

JOHN WAIHEE
GOVERNOR



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HARBORS DIVISION
79 SO. NIMITZ HWY. • HONOLULU, HAWAII 96813-4898

REX D. JOHNSON
DIRECTOR
DEPUTY DIRECTORS
JOYCE T. OMINE
AL PANG
JEANNE K. SCHULTZ
CALVIN M. TSUDA
IN REPLY REFER TO:

September 21, 1992

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OFFICE OF ENVIRONMENTAL
QUALITY CONTROL

To: Brian Choy, Director
Office of Environmental Quality Control

From: *[Signature]* Rex D. Johnson
Director of Transportation *[Signature]*

Subject: NEGATIVE DECLARATION - FORT ARMSTRONG CONTAINER
TERMINAL, LTD. (FACT)

In accordance with Act 241, SLH 1992, we have completed the formal environmental assessment (EA) 30-day review period for the subject project. Since we have not received any comments from the public, we have determined that the action will not have a significant impact. Therefore, we are submitting it as a Negative Declaration (NEG/DEC). We have enclosed the original plus four (4) copies of the EA on the proposal and a completed OEQC Form for publication in the OEQC Bulletin.

Should you have any question on the action, please contact Robert Nagao of our Harbors Division at 587-1880.

Enc.

c: Hawaii Stevedores - Murray Grune

1992-10-08-0A-~~FEA~~-Fort Armstrong
Container Terminal Improvements

OCT 8 1992

ENVIRONMENTAL ASSESSMENT

for

Fort Armstrong
Container Terminal Improvements

at

Pier 1, Honolulu Harbor, Oahu

August 1992

Fort Armstrong Container Terminal
Environmental Assessment

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CHAPTER I
AGENCIES CONSULTED

The following agencies were consulted during the preparation of this environmental assessment:

Department of Transportation
Harbors Division
Airports Division
Highways Division

Office of State Planning
— Department of Business, Economic Development and Tourism

Honolulu Community Development Authority

Department of Land & Natural Resources

Department of Health

U. S. Treasury
U. S. Customs Service

City and County of Honolulu
Department of General Planning
Department of Land Utilization

Federal Aviation Administration
Airports District Office

CHAPTER II

DESCRIPTION OF THE PROPOSED ACTION

General Description

Fort Armstrong Container Terminal, Ltd. (FACT), a joint venture of Eagle Marine Services, Ltd. (EMS), Nippon Yusen Kaisha (NYK Line) and Hawaii Stevedores, Inc. (HSI), proposes to improve the cargo loading and unloading facilities of Pier 1 at Fort Armstrong. (The location of Fort Armstrong and existing and proposed facilities are shown in Figures 1 through 4.) Two container handling diesel cranes will be mounted on steel platforms which will be constructed to span the existing crane rail foundations. Existing rail foundations will not be affected; new rails will be installed. The cranes will be similar to those currently used for loading and unloading containers at Pier 1, except they will be larger, mounted on platforms and permanently stationed at Pier 1.

FACT is currently negotiating a five year lease with the State Department of Transportation Harbors Division for its operations at Fort Armstrong. The lease will include three areas of exclusive use for U. S. Customs offices, an area of reefer outlets and the new crane rails.

Frequency of Service

Currently NYK's vessels arrive in Honolulu from the Far East every other week before returning to the Far East. The ships are tentatively scheduled to arrive in Honolulu on Thursday and depart on Friday. They will be berthed at Pier 1 approximately 30 hours.

Additionally, various other lines, such as Columbus, Blue Star, PM&O, HML and Aloha Cargo Transport are arriving from the West Coast as well as other Pacific and Orient ports, which currently use the pier on a monthly basis, will be served by the two new cranes.

The vessels operated by the shipping lines referred to above in this section range in length from 380 to 560 feet. Future vessels by the third year may include vessels over 800 feet in length.

Cargo

Currently, there are approximately 1,650 containers per month transferred through Pier 1. Projections indicate that this amount may increase to 2,795 containers per month by the third year of operation. These containers will arrive from and return to the Orient, New Zealand, Australia and Pacific West Coast ports.

Approximately 90% of the current containers will be destined for Honolulu. The remaining 10% will be transshipped to and from the outer islands.

Terminal Operations

The terminal will normally be open Monday through Friday from 7:00 AM to 5:00 PM for pick up and delivery of containers. Arriving vessels will be worked on a 24-hour basis while they are in port by the two diesel powered cranes. All of the containers coming off the ship will be placed on the ground and transferred onto chassis for pickup. The vast majority of containers returning to the yard will be empty and will be block stowed (stacked 3 or 4 high) on the ground.

