure 1-7). Both domes will have diameters of 144 feet and heights of 77 feet. The actual height of the storage domes, however, will be approximately 90 feet because of dust collection equipment (baghouses) on top of the domes. A mechanical reclaim system will be used to clear the cement from the storage domes for transport to the various loadout systems. The preferred system uses a reclaimer arm connected to a column in the middle of the dome by a hoist cable. The reclaimer arm rotates inside the dome around the column, pulling cement to the center of the dome so that it can be gravity-fed through hoppers under the domes. Tag screws along the length of the reclaimer arm are used to assist in the movement of the cement. The reclaimer system in each dome will have a capacity of 400 tph.

A pneumatic conveying system will transfer cement from the domes via pipeline to the following loadout systems:

1. the truck loadout station for delivery on Oahu;
2. barge loadout for delivery to the neighbor islands; and
3. bagging and palletizing.

At the top of the truck loadout station, the cement is fed into two bins. From these loadout bins, cement is gravity-fed through an automated loadout chute into the cement truck tanks. The chute matches the tank hatch, so that truck loading is totally enclosed and the air displaced from the truck tank is contained. Excess air will be vented through a baghouse. Truck scales will be used in conjunction with fully automated loading and dispatch systems to



Source: Dorntec International, L.L.C. and Cambell International Corp.

**Cement Storage Domes**
**HAWAIIAN CEMENT TERMINAL AT KALAELOA/BARBERS POINT HARBOR, PIER P-7**
*Final Environmental Assessment*
*FIGURE 1-10*

**PARSONS BRINCKERHOFF QUADE & DOUGLAS, INC.**

ensure that the proper amount of cement is loaded into the truck tank, thereby avoiding overfilling. The capacity of the truck loadout station is 400 tph.

The barge loadout system will utilize the existing 300-tph pneumatic barge loading system and 1,550-ton-capacity silo. Excess air will be vented through baghouses on the barge and silo. The silo will be used as a surge bin for loading barges, and will require modifications to handle the increased feed rate. It will also be possible to load the barge directly from the storage domes. Both the truck and barge loadout systems can be fed simultaneously.

The third loadout system will be a 50-tph bagging and palletizing operation located in a 15,000-square-foot warehouse (see Figure 1-7). These operations will be totally enclosed.

The terminal will also have an optional blending capability prior to product loadout, which will consist of a 5,000-ton storage silo for an additive (see Figure 1-7). The blended product can be transported to the other loadout systems (e.g., truck loadout, barge loadout and bagging).

Personnel safety features will be designed into each system to comply with all health and safety standards.

The terminal will also include ancillary facilities such as administrative offices, operations center, security, maintenance shop, and storage for sensitive equipment. These facilities will be located in the warehouse building. About ten parking stalls will be provided on-site for employees and visitors. The terminal will also include drainage structures similar to those at S-4 and S-5.

### 1.3.2 Operational Characteristics

Cement vessels will range from 35,000 to 40,000 deadweight tons (DWT). The frequency of vessel calls will depend on vessel size and market conditions, but generally one vessel is expected per month. The vessels will spend seven to eight days in port. Cement unloading will be a 24-hour operation.

Bulk cement trucks will be loaded and dispatched from the terminal daily. It is anticipated that no more than 50 trucks will enter and leave the facility per day (Hawaiian Cement's facility in CIP presently averages 30 to 35 truckloads per day). Trucks will enter and exit the facility

via Malakole Road and the southeast side of S-4 and S-5. Once the new access road is completed (see Section 1.2), the truck routes will be diverted onto the new road.

*Punapau*, Hawaiian Cement's barge, will still be used for neighbor island distribution of bulk cement. Typically, the barge will be berthed in Kalaeloa/Barbers Point Harbor for five days per week: one day for actual loading and four days idle. The remaining two days of the week will be spent at sea or at a neighbor island port. *Punapau* can be shifted to a lay berth to accommodate other P-7 users during idle periods.

Bagging and palletizing of cement will be performed as needed depending on market conditions. Distribution of sack cement will be done Monday through Friday from 7 a.m. to 3 p.m. It is expected that no more than ten delivery trucks will enter and exit the terminal per day. The route of these trucks to and from the facility will be the same as the cement tank trucks.

The administrative office will be open during normal business hours Monday through Friday.

### 1.3.3 Alternatives to Selected Equipment

#### 1.3.3.1 Cement Unloader

The alternatives to installing a new pneumatic ship unloader are: (1) a new mechanical unloader; or (2) use of the existing BPI unloader.

A new mechanical unloader would utilize a screw mechanism to lift cement from the vessel holds or a clam shell bucket to grab cement and drop it into a hopper for conveyance to the domes. Although both technologies have higher capacities (tph) than pneumatic unloading, Hawaiian Cement did not select them because each would generate substantially higher particulate emissions.

The existing BPI bulk unloader uses a bucket elevator system that scoops dry bulk material from the cargo hold. Although the BPI unloader has a higher capacity than pneumatic unloading, and is currently used to unload Hawaiian Cement's clinker shipments, Hawaiian Cement did not choose to use the BPI unloader because it would generate substantially

higher particulate emissions, and it is not the appropriate technology for cement, which is much finer than clinker.

#### 1.3.3.2 Cement Storage

Hawaiian Cement selected concrete domes as the cement storage structures at the terminal. Their advantages in comparison to the alternatives described below include:

- superior moisture protection of the stored material;
- greater strength and durability;
- lower cost per ton of storage capacity;
- better environmental controls and dust containment;
- faster construction; and
- lower profile (shorter).

There are two alternatives to using domes for storing cement: (1) silos; and (2) flat storage.

To achieve the required storage capacity (60,000 tons) within the confines of the terminal site, 12 silos, with diameters of approximately 36 feet and heights of approximately 150 feet, would be needed. Silo storage was not selected because these structures are more expensive to construct, and would be substantially taller than the domes, thereby causing greater visual impacts.

Flat storage utilizes a warehouse-type building. This type of storage was not selected because the required storage capacity could not be provided within the confines of the site. In addition, this type of storage is less efficient because its reclaimer system would allow cement to build up along the walls and corners.

#### 1.3.3.3 Conveyance Systems

The alternative to using the preferred pneumatic pipelines is belt conveying. Although belt conveying is generally more efficient in moving bulk material, it is more difficult to control dust emissions. Pneumatic conveying requires less extensive dust collection systems and for cement, provides better environmental performance.

### 1.3.4 Schedule

Table 1-1 displays Hawaiian Cement's phasing plan to complete its proposed terminal.

**Table 1-1**
**Phasing Schedule**

| Phase | Facility | Initiate Construction |
|---|---|---|
| 1 | Unloader, Domes and Truck Loading Station | Spring 2000 |
| 2 | Warehouse, Bagging Operation and Offices | 2002 |
| 3 | Specialty Product and Blending Operation | 2004 |

Source: Hawaiian Cement, July 1999

## 1.4 PLANNING PROCESS

### 1.4.1 Hawaii Revised Statutes, Chapter 343

The proposed project must undergo environmental review in accordance with HRS Chapter 343 (the State EIS law) because State land will be used (see Section 1.3.1.1). As the State land owner, HDOT is the approving agency under HRS Chapter 343. The proposed project is not on the HDOT list of projects and programs that are "exempt" from Chapter 343 review.

A Draft EA was prepared as the HRS Chapter 343 environmental review document because HDOT indicated during early consultation that it anticipated a Finding of No Significant Impact (FONSI) for the project. During the preparation of the Draft EA, scoping activities were conducted, and the results were used to complete the document (see Chapter 3). The Draft EA was announced in the June 23, 1999 edition of the State Office of Environmental Quality Control's Environmental Notice and distributed to appropriate State and City and County of Honolulu agencies and other organizations.

Following the required 30-day Draft EA comment period, Hawaiian Cement responded to all written comments received. Based on Significance Criteria specified in HAR Chapter 200 (see Chapter 4), comments received on the Draft EA, and Hawaiian Cement's responses to

these comments, HDOT has rendered a FONSI for the proposed project. Therefore, this Final EA / FONSI has been prepared, and will be announced in the State Environmental Notice.

### 1.4.2 Special Management Area

A portion of the Hawaiian Cement terminal will be within the Special Management Area (SMA). As described in Section 2.4.2.3, SMAs were designated by the 1975 Shoreline Protection Act and the enabling State legislation appears in HRS Chapter 205A. Correspondence with the City and County of Honolulu Department of Planning and Permitting (DPP) (see Chapter 3), the agency that administers the SMA program on Oahu, indicated that the project will require a major Special Management Area Use Permit (SMP) because structures within the portion of the project within the SMA will have a capital cost greater than $125,000. In accordance with Chapter 25 of the Revised Ordinance of Honolulu (RO), the proposed project must undergo HRS Chapter 343 environmental review before the SMP review begins.

The Final EA / FONSI (see Section 1.4.1) will be submitted to DPP to initiate the SMP process. Section 2.4.2.3 includes an assessment of the proposed project in relation to review guidelines specified in RO Section 25-3.2. Following submission of the SMP application, DPP will hold a public hearing in the project area. DPP will then provide an assessment and recommendation to the City Council, which will make the decision on whether to grant a major SMP.

### 1.4.3 Environmental Assessment

This Final EA identifies and assesses the environmental and social impacts that could result from the construction and operation of the proposed cement terminal at Kalaeloa/Barbers Point Harbor. This Final EA also contains a record of all correspondence with relevant agencies and organizations, including comments on the Draft EA and Hawaiian Cement's responses.

# Chapter 2
# Environmental Setting, Impacts and Proposed Mitigation

This chapter describes the existing environmental conditions of the project site, the future Pier P-7 and Storage Yard S-6, and the vicinity of Kalaeloa/Barbers Point Harbor, Ewa, Oahu, Hawaii. It also describes the long-term environmental and social impacts of the proposed project, as well as short-term construction impacts. Where a long-term or construction-related impact is considered adverse, mitigation is proposed.

## 2.1 PHYSICAL ENVIRONMENT

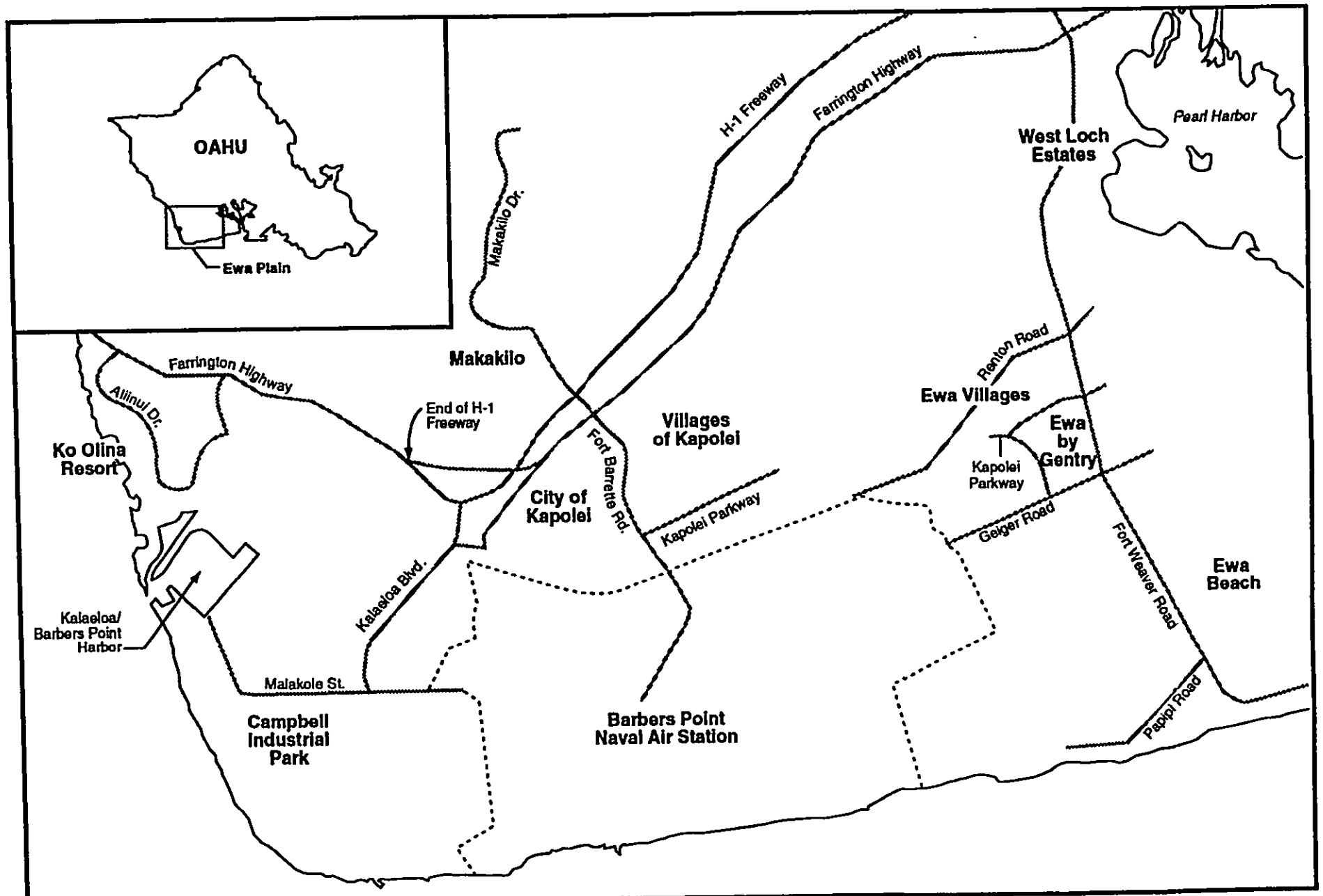
### 2.1.1 Topography, Geologic Conditions and Agricultural Activities

#### 2.1.1.1 Existing Condition

Kalaeloa/Barbers Point Harbor is on the western edge of the Ewa plain, an emergent ancient coral-algae calcareous reef formed during the Pleistocene Period (see Figure 2-1). The Ewa plain extends from sea level at the coastline to an elevation of about 100 feet three to five miles inland. The plain is composed of calcareous material, which has been modified, consolidated, and cemented by dissolution, rain, air and other weathering factors to form a hard but extremely permeable surface. The rock is predominantly classified as coral limestone or coral limestone breccia. Alluvium, consisting of muds and clays that eroded from the Waianae mountain range, is interlayered with limestone.

At the project site, future P-7 and S-6, the natural elevation is approximately 20 feet above mean sea level (msl). The site is undeveloped, and level with an average slope of about one percent. Thirty- to 40-foot high stockpiles of material from the original and recent harbor excavations are on the southeastern and northeastern (mauka) side of the harbor. Material from the stockpiles is withdrawn for processing at a rate dependent on local demand for construction materials.

Soils at the project site are designated Coral Outcrop (CR) by the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service. This soil consists of coral or




PARSONS BRINCKERHOFF QUADE & DOUGLAS, INC.

**Ewa Plain**

*HAWAIIAN CEMENT TERMINAL AT KALAELOA/BARBERS POINT HARBOR, PIER P-7*
*Final Environmental Assessment*
*FIGURE 2-1*

cemented calcareous sand with a thin layer of friable red soil material in cracks, crevices, and depressions. Coral Outcrop is generally unsuitable for agriculture.

The Ewa plain, including the area surrounding the harbor, was used since the late 1800s for sugarcane cultivation. This activity, however, ceased in the mid-1990s and the lands adjacent to the harbor beyond the stockpiles have remained fallow. However, the area immediately east of Kapolei, approximately five miles from the harbor, has converted to diversified agricultural activities.

#### 2.1.1.2 Potential Impact

Construction of the Hawaiian Cement terminal at P-7 requires lowering the existing topography within and outside the terminal parcel by eight to ten feet, to match the elevation and slope of the existing storage yard (S-4 and S-5). Grading and excavation outside the boundaries of the parcel are needed to create proper drainage and access to the terminal. The amount of excavation is estimated to be 53,000 cubic yards within the parcel and another 50,000 cubic yards outside the parcel. These volumes are relatively small in comparison to the recently completed basin expansion. Construction equipment and vehicles to be used for the grading and excavation work will include dozers, excavators, earthmovers, and haul trucks. Excavated material will be added to the existing stockpiles surrounding the harbor, and will later be sold by the State of Hawaii Department of Transportation, Harbors Division (HDOT) for sand, gravel, and fill uses.

The grading and excavation required to construct the terminal will not affect the geologic conditions of the project site beyond this initial work. Since the project site, or areas adjacent to the project site, is not currently or in the future being used for cultivation, the proposed project will not affect agricultural activities in the State. Best Management Practices (BMPs) will be employed to control and minimize soil erosion during construction (see Section 2.5.5 for further details).

## 2.1.2 Water Resources

### 2.1.2.1 Existing Condition

#### 2.1.2.1a Surface Hydrology and Drainage

There are no perennial streams near the project site because storm water runoff is usually absorbed by the porous coral substrate. However, during extreme rainfall, runoff outside of the existing paved yards would sheet flow into the harbor, transporting silt, because there is currently no drainage infrastructure (e.g., canals, drains, etc.) mauka (north to southeast) of the harbor. According to the Flood Insurance Rate Map (FIRM), the project area is classified Zone D, indicating that flood hazards are undetermined.

Storage Yards S-4 and S-5 contain drainage systems, such as trench drains, collection pipes, and outlet structures, which collect runoff and discharge it into the harbor.

The natural drainage patterns east (mauka) of the harbor were altered by the stockpiles constructed in association with dredging the harbor (see Section 2.1.1). As a result, runoff generated by heavy storms in upland areas presently flows uncontrolled in the harbor vicinity. The Estate of James Campbell is planning to construct a large drainage channel east of Kalaeloa/Barbers Point Harbor as a part of its Kapolei Business - Industrial Park development (see Section 2.2.1).

#### 2.1.2.1b Ground Water

The geologic composition of the Ewa Plain described in Section 2.1.1 forms a wedge of sediments referred to as "caprock." Potable ground water in areas mauka (north to southeast) of Kalaeloa/Barbers Point Harbor is under artesian pressure because it is confined by the caprock. At Kalaeloa/Barbers Point Harbor, the caprock layer is approximately 250 feet thick. Only the upper-most limestone layer of the caprock contains a lens of brackish groundwater. This ground water is too saline for most irrigation purposes, but could be used for industrial purposes.

#### 2.1.2.1c Coastal Water

The tidal range in Kalaeloa/Barbers Point Harbor is relatively small. The difference between mean lower low water (mllw) and mean higher high water (mhhw) is 1.9 feet. Mean sea level (MSL) is 0.8 feet above mllw. The maximum tidal range is 4.0 feet.

Nearshore currents in the Barbers Point region are complex, highly variable and dependent on a variety of meteorological and oceanographic conditions. In general, reversing tidal currents dominate the nearshore coastal waters with the primary direction of flow parallel to the shore and bottom contours. Flood tide currents flow predominantly to the southeast and ebb tide currents typically flow to the northwest. However, this is not always the case, and switches in the ebb and flood tide current directions occur relatively often and unpredictably.

Studies conducted by the U.S Army Corps of Engineers (USACE) (Barbers Point Harbor Modification Study, Island of Oahu, Final Report, August 1991) documented natural resonance modes that cause standing waves to occur in the harbor basin under certain long period ocean wave conditions. These standing waves can strain ship mooring lines, and force ship operators to make certain adjustments to avoid damage to ships and piers. The modifications to Kalaeloa/Barbers Point Harbor being proposed by the USACE (see Section 1.2) should improve wave conditions in the basin.

### 2.1.2.2 Potential Impact

The terminal will replace existing porous surface with buildings and pavement. Drainage structures (trench drains, collection pipes, and outlet structures) will be designed to conform to HDOT's design plans for Pier P-7. Particulate (cement dust) emissions will be minimal (see Section 2.1.4.4) and rigorous housekeeping practices will be implemented (see Section 2.1.2.3). Therefore, storm water will not be contaminated with cement.

The eight to ten feet of excavation required to bring the terminal site to the same elevation and slope of S-4 and S-5 will not be deep enough to affect the brackish groundwater in the caprock. Also, no structures will be constructed or placed in the basin. Therefore, existing and future wave conditions (after USACE has made the modifications) will be unaffected.

### 2.1.2.3 Mitigation Measures

During ship unloading, sweeping and area policing around the unloader will be performed daily. Personnel will check for and clean up excess grease and oil spills. At the terminal, headhouses, collector and ventilating fans, the compressor room and truck loadout station will be inspected daily for dust accumulation and grease or oil spills. Sweeping around the domes will be done weekly, and sweeping around the truck loadout station and warehouse

will be done daily if in operation. Cement spillage will generally be reclaimed, unless there is a question about the quality of the spilled cement. Questionable cement can be put into a dumpster in small quantities. However, anything larger than 55 gallons will be containerized and transported to a landfill. Appendix A contains more information about Hawaiian Cement's housekeeping standards for the terminal.

### 2.1.3 Biological Conditions

#### 2.1.3.1 Existing Condition

#### 2.1.3.1a Flora

Activities at and surrounding the project site include construction of the basin expansion, material and cargo handling, and port operations. The port areas contain no or very sparse vegetation.

The only relatively undisturbed area near the project site is a narrow strip of kiawe forest on the northeastern (mauka) side of the harbor, beyond the stockpiles. The kiawe trees (*Prosopis pallida*) range from 18 to 25 feet in height. Where the tree cover is less dense and where there is soil, the ground cover consists of patches of Guinea grass (*Panicum maximum*), bristly foxtail (*Setaria verticillata*), and shrubs of wild basil (*Ocimum gratissum*). On areas with coral outcropping and shallow soil, the vegetation tends to be sparser and Chinese violet (*Asystasia gangetica*) is more common.

There are no threatened or endangered plant species at or near the project site. However, there are two endangered species in the vicinity of the harbor. A population of the endangered *Achyranthes splendens* var. *rotundata*, a shrub 1.6 to 6.6 feet tall, is in a half-acre fenced preserve on Malakole Street, approximately 1,000 feet away from the boundary of Kalaeloa/Barbers Point Harbor. Also, a population of the endangered 'Akoko, *Chamaesyce skottsbergii*, a perennial shrub, is in the Barbers Point Naval Air Station, which was recovered and relocated during the original Kalaeloa/Barbers Point Harbor construction.

#### 2.1.3.1b Fauna

A faunal survey conducted for the project to expand the basin of Kalaeloa/Barbers Point Harbor (see Section 1.2) identified avifuanal species, which are listed on Table 2-1.

**Table 2-1**
**Birds Sighted During Survey for the Basin Expansion and Tug Pier at Kalaeloa/Barbers Point Harbor Project**

| Common Name | Scientific Name | Relative Abundance* |
|---|---|---|
| Cattle Egret | *Bubulcus ibis* | R = 3 |
| Spotted Dove | *Streptopelia chinensis* | C = 6 |
| Zebra Dove | *Geopelia striata* | C = 8 |
| Common Myna | *Acridotheres tristis* | U = 4 |
| Red-vented Bulbul | *Pycnonotus cafer* | C = 8 |
| Northern Mockingbird | *Mimus polyglottos* | R = 1 |
| Northern Cardinal | *Cardinalis cardinalis* | U = 2 |
| Red-crested Cardinal | *Paroaria coronata* | U = 4 |
| Japanese White-eye | *Zosterops japonicus* | C = 7 |
| Eurasian Skylark | *Alauda arvensis* | R = 4 |
| House Sparrow | *Passer domesticus* | C = 6 |
| House Finch | *Carpodacus mexicanus* | C = 8 |
| Java Sparrow | *Padda oryzivora* | R = 1 |
| Common Waxbill | *Estrilda astrild* | C = 9 |
| Nutmeg Mannikin | *Lonchura punctulata* | R = 9 |

Notes: * Relative abundance = number of individuals observed during walking survey or frequency on 8-minute counts in appropriate habitat:
C = Common (5-10) on 8-minute counts
U = Uncommon (less than 5) on 8-minute counts
R = Recorded but not on 8-minute counts (number which follows is the total recorded over the course of the entire survey)

Source: Bruner, Phillip, Letter Report on Faunal Survey of Land Proposed for an Expansion of Barbers Point Harbor, Ewa, Oahu, November 15, 1991

The only native species sighted during the survey was the Pacific Golden Plover (*Pluvialis fulva*). This common migrant species can be found on lawns and open fields as well as shoreline habitat. The survey report indicated that the following species could frequent the harbor area, but were not recorded during the survey: Barn Owl (*Tyto alba*); Short-eared Owl or Pueo (*Asio flammeus sandwichensis*), an endemic and endangered species; Ruddy Turnstone (*Arenaria interpres*); Japanese Bush-warbler (*Cettia diphone*); White-rumped Shama (*Copsychus malabaricus*); Red Avadavat (*Amandava amandava*); and Chestnut Mannikin (*Lonchura malacca*). In addition, Hawaiian stilts (endangered) have been observed

at a pond at the Chevron Refinery in Campbell Industrial Park (CIP), which is about one mile from the harbor.

The only feral mammals in the project area are the small Indian Mongoose (*Herpestes aurpounctatus*), cats, rats and mice.

