

**HEALTH AND SAFETY PLAN**  
**WELL INSTALLATION**  
**PACIFIC BELL FACILITY**  
**2610 NORBRIDGE AVENUE**  
**CASTRO VALLEY, CALIFORNIA**

**IT CORPORATION**

## HEALTH AND SAFETY PLAN APPROVALS

Health and Safety Plans require specific approvals as described below. Note that all plans require the approval of a degreed HS professional.

<u>Category</u>	<u>Approvals</u>
Level A PPE, IDLH, Variance from corporate procedures, special circumstances	Project Manager, Project/Location HS Staff, Region/Division HS Manager, Corporate Director HS CIH
Level B PPE	Project Manager, Project/Location HS Staff, Region/Division HS Manager (or designee) CIH
Level C or D PPE	Project Manager, Project/Location HS Staff

### Approvals

I have read and approved this HASP with respect to project hazards, regulatory requirements, and IT procedures (please indicate if CIH).

12-20-93  
Project Manager/Date

Michael D. Noll  
Project/Location HS Staff/Date

\_\_\_\_\_  
Region/Division HS Manager/Date

\_\_\_\_\_  
Corporate Director HS/Date



## SUBCONTRACTOR CERTIFICATION

I, \_\_\_\_\_ as an agent of \_\_\_\_\_,  
do hereby certify that the following employees have successfully completed a 40-hour training  
course which complies with the provisions of 29 CFR 1910.120, and respiratory protection  
training which complies with 29 CFR 1910.134. Each employee has successfully completed a  
medical examination which complies with the above regulations.

Individual copies of certification of successful completion of the required training and medical  
examinations are attached for each employee.

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Signature

Date

## 1.0 Health and Safety Plan

This Health and Safety Plan describes the policies and procedures that will be implemented and followed by IT personnel and subcontractors at the Pacific Bell Facility located at 2610 Norbridge Avenue in Castro Valley, California. The health and safety guidelines for this project are based on sample results from previous investigations.

### 1.1 Introduction

Activities conducted during this operation shall be performed to protect the health and safety of project personnel and the public. The following health and safety program includes training, medical surveillance, personnel protection, decontamination procedures, and general safe work practices. The health and safety plan also addresses procedures for injuries, fire, and spills.

The Health and Safety Plan complies with applicable Occupational Safety and Health Administration (OSHA) regulations. This plan is in accordance with the following IT Health and Safety Policies and Procedures:

HS 001	Safety Policy
HS 600	Respiratory Protection Devices - Wearer Fit Policy
HS 020	Accident Prevention Program - Inspection and Analysis
HS 021	Accident Prevention Program - Safety Inspection
HS 050	Employee and Contractor Training Requirements
HS 100	Preemployment Medical Examinations
HS 100	Periodic/Update Medical Examinations
HS 307	Excavation and Trenching
HS 060	Hazard Communication Program
HS 600	Respiratory Protective Devices
HS 314	Fire Safety
HS 011	Health and Safety Rules for Contractors
HS 402	Hearing Conservation Program.

These policies and their implementation are central to IT's accident prevention program.

The provisions of this plan are mandatory for all IT personnel and subcontractors assigned to the project. All authorized visitors to any of the work sites will be required to abide by these procedures.

### 1.2 Chemical Hazards Identified at the Pacific Bell Facility in Castro Valley, California

The analytical results of previous investigations at Pacific Bell facility in Castro Valley, California have reported the presence of potentially hazardous contaminants related to fuel hydrocarbons. The hydrocarbons and their indicator constituents can be hazardous. These indicator constituents are listed below along with a brief health hazard description, the American Conference of Governmental Industrial Hygienists Threshold Limit Values (ACGIH TLV's) and vapor pressures.

## Benzene

**Hazards:** Benzene is a skin irritant. Inhalation may result in headache, dizziness, nausea, and general weakness. Continued exposures to high concentrations could result in central nervous system depression and respiratory failure. Prolonged chronic exposures may result in abnormalities of the blood forming tissues of bone marrow as well as leukemia. Benzene is a suspect human carcinogen.

- TLV: 1 part per million (ppm)
- Vapor Pressure: 100 mm at 26.1°C

## Toluene

**Hazards:** Toluene is a skin irritant. Inhalation may result in headaches, dizziness, nausea, incoordination, and general weakness. Continued exposures to high concentrations may result in anemia, enlarged liver, or coma. Toluene can contain residual levels of benzene.

- TLV: 100 ppm
- Vapor Pressure: 36.7 mm at 30° C

## Ethyl Benzene

**Hazards:** Ethylbenzene is a skin irritant. Inhalation may result in headache, dizziness, and irritation to the nose and throat. Continued exposure to high concentrations may result in incoordination, loss of consciousness, or respiratory failure.

- TLV: 100 ppm
- Vapor Pressure: 10 mm at 25.9° C

## Xylene

**Hazards:** Xylene is a skin irritant. Inhalation may result in headache, dizziness, and irritation to the eyes, nose, or throat. Continued exposures to high concentrations may result in dizziness and incoordination.

- TLV: 100 ppm
- Vapor Pressure: 6.72 mm at 21° C

These chemical compounds are both skin contact and inhalation hazards. Consequently, protection from both skin contact and inhalation of hazardous chemicals must be addressed by the Health and Safety Plan for this site.

### 1.3 Hazards Associated with Work Activities

This section of the Health and Safety Plan briefly describes each work task and the potential chemical and physical hazards posed to workers by each task. Sections 1.2 through 1.11 of this Plan describe the standards and procedures that will be implemented to mitigate these hazards.

1. Monitoring well installation. Four groundwater monitoring wells will be installed using a truck-mounted hollow-stem auger drilling rig. The purpose of these wells will be to establish the level, if any, of contamination in the groundwater.

**Hazards:** Worker exposure to the identified chemicals could occur due to inhalation of these compounds, inhalation of contaminated dust, or skin contact with contaminated groundwater.

Drilling rigs may create hazards due to falling objects, swinging objects and/or lines or cables; rigs will travel or backup near workers performing related work tasks; and noise exposures will be generated by hammering activities, compressors and from equipment engines.