Most of the inbound containers will be picked up and delivered to the consignees within 48 to 72 hours after discharge from the vessel. Currently, based on a Monday to Saturday work week, there are approximately 50 containers delivered thru the gate per day. The projection for the third year of operation is 105 containers delivered thru the gate per day.

Outbound empties will return to the yard on a fairly even basis throughout the week. Most of the tractors returning empty containers will also pick up loaded containers.

Social and Economic Characteristics

Construction costs for the improvements are estimated to be \$500,000. Principle items included in this cost are 800 feet of new track and two approximately 30'x30' steel platforms upon which the two new cranes will be mounted. Labor for construction will be purchased locally. FACT will have a staff of approximately 6 people in Honolulu, most of whom will be hired locally. Three may be located at Fort Armstrong while the remainder may be located in a separate sales and administration office.

FACT will contract with Hawaii Stevedores, Inc. (HSI) for stevedoring services as well as container and chassis maintenance and repair. By the third year of operations, Hawaii Stevedores estimates that 14 additional people will be hired to accommodate the increased workload, an increase of 10% over their present 140 employees.

Environmental Characteristics

The proposed cargo handling improvements will have no effect on water quality, flora, fauna or vegetation. There will be increases in traffic when a vessel has just made a port call, but no greater than that which is currently experienced. In the third year of operations, there will be slight increases over current

levels. There will be some minor impacts on air quality from the additional traffic during ship off loading but not enough to cause a violation of air quality standards and no more than is currently experienced. There will be no increased noise during operations.

Platform Mounted Cranes

The cranes will be mounted on fixed rail platforms and have elevated cabs with a total operating boom height of 150 feet. The height of the crane is well below the imaginary surfaces set forth in Federal Aviation Regulations, Part 77, concerning interference with aircraft traffic. A regulation aircraft warning light located at the top of each crane's boom will operate continually during hours of darkness. The new cranes will be visible at the pier at all times opposed to the present mobile crane operation in which the cranes are at the pier only when working the ship. The cranes which are planned to be mounted on the approximately 30'x30' steel platforms are two 4100W Series 2 Manitowoc cranes. Figure 4 is an elevation of the crane as it will appear working alongside a ship.

CHAPTER III

DESCRIPTION OF THE AFFECTED ENVIRONMENT

Physical Characteristics

Location

Fort Armstrong is located in the center of the Honolulu Waterfront, between downtown Honolulu and Kewalo Basin (see Figure 1). The 75-acre complex includes Piers 1 and 2 and has container and general cargo berths, warehouses, sheds, open paved storage areas for container back up and marshalling, and Foreign Trade Zone No. 9. The area also contains the U. S. Immigration Station, the Department of Health Building, and the Ala Moana Pumping Station, all historic buildings.

Pier 1 has a berth length of 1,266 feet and a yard area of 1,265,000 square feet. It has 78,000 square feet of shed area. Depth at the pier is 36 to 40 feet (Port Hawaii Handbook 1988-1989).

Geology and Soils

Most of the Honolulu waterfront is underlain by reef limestone 5 to 20 feet below mean sea level. Soft lagoonal deposits made up of sand, silt, clay and occasional boulders are found above the ancient reef, covered by 5 to 10 feet of dredged coral fill. Incinerator and sanitary landfill overlay the dredged coral fill and lagoonal deposits.

The near-surface soils are composed of man-made fills to a depth about 10 feet below the existing ground surface. Underlying the fills are lagoon deposits consisting of coralline gravels and sands, and silts to depths of 40 to 50 feet. Beneath the lagoon deposit is a coralline reef, the thickness of which varies from 12 to 30 feet. The man-made fills are highly variable and contain numerous cobbles and boulders.

Flood Hazard

According to the Civil Defense Tsunami Inundation map of Oahu, the Pier 1 portion of the site is within the projected inundation zone. According to the Federal Flood Insurance Rate map, the area is designated "C - Area of Minimal Flooding".

Water Quality

Water quality near Pier 1 and in the harbor area is generally good. The proposed project will have no effect on water quality.

Flora and Fauna

The project site is presently in industrial use. There is no natural vegetation and no native fauna in the project site.

Air Quality

Because of favorable climatic conditions and a lack of heavy industry, air quality in Honolulu is relatively clean and free from pollutants, with only occasional violations of air quality standards.

Noise

The nearest potentially noise sensitive areas to the project site are the Waterfront-Tower highrise condominiums on South Street; the Harbor Square Condominium on Nimitz Highway between Alakea and Richards Streets, and the Family Camping area at Sand Island State Park across Honolulu Harbor Channel.