### 2.1.3.2 Potential Impact

The proposed project will not affect the existing kiawe forest on the northeastern (mauka) side of the harbor, nor will the project affect habitat for birds and feral mammals in the project area. Construction activities associated with basin expansion have already cleared the vegetation at the project site.

Alien species can be contained in the ballast water of vessels entering Hawaiian ports, especially if the voyage originates at a tropical or subtropical foreign port. However, vessels carrying cement will arrive at Kalaeloa/Barbers Point Harbor unballasted. Vessels will take on ballast water while in port at Kalaeloa/Barbers Point Harbor.

Alien species can also stowaway in the vessel. Organisms will not likely be in the cement because of its production process and because it is inorganic. In addition, hold temperatures are often in excess of 110° (F), and the cement will be heated to over 200° (F) while being transported through the pneumatic unloading system. Alien species can, however, be in other sections of the vessel (e.g. crew quarters) and may find their way onto land when the vessel is in port. However, there is at present an import trade in clinker, and alien species could stow away as easily on clinker ships as cement ships, so the terminal will not affect the possible introduction of alien species.

### 2.1.3.3 Mitigation Measures

The prevention of alien species invasion from foreign vessels is the responsibility of the U.S. Department of Agriculture, the U.S. Customs, the U.S. Coast Guard and the State of Hawaii Department of Agriculture. These agencies conduct inspections of vessels, and current practices will apply to vessels engaged in the new cement trade.

### 2.1.4 Air Quality

#### 2.1.4.1 Existing Condition

The most recent air quality data from State of Hawaii Department of Health (HDOH) monitoring stations at Kapolei, Makaiwa and West Beach indicate that the National Ambient Air Quality Standards (NAAQS) and State Ambient Air Quality Standards (SAAQS) are being met in the vicinity of the project site (see Figure 2-2 and Table 2-2).

Air pollutants from vehicular, harbor, industrial, natural and construction sources affect air quality in the project area.

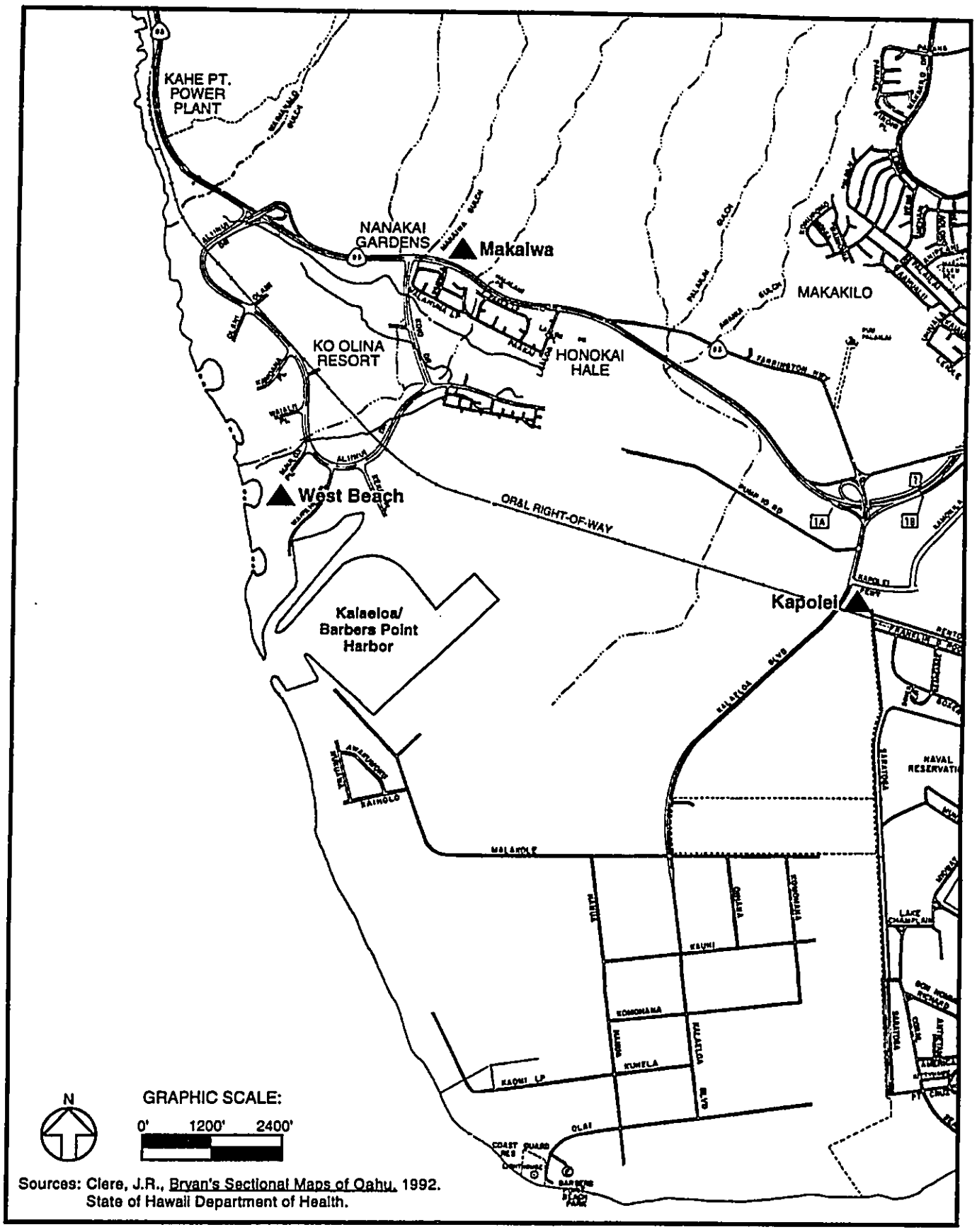
Kalaeloa Boulevard, passing near the project area to the east, is the only access road to CIP and Kalaeloa/Barbers Point Harbor from the H-1 Freeway. It presently carries moderate levels of traffic during peak traffic hours (see Section 2.3.1). Malakole Street intersects with Kalaeloa Boulevard at the entrance to CIP and is currently the only access to the harbor. (A road is being planned from Kalaeloa Boulevard to the harbor.) Emissions from vehicles using these roadways tend to be carried toward the ocean by the prevailing east-northeast winds. Since traffic volumes on these roadways are moderate to low, the project area does not experience degraded air quality from vehicle emissions.

Air pollution associated with a port facility includes vessel exhaust, mobile equipment exhaust, and emissions from cargo, if any.

Several sources of industrial air pollution are located at CIP, such as two oil refineries, the H-Power plant, a coal-fired co-generation plant and the existing Hawaiian Cement facility.

Natural sources of air pollution, such as from the ocean (sea spray), plants (aero-allergens), wind-blown dust, and volcanic emissions from the island of Hawaii can affect the air quality at the harbor and surrounding area. However, these sources cannot be quantified accurately.

Currently, HDOT is expanding the basin and constructing additional piers and storage yards. Material excavated from the expanded basin area is being stockpiled southeast and northeast of the harbor. The stockpiles and construction activities produce particulate




Sources: Clere, J.R., Bryan's Sectional Maps of Oahu, 1992.
State of Hawaii Department of Health.

***PARSONS BRINCKERHOFF QUADE & DOUGLAS, INC.***

***Department of Health Air Quality Monitoring Stations***
***HAWAIIAN CEMENT TERMINAL AT KALAELOA/BARBERS POINT HARBOR, PIER P-7***
*Final Environmental Assessment*
*FIGURE 2-2*

**Table 2-2**
**Air Quality Data from Monitoring Stations**
**Near Kalaeloa/Barbers Point Harbor**

| Air Pollutant | Kapolei[1] | | | Makaiwa[1] | | | West Beach[1] | | |
|---|---|---|---|---|---|---|---|---|---|
| | 1994 | 1995 | 1996 | 1994 | 1995 | 1996 | 1994 | 1995 | 1996 |
| **Particulate Matter <10 microns in diameter ($PM_{10}$)** | | | | | | | | | |
| Possible Periods | 61 | 61 | 61 | NM | NM | NM | 61 | 61 | 61 |
| Valid Periods | 54 | 55 | 55 | NM | NM | NM | 59 | 55 | 59 |
| Highest Value Recorded ($\mu g/m^3$) | 97 | 78 | 52 | NM | NM | NM | 42 | 46 | 32 |
| Annual Mean ($\mu g/m^3$) | 30 | 24 | 19 | NM | NM | NM | 17 | 16 | 18 |
| Number of Times SAAQS Exceeded | 0 | 0 | 0 | NM | NM | NM | 0 | 0 | 0 |
| Number of Times NAAQS Exceeded | 0 | 0 | 0 | NM | NM | NM | 0 | 0 | 0 |
| **One Hour Carbon Monoxide (CO)** | | | | | | | | | |
| Possible Periods | 8760 | 8760 | 8784 | NM | NM | NM | 8760 | 8760 | 8784 |
| Valid Periods | 5828 | 8623 | 8220 | NM | NM | NM | 7468 | 8352 | 8060 |
| Highest Value Recorded ($\mu g/m^3$) | 5700 | 2166 | 1739 | NM | NM | NM | 3306 | 6384 | 1425 |
| Annual Mean ($\mu g/m^3$) | 153 | 238 | 260 | NM | NM | NM | 592 | 447 | 481 |
| Number of Times SAAQS Exceeded | 0 | 0 | 0 | NM | NM | NM | 0 | 0 | 0 |
| Number of Times NAAQS Exceeded | 0 | 0 | 0 | NM | NM | NM | 0 | 0 | 0 |
| **Eight hour Carbon Monoxide (CO)** | | | | | | | | | |
| Possible Periods | 1095 | 1095 | 1098 | NM | NM | NM | 1095 | 1095 | 1098 |
| Valid Periods | 777 | 1095 | 1049 | NM | NM | NM | 956 | 1061 | 1029 |
| Highest Value Recorded ($\mu g/m^3$) | 926 | 784 | 734 | NM | NM | NM | 855 | 1311 | 912 |
| Annual Mean ($\mu g/m^3$) | 153 | 238 | 258 | NM | NM | NM | 592 | 447 | 483 |
| Number of Times SAAQS Exceeded | 0 | 0 | 0 | NM | NM | NM | 0 | 0 | 0 |
| Number of Times NAAQS Exceeded | 0 | 0 | 0 | NM | NM | NM | 0 | 0 | 0 |
| **Three Hour Sulfur Dioxide ($SO_2$)** | | | | | | | | | |
| Possible Periods | 2920 | 2920 | 2928 | 2920 | 2920 | 2928 | 2920 | 2920 | 2928 |
| Valid Periods | 1961 | 2909 | 2785 | 1770 | 1977 | 2838 | 2246 | 2076 | 2637 |
| Highest Value Recorded ($\mu g/m^3$) | 36 | 57 | 45 | 69 | 45 | 60 | 33 | 37 | 62 |
| Annual Mean ($\mu g/m^3$) | 1 | 2 | 2 | 3 | 2 | 1 | 1 | 1 | 3 |
| Number of Times SAAQS Exceeded | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Number of Times NAAQS Exceeded | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

**Table 2-2**
**Air Quality Data from Monitoring Stations**
**Near Kalaeloa/Barbers Point Harbor**
**(Continued)**

| Air Pollutant | Kapolei[1] | | | Makaiwa[1] | | | West Beach[1] | | |
|---|---|---|---|---|---|---|---|---|---|
| | 1994 | 1995 | 1996 | 1994 | 1995 | 1996 | 1994 | 1995 | 1996 |
| **24 Hour Sulfur Dioxide ($SO_2$)** | | | | | | | | | |
| Possible Periods | 365 | 365 | 366 | 365 | 365 | 366 | 365 | 365 | 366 |
| Valid Periods | 263 | 365 | 358 | 227 | 274 | 360 | 308 | 265 | 339 |
| Highest Value Recorded ($\mu g/m^3$) | 11 | 17 | 14 | 24 | 11 | 20 | 10 | 16 | 25 |
| Annual Mean ($\mu g/m^3$) | 1 | 2 | 2 | 3 | 3 | 1 | 1 | 1 | 3 |
| Number of Times SAAQS Exceeded | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Number of Times NAAQS Exceeded | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Nitrogen Dioxide ($NO_2$)** | | | | | | | | | |
| Possible Periods | 8760 | 8760 | 8784 | NM | NM | NM | 8760 | 8760 | 8784 |
| Valid Periods | 5499 | 8477 | 7610 | NM | NM | NM | 6722 | 3008 | 6426 |
| Highest Value Recorded ($\mu g/m^3$) | - | - | - | NM | NM | NM | - | - | - |
| Annual Mean ($\mu g/m^3$) | 8 | 8 | 2 | NM | NM | NM | 6 | 7 | 3 |
| Number of Times SAAQS Exceeded | 0 | 0 | 0 | NM | NM | NM | 0 | 0 | 0 |
| Number of Times NAAQS Exceeded | 0 | 0 | 0 | NM | NM | NM | 0 | 0 | 0 |

Notes: [1] See Figure 2-2
NM: Not Measured
Possible Periods: the total number of possible sampling periods in the year
Valid Periods: the total number of valid sampling periods

Source: State of Hawaii Department of Health, Clean Air Branch, Hawaii Air Quality Data, January 1994- December 1996

emissions (dust) that affect air quality at the harbor. As construction activity finishes and the stockpiles are reclaimed, these sources of air pollution will be reduced in the future.

### 2.1.4.2 Potential Impact

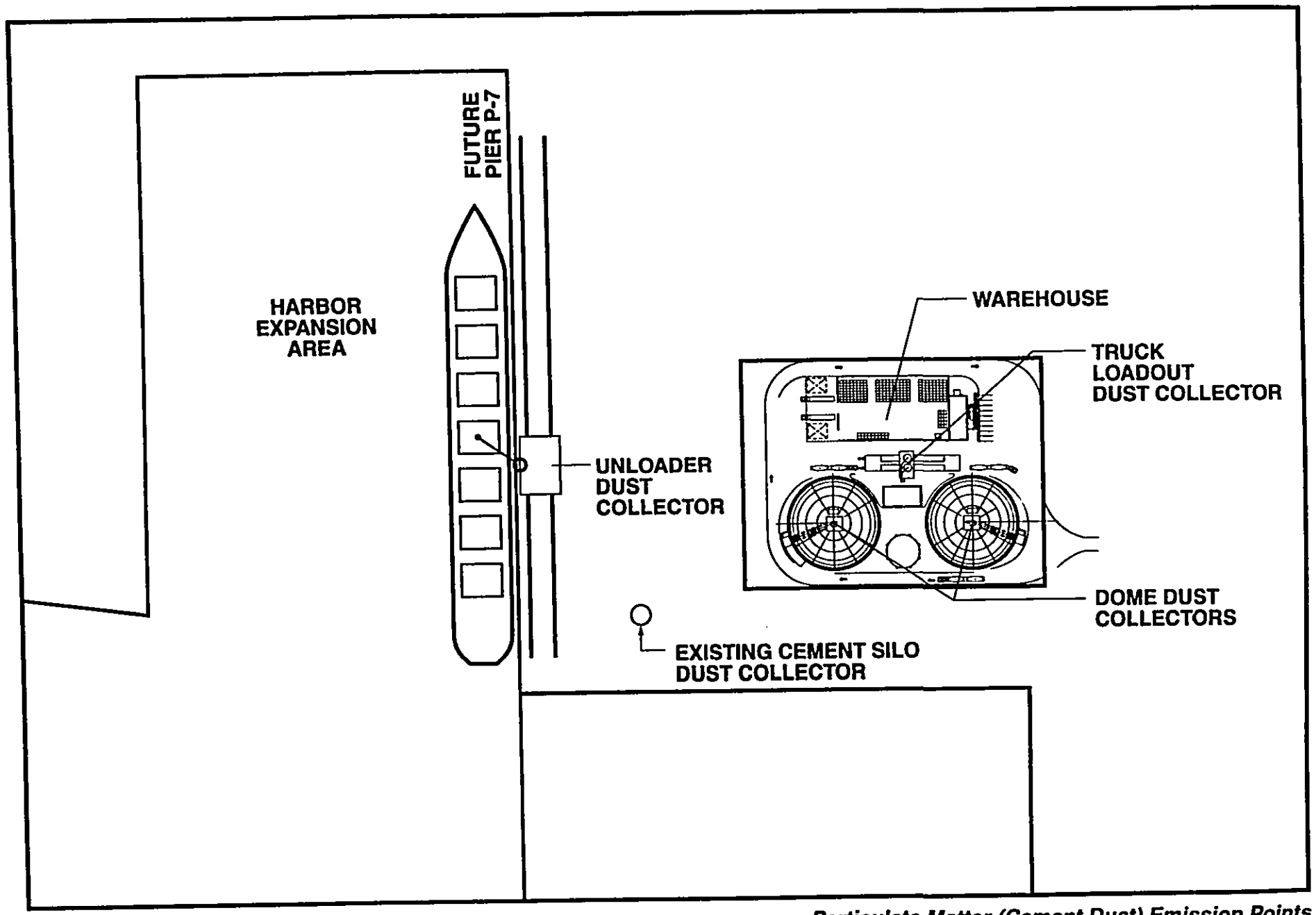
The proposed terminal has the potential to emit particulate matter (cement particles). This material becomes airborne if it escapes from any of the conveyance systems described in Section 1.3.1.3 and is picked up by air streams. In contrast to many gaseous pollutants or particulates of smaller size, cement particles are much denser than air and quickly settle within a relatively short distance from the source. Particulate emissions depend on many factors, such as the characteristics of the cement, the design of the emission points, and the provision, maintenance and control efficiency of air quality control measures. The locations at the terminal where particulate emissions could potentially occur are shown on Figure 2-3. Table 2-3 displays estimated emissions of particulate at each source based on an annual throughput of 300,000 tons.

Estimated particulate emissions (approximately 4.4 tons per year) are minute compared to the present emission level at Hawaiian Cement's CIP facility and during clinker unloading using the existing BPI unloader. The proposed terminal will replace both operations. The CIP facility generates 60 to 110 tons of particulate a year. Therefore, without considering clinker unloading, the proposed terminal will reduce particulate emissions by 55 to 105 tons per year.

Vessels at-berth will emit sulfur dioxide, nitrogen oxides, carbon monoxide and hydrocarbons for a period of seven to eight days, the length of time required to unload the cement. Since clinker vessels presently spend five to six days in port about once a month, vessel emissions will increase by one to three days of berth time. (The shorter time at berth for clinker vessels compared to cement vessels is due to the higher unloading rate of the BPI unloader.)

### 2.1.4.3 Mitigation Measures

Particulate emissions will be controlled through total enclosure of all possible emission sources, and the comprehensive deployment of dust collection systems throughout the facility. In addition, the conveyance equipment (e.g., unloader, pipelines, etc.) described in Section 1.3.1.3 was selected to achieve the lowest particulate emissions possible for this kind of facility. No other types of equipment can achieve lower emission rates.

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**Particulate Matter (Cement Dust) Emission Points**
**HAWAIIAN CEMENT TERMINAL AT KALAELOA/BARBERS POINT HARBOR, PIER P-7**
*Final Environmental Assessment*
*FIGURE 2-3*

**Table 2-3**
**Estimated Particulate Emissions**

| Source | Approx. Emissions Per Year (tons) |
|---|---|
| Cement Unloader[1] | 0.6 |
| Dome Dust Collectors (During Vessel Unloading) | 0.6 |
| Dome Dust Collectors (Other Hours) | 0.8 |
| Truck Loadout Station[2] | 1.5 |
| Bagging Operation[3] | 0.5 |
| Existing Cement Silo[4] | 0.2 |
| Barge Dust Collector[4] | 0.2 |
| Total | 4.4 |

Notes: [1] Assumes a throughput of 300,000 tpy. With an average unloading rate of 390 tons per hour (tph) (600 tph maximum), unloading will take place approximately 770 hours per year.
[2] Assumes 4,400 working hours per year = 16 hours per day X 5.5 days per week X 50 weeks per year.
[3] Assumes 1600 working hours per year = 32 hours x 50 weeks per year
[4] Assumes 520 working hours per year = 10 hours x 52 weeks per year

Source: Fuller Bulk Handling Corporation, June 30, 1998 and March 3, 1999

Dust collector exhausts will be inspected daily to check for visible signs of emissions. Documented maintenance inspections will be performed in accordance with Table 2-4.

**Table 2-4**
**Maintenance Schedule for Dust Collection Equipment**

| Location | Monthly | Quarterly | Six Months |
|---|---|---|---|
| Ship Unloader | Prior to every ship | | |
| Top of Domes | | O | |
| Under Domes | O | | |
| Truck Load-out | O | | |
| Barge Silo | | If used frequently | O |

Source: Hawaiian Cement, March 1999

## 2.1.5 Noise

### 2.1.5.1 Characteristics and Measurement of Sound

Several characteristics of noise affect its impact. These include the sound level (loudness), the frequencies involved, the period of exposure to the noise, and the changes or fluctuations in the noise levels during exposure. Loudness is measured in units called decibels. Since the human ear does not perceive all pitches or frequencies equally, noise levels are adjusted, or weighted, to correspond to human hearing. This adjusted unit is known as the A-weighted decibel, or dBA.

### 2.1.5.2 Noise Standards and Criteria

HDOH administers the applicable noise standards established by Hawaii Administrative Rules Title 11, Chapter 46, "Community Noise Control." The maximum permissible sound levels for three classes of land use are shown on Table 2-5.

**Table 2-5**
**Community Noise Control Standards**

| Zoning District | Sound Level (dBA) | |
|---|---|---|
| | Daytime (7 a.m. to 10 p.m.) | Nighttime (10 p.m. to 7 a.m.) |
| Class A[1] | 55 | 45 |
| Class B[2] | 60 | 50 |
| Class C[3] | 70 | 70 |

Notes: [1] Includes lands zoned residential, conservation, preservation, public space, open space or similar type.
[2] Includes land zoned multi-family, apartment, business, commercial, hotel, resort or similar type.
[3] Include land zoned agriculture, country, industrial or similar type.

Source: Hawaii Administrative Rules, Title 11 (Department of Health), Chapter 46, Community Noise Control, September 23, 1996

For a waterfront industrial (I-3) land use, the noise standard is 70 dBA (24 hours). The City and County of Honolulu also maintains noise control standards in its Land Use Ordinance (LUO)--Section 3.11, Noise Regulations. The LUO criteria differ from those of the HDOH in

that they use octave band sound levels instead of A-weighted decibel levels, and no temporal factor is involved. A-weighted noise standards were calculated based on octave band sound pressure level data provided by Hawaiian Cement. From 8 a.m. to 6 p.m. and from 6 p.m. to 8 a.m. the LUO noise control standards are 51 dBA and 48 dBA, respectively.

To be in compliance with the standards, noise from the terminal should not exceed the maximum permissible sound levels (as specified by Community Noise Control and LUO standards) for more than ten percent of the time within any twenty minute period at neighboring land uses.

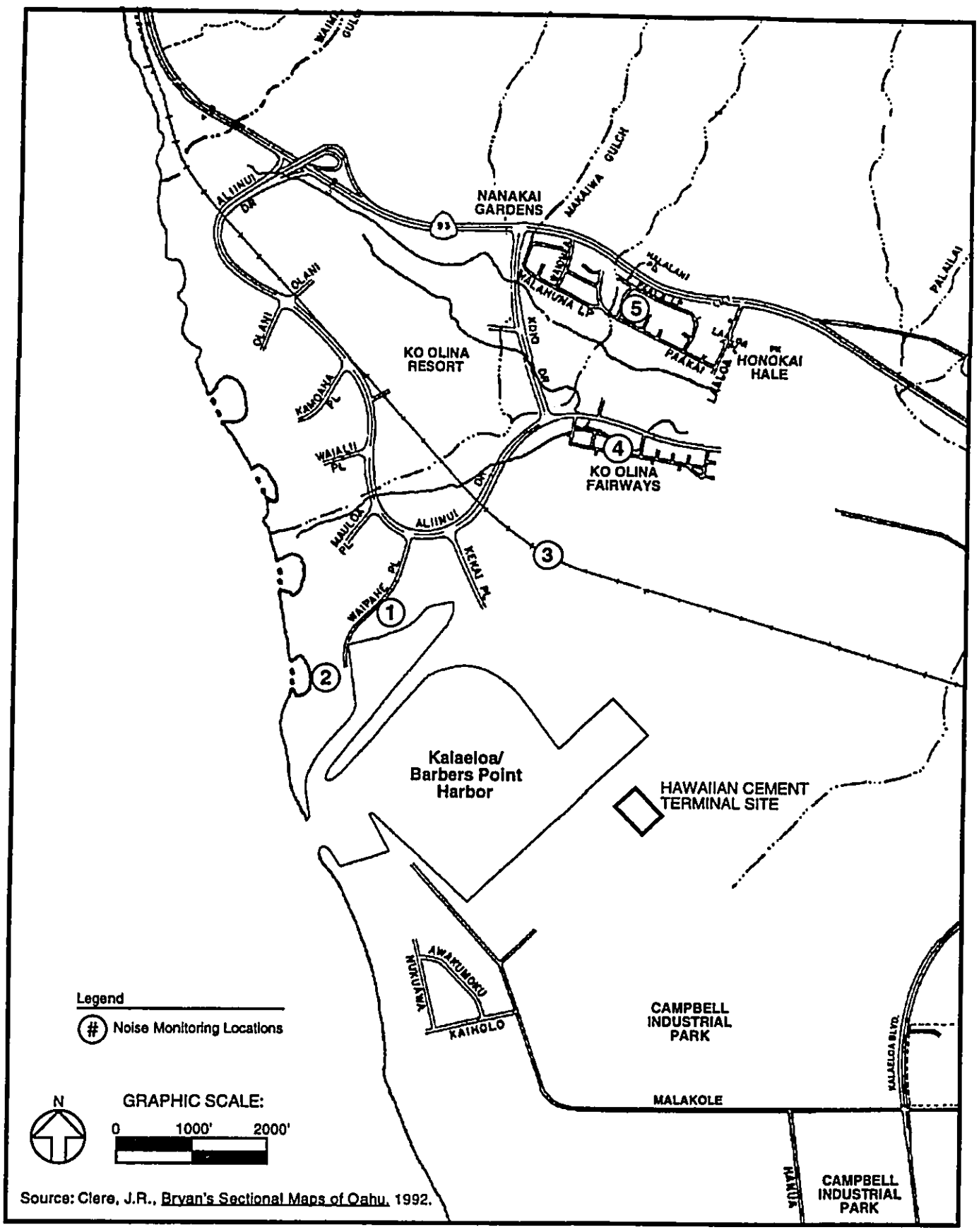
#### 2.1.5.3 Existing Condition

Measurements of 24-hour noise levels were taken between January 19 and 22, 1999 at five sites, as shown on Figure 2-4. These sites were considered representative of land uses that are sensitive to noise, such as residences, parks, and resorts. Site 1 is at the future West Beach Marina. Although the marina is presently unoccupied, it may eventually hold up to 300 boats and include a yacht club and residences. Site 2 is also in Ko Olina at the lagoon nearest to the harbor. This site represents a recreation area and future hotels and condominiums in the resort. Site 3 represents future low density apartments in Ko Olina. Site 4 represents the existing Ko Olina Fairways Townhouses, a new residential community developed in the mid-1990s. Site 5 represents a 30-year-old residential community, Honokai Hale / Nanakai Gardens. A summary of the ambient noise levels at the five sites during a 24-hour period is shown on Table 2-6.

