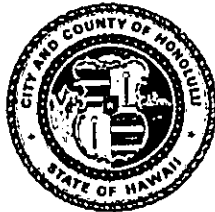


DEPARTMENT OF LAND UTILIZATION  
**CITY AND COUNTY OF HONOLULU**

650 SOUTH KING STREET  
HONOLULU, HAWAII 96813 • (808) 523-4432

RECEIVED



JEREMY HARRIS  
MAYOR

'95 SEP 21 P2:53

PATRICK T. ONISHI  
DIRECTOR

OFFICE OF ENVIRONMENTAL  
QUALITY CONTROL

LORETTA K.C. CHEE  
DEPUTY DIRECTOR

95/SMA-043 (JT)

September 19, 1995

The Honorable Gary Gill, Director  
Office of Environmental Quality Control  
State of Hawaii  
220 S. King Street, 4th Floor  
Honolulu, Hawaii 96813

Dear Mr. Gill:

**SPECIAL MANAGEMENT AREA ORDINANCE  
CHAPTER 25, ROH  
Environmental Assessment/Determination  
Negative Declaration**

Owner/Agent : Hawaiian Electric Company, Inc.  
Location : 92-200 Farrington Highway, Waianae, Oahu  
Tax Map Key : 9-2-03: 27  
Request : Special Management Area Use Permit  
Proposal : Addition of a centralized storage shed and a  
sandblast enclosure at the Kahe Generating  
Station  
Determination : A Negative Declaration Is Issued

Attached and incorporated by reference is the Final Environmental Assessment (FEA) prepared by the applicant for the project. Based on the significance criteria outlined in Chapter 200, State Administrative Rules, we have determined that preparation of an Environmental Impact Statement is not required.

We have enclosed a completed OEQC Bulletin Publication Form and four copies of the FEA. If you have any questions, please contact Joan Takano of our staff at 527-5038.

Very truly yours,

A handwritten signature in cursive script, appearing to read "Patrick T. Onishi".

PATRICK T. ONISHI  
Director of Land Utilization

PTO:am  
Enclosures

g:ndoeheco.jht

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**FINAL ENVIRONMENTAL ASSESSMENT**

**FILE COPY**

**Kahe Storage Shed and Kahe Sandblast Enclosure**

**I. Description of the Proposed Action**

**A. General Description: Hawaiian Electric Company, Inc. (HECO) proposes to improve housekeeping and environmental controls at the Kahe Generating Station with the addition of a centralized Storage Shed and a Sandblast Enclosure.**

**1. Project Location**

- a) **The entire Kahe Generating Station is located within the SMA. Exhibit IA, attached, is a Vicinity Map for Kahe Generating Station showing the Kahe Generating Station property lines, the approximate SMA boundary, limits of existing power plant facilities, and the approximate location of the projects. Exhibit IB, the Kahe Station Plot Plan shows the location of the projects within the developed portion of the site.**
- b) **No land use approvals are required since the parcel is zoned as I-2 for which utility installations are allowed.**

**2. Kahe Storage Shed**

- a) **The proposed Storage Shed covers an area of 1,200 square feet and consists of a metal roof, steel framing, and a concrete floor. The shed will be 13 feet high and will not have enclosing walls. Exhibit IIA shows the Site Location of the Storage Shed. Exhibit IIB shows the Plan and Elevation of the Storage Shed.**
- b) **The proposed shed will provide temporary covered storage for drums containing flue ash, boiler residue, and various solid combustibles. These items are by products of the oil burning power generation process and are temporarily stored at various locations at Kahe Station prior to disposal in an appropriate waste facility. HECO desires to improve housekeeping by centralizing the temporary storage at a location away from the normal work areas. The stored items are not defined as hazardous by**

*the Building Code, and central storage is not required by environmental regulations.*

**3. Kahe Sandblast Enclosure**

- a) *The proposed Sandblast Enclosure project will affect an area of approximately 9,000 square feet. Exhibit IIIA shows the Site Plan for the Sandblast Enclosure and the project limits. Exhibit IIIB shows the Plan of the Sandblast Enclosure, including an approximate equipment layout. Exhibit IIIC shows Elevations of the Sandblast Enclosure.*
- b) *The proposed sandblast enclosure consists of a pre-engineered steel frame building with an overhead monorail hoist and jib boom hoist. Outdoor, pad mounted equipment will consist of air compressors, dust collecting ventilators, and blast pots. The enclosure is planned to have provisions for the future addition of a vacuum reclaimer. The building will be 27 feet high and will enclose 1800 square feet of the 9,000 square feet.*
- c) *The proposed sandblast enclosure will provide for environmentally safe containment of airborne dust generated from sandblasting operations. Sandblasting is a necessary maintenance operation for many large pieces of equipment such as removal of mineral deposits from turbine rotors or removal of corrosion and surface preparation of traveling screens prior to repainting. This work needs to be done at the plant to minimize the down time required for maintenance operations.*
- d) *The proposed sandblast containment enclosure will replace the existing open sandblast shed for sandblast operations, while redesignating the existing shed as a maintenance shed for non-destructive testing.*

**B. Technical Characteristics:**

- 1. **The property is located mauka (east) of Farrington Highway and therefore, not on the shoreline.**
- 2. **Kahe Storage Shed**

a) **Use Characteristics:** The proposed shed will provide temporary covered storage for drums containing flue ash, boiler residue, and various solid combustibles. These items are by products of the oil burning power generation process and are currently temporarily stored at various locations at the Kahe Station. HECO desires to improve housekeeping by centralizing the temporary storage at a location away from the normal work areas. The stored items are not defined as hazardous by the Building Code, and central storage is not required by environmental regulations.

b) **Physical Characteristics:** The proposed structure will be situated at an approximate elevation of 33'-0" MLLW.