The noise environment at the highrise condominiums is normally dominated by motor vehicular traffic. Present maritime operations from Pier 1 and 2 can be audible at the condominium and the park when lulls occur in traffic and in-between aircraft flights. Loading and unloading ships and barges may occur during the stevedores' second shift from 6:00 PM to 5:00 AM. Diesel powered mobile cranes, commonly used in loading and unloading ships and barges, also may be audible in the environs at times. The auxiliary power systems in some ships may be heard, particularly if high velocity gas is exhausted at elevated heights through stacks.

The noise from existing maritime operations at Fort Armstrong should usually be in compliance with the State Department of Health (DOH) noise regulations. The project area was zoned industrial prior to the development of nearby condominiums and the park. DOH regulations state that the allowable noise levels shall apply subject to the order of precedence in which land uses were initiated. Industrial limits apply to the site even if new residential units are developed close to the facility. The regulations do not apply to "boat whistles, horns . . . and boats operating in any harbor" (Chapter 43, Administrative Rules, Title 11, 1981, Community Noise Control for Oahu, Department of Health).

Aesthetics

Views of Pier 1 are principally intermittent roadway views as seen from Nimitz Highway/Ala Moana Boulevard and stationary views from Sand Island. In describing the downtown area, the Coastal View Study notes that

Stationary views from Sand Island are particularly significant in capturing the visual quality of this area and in illustrating the unity between the built environment and Koolau Mountains in the background. These views are vivid and demonstrate high urban activity (Coastal View Study, 1987).

Pier 1 is presently used for loading and unloading cargo and has the open areas, warehouses, sheds, vehicles and miscellaneous items usual for a harbor area.

Social and Economic Characteristics

Land Ownership and Use

With the exception of the area which contains the U. S. Immigration Station and the Department of Health Building, all of Fort Armstrong is owned by the Hawaii Community Development Authority, State of Hawaii, and is under the jurisdiction of the Harbors Division of the Department of Transportation. Fort Armstrong lies within the Kakaako Community Development District Makiki Area (see Figure 1) and is under the jurisdiction of the Hawaii Community Development Authority. All of the state-owned land on the site is zoned Waterfront Service (W).

Honolulu Harbor is the major commercial harbor in Hawaii and among the ten largest container handling ports in the United States. Large container ships, tankers, and ocean-going and inter-island barges are on the move constantly night and day, loading and discharging cargo around the clock (Port Hawaii Handbook 1988-1989).

Fort Armstrong has been used for cargo handling for a long time. The first gantry crane was set up on the site in 1960 to accommodate the first all-container vessel to arrive in Hawaii. Later, three additional cranes were erected and were used continuously until 1981 when Matson transferred its container operations and cranes to Sand Island (Ampersand, 1981). Principal cargo for Pier 1 is containers, autos, lumber, heavy machinery, paper products, and general cargo. Users include ACS Agencies, Alaska Cargo Transport, Hawaii Pacific Marine Lines, Blue Star Line, Columbus Line, NYK Line, Hawaiian Marine Lines, PM&O Lines, and U. S. Customs.

The long-range Honolulu Waterfront Master Plan developed by the Office of State Planning designates Pier 1 and 2 area of Fort Armstrong for passenger cruise ship terminals and deep draft lay berths areas for itinerant vessels. The short-range plan (5 to 10 years) supports existing directions within Honolulu Harbor and improved efficiency of specific maritime operations. According to the Plan, key maritime elements within the next 5 to 10 years include:

Maintaining the existing container yard area at Fort Armstrong as an interim cargo handling facility, providing the continuation of roll-on/roll-off activities and possibly reinstating gantry container operations if the need exists for such an operation at this facility.

Land use of the areas adjacent to Fort Armstrong is presently primarily industrial and commercial. The other major current use is public. Both the State Department of Health and U. S. Department of Immigration have buildings and offices at Fort Armstrong. On the other side of Fort Armstrong across the ship channel is Sand Island State Park. However, with the redevelopment of Kakaako, residential uses are returning to the area.

Historic/Cultural Resources

There are two historic buildings at Fort Armstrong, the State Department of Health and the U. S. Immigration Station. Neither will be affected by the proposed project.

Demography and Employment

As noted earlier, Fort Armstrong lies within the boundaries of the Kakaako Community Development District Makai Area. At present the general mix of the land uses in the Makai Area consists of maritime industrial cargo and warehousing operations at Fort Armstrong, light industrial, public facility and commercial office activities in the central portion of the peninsula and recreational uses along the shoreline.

Implementation of the Makai Area Plan will change a predominantly older industrial/commercial area into a land use scheme which includes cultural, recreational, commercial and maritime related uses. Specific projects within the Makai Area will generate both short-term employment during the construction, and long-term employment during the operational phase. At build out of the Makai Area Plan, it is anticipated that based on 2,530,000 sq. ft. of the commercial floor area, an additional 12,650 employees can be estimated for this area. (1990 Kakaako Makai Area Plan Final Supplemental EIS)

The Kakaako Plan is currently being revised and updated to incorporate the recommendations of the Master Plan for the Honolulu Waterfront being prepared by the Office of State Planning.