#### 2.1.5.4 Potential Impact

The major noise sources of the terminal are shown on Figure 2-5 and the estimated sound levels in decibels (dB) immediately beyond these sources are displayed on Table 2-7.

The operational noise levels were projected to each of the five noise sensitive receptor sites where existing ambient noise levels were measured (see Table 2-8). The simultaneous nighttime operation of the unloader and the two dust collectors on top of the storage domes was analyzed as a worst case scenario.




***PARSONS BRINCKERHOFF QUADE & DOUGLAS, INC.***

***Noise Monitoring Locations***
***HAWAIIAN CEMENT TERMINAL AT KALAELOA/BARBERS POINT HARBOR, PIER P-7***
*Final Environmental Assessment*
*FIGURE 2-4*

**Table 2-6**
**Summary of Noise Levels at Sensitive Receptors ($L_{eq}$(h) dBA)**

| | West Beach Marina | Ko Olina Lagoon | Future Ko Olina Residences | Ko Olina Fairways Townhouses | Honokai Hale/Nanakai Gardens |
|---|---|---|---|---|---|
| Average | 53 | 51 | 46 | 56 | 59 |
| Median | 52 | 50 | 45 | 58 | 56 |
| High | 68.5 | 57 | 65.5 | 69.5 | 69.5 |
| Low | 42 | 47.5 | 36 | 41 | 50 |

Note: $L_{eq}$(h): average sound level in a one hour period

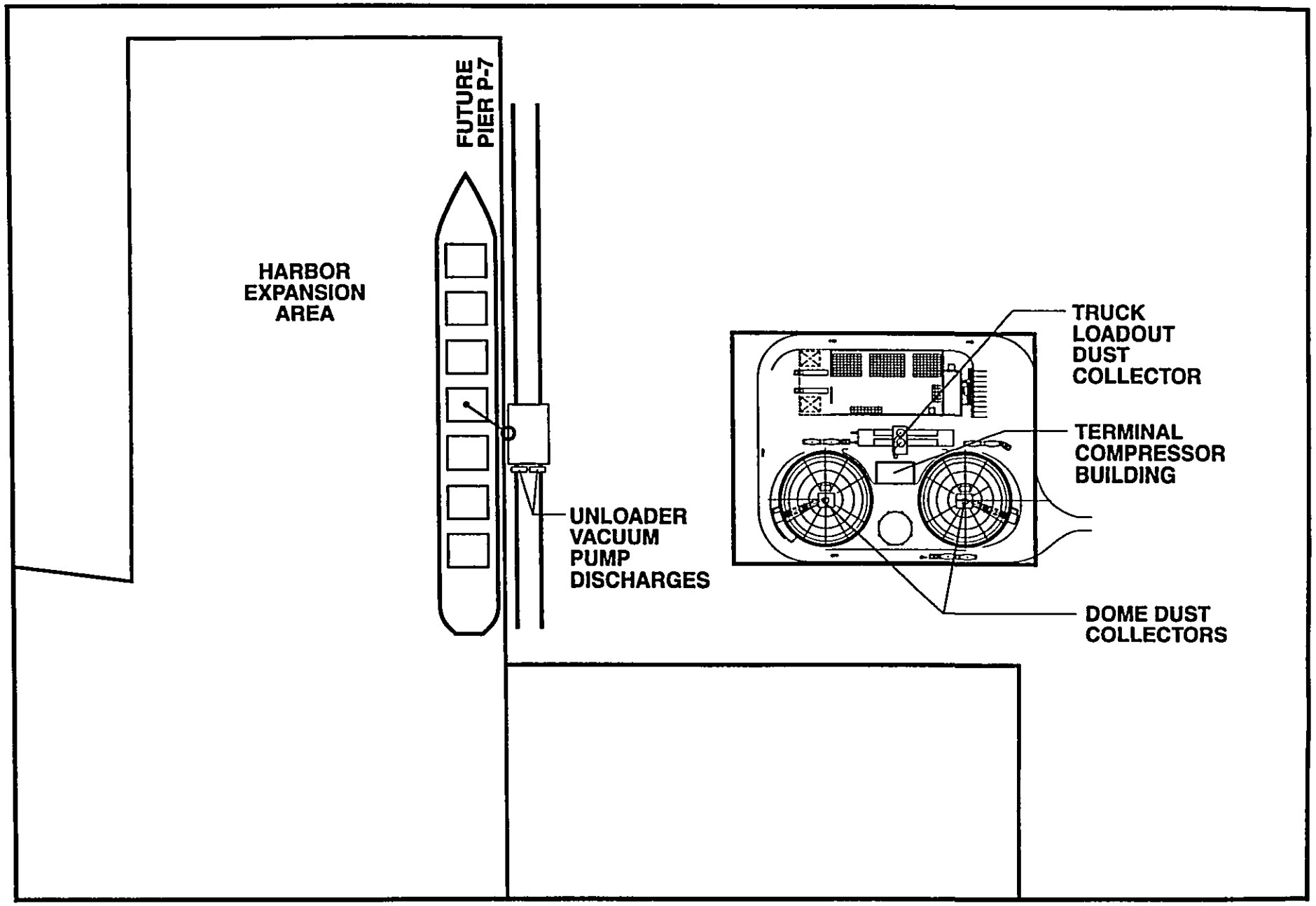
Source: Parsons Brinckerhoff Quade & Douglas, Inc., January 1999

**Table 2-7**
**Major Noise Sources in the Cement Terminal**

| Source | Sound Level (dBA) |
|---|---|
| Ship Unloader: Vacuum Pump Discharge Outlets[1] | 91 |
| Dust Collectors on top of the Domes, Truck Loadout Silos, and Barge Loadout Silo[2] | 85 - 90 |
| Terminal Compressor Building[3] | 61 |

Notes: [1] The discharge outlets are only on one side of the unloader, pointing to the southwest toward the coastline.
[2] The noise from dust collectors is from fans and pulse valves.
[3] There are four air compressors with noise levels of 106 dBA in the building. The building attenuates these noise levels to 61 dBA.

Sources: Fuller Bulk Handling and River Consulting Incorporated




PARSONS BRINCKERHOFF QUADE & DOUGLAS, INC.

**Noise Sources in the Terminal**

*HAWAIIAN CEMENT TERMINAL AT KALAELOA/BARBERS POINT HARBOR, PIER P-7*

*Final Environmental Assessment*

*FIGURE 2-5*

**Table 2-8**
**Predicted Noise Levels from Terminal at Measured Sites**

| | West Beach Marina | Ko Olina Lagoon | Future Ko Olina Residences | Ko Olina Fairways Townhouses | Honokai Hale/Nanakai Gardens |
|---|---|---|---|---|---|
| Approx. Dist. to Terminal (ft.) | 2900 | 3500 | 2100 | 3800 | 5000 |
| Continuous Noise (dBA) | 38 | 36 | 41 | 36 | 33 |

Source: Parsons Brinckerhoff Quade & Douglas, Inc., April 1999

The projected operational noise levels of the terminal will not exceed the HDOH and LUO noise level limits. At all of the five sensitive receptors, the measured existing nighttime and daytime noise levels are higher than the noise that would be generated by the terminal. Therefore, noise from the terminal will not be noticeable at the five sensitive receptors.

#### 2.1.5.5 Mitigation Measures

Additional mitigation measures are not necessary because the analysis described in Section 2.1.5.4 incorporates noise attenuation measures that will be implemented as part of the proposed project. These measures include:

- compressors and vacuum pumps on the ship unloader will be enclosed within a housing providing noise attenuation, and exhaust silencers will be used;
- the air compressors (used to convey the cement from the unloader to the storage domes) will be enclosed within a concrete building; and
- fan exhausts and ducts will be designed to minimize noise emissions.

## 2.2 SOCIAL ENVIRONMENT

### 2.2.1 Land Use

#### 2.2.1.1 Existing and Future Conditions

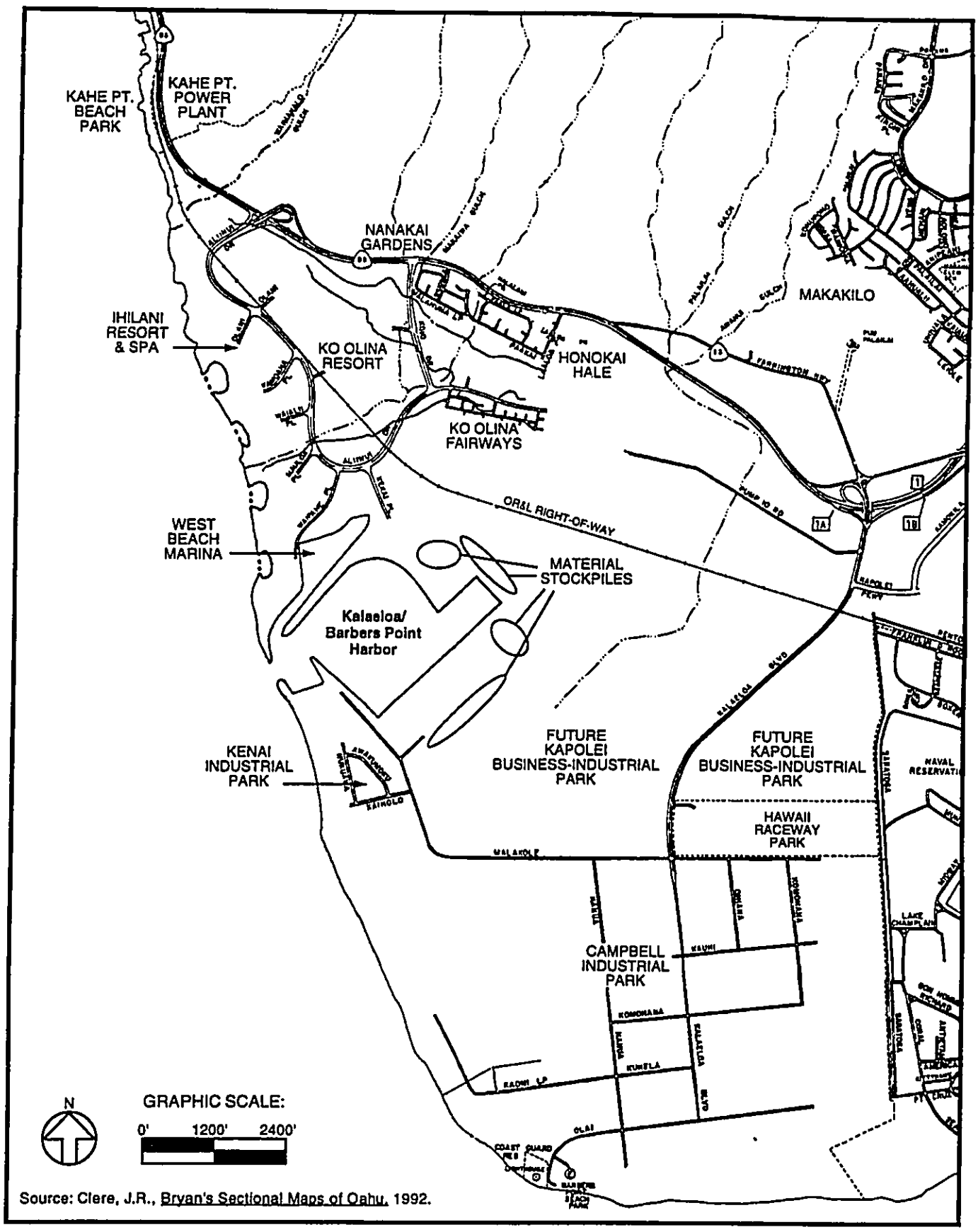
Kalaeloa/Barbers Point Harbor's infrastructure is described in Section 1.2. Land uses beyond the HDOT property are shown in Figure 2-6.

Immediately north and northeast of Kalaeloa/Barbers Point Harbor is West Beach Estates (Ko Olina), a 1000-acre resort which is only partially completed. The resort presently features four artificial sandy lagoons, a golf course and club house, an unoccupied marina (that is expected to soon hold 300 slips), one hotel, the Ihilani Resort and Spa, and a residential community, Ko Olina Fairways Townhouses. The resort may ultimately support 5,200 residences, 18 acres of commercial businesses, and hotels containing up to 4,000 rooms. To the north of Ko Olina is Kahe Point Beach Park, and a major electric-generation facility adjacent to the beach park across Farrington Highway.

Material from the excavation of the main harbor basin and expansion area is stockpiled immediately north and east (mauka) of Kalaeloa/Barbers Point Harbor. This material is processed as base material for construction projects throughout the island. Further north and east (mauka) of Kalaeloa/Barbers Point Harbor is the 40-foot wide Oahu Railway & Land Company (OR&L) right-of-way (see Section 2.2.4) and railroad tracks.

The residential communities nearest to the harbor are Ko Olina Fairways Townhouses (see above) and the contiguous residential communities of Honokai Hale and Nanakai Gardens (see Figure 2-6). The former began occupancy in 1995, and the latter was developed from the mid-1960s to the early 1970s and contains about 300 single-family residences. Further northeast of the harbor is Makakilo, an over 25-year-old 3,000-plus residential community on a ridge overlooking the Ewa plain.

Campbell Industrial Park (CIP), located south of the harbor, contains approximately 190 businesses on 1,367 acres. Major businesses include Hawaiian Cement, two petroleum refineries, the H-Power resource recovery facility, a coal-fired co-generation plant, large building supply yards, and Hawaii Raceway Park. The 66-acre Kenai Industrial Park was recently constructed on land immediately south and adjacent to the harbor. Only a few of its 34 lots are currently occupied. The Kapolei Business-Industrial Park will be developed in areas immediately northeast to southeast of the harbor. The park currently contains few businesses, but plans by the Estate of James Campbell include expansion to 800 acres, and hundreds of waterfront industrial, intensive industrial and commercial businesses.




Source: Clere, J.R., Bryan's Sectional Maps of Oahu, 1992.

***PARSONS BRINCKERHOFF QUADE & DOUGLAS, INC.***

***Existing Land Uses***
***HAWAIIAN CEMENT TERMINAL AT KALAELOA/BARBERS POINT HARBOR, PIER P-7***
*Final Environmental Assessment*
*FIGURE 2-6*

The Barbers Point Naval Air Station (BPNAS) is located to the east of Campbell Industrial Park. The installation is 3,672 acres and used to support Naval aviation activities and units. The base is scheduled to close later this year. Although navy housing and recreational facilities would remain, future land uses in other areas of the base include:

- a general aviation airport using existing naval airport facilities;
- parks and recreational facilities;
- new postal facilities;
- expansion of the Honouliuli Waste Water Treatment Plant;
- a U.S. Fish and Wildlife Service refuge; and
- Department of Hawaiian Home Lands housing.

Two to three miles east of the harbor is the City of Kapolei. The City is being planned by the State and City and County of Honolulu to be the nucleus of a secondary urban center on Oahu. Currently, Kapolei contains a large community shopping center, a 125,000 square feet office complex, a State office building, a 16-screen movie theater, and a regional park. Future land uses in Kapolei include a major water park, a civic center, a police station, and other commercial businesses and offices.

#### 2.2.1.2 Potential Impact

The proposed project will not affect existing land uses, or private or governmental land use decisions with regards to development in Ko Olina, Kapolei Business Park, the City of Kapolei, or other areas in Ewa and the Waianae Coast. Market conditions and the health of the economy will determine whether current land use objectives for these areas will materialize.

### 2.2.2 Social and Economic Activities

#### 2.2.2.1 Existing Condition

The population of the Ewa region (as defined by the City and County of Honolulu Ewa Development Plan (DP) area) was 42,960 in 1990, or 5 percent of Oahu's population. However, because of the large amount of residential development in the Ewa region since that year, population in the Ewa region has substantially increased in recent years, and therefore probably far exceeds the 1990 count. The Ewa region has been designated to

become Oahu's second city by the State and City and County of Honolulu. In accordance with the City and County of Honolulu General Plan, the Ewa DP area is expected to increase its share of islandwide population to around 13 percent in the next ten years.

The population of the Waianae region (as defined by the City and County of Honolulu Waianae DP area) was 37,411 in 1990, or 4.5 percent of Oahu's population. Unlike the Ewa DP area, Waianae has not experienced much population growth in the 1990s because most of the area is rural, and not designated for urban expansion.

Major employment or business centers near the study area include Ko Olina, CIP, the City of Kapolei, and BPNAS. In 1990, BPNAS was the leading employment center in the Ewa region with over 5,700 jobs. The second major employment center is CIP with an estimated 3,500 jobs.

Emerging employment centers near Kalaeloa/Barbers Point Harbor include the City of Kapolei, Kapolei Business-Industrial Park, and Ko Olina. The City of Kapolei is already a major employment center. The State of Hawaii has recently transferred over 1000 workers from other locations on the island to its new office building in the City. Plans are also underway to develop a major water park, and other civic and private land uses that will generate substantial employment opportunities. The Kapolei Business-Industrial Park, an 800-acre development on parcels northeast to southwest of the harbor, and the Kenai Industrial Park, are expected to be major employment centers in the early part of the next century. Although Ko Olina currently has only one hotel and a golf course, the resort could ultimately contain up to 9,000 jobs.

Kalaeloa/Barbers Point Harbor is currently undergoing an expansion that includes the development of three additional piers, and the deepening of the basin (see Section 1.2). With these improvements, vessel traffic is expected to increase and larger vessels (vessels with deeper drafts) will be able to call at the harbor, which would increase economic activities and employment.

#### 2.2.2.2 Potential Impact

Staff currently working at Hawaiian Cement's CIP facility will fill the jobs at the terminal. Employment at the terminal is not large enough to have a major effect on social and economic conditions in the project area. It will, however, support growth in the Ewa plain by being a major source of construction material (i.e., cement to make concrete and mortar). The terminal location at Kalaeloa/Barbers Point Harbor on the western end of Oahu is strategically located to serve this development, minimizing land transportation costs.

### 2.2.3 Recreational Activities

#### 2.2.3.1 Existing Condition

Since the proposed project will be located in a commercial harbor, there are no recreational resources immediately adjacent to the project site. The nearest recreational areas are at Ko Olina Resort—beach lagoons, golf course, and marina. The shoreline near the harbor entrance can be accessed via Malakole Street, which ends at a parking lot adjacent to the barge pier. Shoreline areas near the harbor are presently used for fishing.

#### 2.2.3.2 Potential Impact

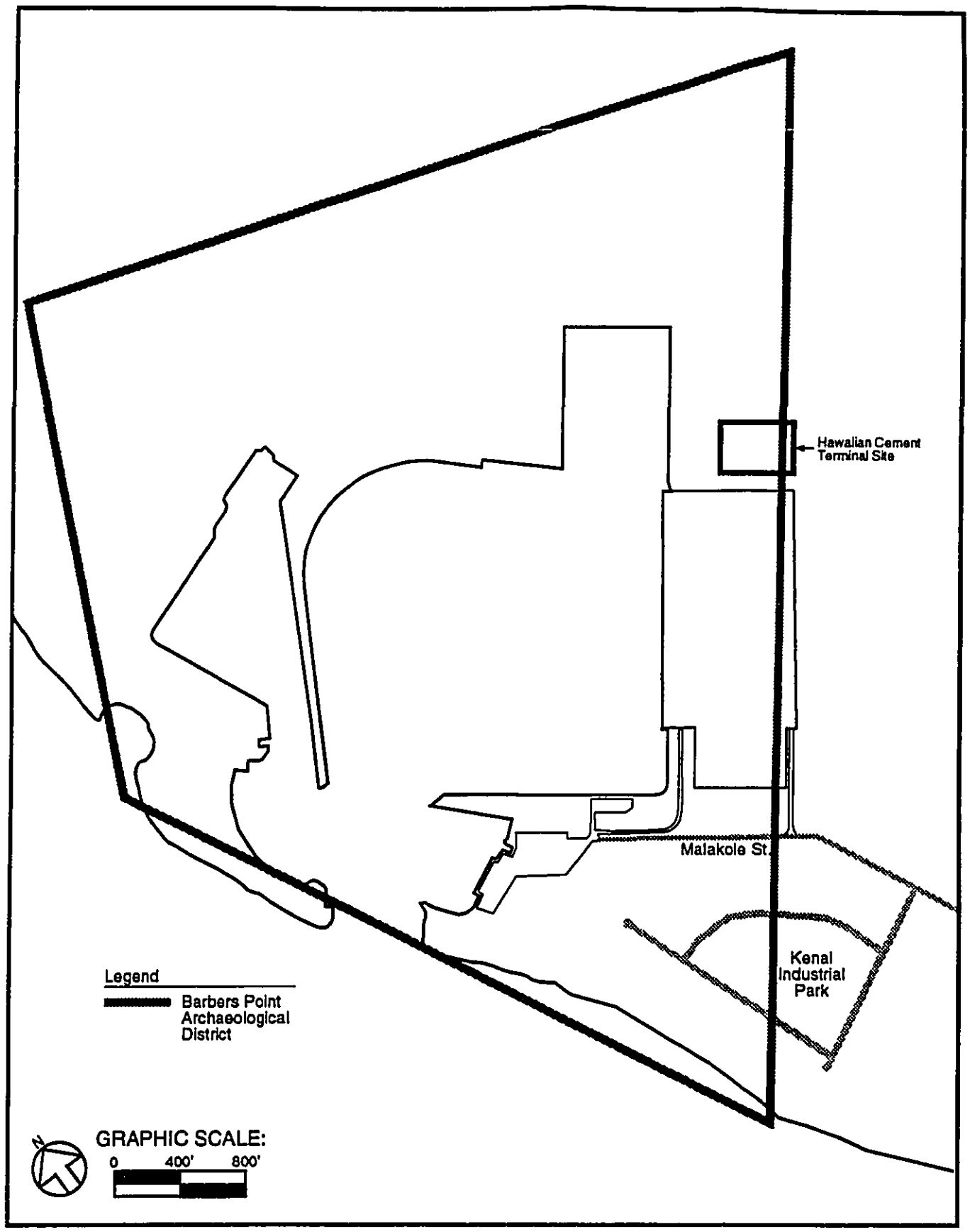
Operation of the proposed cement terminal will not affect existing and future recreational activities or resources in the vicinity of Kalaeloa/Barbers Point Harbor.

### 2.2.4 Archaeology And Historic Sites

#### 2.2.4.1 Existing Condition

The Barbers Point Archaeological District is shown in Figure 2-7. The district was established by the State Historic Preservation Division in the late 1970s to facilitate the archaeological review of Kalaeloa/Barbers Point Harbor construction. The district is eligible for the National Register of Historic Places, but has not been officially listed on either the National or the Hawaii Registers. The project site is within the District.