3. **Kahe Sandblast Enclosure**

a) **Use Characteristics:** The proposed structure will provide for the containment of airborne dust generated by sandblast operations. Equipment to be sandblasted will be pulled or driven into the enclosure through roll-up doors at each end, off loaded and positioned with a monorail hoist and jib boom crane, and sandblasted within the enclosure. A dust collection ventilator located outside the enclosure creates a wind tunnel effect along the length of the enclosure by means of ventilation ducts located at each end of the building, with an overall negative pressure on the interior of the enclosure. Dust particulates and sandblast media are trapped in the dust collector and collected in 55 gallon drums for testing and disposal. Remaining dust within the enclosure will be removed by means of a special dust removing HEPA filter vacuum.

b) **Physical Characteristics:** The proposed structure will be situated at an approximate elevation of 25'-0" MLLW.

C. **Construction Characteristics:** A summary of the major items and building materials to be used in the construction of the projects is shown below:

1. **Access**

- a) **Access to the site is from Farrington Highway which is a four-lane divided highway.**

**2. Kahe Storage Shed**

- a) **Floor Slab and Foundations: A reinforced concrete slab on grade with spread footing.**
- b) **Columns and Bracing: Steel wide flange columns and steel angle bracing will be provided. The structure will be open on all four sides.**
- c) **Roof: Prefinished steel roofing on steel purlins and beams.**
- d) **Site Preparation: The site for which the proposed shed is to be located is a relatively level area that is already cleared. The existing soils consist fine to coarse weakly cemented sand. Preparation of the site will include minimal removal of subgrade to approximately 6 inches below slabs and pavements for a slab cushion. Foundations will bear directly against intact coral rock or properly compacted select fill. Dewatering should not be required, since foundations will be shallow and the water table is expected to be at least 31 ft below grade.**
- e) **Surface Runoff, Drainage, Erosion Control: Surface run-off will be permanently diverted around the shed by sheet flow into existing swales. Surface runoff from the existing swales is carried into the existing storm drain system to the north of the shed. Based on the nature of the subsurface materials and the distance that the runoff needs to travel to reach the receiving waters, there should be no impact on the water quality of receiving waters from construction activities.**
- f) **Construction Best Management Practice: The contractor will be required to provide erosion controls prior to any earth moving work, and to maintain temporary erosion controls until permanent controls are in place. The contractor is required to prevent any sediment laden runoff from leaving the project site and will be required to comply with the conditions of the NPDES permit. Structural controls include silt fences and swales to divert**

*runoff water around the project site and into the existing storm drain catch basin. Graded areas of the site will be covered with a concrete slab.*

**3. Kahe Sandblast Enclosure**

- a) **Pad Mounted Equipment:** *The dust collecting ventilator and air compressor will be located outside of the preengineered building and mounted on reinforced concrete equipment pads. Equipment is expected to be up to 14'-0" tall.*
- b) **Pre-engineered building:** *Approximately 60 feet long by 28 feet wide and 27 feet high. Pre-engineered steel frame walls and roof. 20' x 20' roll up doors at each end wall with standard man doors on each side wall.*
- c) **Foundations:** *Reinforced concrete slab on grade, and spread footings.*
- d) **Site Preparation:** *The site for which the proposed structure is to be located is a relatively level area that is already cleared. The existing soils consist of approximately 11 feet of fine to coarse cemented coralline sand over a medium dense silty coral sand and gravel. Preparation of the site will include minimal removal of subgrade to approximately 6 inches below slabs and pavements for a slab cushion. Foundations will bear directly against intact coral rock or properly compacted select fill. Dewatering should not be required, since foundations will be shallow and the water table is expected to be at least 20 ft below grade.*
- e) **Surface Runoff, Drainage, Erosion Control:** *Surface run-off will be permanently diverted around the building site by sheet flow and by swales. The swales will be constructed for both temporary erosion control during construction and permanent erosion control. Surface runoff from the project site will be carried by sheet flow and by swales to an existing stormwater drainage ditch makai of the building. Based on the nature of the subsurface materials and the distance that the runoff needs to travel to reach the receiving waters, there should be no impact on the*

*water quality of receiving waters from construction activities.*

- f) Construction Best Management Practice: The contractor will be required to provide erosion controls prior to any earth moving work, and to maintain temporary erosion controls until permanent controls are in place. The contractor is required to prevent any sediment laden runoff from leaving the project site and will be required to comply with the conditions of the NPDES permit. Structural controls include silt fences and swales to divert runoff water around the project site and into the existing storm drain catch basin. Most of the site surface will be finished with either concrete slab or asphalt paving. Grading to final grade shall be continuous, and any area within which work has been interrupted or delayed shall maintain a silt fence, or be planted.*

**4. Utility Requirements:**

- a) No electric power or water will be required at the Storage Shed. Utility requirements for the Sandblast Enclosure will include electrical power for dust collecting equipment, sandblasting equipment, building and area lighting, station service air, and city water for an eyewash/shower facility, hose bib, and fire hydrant.*

**5. Liquid and Solid Waste Disposal:**

- a) No liquid or solid wastes would be generated with the addition of the proposed Storage Shed.*
- b) For the Sandblast Enclosure, very little municipal type wastes would be generated with the addition of the proposed structure. Dust collected from sandblasting will be tested in accordance with the Hawaii Department of Health requirements prior to disposal at an appropriate municipal waste landfill. Occasional mopping of the sandblast floor and associated wash down water within the enclosure will be collected within the enclosure for removal to 55 gallon drums. Water collected in the drums will be tested and placed into the plant's existing wastewater treatment system. The discharge of Kahe Station's treated wastewater falls under the jurisdiction of*