2. Groundwater samples will be collected from developed wells.

Hazards: Worker exposure to the identified chemicals could occur due to inhalation of these compounds, inhalation of contaminated dust, or skin contact with contaminated groundwater.

## 2.0 Assignment of Responsibilities

All personnel involved in operations who treat, excavate, trench, handle, sample, dispose of, or otherwise have a potential for exposure to site specific contaminated materials are subject to this health and safety plan.

All IT personnel are responsible for continuous adherence to the safety procedures during the performance of the work. In no case may work be performed in a manner that conflicts with the intent of, or the inherent safety and environmental cautions expressed in these procedures. After due warnings, personnel who violate safety procedures will be dismissed from the site and may be terminated. All field personnel shall be properly trained in health and safety procedures associated with handling hazardous materials and the safe operation of equipment. All on-site personnel will be trained as necessary according to the specifications set forth by 29 CFR 1910.120 and this document.

### 2.1 Project Manager

The Project Manager, will be accountable for ensuring field implementation of the Health and Safety Plan. As required by IT Policy and Procedures HS 052, the Project Manager will be responsible for informing the project's Health and Safety Coordinator of any changes in work plans so that issues of health and safety and project management may be appropriately addressed.

### 2.2 Health and Safety Coordinator

The project Health and Safety Coordinator will be responsible for development and coordination of the site health and safety plan. This plan will comply with 29 CFR 1910.120 and will include medical surveillance, training requirements, hazard assessment, personal protective equipment, and field implementation. The Health and Safety Coordinator will update and change the plan, if warranted by changed conditions, and shall have the only authorization to effect such changes. The Health and Safety Coordinator will report to the Project Manager for health and safety operational matters. Agency liaison on matters relating to safety and health will be handled by the Health and Safety Coordinator. Mr. Ron Oak, a Certified Industrial Hygienist, is the Health and Safety Coordinator for this project. His responsibilities include:

- Determining the level of personal protection required
- Updating equipment or procedures based on new information obtained during site operations
- Performing health and safety program quality control audits as required
- Providing direction to Field Supervisor who will be responsible for implementation of Health and Safety Plan.

### 2.3 Field Supervisor

The Field Supervisor, in conjunction with the Health and Safety Coordinator, will act as the site safety officer and be responsible for field implementation of the health and safety plan. This will include communicating site requirements to all personnel, field supervision, and consultation with the Health and Safety Coordinator regarding appropriate changes to the health and safety plan. As required by IT Policy and Procedure HS 052, the Field Supervisor will be responsible for informing the project's Health and Safety Coordinator of any changes in work plans so that they may be appropriately addressed. The Field Supervisor will be on site during all project activities. The Field Supervisor will be responsible for:

- Stopping work as required to ensure personal safety and protection of property or where noncompliance with safety requirements are found
- Determining and posting routes to capable medical facilities and emergency telephone numbers (including poison control centers), and arranging for emergency transportation to medical facilities
- Examining work party members for symptoms of exposure or stress
- Ensuring that each team member has been given the proper medical clearance by a qualified medical consultant; monitor all team members to determine compliance with the applicable physical requirements as stipulated in the health and safety plan.

### 2.4 Technicians/Subcontractors

Technicians, subcontractors, and other personnel on site will be responsible for understanding and complying with all site requirements. Health and safety requirements will be included in subcontracts. On-site or preproject training will be conducted, and topics cited in Section 4.2 will be discussed. Tailgate safety meetings will be conducted as discussed in Section 4.3. All participants will sign a written statement indicating they are aware of the site hazards and protective requirements.

## 3.0 Medical Surveillance

### 3.1 Physical Examination

As required by IT Policies and Procedures HS 100, all IT personnel on site will have successfully completed a preplacement or periodic physical examination in compliance with OSHA requirements in 29 CFR 1910.120 for hazardous waste site operations.



The IT medical surveillance program examination consists of:

- Medical and occupational history form (detailed questionnaire for new employees, short questionnaire for periodic exams)
- Physical examination
- Complete blood count with differential
- SMAC 23
- Urinalysis (dipstick and microscopic)
- Chest x-ray
- Pulmonary function test (FEV/FVC)
- Audiometric examination
- Electrocardiogram for persons older than 45 years of age, or if medically indicated
- Drug and alcohol screening
- Visual acuity.

The following information is provided to the examining physician:

- Description of employee's duties
- Anticipated exposure levels
- Description of the personal protection equipment to be used
- Information from previous medical exams.

A copy of the medical examination is provided the employee at his/her request. The employee shall be informed of any medical conditions that would result in work restrictions or that would preclude him/her from working at hazardous waste sites.

All subcontractor personnel who have potential for exposure to hazardous materials shall have successfully completed an examination similar to the preplacement physical. The cost for medical surveillance will be paid by the subcontractor. All physicals will be approved by an occupational physician. The Project Manager will verify medical surveillance documentation.

### 3.2 Medical Records

Medical records will be maintained in accordance with the requirements of 29 CFR 1910.120 and shall be kept for 30 years. Employee confidentiality shall be maintained.

### 3.3 Injury and Illness Treatment

- A physician familiar with occupational medicine will be identified before field work begins. This physician will be familiar with the effects of the chemicals on site and will be used as a consultant in the event of a job-related illness.
- If an injury or illness is the result of a chemical exposure, a supervisor shall promptly initiate the steps necessary to identify the chemical(s). Chemical identification shall be accomplished through use of monitoring equipment (photoionization detector in conjunction with Draeger tubes), prior sampling

results and any other information that may be available. Such information shall be given to the treating physician and the Health and Safety Coordinator.

- Any injury or illness requires the completion of IT Form HS 020, "Supervisor's Employee Injury Report", in accordance with IT Procedure HS 020.
- Any injury or illness not limited to a first-aid response requires that the Field Supervisor immediately notify the Health and Safety Coordinator. This notification allows the coordination of internal resources to assist the treating physician in rendering appropriate care.
- Any employee of IT or of a subcontractor who is suspected of having an overexposure to the chemicals on site will be given another complete physical examination. Any employee or contractor who develops a lost-time illness or sustains a lost-time injury will be reexamined. The physician will certify that the employee is fit to return to work by completing the "Return to Work Authorization Following Medical Absence Form." If necessary, activity restrictions will be specified on the "Physical Activity Restriction Report."