Traffic and Utilities

Traffic

The Kakaako makai area where Fort Armstrong is located is

served by one major East-West arterial street, Ala Moana Boulevard, and several mauka-makai collector/distributor roads such as Punchbowl Street, South Street, Cooke Street and Ward Avenue. Figure 1 shows the major arterials.

From Kakaako to Waikiki, Ala Moana Boulevard has three lanes in each direction. Exclusive left turn lanes are provided in the medians at major intersections with the exception of a left turn from Ala Moana Boulevard to Forrest Avenue when travelling in the Ewa direction. Separate phases are given to left turn movements at signalized intersections. The posted speed limit on Ala Moana Boulevard is 35 miles per hour (mph).

On-site utilities serving the container yard include electrical feeders, conduits and pull boxes, telephone conductors, conduits and pull boxes; storm drainage pipelines and manholes; water lines. These utilities will not be altered in order to accommodate the proposed project.

CHAPTER IV
PROBABLE IMPACTS OF THE PROPOSED ACTION
AND MITIGATION MEASURES

Probable Impacts and Mitigation Measures

Water Quality

There will be no impacts on water quality from construction of the facilities which will all take place above the water line. Impacts on water quality from operations are not expected to differ from existing ship docking, loading, and unloading operations.

Air Quality

The possible sources of pollutant emissions associated with the proposed Fort Armstrong container yard improvements would not significantly impact Honolulu regional or local air quality because the same type of activity currently occurs.

Short-term construction emissions would be minimal and can be mitigated. Suppression measures for fugitive dust should be employed for any grading or demolition activities. Measures should include watering methods.

Long-term emissions from commercial vessels, dockside container handling equipment, and truck hauling each will make only incremental increases to ambient pollution levels. Cumulatively, emissions from all sources combined would still not lead to a significant increase in any of the pollutants of concern. Ambient levels at sensitive receptors in the local area, including residential units and the Sand Island State Park, will not change significantly from present levels. Although standards will not be violated, proper maintenance and handling of all equipment engines should be performed to reduce excess emissions resulting from insufficient or improper burning of fuels.

Flora and Fauna

There will be no adverse impacts on flora and fauna.

Noise

As noted earlier, the noise from existing maritime operations at Fort Armstrong should usually be in compliance with the State Department of Health (DOH) noise regulations. The proposed action involves continued use of the Fort Armstrong project area for ship loading and unloading operations using the same, or similar, equipment and vehicles presently in use.

Utilities

Installation of the 800-foot crane rails will not interfere with existing container yard utilities.

Traffic

Currently, on a busy day, the container yard experiences from 2 to 3 and at most 4 truck/trailers waiting in line to receive cargo. The lane where truck/trailers wait in line will accommodate 12 truck/trailers with forty-foot containers. This queuing capacity should be able to accommodate the long-term growth projections. In the event the queuing capacity becomes inadequate, then night hauling could be implemented. Adequate queuing capacity and night hauling at off peak traffic hours will eliminate any potential impact on traffic at the Ala Moana Boulevard intersection.

The proposed project will not significantly impact traffic counts beyond that which are currently being experienced.

Historic/Archaeological Resources

The two historic buildings at Fort Armstrong will not be affected by the project.

Social and Economic Conditions

The proposed project will provide economic and social benefits through improved cargo-handling facilities, the creation of additional jobs, and an additional carrier to import materials needed in Hawaii. The improved cargo-handling facilities will also be available for use by other vessels, resulting in greater efficiency of operations for all carriers. The addition of a crane facility at a third pier in Honolulu Harbor (Piers 51 and 52 have crane facilities) provides greater opportunities for increased service levels and an alternative in case of natural disasters. The project will also provide an alternative method of exporting materials to the Orient.

CHAPTER V

ALTERNATIVES TO THE PROPOSED ACTION

Project Alternatives

There are two alternatives to the proposed action. One is to intermittently bring in mobile cranes for shipside cargo operations. The other alternative is to install a standard fixed gantry crane.

Site Alternatives

No other favorable alternate site is available in Honolulu Harbor.

No Action Alternative

If the proposed project is not implemented, there will be no improvements to the existing cargo-handling facilities and no additional jobs will be created. There will be no opportunities resulting in increased service levels.

CHAPTER VI

DETERMINATION

Since no adverse impacts are anticipated, a determination has been made that an environmental impact statement is not required.