Several archaeological surveys were conducted prior to the original harbor construction in the 1980s and during the most recent planning for the basin expansion project. The earlier surveys, which included the disposal site for the harbor dredging, documented 70 archaeological sites. The later studies were divided by the two parcels of the basin

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***Kalaeloa/Barbers Point Archaeological District***
***HAWAIIAN CEMENT TERMINAL AT KALAELOA/BARBERS POINT HARBOR, PIER P-7***
*Final Environmental Assessment*
*FIGURE 2-7*

expansion project: an 84-acre parcel located along the northeast (mauka) boundary of the basin that includes the basin expansion area and the future piers and a 56.5-acre parcel located immediately northeast (mauka) of the 84-acre parcel. The proposed terminal will be located in the 84-acre parcel. While significant sites were documented in the 84-acre parcel, they no longer exist because of archaeological data recovery activities conducted prior to harbor construction. Nevertheless, the parcel was re-surveyed in January 1994, and it was determined that no archaeological sites or deposits remain. Therefore, the project site does not contain any archaeological or historic sites.

The Oahu Railway and Land Company (OR&L) right-of-way is located approximately 3000 feet north (mauka) of the project site, and is part of the 13-mile Nanakuli-Honouliuli railway right-of-way that is owned by the State of Hawaii. The OR&L railway was constructed in the late 1800s, and once extended 175 miles throughout Oahu, from Honolulu to Kaena Point to Kahuku. The 13-mile right-of-way is a well-preserved remnant of the OR&L railway, and is listed on the National Register.

#### 2.2.4.2 Potential Impact

Operation of the proposed cement terminal will not affect existing archaeological and historic sites in the vicinity of Kalaeloa/Barbers Point Harbor, including the historic OR&L right-of-way.

### 2.2.5 Visual and Aesthetic Resources

#### 2.2.5.1 Existing Condition

Kalaeloa/Barbers Point Harbor has an industrial appearance: storage yards, stockpiles, dry bulk unloader, dry dock, piers and vessels. The harbor is adjacent to CIP, which also has an industrial appearance, with its two refineries, its two electric-generation facilities, and the Hawaiian Cement facility. To the northwest of the harbor, Ko Olina provides a visually pleasant appearance with its manicured landscaping, golf course and beach lagoons.

The harbor can be seen from certain locations along Farrington Highway, and from the residential communities of Honokai Hale/Nanakai Gardens, Ko Olina Fairways Townhouses, and some parts of Makakilo. However, at some of these locations, the view of the harbor is blocked by the kiawe forest and existing stockpiles. The harbor (structures) generally cannot

be seen from many of the presently developed areas of Ko Olina because of the design of the resort. However, it can be seen from West Beach Marina.

#### 2.2.5.2 Potential Impact

The cement terminal will be visible from certain vantage points. Figure 2-8 provides simulations of the terminal and the unloader from two such viewpoints: West Beach Marina and Kamokila Park, which is adjacent to Farrington Highway and Honokai Hale. As shown in this figure, the cement terminal will be consistent with structures typically associated with an industrial and commercial harbor facility. It will be consistent with the existing structures at the harbor such as the dry bulk unloader, cargo shed, offices, cement silo, coal conveyor, and the adjacent existing and future industrial parks (CIP, Kanai Industrial Park, and Kapolei Business-Industrial Park). Despite the terminal's visual consistency with an industrial port setting, Hawaiian Cement intends to maintain a pleasant looking facility, and will include landscaping where appropriate.

As with other vessels, cement ships will be unloaded 24 hours per day. Therefore, lighting will be required during nighttime operations. HDOT will construct lighting systems at Pier P-7 that will be the same or similar to the existing lighting systems at Piers P-5 and P-6 (see Figure 2-9).

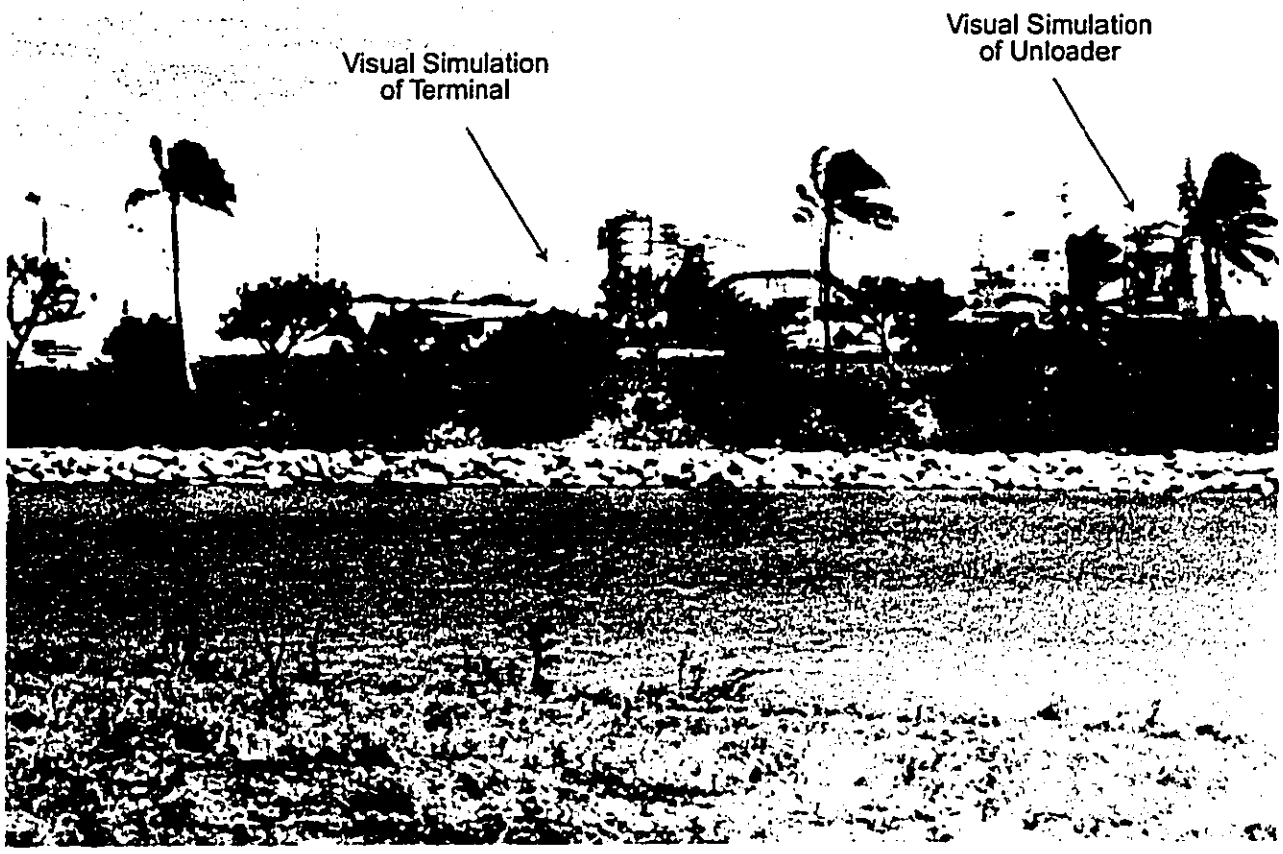
## 2.3 PUBLIC SERVICES

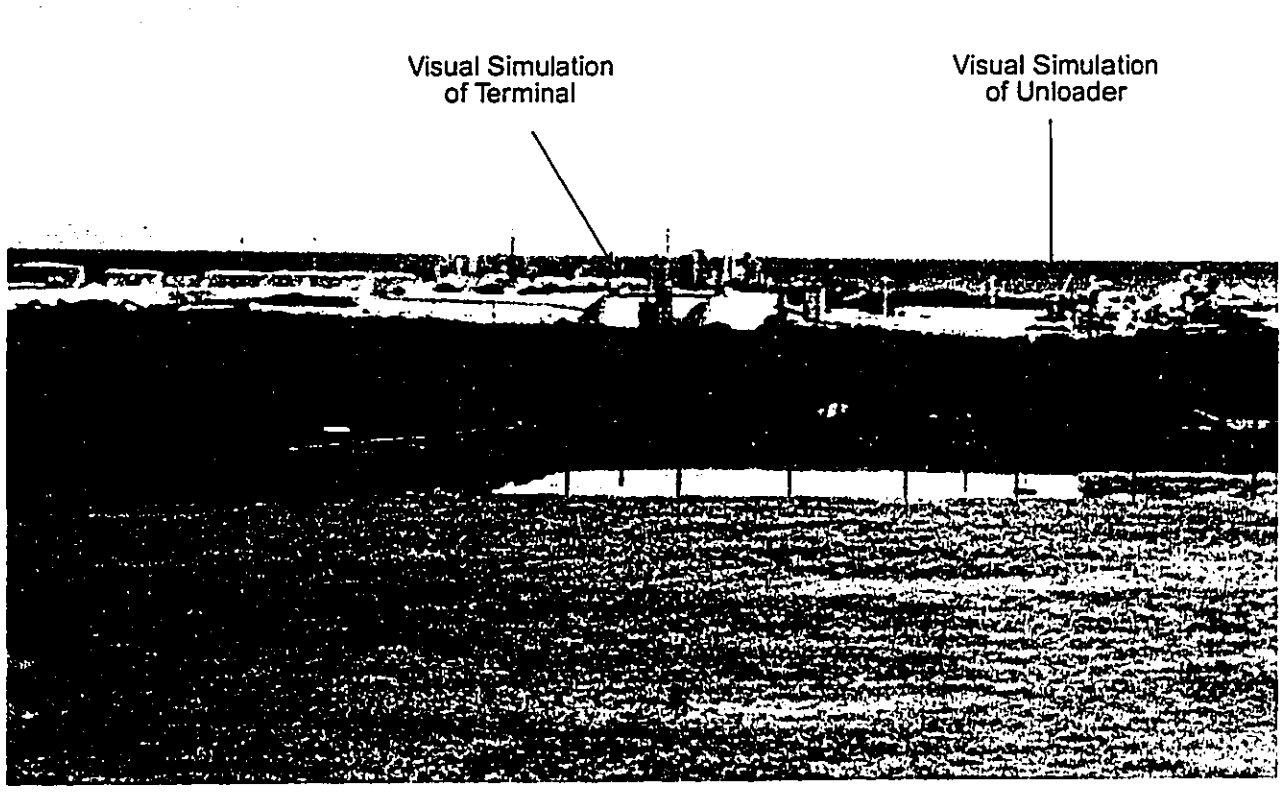
### 2.3.1 Transportation System

#### 2.3.1.1 Existing Condition

Vehicular access to Kalaeloa/Barbers Point Harbor is via the H-1 Freeway, Kalaeloa Boulevard, and Malakole Street (see Figure 2-10). Access from the H-1 Freeway to Kalaeloa Boulevard is made through the Palailai Interchange. Malakole Street intersects with Kalaeloa Boulevard at a signalized intersection at the entrance to Campbell Industrial Park.

The following traffic conditions were disclosed in the Final Supplemental Environmental Impact Statement, Basin Expansion and Tug Pier at Barbers Point Harbor, Oahu and Future Pier and Storage Yard Improvements at Barbers Point Harbor (January 1995):

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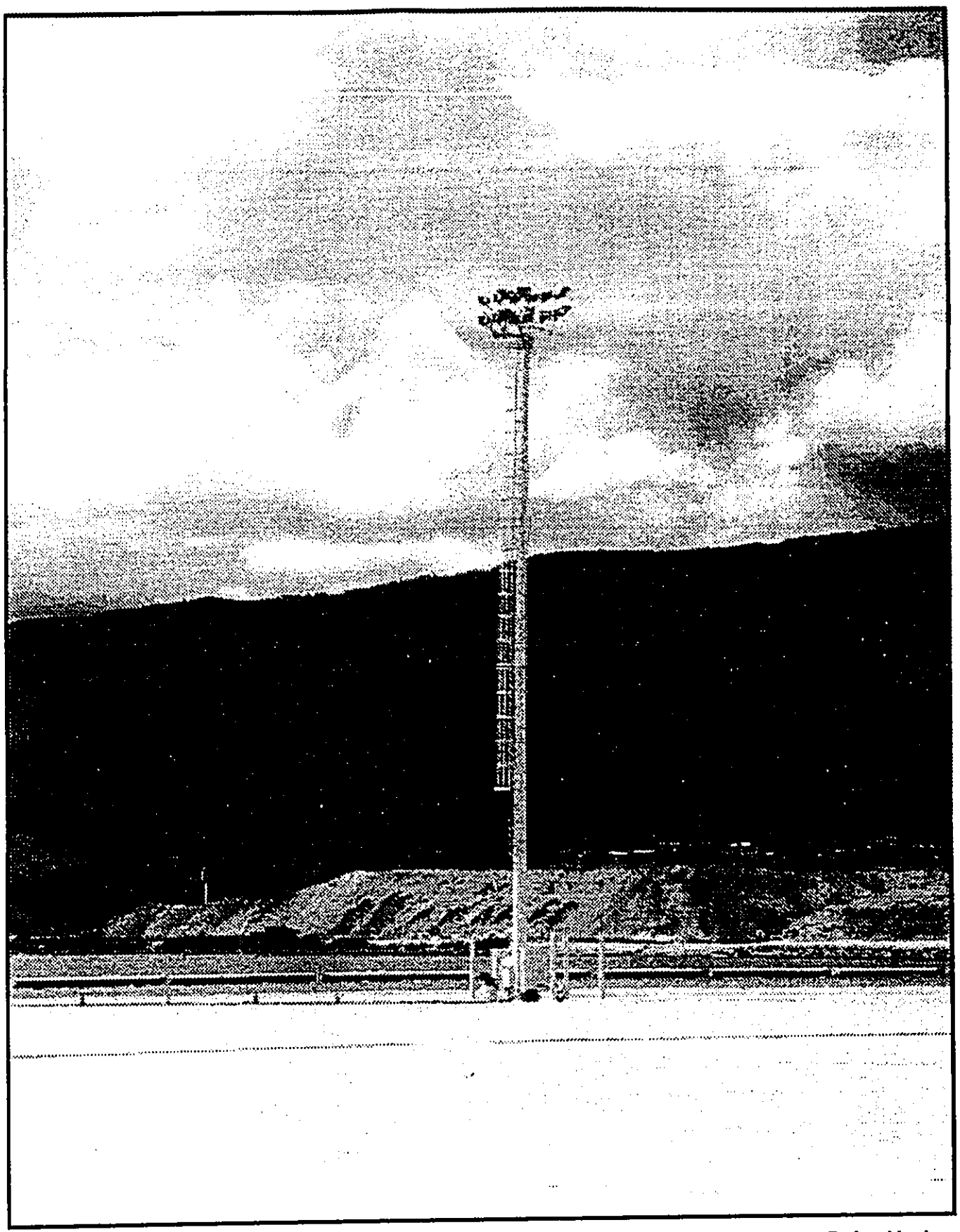
***Visual Simulations of Terminal and Unloader***
***HAWAIIAN CEMENT TERMINAL AT***
***KALAELOA/BARBERS POINT HARBOR, PIER P-7***
*Final Environmental Assessment*
*FIGURE 2-8*



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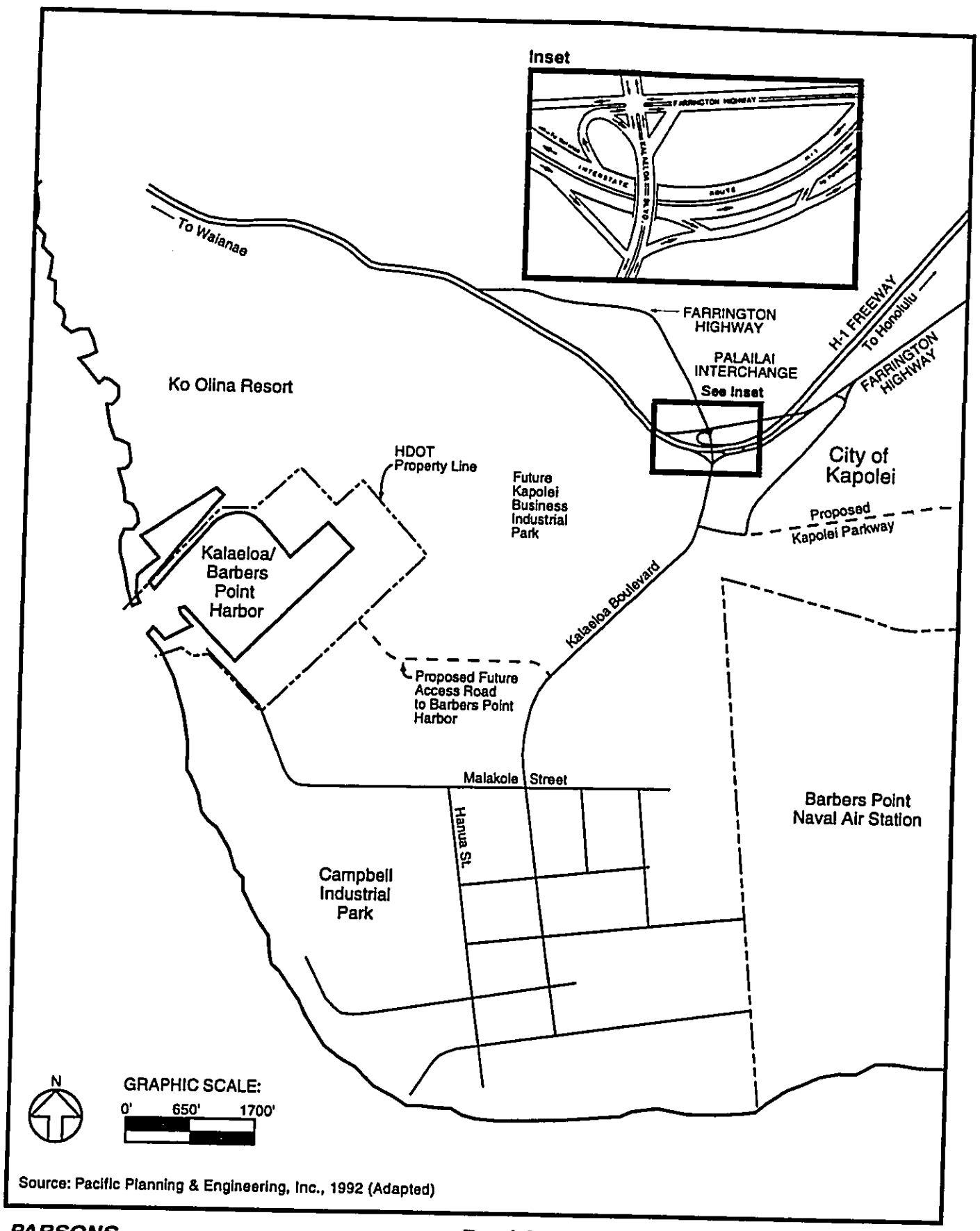
**Lamp Pole at Kalaeloa/Barbers Point Harbor**
HAWAIIAN CEMENT TERMINAL AT
KALAELOA/BARBERS POINT HARBOR, PIER P-7
*Final Environmental Assessment*
*FIGURE 2-9*




PARSONS BRINCKERHOFF QUADE & DOUGLAS, INC.

**Road Access at Kalaeloa/Barbers Point Harbor**
HAWAIIAN CEMENT TERMINAL AT KALAELOA/BARBERS POINT HARBOR, PIER P-7
*Final Environmental Assessment*
*FIGURE 2-10*

- Weekday commuter peak period generally occurs between 6:00 to 8:00 a.m. in the morning, and 3:00 to 5:00 p.m. in the afternoon.
- The following traffic problems were noted during a field survey (note that these conditions were observed prior to the installation of traffic signals at the Kalaeloa Boulevard / Malakole Street intersection):
  - On the West (Waianae) bound off-ramp to Kalaeloa Boulevard, a queue of vehicles extended onto the H-1 Freeway for a 10 to 15 minute period of the morning peak hour.
  - Large trucks traveling southbound, turning right from Kalaeloa Boulevard to Malakole Street, were observed making wide turns, occasionally using the adjacent through lane.
  - During the afternoon peak hour, queues of 10 to 15 vehicles formed along Malakole Street (west bound).
  - Trucks exiting Malakole Street onto or across Kalaeloa Boulevard would sometimes block the intersection or cause traffic to slow considerably for the trucks to clear the intersection.

#### 2.3.1.2 Potential Impact

The terminal is expected to generate a maximum of 50 truck trips (entering and leaving the facility) daily (the bulk of truck traffic will be from 4 a.m to 5 p.m.). The existing Hawaiian Cement facility in CIP presently generates 30 to 35 truckloads a day. Fifty truck loads in a day, as well as traffic generated by terminal employees, will not adversely affect existing traffic conditions on Malakole Street, the only access road to the harbor, because this road is lightly used throughout most of the day. The existing clinker and gypsum unloading activities at the harbor already generate truck traffic between the harbor and the Hawaiian Cement CIP facility. The proposed terminal will eliminate this trucking activity.

Truck traffic from the proposed terminal will not adversely affect the signalized Kalaeloa Boulevard / Malakole Street intersection because traffic from the existing CIP facility already passes through this intersection. Access to the terminal will shift to the future harbor access road (see Figure 2-10) when it is completed. Since the proposed terminal replaces the Hawaiian Cement facility in CIP, there will be little or no difference between traffic conditions

on the major roadways that service CIP and Kalaeloa/Barbers Point Harbor, such as Kalaeloa Boulevard and the H-1 Freeway.

### 2.3.2 Utilities

#### 2.3.2.1 Existing Condition

##### 2.3.2.1a Water Supply

Kalaeloa/Barbers Point Harbor is currently served by a 20-inch Board of Water Supply (BWS) main in Malakole Street, and has a water allocation of 127,000 gallons per day (gpd), which was assigned in 1989. Since then various uses at the harbor, such as shoreside facilities and vessel servicing, have been assigned portions of this allocation. These uses are substantially less than the total BWS allocation. The Basin Expansion and Tug Pier at Barbers Point Harbor, Oahu, Final Supplemental Environmental Impact Statement (January 1995) reported a water usage of 20,000 gpd. Since this document was completed, the harbor has not supported any additional major water user.

##### 2.3.2.1b Waste Water

There are no existing waste water facilities (e.g. sewer lines) serving the harbor. Waste water within the existing harbor is generated at three comfort stations--one operated by HDOT and the others by its tenants. Disposal of waste water from the HDOT comfort station is by onsite seepage pit. One tenant-operated comfort station utilizes a septic tank and the other utilizes a holding tank for waste water disposal. The harbor does not presently provide facilities for vessels to discharge waste water. When necessary, the ship's agent makes arrangements for a tank truck to receive vessel waste water.

The Honouliuli Waste Water Treatment Plant (WWTP) is the nearest treatment facility to the harbor, approximately four miles east. There are no direct connections between the harbor and Honouliuli WWTP.

##### 2.3.2.1c Solid Waste

Solid waste at the harbor is collected by private companies.

#### 2.3.2.1d Power and Communications

Electricity to Kalaeloa/Barbers Point Harbor is currently provided by Hawaiian Electric Company (HECO) through a utility corridor along Malakole Street. An existing HECO substation is located adjacent to the railroad right-of-way, west of Kalaeloa Boulevard. GTE Hawaiian Telephone (HawTel) provides telephone service to the existing harbor facilities.

### 2.3.2.2 Potential Impact

The proposed terminal will require water for domestic purposes and housekeeping only. Therefore, water usage will be minimal. According to the BWS (see Section 3.2), the existing water system is presently adequate to accommodate the proposed terminal. Hawaiian Cement will coordinate with the State of Hawaii Department of Land and Natural Resources to obtain a water allocation.

Waste water disposal will be similar to current practices at the harbor, such as an onsite seepage pit, septic tank or holding tank.

Hawaiian Cement will make arrangements for private pick-up of solid waste generated at the terminal.

The equipment and machinery at the terminal will be electrically powered. Hawaiian Electric Company indicated in a meeting with Hawaiian Cement (see Section 3.1.3) that it can provide for the power needs of the terminal. The terminal will require less power than the existing Hawaiian Cement facility at CIP. Therefore, there will be a net reduction in electrical demand. The terminal will require standard telephone service.

## 2.4 CONSISTENCY WITH GOVERNMENTAL PLANS, POLICIES AND CONTROLS

### 2.4.1 State of Hawaii

#### 2.4.1.1 Hawaii State Plan

The Hawaii State Plan (June 1991) consists of comprehensive goals, objectives, policies and priorities for all areas of government functions. These functions include the protection of the physical environment, the provision of public facilities systems, and the promotion and

assistance of socio-cultural advancement. Under the objectives and policies for facility systems—transportation, the State Plan calls for an integrated multi-modal transportation system that services Statewide needs and promotes the efficient, economical, safe, and convenient movement of people and goods (Sec. 226-17(a)(1)); and an increase in the capabilities of airport and harbor systems and support facilities to effectively accommodate transshipment and storage needs (Sec. 226-17(b)(8)).

The Hawaiian Cement terminal at Kalaeloa/Barbers Point Harbor is consistent with the State Plan and will support its goals and objectives relating to movement, transshipment and storage of goods that are needed in the State. Cement is a necessary construction material. The facility will import all of the cement needed in the State, including the neighbor islands.

