Ms. Susan Hugo

Alameda County Health Care Services Agency

Environmental Protection/LOP Division

1131 Harbor Bay Parkway, 2nd Floor

Alameda, California 94502

Subject:

Work Plan to perform Subsurface Investigation at 1372 Ocean Avenue,

Emeryville, California.

Ms. Hugo:

As you requested, we are submitting for your review and approval the attached Work Plan that summarizes the proposed project tasks recommended to perform a limited subsurface investigation at the above mentioned property. The proposed work includes drilling one soil boring, collecting soil samples from the boring, constructing a groundwater monitoring well in the boring, collecting a groundwater sample from the well, submitting selected soil samples and the groundwater sample to a State Certified laboratory for analysis, and preparing a report of our findings, conclusions, and recommendations.

If you should have any questions or comments about this work plan, please call us at (510) 530-8751. Thank you.

Sincerely,

International Geologic

Steve Bittman Project Manager

cc:

Mr. Doug Ralston

Ten Bothman

Plant Insulation Company

1300 64th Street

Emeryville, California 94662

Encl.: Work Plan For Subsurface Investigation at 1372 Ocean Avenue, Emeryville, California.

WORK PLAN for SUBSURFACE INVESTIGATION at 1372 Ocean Avenue Emeryville, California

BACKGROUND

- 3/31/97 Suspected underground storage tank (UST) and dispenser areas were investigated by exploration/excavation. It was determined that a UST had been probably been removed from the property sometime prior to 1975.
- 4/10/97 Two soil samples and one grab groundwater samples were collected from the approximately 15 foot x 15 foot excavation area and laboratory analyzed for petroleum hydrocarbons as gasoline and diesel, total and dissolved lead, and volatile and semi-volatile organic compounds. Analytical results indicated the presence of low levels of contaminants in soil, and moderate concentrations in the groundwater sample. A soil sample collected from the former dispenser area contained low levels of hydrocarbons.

Detailed descriptions regarding site history, the discovery of the former underground fuel tank location and laboratory results of analyses of soil and groundwater samples collected on site, can be reviewed in the International Geologic Letter Report, <u>Subsurface Investigation Related To A Suspected Underground Storage Tank Location</u>, For 1372 Ocean Avenue, <u>Emeryville</u>, <u>California</u> May 7, 1997.

PROJECT TASKS

The following project tasks are proposed to satisfy the requirements outlined for the subject site in a letter dated July 17, 1997, from the Alameda County Health Care Services Agency. (ACHCSA)

Task 1: Site Safety Plan

A Site Safety Plan outlining precautions and protective equipment necessary for work at the site will be prepared, and will be available during on site work.

Task 2: Drill One Soil Boring/Construct Monitoring Well

Prior to drilling the boring and constructing the well, a permit will be acquired from the Alameda Flood Control District (Zone 7), and Underground Service Alert (USA) will be called 48 hours in advance of drilling to notify local utilities of planned work. One soil boring will be drilled within ten feet of the former UST location in the downgradient direction of groundwater flow. (The direction of groundwater flow in the area has been calculated to be approximately west based on six separate sets of measurements recorded between 1992 and 1995, from three monitoring wells located at the "RIX Industries" property which adjoins the subject site to the west at 6460 Hollis Street (ACHCSA)).

The boring will be drilled to a depth of approximately 10 feet below ground level using a hollow-stem auger drilling rig. Soil samples will be collected continuously from the boring using a split-barrel sampler. The boring will be completed as a monitoring well using 2-inch diameter schedule 40 PVC casing. Field methods are summarized in Attachment A. See Figure 1 for the proposed boring/monitoring well location.

Task 3: Laboratory Analyses For Soil And Groundwater Samples

Soil samples collected from the boring and the groundwater sample collected from the monitoring well, will be analyzed at a State Certified laboratory for the following:

- o Total Petroleum Hydrocarbons as gasoline (TPHg), benzene, toluene, ethylbenzene, and xylenes (BTEX), and methyl-tertiary-butyl-ether (MTBE) by EPA Test Method 8015/8020/5030.
- o Total Petroleum Hydrocarbons as diesel (TPHd) by EPA Test Method 8015/3550.
- o Chlorinated hydrocarbons (VOCs) by EPA Test Method 8010/601.
- o Semi-volatile organic compounds by EPA Test Method 8270A.

Task 4: Report

A technical report summarizing our methods, data, and findings from the completion of Tasks 2 and 3 above will be prepared. The technical report will be signed by a California Registered Geologist.

If you have any questions about this work plan, please call us at (510) 530-8751. Thank you.

If you have any questions about this work plan, please call us at (510) 530-8751. Thank you.