#### 4.0 Employee Training

##### 4.1 Preproject Training

All IT employees and IT subcontractors subject to exposure to on-site contaminants shall be trained in accordance with 29 CFR 1910.120

- All employees will have received a minimum of 40 hours of training off site and a minimum of three days of field experience under the direct supervision of a trained, experienced supervisor. All who complete the 40 hours of classroom training and 3 days of field experience will receive a certificate from the instructor. A copy of the certificate shall be available as needed.
- On-site management and supervision shall receive a minimum of eight hours of additional training.
- Each hazardous waste operations employee shall receive eight hours of refresher training on an annual basis, as appropriate.
- All workers who must wear respirators must have received respirator fit testing for the particular respirator that is worn during work.

## 4.2 Initial On-Site Training

The following training sessions and information materials will be provided on site at the time of initial entry of the work zone.

- Site Safety Plan - All persons entering the site shall be informed of the contents of the site Health and Safety Plan. This site specific training shall address:
- Acute and chronic effects of the toxic chemicals identified at the site, including odors and conditions likely to indicate the presence of site-specific chemicals.
- Physical health hazards identified at the site.
- Personal hygiene.
- Safety equipment, the procedures required for personnel protection, and their effectiveness and limitations.
- Work areas established at the site.
- Prohibitions in contaminated areas.
- Change in site operations.

## 4.3 Tailgate Safety Meetings

A tailgate safety meeting will be conducted at the beginning of each shift or whenever new employees arrive at the job site once the job commences. The health and safety considerations for the day's activities will be discussed, and the necessary protective equipment outlined. The tailgate safety meeting will be documented on the Tailgate Safety Meeting Form.

## 5.0 Site Monitoring

Periodic monitoring with a photoionization detector (PID) and a combustible gas/O<sub>2</sub> meter will be conducted during any work activity. The PID will be calibrated with isobutylene. The combustible gas meter will be set to sound an alarm if oxygen concentration in the air is less than 20% or more than 25%; or if a combustible substance is present in air at greater than 10% of its lower explosion limit (LEL). The work area will be evacuated and the Health and Safety Coordinator will be consulted if more than 10ppm of volatile organic emissions, less than 20% oxygen, more than 25% oxygen, or more than 10% of the LEL is present in the breathing zone of site workers. If more than 10ppm is measured with the PID, Draeger tubes will be used to identify the substance. Tasks of primary concern are drilling and well sampling. The monitoring results will dictate the selection and appropriateness of personal protective equipment. The extent of monitoring will be based on the suspect contaminants and the activity to be performed. The Health and Safety Coordinator will be responsible for this decision based on input from the Field Supervisor.

## 5.1 Noise Monitoring

All personnel shall wear hearing protection in areas where noise levels exceed a time-weighted average of 85 dBA for the duration of exposure. Specifically, hearing protection will be worn around drilling operations. Noise monitoring may be conducted as necessary by the Health and

Safety Coordinator. Monitoring will be conducted initially with an ANSI Type 2 sound level meter. Dosimetry will be conducted if deemed necessary by the Health and Safety Coordinator.

## 6.0 Personnel Protection Program

The personnel protection program has been defined in this section based on the hazards discussed in Section 1.1.

### 6.1 Levels of Protection

The level of protection required for this project will be based upon the hazards and conditions of the work site. The requirement for the specific level of protection is described below.

#### 6.1.1 Level D Protection (Standard)

All workers who enter a work zone (exclusion zone) to perform work tasks that require contact with water, groundwater, or soil that is suspected to be contaminated must wear Level D protection.

The following equipment will be used for Level D protection:

- Coveralls - Tyvek white or yellow
- Boots/shoes - Steel-toed boots with chemical protection
- Safety glasses, or goggles if an eye hazard exists
- Hard hat
- Chemical resistant Nitrile protective gloves for drilling and latex surgical gloves for handling soil or water believed minimally contaminated.
- Orange outer "safety vest" when working in active traffic areas.

### 6.2 Respiratory Protective Program

A comprehensive respiratory protection program has been established by IT. This program will be followed in all locations where use of such equipment could lessen the potential for adverse health effects to any employee. The type of respiratory equipment will be continuously reevaluated based upon the current level of exposure.

As part of the respiratory training program, each employee will have been instructed in the nature of the respiratory hazard on the work site. If respirators are required, each worker will have been instructed in the following elements:

- Use and proper fitting of the respirator
- Cleaning, disinfecting, inspection, maintenance, and storage of the respirator
- Proper selection, capabilities, and their limitations

The respiratory protection training program will be conducted, documented, and recorded by the health and safety representative.

Respiratory equipment will be inspected, cleaned, and disinfected daily or after each use, whichever is appropriate. An inspection of the respirator equipment will include the following:

- Examination of the head straps for breaks, loss of elasticity, broken or malfunctioning buckles, and other attachments.
- Examination of the facepiece for excessive dirt, cracks, tears, distortion, holes or inflexibility.
- Examination of the exhalation and inhalation valves for any foreign material, cracks, tears, distortion, in the valve. Additional checks will be made to inspect for proper insertion, defective valve covers, or improper installation.
- Examination of air purifying elements for incorrect cartridge, expired shelf-life of the cartridge, cracks or dents in the cartridge or cartridge holder.
- Examination of proper insertion of the cartridges into the facepiece and a check of the gaskets inside the cartridge holder.
- Examination of air cylinders for adequate air volume.

## 6.3 Heat and Cold Stress

### 6.3.1 Heat Stress

One or more of the following control measures will be used to help control heat stress:

- Provision for adequate liquids to replace lost body fluids will be made. Replacement fluids can be a 0.1 percent salt water solution, commercial mixes such as Gatorade or Quick Kick, or a combination of these with fresh water.
- Establishment of a work regimen that will provide adequate rest periods for cooling down.
- All breaks are to be taken in a cool area.
- Employees shall be informed of the importance of adequate rest, acclimation, and proper diet in the prevention of heat stress.