#### 2.4.1.2 Oahu Commercial Harbors 2020 Master Plan

The Oahu Commercial Harbors 2020 Master Plan (OCHMP) (May 1997), is a long-range plan for all of the commercial harbors on the island: Honolulu Harbor, Kalaeloa/Barbers Point Harbor, and Kewalo Basin. It updates separate 2010 plans prepared for Honolulu Harbor and Kalaeloa/Barbers Point Harbor. OCHMP recommended the modifications and improvements described in Section 1.2, including the dedication of P-7 for dry bulk cargo. The proposed terminal is therefore consistent with OCHMP.

#### 2.4.1.3 Hawaii State Land Use Controls

Lands in the State are divided into four classifications: Urban, Agriculture, Rural and Conservation. Kalaeloa/Barbers Point Harbor is designated an Urban district because of its commercial harbor activities. As an Urban district, the City and County of Honolulu has exclusive administrative authority in all matters pertaining to zoning for the project (see Section 2.4.2.4). The proposed terminal is a land use consistent with the State urban designation.

#### 2.4.1.4 Air Quality Planning for Campbell Industrial Park

A planning study is being conducted to provide decision makers and the public with information on the need for additional pollution controls and other alternatives to preserve current air quality levels at CIP and the Kahe area without affecting industrial development.

The preliminary draft report of this study identified NAAQS compliance problems for $PM_{10}$ that were attributed to "one CIP area facility" (Hawaiian Cement's clinker grinding and distribution facility). The report noted that this facility "will be decommissioned and replaced with a better controlled plant in the near future."

### 2.4.2 City and County of Honolulu

#### 2.4.2.1 General Plan

The General Plan (revised 1992) provides broad statements on the objectives and policies of the City and County of Honolulu with regard to overall physical and economic development of the island, as well as the health and safety of the island's residents. Under the objectives and policies for transportation and utilities, a General Plan policy is facilitating the development of a second deep-water harbor to relieve congestion in Honolulu Harbor (Objective A, Policy 13).

The Hawaiian Cement terminal at Kalaeloa/Barbers Point Harbor is consistent with the City and County of Honolulu General Plan, and will support the policy of developing Kalaeloa/Barbers Point Harbor (the second deep-water harbor). This facility will reduce or eliminate the need for Honolulu Harbor to accommodate cement vessels.

#### 2.4.2.2 Ewa Development Plan

The Ewa Development Plan (DP) (August 1997) consists of vision statements; community design principles and guidelines; and conceptual mapping of open space networks, public facility networks, and urban land uses. The Ewa DP was the first to be updated using this new plan format. Previous DPs contained site specific land use and public facilities maps. The new Ewa DP was approved by the City Council.

The Ewa DP envisions the development of Kapolei as a "second city" of Oahu to provide opportunities for residential growth and urban development. The Ewa DP projected that there would be close to 28,000 housing units in the Ewa area by the Year 2020, located primarily in master planned communities. The Ewa DP also envisions substantial job growth, including employment at Kalaeloa/Barbers Point Harbor and its surrounding industrial areas.

The Hawaiian Cement terminal at Kalaeloa/Barbers Point Harbor is consistent with the Ewa DP by conforming to land use objectives of facilitating industrial growth at the harbor and other

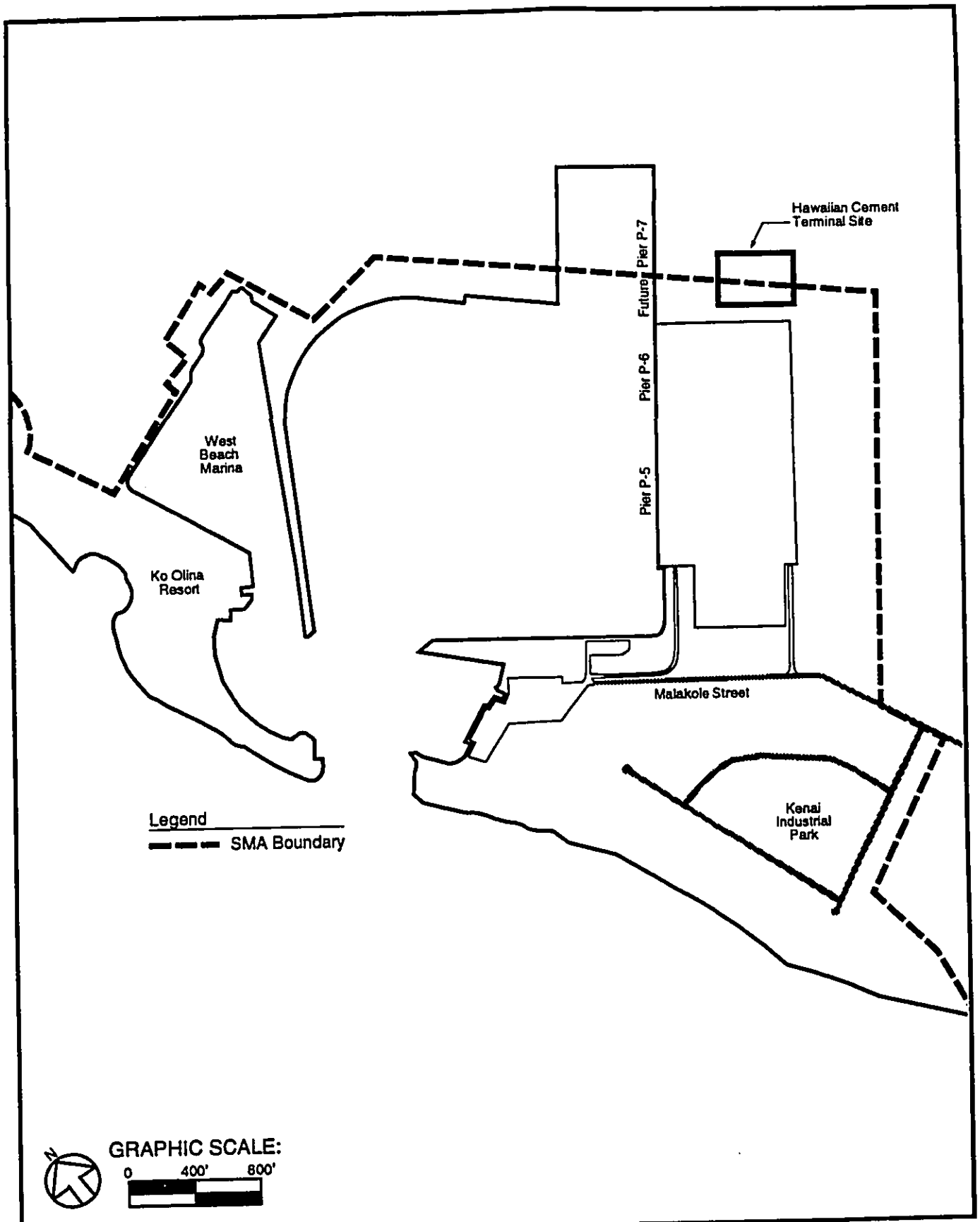
nearby industrial districts, such as CIP and Kapolei Business-Industrial Park. However, the height of the domes will exceed the maximum recommended height of 60 feet, which is also the maximum height allowed under the current zoning at the harbor. Hawaiian Cement will apply for a height variance (see Section 2.4.2.4).

### 2.4.2.3 Special Management Area

Hawaii Revised Statutes (HRS) Chapter 205A outlines special controls, policies and guidelines for development within an area along the shoreline referred to as the Special Management Area (SMA), designated by the 1975 Shoreline Protection Act. This Act gave the counties authority to issue permits for development activities proposed within the SMA. For the City and County of Honolulu, the Department of Planning and Permitting (DPP) is the agency that administers the Special Management Area Use Permit (SMP) program under Chapter 25 of the Revised Ordinances of Honolulu (RO), and the City Council has the authority to approve an SMP.

Figure 2-11 shows the SMA boundary in the project area. In addition, a site plan of the terminal with the SMA line (see Appendix C) is enclosed with this Final EA. As shown on this figure and the site plan, approximately half of the future terminal site is in the SMA. Since structures in the portion of the terminal within the SMA (most notably the domes) have a capital cost greater than $125,000, a major SMP is required. RO Section 25-3.2 contains guidelines that will be used to review the proposed project for an SMP. Appendix B contains a copy of these guidelines. An assessment of the consistency of the proposed project with these guidelines is provided below.

- The portion of the terminal within the SMA will not affect access to or alter publicly owned or used beaches (see Section 2.1.2), scenic and recreational amenities (see Section 2.2.3), or natural reserves (see Section 2.1.3).
- Solid waste and waste water at the terminal will be properly handled (see Section 2.3.2) so that they will not adversely affect SMA resources.
- The portion of the terminal within the SMA will not affect water resources (see Section 2.1.2), or cause erosion (see Section 2.1.1).




PARSONS
BRINCKERHOFF
QUADE &
DOUGLAS, INC.

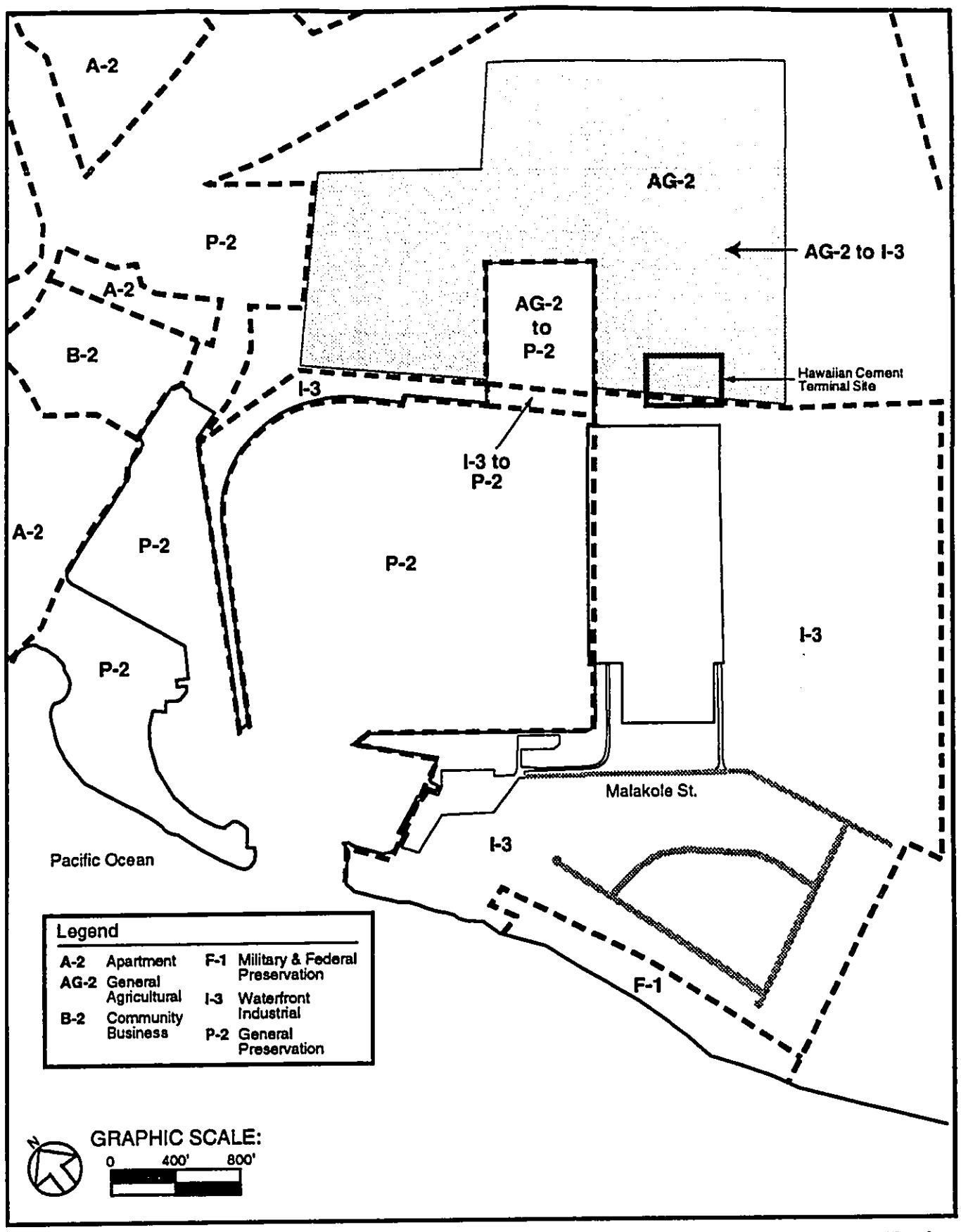
**Special Management Area**
**HAWAIIAN CEMENT TERMINAL AT**
**KALAELOA/BARBERS POINT HARBOR, PIER P-7**
*Final Environmental Assessment*
*FIGURE 2-11*

- The portion of the terminal within the SMA will not cause any substantial, adverse environmental or ecological effects, individually or cumulatively.
- The portion of the terminal within the SMA will be consistent with the General Plan (see Section 2.4.2.1) and existing zoning (see Section 2.4.2.4).
- The portion of the terminal within the SMA will not require the dredging, filling or alteration of Kalaeloa/Barbers Point Harbor.
- The portion of the terminal within the SMA will not substantially interfere with or detract from the line of sight toward the sea from Farrington Highway, the State highway nearest to the harbor, because it is set back almost two miles from the coastline.
- The portion of the terminal within the SMA will not adversely affect water quality, existing areas of open water free of visible structures (see Section 2.1.2), existing and potential fisheries and fishing grounds (see Section 2.2.3), wildlife habitats (see Section 2.1.3), or potential or existing agricultural uses of land (see Section 2.2.1).

Based on the assessment above, the portion of the proposed terminal within the SMA appears to be consistent with the guidelines contained in RO Section 25-3.2. In addition, the cement terminal is a coastal dependent facility that cannot be located outside a major harbor or port. An application for the major SMP will be submitted to DPP following declaration of a Finding of No Significant Impact (FONSI) by HDOT for this project (see Section 1.4). DPP will hold a public hearing on this application, and provide a recommendation to the City Council, which will determine if the portion of the terminal in the SMA is consistent with the SMA review guidelines.

#### 2.4.2.4 Zoning

The City and County of Honolulu Zoning Code is administered by the DPP. Figure 2-12 displays the zoning in the vicinity of Kalaeloa/Barbers Point Harbor. As shown on this figure, the terminal site is partially in an I-3, waterfront industrial, district. However, the land surrounding the expanded basin is currently being changed from AG-2 (Agriculture) to I-3 (see Figure 2-12). As described in the Land Use Ordinance of the City and County of Honolulu, the intent of the I-3 waterfront industrial district is to permit the full range of facilities necessary for successful and efficient performance of port functions and exclude uses that are not only inappropriate, but could be located elsewhere. As described in Section 1.3.1.2,




PARSONS
BRINCKERHOFF
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DOUGLAS, INC.

***City and County of Honolulu Zoning***
***HAWAIIAN CEMENT TERMINAL AT***
***KALAELOA/BARBERS POINT HARBOR, PIER P-7***
*Final Environmental Assessment*
*FIGURE 2-12*

the terminal will function as a commodity (cement) transfer point from ocean-faring vessels to truck or barge. It is, therefore, consistent with the intent of the I-3 waterfront industrial district, and is an allowable use under this zoning. However, since the maximum allowable height for waterfront industrial land at Kalaeloa/Barbers Point Harbor is 60 feet, and the highest structures of the terminal will be the storage domes and their dust collection equipment (estimated to be 90 feet tall), the proposed project will require a height variance.

An application for a zoning height variance will be submitted to DPP following declaration of a FONSI by HDOT. Similar to the SMP process, DPP will hold a public hearing for the zoning variance application. DPP indicated (consultation meeting held on January 22, 1999; see Section 3.1.4) that the hearing for the SMP and the hearing for the zoning height variance could be the same. Following the hearing, DPP will provide a recommendation to the City Council, which will make the decision whether to grant the variance.

## 2.5 CONSTRUCTION IMPACTS AND MITIGATION MEASURES

This section describes potential impacts during the construction phases of the proposed project. As described in Section 1.3.4, the proposed project will be developed in three phases (see Table 1-1).

### 2.5.1 Maintenance of Traffic

Construction vehicles will access the site via Malakole Street. Since traffic is not heavy on this road, construction vehicles will not cause adverse traffic conditions.

### 2.5.2 Air Quality

Construction will cause emissions of fugitive dust, airborne particulates of relatively large size. Fugitive dust will be generated by particulates being resuspended ("kicked up") by vehicle movement over paved and unpaved areas, dirt tracked onto paved surfaces from unpaved areas at access points, and material blown from uncovered stockpiles or haul trucks. Generally, the distance that particles drift from their source depends on their size, emission height, and wind speed. Small particles (30 to 100 micron range) can travel several hundred meters before settling to the ground. Most fugitive dust, however, is made up of relatively

large particles of greater than 100 microns in diameter. These particles are responsible for the reduced visibility often associated with construction. Given their relatively large size, these particles tend to settle within 20 to 30 feet of their source.

Since the nearest building (HDOT administrative building) to the construction site is several hundred feet away, construction-related dust is not expected to cause problems. Also, since HDOT is currently expanding the basin and constructing additional piers and storage yards, the additional dust emissions caused by constructing the terminal will be minimal.

Particulate control measures will be consistent with practices employed on current HDOT construction projects.

### 2.5.3 Noise

Construction activities can generate substantial noise (e.g., 90 dBA at a distance of about 50 feet). However, since the construction site is located far from sensitive receptors (residences), construction noise impacts are not anticipated. Construction activities will conform to the HDOH Community Noise Control standards (HAR Section 11-46) that apply to construction noise. It is not anticipated that construction activities will exceed HDOH's stipulated noise limits.

### 2.5.4 Solid Waste

Construction will require clearing land and excavation. The terminal site is eight to ten feet higher than the adjacent storage yard (S-5 and S-6). Because the pavement of the terminal must match the pavement of S-5 and S-6, approximately 100,000 cubic yards of material must be excavated. HDOT will direct Hawaiian Cement to place the material in existing stockpiles surrounding the harbor. A grubbing, grading, and stockpiling permit will be obtained from the City and County of Honolulu Department of Planning and Permitting for this work.

### 2.5.5 Site Runoff

The exposure and stockpiling of excavated material has the potential to affect the water quality of the basin through erosion. Therefore, Best Management Practices (BMPs) will be employed to control erosion and prevent sedimentation of the basin. Planned BMPs during construction include using berms and catchment basins, subject to approval by HDOT.

## 2.6 PERMITS AND APPROVALS

The proposed Hawaiian Cement terminal at Kalaeloa/Barbers Point Harbor will require the following permits that are administered by the DPP:

- building permit;
- grubbing, grading, and stockpiling permit;
- Special Management Area use permit (see Section 2.4.2.3); and
- zoning height variance (see Section 2.4.2.4).

The proposed project will also require a water allocation from the State of Hawaii Department of Land and Natural Resources, and a Non-Covered Source Permit for air emissions from the State of Hawaii Department of Health.

# Chapter 3
# Comments and Coordination

This chapter summarizes scoping activities conducted during the preparation of the project's Draft Environmental Assessment (EA), and provides a list of agencies and organizations that received copies of the Draft EA. This chapter also documents the comments on the Draft EA and Hawaiian Cement's responses.

## 3.1 CONSULTATION ACTIVITIES

Following Hawaiian Cement's decision to pursue a lease agreement to construct and operate a cement terminal at Kalaeloa/Barbers Point Harbor, consultation was conducted with the following agencies and organizations:

- Kalaeloa/Barbers Point Harbor Users Group Meeting at HDOT, Harbors Division Third Floor Conference Room on August 14, 1998
  Participants: Hawaiian Cement, HDOT, AES Hawaii, Aloha Cargo Transport, Aloha Petroleum, American Marine Services, Ameron, Briggs Pacific Industries, Campbell Estate, EMJ, Hawaii Stevedores, Hawaiian Electric Company, Marisco Limited, Senator Cal Kawamoto, Tesoro Hawaii, Transmarine Navigation Corp., U.S. Coast Guard, U.S. Customs

- Meeting with HDOT on October 14, 1998
  Participants: HDOT, Hawaiian Cement, and Parsons Brinckerhoff (PB)

- Meeting with HDOT on January 11, 1999
  Participants: HDOT, Hawaiian Cement, and River Consulting Incorporated (RC)

- Meeting with Hawaiian Electric Company (HECO) on January 11, 1999
  Participants: HECO, Hawaiian Cement and RC

- Meeting at the Department of Planning and Permitting (DPP) on January 22, 1999
  Participants: DPP, Hawaiian Cement, and PB

A summary of these consultation activities is provided below.

### 3.1.1 Kalaeloa/Barbers Point Harbor Users Group Meeting

Hawaiian Cement provided a presentation on September 8, 1998 to members of the Kalaeloa/Barbers Point Harbor Users Group on their plans to construct a cement import terminal at the harbor. The following general concerns were expressed:

- coordination with other users, such as Briggs Pacific Industries, which operates the dry bulk unloader at Pier P-6, and petroleum operators; and
- *concern* about excessive dust generation.

### 3.1.2 HDOT Consultation Meetings

Hawaiian Cement and PB met with the planning staff of HDOT on October 14, 1998. Hawaiian Cement provided a short briefing on its proposed terminal. Harbors Division noted that agencies might raise the following issues:

- control against alien species that could be contained in ballast water of vessels;
- providing the public with information about the project, suggesting presentations before the neighborhood boards;
- storm water runoff;
- traffic impacts at the harbor and surrounding roadways; and
- consultation with other agencies.

A second HDOT consultation meeting was held with Property Management, Engineering Branch, and Oahu District staff. Hawaiian Cement and River Consulting provided a briefing on the proposed terminal, specifically the terminal layout, utility requirements, easements and dock usage. HDOT provided information on its schedule to complete harbor improvements, such as P-7, which Hawaiian Cement is interested in using as its principal pier. HDOT also stated that the excavated material from the site could be dumped at one of the existing stockpiles.

### 3.1.3 HECO Consultation Meeting

The meeting with HECO was held to discuss the power requirements of the terminal. HECO stated that it could provide for the power needs of the terminal.

### 3.1.4 DPP Consultation Meeting

The meeting with DPP was held to discuss the permitting requirements of the project with this agency. DPP stated that the terminal site and other areas surrounding the expanded basin are in the process of a zoning change from Agriculture to Waterfront Industrial (I-3). DPP indicated that the proposed project will require a height variance because the storage domes would be as tall as 90 feet, and the height limit of the new I-3 land will be 60 feet, the same as the existing I-3 land at the harbor.

There was also discussion of whether the project will need a Special Management Area Use Permit (SMP). It was not clear from the DPP mapping whether the terminal would be within the Special Management Area (SMA). DPP recommended that Hawaiian Cement submit a "Request for Boundary Interpretation." The result of this follow-up coordination was that the SMA boundary bisects the terminal, and the structures within the portion of the terminal within the SMA have a capital cost greater than $125,000, the criterion for a major SMP.

## 3.2 DRAFT ENVIRONMENTAL ASSESSMENT

### 3.2.1 Availability

In accordance with State law, availability of the project's Draft EA was announced in the State Environmental Notice on June 23, 1999, initiating a 30-day public comment period that formally concluded on July 23, 1999. Copies of the Draft EA were sent to the Hawaii State Library, the Ewa Beach Public Library, and the Waianae Public Library, as well as to State of Hawaii and City and County of Honolulu agencies and other organizations listed on Table 3-1.

### 3.2.2 Agency and Public Comments

The agencies and organizations that provided written statements on the Draft EA during the public comment period are indicated on Table 3-1. These letters were reviewed and considered, and are reproduced below. A response letter immediately follows each comment

**Table 3-1**
**Summary of Draft Environmental Assessment Coordination and Comments**

| Agency or Organization | Received Copy of Draft EA | Provided Comments on Draft EA |
|---|---|---|
| **State of Hawaii Agencies** | | |
| Department of Business, Economic Development & Tourism, Office of Planning | ☐ | |
| Department of Health | ☐ | ☐ |
| Department of Land and Natural Resources (DLNR) | ☐ | ☐ |
| DLNR, State Historic Preservation Division | ☐ | ☐ |
| Office of Environmental Quality Control | ☐ | ☐ |
| Office of Hawaiian Affairs | ☐ | ☐ |
| **City and County of Honolulu Agencies** | | |
| Board of Water Supply | ☐ | ☐ |
| Department of Environmental Services | ☐ | ☐ |
| Department Parks and Recreation | ☐ | ☐ |
| Department of Planning and Permitting | ☐ | ☐ |
| **Other Organizations** | | |
| Briggs Pacific Industries | ☐ | |
| Campbell Industrial Park Compliance Coordinator | ☐ | |
| Chevron USA | ☐ | |
| Councilman John DeSoto | ☐ | |
| Estate of James Campbell | ☐ | ☐ |
| Grace Pacific | ☐ | |
| GTE Hawaiian Telephone | ☐ | ☐ |
| Hawaiian Electric Company | ☐ | |

**Table 3-1**
**Summary of Draft Environmental Assessment Consultation and Comments**
**(Continued)**

| Agency or Organization | Received Copy of Draft EA | Provided Comments on Draft EA |
|---|---|---|
| Kapolei Family Center | ☐ | |
| Kapolei, Makakilo, Honokai Hale Neighborhood Board | ☐ | |
| Marisco Limited | ☐ | |
| Tesoro Hawaii | ☐ | |
| West Beach Estates (Ko Olina) | ☐ | ☐ |

letter. Some comments required changes, corrections, or additions to other sections of the Final EA.