KENNY B. MATEIK

No. 5861

Sincerely,

International Geologic

Steve Bittman

Project Manager

Ken Mateik

Senior Geologist

California Registered Geologist No. 5861

Attachment A:

Field Methods

ATTACHMENT A FIELD METHODS

FIELD METHODS

Drilling of Soil Borings

Prior to the drilling of borings, permits are acquired from the appropriate regulatory agency, if necessary. Underground Services Alert is notified at least 48 hours prior to drilling of our intent to drill. The approximate locations of known underground utility lines and structures are marked prior to drilling.

Soil borings are drilled by a truck-mounted drill rig equipped with hollow-stem augers provided and operated by a drilling contractor with a C-57 license. The augers are steam-cleaned prior to drilling to minimize the possibility of cross-contamination.

Logging of Soil Borings

The soil borings are logged using the Unified Soil Classification System. Samples not selected for chemical analysis, and the soil in the sampler shoe, are extruded in the field for visual inspection. Logs include texture, color, moisture, estimated plasticity, consistency, blow counts, and any other characteristics noted. Logs also include subjective evidence for the presence of hydrocarbons, such as soil staining, noticeable or obvious product odor, and field screening instrument readings.

Soil Sampling in Borings

All sampling equipment entering bore-holes is washed or steam-cleaned prior to use, and between borings to minimize the possibility of cross-contamination.

Soil samples are collected by advancing the boring to a point immediately above the sampling depth, and then driving a California-modified, split-barrel sampler containing thin-walled brass sleeves through the hollow center of the auger into the soil. Samples are collected at 5-foot intervals or less if subsurface materials are variable. The sampler is driven with a standard 140-pound hammer repeatedly dropped 30 inches. The number of hammer blows to drive the sampler each successive six inches are counted and recorded to evaluate the relative consistency of the soil.

When retrieving soil samples for laboratory analysis from the split-barrel drive sampler, the deepest tube is immediately trimmed, sealed with aluminum foil, plastic caps, and aluminized duct tape, then labeled and refrigerated until delivery to the laboratory. One of the samples in the brass sleeves not selected for laboratory analysis at each sampling interval is field tested using an instrument (OVA or OVM) that is calibrated at the beginning of each day it is used. The field testing is performed by placing the input pipe of the field instrument intake pipe into the headspace created in a plastic bag containing the soil sample. The field readings will be presented in the Logs of Borings, or within a table, included in the project report.

Sample Labeling and Handling

The samples selected for laboratory analysis will be removed from the sampler and promptly sealed in their brass sleeves with aluminum foil, plastic caps, and aluminized duct tape. The samples will then be labeled, placed in iced storage, and delivered to a laboratory that is certified by the State of California to perform the analyses requested. Chain of Custody Records will be kept throughout handling of the samples tested.

Monitoring Well Construction and Development

Groundwater monitoring wells are constructed of 2-inch or 4-inch-diameter, thread-jointed, polyvinyl chloride (PVC) casing. No chemical cements, glues, or solvents are used in well construction. The bottom of each casing is equipped with a threaded end plug, and the top with a locking plug. The screened portion of each well consists of factory-perforated casing. Selection of well screen is based on particle-size analysis performed in the field as the soil is described by the geologist. The screened section is constructed to allow monitoring during seasonal fluctuations of ground-water levels. The annular space of each well is backfilled with a sand filter pack to approximately two feet above the perforations. The filter pack will also be selected based on particle-size analysis of the stratigraphic units encountered. A 1-foot-thick bentonite plug is placed above the sand as a seal against cement entering the filter pack. The remaining annulus is backfilled with a slurry of water, neat cement and bentonite, or a sand cement slurry to approximately 1-foot below the ground surface.

A traffic rated utility box is placed over each well head and set in concrete placed flush with the surrounding ground surface. The well-head cover has a watertight seal to protect the ground-water monitoring well against surface-water infiltration.

Wells are developed by bailing or surge-pumping. A record of the quantity, turbidity, and other observations of extracted well development water is to be included in our report.

Drill Cuttings

The drill cuttings from the borings are stored at the site, in DOT 17-E or equivalent open top 55-gallon capacity drums. The cuttings will remain the responsibility of the client.

Ground Water Sampling

The wells are allowed to equilibrate for at least 48 hours after development. The liquid in the wells is then checked for visual evidence of hydrocarbon contamination. Any subjective evidence of product detected in the well is recorded. If floating product is encountered in a well, the well will not be purged or sampled. The thickness of any floating product is measured with an interface probe or petroleum finding paste. If no floating product is observed in a well, the well is purged prior to collecting a sample of the formation water. The well is purged of at least four well volumes of water, or until the water is drawn down to the bottom of the well.