The site Field Supervisor will observe the workers for symptoms of heat stress, especially in areas where protective clothing is being worn. Symptoms may include fatigue; irritability; headache; faintness; weak, rapid pulse; shallow breathing; cold, clammy skin; profuse perspiration. Heat related problems are presented below:

- Heat Rash - This is caused by continual exposure to heat and humid air, and aggravated by chaffing clothes. Heat rash decreases a person's ability to tolerate heat as well as becoming an irritating nuisance.
- Heat Cramps - This is caused by profuse perspiration with inadequate water intake and chemical electrolyte imbalance. This results in muscle spasm and pain in the extremities and abdomen.
- Heat Exhaustion - Increased stress on various organs to meet increasing demands to cool the body will result in signs and symptoms including shallow breathing; pale, cool, moist skin; profuse sweating; dizziness and lassitude.
- Heat Stroke - This is the most severe form of heat stress which must be treated

immediately by cooling the body, or death may result. Signs and symptoms include red, hot, dry skin; no perspiration; nausea; dizziness and confusion; strong, rapid pulse; and coma. If symptoms of heat stroke are observed, the following procedures will be implemented:

- Instruct the victim to lie down in a cool, shaded area or air-conditioned room and elevate his/her feet.
- Call an ambulance by dialing 911 on the nearest telephone.

### 6.3.2 Cold Stress

Workers should be protected from exposure to extreme cold temperatures so that the body temperature does not fall below 36 degrees Celsius (98.6 degrees Fahrenheit). Lower body temperature may result in reduced mental alertness, irrational decision making or loss of consciousness.

When the air temperature is below 45 degrees Fahrenheit, workers shall have warm clothing, gloves and heavy socks, such as whole-body thermal underwear, wool socks, or insulated gloves and knit caps or hard hat liners. If the clothing of the worker can become wet on the job site, an outer impermeable layer will be worn. When the worker's underclothing becomes wet, the worker will change into dry clothing. The following provisions will also be made:

- Hot liquids shall be provided in the break area, but the intake of coffee shall be limited because of the diuretic and circulatory effects.
- Workers observed shivering shall be taken to a suitably heated area (greater than 65 degrees Fahrenheit) immediately.
- Workers shall wear multiple layers of clothing with the thinner clothing next to the body and the heavier clothing on the outside.
- Worker should be advised against overdressing that could lead to heat stress.
- Work shall be arranged to avoid long periods of sitting still or standing.

Symptoms of cold stress may include shivering, numbness, low body temperature, drowsiness, and weakness.

Treatment for Cold Stress Include the Following:

- Move victim into warm room as soon as possible
- Be alert for breathing difficulties; start rescue breathing techniques, if necessary
- Remove wet or frozen clothing; immediately rewarm victim by wrapping in blankets
- Give victim hot liquids to drink, only if conscious
- Follow treatment for frostbite
- Consult professional medical help, if required

## 6.4 Hearing Conservation Program

All on-site IT personnel shall wear hearing protection when noise levels exceed 85 DBA as per IT Procedure HS 402. All IT personnel shall also receive baseline and annual audiograms and training as to the causes and prevention of hearing loss. Noise monitoring is discussed in Section 1.5.1.

## 7.0 Site Access

Access to work areas shall be regulated and limited to authorized persons. Visitors to the site shall abide by the following:

- All visitors shall be instructed to stay outside the work zone during the extent of their stay unless they have a documented reason for access such as regulatory responsibility. Visitors shall be cautioned to avoid skin contact with contaminated or suspected contaminated surfaces. During visitation, hand-to-mouth transfers should be reduced with special precautions not to eat, drink, smoke, or chew gum or tobacco. The use of alcohol or medicine in the work zone is prohibited.
- Visitors requesting to enter the work zone must wear all appropriate personal protective devices before entering. Visitors entering the work zone will be required to read and sign a tailgate safety form. If respiratory protective devices are necessary, visitors who wish to enter the work zone must produce evidence that they have had a complete physical examination and respiratory protection training, including respiratory fitting, within the past 12 months. Visitor must provide their own respiratory protection. The wearer must pass a qualitative fit test before entry will be permitted.
- Visitor access to the work zone will be left to the discretion of the Field Supervisor.

## 7.1 General Rules

Controlled access to the work zone will be established. Only authorized personnel shall be permitted to enter this area. The following rules shall be followed by individuals entering the work area:

- An area shall be designated as the break area.
- Hand washing facilities may be provided in the immediate work area for employees who may come into contact with contaminated materials.
- All entry to and exit from the work zone shall be strictly controlled.
- The Field Supervisor shall monitor the effectiveness of the decontamination procedures and, if found ineffective, shall take appropriate steps to correct any deficiencies or modify the plan if needed.
- Employees shall wash their face and hands before eating, drinking, or smoking. No eating, drinking, or smoking shall take place in the work zone.



## 8.0 Decontamination

### 8.1 Employee Decontamination

A decontamination zone will be established at the perimeter of the work area. At the end of each work period (before eating, drinking, smoking, or leaving the site) each person follow decontamination procedures. Soiled equipment will be washed and scrubbed in a detergent/water solution and then be rinsed thoroughly in water and allowed to dry on a clean surface. All equipment will be inspected for defects prior to reuse.

Decontamination procedures are presented for Level D protection. Modifications to site plans and procedures may be made by the Field Supervisor with the approval of the Health and Safety Coordinator.

Deposit equipment used on site (tools, sampling devices and containers, monitoring equipment, radios, clipboards, etc.) on a plastic drop cloth or in separate containers with plastic liners. Gloves and Tyvek suits are deposited in waste collection containers lined with plastic. Wash hands and face.

Equipment: 2 containers (30 to 50 gallon), hand pump spray device, water, detergent, scrub brushes

### 8.2 Equipment Decontamination

All equipment likely to contact soil or groundwater on site shall be cleaned before and after use. Protective equipment such as respirator facepieces will be decontaminated at the end of the shift. It is the responsibility of the Field Supervisor to make sure all pieces of heavy equipment coming off-site are properly decontaminated, according to the procedures outlined above.

### 8.3 Waste Disposal

Disposable protective clothing, air purifying respirator cartridges and decontamination solution will be contained, bagged, labeled and secured for proper disposal, and disposed of according to applicable state and federal regulations.