*limits specified by the generating station's current NPDES Permit No. HI 0000019. The addition of a sandblast enclosure does not meet the definition of a new source under 40 CFR Part 122.29(b)(1). Volume of waste dust and wash down water generated is dependent upon the operation of the system. Because this facility is only operated during certain maintenance operations, and because the quantity of waste materials generated during these operations is small, the overall volume of waste dust and wash down water is expected to be less than 800 gallons per year. The anticipated sandblast operations will be of similar magnitude to current operations, much of the waste generated will be of the same magnitude as has been generated under the current operations. The volume is expected to increase slightly because of the increased containment provided by the proposed facility.*

**D. Economical and Social Characteristics.**

1. **Estimated Cost and Schedule:** The estimated construction cost and tentative completion date of the proposed projects is as follows:

a) Storage Shed	\$61,000.00	April 1996
b) Kahe Sandblast Enclosure	\$520,000.00	June 1996
c) Total Cost	\$581,000.00	
2. **Considerable funds will be expended for materials purchased locally and for the services a local contractor.**

**E. Environmental Characteristics:**

1. **Soils:** The U. S. Department of Agriculture, Soils Conservation Service's Soil Survey classifies soils in the project site as Fill Land, Mixed (FL).
2. **Topography:** The project site is located within the Kahe Generating Station that is located within a valley bounded by the ocean and mountains on the other three sides. The land has a 3% to 4% slope toward the ocean.



3. **Surface Runoff, Drainage, Erosion Hazard:** Presently, surface runoff from the valley is diverted around the Kahe Station through a series of diversion ditches that empty into two culverts crossing Farrington Highway. These culverts and flow into the ocean. These culverts are located on either side of the plant, one as you approach that Station from the Honolulu side and the other on the Waianae side.
4. **Project Specific Surface run-off will be as follows:**
  - a) **Storage Shed:** *Surface run-off will be permanently diverted around the storage shed by means of swales. The swales will be constructed for both temporary erosion control during construction and permanent erosion control. Surface runoff from the site will be carried by the swales to an existing storm water system makai of the site. The storm drain will be connected to a pipe discharging into the ocean on the south side of the plant.*
  - b) **Sandblast Enclosure:** *Surface run-off will be permanently diverted around the sandblast enclosure site by means of swales. The swales will be constructed for both temporary erosion control during construction and permanent erosion control. The swales will discharge surface runoff into the diversion ditch that runs around the perimeter of the plant. During construction, the contractor will be responsible to construct a silt fence at the perimeter of the construction site to trap any sediment that might be carried by the surface runoff to the swales.*
5. **Based on the nature of the subsurface materials and the distance that the runoff needs to travel to reach the receiving waters, there should be no impact on the water quality of receiving waters from construction activities.**
6. **There should not be any increase in the surface runoff due to the proposed project.**
7. **The proposed site is located within the Federal FIRM Insurance Zone D and does not lie in any LUO Flood Hazard District.**

**II. Affected Environment**

- A. ***The project site is located on already developed land within the boundaries of the existing Kahe Generating Station mauka of***

*Farrington Highway and away from the shoreline. Therefore there should not be any impact on coastal/natural resources. The proposed equipment will not add significantly to the existing aesthetic intrusion in the station area since the area is highly industrialized and the existing generating units dominate and for the most part obstruct the view from Farrington Highway.*

- B. The site is zoned I-2 by the City and Urban by the State. The City Development Plan designation is Public Facility.*
- C. No wastewater is anticipated to be generated at the proposed facilities.*
- D. There should be no impact on ambient air quality during construction or operation of the proposed facilities. The sandblast enclosure, along with the dust collector will contain airborne dust produced by sandblasting operations. This facility will be permitted under a modification to Kahe Power Plant's existing covered source permit with the Department of Health.*
- E. It is anticipated that some minor noise will be generated by the equipment used during construction. However, at the property line, such noise levels will be below the State and local noise levels and will in all likelihood be masked by the noise generated by the power plants.*
- F. There should be no increase in the surface runoff and no impact on the quality of the receiving waters due to the construction of the proposed project.*