CHAPTER VII

FINDINGS AND REASONS SUPPORTING DETERMINATION

Chapter 200 (Environmental Impact Statement Rules) of Title 11 Administrative Rules of the State Department of Health specifies criteria for determining if an action may have a significant effect on the environment. The relationship of the proposed project to these criteria is discussed below.

- (1) Involves an irrevocable commitment to loss or destruction of any natural or cultural resource;

The project site has been modified extensively and has no natural resources. The only cultural resources in the area are the historic buildings which will not be affected.

- (2) Curtails the range of beneficial uses of the environment;

The proposed facilities are located on a site currently used for the same purpose as the proposed use. Similar facilities were in place on the site until 1981.

- (3) Conflicts with the state's long-term environmental policies or goals and guidelines as expressed in Chapter 344, Hawaii Revised Statutes, and any revisions thereof and amendments thereto, court decisions or executive orders;

The project does not conflict with long-term state environmental policies or goals.

- (4) Substantially affects the economic or social welfare of the community or state;

The proposed improvements will provide economic and social benefits through the addition of cargo handling facilities and the creation of additional jobs.

- (5) Substantially affects public health;

Public health is not threatened by existing facilities and functions at the site and there is no reason to expect that public health to be affected in the future by the new facilities.

- (6) Involves substantial secondary impacts, such as population changes or affects on public facilities;

The project does not involve substantial secondary impacts such as population changes or effects on public facilities. Water, sewer, drainage, and transportation systems are adequate to serve the project.

- (7) Involves a substantial degradation of environmental quality;

Environmental impacts will be minor. Environmental quality will not be significantly degraded.

- (8) Is individually limited but cumulatively has considerable effect upon the environment or involves a commitment for larger actions;

The proposed project is viewed as an interim facility and is consistent with the state's waterfront master plan. It neither involves a commitment for a larger action nor results in significant adverse effects upon the environment.

- (9) Substantially affects a rare, threatened, or endangered species, or its habitat;

There are no rare, threatened, or endangered species (plant or animal) on the project site.

- (10) Detrimentally affects air or water quality or ambient noise levels;

Noise and dust are unavoidable short-term consequences of construction but can be mitigated through strict adherence to public health regulations governing air pollution and noise.

There will be no impact on water quality. Impacts on air quality will be short-term and should not result in a violation of standards. Noise associated with operation of the cranes and cargo handling at the facility will not increase.

- (11) Affects an environmentally sensitive area such as a flood plain; tsunami zone, erosion-prone area, geologically hazardous land, estuary, fresh water, or coastal waters;

The project is located in a coastal area within a tsunami zone. The use is consistent with existing land use regulations for the area.