## 9.0 Work Practice Control

### 9.1 General Work Practices

Only authorized personnel will be permitted in the work area. Material Safety Data Sheets (MSDS) will be obtained for every commercial chemical product used on site. This information will be made readily available to all employees upon request and stored in a central location. MSDS or applicable information will be available with regard to materials used in the soil collection, drilling, and decontamination process.

- All secondary containers of any commercial chemical products will be properly labeled to comply with the Federal OSHA Hazard Communication Standard (29 CFR 1910.1200).
- Protective clothing will be used for various stages of the entire operation. All information regarding work to be performed, emergency procedures, and health and safety hazards will be reviewed before the work begins during a daily tailgate safety meeting. No work will be performed without completing these procedures.
- Legible and understandable precautionary labels shall be affixed prominently to containers of contaminated scrap, waste, debris, and clothing.
- Removal of contaminated soil from protective clothing or equipment by blowing, shaking, or any other means that disperses contaminants into the air is prohibited.
- No food or beverages shall be present or consumed in the work area.
- Contact lenses shall not be used and cosmetics shall not be applied in the regulated area.
- A complete IT approved first-aid kit will be readily available on site.
- If a serious injury occurs, the local emergency response team will be summoned to tend to and evacuate the injured person, as necessary.

Fire extinguishers will be maintained in on-site vehicles ready for the workers' safety and protection in the event of an emergency.

## 9.2 Site Drilling

Site drilling will comply with the following rules:

- Before drilling or excavating, the existence and location of underground pipe, electrical equipment, and gas lines shall be determined. This will be done by contacting Underground Service Alert (USA) at least 48 hours in advance of subcontractor arrival to locate underground utility lines.
- Drilling equipment operators and helpers in proximity to the drilling equipment will wear a full complement of protective gear. Wearing of all personal protection equipment including safety glasses, gloves and hard hats is mandatory. Prior to drilling all field personnel will be made aware of the location of the drill rig kill switch.

## 9.3 Heavy Equipment Operation and Heavy Materials Handling

The following procedures will be established around heavy equipment such as backhoes and drilling rigs and during handling of heavy materials:

- Hard hats are to be worn at all times on site. Other protective gear as specified in the health and safety plan is also applicable.
- Safe distances must be maintained from underground or overhead utility lines that present a hazard in the work area.
- Operators of trucks and heavy equipment used on-site will be properly trained in the inspection and operation of such equipment. The site supervisor will be

- responsible to check the proficiency of the operator.
- One standby person will provide guidance to the equipment operator using either two-way radios or universal hand signals.
- Perimeter barricades and yellow warning tape will be placed around equipment used in a fixed location.
- Audio and/or visual backup alarms will be utilized on all heavy equipment on-site.
- Walking and working in the immediate vicinity of operating equipment without the operator's knowledge will be prohibited.
- If the object may be of questionable weight, assistance in lifting from a second person should be sought.
- Use chains, hoists, straps, and any other equipment to safely aid in moving heavy materials. A minimum of a four-point suspension will be used to move these items.
- The path for transporting materials will be checked for slip, trip and fall hazards prior to initiating transport tasks.
- Proper personal lifting techniques should be emphasized.

## 9.4 Excavation Safety

### 9.4.1 Hazard Assessment

At the beginning of the project, at the beginning of each work shift, or as often as necessary to ensure safety, a competent person shall conduct an area survey to locate potential hazards and determine appropriate safety control measures.

### 9.4.2 Excavation Safety Procedures

If excavation of contaminated soil to a depth greater than five feet occurs and entry by workers is needed, Cal-OSHA will be notified and the applicable Cal-OSHA permit for excavation entry will be posted. Safety precautions must be adhered to as specified in OSHA regulations 29 CFR 1926.650 and the Cal-OSHA equivalent. The Supervisor shall question the real need to enter a trench greater than three feet deep. Remote sampling and/or excavation equipment should be used where possible. As a minimum, the following rules shall be strictly observed:

- Excavations into which employees may be required to descend shall be sloped (1-to-1), benched, or shored, if they are more than five feet in depth.
- Excavation spoils shall be placed no closer to the edge of the excavation than one excavation depth away.
- No employee will work adjacent to any excavation until a reasonable examination of the excavation has been made to determine that no conditions exist exposing them to injury from moving ground.
- Trees, boulders, overhead lines or cables, and other surface encumbrances located so as to create a hazard to employees involved in excavation or in the vicinity thereof at any time during operations will be removed or made safe before excavating is begun.

- Excavations shall be inspected by an IT-qualified person before initial entry and after every rainstorm or other hazard-increasing occurrence, and the protection against slides and cave-ins will be increased if necessary.
- Appropriate access methods, such as ladders, shall be used to enter or exit the excavation. Under no circumstances are workers permitted to ride backhoe buckets to enter or exit the excavation.
- Trenches more than four feet deep shall have ladders or steps located so as to require no more than 25 feet of lateral travel between means of egress. Ladders shall be placed at an angle not more than 30 degrees from vertical and secured as necessary. Ladder side rails shall extend at least three feet above the original ground surface.

## 9.5 Confined Space Entry

Entry into confined spaces is not anticipated. However, if it is necessary, an amendment to this plan will be developed that will specifically address entry procedures and protocol to be used per IT policy HS300.

## 10.0 Sanitation

- An adequate supply of potable water shall be provided at the work site.
- Portable containers used to dispense drinking water shall be capable of being tightly closed, and equipped with a tap. Water shall not be dipped from the container.
- Containers used to distribute drinking water shall be clearly marked and not used for any other purpose.
- Single service cups will be supplied; both a sanitary container for the unused cups and a receptacle for disposing of the used cups shall be provided.

## 11.0 Emergency Contingency and Response

The Health and Safety Plan has been established to allow site operations to be conducted in a manner to minimize hazards to employee health and safety. This Emergency Contingency and Response (ECR) section has been developed to cover extraordinary conditions that might occur at the site.