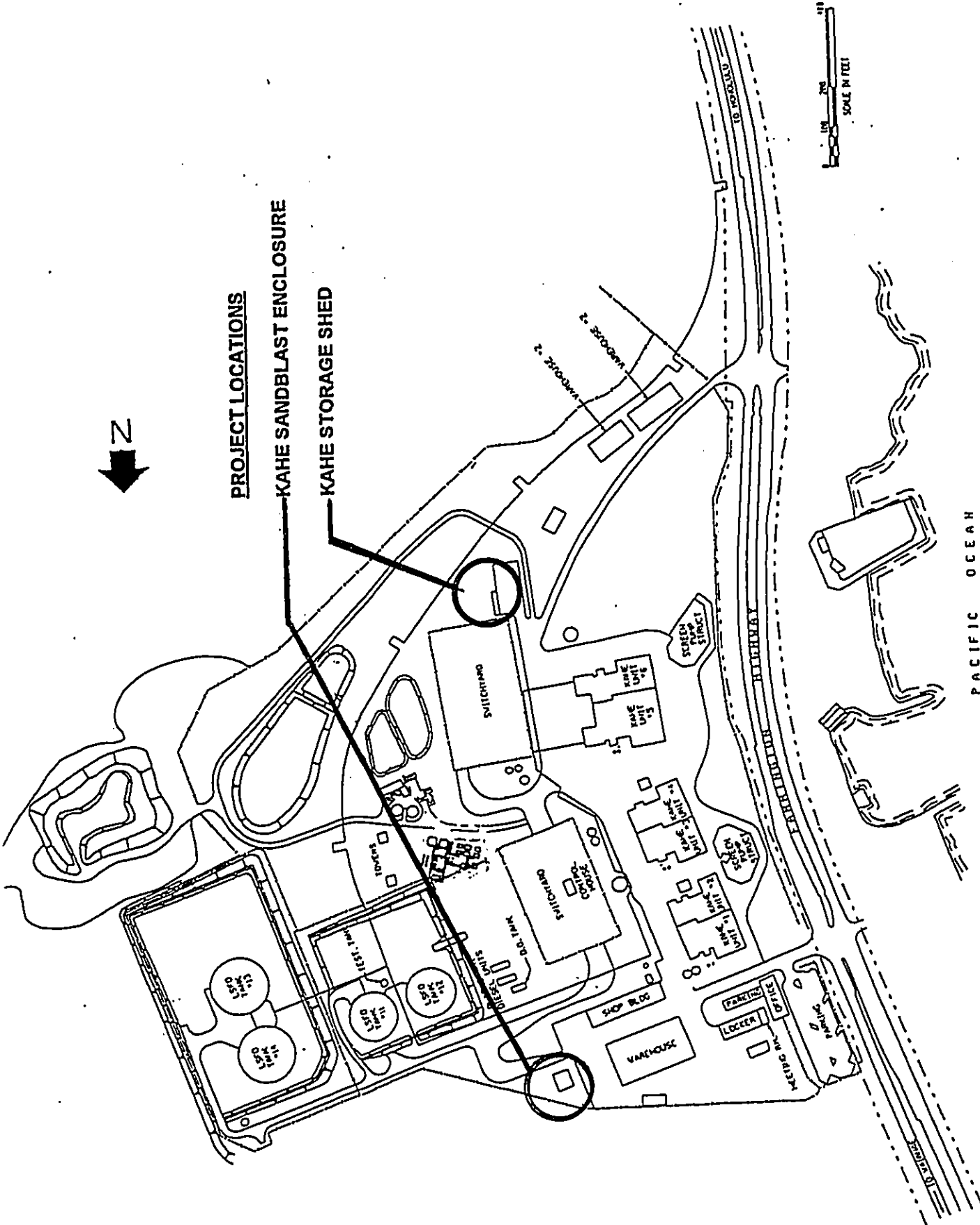
**III. Project Impacts**

- A. Since the project site is located within the generating station on land already developed and surrounded by other industrial type facilities, the cumulative effect of this addition is insignificant.*
- B. The proposed addition is part of the utility installation and therefore an allowed use within the I-2 zoning. It is also consistent with the Development Plan's Public Facility designation.*
- C. Since the project site is not located on any beach or public area, the addition of the proposed equipment will not reduce the size of any beach or other area usable for public recreation.*
- D. Since the project site is located within existing property lines and away from the shoreline, the addition of the proposed equipment will not*

*reduce or impose restrictions upon public access to tidal and submerged lands, beaches, portions of rivers and streams with the SMA and the mean high tide line where there is no beach.*

- E. Since the project site is located mauka of Farrington Highway, the proposed equipment will not detract from the line of sight toward the sea from the nearest State highway. Visibility of the proposed facilities from Farrington Highway is possible from only a few locations fronting the Kahe station property.*
- F. The addition of the proposed facilities will not increase the current quantity or quality of treated wastewater discharged and therefore will not adversely affect current water quality.*