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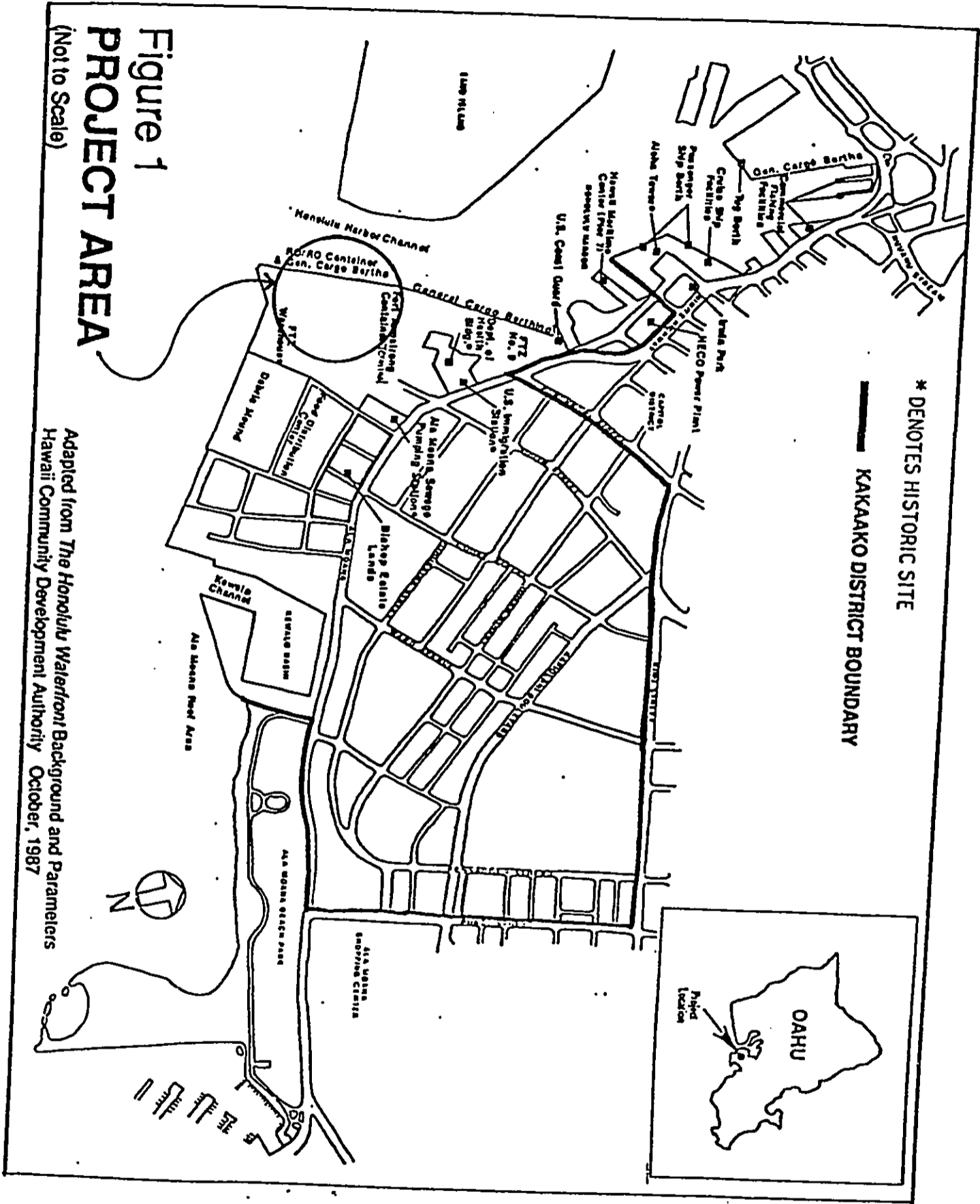
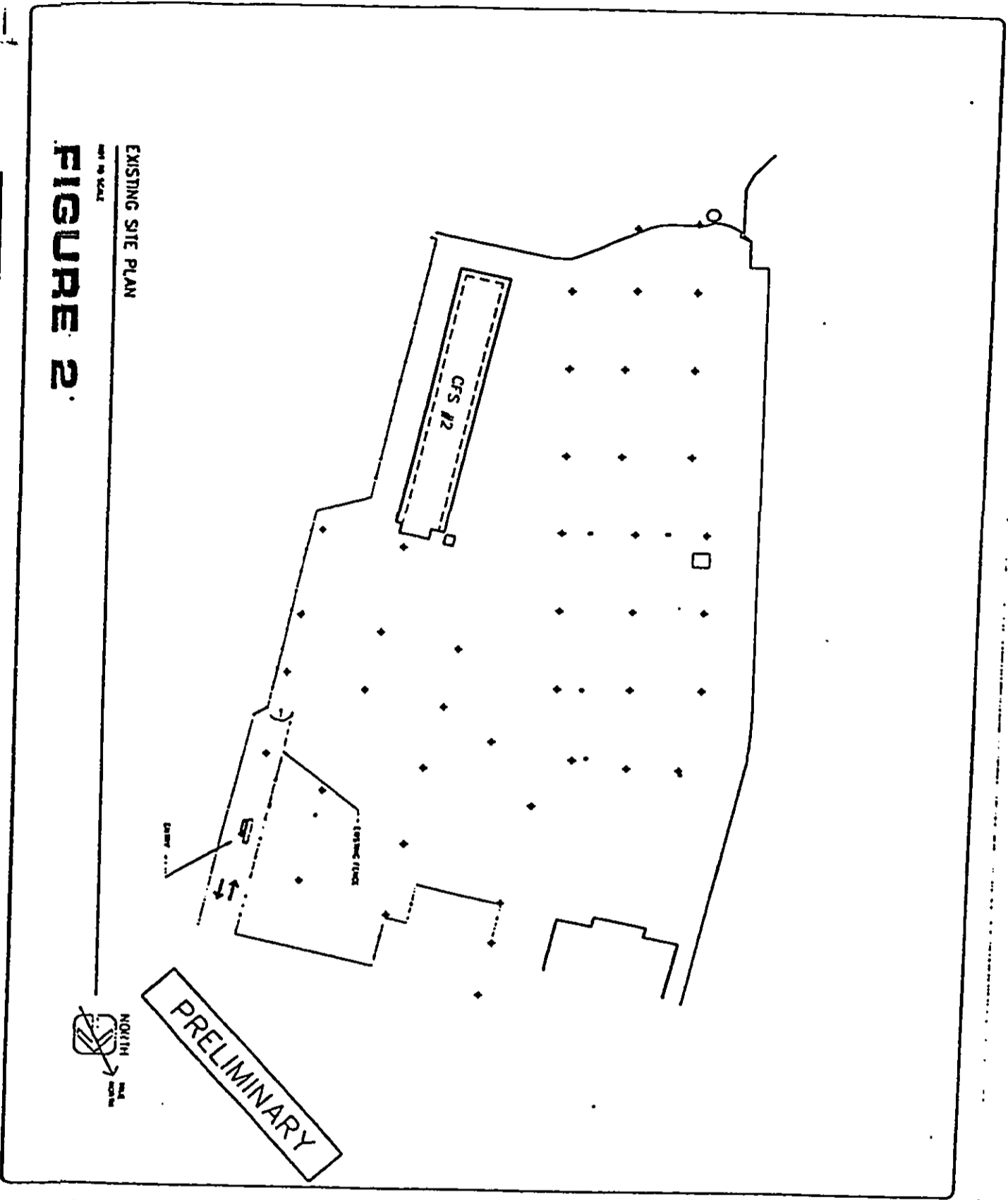