All accidents and unusual events will be dealt with in a manner to minimize health risk to site workers and the surrounding community. In the event of an accident or other unusual event, the following procedures will be followed:

- First aid and other appropriate initial action will be administered by properly trained personnel closest to the incident. This assistance will be conducted in a manner to assure that those rendering assistance are not placed in a situation of unacceptable risk.
- All incidents will be reported to and documented by the designated Emergency Coordinator, who is responsible for coordinating the emergency response in an

efficient, rapid, and safe manner. The Emergency Coordinator will decide if off-site assistance, medical treatment, or both is required and arrange for such assistance. The Emergency Coordinator will ensure that adequate emergency equipment will be available on site.

- All workers on site are expected to be responsible and to conduct themselves in a mature, calm manner in the event of an accident or unusual event. All personnel must conduct themselves in a manner to avoid spreading danger to themselves, surrounding workers, or the community in general.

## 11.1 Responsibilities

### 11.1.1 Emergency Coordinator

The site Field Supervisor is responsible for field implementation of the ECR and will act as the Site Emergency Coordinator. As the Emergency Coordinator, specific duties include:

- Communicating site ECR requirements to all personnel, whether directly involved in emergency response or not
- Specifying a backup alternate
- Purchasing supplies as necessary
- Controlling activities of subcontractors and respond to outside agencies
- Anticipating, identifying, assessing, and controlling fires, explosions, chemical releases, and other emergency situations.

### 11.1.2 Health and Safety Coordinator

The Health and Safety Coordinator is responsible for:

- Establishing health and safety procedures
- Conducting preproject training
- Instructing the Field Supervisor
- Monitoring during project start-up.

He/she will make advance arrangements with appropriate support groups and alert them to the site hazards and types of emergencies that may arise. As the Health and Safety Coordinator, specific duties include:

- Provide a map of the site location and define the ingress routes
- Identifying medical and emergency facilities
- Providing training and information about hazards on site and special handling procedures.

### 11.1.3 Personnel and Subcontractors

All on-site personnel, whether involved in emergency response or not, will be notified of their responsibilities in an emergency. They will be familiar with the ECR and the Emergency Coordinator's authority.

### 11.2 Emergency Equipment

In the event of an emergency, equipment will be available that is consistent with the response plan to rescue and treat victims, protect response personnel, and mitigate hazardous conditions on site. Protective equipment up to Level D is anticipated for protection during emergency incidents. If greater protection is needed, off-site support equipped for the need should be considered.

### 11.3 Communication and Notification

#### 11.3.1 Communications

Personnel will be familiar with protocol for contacting support groups and agencies identified in the ECR. Emergency numbers and phone locations will be posted so that outside assistance can be requested. A vicinity map showing the location of the nearest hospital will also be posted.

#### 11.3.2 Notification

If the Emergency Coordinator determines that the site has an uncontrolled situation such as an injury, spill, fire, or explosion which could threaten public health or the environment, he/she will report his findings as follows:

- Alert site personnel. Initiate the appropriate response to the situation.
- Contact the emergency support unit if needed.
- Fire, Police, Ambulance: Phone 911

Eden Hospital  
20103 Lake Chabot Road  
Castro Valley, CA  
1-510-889-5015 (Emergency Room Direct Line)  
1-510-537-1234 (General Number)

- Contact the IT Health and Safety Coordinator  
1-408-894-1200
- Contact the IT Project Manager  
1-408-894-1200

## 11.4 Emergency Procedures

Potential incidents fall under three general classifications: (1) worker injury or illness; (2) chemical release to the atmosphere, soil, or surface waters; and (3) fire or explosions. The following sequence of events constitute the specific responses and control procedures to be taken in the event of these three incident scenarios.

The initial response to any emergency will be firstly to protect human health and safety, and then the environment. Secondary response to the emergency will be identification, containment, treatment, and disposal assessment.

### 11.4.1 Hazard Assessment

The Emergency Coordinator and Field Supervisor in consultation with the Health and Safety Coordinator will assess possible hazards to human health or the environment that may result from the chemical release, fire, or explosion. The Emergency Coordinator will assess the hazards posed by an incident through the following steps, as appropriate:

- Assess immediate threat to human life and health.
- Assess immediate need to protect public health and safety
- Identify the materials involved in the incident
- Identify exposure and/or release pathways and the quantities of materials involved
- Determine the potential effects of exposure/release, and appropriate safety precautions.

This assessment will consider both the direct and indirect effects of the chemical release, fire, or explosion (e.g., the effects of any toxic, irritating, or asphyxiating gases that are generated, or the effects of any hazardous surface water runoff from water or chemical agents used to control fire and heat-induced explosions).

Based on this assessment, the Emergency Coordinator will determine what risks are posed to site personnel and community populations. If the incident cannot be controlled by operating personnel without incurring undue risk, the Emergency Coordinator will order the evacuation of all workers at risk and notify the Fire Department (dial 911) of the situation and the assistance required and then notify appropriate parties listed in Section 11.3.2.

### 11.4.2 Worker Injury

If an employee working in a contaminated area is physically injured, first-aid procedures will be followed. Depending on the severity of the injury, emergency medical response may be sought. If the employee can be removed, he/she will be removed from the source of contamination. Decontamination procedures, additional first aid, or preparation for transportation will be conducted at a safe distance from the work site.

Personnel decontamination procedures will be conducted as practical. Modification or omission of decontamination procedures may be necessary, depending on the severity of the injury.

If the injury to the worker is chemical in nature (e.g., overexposure), the following first-aid procedures are to be instituted:

- Eye exposure - If contaminated soils or liquids get into the eyes, wash eyes immediately at the emergency station using large amounts of sterile saline, distilled, or potable water and lifting the lower and upper eye lids occasionally. Wash for at least 15 minutes. Obtain medical attention immediately. Contact lenses will not be worn when working on the site.
- Skin exposure - If contaminated solids or liquids get on the skin, promptly wash the contaminated skin using soap or mild detergent and water for at least 15 minutes. Obtain medical attention immediately when exposed to concentrated solids or liquids. Wash face and hands before eating or leaving the site. "Don't carry the contamination."

In the event of serious emergency, call 911 for transport of workers to Eden Hospital, 20103 Lake Chabot Road, Castro Valley.

#### 11.4.3 Fire and Explosion

When fire or explosion appear imminent or have occurred, all work activities will cease. The Emergency Coordinator will assess the severity of the situation and decide whether the emergency event is or is not readily controllable with existing fire suppression equipment on hand. Fire fighting will not be done if the risk to operating personnel appears high. The Fire Department will be called (dial 911) in all situations in which fires or explosions have occurred.