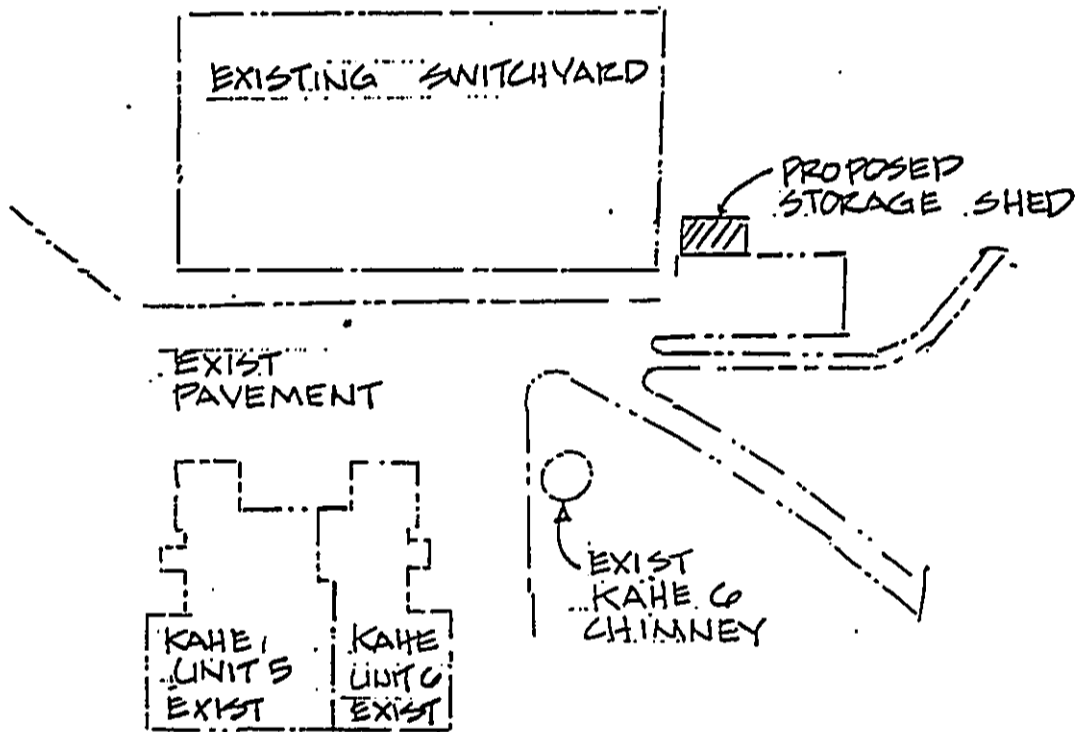
PROJECT LOCATIONS

KAHE SANDBLAST ENCLOSURE

KAHE STORAGE SHED

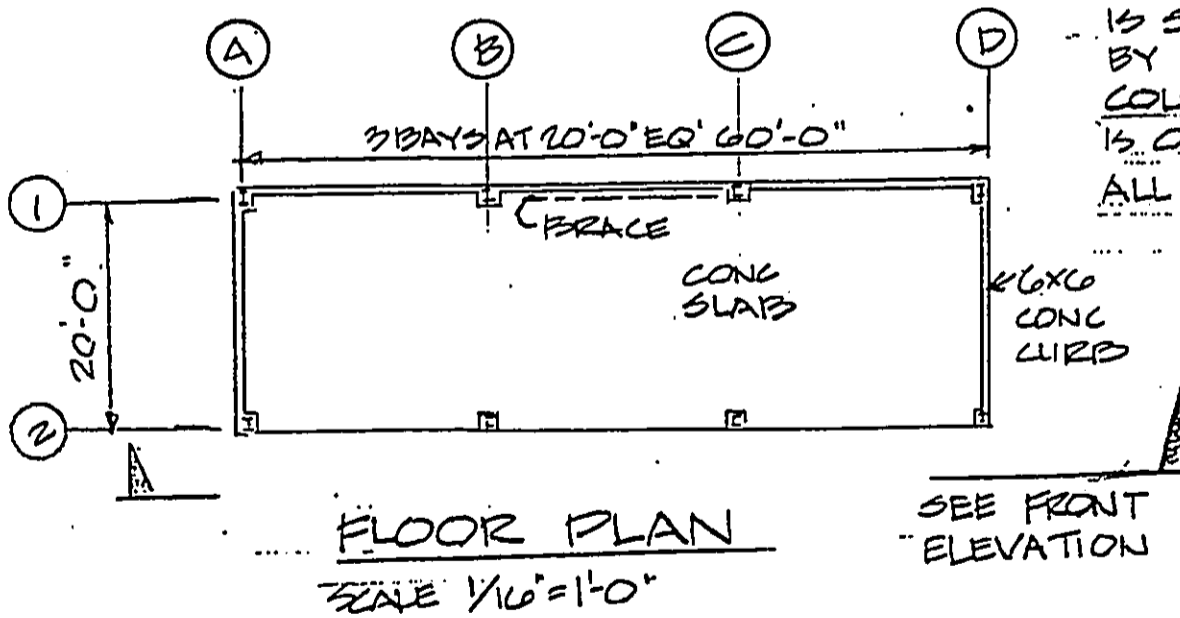
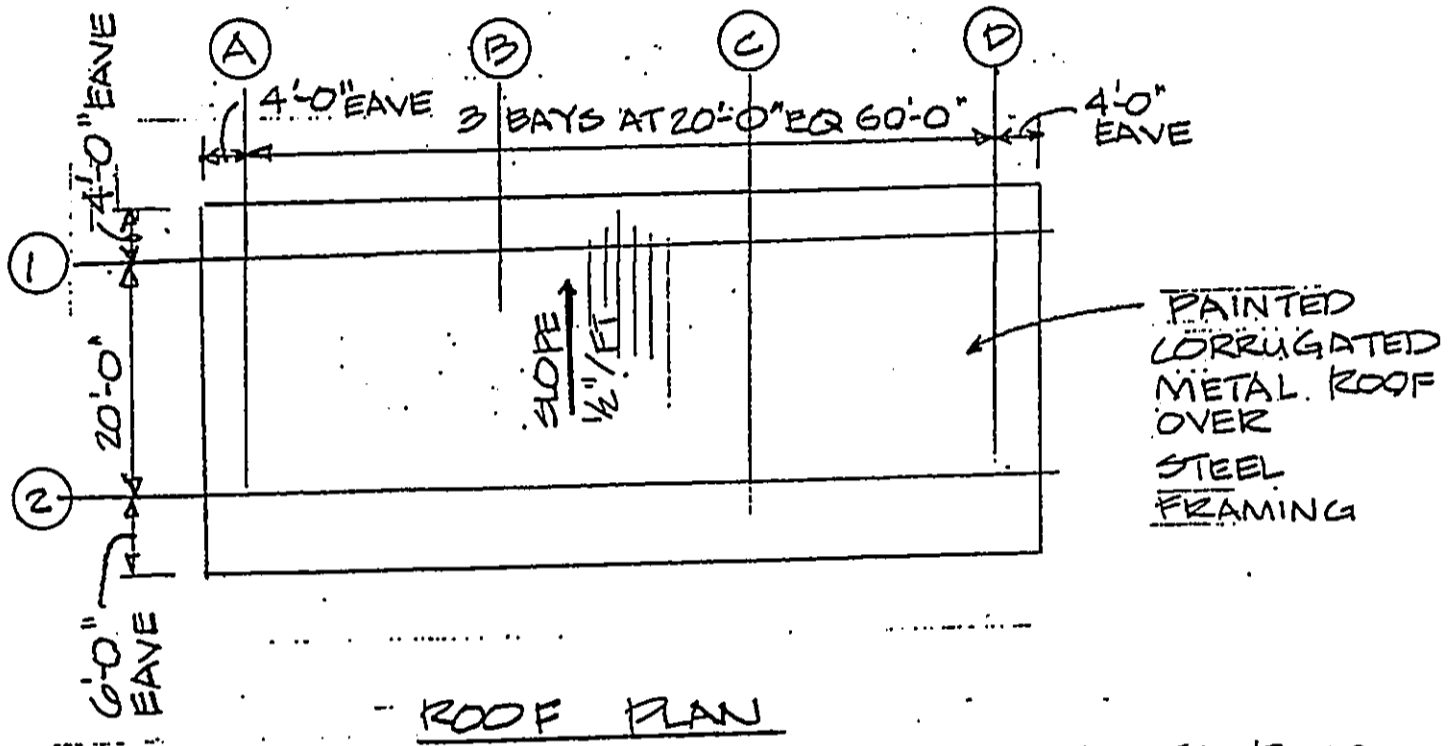
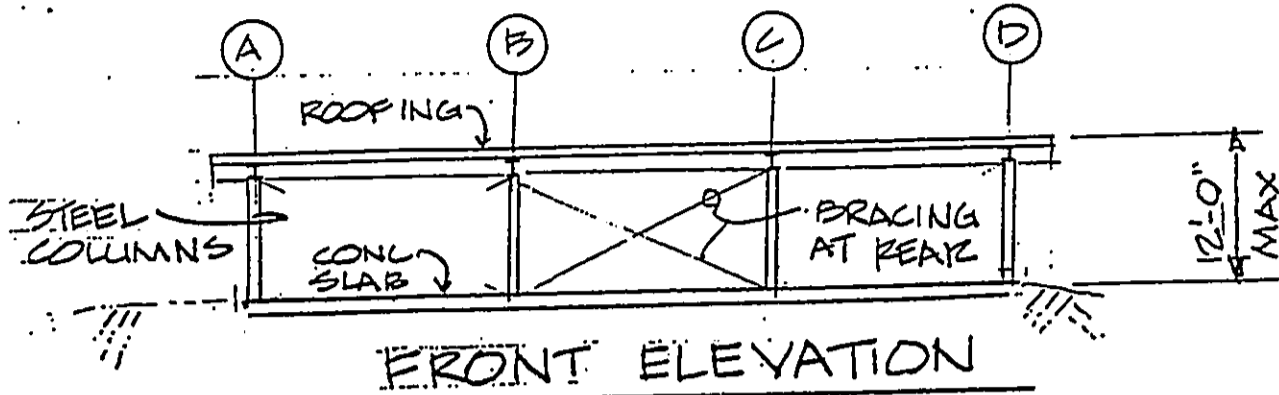
EXHIBIT IB - KAHE STATION PLOT PLAN