Figure 1
PROJECT AREA
(Not to Scale)

Adapted from *The Honolulu Waterfront Background and Parameters*
Hawaii Community Development Authority October, 1987



EXISTING SITE PLAN
NOT TO SCALE
FIGURE 2

FORT
ARMSTRONG
BACKLANDS
IMPROVEMENTS

EXISTING
SITE
PLAN

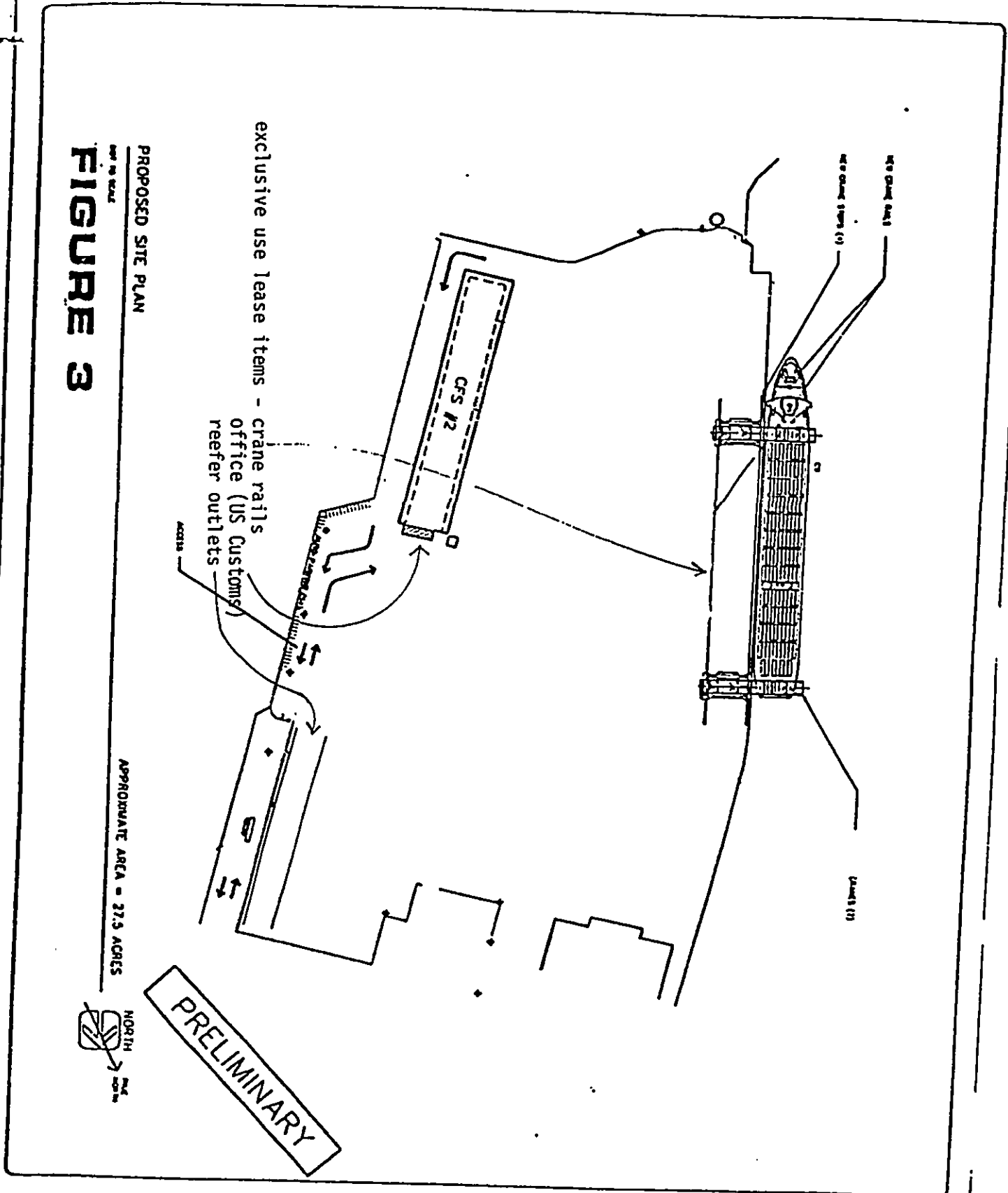