If the situation appears uncontrollable, and poses a direct threat to human life or the environment, a warning will be administered to all personnel to secure their emergency equipment. If the chances of an impending explosion are high, the entire site will be evacuated.

The Emergency Coordinator will alert all personnel when all danger has passed, as determined by the Fire Department.

Situations which will activate notification of other emergency contacts are:

- A fire which causes or could cause the release of toxic fumes
- The fire could possibly spread to off-site areas
- Use of fire extinguishers and suppressants does not result in immediate fire containment
- An imminent danger exists that an explosion could occur, causing a safety or health hazard
- An imminent danger exists that an explosion could ignite other hazardous substances at the facility
- An imminent danger exists that an explosion could result in release of toxic



- materials
- An explosion has occurred.

#### 11.4.4 Chemical Release

If a chemical release resulting in a vapor cloud or liquid spill is noted, the information will be immediately relayed to the Emergency Coordinator. The Emergency Coordinator in consultation with the Health and Safety Coordinator will assess the magnitude and potential seriousness of the release by reviewing the following information:

- Information regarding the material released such as material safety data sheets
- Source of the release
- An estimate of the quantity released and the rate at which it is being released
- Weather conditions which may influence the situation.
- The direction in which the air or liquid release is moving
- Personnel who may be or may have been in contact with material, or release, and possible injury or sickness as a result
- Potential for fire or explosion resulting from the situation
- Estimates of the area threatened by the release.

If the release is determined to lie within the on-site emergency response capabilities, the Emergency Coordinator will implement the necessary remedial action.

If the incident results in chemical concentrations at the site perimeter exceeding the action levels specified in the Health and Safety Plan, the Emergency Coordinator will notify the appropriate support agencies. The Emergency Coordinator may elect to make immediate notification if conditions warrant. In the event of an emergency release, all personnel not involved with emergency response activity will be evacuated from the immediate area.

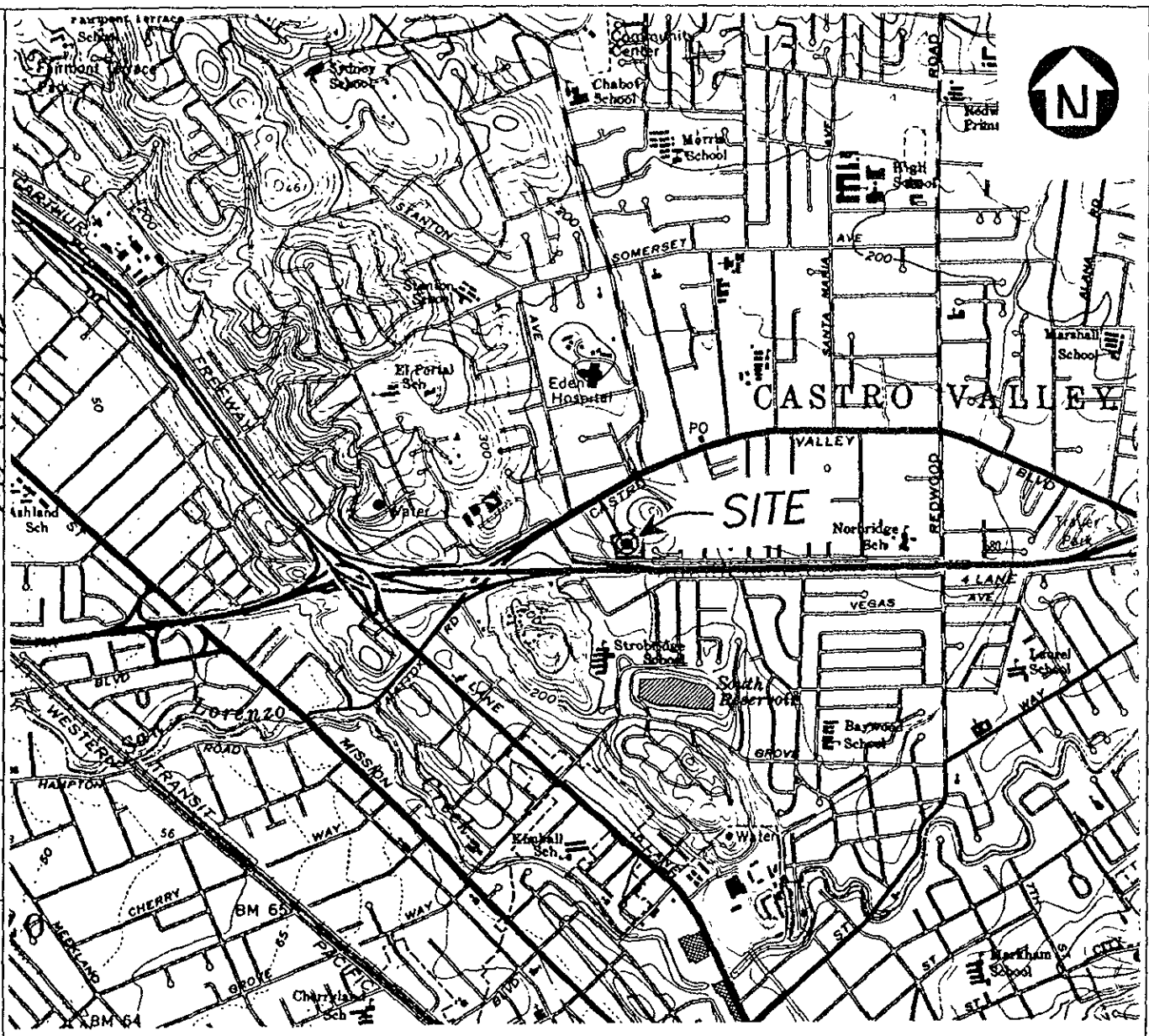
#### 11.5 Documentation

If an incident occurs, the Field Supervisor will produce a report in addition to the IT Supervisor's Employee Injury Report describing the following:

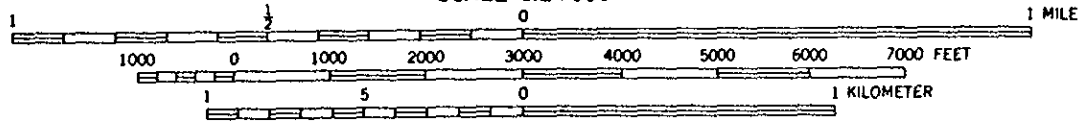
- The incident (including date and time) that necessitated the notification and the basis for that decision
- Date, time, and names of all persons/agencies notified and their responses
- Resolution of the incident (including duration) and the method/corrective action involved.