The temperature, pH, and conductivity of purged ground water is allowed to stabilize prior to sampling the well. The well is then be sampled using a new disposable plastic bailer.

The water samples are sealed in laboratory-cleaned, 40-milliliter glass vials with Teflon-lined lids. The samples are labeled and immediately placed in iced storage. A Chain of Custody Record is initiated by the geologist and kept throughout handling of the samples, and will accompany the samples to a laboratory certified by the State of California for the analyses requested.

Report Preparation

A report will be provided summarizing the results, interpretations, and conclusions, as necessary. The report will also contain copies of well permits, boring logs, chain of custody forms, and laboratory data sheets.

PROJECT STAFF

Mr. Kenny B. Mateik, a Geologist registered with the State of California (R.G. No. 5861) will be in overall charge of this project. Mr. Steve Bittman, Project Manager, will provide supervision of field and office operations of the project.

INTERNATIONAL GEOLOGIC ENVIRONMENTAL AND GEOLOGICAL SERVICES

2831 SYLHOWE ROAD, OAKLAND, CALIFORNIA 94602 PHONE (610) 530-8751 FAX (610) 530-8794

FAX TRANSMITTAL SHEET

DATE: 9-1-97

DOCUMENT SENT TO:

Fax: 337-9338

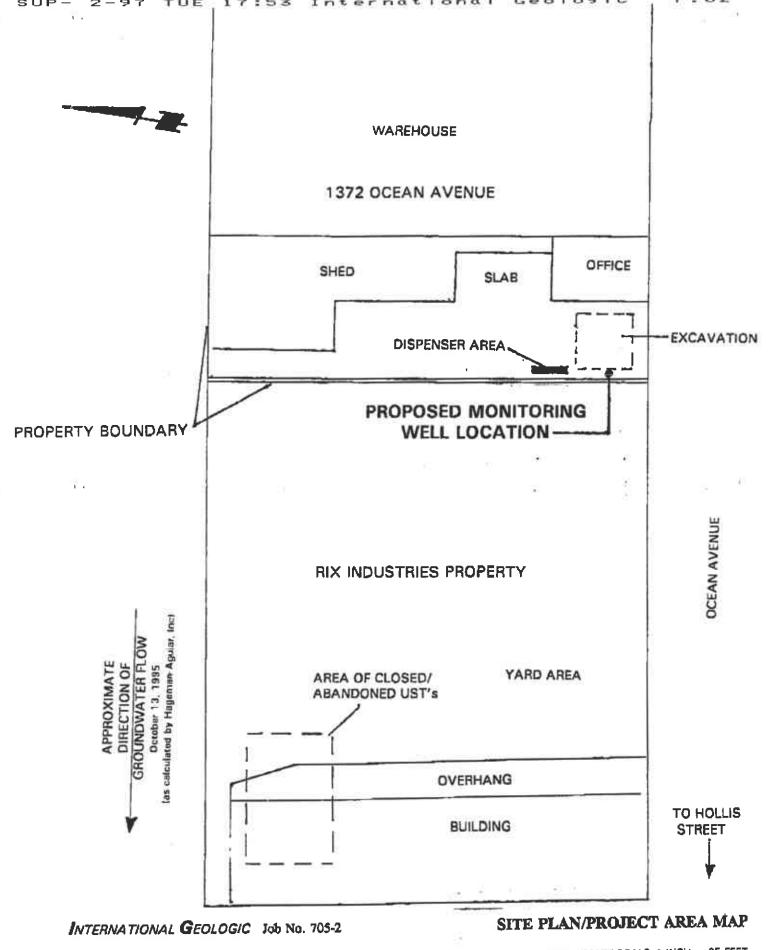
Attn: Susan Hugo

FROM:

Steve Bittman

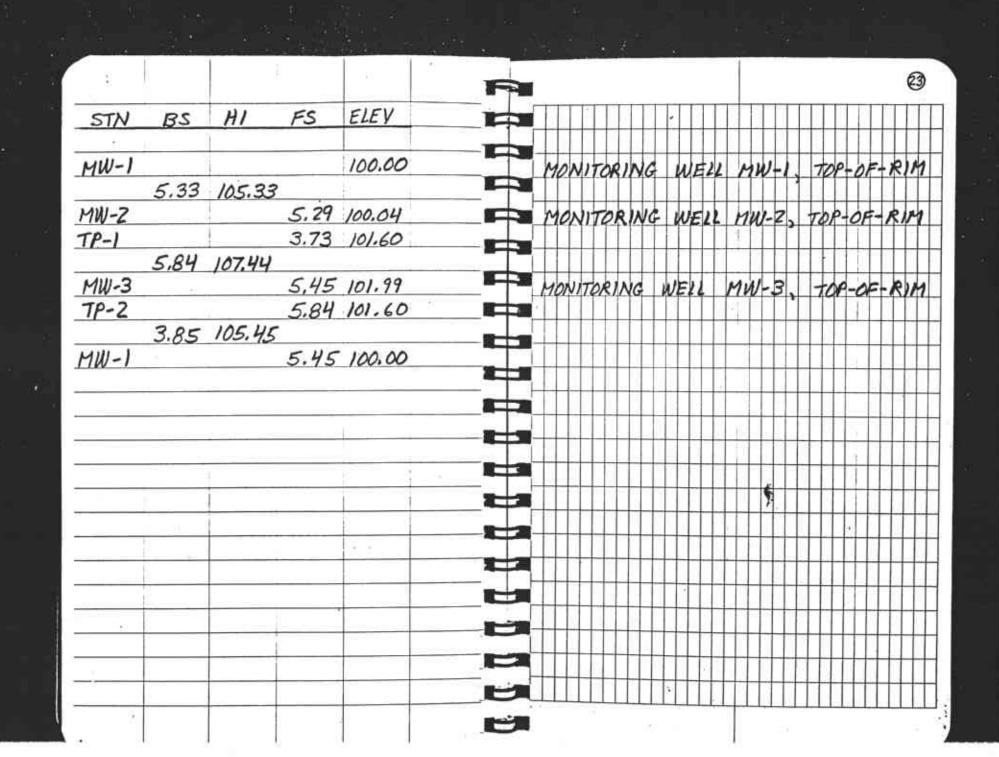
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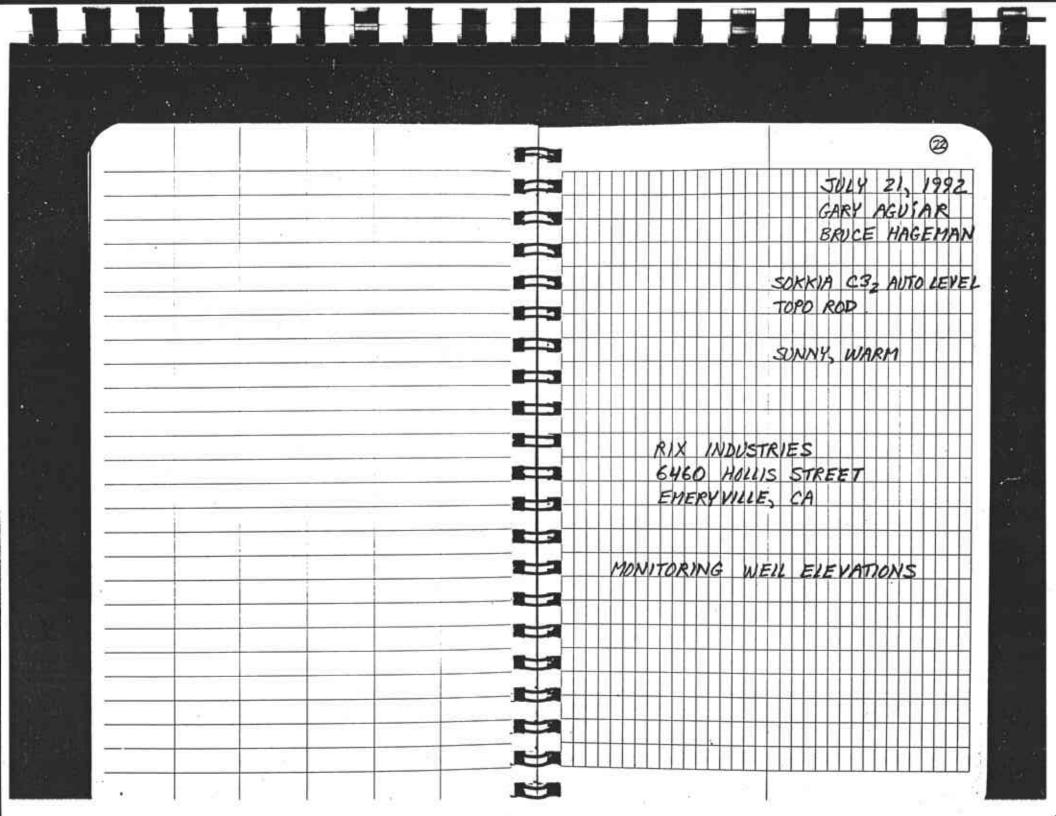
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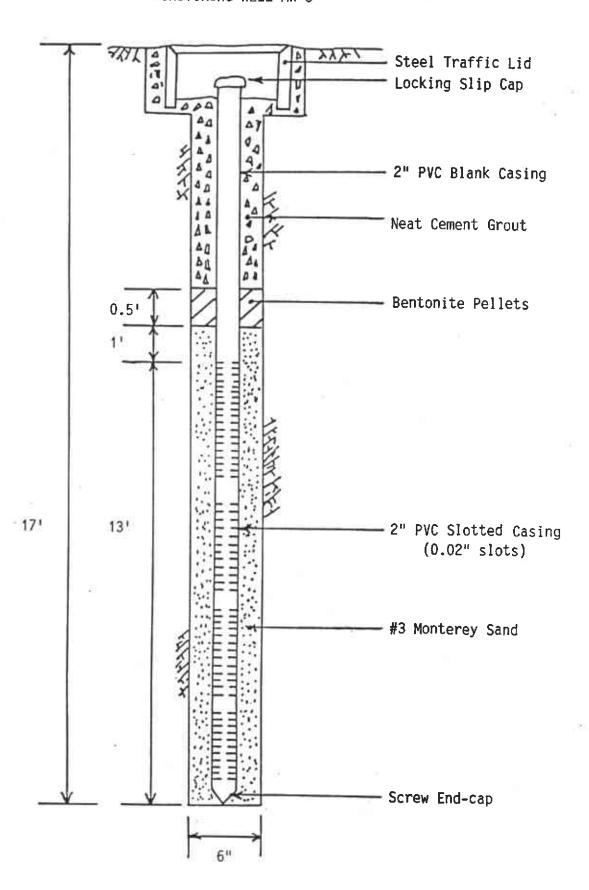


