DEPARTMENT OF PLANNING AND PERMITTING
CITY AND COUNTY OF HONOLULU
650 SOUTH KING STREET • HONOLULU, HAWAII 96813
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JEREMY HARRIS
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ERIC G. CRISPIN, AIA
DIRECTOR

BARBARA KIM STANTON
DEPUTY DIRECTOR

2002/ED-10 (DT)

May 9, 2003

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

Dear Ms. Salmonson:

CHAPTER 343, HAWAII REVISED STATUTES
FINAL ENVIRONMENTAL ASSESSMENT (EA)

Landowner	:	City and County of Honolulu
Applicant	:	VoiceStream PCS II Corp.
Agent	:	Roy Irei
Location	:	2471 Kula Kolea Drive (Kalihi Elementary School) - Kalihi Valley
Tax Map Key	:	1-4-7: 2
Proposal	:	To allow a utility installation, Type B, (an 80-foot high freestanding "Mono-Pine" antenna structure, with attached panel-type transmitting antennas) which will exceed the maximum height, and accessory structures.
Determination	:	A Finding of No Significant Impact is Issued

Attached and incorporated by reference is the Final EA prepared by the applicant for the project. Based on the significance criteria outlined in Title 11, Chapter 200, Hawaii 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 Final EA. If you have any questions, please contact Dana Teramoto of our staff at 523-4648.

Sincerely yours,

for ERIC G. CRISPIN, AIA
Director of Planning
and Permitting

EGC:cs
Attachments

doc. 189302

2003-05-23-OA-FEA

(VOICESTREAM WIRELESS CELLULAR)

FINAL ENVIRONMENTAL ASSESSMENT

PROPOSED CELLULAR COMMUNICATIONS SITE
KALIHI ELEMENTARY SCHOOL
TAX MAP KEY TMK: (1) 1-4-007:002
2471 KULA KOLEA DRIVE
HONOLULU, HAWAII 96819

Prepared for

VOICESTREAM PCS II CORPORATION
615 PIIKOI STREET
HONOLULU, HAWAII 96814

Prepared by

SOUTH PACIFIC GEOTECHNICAL, INC.
73-5574 MAIAU STREET, SUITE 1
KAILUA-KONA, HAWAII 96740

APRIL 2003

FINAL ENVIRONMENTAL ASSESSMENT

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KAILUA-KONA, HAWAII 96740

APRIL 2003

SUMMARY

Proposed Action:	Installation of one 80-feet "Stealth Mono-Pine Tree" communications tower with nine flat panel antennae mounted on a platform that is to be concealed within the foliage of the Pine Tree and install two Base Transmittal System (BTS) equipment cabinets and one electrical panel within a 625 square feet compound. The compound will be covered with a concrete grade slab and enclosed with a 6-feet high chain link fence.
Proposing Agency:	VoiceStream PCS II Corporation *615 Piikoi Street, Suite 100* Honolulu, Hawaii 96814 Contact: Mr. Roy Irei, Director of Development Telephone: (808) 593-0600 Facsimile: (808) 593-1610
Accepting Agency:	City and County of Honolulu Department of Planning and Permitting 650 South King Street Honolulu, Hawaii 96813
Project Name:	Kalihi Elementary School, Site No. HI1135C
Project Location:	Kalihi Elementary School 2471 Kula Kolea Drive Honolulu, Hawaii 96819
Tax Map Key:	TMK: (1) 1-4-007:002 Lots 12 to 14, 12-A, 13-A
Land Area:	27.44-acres
Project Area:	625 square feet
State Land Use:	Conservation District Urban District
County Zoning:	R-5 Residential District P-1 Restricted Preservation

Land Owner:	City and County of Honolulu Budget and Fiscal Services 530 South King Street Honolulu, Hawaii 96813 Contact: Ms. Diane Murata Telephone: (808) 523-4796
Lessee:	State of Hawaii Department of Education
Permits Required:	Conditional Use Permit-Minor Height Variance Building-Grading Permits
Assessment Prompted By:	Chapter 343, Hawaii Revised Statutes (HRS), Use of Public Funds or Lands
Assessment Prepared By:	South Pacific Geotechnical, Inc. 73-5574 Maiau Street, Suite 1 Kailua-Kona, Hawaii 96740 Contact: Jerry M. Sessums, P.E., Ph.D., President Telephone: (808) 322-3706 Facsimile: (808) 322-3726
Agency Determination	Anticipated Finding of No Significant Impact
Agencies, Individuals and Organizations Contacted During Pre-Assessment:	-Kalihi Valley Neighborhood Board No. 16 -State of Hawaii, Department of Land and Natural Resources, Historic Preservation Division -Office of Hawaiian Affairs -Historic Hawaii Foundation -The Outdoor Circle -Hawaii Natural Heritage Program
Agencies, Individuals and Organizations Commenting on Draft Environmental Assessment:	-City and County of Honolulu, Department of Planning and Permitting -State of Hawaii, Department of Health, Environmental Planning Office -State of Hawaii, Office of Environmental Quality Control -State of Hawaii, Department of Land and Natural Resources Historic Preservation Division -Jacqueline Ralya, Horticulturist -Monica Hembree, Individual -William Joseph Hall, Individual -The Outdoor Circle -Waiakea High School (Class Project)

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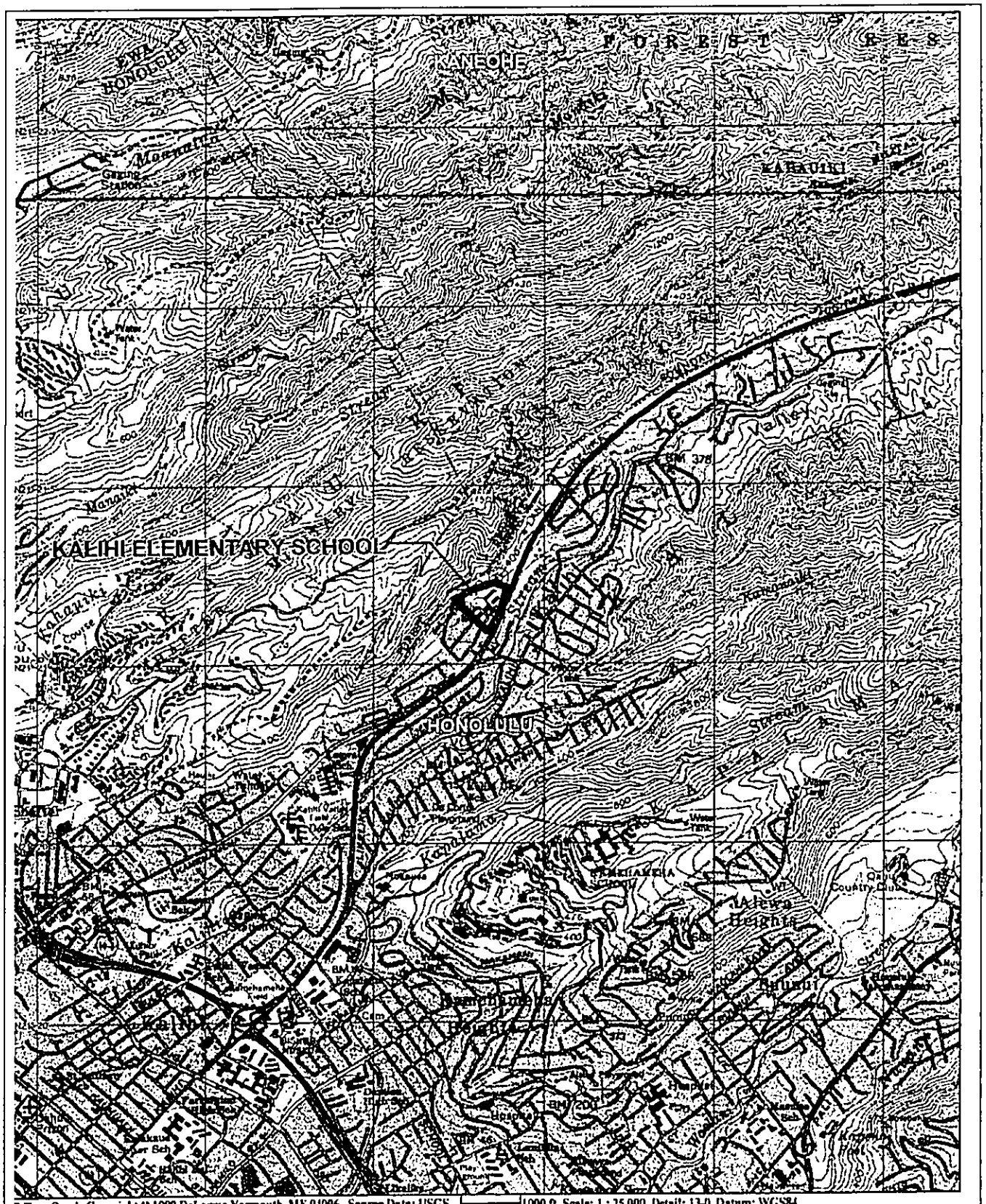
1.0 INTRODUCTION

VoiceStream PCS II Corporation is proposing to install a cellular communications system on the grounds of the existing Kalihi Elementary School campus located at 2471 Kula Kolea Drive Honolulu, Hawaii 96819 (see Figure 1, Page 2). Prior to installation of the system, South Pacific Geotechnical, Inc. was retained to accomplish an Environmental Assessment (EA) of the proposed development. The EA was prompted due to the planned communications facility being located on public lands. In accordance with Hawaii Revised Statutes (HRS) Chapter 343-5, Applicability and Requirements, (a) "*Except as otherwise provided, an environmental assessment shall be required for actions which: (1) Propose the use of state or county lands or the use of state or county funds, other than funds to be used for feasibility or planning studies for possible future programs or projects which the agency has not approved, adopted, or funded, or funds to be used for the acquisition of unimproved real property; provided that the agency shall consider environmental factors and available alternatives in its feasibility or planning studies.*"

Procedural requirements for the preparation of the EA, including contents and significant criteria, are defined by Hawaii Administrative Rules, Department of Health, Chapter 200, Title 11, Environmental Impact Statement Rules, Subchapter 6, specifically Sections §11-200-10 and §11-200-12. In addition, according to Title 11, Chapter 200, Subchapter 2 (§11-200-2), Definitions and Terminology:

- Environment means humanity's surroundings, inclusive of all physical, economical, cultural, and social conditions that exist within the area affected by a proposed action, including land, human and animal communities, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance.
- Environmental assessment means a written evaluation to determine whether an action may have a significant environmental effect.
- Environmental impact means an effect of any kind, whether immediate or delayed, on any component of the environment.
  - Primary impact or primary effect or direct impact or direct effect means effects which are caused by the action and occur at the same time and place.
  - Secondary impact or secondary effect or indirect impact or indirect effect means effects which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect effects may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems.
  - Significant effect or significant impact means the sum of effects on the quality of the environment, including actions that irrevocably commit a natural resource, curtail the range of beneficial uses of the environment, are contrary to the state's environmental law, or adversely affect the economic or social welfare, or are otherwise set forth in section 11-200-12 of this chapter.
  - Cumulative impact means the impact on the environment which results from the incremental impact of the action when added to past, present, and reasonably foreseeable future actions regardless of what agency or person undertakes such other actions.



LOCATION MAP

Figure 1

- Cumulative impacts can result from individually minor, but collectively significant actions taking place over a period of time.

2.0 PURPOSE AND NEED

This project was initiated by the need for improvement to the spotty coverage in addition to the increased customer use within the Kalihi Valley area as well as repeated requests by customers for better service. To fulfill the licensing agreements with the Federal Communications Commission (FCC) and better service the public, VoiceStream PCS II Corporation commenced a study to determine the optimum location for a communications site.

3.0 ALTERNATE SITES CONSIDERED

The selection of a communications site is first determined by the coverage need specified by VoiceStream Radio Frequency engineers. Based on the location of the coverage area, an existing structure or a property's ability to fulfill the height requirement is an important factor in providing the clearest unobstructed line of transmission. If the availability of an existing structure is non-existent, then the placement of a tower is determined based on the topography of the area.

VoiceStream PCS II Corporation commenced their study of locating a communications site in the Kalihi Valley area in 2000. Initial search established five potential locations for the communications site.

The State of Hawaii Department of Transportation Materials Testing Laboratory located on Like Like Highway was selected initially for the site. However, there was no ground space available. An existing wooden pole fronting the property was considered for co-location, but was found to be structurally designed for only one carrier and is not of adequate height. To raise the height of the existing pole would have resulted in a negative impact along Like Like Highway.

The second site considered was at an existing church located at the intersection of Like Like Highway and Valley View Drive. This site would have required a new tower and a Stealth Mono-Pine Tree was considered. However, negotiations with the church failed.

The third site considered was located at a City Park adjacent to Like Like Highway. However, the analysis indicated that a 180-feet high tower would be required to provide adequate coverage.

The fourth site considered was the HECO H-framed power pole located on the mountaintop above Kalihi Valley. The Kalihi Valley community opposed the HECO site.

The fifth site considered was the Kalihi Elementary School campus. Several meetings were held with school officials and the Kalihi Valley community to discuss the installation of the system on the school campus. The outcome of the meetings resulted in the Kalihi Valley community recommending the site for development utilizing the Stealth Mono-Pine Tree tower. Upon receiving approval from the school and community, additional studies were conducted by VoiceStream PCS II Corporation, including: consultation with the State of Hawaii, Department of Health, Hazard Evaluation and Emergency Response; meeting with the school principal, Chairperson of the Kalihi Valley Neighborhood Board #16, accomplishing NEPA Land Use Screening study, a Phase I

Environmental Site Assessment, and a geotechnical engineering study. On March 22, 2001, VoiceStream PCS II Corporation convened a meeting to discuss the project and possible health issues related to electrical and magnetic effects. Attending the meeting were the principal of Kalihi Elementary School, the chairperson of Kalihi Valley Board No. 16, and Dr. Au with the State of Hawaii, Department of Health. Dr. Au confirmed that the telecommunications facility would not have any affect on the children and faculty of Kalihi Elementary School.

4.0 PROJECT DESCRIPTION

According to the Civil Engineering design plans prepared for the project by Hawaii Engineering Group and the site information package prepared by VoiceStream PCS II Corporation, the cellular communications system will consist of several components, including:

4.1 Lease Area

The lease area is planned to be located in the northeast corner of the Kalihi Elementary School Campus, about 100-feet northeast of the nearest classroom building and about 20-feet beyond the crest of an approximate 15-feet high cut slope. The lease area will total 625-square feet of land contained within a 25-feet by 25-feet compound. A 25-feet by 25-feet by 1.5-feet thick reinforced concrete grade slab will be constructed over the lease area. The lease area will be enclosed with a 6-feet high chain link fence with fence posts embedded in the concrete grade slab. As site topography slopes north to south, an approximate 4-feet high CMU (masonry unit) wall will be constructed along the mauka (northerly) side of the lease area. The 6-feet high chain link fence will be installed atop the wall in this area. Access to the interior of the lease area will be through a locked, chain link gate. Following construction, should any area surrounding the site be disturbed, the area will be replanted with native vegetation (see Figure 2, Page 5).

4.2 Equipment Cabinets

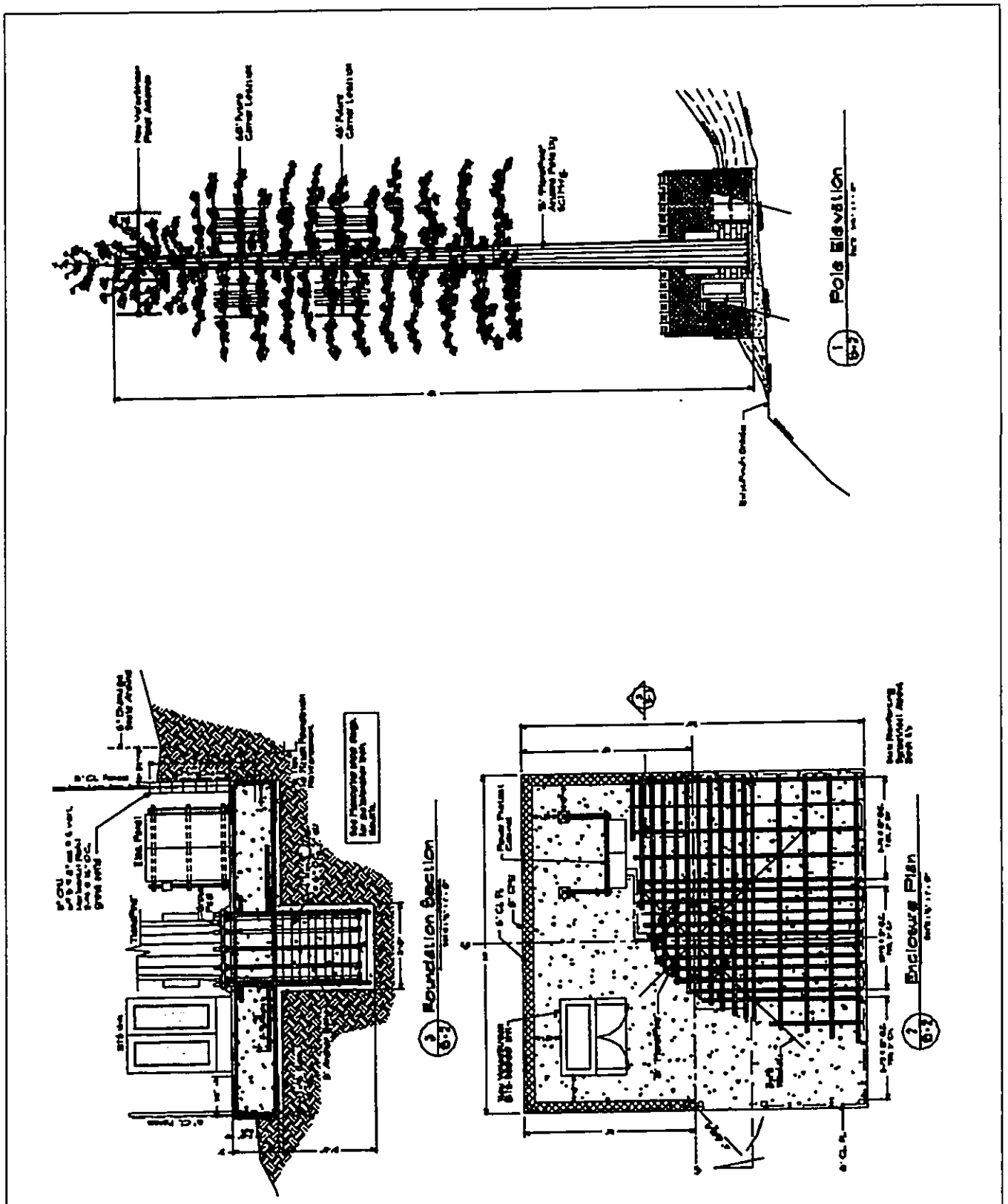
Two approximate 4-feet high metal equipment cabinets, housing an electrical distribution panel, electrical meter with circuit breaker and telephone will be installed within the interior of the lease area and will be supported on the concrete grade slab.

Two metal accessory Base Transmittal System (BTS) equipment cabinets approximately 6-feet in height, will also be installed within the lease area and be supported on the concrete grade slab (see Figure 2, Page 5).

4.3 Stealth Mono-Pine Tree and Antennae

An 80-feet high Stealth Mono-Pine Tree tower will be erected in the center of the lease area. The tower will be supported by a 5-feet diameter, reinforced concrete pier embedded in the volcanic formations underlying the site. The concrete pier will be integrally tied to the concrete grade slab for additional support (see Figure 2, Page 5).

The major component of the pine tree will be a galvanized steel monopole with the UV resistant polyurethane bark covering the pole to simulate tree bark. This bark covers only the



TOWER ELEVATION, FOUNDATION PLAN AND ENCLOSURE PLAN

Figure 2

bottom portion of the tree where there are no branches. The upper 40-feet of the pine tree is painted with an epoxy based brown paint to simulate tree bark. The branches are made of steel mounting base plastic/fiberglass framework and PVC pine needles painted green (see Figure 3, Page 7).

Nine, flat panel antennae will be mounted on a platform that is to be concealed within the tree limbs and pine needles of the tree. The antennae and platform will be painted green to match the color of the pine tree needles (see Figure 4, Page 8).

4.4 Electric and Telephone

Electricity will be extended from an existing power line located upslope (mauka) of the site to a wooden pole near the lease area and then underground to the equipment cabinets in the interior of the lease area. The lines will then run from the equipment cabinets to the antennae through the inside of the pine tree tower.

Telephone service will be extended underground to the site from the school or overhead from an existing power pole located upslope (mauka) of the site.