BENJAMIN J. CAYETANO
GOVERNOR OF HAWAII

BRUCE S. ANDERSON, Ph.D., M.P.H.
DIRECTOR OF HEALTH

STATE OF HAWAII
DEPARTMENT OF HEALTH
P.O. BOX 3378
HONOLULU, HAWAII 96801

In reply, please refer to:
File:

July 22, 1999

99-134/epo

Mr. Dane Wurlitzer
Project Manager
Hawaiian Cement
Cement Division
Campbell Industrial Park
91-055 Kaomi Loop
Kapolei, Hawaii 96707-1709

Dear Mr. Wurlitzer:

Subject: Draft Environmental Assessment (DEA)
Hawaiian Cement Terminal at Kalaeloa Harbor
Oahu

Thank you for allowing us to review and comment on the subject project. We have the following comments to offer:

Water Pollution

1. A National Pollutant Discharge Elimination System (NPDES) general permit is required for the following discharges to waters of the State:

   a. Storm water discharges relating to construction activities, such as clearing, grading, and excavation, for projects equal to or greater than five acres;

   b. Storm water discharges from industrial activities;

   c. Construction dewatering activities;

   d. Noncontact cooling water discharges less than one million gallons per day;

   e. Treated groundwater from underground storage tank remedial activities;

f. Hydrotesting water;

g. Treated effluent from petroleum bulk stations and terminals; and

h. Treated effluent from well drilling activities.

Any person requesting to be covered by a NPDES general permit for any of the above activities should file a Notice of Intent with the Department's Clean Water Branch at least 30 days prior to commencement of any discharge to waters of the State.

2. After construction of the proposed facility is completed, a NPDES individual permit will be required if the operation of the facility involves any wastewater discharge into State waters.

Any questions regarding these comments should be directed to Mr. Denis Lau, Branch Chief, Clean Water Branch at 586-4309.

Sincerely,

for GARY GILL
Deputy Director for
Environmental Health

c: CWB

**HAWAIIAN CEMENT**

**Cement Division**

August 13, 1999

Mr. Gary Gill
Deputy Director
State of Hawaii Department of Health
P.O. Box 3378
Honolulu, Hawaii 96801

Subject: **Proposed Cement Terminal at Kalaeloa/Barbers Point Harbor**
**Kapolei, Oahu, Hawaii**
**Environmental Assessment (EA)**

Dear Mr. Gill:

Thank you for your comments (ref. letter 99-134/epo) on the Draft EA for our proposal to construct and operate a cement terminal at Kalaeloa/Barbers Point Harbor. We would like to provide the following responses to your comments.

Comment 1. When we applied for NPDES general permit coverage for our neighbor island terminals in 1997, the State Department of Health responded with the enclosed letter that states these facilities do not require coverage because they are classified as Marine Cargo Handling (SIC Code 4491). Our proposed facility at Kalaeloa/Barbers Point Harbor is essentially the same as these facilities, although it will be larger. Therefore, we feel this industrial facility would fall under the same classification and have the same exemption.

It would be very helpful if your office could confirm that NPDES general permit coverage is not required for this new facility. Otherwise, we are prepared to file a Notice of Intent 30 days prior to the start of industrial activities.

Comment 2. The proposed terminal will not discharge wastewater into any State water body. Therefore, the project will not require an NPDES individual permit.

We are anticipating that the State of Hawaii Department of Transportation, Harbors Division, the Approving Agency of the EA, will render a Finding of No Significant Impact (FONSI) for our project. Please let me know if you would like a copy of the Final EA/FONSI.

If you have any questions, you are welcome to call me at 673-4226.

Sincerely yours,

Dane Wurlitzer
Project Manager

CAMPBELL INDUSTRIAL PARK 91-055 KAOMI LOOP KAPOLEI, HAWAII 96707-1709 TELEPHONE (808) 673-4200 FAX (808) 673-4221

Enclosure: Letter from State of Hawaii Department of Health to Hawaiian dated October 27, 1999

cc. Messrs: Glenn Soma
State of Hawaii Department of Transportation
Harbors Division

David Atkin
Parsons Brinckerhoff Quade & Douglas, Inc.

BENJAMIN J. CAYETANO
GOVERNOR OF HAWAII

LAWRENCE MIKE
DIRECTOR OF HEALTH

STATE OF HAWAII
DEPARTMENT OF HEALTH
P.O. BOX 3378
HONOLULU, HAWAII 96801-3378

In reply, please refer to:
EMO/CWB

October 27, 1997

P10128KP

Mr. John H. DeLong
President and Chief Executive Officer
Hawaiian Cement
91-055 Kaomi Loop
Kapolei, Hawaii 96707-1786

Dear Mr. DeLong:

Subject: **Termination of Notices of General Permit Coverage (NGPCs) for:**

1. **Hawaiian Cement Hilo Terminal**
   **File No. HI R80A363**

2. **Hawaiian Cement Kahului Terminal**
   **File No. HI R80A365**

3. **Hawaiian Cement Kawaihae Terminal**
   **File No. HI R80A367**

4. **Hawaiian Cement Nawiliwili Terminal**
   **File No. HI R80A369**

The Department of Health (Department) acknowledges receipt of your Notices of Intent (NOIs) dated October 7, 1997 and the required filing fees to renew coverage under the National Pollutant Discharge Elimination System (NPDES) general permit in accordance with Hawaii Administrative Rules (HAR) 11-55-34.09(d).

After examination of the subject NOIs and a telephone conversation with Mr. Dane Wurlitzer of your staff on October 21, 1997, the Department has determined that the subject facilities do not require coverage under the NPDES general permit for storm water associated with industrial activities. This determination has been based on the Standard Industrial Classification (SIC) code for the subject facilities (SIC Code 4491, Marine Cargo Handling) and the absence of any vehicle maintenance shops, equipment cleaning operations, or airport de-icing operations at the subject facilities.

Therefore, in accordance with the provisions of the Federal Water Pollution Control Act Amendments of 1972 et. seq. and Hawaii Revised Statutes, Chapter 342D, the Department hereby terminates the subject NGPCs issued to Hawaiian Cement. The termination of your NGPC will become final and effective on the date of this letter.

Furthermore, the Department will not process the subject NOIs dated October 7, 1997. Enclosed are your four (4) checks each in the amount of $500.00.

Should you have any questions, please contact Kris Poentis, Engineering Section of the Clean Water Branch, at 586-4309. Thank you for your cooperation and efforts in keeping our waterways clean.

Sincerely,

THOMAS E. ARIZUMI, P.E., CHIEF
Environmental Management Division

KP/cr

Enclosure: Checks (4)

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
P.O. BOX 621
HONOLULU, HAWAII 96809

AUG -2 1999

AQUACULTURE DEVELOPMENT PROGRAM
AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
CONSERVATION AND RESOURCES ENFORCEMENT
CONVEYANCES
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
LAND DIVISION
STATE PARKS
WATER RESOURCE MANAGEMENT

Ref:PS:EH

Mr. Dane Wurlitzer
Project Manager
Hawaiian Cement
Cement Division
Campell Industrial Park
91-055 Kaomi Loop
Kapolei, Hawaii 96707-1709

Dear Mr. Wurlitzer:

Subject: Draft Environmental Assessment (DEA)
For Hawaiian Cement Terminal at Kalaeloa/
Barbers Point Harbor, Oahu

We have reviewed the subject DEA document and offer the attached comments from our Land Division, Engineering Branch for your consideration.

Thank you for the opportunity to comment on the proposed project.

Should you have any questions or require further assistance, please contact staff planner Ed Henry at 587-0380.

Very truly yours,

TIMOTHY E. JOHNS
Chairperson

Attachment

c.c. Engineering Branch

## ENGINEERING BRANCH

COMMENTS

We confirm that the project site, according to FEMA Community Panel Number 150001 0130 C, is located in Zone D, areas in which flood hazards are undetermined.

Revise section 2.3.2.1a Water Supply on page 2-31: the 127,000 gallons per day (gpd) water allocation was assigned to the Barbers Point Deep Draft Harbor in 1989, since then various projects at the Harbor used a portion of the 127,000 gpd allocation. The water demands for the project need to be coordinated with the Department of Transportation, Harbors Division.

Please provide the water demands (gpd) and water demand calculation to the Engineering Branch, Land Division so that it can be included in the Water Master Plan for Oahu being prepared by Fukunaga and Associates for the Department of Land and Natural Resources.

**HAWAIIAN CEMENT**

**Cement Division**

August 13, 1999

Mr. Timothy E. Johns, Chairperson
State of Hawaii
Department of Land and Natural Resources
P.O. Box 621
Honolulu, Hawaii 96809

Subject: **Proposed Cement Terminal at Kalaeloa/Barbers Point Harbor**
**Kapolei, Oahu, Hawaii**
**Environmental Assessment (EA)**

Dear Mr. Johns:

Thank you for your comments (ref. letter PS:EH) on the Draft EA for our proposal to construct and operate a cement terminal at Kalaeloa/Barbers Point Harbor. We would like to provide the following responses to your comments.

Comment 1. You confirmed that the project site is located in Zone D, areas in which flood hazards are undetermined. *Response not necessary.*

Comment 2. Section 2.3.2.1a will be changed to show up-to-date water allocation data. All information and approvals for new service will be coordinated with Department of Transportation, Harbors Division.

Comment 3. Water demand information is still being finalized, and will be forwarded to your Land Division Engineering Branch when complete.

We are anticipating that the State of Hawaii Department of Transportation, Harbors Division, the Approving Agency of the EA, will render a Finding of No Significant Impact (FONSI) for our project. Please let me know if you would like a copy of the Final EA/FONSI.

If you have any questions, you are welcome to call me at 673-4226.

Sincerely yours,

Dane Wurlitzer
Project Manager

cc. Messrs. Glenn Soma
State of Hawaii Department of Transportation
Harbors Division

David Atkin
Parsons Brinckerhoff Quade & Douglas, Inc.

CAMPBELL INDUSTRIAL PARK 91-055 KAOMI LOOP KAPOLEI, HAWAII 96707-1709 TELEPHONE (808) 673-4200 FAX (808) 673-4221

BENJAMIN J. CAYETANO
GOVERNOR OF HAWAII

STATE OF HAWAII

DEPARTMENT OF LAND AND NATURAL RESOURCES

HISTORIC PRESERVATION DIVISION
Kakuhihewa Building, Room 555
601 Kamokila Boulevard
Kapolei, Hawaii 96707

TIMOTHY E. JOHNS, CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES

DEPUTIES
JANET E. KAWELO

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
CONSERVATION AND RESOURCES
ENFORCEMENT
CONVEYANCES
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
LAND
STATE PARKS
WATER RESOURCE MANAGEMENT

July 15, 1999

Dane Wurlitzer
Project Manager
Hawaiian Cement
Campbell Industrial Park
91-055 Kaomi Loop
Kapolei, Hawaii 96707-1709

LOG NO: 23781
DOC NO: 9907EJ09

Dear Mr. Wurlitzer:

SUBJECT: Chapter 6E-42 Historic Preservation Review Draft Environmental Assessment (DEA) for Hawaiian Cement Terminal at Kalaeloa, Barbers Point Harbor
Honouliuli, 'Ewa, O'ahu
TMK: 9-1-14

Thank you for the opportunity to review the DEA for the Hawaiian Cement Terminal project. Archaeological investigations conducted for the Barbers Point Harbor expansion did not identify any significant historic sites within the proposed project area. Therefore, we believe that this project will have "no effect" on historic sites.

If you have any questions please call Sara Collins at 692-8026 or Elaine Jourdane at 692-8027.

Aloha,

Don Hibbard, Administrator
State Historic Preservation Division

EJ:jk

**HAWAIIAN CEMENT**

**Cement Division**

August 13, 1999

Mr. Don Hibbard, Administrator
Historic Preservation Division
State of Hawaii Department of Land and Natural Resources
601 Kamokila Blvd., Room 555
Kapolei, Hawaii 96707

Subject: **Proposed Cement Terminal at Kalaeloa/Barbers Point Harbor**
**Kapolei, Oahu, Hawaii**
**Environmental Assessment (EA)**

Dear Mr. Hibbard:

Thank you for your review (ref. DOC NO: 9907EJ09) of the Draft EA for our proposal to construct and operate a cement terminal at Kalaeloa/Barbers Point Harbor.

We are anticipating that the State of Hawaii Department of Transportation, Harbors Division, the Approving Agency of the EA, will render a Finding of No Significant Impact (FONSI) for our project. Please let me know if you would like a copy of the Final EA/FONSI.

If you have any questions, you are welcome to call me at 673-4226.

Sincerely yours,

Dane Wurlitzer
Project Manager

cc. Messrs. Glenn Soma
State of Hawaii Department of Transportation
Harbors Division

David Atkin
Parsons Brinckerhoff Quade & Douglas, Inc.

CAMPBELL INDUSTRIAL PARK 91-055 KAOMI LOOP KAPOLEI, HAWAII 96707-1709 TELEPHONE (808) 673-4200 FAX (808) 673-4221

BENJAMIN J. CAYETANO
GOVERNOR

GENEVIEVE SALMONSON
DIRECTOR

STATE OF HAWAII
OFFICE OF ENVIRONMENTAL QUALITY CONTROL
235 SOUTH BERETANIA STREET
SUITE 702
HONOLULU, HAWAII 96813
TELEPHONE (808) 586-4185
FACSIMILE (808) 586-4186

JUL 16 1999

July 15, 1999

Mr. Kazu Hayashida, Director
State Department of Transportation
869 Punchbowl Street
Honolulu, Hawaii 96813

Dear Mr. Hayashida:

Subject: Draft Environmental Assessment for the Hawaiian Cement Terminal at Kalaeloa/Barbers Point Harbor, Oahu, Hawaii

Thank you for the opportunity to review the above project. We have the following questions and comments.

1. Cement will be stored in two domes. Each dome will be 144 feet wide and 77 feet tall. Please illustrate the visual impacts of the proposed structures from public places such as roads and lookouts. Photos of existing conditions taken from public view points are helpful in evaluating visual impacts. Renderings of future structures superimposed on photos of existing views should be provided. We recommend constructing and painting the domes with materials and colors that blend with the surroundings.

2. Cement ships will be unloaded 24 hours per day. Therefore, lighting will be required during the night. What specific mitigation measures will be applied to minimize spillover, glare and other lighting impacts? Please consider designing the lighting using the Department of Land and Natural Resources' guidelines entitled The Newell's Shearwater Light Attraction Problem, A Guide for Architects, Planners, and Resort Managers to reduce lighting impacts.

3. Disposal of wastewater from the HDOT comfort station is by an onsite seepage pit. Please consult the Department of Health to determine whether this sewage disposal system meets current standards. If not, please correct the problem.

Should you have any questions, please call Jeyan Thirugnanam at 586-4185. Mahalo.

Sincerely,

Genevieve Salmonson
Director

Enclosures

c: Hawaiian Cement
PBQD

**HAWAIIAN CEMENT**

**Cement Division**

August 13, 1999

Ms. Genevieve Salmonson, Director
Office of Environmental Quality Control
State of Hawaii
235 South Beretania Street, Suite 702
Honolulu, Hawaii 96813

Subject: ***Proposed Cement Terminal at Kalaeloa/Barbers Point Harbor***
**Kapolei, Oahu, Hawaii**
**Environmental Assessment (EA)**

Dear Ms. Salmonson:

Thank you for your comments (letter dated July 15, 1999) on the Draft EA for our proposal to construct and operate a cement terminal at Kalaeloa/Barbers Point Harbor. We would like to provide the following responses to your comments.

Comment 1. The Final EA will include visual simulations of the terminal superimposed onto photographs of the project site. These visual simulations will show that the cement terminal will be consistent with a commercial harbor facility.

The dome is constructed by inflating a waterproof roofing fabric into a hemispherical shape. This roofing fabric is kept in place and will last about 15 years, at which time the dome will be painted to maintain waterproofing. The colors available for the roofing fabric are limited, and normally an off white is used.

Comment 2. Lighting at the future Pier P-7 will be provided by State of Hawaii Department of Transportation, Harbors Division (HDOT). The lighting system would probably be the same or similar to the existing system at Piers P-5 and P-6. We currently import clinker and gypsum through Kalaeloa/Barbers Point Harbor with unloading taking place continuously day and night until the vessel is empty. Therefore, around the clock unloading activities in the future would essentially be the same as the around the clock unloading operations occurring presently.

Comment 3. This comment concerning wastewater from the existing comfort station is for HDOT. *No response necessary.*

We are still anticipating that the HDOT, the Approving Agency of the EA, will render a Finding of No Significant Impact (FONSI) for our project.

CAMPBELL INDUSTRIAL PARK 91-055 KAOMI LOOP KAPOLEI, HAWAII 96707-1709 TELEPHONE (808) 673-4200 FAX (808) 673-4221

If you have any questions, you are welcome to call me at 673-4226.

Sincerely yours,

Dane Wurlitzer
Project Manager

cc. Messrs. Glenn Soma
State of Hawaii Department of Transportation
Harbors Division

David Atkin
Parsons Brinckerhoff Quade & Douglas, Inc.

PHONE (808) 594-1888

FAX (808) 594-1865

STATE OF HAWAI'I
OFFICE OF HAWAIIAN AFFAIRS
711 KAPI'OLANI BOULEVARD, SUITE 500
HONOLULU, HAWAI'I 96813

July 22, 1999

Hawaiian Cement
Cement Division
Campbell Industrial Park
91-055 Kaomi Loop
Kapolei, Hawaii 96707-1709

EIS #324

Attention: Mr. Dane Wurlitzer, Project Manager

Re: Proposed Construction of a Cement Import Terminal at Kalaeloa/Barbers Point Harbor, Kapolei, O'ahu, Hawai'i

Dear Mr. Wurlitzer,

Thank you for the opportunity to review the Draft EA for the proposed construction and operation of a cement import and transshipment terminal at Kalaeloa/Barbers Point Harbor. This proposed facility will replace Hawaiian Cement's existing clinker grinding, storage, and distribution facility at Campbell Industrial Park.

As stated in the Draft EA, the proposed project site is within the Barbers Point Archaeological District, which was established by the State Historic Preservation Division (SHPD) in the late 1970's to facilitate the archaeological review of Kalaeloa/Barbers Point Harbor Construction.

According to the Draft EA, there were 70 documented archaeological sites surveyed prior to the original harbor construction in the 1980's and during the most recent planning for the basin expansion project. The later studies were divided by the two parcels of the basin expansion project: an 84-acre parcel located along the northeast (mauka) boundary of the basin expansion area and the future piers and a 56.5 acre parcel located immediately northeast (mauka) of the 84-acre parcel. The proposed terminal would be located in the 84-acre parcel.

While significant sites were documented in the 84-acre parcel, they no longer exist because of archaeological data recovery activities conducted prior to harbor construction. Nevertheless, the parcel was re-surveyed in January 1994, and it was determined that no archaeological sites or deposits remain. Therefore, the project site does not contain any archaeological or historic sites.

Moreover, operation of the proposed cement terminal will not affect existing archaeological and historic sites in the vicinity of Kalaeloa/Barbers Point Harbor.

In addition, approximately half of the proposed terminal site is within the Shoreline Management Area (SMA). As stated in the Draft EA, the portion of the terminal within the SMA:

- Will not affect access to or alter public owned or used beaches, scenic, and recreational amenities;
- Will not affect water resources or cause erosion;
- Will not cause any substantial, adverse environmental or ecological effects, individually or cumulatively; and,
- Will not adversely affect water quality, existing areas of open water free of visual structures, existing and potential fisheries and fishing grounds, wildlife habitats or potential existing agricultural uses of land.

In accordance with Chapter 343, HRS and Hawaii Administrative Rules (HAR) Sections 11-200-9 and 11-200-11.2 the State Department of Transportation, Harbors Division (HDOT) as the approving agency, anticipates a Finding of No Significant Impact (FONSI) for the proposed Hawaiian Cement terminal.

Based on the assessment of project impacts in the Draft EA:

- The proposed project will not cause the loss or destruction of any natural or cultural resource; and,
- There are no rare, threatened or endangered plant or animal species in the area directly affected by the proposed project area.

Finally, there are no threatened or endangered plant species at or near the project site. The Pacific Golden Plover or *Kolea* was sighted during a faunal survey. The survey report indicated that the Short-eared Owl or *Pueo* could frequent the harbor area, but were not recorded during the survey.

At this time the Office of Hawaiian Affairs (OHA) has no comment to the project. If you have any questions, please contact Mark A. Mararagan, Policy Analyst-Government Regulations at 594-1945.

Sincerely,

C. Sebastian Aloot
Hawaiian Rights Division Director

cc: OHA Board of Trustees

Colin Kippen, Deputy Administrator

**HAWAIIAN CEMENT**

**Cement Division**

August 13, 1999

Mr. C. Sebastian Aloot
Hawaiian Rights Division Director
State of Hawaii Office of Hawaiian Affairs
711 Kapiolani Blvd., Suite 500
Honolulu, Hawaii 96813

Subject: **Proposed Cement Terminal at Kalaeloa/Barbers Point Harbor**
**Kapolei, Oahu, Hawaii**
**Environmental Assessment (EA)**

Dear Mr. Aloot:

Thank you for your review (ref. letter EIS #324) of the Draft EA for our proposal to construct and operate a cement terminal at Kalaeloa/Barbers Point Harbor.

We are anticipating that the State of Hawaii Department of Transportation, Harbors Division, the Approving Agency of the EA, will render a Finding of No Significant Impact (FONSI) for our project. Please let me know if you would like a copy of the Final EA/FONSI.

If you have any questions, you are welcome to call me at 673-4226.

Sincerely yours,

Dane Wurlitzer
Project Manager

cc. Messrs. Glenn Soma
State of Hawaii Department of Transportation
Harbors Division

David Atkin
Parsons Brinckerhoff Quade & Douglas, Inc.

CAMPBELL INDUSTRIAL PARK 91-055 KAOMI LOOP KAPOLEI, HAWAII 96707-1709 TELEPHONE (808) 673-4200 FAX (808) 673-4221

**BOARD OF WATER SUPPLY**

CITY AND COUNTY OF HONOLULU
630 SOUTH BERETANIA STREET
HONOLULU, HAWAII 96843



July 20, 1999

Mr. Dane Wurlitzer
Hawaiian Cement
Campbell Industrial Park
91-055 Kaomi Loop
Kapolei, Hawaii 96707-1709

Dear Mr. Wurlitzer:

Subject: Your Letter of June 22, 1999 Regarding the Draft Environmental Assessment for the Proposed Cement Import Terminal at Kalaeloa/Barbers Point Harbor, Kapolei, Oahu, Hawaii, TMK: 9-1-14: 24

Thank you for the opportunity to review and comment on the proposed cement import terminal.

We have the following comments:

1. The existing water system is presently adequate to accommodate the proposed project.

2. There are two existing services near the project site; however, our records indicate that the meters serve TMK: 9-1-14: 08. One of the services is a fire service with four 8-inch meters (Promise ID Numbers 1106346, 1106347, 1106348 and 1106349) and the other is a domestic service with one 3-inch meter (Premise ID Number 1106345).

3. The availability of water will be confirmed when the building permit application is submitted for our review and approval. When water is made available, the applicant will be required to pay our Water System Facilities Charges for transmission and daily storage.

4. The applicant will be required to obtain a water allocation from the State Department of Land and Natural Resources.

5. Board of Water Supply approved reduced pressure principle backflow prevention assemblies will be required to be installed after all domestic water meters serving the project site.

If you have any questions, please contact Barry Usagawa at 527-5235.

Very truly yours,

CLIFFORD S. JAMILE
Manager and Chief Engineer

*Pure Water . . . our greatest need – use it wisely*

**HAWAIIAN CEMENT**

**Cement Division**

August 13, 1999

Mr. Clifford S. Jamile
Manager and Chief Engineer
Board of Water Supply
City and County of Honolulu
650 South Beretania Street
Honolulu, Hawaii 96843

Subject: **Proposed Cement Terminal at Kalaeloa/Barbers Point Harbor**
**Kapolei, Oahu, Hawaii**
**Environmental Assessment (EA)**

Dear Mr. Jamile:

Thank you for your comments (letter dated July 20, 1999) on the Draft EA for our proposal to construct and operate a cement terminal at Kalaeloa/Barbers Point Harbor. We appreciate the information provided, and we will continue to work with the Board of Water Supply to satisfy all requirements for a water meter for the terminal.

We are anticipating that the State of Hawaii Department of Transportation, Harbors Division, the Approving Agency of the EA, will render a Finding of No Significant Impact (FONSI) for our project. Please let me know if you would like a copy of the Final EA/FONSI.

If you have any questions, you are welcome to call me at 673-4226.

Sincerely yours,

Dane Wurlitzer
Project Manager

cc: Messrs. Glenn Soma,
State of Hawaii Department of Transportation
Harbors Division

David Atkin
Parsons Brinckerhoff Quade & Douglas, Inc.