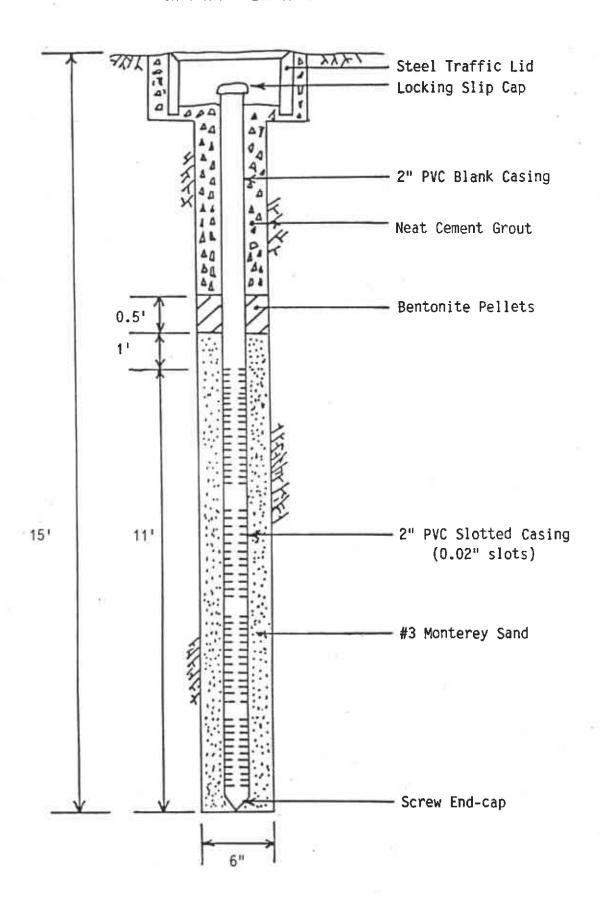
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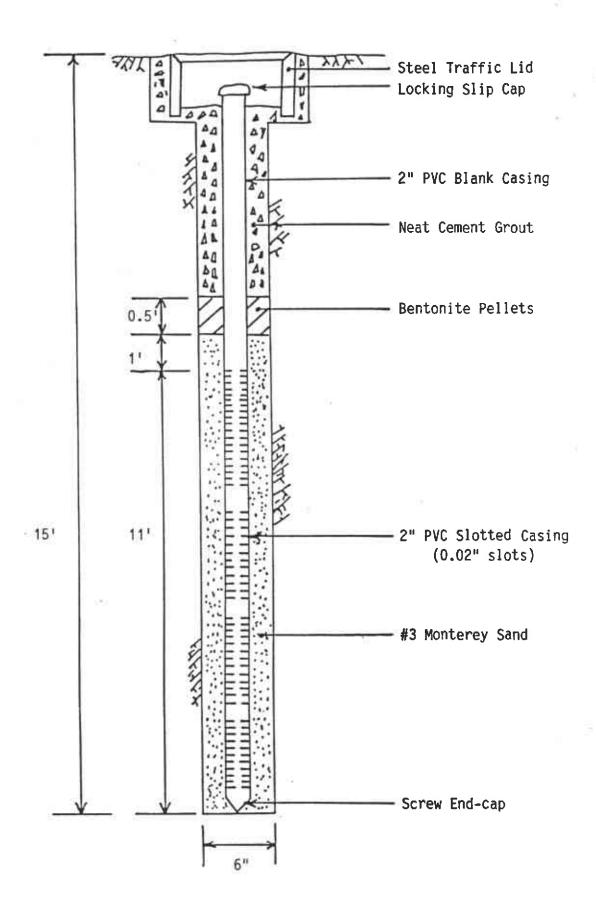
APPROXIMATE SCALE: 1 INCH - 25 FEET FIGURE 1