4.5 Site Access

There are no plans to construct paved or gravel surfaced driveways to the site. Present access to the site is through a locked gate located along the southeasterly side of the school auditorium. Grass lawn covers the area between the gate and the site.

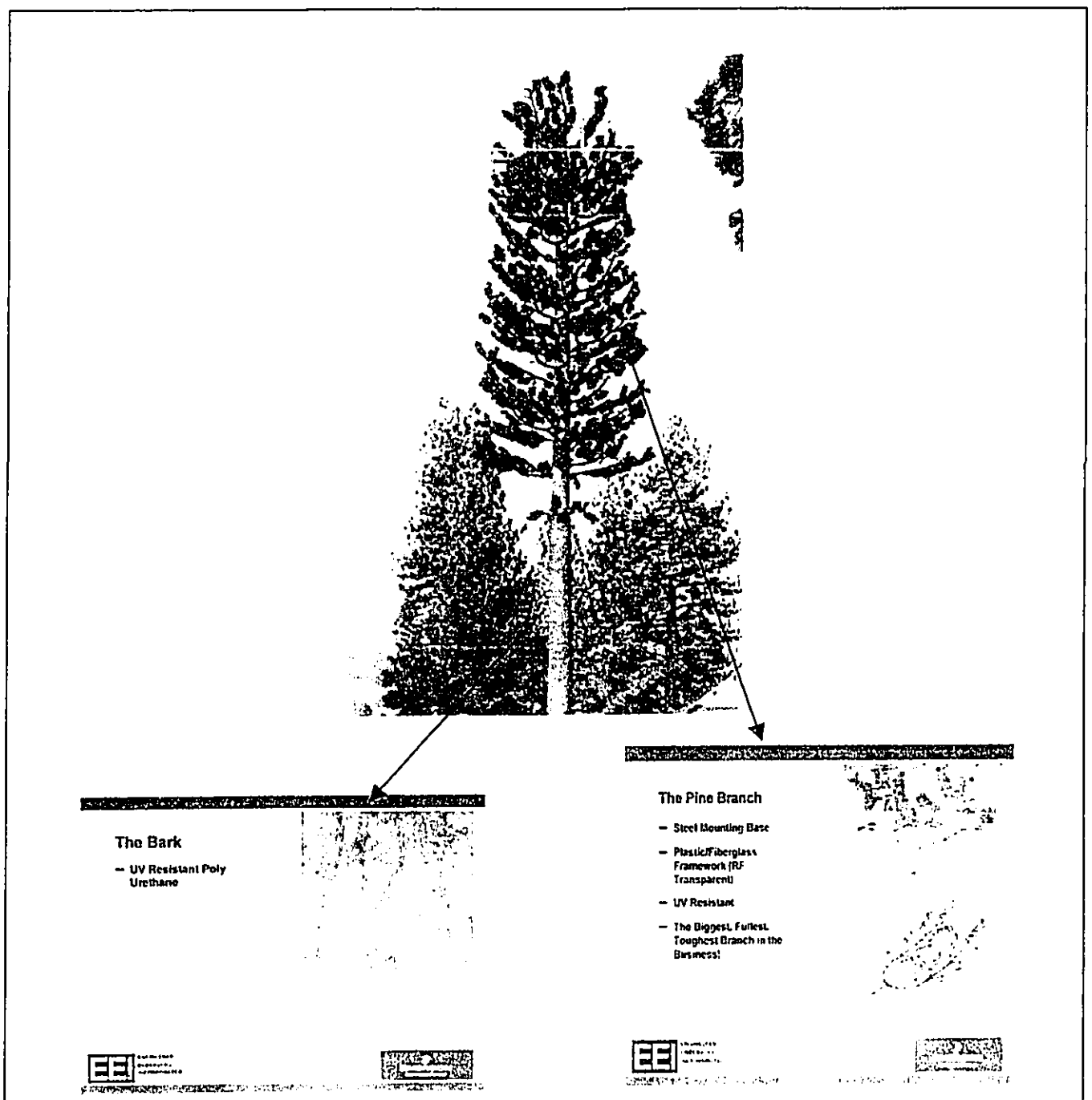
4.6 Cost of Development and Construction Schedule

The cost to construct the system is estimated at $95,000.00 and it is anticipated that construction will require less than 30-days. The major portion of construction of the system is planned to be accomplished during the school's summer recess. No grading activities will be performed at the site during school hours, Saturdays, Sundays, or holidays.

5.0 SITE DESCRIPTION

The property proposed for development with the cellular communications system is located in Kalihi Valley, City and County of Honolulu and is identified as TMK: (1) 1-4-007:002. The approximate 27-acre property is owned by the City and County of Honolulu and is dually zoned; P-1 Restricted Preservation and R-5 Residential District. The portion of the property on which the communications system is to be constructed totals about 10-acres in size, is zoned R-5, leased to the State of Hawaii, Department of Education and is occupied by the Kalihi Elementary School (see Figure 5, Page 9)

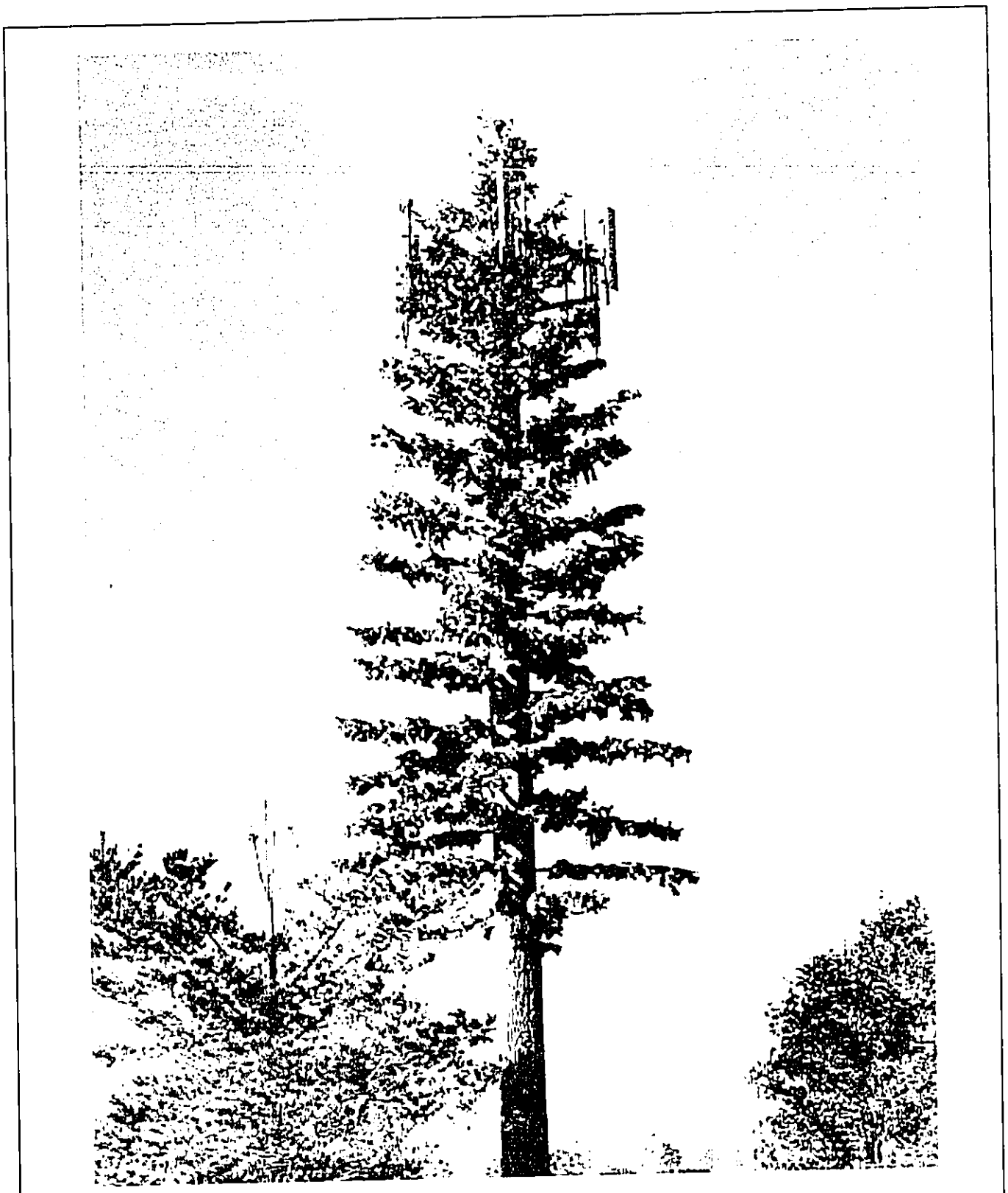
Kalihi Elementary School campus is irregular in shape and encompasses about 10-acres of land. The school, with a physical address of 2471 Kula Kolea Street, Honolulu, Hawaii 96819, was constructed circa 1954 and presently consists of 2, two-story class room buildings, cafeteria, multi-purpose room, library, administration offices, several covered play areas, several open (grass) play areas, and associated paved access drives and parking lots.



Material composition of the "Stealth" pine tree.

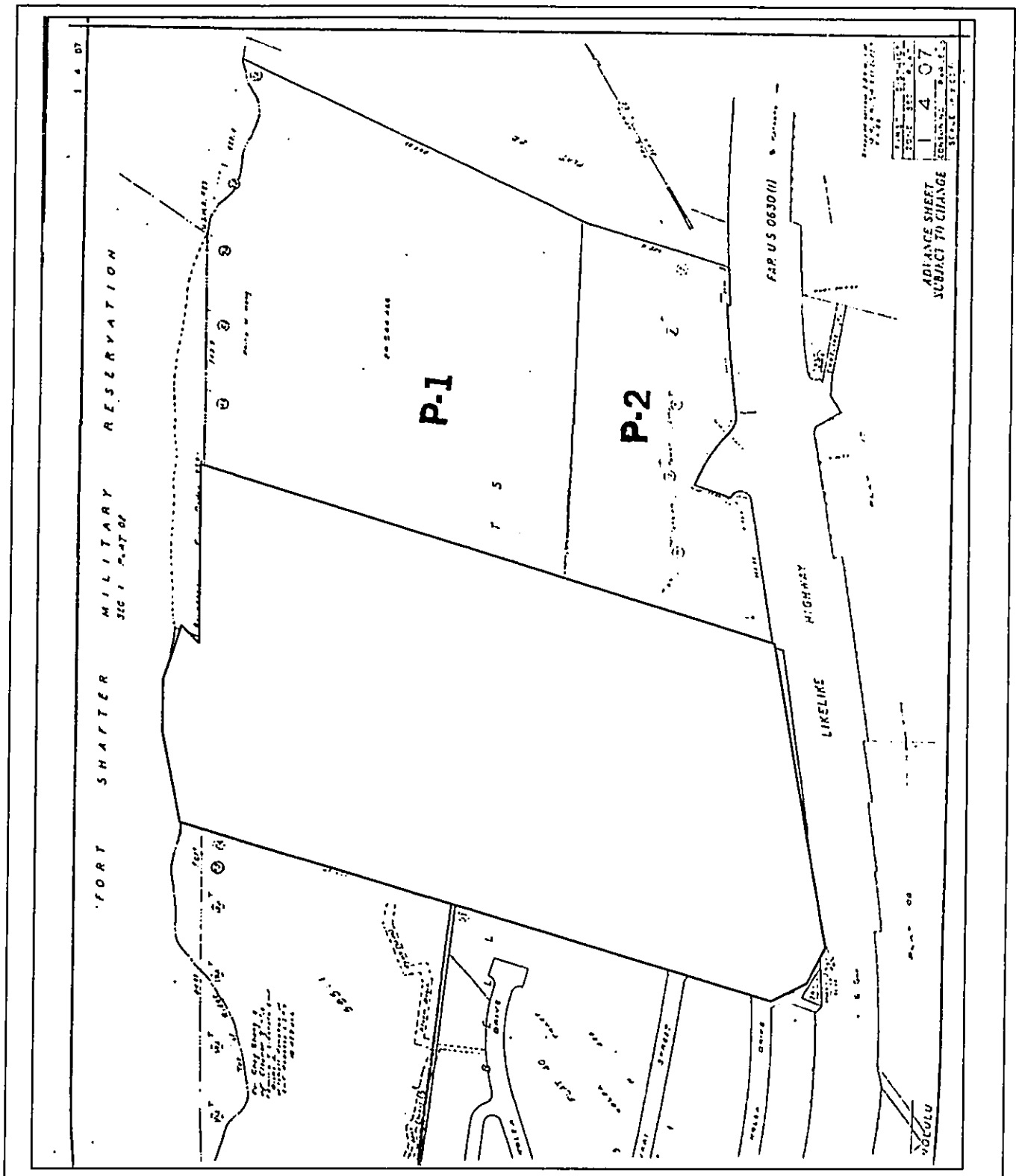
The major component of the pine tree will be the galvanized steel monopole with the UV resistant poly urethane bark covering the bottom 40' of the pole. The upper 40' will be painted brown to simulate the color of the bark.

Figure 3



STEALTH MONO-PINE TREE TOWER

Figure 4



TAX MAP TMK: (1) 1-4-007:002

Figure 5

The school property is bound by the Like Like Highway to the east, residential property to the south-southwest, and undeveloped forest reserve property to the west and north. Topography across the school property is moderate to steep with elevations ranging from about 400-feet to 350-feet, north to south. The school buildings and play areas are terraced across the property to accommodate topographic differential. Access to the school property is by way of Kula Kolea Street to the southwest (see Figure 6, Page 11).

The proposed communications site is situated in the northeast corner of the school property, an area heavily forested with 20 to 60-feet high trees and with a dense groundcover of grass, weeds, and brush up to about 6 to 7-feet high. The site is located about 100-feet northeast of the nearest classroom building atop an existing cut slope, approximate 15-feet higher than the first floor of the classroom building. A sanitary sewer line extends along the crest of the cut slope on a north to south line. Two manholes, associated with the sanitary sewer line, were noted atop the cut slope, one at the northerly end and one at the southerly end (see Figure 7, Page 12).

6.0 SITE ENVIRONMENT

6.1 Vegetation

6.1.1 Existing Conditions

The site is located in a heavily forested area at the toe (bottom) of a fairly steep slope. Trees between about 20-feet to 60-feet in height surround the site. Groundcover consists of a dense growth of grass, weeds and brush up to 6 and 7-feet high. An approximate 15-feet high cut slope is located about 20-feet southwest of the lease area and two sanitary sewer manholes were noted atop the cut slope.

6.1.2 Impacts and Mitigation Measures

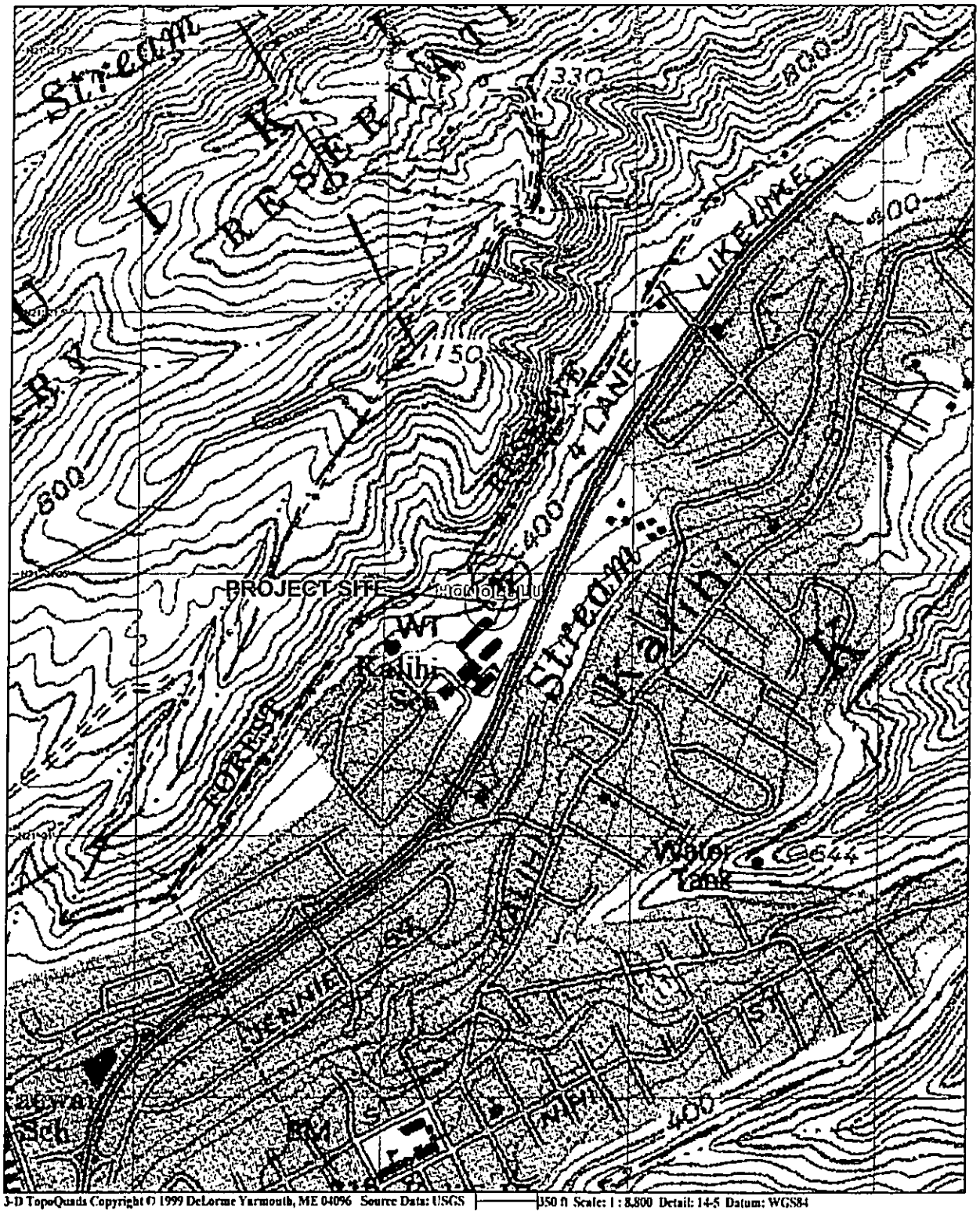
Removal of vegetation at the site is required to allow for the over-excavation of near-surface soils, placement of base aggregate, and to ensure against future settlement of the concrete grade slab. Erosion fencing will be installed prior to construction to ensure against offsite migration of soil during a rain event.

Removal of vegetation will be limited to the proposed lease area plus about 5-feet on its periphery (30-feet by 30-feet in plan dimension). Following construction, any vegetation removed beyond the perimeter of the lease area will be replanted with native vegetation of similar type and size. This effort will assist in re-establishing the groundcover at the site and provide a screen for the 6-feet high chain link fence. No trees are expected to be removed from the site.