This full report will be submitted to the Health and Safety Coordinator within five working days of the resolution of the event.

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 J.M.  
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CONTOUR INTERVAL 20 FEET  
 DOTTED LINES REPRESENT 5-FOOT CONTOURS  
 NATIONAL GEODETIC VERTICAL DATUM OF 1929



QUADRANGLE LOCATION

REFERENCE

UNITED STATES DEPT. OF THE INTERIOR, GEOLOGICAL SURVEY  
 STATE OF CALIFORNIA, HAYWARD QUADRANGLE,  
 7.5 MINUTE SERIES (TOPOGRAPHIC).

Figure 1

VICINITY MAP

IT PROJECT No. 151933

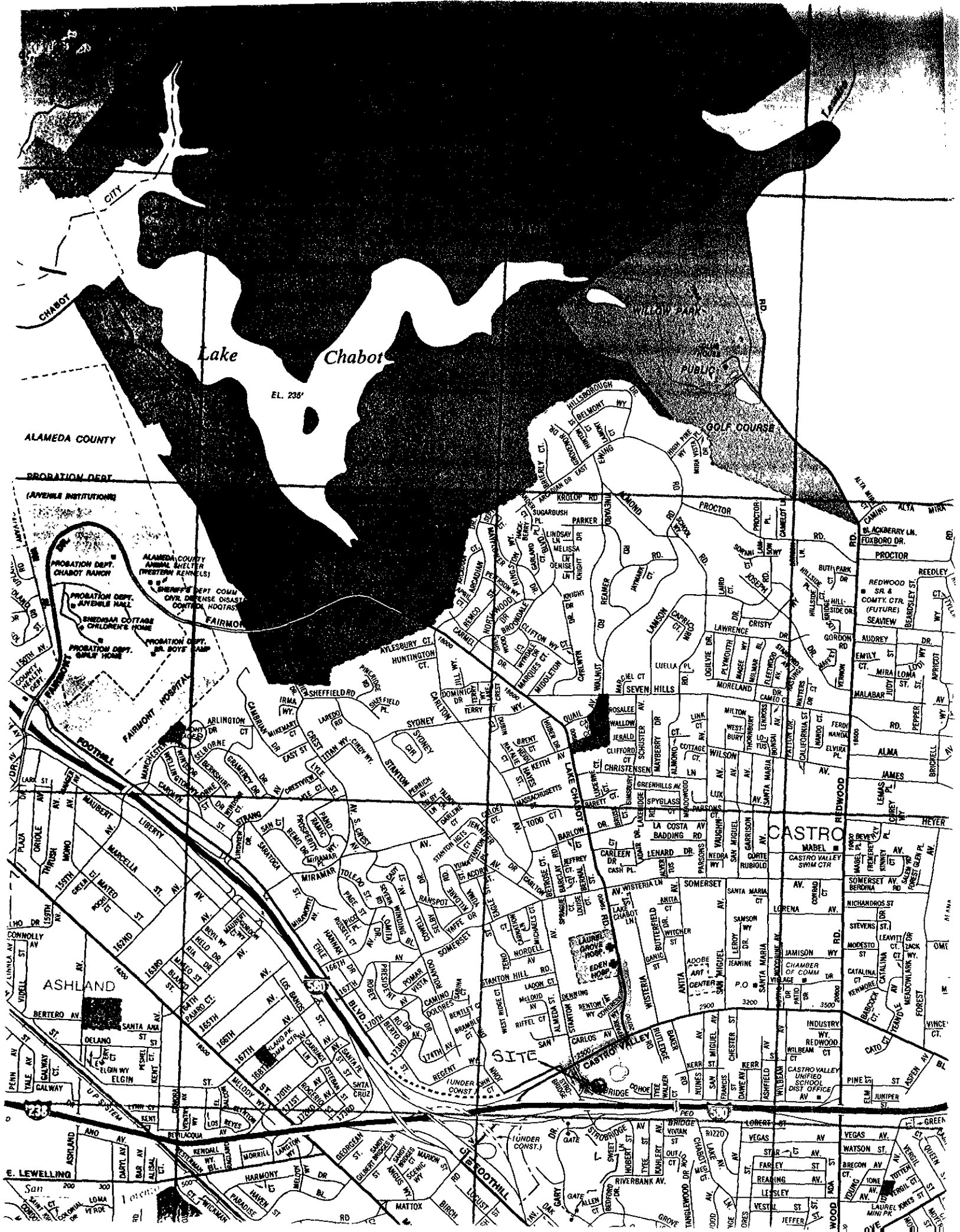
PACIFIC BELL FACILITY  
 2610 NORBRIDGE AVENUE  
 CASTRO VALLEY, CALIFORNIA

PREPARED FOR

PACIFIC BELL  
 SAN JOSE, CALIFORNIA



INTERNATIONAL  
 TECHNOLOGY  
 CORPORATION



Lake Chabot

EL. 236'

WILLOW PARK

PUBLIC

GOLF COURSE

ALAMEDA COUNTY

PROBATION DEPT.  
(AYERVILLE INSTITUTIONS)

ALAMEDA COUNTY ANIMAL SHELTER  
(WESTERN KENNELS)

PROBATION DEPT. CHABOT RANCH

PROBATION DEPT. AYERVILLE HALL

SHEDDIAA COTTAGE & CHILDREN'S HOME

PROBATION DEPT. GIRL'S HOME

PROBATION DEPT. SA. BOYS' CAMP

FAIRMONT HOSPITAL

FAIRMONT HOSPITAL

ARLINGTON CT.

CLAYBURN WINDMILL CT.

ELBORN CT.

GRANDEY DR.

IRMA WY.

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