CONFIDENTIAL

STATE OF CALIFORNIA DWR WELL COMPLETION REPORT (WELL LOGS)

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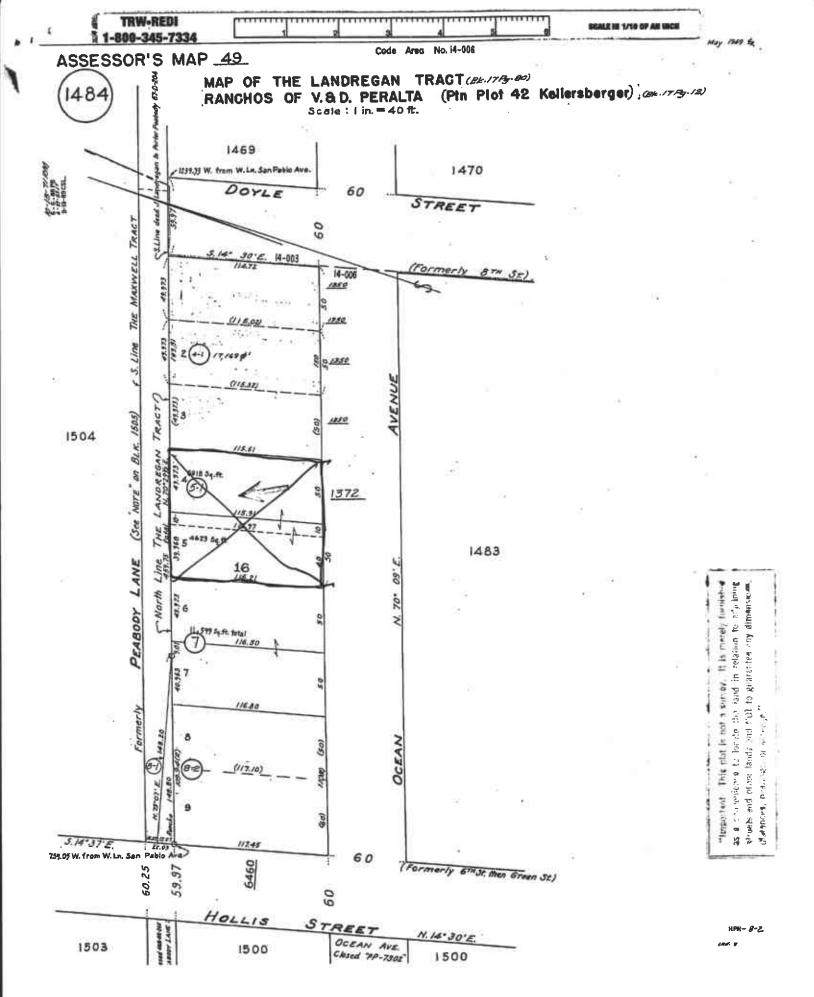
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STATE OF CALIFORNIA DWR WELL COMPLETION REPORT (WELL LOGS)

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Ocean Avenue Lofts

1372 Ocean Avenue Emeryville, California

schematic design dated May 15, 1998

no, revisions date

date issued: 5/12/98

drawn by: ED checked: DH

of sheets

job# 1100-98 drawing number

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four little to the committee four first on the c Unit Six to low 125 mg 1 mount for 125 mg 1 now 157 mg 1

OWNER: Russell Vincent 855 Keeler Avenus Serkelsy, CA 94705 ph(510)525-7473

PROJECT CONSULTANTS:

HOLSCHER ARCHITECTURE

ARCHITECT:

TITLE 24:

STRUCTURAL ENGINEER:

ABBREVIATIONS CAMPAGEN CAM PARTICULAR OF STATE LINES OF STA

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SYMBOLS

SHEET INDEX

AO.1 LOCATION MAP, GENERAL NOTES, ABBREVIATIONS

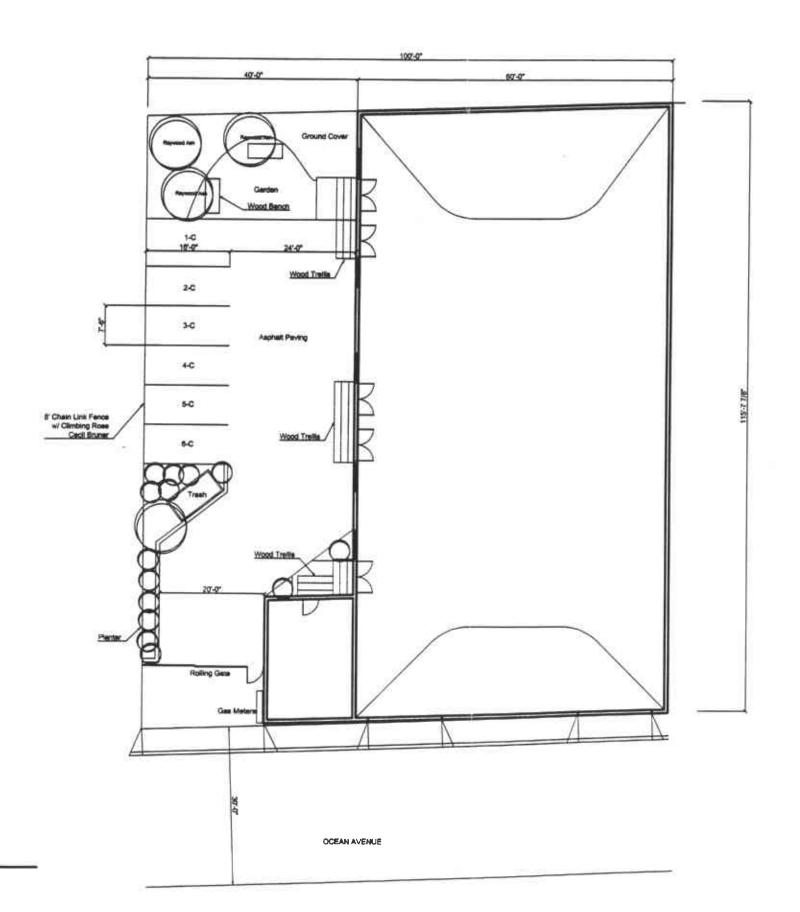
AO.1 SITE PLAN

FIRST FLOOR PLAN SECOND FLOOR PLAN

A2.1 SECTION A3.1 ELEVATIONS

GENERAL NOTES

Total Siquery Footage 9829 Parking provided & Required 10 total- 6 compact 4 regular Outdoor space provided 600 aq. ft. or 133 sq. ft. per uns



HOLSCHER

ARCHITECTURE

2195 paradise drive tiburon, california, 94920 www. harch. com phone 415, 435, 5219 facelmile 415, 435, 0132

Ocean Avenue Lofts

1372 Ocean Avenue Emeryville, California

Site Plan scale 1"=8' schematic design

no. revisions date

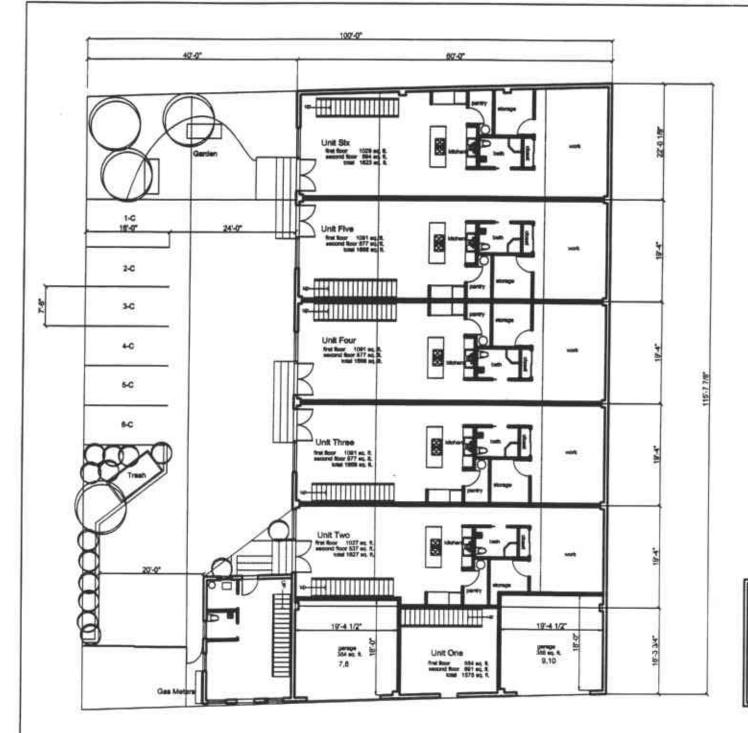
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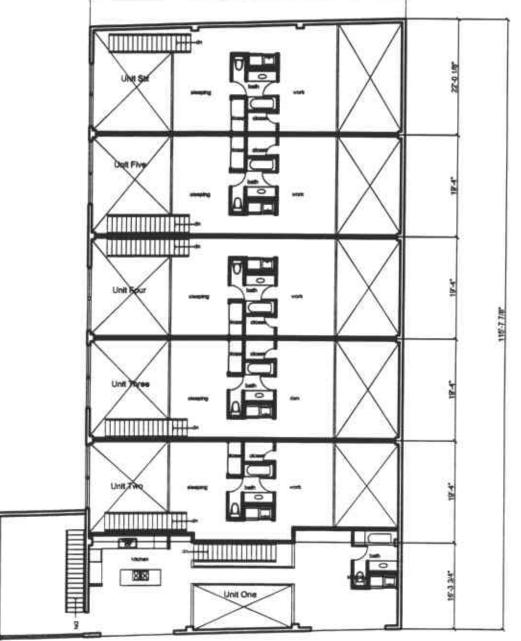
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First Floor Plan