EXHIBIT  
KAHE STORAGE SHED  
SITE PLAN



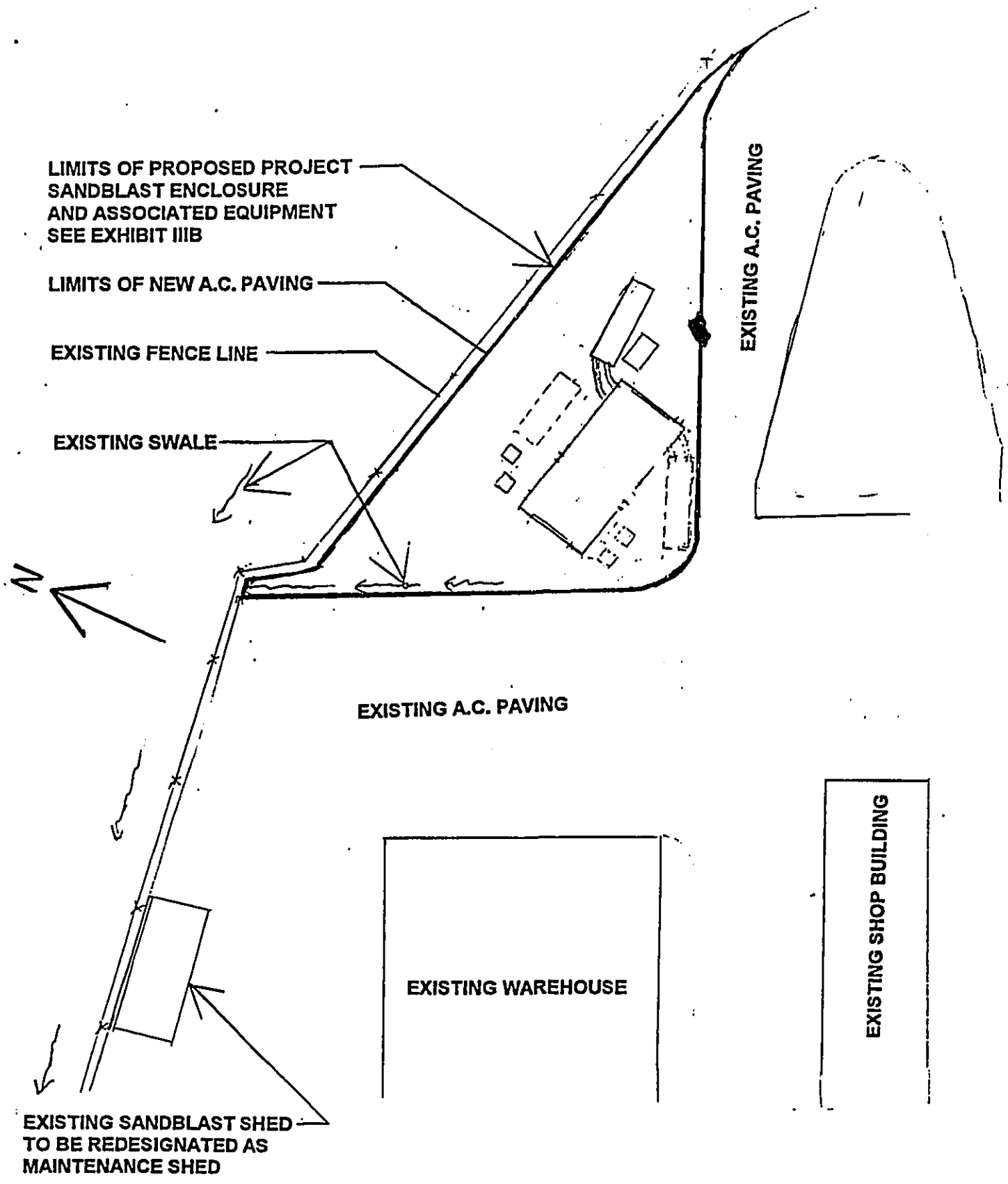
SITE PLAN

EXHIBIT IIA - STORAGE SHED SITE PLAN



NOTE ROOF IS SUPPORTED BY 2 STEEL COLS. SHED IS OPEN ON ALL 4 SIDES.