6.2 Soils

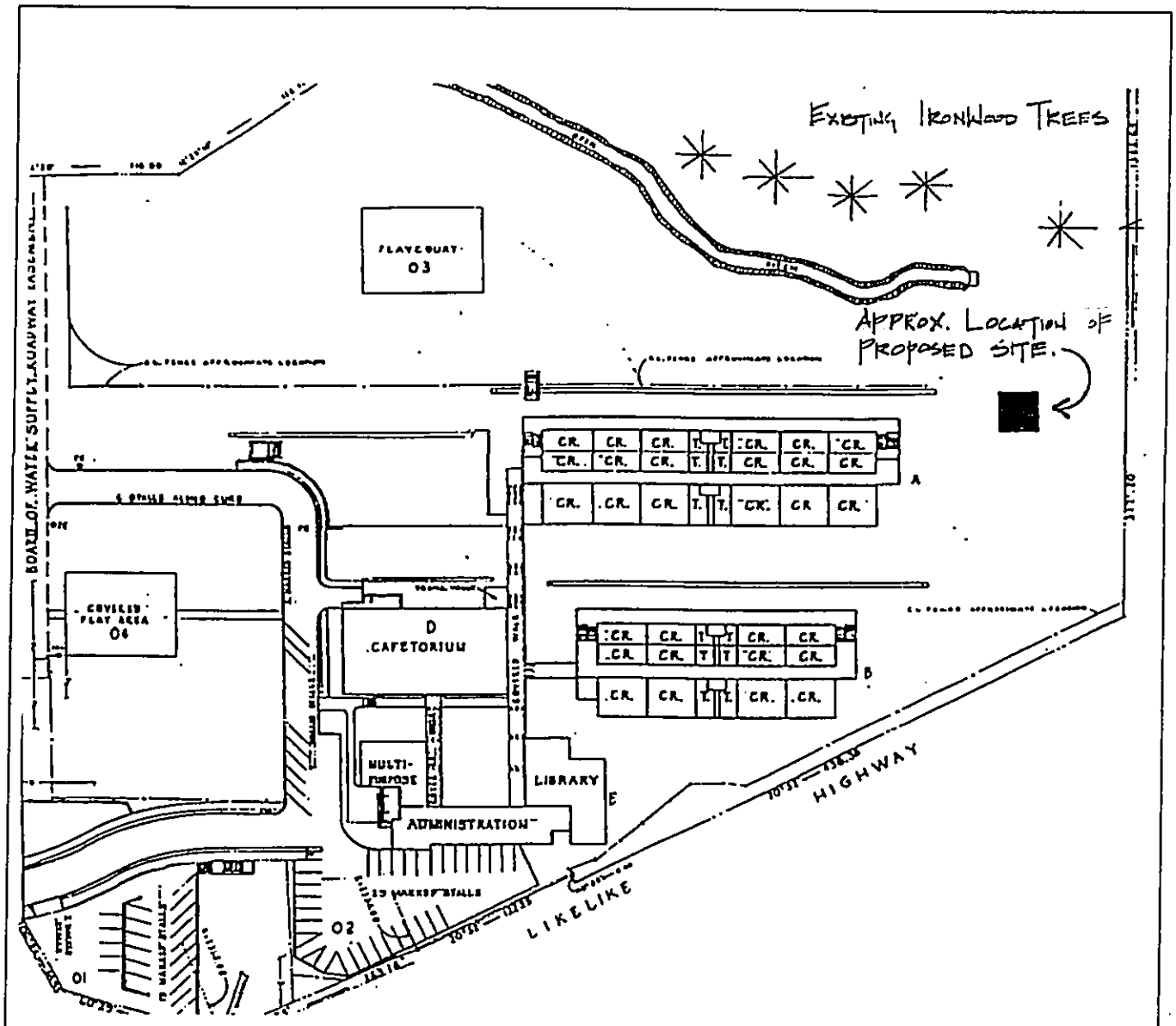
6.2.1 Existing Conditions

The U.S. Department of Agriculture's (USDA) Soil Conservation Services (SCS) leads the National Cooperative Soils Survey (NCSS) and is responsible for collecting,



TOPOGRAPHIC MAP

Figure 6



SITE PLAN

Figure 7

storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps. The following information is based on Soil Conservation Service STATSGO data.

Soil Component Name:	WAIKANE
Soil Surface Texture:	Silty Clay
Hydrologic Group:	Class B. Moderate infiltration rates. Deep and Moderately deep, moderately and well drained soils with moderately coarse textures.
Soils Drainage Class:	Well Drained. Soils have an intermediate water holding capacity. Depth to water table is more than 6-feet.
Hydric Status:	Soil does not meet the requirements for a hydric soil.
Corrosion Potential-Uncoated Steel:	High
Depth to Bedrock Minimum:	>60-inches
Depth to Bedrock Maximum:	>60-inches

Soil Layer Information						
	Boundary			Classification		
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	Permeability Rate (in/hr)
1	0 inches	8 inches	Silty Clay	Silt Clay (more than 35% passing No. 200) Clayey Soils	Kaolinitic Suffix for MH	Max: 2.00 Min: 0.20
2	8 inches	60 inches	Silty Clay	Silt Clay (more than 35% passing No. 200) Clayey Soils	Kaolinitic Suffix for MH	Max: 2.00 Min: 0.20

Based on Soil Conservation Service STATSGO data, the following additional subordinate soil types may appear within the general area of the site.

Soil Surface Textures	Surficial Soil Types	Shallow Soil Types	Deeper Soil Types
Silty clay loam Weathered bedrock Silty loam	Silty clay loam Weathered bedrock Silt loam	Silty clay	Loam Stony-silty clay Gravelly-silty clay Weathered bedrock

6.2.2 Impacts and Mitigation Measures

The near surface soils at the site consist of wet to very moist, soft to medium stiff, stoney-silt clay to a depth of about 5-feet and are derived by alluvial deposition and weathering of parent bedrock (lava). Organic matter (plant roots, etc) is present to a depth of between 2 and 3-feet. It has been recommended by the geotechnical engineer that the upper 2 to 3-feet of these soils be removed from the lease area as they are not

suitable for the support of the proposed concrete grade slab. In addition, as the surface slopes north to south across the lease area, cuts on the order of about 5 to 6-feet will be required on the uphill (northerly) side of the site. A retaining wall will be installed to retain the cut slope. The wall has been designed by the project structural engineer based on recommendations provided by the project geotechnical engineer.

The site and excavated soils will be maintained in a moist condition during excavation and transport off site to control fugitive dust. Erosion fencing will be installed around the lease area to prevent offsite migration of soil during rain events. Following the over-excavation of the near–surface soils, the lease area will be overlain by about 12-inches of imported crushed aggregate. All construction activities will comply with Hawaii Administrative Rules, §11-60.1-33 for fugitive dust, and Administrative Rules of the Department of Health, Chapter 11-46 for "Community Noise Control".

6.3 Geology

6.3.1 Existing Conditions

Oahu has an area of 604 square miles and consists of two extinct volcanoes, Koolau on the east and Waianae on the west. Waianae volcano consists of shield lavas (3.0-3.5 Ma) overlain by a thick sequence of postshield-sated alkalic basalt (3.2-2.5 Ma). Koolau consists of the eruptive products of the shield (2.5-1.7 Ma) and rejuvenated stages.

Oahu has four major geomorphic provinces: (1) Koolau Range; (2) Waianae Range; (3) Schofield Plateau; and (4) Coastal Plain. The Koolau Range forms the eastern part of the island and is the one lying behind Honolulu. Puu Konahuanui, the highest point, is 3,105 feet high. The range is 37-miles long and is deeply eroded by streams. In places it has high sea cliffs along its shore. The range consists entirely of thin, narrow, basaltic lava flows piled one upon the other like shingles, with minor amounts of volcanic ash and numerous dikes. Secondary geomorphic forms are the Nuuanu Pali and the younger secondary tuff cones. It is believed that the main volcano was built during a single episode.

The rocks of the ancient Koolau volcano are chiefly thin tholeiitic basalts with minor amounts of ash and their associated dike feeders. The rocks have been divided into two groups, the Kailua volcanic series and the Koolau volcanic series. The Koolau volcanic series were erupted from two main rift zones in Pliocene time and third southwest rift zone passing through Diamond Head. Rejuvenated-stage lavas mainly erupted in the Honolulu areas, thus their name; the Honolulu Volcanics. The site is mapped by MacDonald, Davis and Cox as being underlain by alluvial soil and gravel overlying lava flows of the Honolulu volcanic series which consist of alkalic basalt, basanite, nephelinite, and melilitite.

6.3.2 Impacts and Mitigation Measures

Materials underlying the site (below the overburden soils) consist of weathered

volcanics. The foundation for the mono-pine tree tower will consist of a 5-feet diameter pier embedded between 10 and 12-feet below existing surface elevations into these geologic formations. The pier foundation has been designed by the project structural engineer based on the recommendations provided by the project geotechnical engineer. Excavation for the pier foundation will not create any geologic hazards.

6.4 Groundwater and Surface Water

6.4.1 Existing Conditions

The Federal U.S.G.S. lists only one well within a one-mile radius of the project site. The well is identified as HI0000331. The depth to groundwater was not reported. The well is located approximately 1-mile southwest of the project site.

A small drainage/irrigation canal is located upslope from the project site and a small stream is located east and south of the site, across the Like Like Highway.

Federal Emergency Management Agency (FEMA) Floodplain panel 1500010112C (revised September 28, 1990) maps the project area as being a Flood Zone X (un-shaded). Shaded Zone X areas are areas of 500-year flood; areas of 100-year flood with average depths of less than 1-foot or with drainage areas less that 1 square mile; and areas protected by levees from 100-year flood. Un-shaded Zone X areas are areas determined to be outside of the 500-year floodplain.

6.4.2 Impacts and Mitigation Measures

The cellular communications system is un-manned and does not require water for its operation. Water will be used during construction to maintain dust control. This water will be obtained, with permission, from the Kalihi Elementary School.

The site is not in a floodplain and construction and operation of the communications system will not impact or adversely affect any surface or groundwater resource.

6.5 Wastewater

6.5.1 Existing Conditions

As mentioned previously, a sanitary sewer line was noted atop the cut slope, about 20-feet southwest of the communications site. It is thought that this sewer line services the upper portions of the Kalihi Elementary School.

6.5.2 Impacts and Mitigation Measures

The cellular communications facility is un-manned and does not require resources for sewage disposal. During construction, a portable toilet will be placed at the site for worker convenience.

7.0 ENVIRONMENTAL ISSUES

7.1 Hazardous Materials

7.1.1 Existing Conditions

A Phase I Environmental Site Assessment (ESA) was accomplished by VoiceStream PSC II Corporation as part of their consideration of this site. The ESA found no evidence of adverse environmental conditions that would preclude construction of the cellular communications system at the site.

Several lead based batteries will be installed at the cellular communications system. The batteries are contained and secured in a locked cabinet.

7.1.2 Impacts and Mitigation Measures

VoiceStream engineers continually monitor the cellular communications system, including the batteries. Should a battery appear to be wearing, it will be immediately replaced. The removed battery will be disposed of in an environmentally safe manner consistent with State of Hawaii Department of Health regulations.

7.2 Traffic

7.2.1 Existing Conditions

At present, no traffic other than maintenance vehicles and landscape equipment, enter the area of the planned cellular communications system. VoiceStream engineers and technicians visit the cellular communications system on a regular basis at a frequency of about once or twice per month. The engineer or technician usually travels alone, in one vehicle.

7.2.2 Impacts and Mitigation Measures

School maintenance and landscaping vehicles and equipment will continue to enter the area surrounding the planned communication system.

Trips to the cellular communications systems site by VoiceStream personnel will be limited to off-school hours, if at all possible. Prior to entering the school campus, the engineer or technician will call ahead to the administrative staff of the school and check in with the school administrative staff upon arrival at the site. No major repair work will be accomplished at the site during school hours until the school's administrative staff have been advised and approval granted.

7.3 Air Quality

7.3.1 Existing Conditions

At present, air quality in the area of the cellular communications system is largely affected by exhaust fumes from vehicles traveling along Like Like Highway. The cellular communications system is un-manned and has no machinery that develops air emissions.

7.3.2 Impact and Mitigation Measures

Potential adverse impacts during construction include fugitive dust and exhaust emissions from construction equipment. These potential adverse impacts will be short-term during the period of construction. Fugitive dust will be controlled by continuous moisture conditioning areas of excavations and equipment travel paths. Construction of the communications system is planned to occur during the school's summer recess to reduce any interference with the school's students and faculty.

7.4 Noise

7.4.1 Existing Conditions

Noise at the site is largely generated by traffic traveling along Like Like Highway. The cellular communication system is un-manned and has no machinery that contributes to noise pollution. During construction, noise from construction equipment will be evident.

7.4.2 Impact and Mitigation Measures

Construction of the communications system is planned during the school's summer recess. All work at the site will be accomplished during working hours as established by City and County and State regulations and guidelines.

7.5 Archaeological and Cultural Resources

7.5.1 Existing Conditions

Prior to accomplishing the environmental assessment, VoiceStream PCS II Corporation conducted a NEPA Land Use Screening of the project site in conformance with the National Environmental Policy Act of 1969 (see Appendix A). As part of the screening, the State of Hawaii, Department of Land and Natural Resources, Historic Preservation Division was consulted. It was the findings of the State Historic Preservation that: (1) residential development/urbanization has altered the land, (2) previous grubbing/grading has altered the land, and (3) the site is located within an existing developed school property. Based on their findings, a statement of no historic properties will be affected by this undertaking was issued (see Appendix B).

The State of Hawaii, Office of Hawaiian Affairs (OHA) was also consulted. OHA's determination was that the project would not impact Native Hawaiian access and gathering rights, or traditional or cultural properties and is supported by the Kalihi Valley Board and the Kalihi Elementary School. Thus OHA has no additional comments on this project (see Appendix B)

7.5.2 Impacts and Mitigation Measures

Although statements of no affect have been issued by both the State Historic Preservation Division and Office of Hawaiian Affairs, great care will be taken during construction. In the unlikely event that archaeological items are encountered during construction, all construction activities will immediately cease and the State Historic Preservation Office will be contacted. No work will recommence until so approved by the State Historic Preservation Office.

7.6 Electromagnetic Radiation

7.6.1 Existing Conditions

Prior to accomplishing the environmental assessment, VoiceStream PCS II Corporation conducted a NEPA Land Use Screening of the project site in conformance with the National Environmental Policy Act of 1969. The NEPA screening determined that at present there are 13 FCC and/or FAA antennae and/or tower sites within a one-mile radius of the site. Those sites mapped include:

-Nine (9) FAA Sites, Owned by the Department of Defense. All these sites are existing.
-Two (2) FCC Sites, Owned by GTE. These sites are a license and may or may not be constructed.
-One (1) Tower Site, Owned by The City and County of Honolulu. This site is for a license and may or may not be constructed.
-One (1) Tower Site, Un-named Owner. This site is for a license and may or may not be constructed.

7.6.2 Impact and Mitigation Measures

The proposed VoiceStream PCS II Corporation cellular communications site will add to the existing radio frequency waves being transmitted throughout the Kalihi Valley area. However, VoiceStream PCS II Corporation is licensed with the Federal Communications Commission (FCC) and complies with very strict emission guidelines established by the FCC.

It is important to understand that cellular service is nothing more than radio waves. Even through the FCC has established strict radio frequency (RF) emission guidelines, the wireless industry believes that it is important to operate cell sites at even lower RF and power emission levels than the government recommends. The emissions are set

so low that items found in a home, such as a microwave oven or a baby monitor, operate at higher levels.

The consensus of the scientific community, both in the U.S and internationally, is that the power from wireless telecommunication antennas is far too low to produce health hazards. At the proposed height of 80-feet, there will be very minimal electromagnetic radiation.

During initial evaluation of the project site, a representative from the State Department of Health met with the school principal and chairperson of the Kalihi Valley Neighborhood Board to address any and all concerns in respect to health risks of having the tower near the school. The State Department of Health representative, Dr. Au, advised that there is no exposure to health risks from the facility.

In addition, in accordance with City and County of Honolulu guidelines, a radiated power density analysis was completed by VoiceStream PCS II Corporation to determine the total energy emissions of the new site. Testing of the existing site, added to emissions from the proposed site, show power emissions to well below FCC requirements.

7.7 Visual

7.7.1 Existing Conditions

At present, the area north of the Kalihi Elementary School campus, including the hillside above the campus, is covered with a variety of plants and dense forest. In the immediate vicinity of the proposed communications system, vegetation includes grass, weeds, and brush up to about 7-feet in height and trees ranging between 20 and 60-feet in height.

7.7.2 Impacts and Mitigation Measures

VoiceStream PCS II Corporation conducted several meetings with Kalihi Elementary School, concerned citizens and the Kalihi Valley Neighborhood Board No. 16 to discuss and present various alternative tower types for the school campus site. At the conclusions of these meetings and presentations, the Kalihi Valley Neighborhood Board unanimously voted in favor of the "Stealth Pine Tree" tower.

Upon learning of the community's choice for the stealth pine tree tower, VoiceStream commenced a rigorous visual impact analysis of the site and tower. The impact analysis included driving and walking streets and highways of adjoining neighborhoods and taking photographs of the site from various vantage points. Photo-simulation of the site was then accomplished by superimposing the stealth pine tree on the photographs taken. For clarity of presentation, the colors of the pine tree were lightened or highlighted.

The visual impact analysis revealed that from certain vantage points, the tower cannot be seen at all. Conversely, from other vantage points, the upper 20 to 65-feet of the stealth pine tree tower can be seen.

Construction of the communications system will require the removal of grass, weeds and brush in an approximate 30-feet by 30-feet area. Following construction, any vegetation removed or damaged will be replaced with similar type and size vegetation. The removal of trees from the site is not anticipated.

The lower 15 to 20-feet of the communications system, including the equipment cabinets and enclosure fence, will not be visible from the Like Like Highway or surrounding neighborhood and perhaps only partially visible from select areas on the school campus. The upper 60 to 65-feet of the mono-pine tree tower will be visible from certain areas.

The stealth pine tree tower and antennae will be painted to blend in with surrounding vegetation and immediate surrounding 40 to 60-feet high ironwood trees (see Figures 8 though 15, Pages 21 though 28).

7.8 Threat to Wilderness Areas, Wildlife Preserves, Sanctuaries, Refuges, Fish and Wildlife, Threatened or Endangered Species, Candidate Species, Species of Concern and Critical Habitats

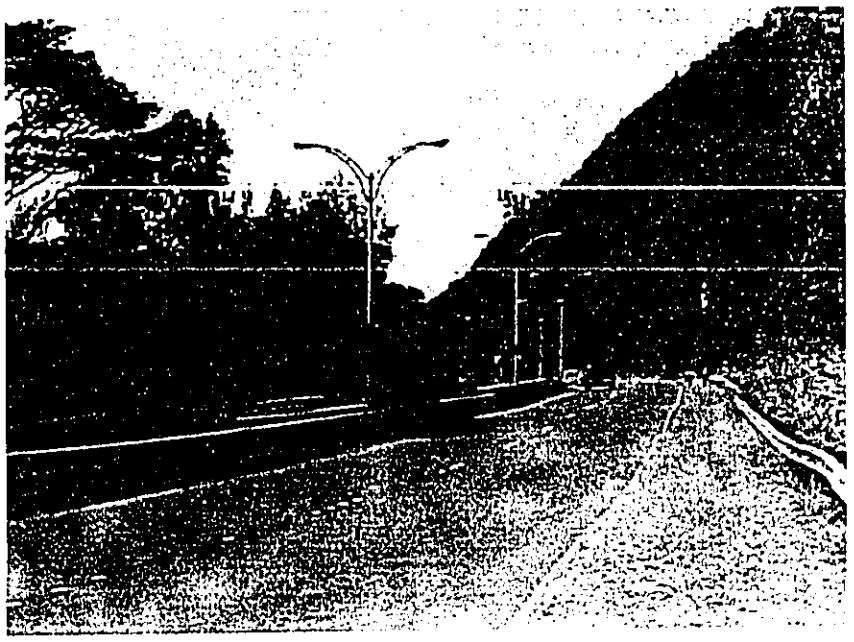
7.8.1 Existing Conditions

The land north and west of the Kalihi Elementary School campus presently consists of heavily vegetated and forested, steeply sloping hillsides with limited access. The land area consists of watershed, forest preserve and United States Military property.

7.8.2 Impacts and Mitigation Measures

Prior to accomplishing the environmental assessment, VoiceStream PCS II Corporation conducted a NEPA Land Use Screening of the project site in conformance with the National Environmental Policy Act of 1969. The NEPA screening included researching available records of the National Park Service, USDA Forest Service, US Fish and Wildlife, US Bureau of Land Management, State of Hawaii Department of Land and Natural Resources, and Natural Heritage Program with the Nature Conservancy of Hawaii. Research of available database resulted in mapping one Hawaii Game Management Area, One Hawaii Land Management Area and Two Federal Land Areas (Fort Shafter and Tripler Military Hospital) within a one-mile radius of the site. No documented threatened or endangered species, candidate species, species of concern or critical habitats were mapped within the search parameters of a one-mile radius (see Appendix A).

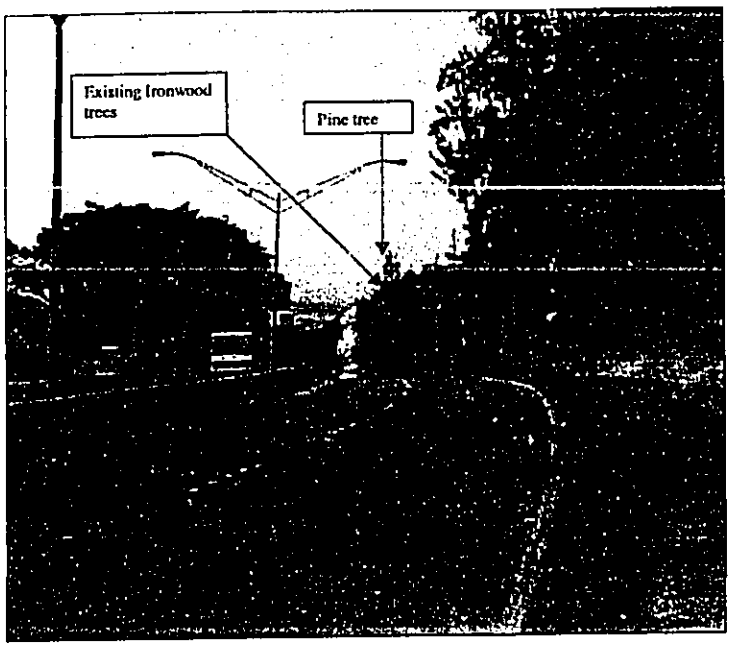
The Hawaii Natural Heritage Program at the University of Hawaii, Manoa Campus was also consulted. Database research of the area accomplished by the Hawaii Natural Heritage Program found no species of concern in the vicinity of the site (see Appendix B).