Second Floor Plan

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Ocean Avenue Lofts

1372 Ocean Avenue Emeryville, California

First Floor Plan Second Floor Plan scale 1"=8' schematic design

no, revisions date

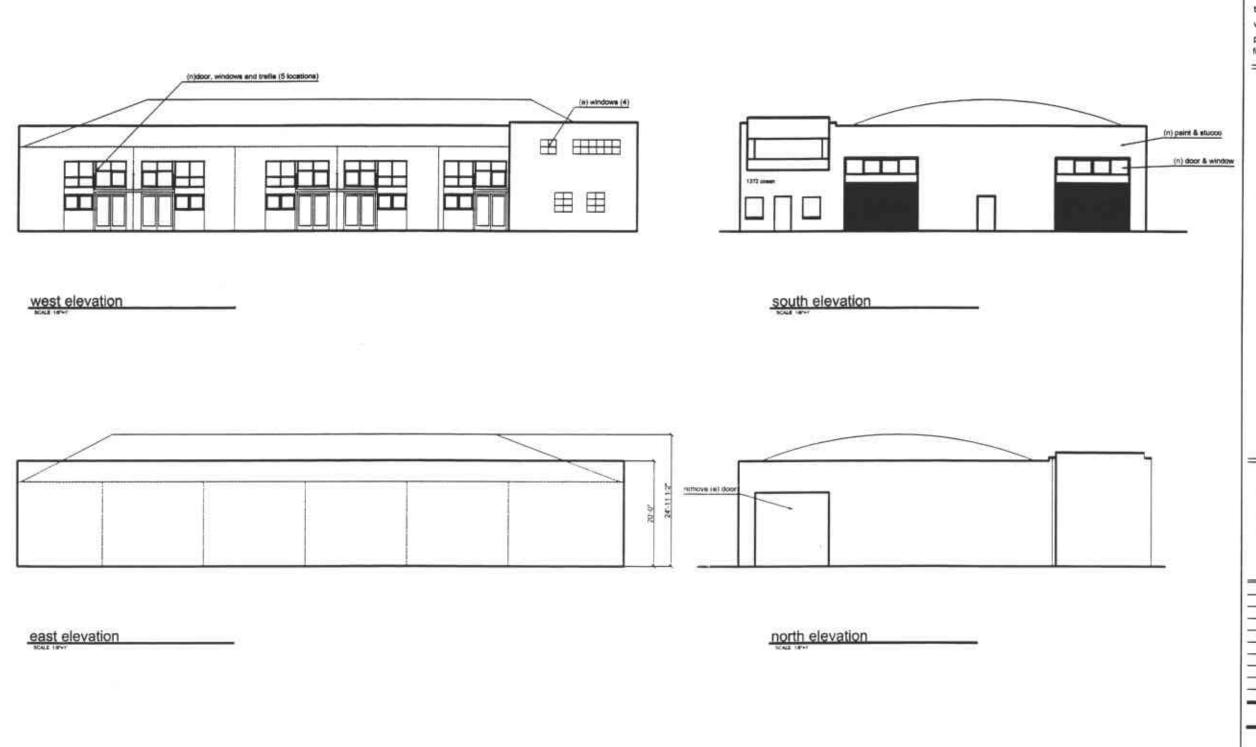
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Ocean Avenue Lofts

1372 Ocean Avenue Emeryville, California

Elevations scale 1"=8' schematic design

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