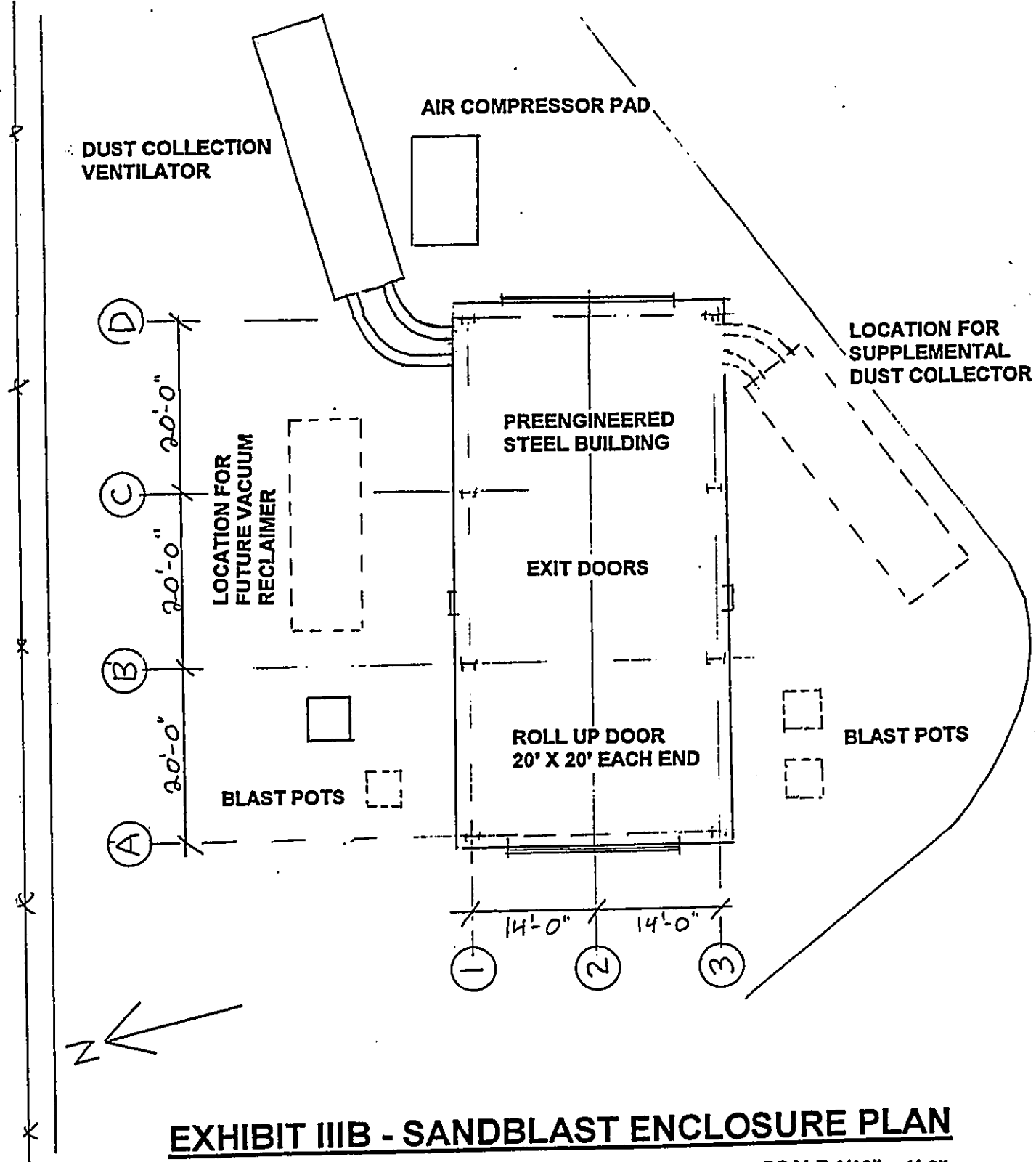
**EXHIBIT IIB - STORAGE SHED PLAN AND ELEVATION**



**EXHIBIT IIIA - SANDBLAST ENCLOSURE SITE PLAN**

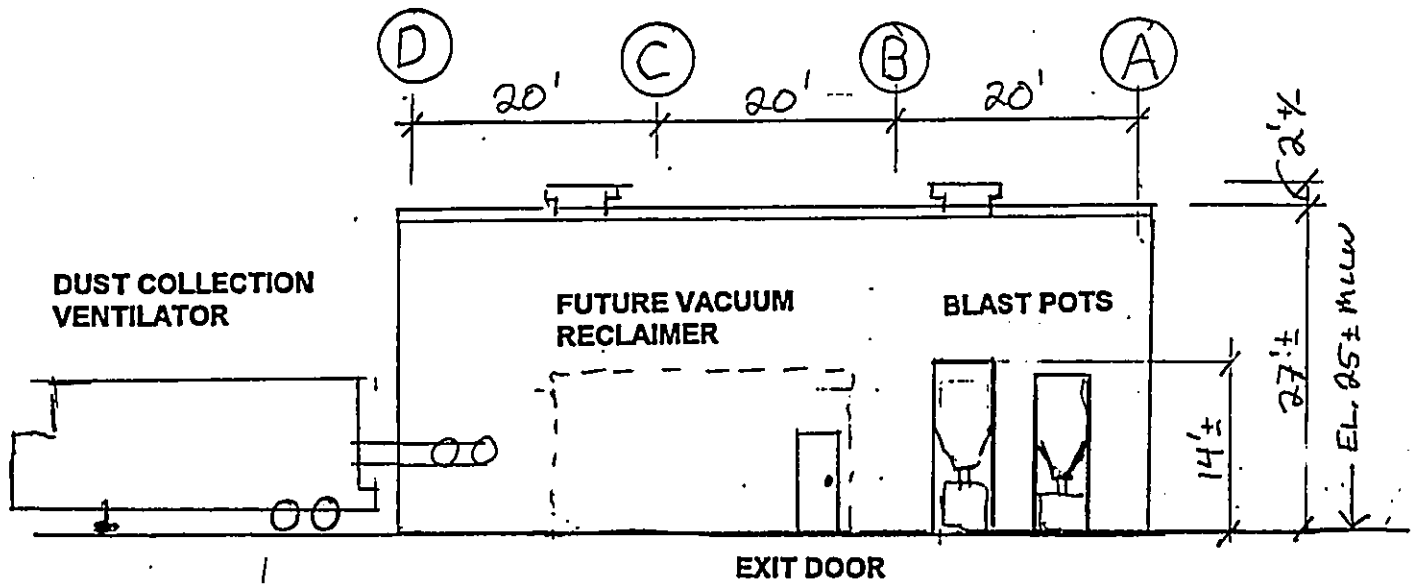
SCALE 1" = 50'