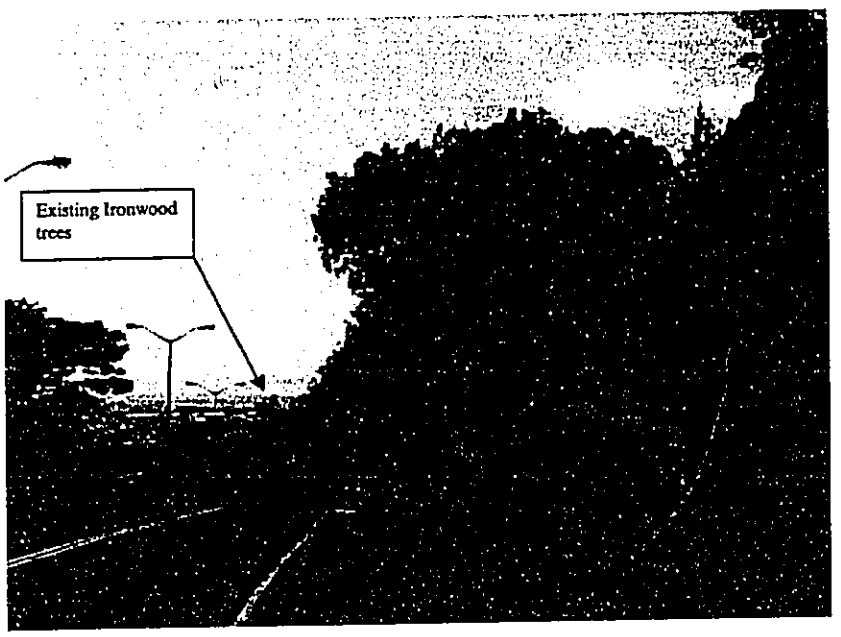
The photo was taken from Likelike Highway heading town bound approximately ½ mile after the Burmeister Bridge. The proposed project site cannot be seen from this location and up towards the Wilson Tunnels

This photo shows the view heading towards town on Likelike Highway just fronting the Department of Transportation Testing Lab. The arrow indicates the proposed project location where there are existing Ironwood trees. See next page for simulation (Exhibit B-2)

Figure 8

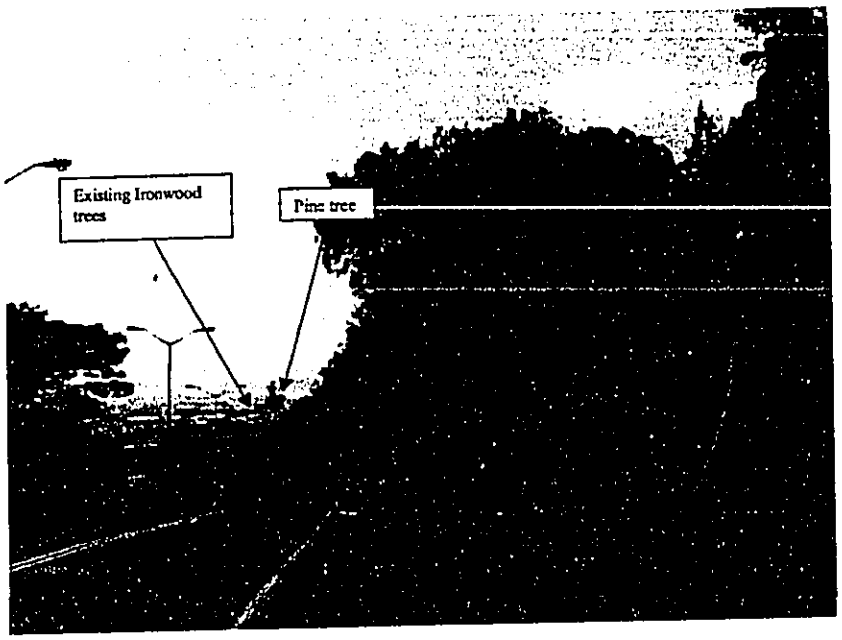


This photo shows the view heading towards town on Likelike Highway fronting the Department of Transportation Testing Lab. The "Stealth" pine tree will blend in with the other Ironwood trees in the propo project area. Only the top 30 feet of the pine tree will be visible from this location.

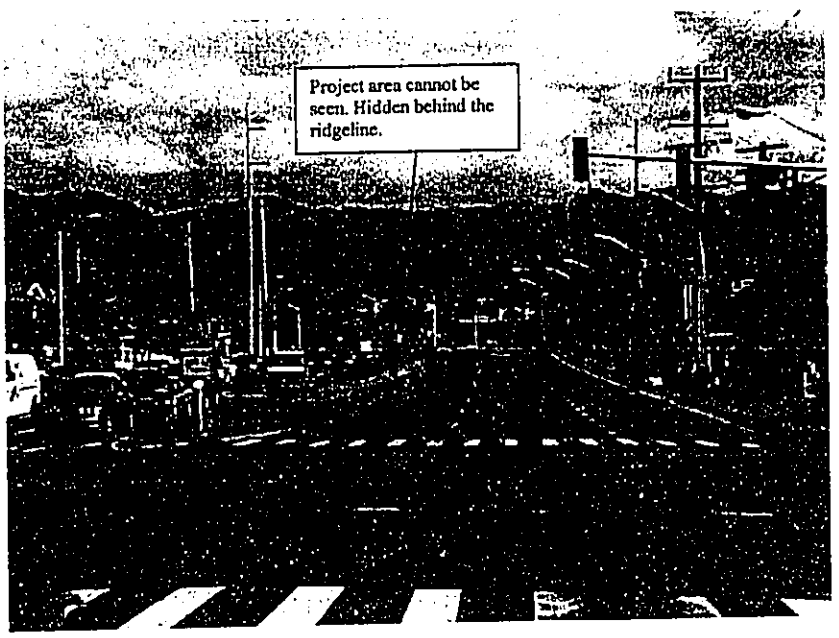


This photo shows the view heading town bound on Likelike Highway just before the runaway truck ramp. The arrow indicates the proposed location of the project area within the area of the existing Ironwood trees. See next page for simulation.

Figure 9

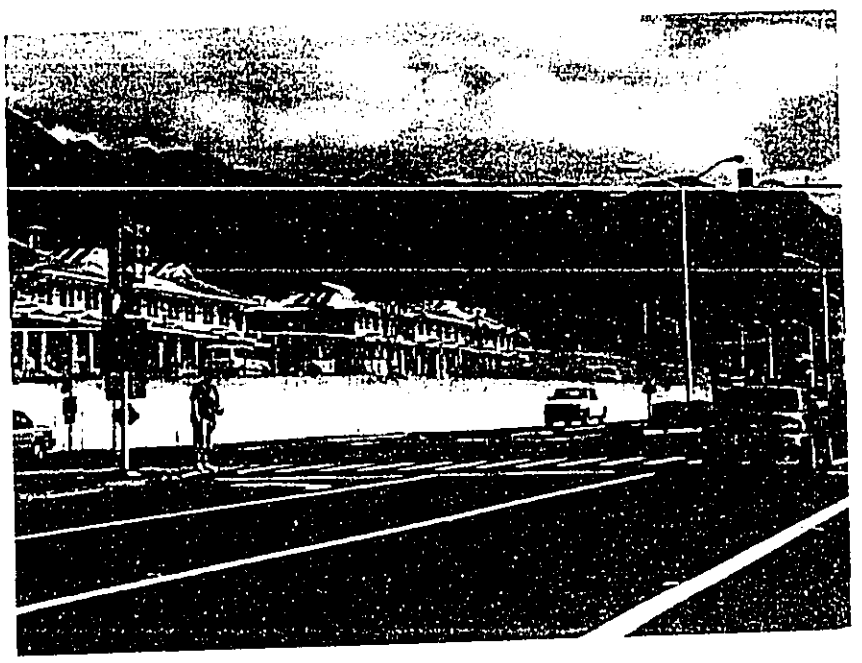


This photo shows the view heading town bound on Likelike Highway just before the runaway truck ramp. The "Stealth" pine tree will blend in with the other Ironwood trees in the proposed project area. Only the top 30 feet of the pine tree will be visible from this location.



This photo was taken from the intersection of Likelike Highway and School Street. The arrow indicates the approximate area of the proposed project site. The pine tree will not be visible from any location of School Street.

Figure 10

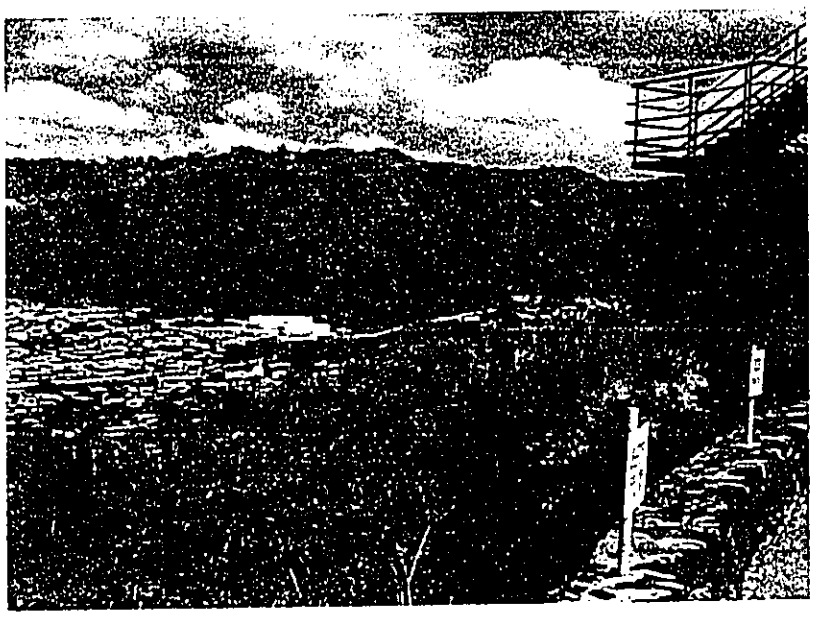


This photo is taken from the intersection of Likelike Highway and Alu Street. Please note that the proposed project will not be visible from this location.

This photo is taken from the intersection of Likelike Highway and Nalanicha Street in Kalihi Valley. The arrow indicates the proposed location of the project site within the vicinity of the existing Ironwood trees.

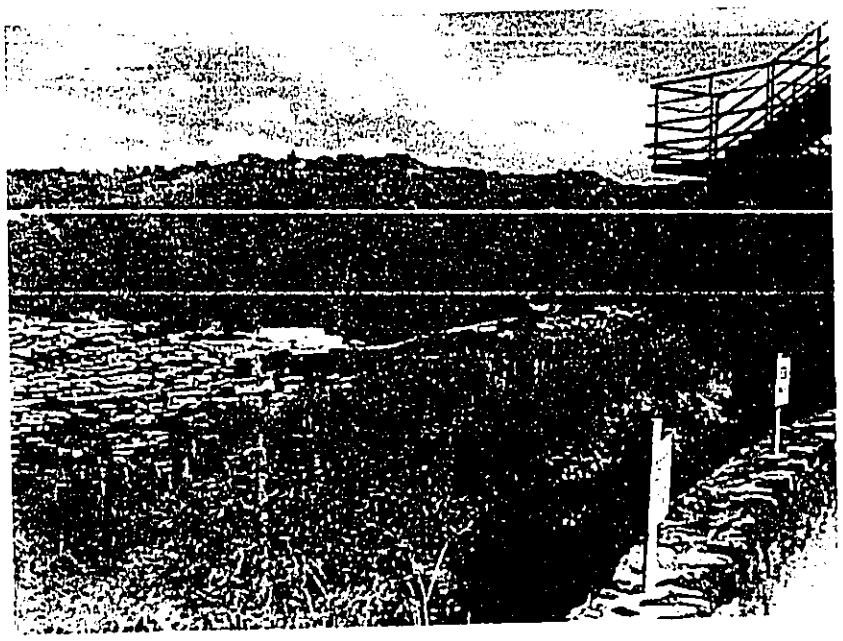
Figure 11

This view is from the intersection of Likelike Highway and Nalanieha Street. The arrow points to location of the pine tree simulated into the photo. The pine tree will blend in with the backdrop of the mountain and its environment.

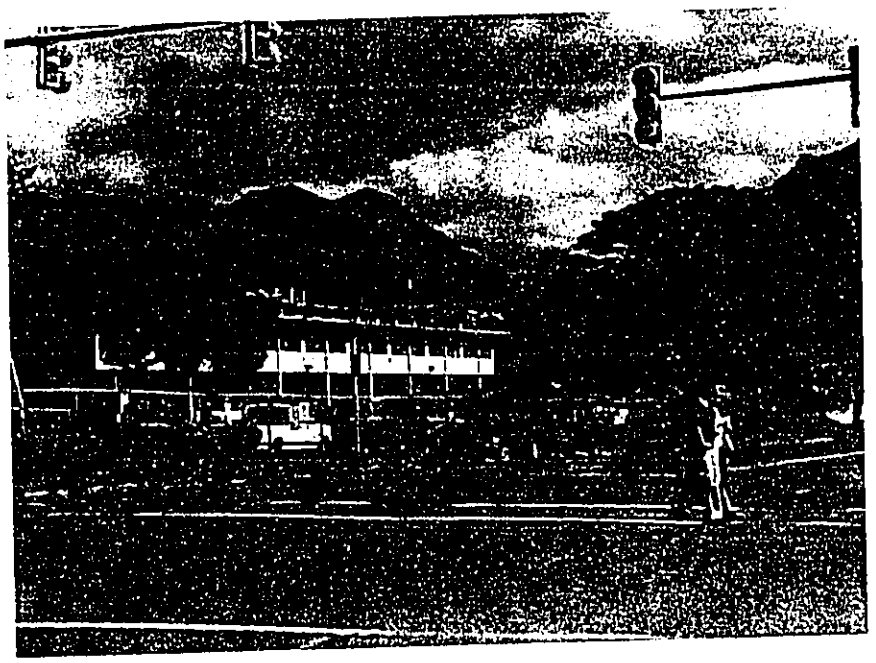


This photo is taken from the campus of Kamehameha Schools Bishop Estate. The arrow indicates the location of the proposed project site. Please note that the existing 50 feet Ironwood trees are barely noticeable from this location as it blends in with the environment surrounds this area.

Figure 12

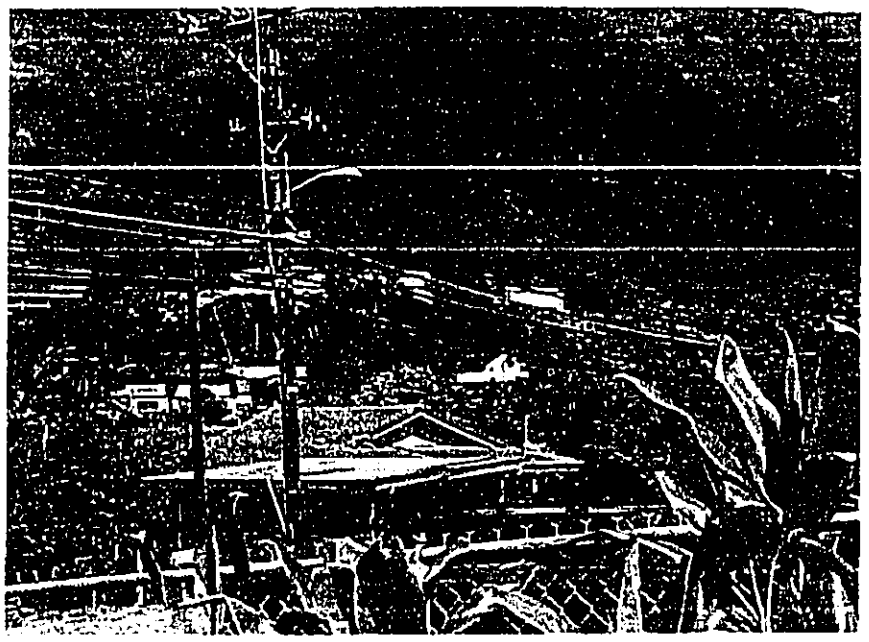


This photo was taken from the campus of Kamehameha Schools. The arrows marks the location of the proposed project site. The simulation shows that the "Stealth" pine tree will blend in with the environment. The backdrop of the mountain and its vegetation will further blend its color.

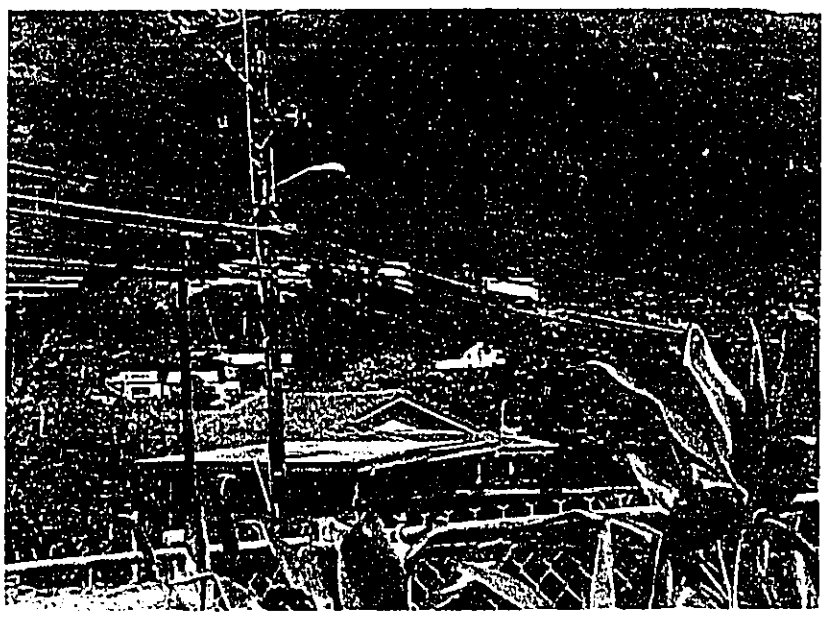


This photo was taken from Kamehameha IV Road in Kalihi Valley. Please note that the proposed project will not be visible from this Road.

Figure 13

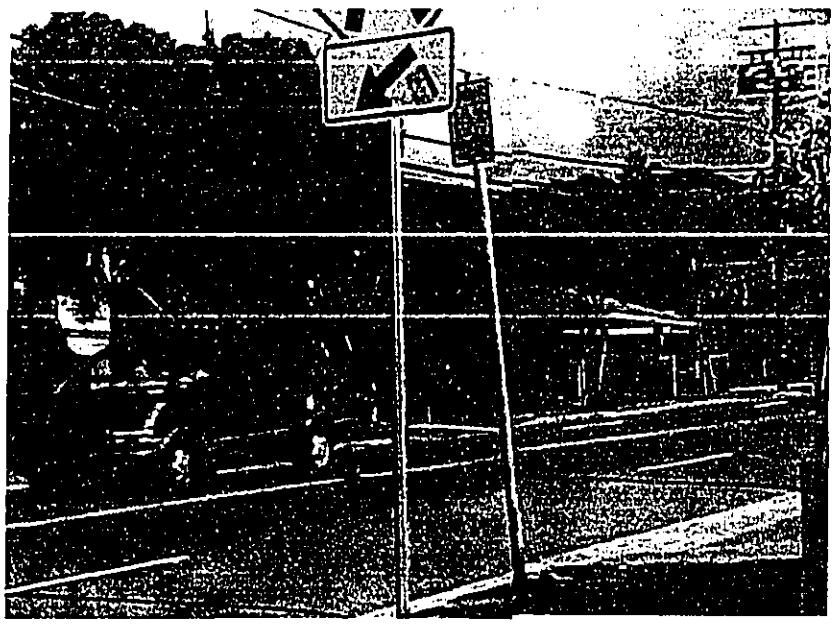


This photo was taken from the intersection of Kalihi Street and Akone Street in Kalihi Valley. Arrow indicates the location of the proposed project area.



This view is from the intersection of Kalihi and Akone Streets. The arrow points to location of the pine tree simulated into the photo. The pine tree will blend in with the backdrop of the mountain and its environment.

Figure 14



This photo was taken from the intersection of Kalihi and Machado streets in Kalihi Valley. The arrow marks the approximate area of the proposed project site. Please note the "Stealth" pine tree will not be visible from the majority of Kalihi Street.