CAMPBELL INDUSTRIAL PARK 91-055 KAOMI LOOP KAPOLEI, HAWAII 96707-1709 TELEPHONE (808) 673-4200 FAX (808) 673-4221

DEPARTMENT OF ENVIRONMENTAL SERVICES
CITY AND COUNTY OF HONOLULU
650 SOUTH KING STREET, 3RD FLOOR • HONOLULU, HAWAII 96813
PHONE: (808) 527-6663 • FAX: (808) 527-6673

JEREMY HARRIS
Mayor

KENNETH E. SPRAGUE, P.E., Ph.D.
Director

BARRY FUKUNAGA
Deputy Director

ENV 99-74

JUL - 1 1999

Mr. Dane Wurtizer
Project Manager
Hawaiian Cement
Cement Division
Campbell Industrial Park
91-055 Kaomi Loop
Kapolei, HI 96707-1709

Dear Mr. Wurtizer:

Subject: Draft Environmental Assessment (DEA)
Proposed Cement Import Terminal

We have reviewed the subject DEA and have the following comments:

1. The DEA should indicate the Tax Key Number for the proposed project.

2. Best management practices (BMPs) should be employed during the construction and subsequent operation to reduce and control discharge of pollutants.

Should you have any questions, please contact Mr. Alex Ho, Environmental Engineer, at 523-4160.

Sincerely,

KENNETH E. SPRAGUE
Director

**HAWAIIAN CEMENT**

**Cement Division**

August 13, 1999

Mr. Kenneth E. Sprague, Director
Department of Environmental Services
City and County of Honolulu
650 South King Street, 3rd Floor
Honolulu, Hawaii 96813

Subject: **Proposed Cement Terminal at Kalaeloa/Barbers Point Harbor**
**Kapolei, Oahu, Hawaii**
**Environmental Assessment (EA)**

Dear Mr. Sprague:

Thank you for your comments (ref. letter ENV 99-74) on the Draft EA for our proposal to construct and operate a cement terminal at Kalaeloa/Barbers Point Harbor. We would like to provide the following responses to your comments.

Comment 1. The tax map key (TMK) number (9-1-14:24) of the project site was specified in Section 1.3 of the Draft EA. For the Final EA, we will provide this TMK number in the beginning of the Executive Summary.

Comment 2. Best Management Practices (BMPs) to control discharges of pollutants will be employed during both construction and operation of the terminal. Please see Sections 2.1.2.3 and 2.5.5 and Appendix A of the Draft EA. During construction, we plan to use berms and catch basins to control erosion and prevent sedimentation of the harbor.

We are anticipating that the State of Hawaii Department of Transportation, Harbors Division, the Approving Agency of the EA, will render a Finding of No Significant Impact (FONSI) for our project. Please let me know if you would like a copy of the Final EA/FONSI.

If you have any questions, you are welcome to call me at 673-4226.

Sincerely yours,

Dane Wurlitzer,
Project Manager

cc. Messrs. Glenn Soma
State of Hawaii Department of Transportation
Harbors Division

David Atkin
Parsons Brinckerhoff Quade & Douglas, Inc.

CAMPBELL INDUSTRIAL PARK 91-055 KAOMI LOOP KAPOLEI, HAWAII 96707-1709 TELEPHONE (808) 673-4200 FAX (808) 673-4221

DEPARTMENT OF PARKS AND RECREATION
CITY AND COUNTY OF HONOLULU
650 SOUTH KING STREET, 10TH FLOOR • HONOLULU, HAWAII 96813
PHONE: (808) 523-4182 • FAX: (808) 523-4084

JEREMY HARRIS
MAYOR

WILLIAM D. BALFOUR, JR.
DIRECTOR

MICHAEL T. AMII
DEPUTY DIRECTOR

July 12, 1999

Mr. Dane Wurlitzer, Project Manager
Hawaiian Cement
Cement Division
Campbell Industrial Park
91-055 Kaomi Loop
Kapolei, Hawaii 96707-1709

Dear Mr. Wurlitzer:

We have reviewed the draft environmental assessment (DEA) for the Cement Import Terminal at Kalaeloa/Barbers Point Harbor and find that the project will not adversely impact any of our recreation programs or facilities.

Thank you for the opportunity to review the DEA. Should you need further information, please contact Mr. Don Kusunoki, Leeward Oahu District Manager, at 671-0561.

Sincerely,

W. D. Balfour

WILLIAM D. BALFOUR, JR.
Director

WDB:cu
(99-1595GT)

**HAWAIIAN CEMENT**

**Cement Division**

August 13, 1999

Mr. William D. Balfour, Jr.
Director
Department of Parks and Recreation
City and County of Honolulu
650 South King Street, 10th Floor
Honolulu, Hawaii 96813

Subject: **Proposed Cement Terminal at Kalaeloa/Barbers Point Harbor**
**Kapolei, Oahu, Hawaii**
**Environmental Assessment (EA)**

Dear Mr. Balfour:

Thank you for your review (letter dated July 12, 1999) of the Draft EA for our proposal to construct and operate a cement terminal at Kalaeloa/Barbers Point Harbor.

We are anticipating that the State of Hawaii Department of Transportation, Harbors Division, the Approving Agency of the EA, will render a Finding of No Significant Impact (FONSI) for our project. Please let me know if you would like a copy of the Final EA/FONSI.

If you have any questions, you are welcome to call me at 673-4226.

Sincerely yours,

Dane Wurlitzer
Project Manager

cc. Messrs. Glenn Soma
State of Hawaii Department of Transportation
Harbors Division

David Atkin
Parsons Brinckerhoff Quade & Douglas, Inc.

CAMPBELL INDUSTRIAL PARK 91-055 KAOMI LOOP KAPOLEI, HAWAII 96707-1709 TELEPHONE (808) 673-4200 FAX (808) 673-4221

DEPARTMENT OF PLANNING AND PERMITTING
CITY AND COUNTY OF HONOLULU
650 SOUTH KING STREET • HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-4414 • FAX: (808) 527-6743

JUL 3 0 [illegible]

JEREMY HARRIS
MAYOR

JAN NAOE SULLIVAN
DIRECTOR

LORETTA K.C. CHEE
DEPUTY DIRECTOR

July 29, 1999

1999/CLOG-4104(ST)
`99 EA Comments - Zone 9

Mr. Dane Wurlitzer, Project Manager
Hawaiian Cement
Campbell Industrial Park
91-055 Kaomi Loop
Kapolei, Hawaii 96707-1709

Dear Mr. Wurlitzer:

Draft Environmental Assessment (EA)
Hawaiian Cement Terminal at Kalaeloa/Barbers Point Harbor
Barbers Point, Ewa, Oahu
Tax Map Key: 9-1-14: por. 24

We have reviewed the Draft EA for the above-referenced project and appreciate the additional time to provide comments. Our comments are as follows:

**8.2 PLANNING PROCESS**

We concur that the proposed facility will require a Height Variance and a Major Special Management Area (SMA) Use Permit.

**2.1.1.2 Topography, Geologic Conditions - Potential Impact**

This section of the final EA should be expanded to provide general estimates on the amount of excavation required to prepare the project site and discuss what type of construction equipment will be used. This section should also discuss where and how excess excavation materials will be stored and or utilized.

The final EA should also elaborate on what mitigation measures constitute the Best Management Practices (BMPs) which are planned to control and avoid potential soil erosion and near-shore water contamination during construction.

**2.1.4.2 Air Quality - Potential Impact**

This section of the final EA should be expanded to discuss what mitigation measures are proposed, if any, during times when the prevailing trade winds are <u>not</u> carrying particulate emissions out to sea from unloading at-berth vessels.

**2.2.5.2 Visual and Aesthetic Resources - Potential Impact**

This section fails to provide illustrations that support the visual analysis discussed. This section of the final EA should be expanded to include figures which reveal the proposed facility from the various vantage points described. The final EA should be revised to provide illustrations of the typical lighting system improvements that are planned at this facility.

**2.3.2.1b Waste Water**

We acknowledge that there is no municipal sewer system which currently serves this harbor. Hawaiian Cement plans to use an onsite seepage pit, septic tank or holding tank for wastewater treatment and disposal for which we have no objections.

**2.4.2.2 Ewa Development Plan**

This section of the final EA should be expanded to describe how the proposed facility will conform to specific provisions of the new Ewa Development Plan relative to industrial development at Kalaeloa/Barbers Point Harbor.

**2.4.2.3 Special Management Area**

The final EA should include a site plan layout with the SMA line superimposed so that specific facilities can be identified to be located within the SMA. These facilities will be the subject of a major SMA Use Permit application.

**2.4.2.4 Zoning**

This section correctly indicates that a zone change (Application No. 98/Z-7) is currently pending before the Honolulu City Council for the land-side portion of the harbor as Bill 79(1998).

However, we would like to clarify that approximately 11.7 acres of the actual harbor basin expansion area will be rezoned from AG-2 General Agricultural District to P-2 General Preservation District, and approximately 1.741 acres of existing I-3 Waterfront Industrial District will be rezoned to P-2 District (see enclosed map).

Thank you for the opportunity to comment on this matter. Should you have any questions, please contact Steve Tagawa of our staff at 523-4817.

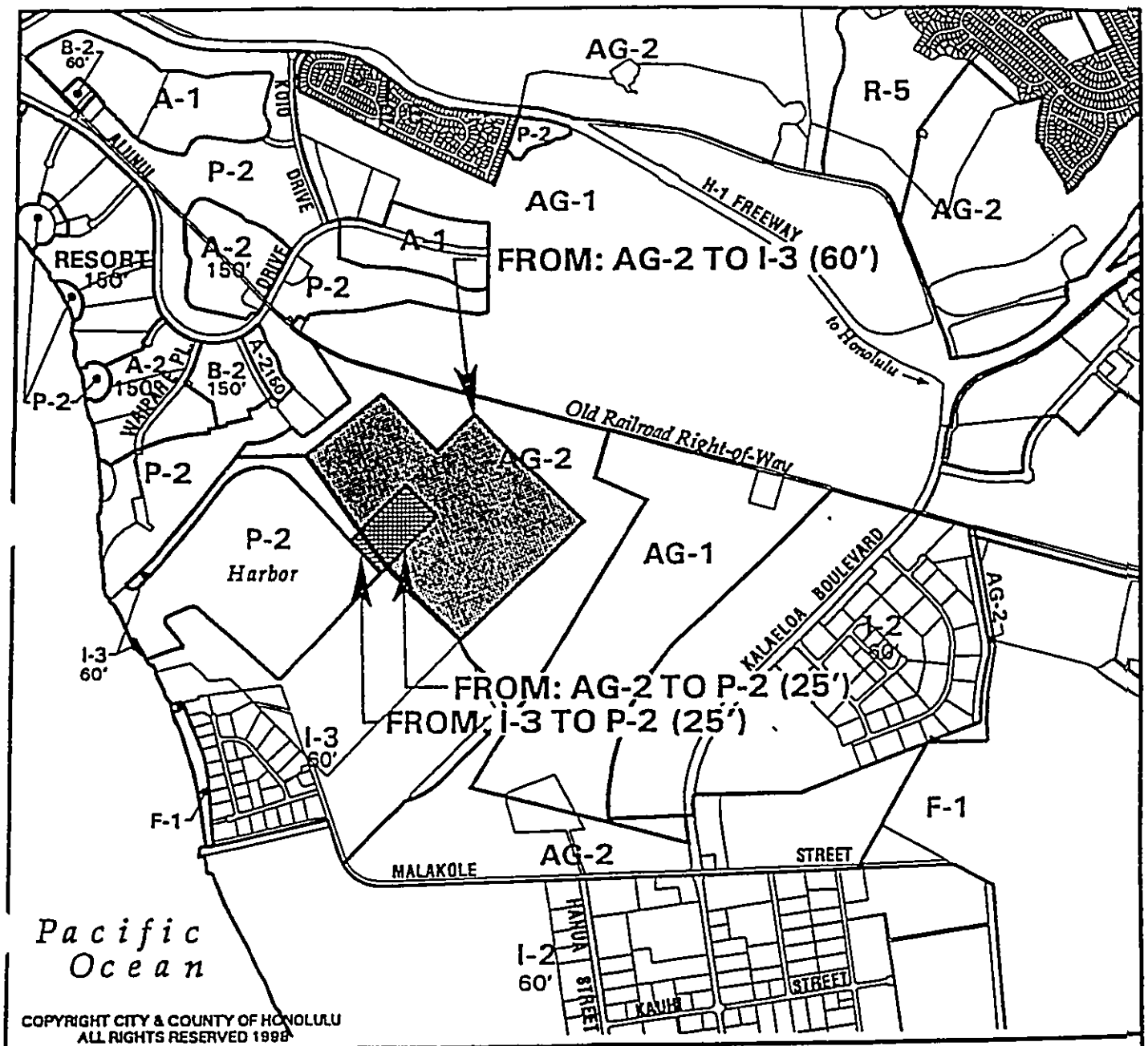
Very truly yours,

JAN NAOE SULLIVAN
Director of Planning
and Permitting

JNS:am
Encl.

cc: ✓David Atkin, Parsons Brinckerhoff
Quade & Douglas, Inc.
Glenn Soma, Harbors Division,
State Department of Transportation
Office of Environmental Quality Control

POSSE: 6033






0 1000 2000
Scale in Feet

# PORTION OF ZONING MAP NO. 14

## BARBERS POINT - NANAKULI

Lands situated on the Easterly side of Barbers Point Harbor approximately 2,550 feet Northeasterly of the Western end of Malakole Street.

APPLICANT: STATE OF HAWAII, DEPT. OF TRANSPORTATION, HARBORS DIVISION

TAX MAP KEY: 9-1-14: PORS. 24 & 27

FOLDER NO.: 98/Z-07

LAND AREA: APPROXIMATELY 142.6 ACRES

PREPARED BY: DEPARTMENT OF PLANNING AND PERMITTING
CITY AND COUNTY OF HONOLULU

PUBLIC HEARING: PLANNING COMMISSION 9/9/98 CITY COUNCIL

ORD. NO. 98/Z-6

EFF. DATE: EXHIBIT A BILL 79 (1998)

**HAWAIIAN CEMENT**

**Cement Division**

August 13, 1999

Ms.Jan Naoe Sullivan, Director
Department of Planning and Permitting
City and County of Honolulu
650 South King Street
Honolulu, Hawaii 96813

Subject: **Proposed Cement Terminal at Kalaeloa/Barbers Point Harbor**
**Kapolei, Oahu, Hawaii**
**Environmental Assessment (EA)**

Dear Ms. Sullivan:

Thank you for your comments (ref. letter 1999/CLOG-4104(ST)) on the Draft EA for our proposal to construct and operate a cement terminal at Kalaeloa/Barbers Point Harbor. We would like to provide the following responses to your comments.

Comment 1 (S.2 Planning Process). We will be submitting applications for the Height Variance and the Major SMA Use Permit shortly after announcement of the anticipated Final EA/Finding of No Significant Impact (FONSI).

Comment 2 (2.1.1.2 Topography, Geologic Conditions – Potential Impact). Section 2.1.1.2 will be revised in the Final EA to include the information requested. As will be indicated in this section, on-site and off-site excavation and grading will be approximately 100,000 cubic yards, which is small relative to the recently completed harbor expansion project. Section 2.5.5 (Construction Impacts, Site Runoff) will be revised to include information that we plan to use berms and catchment basins to control erosion and prevent sedimentation of the harbor. Harbors Division must approve these plans.

Comment 3 (2.1.4.2 Air Quality – Potential Impact).

As described in Section 2.1.4.2 of the Draft EA, particulate emissions from the operation of the terminal are estimated to be approximately 4.4 tons per year based on an annual throughput of 300,000 tons. In comparison, our Campbell Industrial Park Facility, which will be replaced by the terminal, has emission levels in the order of 55 to 105 tons per year. An emissions problem, generally measured by opacity, is unacceptable regardless of the wind direction. In the event of unacceptable emissions, which are established by the State Department of Health in the terminal operating permit, operations will be suspended. It is very unlikely that this will occur because particulate emissions at the terminal will be controlled through total enclosure of all possible sources, and the comprehensive deployment of dust collection systems throughout the facility.

CAMPBELL INDUSTRIAL PARK 91-055 KAOMI LOOP KAPOLEI, HAWAII 96707-1709 TELEPHONE (808) 673-4200 FAX (808) 673-4221

Comment 4 (2.2.5.2 Visual and Aesthetic Resources – Potential Impact). The Final EA will include visual simulations of the terminal superimposed onto photographs of the project site. These visual simulations will show that the cement terminal will be consistent with a commercial harbor facility. In addition, a photograph of the lighting system at Kalaeloa/Barbers Point Harbor will be included in the Final EA.

Comment 5 (2.3.2.1b Waste Water). Response not necessary.

Comment 6 (2.4.2.2 Ewa Development Plan). Section 2.4.2.2 will be revised in the Final EA to include the analysis requested.

Comment 7 (2.4.2.3 Special Management Area). A site plan of the terminal with the SMA line will be included with the Final EA.

Comment 8 (2.4.2.4 Zoning). The figure showing existing and future zoning will be corrected in the Final EA.

We are anticipating that the State of Hawaii Department of Transportation, Harbors Division, the Approving Agency of the EA, will render a Finding of No Significant Impact (FONSI) for our project. Shortly after this announcement, we will submit applications to the Department of Planning and Permitting for a Major SMA Use Permit and Height Variance. We will submit the Final EA/FONSI, and other necessary information, along with the applications.

If you have any questions, you are welcome to call me at 673-4226.

Sincerely yours,

Dane Wurlitzer
Project Manager

cc. Glenn Soma
State of Hawaii Department of Transportation
Harbors Division

David Atkin
Parsons Brinckerhoff Quade & Douglas, Inc.

THE ESTATE OF JAMES CAMPBELL

July 21, 1999

Mr. Dane Wurlitzer
Project Manager
Hawaiian Cement
Cement Division
Campbell Industrial Park
91-055 Kaomi Loop
Kapolei, HI 96707-1709

Dear Mr. Wurlitzer:

Draft Environmental Assessment ("EA") Proposed Cement Import Terminal at Kalaeloa/Barbers Point Harbor ("Harbor")

I have reviewed the EA with Campbell Estate management.

The Campbell Estate appreciates the opportunity to review the EA and has no specific comments.

Generally, however, the Campbell Estate is supportive of efforts aimed at maximizing the use of the Harbor as it benefits all of the people of Hawaii.

Thank you again for this opportunity.

Sincerely,

David H. Franzel
Legal Counsel

cc: Susan H. S. Graham

blk:01003400\K10126

1001 Kamokila Boulevard, Kapolei, Hawaii 96707 Phone (808) 674-6674 Facsimile (808) 674-3111 Website: www.kapolei.com

**HAWAIIAN CEMENT**

**Cement Division**

August 13, 1999

David H. Franzel, Esq.
Legal Counsel
The Estate of James Campbell
1001 Kamokila Boulevard
Kapolei, Hawaii 96707

Subject: **Proposed Cement Terminal at Kalaeloa/Barbers Point Harbor**
**Kapolei, Oahu, Hawaii**
**Environmental Assessment (EA)**

Dear Mr. Franzel:

Thank you for your review of the Draft EA for our proposal to construct and operate a cement terminal at Kalaeloa/Barbers Point Harbor.

We are anticipating that the State of Hawaii Department of Transportation, Harbors Division, the Approving Agency of the EA, will render a Finding of No Significant Impact (FONSI) for our project. Please let me know if you would like a copy of the Final EA/FONSI.

If you have any questions, you are welcome to call me at 673-4226.

Sincerely yours,

Dane Wurlitzer,
Project Manager

cc. Messrs. Glenn Soma
State of Hawaii Department of Transportation
Harbors Division

David Atkin
Parsons Brinckerhoff Quade & Douglas, Inc.

CAMPBELL INDUSTRIAL PARK 91-055 KAOMI LOOP KAPOLEI, HAWAII 96707-1709 TELEPHONE (808) 673-4200 FAX (808) 673-4221

**GTE Hawaiian Tel**
*Beyond the call*

GTE Hawaiian Telephone Company Incorporated
P.O. Box 2200 • Honolulu, HI 96841 • (808) 546-4511

July 26, 1999

Reply to
HIABY3

Mr. Dane Wurlitzer
Hawaiian Cement
Cement Division
Campbell Industrial Park
91-055 Kaomi Loop
Kapolei, HI 96707-1709

Dear Mr. Wurlitzer:

Subject: **Proposed Cement Import Terminal at Barbers Point Harbor – Draft Environmental Assessment**

Thank you for the opportunity to review and comment on the environmental assessment document for the **Proposed Cement Import Terminal at Barbers Point Harbor.** We have no comments to add to your document at this time.

If you have any questions or require assistance in the future, please call me at 840-1447.

Sincerely,

Paul K. Hanohano

Paul Hanohano
Designer – Access Design

**HAWAIIAN CEMENT**

**Cement Division**

August 13, 1999

Mr. Paul Hanohano
Designer – Access Design
GTE Hawaiian Telephone Company, Inc.
P.O. Box 2200
Honolulu, Hawaii 96841

Subject: **Proposed Cement Terminal at Kalaeloa/Barbers Point Harbor**
**Kapolei, Oahu, Hawaii**
**Environmental Assessment (EA)**

Dear Mr. Hanohano:

Thank you for your review (ref. letter HIABY3) of the Draft EA for our proposal to construct and operate a cement terminal at Kalaeloa/Barbers Point Harbor.

We are anticipating that the State of Hawaii Department of Transportation, Harbors Division, the Approving Agency of the EA, will render a Finding of No Significant Impact (FONSI) for our project. Please let me know if you would like a copy of the Final EA/FONSI.

If you have any questions, you are welcome to call me at 673-4226.

Sincerely yours,

Dane Wurlitzer
Project Manager

cc. Messrs. Glenn Soma
State of Hawaii Department of Transportation
Harbors Division

David Atkin
Parsons Brinckerhoff Quade & Douglas, Inc.

CAMPBELL INDUSTRIAL PARK 91-055 KAOMI LOOP KAPOLEI, HAWAII 96707-1709 TELEPHONE (808) 673-4200 FAX (808) 673-4221

KO OLINA
Lagoons • Resort • Marina

July 23, 1999

Mr. Dane Wurlitzer, Project Manager
Hawaiian Cement, Cement Division
Campbell Industrial Park
91-055 Kaomi Loop
Kapolei, Hawaii 96707-1709

**Subject:** **Draft Environmental Assessment for the Hawaiian Cement Terminal at Kalaeloa/Barbers Point Harbor, Oahu, Hawaii**

Dear Mr. Wurlitzer:

Thank you for the opportunity to review your draft environmental assessment (DEA) for the Hawaiian Cement Terminal. We have reviewed the following concerns about the proposed development and the existing harbor operations:

1. Noise impacts

We are concerned about noise from the project and the impact of that noise on the surrounding area, including the Fairways at Koolina and the proposed commercial and apartment development around the marina.

At the present time certain evening activities at the Harbor create noise loud enough to wake the residents at the Fairways. I live at the Fairways and have been awakened at night by certain noises. It would help if the noise from machinery operating in the evening could be reduced, either by reducing the volume on machinery controls or preventive maintenance to insure that machines run efficiently and quietly.

It would be useful if the Summary of Noise Levels at Sensitive Receptors, Table 2-6, page 2-17 of the DEA could be modified to convert the average noise levels presented to allow a comparison with the Community Noise Control Standards in Table 2-5, on page 2-16 of the DEA. Are the daytime and nighttime standards for the Class A district (West Beach Marina; Ko Olina Lagoon, and Honokai Hale/Nanakai Gardens) and the Class B district (Future Ko Olina Residences and Ko Olina Fairways Townhouses) being exceeded by the existing Harbor activities? What mitigation is planned to correct noise from the existing Harbor activities if the Department of Health (DOH) Community Noise Control Standards are being exceeded?

92-101 Maulua Place • Ko Olina, Hawaii 96707 • Phone: 808-673-7678 Facsimile: 808-673-7670

The noise levels taken at the sensitive receptors, as shown in Table 2-6 on page 2-17 of the DEA indicates that the 24-hour average

2. Air Quality

We appreciate the fact that existing national and state air quality standards are being met at the at the DOH monitoring stations at Kapolei, Makaiwa and West Beach. We are concerned however with the additional particulate emissions (dust) that may be generated by expansion and construction activities at the Harbor and the further impact by operational activities at the new piers and storage yards being developed. We are particularly concerned about the impact to the Ko Olina Marina and existing and future Ko Olina developments, because as mentioned in report the prevailing winds blow east-northeast and dust from the construction and operational activities at the Harbor would directly affect the marina and Ko Olina developments.

Does the Department of Transportation (DOT) have plans in place for mitigation of particulate emissions that may be generated by the expansion of the Harbor?

3. Visual Impact

As mentioned in the DEA, the Harbor can be seen from Honokai Hale/Nanakai Gardens, Ko Olina Fairways, some parts of Makakilo, and areas of Ko Olina planned for development. Does the DOT plan any mitigation measures to screen or soften the appearance of the Harbor from the sites mentioned earlier?