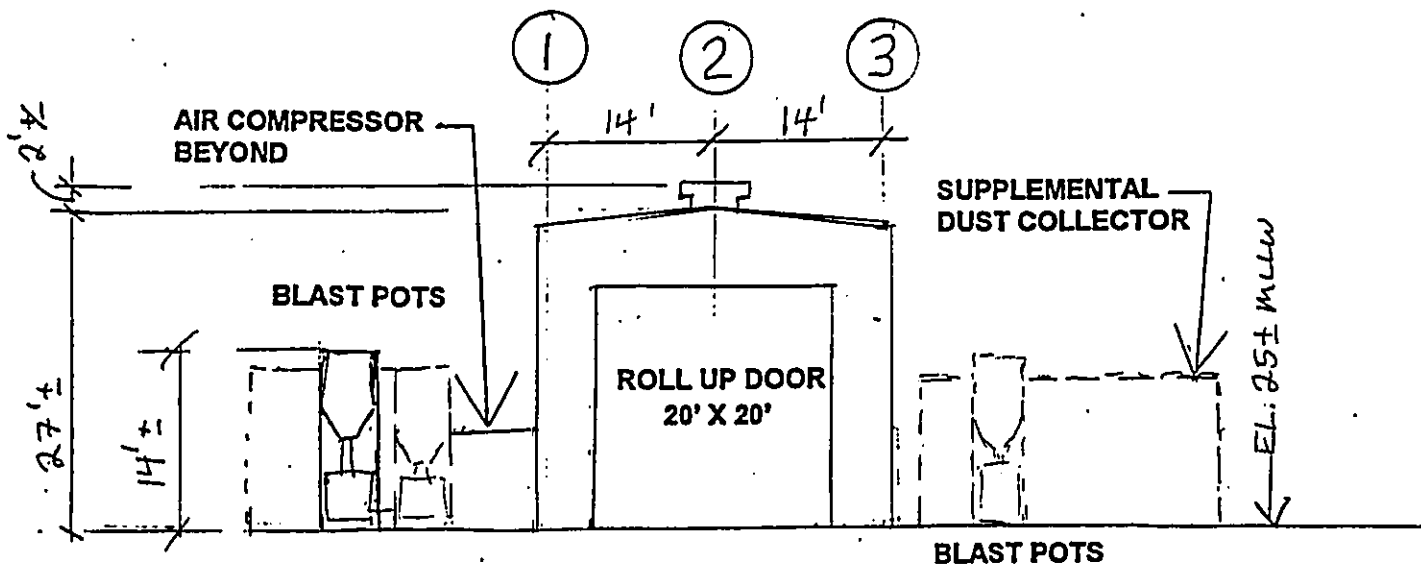
**EXHIBIT IIIB - SANDBLAST ENCLOSURE PLAN**

SCALE 1/16" = 1'-0"



**ELEVATION LOOKING SOUTH FROM FENCE LINE**

SCALE 1/16" = 1'-0"



**ELEVATION LOOKING EAST FROM EXISTING WAREHOUSE**

SCALE 1/16" = 1'-0"

**EXHIBIT IIIC - SANDBLAST ENCLOSURE ELEVATIONS**

**AGENCIES CONSULTED FOR DRAFT EA:**

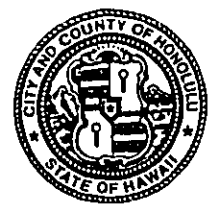
1. CITY DEPARTMENT OF PARKS AND RECREATION
2. CITY DEPARTMENT OF PUBLIC WORKS
3. STATE DEPARTMENT OF HEALTH
4. STATE DEPARTMENT OF LAND AND NATURAL RESOURCES
5. OFFICE OF STATE PLANNING

COMMENTS TO DRAFT EA  
(No response required)

95-05233

DEPARTMENT OF PUBLIC WORKS  
**CITY AND COUNTY OF HONOLULU**  
650 SOUTH KING STREET  
HONOLULU, HAWAII 96813

JEREMY HARRIS  
MAYOR



KENNETH E. SPRAGUE  
DIRECTOR AND CHIEF ENGINEER  
  
DARWIN J. HAMAMOTO  
DEPUTY DIRECTOR  
ENV 95-234

August 16, 1995

**MEMORANDUM:**

TO: PATRICK T. ONISHI, DIRECTOR  
DEPARTMENT OF LAND UTILIZATION

FROM: *ES* KENNETH E. SPRAGUE  
DIRECTOR AND CHIEF ENGINEER *KES*

SUBJECT: ENVIRONMENTAL ASSESSMENT (EA)  
KAHE STORAGE SHED AND SANDBLAST ENCLOSURE  
TAX MAP KEY: 9-2-03: 27

95 AUG 17 AM 8 20  
DEPARTMENT OF LAND UTILIZATION  
HONOLULU, HAWAII

We have reviewed the subject EA and have no comments to offer at this time.

Should you have any questions, please contact Mr. Alex Ho, Environmental Engineer, at Local 4150.

bcc: Eng