This photo was taken from the intersection of Wilson and Jennie Streets. The arrow indicates the approximate area of the proposed project location. View of the "Stealth" pine tree will not be visible from the general vicinity of this intersection.

Figure 15

It is not anticipated that the proposed cellular communication system will have any affect on any threatened or endangered species, candidate species, species of concern, or critical habitats.

8.0 ANTICIPATED DETERMINATION OF SIGNIFICANCE

Chapter 200 (Environmental Impact Statement Rules) of Title 11, Hawaii Administrative Rules of the State of Hawaii Department of Health, establishes criteria to make a determination whether an action may have significant effect on the environment (§11-200-12). The significant criteria for making the determination for this project are as follows:

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

As determined from available database, the project site does not provide habitat for any known Federal or State listed threatened or endangered species, candidate species, or species of concern.

The State Historic Preservation Division and Office of Hawaiian Affairs determined that there is no historic or cultural significance related to the project site.

Construction of the proposed cellular communications system will not result in the loss or destruction of any natural or cultural resource.

2) *Curtails the range of beneficial uses of the environment:*

The proposed ceilular communications system will encompass an area of 625 square feet or approximately 0.05% of the 27.44-acre property. Approximately one-half of the property is zoned R-5, Residential and is occupied by the Kalihi Elementary School. The balance of the property is zoned P-1, Restricted Preservation. The project site is located on the portion of the property zoned R-5 and will not curtail the beneficial uses of the environment.

3) *Conflicts with the States long-term environmental policies or goals and guidelines as expressed in Chapter 344, HRS, and any revisions thereof and amendments thereto, court decisions, or executive orders;*

The proposed cellular communication system will not adversely affect natural resources at the site. The facility will provide more thorough coverage for cellular phone service throughout the Kalihi Valley for local residents and citizens traveling through the area, promoting public safety and health. The facility will not affect the state's long-term goals and guidelines as expressed in Chapter 344, HRS.

4) *Substantially affects the economic or social welfare of the community or State;*

The proposed cellular communications system will benefit local residents and citizens traveling through the Kalihi Valley by providing better telephone service. The facility will not have a substantial effect on the economic or social welfare of the community or State.

5) *Substantially affects public health;*

VoiceStream PCS II Corporation is licensed through and by the Federal Communications Commission (FCC) and complies with very strict emission guidelines established by the FCC. VoiceStream accomplished a radiated power density analysis of the site to determine total energy power emissions. Testing of the site shows power emissions to be well below FCC requirements.

VoiceStream PCS II Corporation also consulted with the State of Hawaii, Department of Health Office of Hazard Evaluation and Emergency Response. It was the opinion of Dr. Au, representative of the State, that the telecommunications system would not have any effect on the children and faculty of Kalihi Elementary School

The proposed cellular communications system is not expected to create any electromagnetic radiation hazard to people or animals, thus the facility will not have an adverse effect on public health.

6) *Involves substantial secondary impacts, such as population changes or effects on public facilities;*

The proposed cellular communications system is an un-manned site. VoiceStream engineers and technicians, existing Hawaii residents, will travel to the site on a periodic basis to accomplish maintenance and repair. No other personnel are anticipated to visit the project site. In addition, the project site is located in an area of the school campus not utilized for any purpose and with no plans for future usage. The school will receive monthly rental payments from VoiceStream PCS II Corporation, which will benefit the school and local community. Construction of the project will not result in substantial secondary impacts, such as population changes or effects of public facilities.

7) *Involves a substantial degradation of environmental quality;*

During construction of the proposed cellular communications system, short-term impacts to noise, air and traffic in the immediate vicinity of the project site is anticipated. According to the State Historic Preservation Division and Office of Hawaiian Affairs, construction of the facility will not affect any historic sites or cultural resources. The facility will not result in a substantial degradation of environmental quality.

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

The proposed cellular communications system does not involve a commitment to further actions or undertakings. The facility will not have an individual or cumulative effect upon the environment or require a commitment for larger actions.

9) *Substantially effects a rare, threatened, or endangered species or habitat;*

According to available database, there are no known, listed or mapped rare, threatened, or endangered species or habitats in the vicinity of the project. The cellular communications system will not substantially affect rare, threatened or endangered species, or habitat.

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

During installation of the cellular communications system, construction equipment will increase noise and exhaust emissions in the vicinity of the project site. These noise and air impacts are short-term and will be controlled according to State regulations. Following construction, the facility will not contribute to any adverse effects on air, water or ambient noise levels.

11) *Affects or is likely to suffer damage by being located in an environmentally sensate area such as a floodplain, tsunami zone, beach, erosion-prone area, geologically hazardous area, estuary, fresh water, or coastal waters.*

According to FEMA Floodplain maps, the project site is not located in a 100-year floodplain or tsunami zone. In addition, the project site is not located on a beach, in an erosion-prone area, geologically hazardous area, or in estuary, fresh water or coastal waters. The site is not located in an environmentally sensitive area.

12) *Substantially affects scenic vistas and view planes identified in county or state plans or studies;*

No scenic vistas and/or view planes, identified in county or state plans or studies are known to exist in the vicinity of the project site. In addition, the location of the facility is several hundred yards upslope (north and west) of the Like Like Highway amongst (back dropped by) numerous 50 to 60-feet high trees. The tower for the facility is to be a "Stealth Mono-Pine Tree" constructed and painted to blend with surrounding environs.

Visual impact analysis of the site indicates only the upper 60 to 65-feet portion of the pine tree will be visible and then only from a limited number of vantage points. The project will not substantially affect scenic vistas and/or view planes.

13) *Requires substantial energy consumption.*

The proposed cellular communications system is designed to utilize a minimal amount of electrical power. The project will not consume substantial energy.

Based on the finding of this Environmental Assessment, a Finding of No Significant Impact (FONSI) for this project is anticipated.

APPENDIX a

EDR NEPA Check

Prepared by

Environmental Data Resources, Inc.
June 1, 2001

EDR NEPACheck®

Kalihi Elementary School
Kalihi Elementary School
Honolulu, HI 96819

Inquiry Number: 639503.8s

June 01, 2001

Environmental Data Resources, Inc.

The Source For Environmental Risk Management Data

3530 Post Road
Southport, Connecticut 06490

Nationwide Customer Service

Telephone: 1-800-352-0050
Fax: 1-800-231-6802
Internet: www.edrnet.com

FORM.NCP

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

EDR NEPACheck® DESCRIPTION

The National Environmental Policy Act of 1969 (NEPA) requires that Federal agencies include in their decision-making processes appropriate and careful consideration of all environmental effects and actions, analyze potential environmental effects of proposed actions and their alternatives for public understanding and scrutiny, avoid or minimize adverse effects of proposed actions, and restore and enhance environmental quality as much as possible.

The EDR NEPACheck provides information which may be used, in conjunction with additional research, to determine whether a proposed site or action will have significant environmental effect.

The report provides maps and data for the following NEPA checklist items for geographic areas which are available in electronic format:

	Regulation
Natural Areas Map	
• Federal Lands Data:	
- Officially designated wilderness areas	47 CFR 1.1307(1)
- Officially designated wildlife preserves, sanctuaries and refuges	47 CFR 1.1307(2)
- Wild and scenic rivers	40 CFR 6.302(e)
- Fish and Wildlife	40 CFR 6.302
• Threatened or Endangered Species, Fish and Wildlife, Critical Habitat Data	47 CFR 1.1307(3); 40 CFR 6.302
Historic Sites Map	
• National Register of Historic Places	47 CFR 1.1307(4); 40 CFR 6.302
Flood Plain Map	
• National Food Plain Data	47 CFR 1.1307(6); 40 CFR 6.302
Wetlands Map	
• National Wetlands Inventory Data	47 CFR 1.1307(7); 40 CFR 6.302
FCC & FAA Map	
• FCC antenna/tower sites, AM Radio Towers, FAA Markings and Obstructions	47 CFR 1.1307(8)

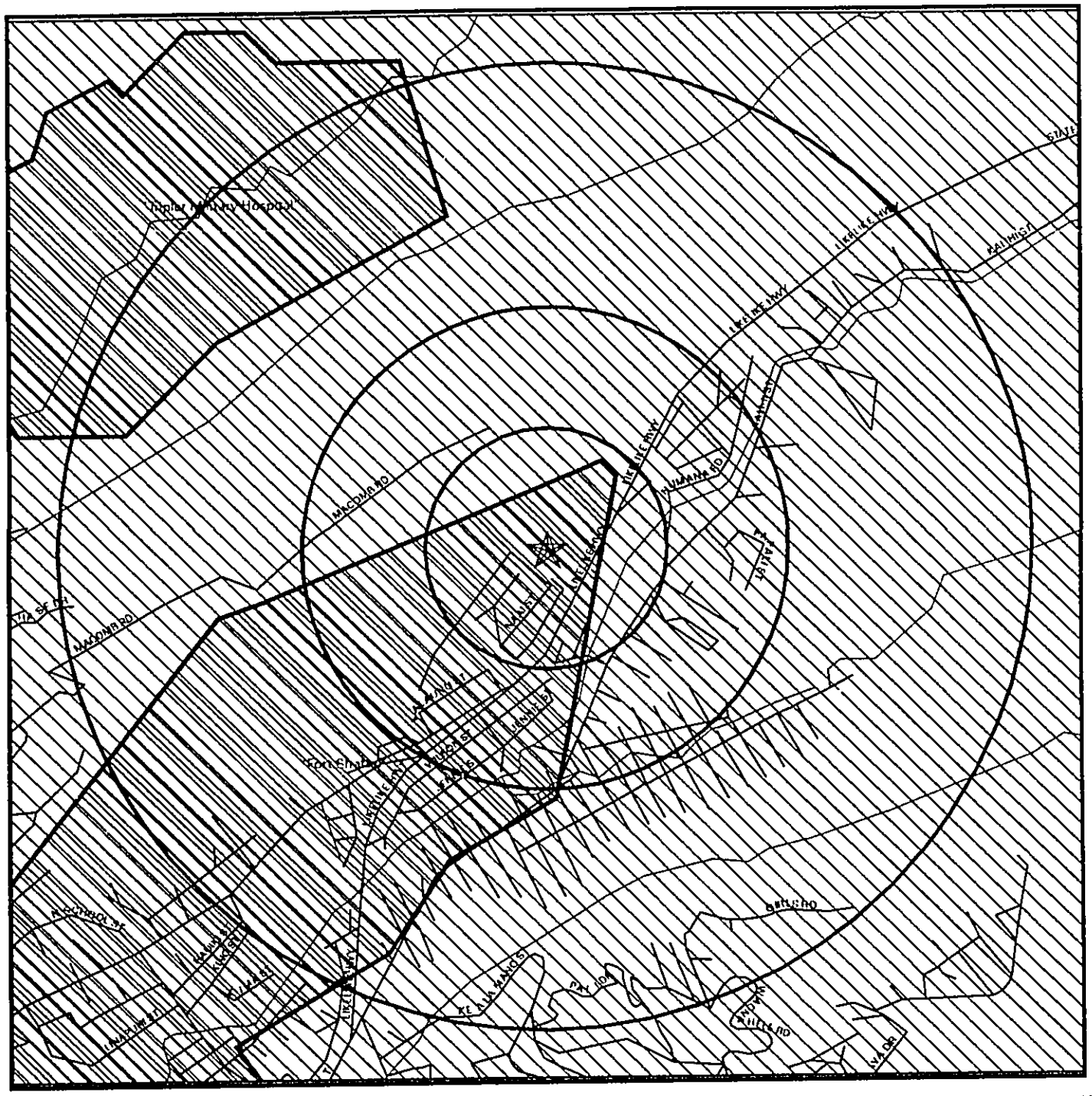
Key Contacts and Government Records Searched

MAP FINDINGS SUMMARY

The databases searched in this report are listed below. Database descriptions and other agency contact information is contained in the Key Contacts and Government Records Searched section on page 22 of this report.

Database	Search Distance (Miles)	Item within Search Distance	Item within 1/8 mile of Target Property
Federal Lands	1.00	YES	YES
Game Management Areas	1.00	YES	YES
Managed Areas	1.00	YES	YES
NEPAHIST	1.00	NO	NO
FLOODPLAIN	1.00	YES	YES
NWI	1.00	NO	NO
HI COASTAL ZONE	20.00	YES	YES
FCC Cellular	1.00	YES	NO
FCC Antenna	1.00	NO	NO
FCC Tower	1.00	YES	NO
FCC AM Tower	1.00	NO	NO
FAA DOF	1.00	YES	NO

Natural Areas Map



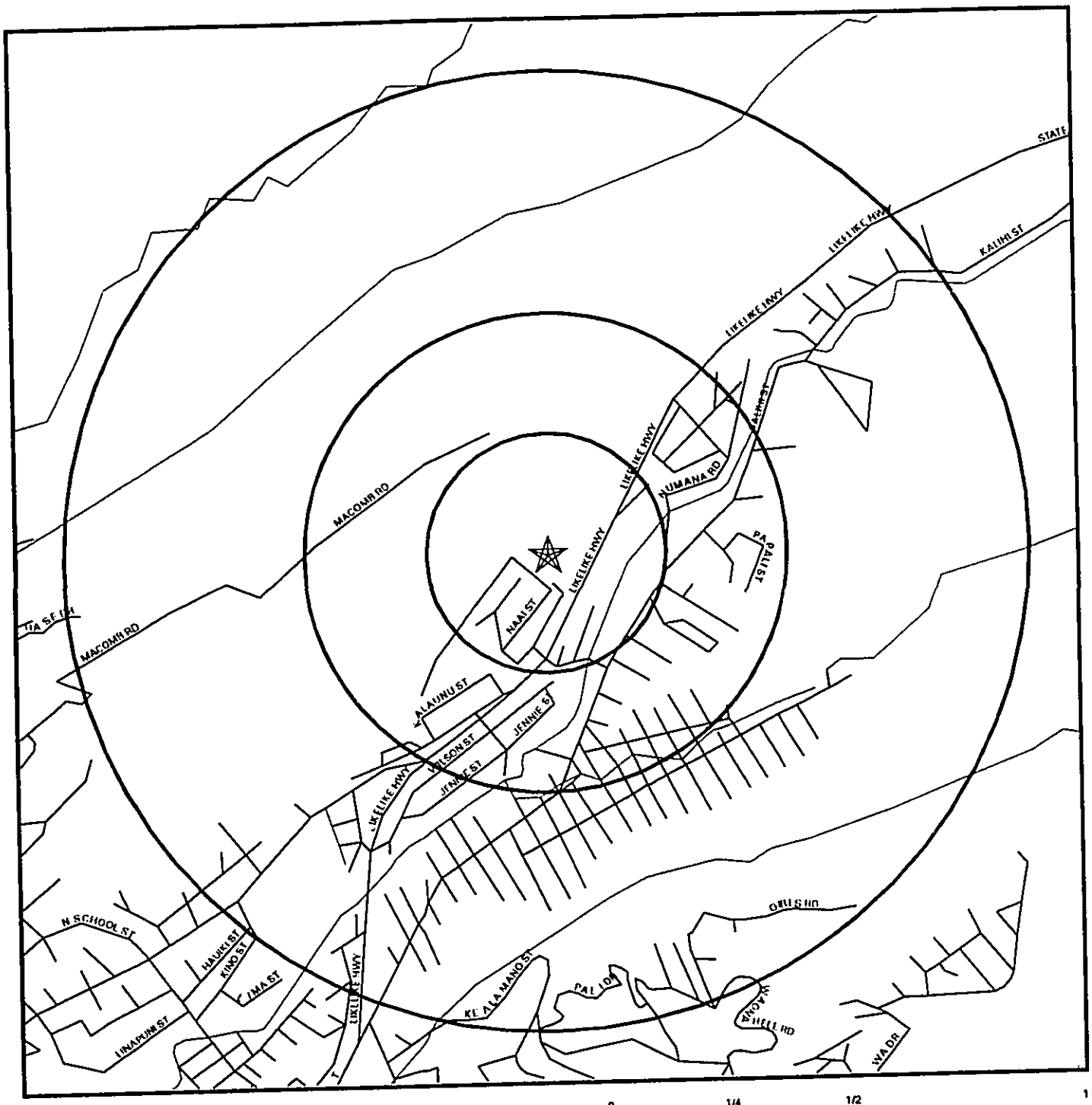
★ Target Property
Roads
Waterways
State Natural/Wildlife Locations
State Natural/Wildlife Linear Features
Federal Natural/Wildlife Linear Features
State Natural/Wildlife Areas
Federal Natural/Wildlife Areas

TARGET PROPERTY:	Kalihi Elementary School	CUSTOMER:	South Pacific Geotechnical Inc
ADDRESS:	Kalihi Elementary School	CONTACT:	Mr. Jerry M. Sessums
CITY/STATE/ZIP:	Honolulu HI 96819	INQUIRY #:	639503.8s
LAT/LONG:	21.3567 / 157.8642	DATE:	June 01, 2001

NATURAL AREAS MAP FINDINGS

Map ID Direction Distance Distance (ft.)	Site		EDR ID Database
NA North 0-1/8 mi 0	Unit:	Not Reported	HI10000022 HI_GAME
NA North 0-1/8 mi 0	Reserve Type: Reserve Name: Managed Area: Reserve Sub-section:	Undefined (code 1) Not Reported 0 Not Reported	HI20000030 HI_MAN
NA North 0-1/8 mi 0	Name: ID: State FIPS: Feature:	'Fort Shafter' 98815 15 Army DOD	US0050032 FED_LAND
NA NNW 1/2-1 mi 3712	Name: ID: State FIPS: Feature:	'Tripler Military Hospital' 98813 15 Army DOD	US0050030 FED_LAND

Historic Places Map



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LAT/LONG:	21.3567 / 157.8642	DATE:	June 01, 2001

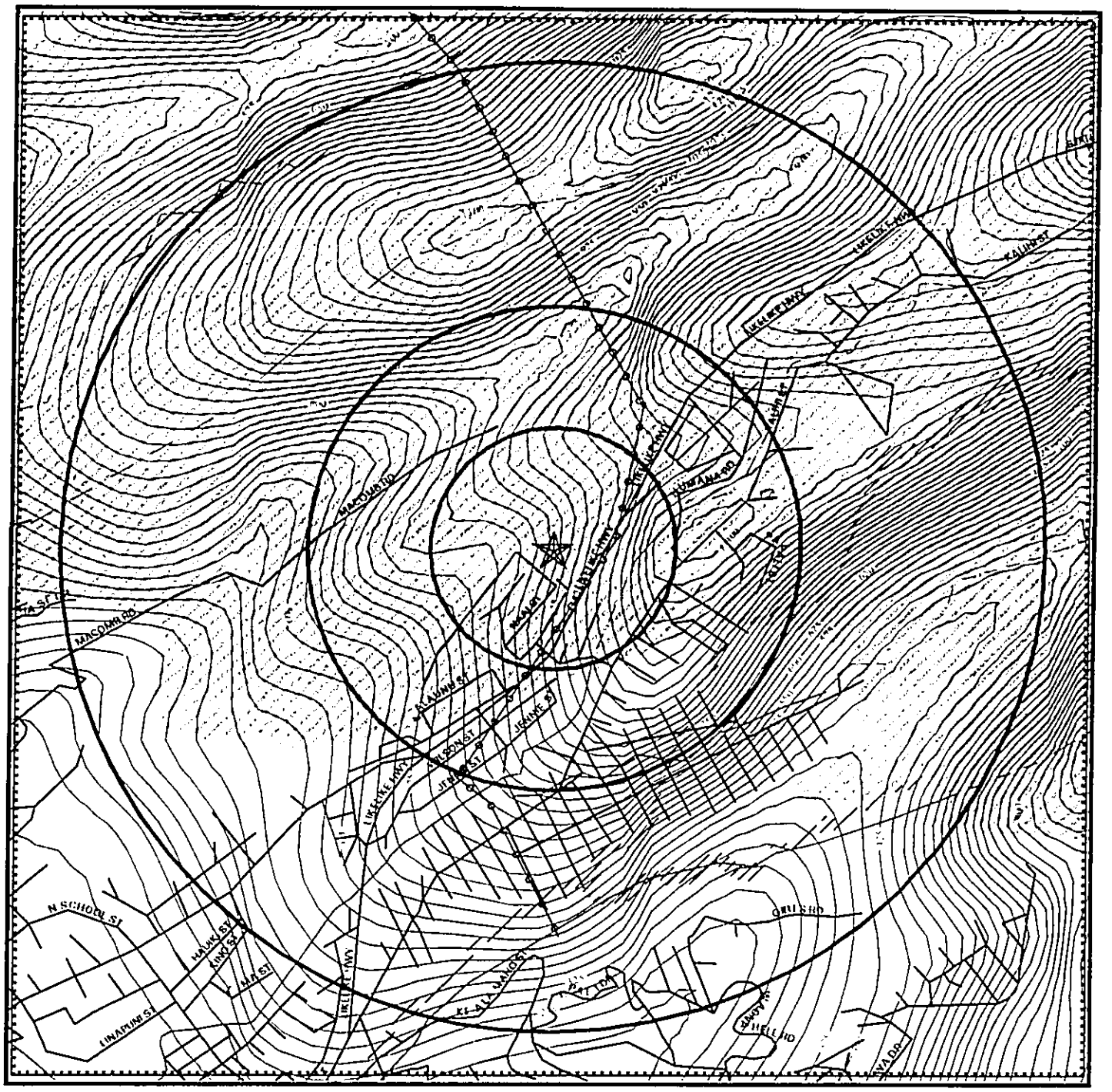
HISTORIC PLACES MAP FINDINGS

Map ID
Direction
Distance
Distance (ft.)