FIGURE 3

PROPOSED SITE PLAN

NOT TO SCALE

APPROXIMATE AREA = 27.5 ACRES



PRELIMINARY

**FORT
ARMSTRONG
BACKLANDS
IMPROVEMENTS**

**PROPOSED
SITE
PLAN**

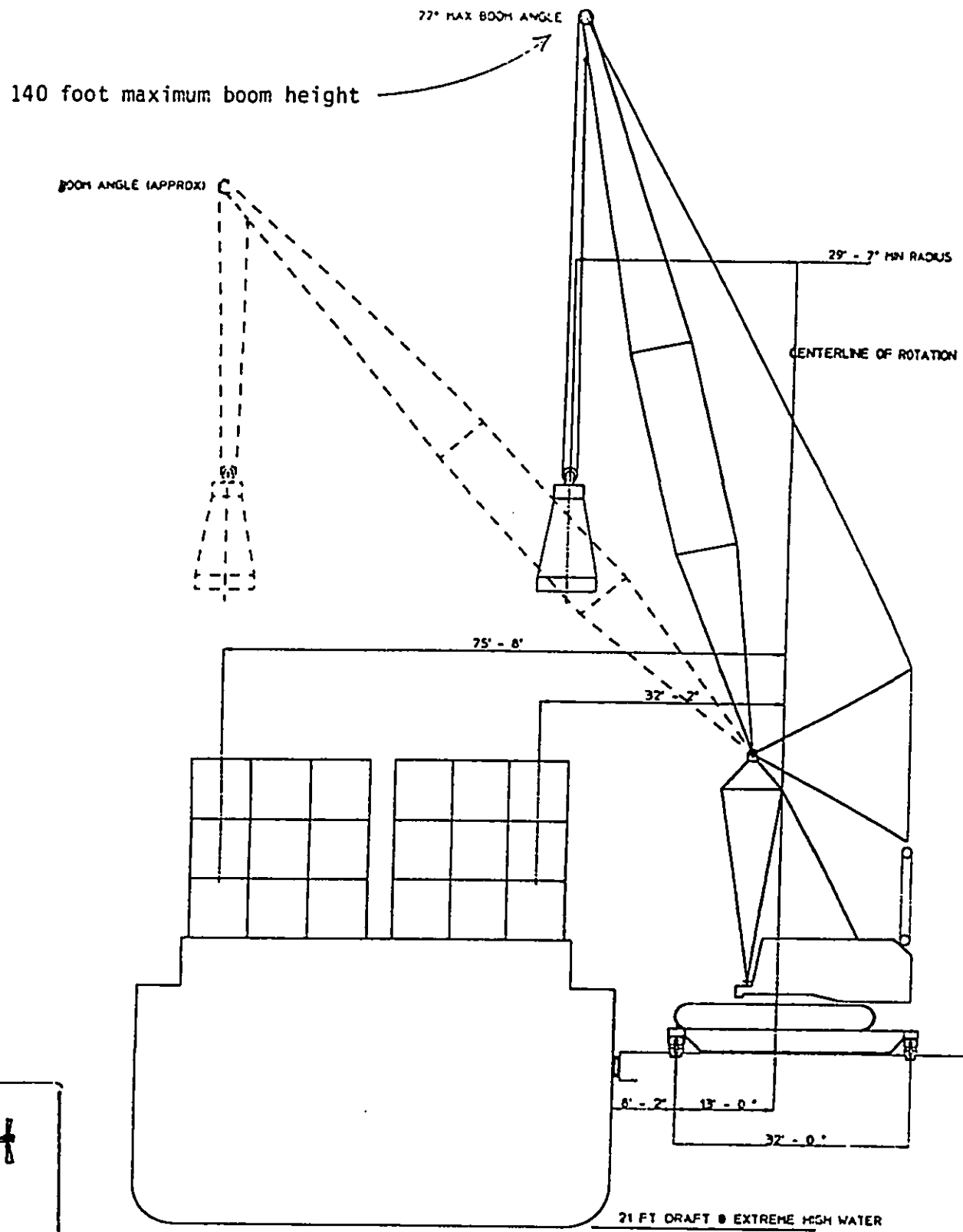


FIGURE 4
CRANE
ELEVATION

MANITOWOC 4100 / NYK VESSEL INTERFACE