We would appreciate your response to our concerns and proposals to mitigate these concerns not only for the proposed development but also for impacts from the existing Harbor operations. We have mentioned possible mitigation measures for the noise impacts and would like to also offer a recommendation for mitigating visual and air quality impacts. Vertical Wiliwili could be planted in a tall thick strand along the northeast and northwest boundaries of the Harbor to offer visual relief and mitigation from dust generated by Harbor activities.

Should you have questions, please feel free to call me.

Very truly yours,

for Kevin Showe

cc: Mr. Glenn Soma, State of Hawaii Department of Transportation, Harbors Division
Mr. David Atkin, Parsons Brinckerhoff Quade & Douglas, Inc.

**HAWAIIAN CEMENT**

**Cement Division**

August 13, 1999

Mr. Kevin Stowe
*Ko Olina Lagoons • Resort • Marina*
92-101 Mauloa Place
Ko Olina, Hawaii 96707

Subject: **Proposed Cement Terminal at Kalaeloa/Barbers Point Harbor**
**Kapolei, Oahu, Hawaii**
**Environmental Assessment (EA)**

Dear Mr. Stowe:

Thank you for your comments (letter dated July 23, 1999) on the Draft EA for our proposal to construct and operate a cement terminal at Kalaeloa/Barbers Point Harbor. We would like to provide the following responses to your comments.

Comment 1. As a commercial port, Kalaeloa/Barbers Point Harbor operates 24-hours a day. Our import activities at the harbor have and will continue to be conducted during both daytime and nighttime hours because we need to minimize the time vessels spend in port. Other operators at the harbor also conduct both daytime and nighttime activities for similar reasons. As indicated in the Draft EA, noise to be generated by our future activities is not expected to exceed the Community Noise Control Standards (Standards) at the five existing and future noise sensitive sites identified in the EA. In addition, we will maintain our machinery so that they run as quietly as possible.

The information provided on Table 2-6 of the Draft EA is a summary (average, median, high and low) of one-hour average sound levels measured over a period of 24 hours. The Standards, as specified on Table 2-5 of the Draft EA, are absolute sound levels, not average sound levels. As noted in Section 2.1.5.2 of the Draft EA, noise from a particular source should not exceed the Standards at the receptor for more than ten percent of the time within any 20 minute period (i.e., total of two minutes within a 20 minute time period). Based on the results of our noise monitoring, it appears that noise levels at the sites may have exceeded the Standards during certain periods of the day. However, we do not think harbor activities played a major role in these results. For example, most of the noise at Honokai Hale / Nanakai Gardens is caused by traffic on Farrington Highway.

Your letter seems to be missing a portion of the third paragraph in this section. Please feel free to fax me at 673-4221 if you want to complete this thought.

CAMPBELL INDUSTRIAL PARK 91-055 KAOMI LOOP KAPOLEI, HAWAII 96707-1709 TELEPHONE (808) 673-4200 FAX (808) 673-4221

Comment 2. The majority of this comment concerning air quality seems to be for DOT. As for the proposed Hawaiian Cement facilities, we feel there will be an improvement over the existing clinker unloading operations. Best Management Practices (BMP's) will be employed terminal facility to minimize fugitive emissions during construction and operation.

Comment 3. This comment concerning visual impact seems to be directed at DOT. Hawaiian Cement intends to maintain a pleasant looking facility.

We are anticipating that the State of Hawaii Department of Transportation, Harbors Division, the Approving Agency of the EA, will render a Finding of No Significant Impact (FONSI) for our project. Please let me know if you would like a copy of the Final EA/FONSI.

If you have any questions, you are welcome to call me at 673-4226. I would also be willing to meet with you to further discuss the proposed operation and your air and noise quality concerns.

Sincerely yours,

Dane Wurlitzer,
Project Manager

cc. Messrs. Glenn Soma
State of Hawaii Department of Transportation
Harbors Division

David Atkin
Parsons Brinckerhoff Quade & Douglas, Inc.

# Chapter 4
# Finding of No Significant Impact

In accordance with Hawaii Revised Statutes, Chapter 343 and Hawaii Administrative Rules (HAR), Sections 11-200-9 and 11-200-11.2, the State of Hawaii Department of Transportation, Harbors Division (HDOT), as the approving agency, has rendered a Finding of No Significant Impact (FONSI) for the proposed Hawaiian Cement terminal at Kalaeloa/Barbers Point Harbor, Ewa, Oahu, Hawaii. *This FONSI will be announced in the State Environmental Notice, along* with an announcement of this Final Environmental Assessment (EA). This FONSI determination is partly based on an assessment of project impacts, as described in Chapter 2, in relation to the Significance Criteria specified in HAR 11-200-12(b). Other factors include comments on the Draft EA and Hawaiian Cement's responses (see Section 3.2). The Significance Criteria are italicized below, followed by brief assessments of the proposed project.

*Involves an irrevocable commitment to loss or destruction of any natural or cultural resource* - The proposed project will not cause the loss or destruction of any natural or cultural resource.

*Curtails the beneficial uses of the environment* - The proposed project will not curtail the beneficial uses of the environment. Recreational resources in Ko Olina Resort and fishing and other recreational activities along the shoreline will be unaffected.

*Conflicts with the State's long-term environmental policies or goals and guidelines expressed in Chapter 344, HRS, and any revisions thereof and amendments thereto, court decisions, or executive orders* - The proposed project is consistent with the environmental goals and objectives of the State of Hawaii.

*Substantially affects the economic or social welfare of the community or State* - The proposed project will not adversely affect social activities or economic activities in any neighborhood or community in the region or the island.

*Substantially affects public health* - The proposed project will not adversely affect public health. The terminal will be located in area zoned Waterfront Industrial by the City and

County of Honolulu, and is an allowable use under this zoning. Therefore, there will be no residences adjacent to the terminal. The only possible threat to public health is from particulate (cement dust) emissions. However, at peak throughput, the terminal will generate only three and a half tons of particulates per year. In comparison, the existing Hawaiian Cement facility at Campbell Industrial Park (CIP) generates 60 to 110 tons of particulates per year. The terminal will replace the facility at CIP, resulting in a substantial net decrease in particulate emissions. An air quality permit will be obtained for the new facility.

*Involves substantial secondary impacts* - The proposed project will not lead to other substantial actions by Hawaiian Cement or other entities to cause secondary impacts.

*Involves substantial degradation of environmental quality* - The proposed project will not affect the environmental quality of the harbor, the region or the island.

*Is individually limited but cumulatively has considerable effect upon the environment or involves a commitment for larger actions* - Excavation of the main basin of Kalaeloa and expansion of the basin have permanently altered the environment of the project site and the surrounding area. The proposed project will add very little cumulative impact to previous impacts already experienced at the project site. For example, the harbor is now an "industrial waterfront" environment, and the proposed project is consistent with that environment. In addition, the proposed project will not cause commitments for larger actions.

*Substantially affects a rare, threatened or endangered species, or its habitat* - There are no rare, threatened or endangered plant or animal species in the area directly affected by the proposed project.

*Detrimentally affects air or water quality or ambient noise levels* - The proposed project will improve regional air quality because the terminal will replace Hawaiian Cement's facility at CIP, which will lead to a reduction of 55 to 105 tons of particulates per year in the region. The proposed project will not adversely affect the surface and ground water resources at

the site. Noise modeling at sensitive receptor sites near the harbor indicates that the noise from the terminal will not be noticeable at these sites.

*Affects or is likely to suffer damage by being located in an environmentally sensitive area such as a floodplain, tsunami zone, beach, erosion-prone area, geologically hazardous land, estuary, fresh water, or coastal waters* - Kalaeloa/Barbers Point Harbor is a working commercial port, and is not an environmentally sensitive area.

*Substantially affects scenic vistas and viewplanes identified in county or state plans or studies* - Although the terminal will be visible from certain locations at Ko Olina Fairways Townhouses, Honokai Hale / Nanakai Gardens, Makakilo and West Beach Marina, Kalaeloa/Barbers Point Harbor is not considered to be a scenic resource. The terminal structures are consistent with the Waterfront Industrial zoning of the harbor.

*Requires substantial energy consumption* - The proposed project will lead to a net reduction in energy demand because the terminal will require less power than the existing CIP facility.

# Chapter 5
# References

AECOS, Final Report, Water Quality Monitoring Study, Barbers Point Deep Draft Harbor, Oahu, Hawaii, 1986

B. D. Neal & Associates, Air Quality Study for the Proposed Barbers Point Harbor Expansion Project, July 1992

Bruner, Phillip, Letter Report on Faunal Survey of Land Proposed for an Expansion of Barbers Point Harbor, Ewa, Oahu, November 15, 1991

Char & Associates, Botanical Consultants, Botanical Survey for Proposed Barbers Point Harbor Expansion, Ewa District, Oahu, January 1992

City and County of Honolulu, General Plan, Objectives and Policies, 1992

City and County of Honolulu, Planning Department, Ewa Development Plan, March 1996

City and County of Honolulu, Revised Ordinances of Honolulu, as amended

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Cultural Surveys Hawaii, An Archaeological Assessment for the Proposed Barbers Point Harbor Expansion (84 acres), Honouliuli, Ewa, Oahu, July 1993, revised January 1994

Cultural Surveys Hawaii, Archaeological Inventory Survey of the Proposed Barbers Point Harbor Expansion (TMK 9-1-14:02), revised September 1994

Dames & Moore for CIP/Kahe Area Air Quality Task Force and State Department of Health, Air Quality Planning Strategies to Accommodate Growth in the Campbell Industrial Park/Kahe Area, Preliminary Draft Report, January 27, 1999

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Estate of James Campbell, Kapolei Area Long Range Master Plan, Ewa, Oahu, Hawaii, October 1997

M&E Pacific, Inc., Revised Environmental Impact Statement for Barbers Point Harbor on Oahu, June 1978

Mink, John F., George A.L. Yuen and John Y.C. Chang, Groundwater Resources and Sustainable Yield Ewa Plain Caprock Aquifer, Oahu, Hawaii, July 1988

Pacific Planning & Engineering Inc., Traffic Impact Assessment Report for Barbers Point Harbor Expansion, July 2, 1992

Parsons Brinckerhoff Quade & Douglas for the State of Hawaii Department of Transportation Harbors Division, Basin Expansion and Tug Pier at Barbers Point Harbor, Oahu, Job H.C. 1823 and Future Pier and Storage Yard Improvements at Barbers Point Harbor, Ewa, Oahu, Hawaii: Final Supplement Environmental Impact Statement, January 1995

State of Hawaii Department of Health, Clean Air Branch, Hawaii Air Quality Data, January 1994- December 1996

State of Hawaii Department of Transportation, 2010 Master Plan for Barbers Point Harbor, February 1991

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State of Hawaii Department of Transportation, Harbors Division, Oahu Commercial Harbors 2020 Master Plan, May 1997

The State Legislature, Hawaii Revised Statutes, as amended

U.S. Army Corps of Engineers, Barbers Point Harbor Modification Study, Island of Oahu, Hawaii, Final Report, August 1991

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U.S. Department of Agriculture, Soil Conservation Service in cooperation with The University of Hawaii, Agricultural Experiment Station, Soil Survey of Islands of Kauai, Oahu, Maui, Molokai, and Lanai, State of Hawaii, August 1972

U.S. Department of the Interior, National Park Service, National Register of Historic Places Inventory, Nomination Form, Historic Oahu Railway and Land Company Right of Way, March 1974

U.S. Fish & Wildlife Service, Draft Recovery Plan for *Chamaesyce skottsbergii* var. *skottsbergii* and *Achyranthese splendens* var. *rotundata*, 1994

Wanket, William E., Final EIS, Kapolei Business-Industrial Park, Volumes I & II, April 1990

# APPENDIX A

## Barbers Point Harbor Terminal Housekeeping Standards

# BARBERS POINT HARBOR TERMINAL
# HOUSEKEEPING STANDARDS

**Prepared by:**
**Hawaiian Cement - Cement Division**

## Ship Unloader

Sweeping and area policing shall be performed daily when there are maintenance or ship unloading activities. The ship unloader structure, the dock area, and the pipeline hatch areas shall be inspected at a minimum of once per day. No rubbish or spilled cement shall be allowed to accumulate.

Special attention shall be given to lubrication services to ensure purged grease or spilled oil is disposed of properly. Excess grease shall be scraped up and oil spills shall be cleaned up with an absorbent. Daily inspections shall include a special emphasis for petroleum products.

## Pipeline Easement

The pipelines shall be inspected daily when unloading ships. The dock area and above ground pipelines to the domes shall be included. Special attention shall be given to flange connections, valves, and elbows.

Hatches along the dock shall be barricaded or covered for safety reasons. Under no circumstances shall a hatch be left unattended with the cover off.

## Storage Domes

The tops of the domes shall be inspected daily to ensure there is no escape of cement into the headhouse. The dust collector and ventilating fans shall be checked for proper operation. Sweeping shall be performed in the headhouse daily. Grease and oil spills shall be cleaned up immediately.

The tunnels under the domes shall be inspected daily. Grease and oil spills shall be cleaned up immediately. Spilled cement shall be cleaned up daily. Weekly sweeping shall be performed to control dust accumulation.

The area around the sump pumps shall be checked daily. Sump pump operation shall be checked weekly.

## Compressor Room

All equipment in the compressor room shall be checked daily. Lubricators and condensate catchment systems shall be serviced daily with any spills or leaks cleaned up immediately. The oil storage area shall also be inspected. The compressor room shall be swept daily.

**Truck Load-out**

The operators station shall be swept daily and mopped weekly. Rubbish cans in the operators station shall be dumped daily. The grounds around the scales and under the truck access station shall also be swept at the end of each day.

The truck load-out tower shall be inspected daily to make sure all equipment is operating properly. If a problem develops with one of the loading spouts, that lane should be shut down until the problem is corrected.

**Barge Loading Silo**

The transport system and top of the silo shall be inspected at least once while running. Any leaks or spills must be corrected immediately. The dust collector on top of the silo must be checked for proper operation.

The transport system under the silo and barge loading piping will also be inspected while running. Care should be taken upon connecting and disconnecting hoses to make sure no cement is spilled. Sweeping under the silo shall be performed once per week or with every operation. Grease and oil spills shall be cleaned up immediately.

**Dust Collection**

Dust collector exhausts shall be observed daily to make sure there are no visible emissions. The systems being ventilated shall also be observed to make sure there is adequate control. Periodic documented maintenance inspections shall be performed as per the following table.

| Location | Monthly | Quarterly | Six Months |
|---|---|---|---|
| Ship Unloader | Prior to every ship | | |
| Top of Domes | | O | |
| Under Domes | O | | |
| Truck Load-out | O | | |
| Barge Silo | | If used frequently | O |

**Disposal Material**

Cement spillage should be reclaimed for use as much as possible, but should be disposed of if there are any questions about the quality. Questionable cement and chunk material can only be put in the dumpster in small quantities. Anything larger than 55 gallon capacity shall be kept containerized until it is transported to a landfill.

Small amounts of oil saturated absorbents can be put in the dumpster as long as they are contained in a leak proof container. Disposal of large quantities of petroleum products must be handled by a licensed disposal facility.

Scrap steel and other metals shall be accumulated in a small scrap bin until we have enough to send to a metal recycler.

Miscellaneous rubbish generated on site shall be properly disposed of in a dumpster. Food type rubbish shall be contained in covered trash receptacles only. Unknown personnel shall not be allowed to discard outside rubbish in our dumpster.

**Liquid Waste**

Precautions shall be taken to ensure rainwater or washdown water does not carry away any contaminates such as oil and grease. Extensive vehicle washing with water is not permitted on this site. Vehicles must be washed at another approved location.

Precautions shall also be taken to make sure cooling system fluids are handled and disposed of properly. Under no circumstances shall coolant be allowed flow uncontained.

# APPENDIX B

**Special Management Area Review Guidelines**
**(City and County of Honolulu, Revised Ordinances Section 25-3.2)**

"Shoreline survey" means a survey map showing the shoreline as determined by the state board of land and natural resources in accordance with HRS Section 205A-42, and the rules adopted pursuant thereto.

"Special management area" means the land extending inland from the shoreline, as established in this chapter and delineated on the maps established by the council and filed with the council and agency pursuant to HRS Section 205A-23.

"Special management area minor permit" means an action by the agency authorizing development, the valuation of which is not in excess of $65,000.00 and which has no substantial adverse environmental or ecological effect, taking into account potential cumulative effects.

"Special management area use permit" means an action by the authority authorizing development, the valuation of which exceeds $65,000.00 or which may have a substantial adverse environmental or ecological effect, taking into account potential cumulative effects.

"Structure" includes, but is not limited to, any building, road, pipe, flume, conduit, siphon, aqueduct, telephone line and electrical power transmission tower and distribution line.

"Valuation" shall be determined by the agency and means the estimated cost to replace the structure in kind, based on current replacement costs, or in the cases of other development, as defined in this section, the fair market value of the development. (Sec. 33-1.3, R.O. 1978 (1987 Supp. to 1983 Ed.))

## Article 2. Special Management Area

Sections:



### Sec. 25-2.1 Adoption.

The special management area, as established by the council in this chapter as shown on the special management area maps, which maps are adopted and made a part of this chapter and filed with the council on the effective date of this chapter, shall be the city and county's official special management area to be administered and enforced by the director under the provisions of this chapter. (Sec. 33-2.1, R.O. 1978 (1987 Supp. to 1983 Ed.))

### Sec. 25-2.2 Included area.

The special management area shall include those areas of the island of Oahu so designated on the maps; the islands within three miles offshore of Oahu, including but not limited to those islands shown on the maps; and the northwestern Hawaiian Islands, which include Nihoa, Necker Island, French Frigate Shoals, Gardner Pinnacles, Maro Reef, Laysan Island, Lisianski Island, Pearl and Hermes Atoll and Kure Atoll. (Sec. 33-2.2, R.O. 1978 (1987 Supp. to 1983 Ed.))

## Article 3. Objectives and Policies, Review and Procedural Guidelines

Sections:



### Sec. 25-3.1 Objectives and policies.

The objectives and policies of this chapter shall be those contained in HRS Section 205A-2. (Sec. 33-3.1, R.O. 1978 (1987 Supp. to 1983 Ed.))

### Sec. 25-3.2 Review guidelines.

The following guidelines shall be used by the council or its designated agency for the review of developments proposed in the special management area.

(a) All development in the special management area shall be subject to reasonable terms and conditions set by the council to ensure that:
  (1) Adequate access, by dedication or other means, to publicly owned or used beaches, recreation areas and natural reserves is provided to the extent consistent with sound conservation principles;
  (2) Adequate and properly located public recreation areas and wildlife preserves are reserved;
  (3) Provisions are made for solid and liquid waste treatment, disposition and management which will minimize adverse effects upon special management area resources; and
  (4) Alterations to existing land forms and vegetation; except crops, and construction of structures shall cause minimum adverse effect to water resources and scenic and recreational amenities and minimum danger of floods, landslides, erosion, siltation or failure in the event of earthquake.

(b) No development shall be approved unless the council has first found that:
  (1) The development will not have any substantial, adverse environmental or ecological effect except as such adverse effect is minimized to the extent practicable and clearly outweighed by public health and safety, or *compelling public interest*. Such adverse effect shall include, but not be limited to, the potential cumulative impact of individual developments, each one of which taken in itself might not have a substantial adverse effect and the elimination of planning options;
  (2) The development is consistent with the objectives and policies set forth in Section 25-3.1 and area guidelines contained in HRS Section 205A-26;
  (3) The development is consistent with the county general plan, development plans and zoning. Such a finding of consistency does not preclude concurrent processing where a development plan amendment or zone change may also be required.

(c) The council shall seek to minimize, where reasonable:
  (1) Dredging, filling or otherwise altering any bay, estuary, salt marsh, river mouth, slough or lagoon;
  (2) Any development which would reduce the size of any beach or other area usable for public recreation;
  (3) Any development which would reduce or impose restrictions upon public access to tidal and submerged lands, beaches, portions of rivers and streams within the special management area and the mean high tide line where there is no beach;
  (4) Any development which would substantially interfere with or detract from the line of sight toward the sea from the state highway nearest the coast;
  (5) Any development which would adversely affect water quality, existing areas of open water free of visible structures, existing and potential fisheries and fishing grounds, wildlife habitats, or potential or existing agricultural uses of land.

(Sec. 33-3.2, R.O. 1978 (1987 Supp. to 1983 Ed.))

**Sec. 25-3.3 Procedural guidelines.**

All development within the special management area shall be subject to assessment by the agency under the provisions of this chapter. Such assessment shall be pursuant to the objectives, policies and guidelines set forth herein.

(a) Consultation.
  (1) Any applicant contemplating development within the special management area shall contact the agency for information regarding procedures and general information which may have a direct influence on the applicant's proposed development.
  (2) Any development which has been assessed under the National Environmental Policy Act or under HRS Chapter 343, and for which a negative declaration has been filed or a required EIS has been accepted may apply directly for a special management area use permit pursuant to Section 25-5.1 to waive the assessment procedures in subsection (b) of this section.

(b) Assessment Procedures.
  (1) Filing. Any applicant subject to assessment shall be responsible for filing the following with the agency:
    (A) A completed application form (to be obtained from the agency);
    (B) A tax map key identification of the property on which the applicant proposes such person's development;
    (C) A plot plan of the property, drawn to scale;

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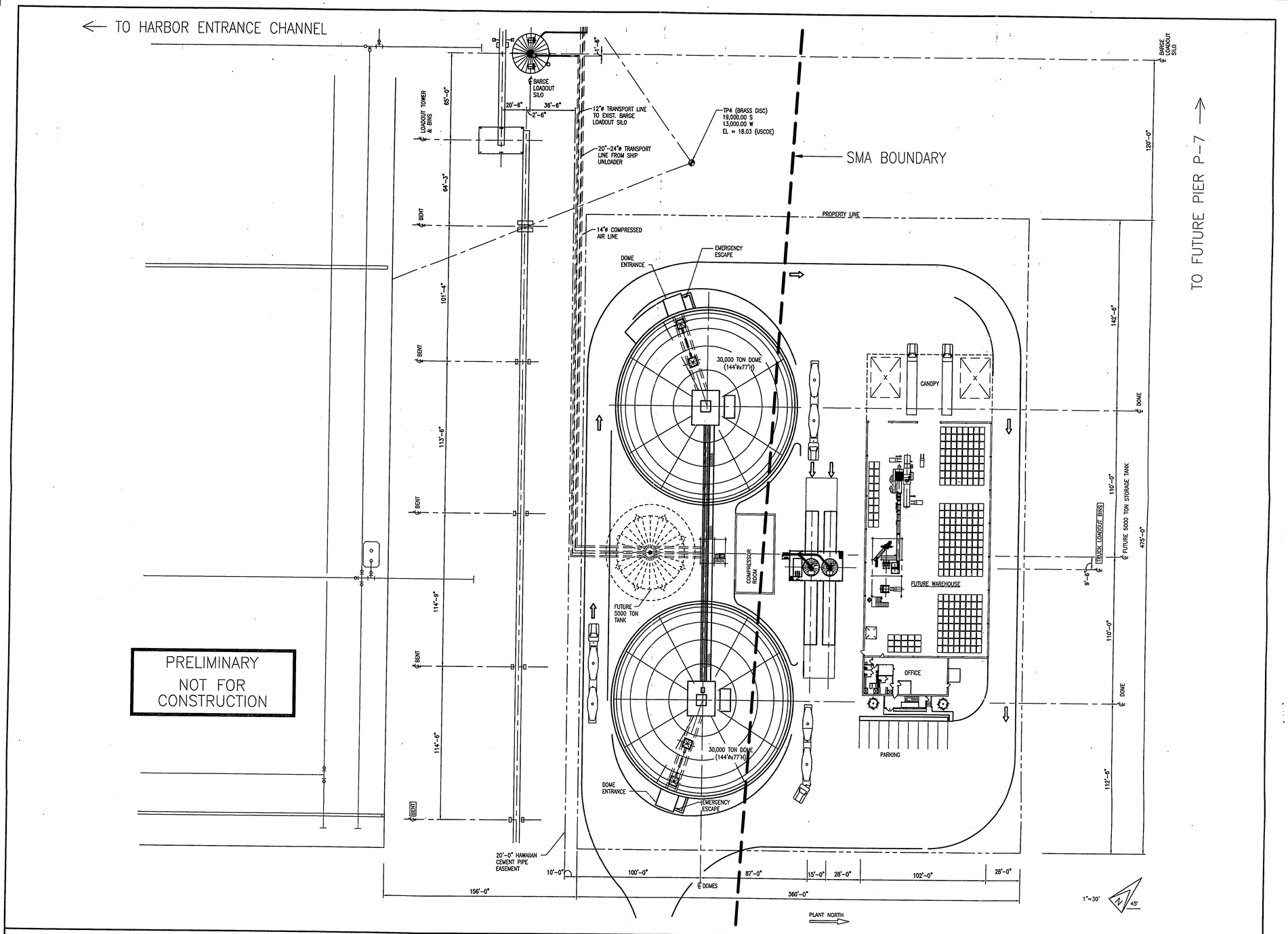


APPENDIX C – SITE PLAN OF HAWAIIAN CEMENT TERMINAL AT KALAELOA/BARBERS POINT HARBOR AND ESTIMATED LOCATION OF SMA BOUNDARY