EDR ID
Database

No Sites Reported.

Flood Plain Map



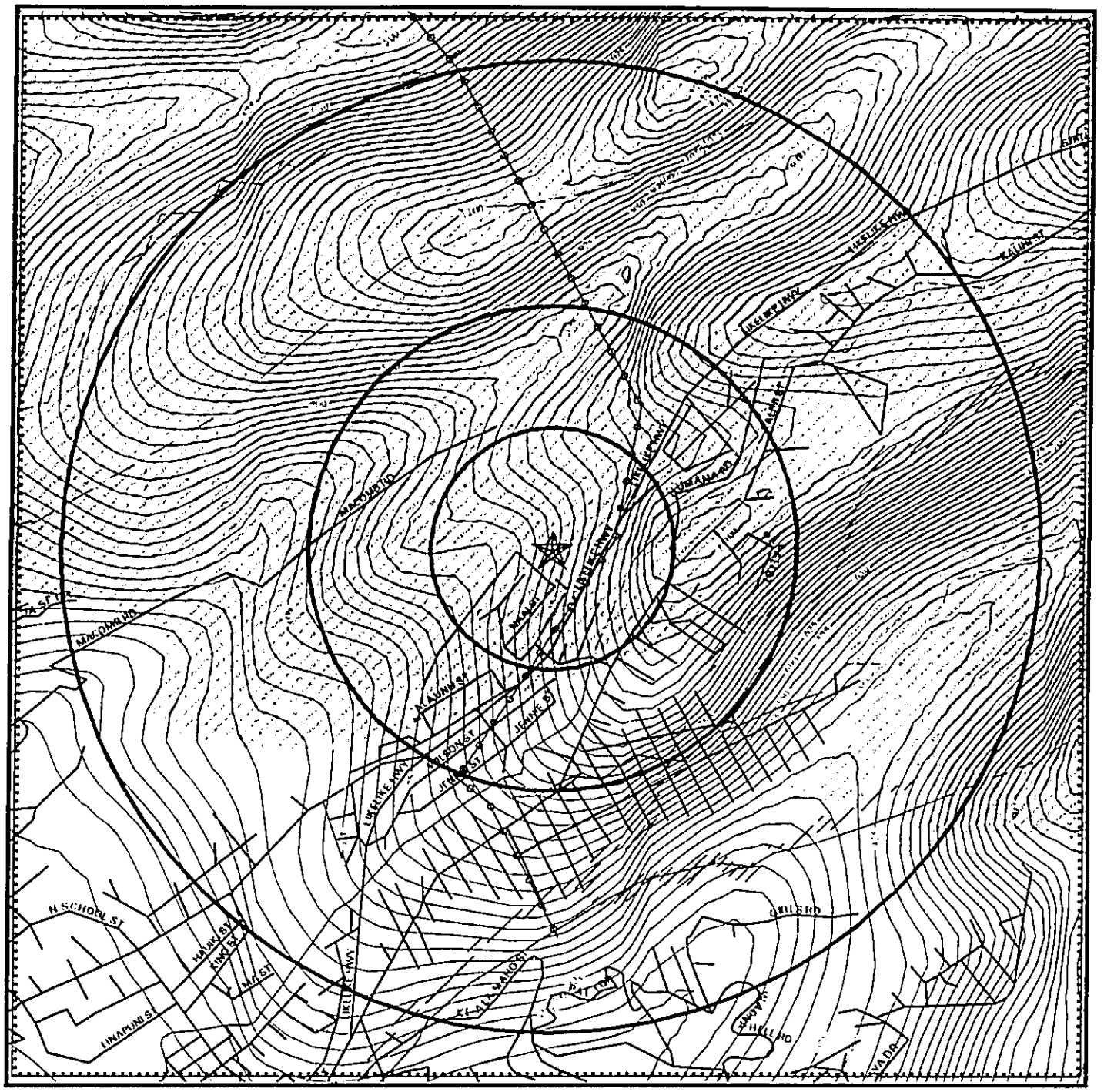
Major Roads	Power Lines	Water	
Contour Lines	Pipe Lines	100-year flood zone	
Waterways	Fault Lines	500-year flood zone	
County Boundary		Electronic FEMA data available	
		Electronic FEMA data not available	

TARGET PROPERTY:	Kalihi Elementary School	CUSTOMER:	South Pacific Geotechnical Inc
ADDRESS:	Kalihi Elementary School	CONTACT:	Mr. Jerry M. Sessums
CITY/STATE/ZIP:	Honolulu HI 96819	INQUIRY #:	639503.8s
LAT/LONG:	21.3567 / 157.8642	DATE:	June 01, 2001

CORRECTION

THE PRECEDING DOCUMENT(S) HAS BEEN REPHOTOGRAPHED TO ASSURE LEGIBILITY
SEE FRAME(S)
IMMEDIATELY FOLLOWING

Flood Plain Map



- Major Roads
- Contour Lines
- Waterways
- County Boundary
- Power Lines
- Pipe Lines
- Fault Lines
- Water
- 100-year flood zone
- 500-year flood zone
- Electronic FEMA data available
- Electronic FEMA data not available

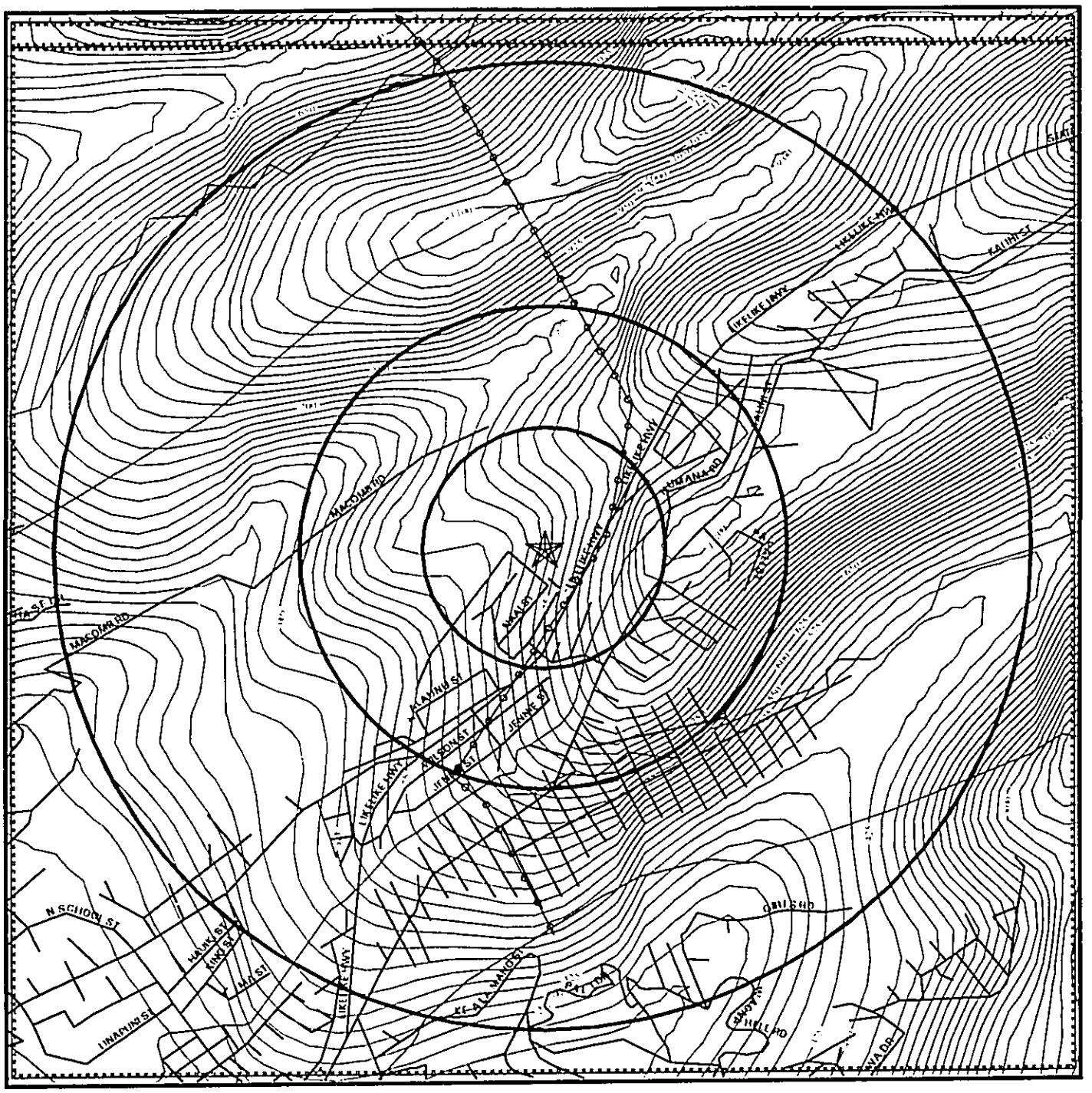
TARGET PROPERTY:	Kalihi Elementary School	CUSTOMER:	South Pacific Geotechnical Inc
ADDRESS:	Kalihi Elementary School	CONTACT:	Mr. Jerry M. Sessums
CITY/STATE/ZIP:	Honolulu HI 96819	INQUIRY #:	639503.8s
LAT/LONG:	21.3567 / 157.8642	DATE:	June 01, 2001

FLOOD PLAIN MAP FINDINGS

Source: FEMA Q3 Flood Data

County	FEMA flood data electronic coverage
HONOLULU, HI	YES
Flood Plain panel at target property:	1500010112C / CBPP
Additional Flood Plain panel(s) in search area: 1500010084B / CBPP	

National Wetlands Inventory Map



Major Roads
Contour Lines
Waterways
County Boundary
Power Lines
Pipe Lines
Fault Lines
Water
Wetlands
Electronic NWI data available
Electronic NWI data not available

TARGET PROPERTY:	Kalihi Elementary School	CUSTOMER:	South Pacific Geotechnical Inc
ADDRESS:	Kalihi Elementary School	CONTACT:	Mr. Jerry M. Sessums
CITY/STATE/ZIP:	Honolulu HI 96819	INQUIRY #:	639503.8s
LAT/LONG:	21.3567 / 157.8642	DATE:	June 01, 2001

WETLANDS MAP FINDINGS

Source: Fish and Wildlife Service NWI data

NWI hardcopy map at target property: Honolulu
Additional NWI hardcopy map(s) in search area:
Not reported in source data

Map ID Direction Distance Distance (ft.)	Code and Description*	Database

No Sites Reported.

*See Wetland Classification System for additional information.

WETLANDS CLASSIFICATION SYSTEM

National Wetland Inventory Maps are produced by the U.S. Fish and Wildlife Service, a sub-department of the U.S. Department of the Interior. In 1974, the U.S. Fish and Wildlife Service developed a criteria for wetland classification with four long range objectives:

- to describe ecological units that have certain homogeneous natural attributes,
- to arrange these units in a system that will aid decisions about resource management,
- to furnish units for inventory and mapping, and
- to provide uniformity in concepts and terminology throughout the U.S.

High altitude infrared photographs, soil maps, topographic maps and site visits are the methods used to gather data for the productions of these maps. In the infrared photos, wetlands appear as different colors and these wetlands are then classified by type. Using a hierarchical classification, the maps identify wetland and deepwater habitats according to:

- system
- subsystem
- class
- subclass
- modifiers

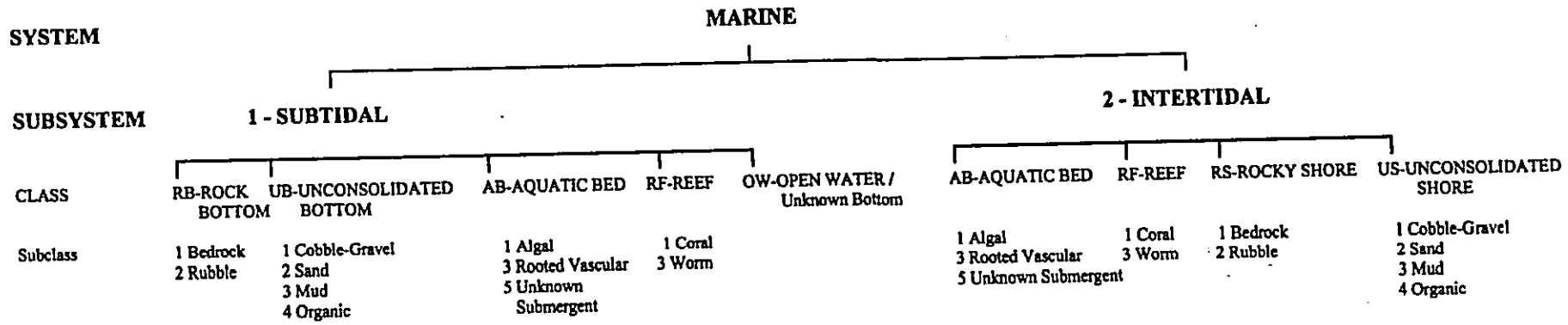
(as defined by Cowardin, et al. U.S. Fish and Wildlife Service FWS/OBS 79/31. 1979.)

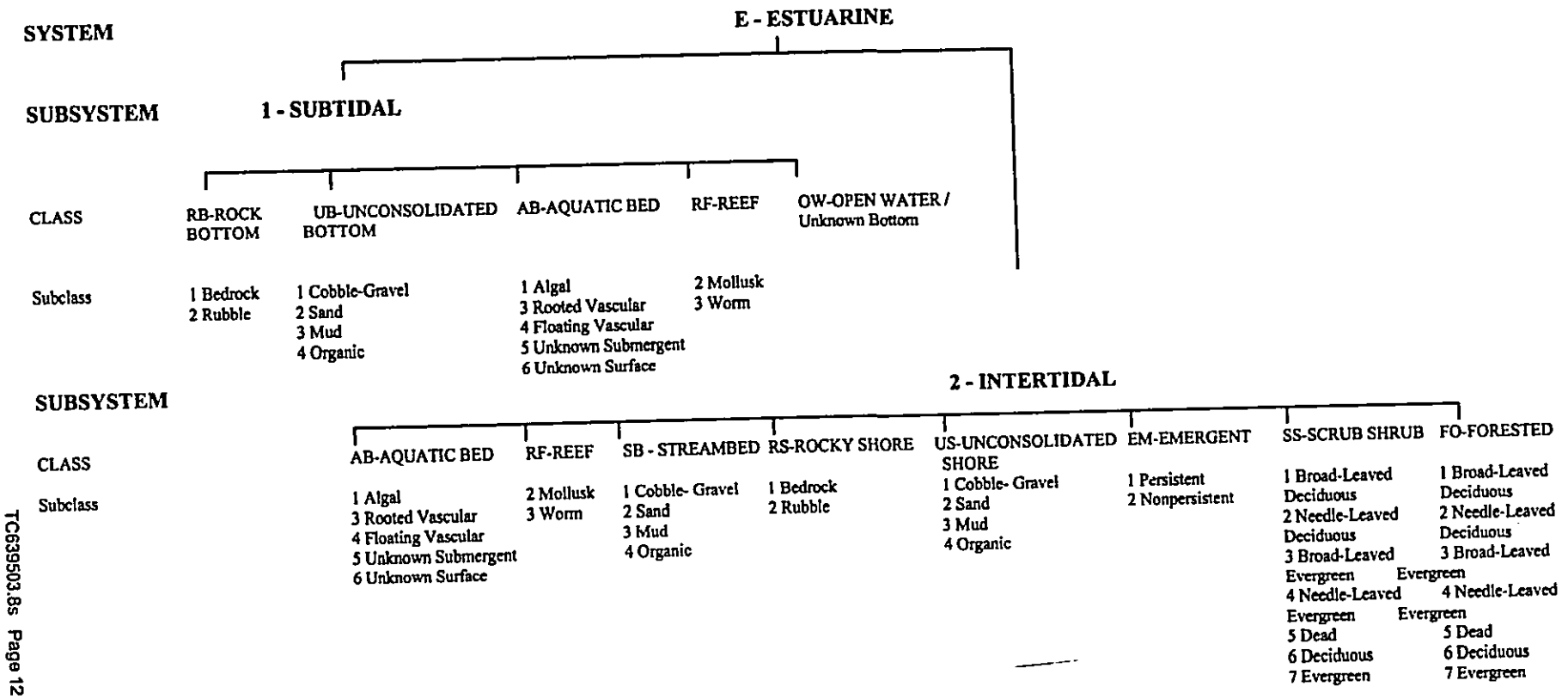
The classification system consists of five systems:

1. marine
2. estuarine
3. riverine
4. lacustrine
5. palustrine

The marine system consists of deep water tidal habitats and adjacent tidal wetlands. The riverine system consists of all wetlands contained within a channel. The lacustrine systems includes all nontidal wetlands related to swamps, bogs & marshes. The estuarine system consists of deepwater tidal habitats and where ocean water is diluted by fresh water. The palustrine system includes nontidal wetlands dominated by trees and shrubs and where salinity is below .5% in tidal areas. Ali of these systems are divided in subsystems and then further divided into class.

National Wetland Inventory Maps are produced by transferring gathered data on a standard 7.5 minute U.S.G.S. topographic map. Approximately 52 square miles are covered on a National Wetland Inventory map at a scale of 1:24,000. Electronic data is compiled by digitizing these National Wetland Inventory Maps.


SYSTEM
MARINE
SUBSYSTEM
1 - SUBTIDAL
2 - INTERTIDAL
CLASS
RB-ROCK BOTTOM
UB-UNCONSOLIDATED BOTTOM
AB-AQUATIC BED
RF-REEF
OW-OPEN WATER / Unknown Bottom
AB-AQUATIC BED
RF-REEF
RS-ROCKY SHORE
US-UNCONSOLIDATED SHORE
Subclass
1 Bedrock
2 Rubble
1 Cobble-Gravel
2 Sand
3 Mud
4 Organic
1 Algal
3 Rooted Vascular
5 Unknown Submergent
1 Coral
3 Worm
1 Algal
3 Rooted Vascular
5 Unknown Submergent
1 Coral
3 Worm
1 Bedrock
2 Rubble
1 Cobble-Gravel
2 Sand
3 Mud
4 Organic


SYSTEM
E - ESTUARINE
SUBSYSTEM
1 - SUBTIDAL
2 - INTERTIDAL
CLASS
RB-ROCK BOTTOM
UB-UNCONSOLIDATED BOTTOM
AB-AQUATIC BED
RF-REEF
OW-OPEN WATER / Unknown Bottom
AB-AQUATIC BED
RF-REEF
SB - STREAMBED
RS-ROCKY SHORE
US-UNCONSOLIDATED SHORE
EM-EMERGENT
SS-SCRUB SHRUB
FO-FORESTED
Subclass
1 Bedrock
2 Rubble
1 Cobble-Gravel
2 Sand
3 Mud
4 Organic
1 Algal
3 Rooted Vascular
4 Floating Vascular
5 Unknown Submergent
6 Unknown Surface
2 Mollusk
3 Worm
1 Algal
3 Rooted Vascular
4 Floating Vascular
5 Unknown Submergent
6 Unknown Surface
2 Mollusk
3 Worm
1 Cobble- Gravel
2 Sand
3 Mud
4 Organic
1 Bedrock
2 Rubble
1 Cobble- Gravel
2 Sand
3 Mud
4 Organic
1 Persistent
2 Nonpersistent
1 Broad-Leaved Deciduous
2 Needle-Leaved Deciduous
3 Broad-Leaved Evergreen
4 Needle-Leaved Evergreen
5 Dead
6 Deciduous
7 Evergreen
1 Broad-Leaved Deciduous
2 Needle-Leaved Deciduous
3 Broad-Leaved Evergreen
4 Needle-Leaved Evergreen
5 Dead
6 Deciduous
7 Evergreen

SYSTEM — **R - RIVERINE**

SUBSYSTEM	1 - TIDAL	2 - LOWER PERENNIAL	3 - UPPER PERENNIAL	4 - INTERMITTENT	5 - UNKNOWN PERENNIAL
CLASS	RB-ROCK BOTTOM; UB-UNCONSOLIDATED BOTTOM		*SB-STREAMBED	AB-AQUATIC BED	RS-ROCKY SHORE; US-UNCONSOLIDATED SHORE	**EM-EMERGENT	OW-OPEN WATER/ Unknown Bottom
Subclass	1 Bedrock 2 Rubble	1 Cobble-Gravel 2 Sand 3 Mud 4 Organic	1 Bedrock 2 Rubble 3 Cobble-Gravel 4 Sand 5 Mud 6 Organic 7 Vegetated	1 Algal 2 Aquatic Moss 3 Rooted Vascular 4 Floating Vascular 5 Unknown Submergent 6 Unknown Surface	1 Bedrock 2 Rubble	1 Cobble-Gravel 2 Sand 3 Mud 4 Organic 5 Vegetated	2 Nonpersistent	

* STREAMBED is limited to TIDAL and INTERMITTENT SUBSYSTEMS, and comprises the only CLASS in the INTERMITTENT SUBSYSTEM.
**EMERGENT is limited to TIDAL and LOWER PERENNIAL SUBSYSTEMS.

SYSTEM — **L - LACUSTRINE**

SUBSYSTEM — **1 - LIMNETIC**

CLASS	RB-ROCK BOTTOM	UB-UNCONSOLIDATED BOTTOM	AB-AQUATIC BED	OW-OPEN WATER/ Unknown Bottom
Subclass	1 Bedrock 2 Rubble	1 Cobble-Gravel 2 Sand 3 Mud 4 Organic	1 Algal 2 Aquatic Moss 3 Rooted Vascular 4 Floating Vascular 5 Unknown Submergent 6 Unknown Surface	

SUBSYSTEM — **2 - LITTORAL**

CLASS	RB-ROCK BOTTOM	UB-UNCONSOLIDATED BOTTOM	AB-AQUATIC BED	RS-ROCKY SHORE	US-UNCONSOLIDATED SHORE	EM-EMERGENT	OW-OPEN WATER/ Unknown Bottom
Subclass	1 Bedrock 2 Rubble	1 Cobble-Gravel 2 Sand 3 Mud 4 Organic	1 Algal 2 Aquatic Moss 3 Rooted Vascular 4 Floating Vascular 5 Unknown Submergent 6 Unknown Surface	1 Bedrock 2 Rubble	1 Cobble-Gravel 2 Sand 3 Mud 4 Organic 5 Vegetated	2 Nonpersistent	

SUBSYSTEM — **P - PALUSTRINE**

CLASS	RB–ROCK BOTTOM	UB–UNCONSOLIDATED BOTTOM	AB-AQUATIC BED	US–UNCONSOLIDATED SHORE	ML–MOSS-LICHEN	EM–EMERGENT	SS–SCRUB-SHRUB	FO–FORESTED	OW-OPEN WATER/ Unknown
Bottom									
Subclass	1 Bedrock 2 Rubble 3 Mud 4 Organic	1 Cobble-Gravel 2 Sand	1 Algal 2 Aquatic Moss 3 Rooted Vascular 4 Floating Vascular 5 Unknown Submergent 6 Unknown Surface	1 Cobble-Gravel 2 Sand 3 Mud 4 Organic 5 Vegetated	1 Moss 2 Lichen	1 Persistent 2 Nonpersistent	1 Broad-Leaved Deciduous 2 Needle-Leaved Deciduous 3 Broad-Leaved Evergreen 4 Needle-Leaved Evergreen 5 Dead 6 Deciduous 7 Evergreen	1 Broad-Leaved Deciduous 2 Needle-Leaved Deciduous 3 Broad-Leaved Evergreen 4 Needle-Leaved Evergreen 5 Dead 6Deciduous 7 Evergreen	

MODIFIERS

In order to more adequately describe wetland and deepwater habitats one or more of the water regime, water chemistry, soil, or special modifiers may be applied at the class or lower level in the hierarchy. The farmed modifier may also be applied to the ecological system.

WATER REGIME

Non-Tidal

A Temporarily Flooded
B Saturated
C Seasonally Flooded
D Seasonally Flooded/ Well Drained
E Seasonally Flooded/ Saturated
F Semipermanently Flooded
G Intermittently Exposed

Tidal

H Permanently Flooded
J Intermittently Flooded
K Artificially Flooded
W Intermittently Flooded/Temporary
Y Saturated/Semipermanent/ Seasonal
Z Intermittently Exposed/Permanent
U Unknown

Coastal Halinity Inland Salinity pH Modifiers for

K Artificially Flooded
L Subtidal
M Irregularly Exposed
N Regularly Flooded
P Irregularly Flooded

*S Temporary-Tidal
*R Seasonal-Tidal
*T Semipermanent -Tidal
V Permanent -Tidal
U Unknown

*These water regimes are only used in tidally influenced, freshwater systems.

WATER CHEMISTRY

1 Hyperhaline
2 Euhaline
3 Mixohaline (Brackish)
4 Polyhaline
5 Mesohaline
6 Oligohaline
0 Fresh

7 Hypersaline
8 Eusaline
9 Mixosaline
0 Fresh

all Fresh Water

a Acid
t Circumneutral
i Alkaline

SOIL

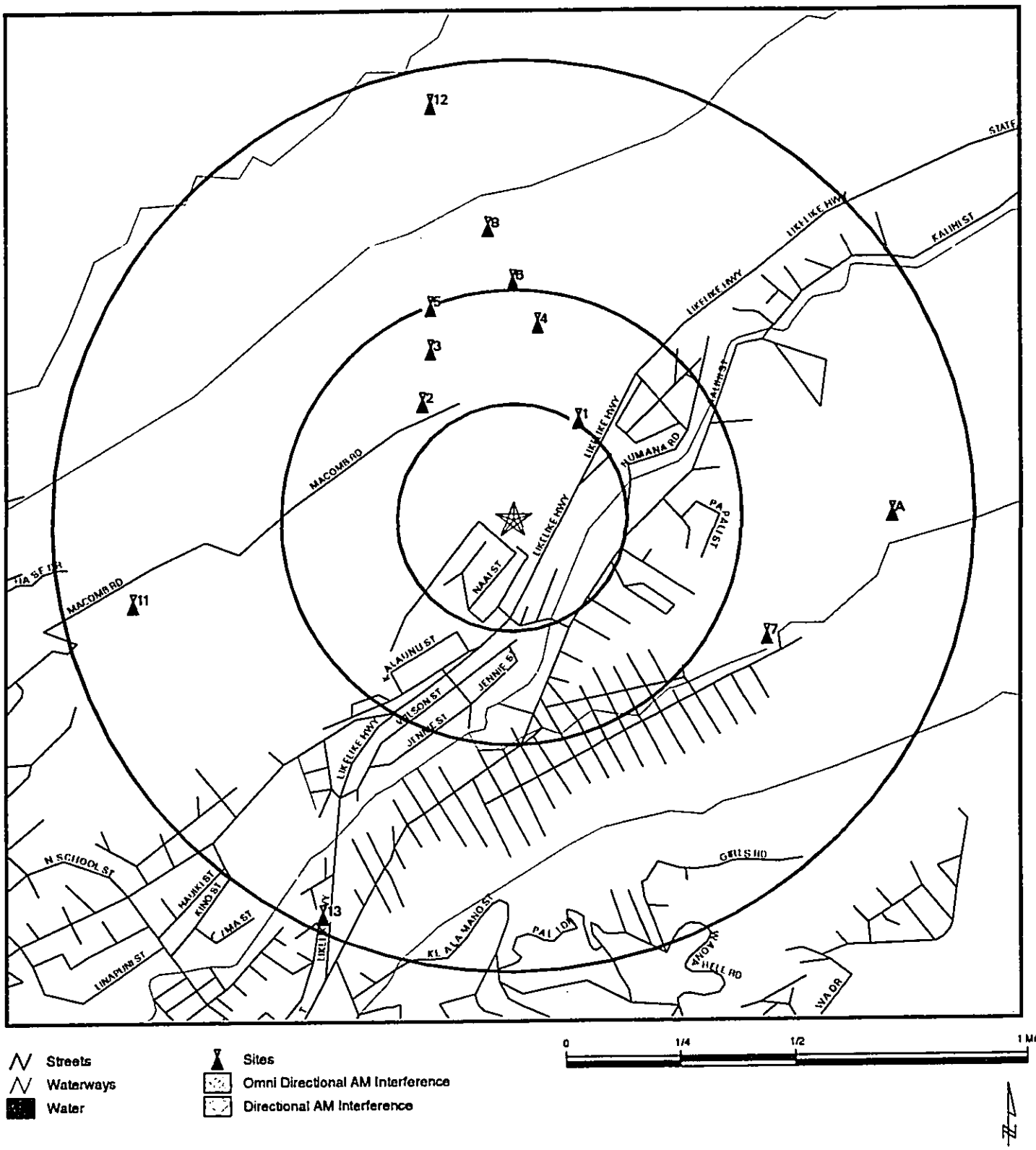
g Organic
n Mineral

SPECIAL MODIFIERS

b Beaver
d Partially Drained/Ditched
f Farmed
h Diked/Impounded
r Artificial Substrate
s Spoil
x Excavated

Source: U.S. Department of the Interior
Fish and Wildlife Service
National Wetlands Inventory

FCC & FAA Sites Map



TARGET PROPERTY:	Kalihi Elementary School	CUSTOMER:	South Pacific Geotechnical Inc	
ADDRESS:	Kalihi Elementary School	CONTACT:	Mr. Jerry M. Sessums	
CITY/STATE/ZIP:	Honolulu HI 96819	INQUIRY #:	639503.8s	
LAT/LONG:	21.3567 / 157.8642	DATE:	June 01, 2001	TC639503.8s Page 15 of 26

FCC & FAA SITES MAP FINDINGS

Map ID
Direction
Distance
Distance (ft.)

EDR ID
Database

1
NNE
1/4-1/2 mi
1372

DOF000000023987
FAA DOF

Unique ID:	120161	Obstruction #:	0161
City:	KALIHI	State:	Hawaii
Verification Status:	verified	Obstruction Type:	CATENARY
Latitude:	21 21 47N	Longitude:	157 51 53W
Frequency:	Not Reported	Type of Lighting:	No Lights
Above Ground Level Height (Ft.):			0488
Above Mean Sea Level Height (Ft.):			01128
Horizontal Accuracy:	+-250'	Vertical Accuracy:	+-50'
Painted/Marked:	Not Reported	FAA Study #:	Not Reported

2
NW
1/4-1/2 mi
1704

DOF000000023991
FAA DOF

Unique ID:	120165	Obstruction #:	0165
City:	KALIHI	State:	Hawaii
Verification Status:	verified	Obstruction Type:	CATENARY
Latitude:	21 21 49N	Longitude:	157 52 12W
Frequency:	Not Reported	Type of Lighting:	No Lights
Above Ground Level Height (Ft.):			0200
Above Mean Sea Level Height (Ft.):			00970
Horizontal Accuracy:	+-250'	Vertical Accuracy:	+-50'
Painted/Marked:	No	FAA Study #:	Not Reported

3
NNW
1/4-1/2 mi
2169

DOF000000023992
FAA DOF

Unique ID:	120166	Obstruction #:	0166
City:	KALIHI	State:	Hawaii
Verification Status:	verified	Obstruction Type:	CATENARY
Latitude:	21 21 55N	Longitude:	157 52 11W
Frequency:	Not Reported	Type of Lighting:	No Lights
Above Ground Level Height (Ft.):			0527
Above Mean Sea Level Height (Ft.):			00972
Horizontal Accuracy:	+-250'	Vertical Accuracy:	+-50'
Painted/Marked:	Not Reported	FAA Study #:	Not Reported

FCC & FAA SITES MAP FINDINGS

Map ID
Direction
Distance
Distance (ft.)

EDR ID
Database

4
North
1/4-1/2 mi
2273

DOF000000023988
FAA DOF

Unique ID:	120162	Obstruction #:	0162
City:	KALIHI	State:	Hawaii
Verification Status:	verified	Obstruction Type:	CATENARY
Latitude:	21 21 58N	Longitude:	157 51 58W
Frequency:	Not Reported	Type of Lighting:	No Lights
Above Ground Level Height (Ft.):		0315	
Above Mean Sea Level Height (Ft.):		01115	
Horizontal Accuracy:	+-250'	Vertical Accuracy:	+-50'
Painted/Marked:	Not Reported	FAA Study #:	Not Reported

5
NNW
1/4-1/2 mi
2633

DOF000000023993
FAA DOF

Unique ID:	120167	Obstruction #:	0167
City:	KALIHI	State:	Hawaii
Verification Status:	verified	Obstruction Type:	CATENARY
Latitude:	21 22 00N	Longitude:	157 52 11W
Frequency:	Not Reported	Type of Lighting:	No Lights
Above Ground Level Height (Ft.):		0352	
Above Mean Sea Level Height (Ft.):		01022	
Horizontal Accuracy:	+-250'	Vertical Accuracy:	+-50'
Painted/Marked:	No	FAA Study #:	Not Reported

6
North
1/2-1 mi
2760

DOF000000023989
FAA DOF

Unique ID:	120163	Obstruction #:	0163
City:	KALIHI	State:	Hawaii
Verification Status:	verified	Obstruction Type:	CATENARY
Latitude:	21 22 03N	Longitude:	157 52 01W
Frequency:	Not Reported	Type of Lighting:	No Lights
Above Ground Level Height (Ft.):		0605	
Above Mean Sea Level Height (Ft.):		01125	
Horizontal Accuracy:	+-250'	Vertical Accuracy:	+-50'
Painted/Marked:	No	FAA Study #:	Not Reported

FCC & FAA SITES MAP FINDINGS

Map ID Direction Distance Distance (ft.)			EDR ID Database
7 ESE 1/2-1 mi 3234			DOF000000023882 FAA DOF
Unique ID:	120055	Obstruction #:	0055
City:	HONOLULU	State:	Hawaii
Verification Status:	verified	Obstruction Type:	TOWER
Latitude:	21 21 22N	Longitude:	157 51 30W
Frequency:	Not Reported	Type of Lighting: Not Reported	
Above Ground Level Height (Ft.):		0200	
Above Mean Sea Level Height (Ft.):		00560	
Horizontal Accuracy:	+-500'	Vertical Accuracy:	+-125'
Painted/Marked:	No	FAA Study #:	77PC0003
8 North 1/2-1 mi 3377			DOF000000023990 FAA DOF
Unique ID:	120164	Obstruction #:	0164
City:	KALIHI	State:	Hawaii
Verification Status:	verified	Obstruction Type:	CATENARY
Latitude:	21 22 09N	Longitude:	157 52 04W
Frequency:	Not Reported	Type of Lighting: No Lights	
Above Ground Level Height (Ft.):		0214	
Above Mean Sea Level Height (Ft.):		01184	
Horizontal Accuracy:	+-250'	Vertical Accuracy:	+-50'
Painted/Marked:	Not Reported	FAA Study #:	Not Reported

FCC & FAA SITES MAP FINDINGS

Map ID
Direction
Distance
Distance (ft.)

EDR ID
Database

A9
East
1/2-1 mi
4343

CEL100000043034
CELLULAR

Low Frequency:	880.02000000	High Frequency:	889.98000000
Callsign:	KNKA250	Radio Code:	CL
DBA Name:	GTE MOBILNET OF HAWAII INCORPORATED		
Contact:	Not Reported		
Licensee:	GTE MOBILNET OF HAWAII INCORPORATED Not Reported ATLANTA, GA 30346		
Transmitter Address:	1653 KALAEPAA DRIVE HONOLULU, HI		
County:	HONOLULU	Longitude:	1575115
Latitude:	212136	Height:	00000
Elevation:	00000	Effective Height:	00540
Height Average:	00000	Class Code:	FB
Structure Height:	00050	Database ID:	Y
ERP:	00000000	Emissions:	40K0F3E 40K0F1D
License Date:	940922	Expiration Date:	951001
Issue Date:	940725	Total Units:	Not Reported
Mobile Vehicles:	Not Reported	Authorization Type:	L
Control Point Auth:	00		

This record is for a license, and it may or may not indicate a site which has been built.

A10
East
1/2-1 mi
4343

CEL100000018203
CELLULAR

Low Frequency:	835.02000000	High Frequency:	844.98000000
Callsign:	KNKA250	Radio Code:	CL
DBA Name:	GTE MOBILNET OF HAWAII INCORPORATED		
Contact:	Not Reported		
Licensee:	GTE MOBILNET OF HAWAII INCORPORATED Not Reported ATLANTA, GA 30346		
Transmitter Address:	1653 KALAEPAA DRIVE HONOLULU, HI		
County:	HONOLULU	Longitude:	1575115
Latitude:	212136	Height:	00000
Elevation:	00000	Effective Height:	00540
Height Average:	00000	Class Code:	MO
Structure Height:	00050	Database ID:	Y
ERP:	00000000	Emissions:	40K0F3E 40K0F1D
License Date:	940922	Expiration Date:	951001
Issue Date:	940725	Total Units:	Not Reported
Mobile Vehicles:	Not Reported	Authorization Type:	L
Control Point Auth:	00		

This record is for a license, and it may or may not indicate a site which has been built.

FCC & FAA SITES MAP FINDINGS

Map ID
Direction
Distance
Distance (ft.)

EDR ID
Database

11
WSW
1/2-1 mi
4455

TOW100000066324
TOWER

Tower ID: 541
Tower Owner Name:
END OF HART ST., HONOLULU, HI
Latitude: 21 21' 76886"
Longitude: 157 52' 47"
Transmitter Latitude: 212126
Construction Date: 05/01/1989
FAA Date: Aug 4 1976
File Number: BL-810325
Antenna Height: 0.0000
Beacon Height: 0.0000
Elevation: 206.0000
Elevation FAA (M): 62.8000
Structure Height: 200.0000
Structure Height FAA: 200.0000
Supporting Struct Hgt: 0.0000
Tower Height: 0.0000
Structure Type: TOW
Key Remarks:
Key Site: 648
ID Exam:
Paint and Lighting Specs: 1 11 21 3
Special Conditions/Remarks:

Latitude (in seconds): 76886
Longitude (in seconds): 568367
Transmitter Longitude 1575247
Activation Date: Nov 11 1977
FCC Date:
FAA ID: 76-PC-10-OE
Antenna Height (M): 0.0000
Beacon Height (M): 0.0000
Elevation FAA: 206.0000
Elevation (M): 62.8000
Structure Height (M): 61.0000
Structure Height FAA (M): 61.0000
Supporting Struct Hgt (M): 0.0000
Tower Height (M): 0.0000
Tower Type: E
Date:
Record Action: OLD
ID_ASB_ACC: C

This record is for a license, and it may or may not indicate a site which has been built.

12
North
1/2-1 mi
4870

DOF000000023906
FAA DOF

Unique ID: 120079
City: MOANALUA
Verification Status: verified
Latitude: 21 22 23N
Frequency: Not Reported
Above Ground Level Height (Ft.):
Above Mean Sea Level Height (Ft.):
Horizontal Accuracy: +-250'
Painted/Marked: No

Obstruction #: 0079
State: Hawaii
Obstruction Type: CATENARY2
Longitude: 157 52 11W
Type of Lighting: No Lights
0366
01086
Vertical Accuracy: +-50'
FAA Study #: Not Reported

FCC & FAA SITES MAP FINDINGS

Map ID Direction Distance Distance (ft)		EDR ID Database
13 SSW 1/2-1 mi 5093		TOW100000027297 TOWER

Tower ID:	131559		
Tower Owner Name:	HONOLULU, CITY & COUNTY OF		
	1865 KAM IV RD, HONOLULU, HI		
Latitude:	21 20' 76850"	Latitude (in seconds):	76850
Longitude:	157 52' 24"	Longitude (in seconds):	568344
Transmitter Latitude:	212050	Transmitter Longitude	1575224
Construction Date:		Activation Date:	Feb 7 1996
FAA Date:	Jan 12 1996	FCC Date:	Jan 10 1996
File Number:	D012999-D	FAA ID:	95-AWP-2189-OE
Antenna Height:	4.0000	Antenna Height (M):	1.2000
Beacon Height:	0.0000	Beacon Height (M):	0.0000
Elevation:	221.0000	Elevation FAA:	221.0000
Elevation FAA (M):	67.4000	Elevation (M):	67.4000
Structure Height:	60.0000	Structure Height (M):	18.3000
Structure Height FAA:	60.0000	Structure Height FAA (M):	18.3000
Supporting Struct Hgt:	0.0000	Supporting Struct Hgt (M):	0.0000
Tower Height:	56.0000	Tower Height (M):	17.1000
Structure Type:	TOW	Tower Type:	E
Key Remarks:		Date:	
Key Site:	82539	Record Action:	ADD
ID Exam:	PRB0	ID_ASB_ACC:	
Paint and Lighting Specs:			
Special Conditions/Remarks:			

This record is for a license, and it may or may not indicate a site which has been built.

KEY CONTACTS & GOVERNMENT RECORDS SEARCHED

Various Federal laws and executive orders address specific environmental concerns. NEPA requires the responsible offices to integrate to the greatest practical extent the applicable procedures required by these laws and executive orders. EDR provides key contacts at agencies charged with implementing these laws and executive orders to supplement the information contained in this report.

NATURAL AREAS
Officially designated wilderness areas
Government Records Searched in This Report
FED_LAND: Federal Lands
Source: USGS
Telephone: 703-648-5094
Federal data from Bureau of Land Management, National Park Service and Forest Service and Fish and Wildlife Service.
- National Parks
- Forests
- Monuments
- Wildlife Sanctuaries, Preserves, Refuges
- Federal Wilderness Areas.

Date of Government Version: 09/01/1997

Federal Contacts for Additional Information
National Park Service, Pacific West Region
600 Harrison Street, Suite 600
San Francisco, CA 94107
415-427-1300

USDA Forest Service, Pacific Southwest
630 Sansome Street
San Francisco, CA 94111
415-705-2557

Fish & Wildlife Service, Region 1
Eastside Federal Complex 911 NE 11th Avenue
Portland, OR 97232-4181
503-231-6188

Officially designated wildlife preserves, sanctuaries and refuges
Government Records Searched in This Report
FED_LAND: Federal Lands
Source: USGS
Telephone: 703-648-5094
Federal data from Bureau of Land Management, National Park Service and Forest Service and Fish and Wildlife Service.
- National Parks
- Forests
- Monuments
- Wildlife Sanctuaries, Preserves, Refuges
- Federal Wilderness Areas.

Date of Government Version: 09/01/1997

KEY CONTACTS & GOVERNMENT RECORDS SEARCHED

Government Records Searched in This Report

HI_GAME
Game Management Areas
State Game Management areas for islands of Kauai, Oahu, Molokai, Lanai, Maui and Hawaii
Source: Dept. of Land & Natural Resources
Telephone: 808-587-0166

HI_MAN
Managed Areas
Managed areas (e.g. refuges, preserves, etc.) for islands Kauai, Oahu, Maui, Molokai, Lanai and Hawaii. Such areas include, but are not limited to, private and public wildlife refuges, preserves, sanctuaries and reserves. Also includes state forest reserves and some state parks
Source: Dept. of Land & Natural Resources
Telephone: 808-587-0166

Federal Contacts for Additional Information

Fish & Wildlife Service, Region 1
Eastside Federal Complex 911 NE 11th Avenue
Portland, OR 97232-4181
503-231-6188

State Contacts for Additional Information

Dept. of Land & Natural Resources 808-587-0100

Wild and scenic rivers

Government Records Searched in This Report

FED_LAND: Federal Lands
Source: USGS
Telephone: 703-648-5094
Federal data from Bureau of Land Management, National Park Service and Forest Service and Fish and Wildlife Service.
- National Parks
- Forests
- Monuments
- Wildlife Sanctuaries, Preserves, Refuges
- Federal Wilderness Areas.

Date of Government Version: 09/01/1997

Federal Contacts for Additional Information

Fish & Wildlife Service, Region 1
Eastside Federal Complex 911 NE 11th Avenue
Portland, OR 97232-4181
503-231-6188

Endangered Species

Federal Contacts for Additional Information

Fish & Wildlife Service, Region 1
Eastside Federal Complex 911 NE 11th Avenue
Portland, OR 97232-4181
503-231-6188

State Contacts for Additional Information

Natural Heritage Program, The Nature Conservancy of Hawaii 808-537-4508

KEY CONTACTS & GOVERNMENT RECORDS SEARCHED

LANDMARKS, HISTORICAL, AND ARCHEOLOGICAL SITES
Historic Places
Government Records Searched in This Report

National Register of Historic Places:
The National Register of Historic Places is the official federal list of districts, sites, buildings, structures, and objects significant in American history, architecture, archeology, engineering, and culture. These contribute to an understanding of the historical and cultural foundations of the nation.
The National Register includes:
- All prehistoric and historic units of the National Park System;
- National Historic Landmarks, which are properties recognized by the Secretary of the Interior as possessing national significance; and
- Properties significant in American, state, or local prehistory and history that have been nominated by State Historic Preservation Officers, federal agencies, and others, and have been approved for listing by the National Park Service.

Date of Government Version: 03/15/2000

FED_LAND: Federal Lands
Source: USGS
Telephone: 703-648-5094
Federal data from Bureau of Land Management, National Park Service and Forest Service and Fish and Wildlife Service.
- National Parks
- Forests
- Monuments
- Wildlife Sanctuaries, Preserves, Refuges
- Federal Wilderness Areas.

Date of Government Version: 09/01/1997

Federal Contacts for Additional Information
Park Service; Advisory Council on Historic Preservation
1849 C Street NW
Washington, DC 20240
Phone: (202) 208-6843

State Contacts for Additional Information
Dept. of Land & Natural Resources 808-587-0401

Indian Religious Sites
Federal Contacts for Additional Information
Department of the Interior- Bureau of Indian Affairs
Office of Public Affairs
1849 C Street, NW
Washington, DC 20240-0001
Office: 202-208-3711
Fax: 202-501-1516

National Association of Tribal Historic Preservation Officers
1411 K Street NW, Suite 700
Washington, DC 20005
Phone: 202-628-8476
Fax: 202-628-2241

KEY CONTACTS & GOVERNMENT RECORDS SEARCHED

FLOOD PLAIN, WETLANDS AND COASTAL ZONE

Flood Plain Management
Government Records Searched in This Report
Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 1999 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

Federal Contacts for Additional Information
Federal Emergency Management Agency 877-3362-627

State Contacts for Additional Information
Department of Defense, Emergency Mgmt. 808-733-4300

Wetlands Protection
Government Records Searched in This Report
NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 1999 from the U.S. Fish and Wildlife Service.

Federal Contacts for Additional Information
Fish & Wildlife Service 813-570-5412

State Contacts for Additional Information
Dept. of Land & Natural Resources 808-587-0100

Coastal Zone Management
Government Records Searched in This Report
CAMA Management Areas
Dept. of Env., Health & Natural Resources
919-733-2293

Federal Contacts for Additional Information
Office of Ocean and Coastal Resource Management
N/ORM, SSMC4
1305 East-West Highway
Silver Spring, Maryland 20910
301-713-3102

State Contacts for Additional Information
Office of Planning, Coastal Zone Management Program 808-587-2875

FCC & FAA SITES MAP
For NEPA actions that come under the authority of the FCC, the FCC requires evaluation of Antenna towers and/or supporting structures that are to be equipped with high intensity white lights which are to be located in residential neighborhoods, as defined by the applicable zoning law.

Government Records Searched in This Report
Cellular
Federal Communications Commission
Mass Media Bureau
2nd Floor - 445 12th Street SW
Washington DC 20554 USA
Telephone (202) 418-2700

KEY CONTACTS & GOVERNMENT RECORDS SEARCHED

Tower
Federal Communications Commission
Mass Media Bureau
2nd Floor - 445 12th Street SW
Washington DC 20554 USA
Telephone (202) 418-2700

Antenna Registration
Federal Communications Commission
Mass Media Bureau
2nd Floor - 445 12th Street SW
Washington DC 20554 USA
Telephone (202) 418-2700

AM Tower
Federal Communications Commission
Mass Media Bureau
2nd Floor - 445 12th Street SW
Washington DC 20554 USA
Telephone (202) 418-2700

FAA Digital Obstacle File
National Oceanic and Atmospheric Administration
Telephone: 301-436-8301
Describes known obstacles of interest to aviation users in the US. Used by the Federal Aviation Administration (FAA) and the National Oceanic and Atmospheric Administration to manage the National Airspace System.

OTHER CONTACT SOURCES

Excessive Radio Frequency Emission
For NEPA actions that come under the authority of the FCC, Commission actions granting construction permits, licenses to transmit or renewals thereof, equipment authorizations or modifications in existing facilities, require the determination of whether the particular facility, operation or transmitter would cause human exposure to levels of radio frequency in excess of certain limits.

Federal Contacts for Additional Information
Office of Engineering and Technology
Federal Communications Commission
445 12th Street SW
Washington, DC 20554
Phone: 202-418-2470

APPENDIX B

COMMUNICATIONS WITH ORGANIZATIONS DURING PRE-ASSESSMENT

Kalihi Valley Neighborhood Board No. 16

State of Hawaii, Department of Land and Natural Resources
Historic Preservation Division

Office of Hawaiian Affairs

Historic Hawaii Foundation

The Outdoor Circle

Hawaii Natural Heritage Program

November 1, 2000

To: Adjoining Landowners

From: VoiceStream Wireless

Re: Proposal to construct a telecommunication antenna site.

Dear Neighbor:

VoiceStream Wireless is working to improve service throughout the island of Oahu. As part of this effort, proposals have been made for possible telecommunication antenna sites on two locations within Kalihi Valley. One site is an existing electrical pole in Kalihi Valley. [Tax Map Key 1-4-22:3] The other site is a possible location within the campus of Kalihi Elementary School at 2471 Kula Kolea Drive. [Tax Map Key 1-4-7:2]

This letter is sent to inform you that VoiceStream Wireless will be making a presentation at the Kalihi Neighborhood Board Meeting to discuss these two proposed projects. The meeting is scheduled as follows:

Date: **Wednesday, November 8, 2000**
Time: **7:00 p.m.**
Place: **Kalihi Valley District Park**
1911 Kamehameha IV Road

VoiceStream would like to work with the community in creating solutions to the benefit of all. Should you have any further questions or concerns please feel free to call Roy Irei, VoiceStream Development Manager, at 256-0037.

Thank you for your time and attention.

Sincerely,

Cynthia Takamiya
VoiceStream Wireless

KALIHI VALLEY NEIGHBORHOOD BOARD NO. 16

c/o NEIGHBORHOOD COMMISSION • CITY HALL, ROOM 400 • HONOLULU, HAWAII 96813

June 29, 2001

Mr. Roy Irei
Voicestream Wireless
615 Piikoi Street, Suite 100
Honolulu, HI. 96814

Dear Mr. Irei:

On May 9, 2001 the Kalihi Valley Neighborhood Board #16 unanimously voted in favor of the Voicestream Wireless antennas being placed on a "stealth pine tree" which would be situated on the Kalihi Elementary School campus. On June 13, 2001 the minutes of the May 9, 2001 meeting were approved (copy of the Voicestream Wireless vote enclosed.) We understand that Kalihi Elementary School will receive monthly rent from this antenna arrangement with Voicestream Wireless.

The Board is delighted with this cooperative venture between the school and Voicestream Wireless. The Board and community leaders were very impressed with your hard work, innovative and outstanding efforts to resolve the many governmental hurdles in facilitating this project. We commend you for listening to and addressing the concerns of the community and school personnel prior to installing the antennas. The Board looks forward to cooperatively working with you and Voicestream Wireless in the future.

Thank you for caring about our Kalihi Valley community.

Sincerely,

Ms. Maryrose McClelland,
Chairperson

SOUTH PACIFIC GEOTECHNICAL, INC.

73-5574 Maiau Street, Suite 1
Kailua-Kona, Hawaii 96740

Telephone: (808) 322-3706 Facsimile: (808) 322-3726

September 16, 2002
Project No. M189.44.4

State of Hawaii
Department of Land and Natural Resources
Historic Preservation Division
Kakuhihawa Building, Room 555
601 Kamokila Boulevard
Kapolei, Hawaii 96707

Attention: Mr. Gilbert Coloma-Agaran
State Historic Preservation Officer

Subject: Request for "Finding of No Effect"
Proposed VoiceStream Wireless Cellular Communications Site
Kalihi Elementary School, Like Like Highway
Honolulu, Hawaii

Sir:

South Pacific Geotechnical, Inc. has been retained by VoiceStream Wireless to accomplish an Environmental Assessment (EA) of the proposed Kalihi Elementary School cellular communications site. VoiceStream Wireless has requested the EA in accordance with §343-5 of Hawaii Revised Statues Pertaining to Historic Preservation. As part of the EA we are requesting of your office a confirmation of a "Finding of No Effect" for the proposed communications facility.

PROPOSED CONSTRUCTION

VoiceStream Wireless proposes to construct a cellular communications system within a leased 20' x 20' area of land situated in the northeast corner of the Kalihi Elementary School property. Kalihi Elementary School is located north of Like Like Highway and east of Halina Street in Honolulu, Hawaii. The property is identified as TMK: (1) 4-07:02.

The communications system will consist of an 80-feet high "stealth" pine tree type tower and several equipment cabinets located within the lease area. The equipment cabinets and communications tower will be supported on a 20' x 20' square by 1.5' thick concrete mat. Additional support of the tower will be provided by a 5' diameter by 5' deep pier located at the center of the concrete mat. Associated improvements will include extending electricity and telephone lines to the tower site.

SITE DESCRIPTION

The site to be developed is situated in the northeast corner of the Kalihi Elementary School property located in Honolulu, Hawaii. The school property is irregular in shape and encompasses approximately 10-acres of land. Kalihi Elementary School was constructed circa 1954 and presently consists of two, 2-story class room buildings, cafetorium, multi-purpose room, library, administration office, several covered play areas, several open (grass) play areas and associated paved access drives and parking lots. The school property is bound by the Like Like Highway to the east-southeast, residential property to the west-southwest, and undeveloped forest reserve property to the north-northeast. Topography across the school property is moderate to steep with elevations ranging from about 400-feet to 350-feet, north to south. The school buildings and play areas are terraced across the property to accommodate topographic differential.

The proposed communications site is situated in a heavily forested area in the northeast corner of the school property, approximately 20-feet northeast of an approximate 15-feet high cut bank. Groundcover consists of grass, weeds and brush. A sanitary sewer line extends along the crest of the cut bank on a north to south line. Two manholes associated with the sewer were noted atop the cut bank, one at the northerly end and one at the southerly end.

FINDINGS

South Pacific Geotechnical, Inc. previously accomplished NEPA Land Use Screening and Phase I Environmental Site assessment for the proposed communications site. Information gathered during these studies include:

1. Kalihi Elementary School was constructed circa 1954, thus is not presently qualified by age (over 50-years of age) to be nominated as an historic site or structure.
2. Grading and installation of aboveground and underground utilities has extensively altered the school property, including the location of the proposed communication facility.
3. Our research revealed no historic districts, structures, buildings, sites or objects significant in American History, Archaeology, Engineering, or Culture that are listed or eligible for listing as historic places that would be potentially affected by construction of the facility.
4. Our research revealed no Hawaiian religious or cultural sites that would be potentially affected by construction of the facility.
5. Thirteen FCC/FAA tower sites are presently mapped within a one-mile radius of the site.

CONCLUSIONS

VoiceStream Wireless is proposing to construct a cellular communications facility within the Kalihi Elementary School property located off (north of) the Like Like Highway in Honolulu, Hawaii. The communications facility will consist of an 80-feet high Pine Tree (stealth) tower with antennae and several equipment cabinets situated within a leased 20' x 20' parcel of heavily forested land located in the northeast corner of the school property. The area proposed for development has been extensively altered due to grading (cuts) and the installation of both above ground and below ground utilities.

Visual impact of the facility will be minimal due to: a) existing trees and vegetation obscuring the concrete grade slab, equipment cabinets, fence enclosure and lower 20 to 25-feet of the Pine Tree tower, and b) the upper portion of the Pine Tree tower blending in with surrounding 40 to 50-feet high trees.

To assist you with your review of this site and our request, we have enclosed the following:

-USGS Map Indicating the Project Location
-Tax Map of Kalihi Elementary School Indicating the Project Location
-Photograph of Site Indicating Project Location
-Photograph of Site with Photo-simulation of Pine Tree Tower
-Photographs of Site Indicating Extensive Grading for Terraces
-Elevation Drawing of "Stealth Pine Tree" Tower
-Design Plan for Facility
-Letter from Kalihi Valley Neighborhood Board No. 16
-EDR NEPA Check Report for Site

Respectfully,

SOUTH PACIFIC GEOTECHNICAL, INC.

Jerry M. Sessums, Ph.D.
President

. J. CAYETANO
OVERNOR OF HAWAII

STATE OF HAWAII

DEPARTMENT OF LAND AND NATURAL RESOURCES

HISTORIC PRESERVATION DIVISION
KAKUHIHEWA BUILDING, ROOM 555
601 KAMOKILA BOULEVARD
KAPOLEI, HAWAII 96707

GILBERT S. COLOMA-AGARAN, CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCES MANAGEMENT

DEPUTIES
ERIC T. HIRANO
LINNEL NISHIOKA

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

FAXED

HAWAI'I HISTORIC PRESERVATION DIVISION REVIEW

Log #: 30841
Doc #: 0209EJ27

Applicant/Agency: Jerry M. Sessums, Ph.D.
President
Address: South Pacific Geotechnical, Inc.
73-5574 Maiau Street, Suite 1
Kailua-Kona, Hawaii 96740

SUBJECT: Chapter 6E-42 Historic Preservation Review - Pre-EA Review of Proposed Voice Stream Wireless Kalihi Elementary School Cellular Communications Site

Ahupua`a: Kalihi
District, Island: Kona, O`ahu
TMK: (1) 1-4-007:002

1. We believe there are no historic properties present, because:

____ a) intensive cultivation has altered the land
✓ b) residential development/urbanization has altered the land
✓ c) previous grubbing/grading has altered the land
____ d) an acceptable archaeological assessment or inventory survey found no historic properties
✓ e) other: The site is located within an existing developed school property.

2. This project has already gone through the historic preservation review process, and mitigation has been completed ___.

✓ Thus, we believe that "no historic properties will be affected" by this undertaking.

Staff: Elaine Jourdane Date: 9/25/02

Title: Elaine Jourdane, Assistant Archaeologist O`ahu Phone (808) 692-8027

SOUTH PACIFIC GEOTECHNICAL, INC.

FACSIMILE TRANSMITTAL SHEET

TO: Ms. Jolna Keala	FROM: Jerry M. Sessums, Ph.D.
COMPANY: Office of Hawaiian Affairs	DATE: 10/7/02
FAX NUMBER: (808) 594-1825	TOTAL NO. OF PAGES INCLUDING COVER: 11
PHONE NUMBER: (808) 594-1946	SENDER'S REFERENCE NUMBER:
RE:	

Request for Comment
Proposed VoiceStream Wireless Cellular Communication Site
Kalihi Elementary School
Honolulu, Hawaii

Dear Ms. Keala:

South Pacific Geotechnical, Inc. has been retained by VoiceStream Wireless to accomplish an environmental assessment for a cellular communication facility proposed for construction at Kalihi Elementary School in Honolulu, Hawaii.

VoiceStream proposes to construct a cellular communications system within a leased 20' x 20' area of land located in the northeast corner of the school property, identified as TMK: (1) 1-2-7:2 with the address listed as 2471 Kula Kolea Drive, Honolulu, Hawaii. The communications facility will consist of the construction of an 80-feet high "stealth" pine tree tower, equipment cabinets and telephone and electrical panels supported on a concrete grade slab within the leased area. Electricity and telephone will be extended via overhead lines to the site from existing outlets on the school grounds.

The project has been unanimously approved by the Kalihi Valley Neighborhood Board No. 16 and State of Hawaii, DLNR, Historic Preservation Division has provided a finding of "no historic properties effected" by the project.

We respectfully request comment from your office concerning this project. To assist you with review of the project, we are attaching the following:

1. USGS Location Map
2. Site Plan
3. Pole Elevation and Enclosure Plan
4. Photograph of Stealth Pine Tree Tower
5. Photo-simulation of Stealth Pine Tree Tower
6. Letter from Kalihi Valley Neighborhood Board No. 16
7. Our letter to DLNR, Historic Preservation Division
8. DLNR, State Historic Preservation Division's finding of "No Effect"

73-5574 MAIAU STREET, SUITE 1
KAILUA-KONA, HAWAII 96740
TELEPHONE: (808) 322-3706 FACSIMILE: (808) 322-3726

We would appreciate your most expeditious response to our request for comment. You may feel free to fax or email your comments. Should you require additional information, please call.

Sincerely,

SOUTH PACIFIC GEOTECHNICAL, INC.

Jerry M. Sessums, Ph.D.
President

PHONE (808) 594-1888

FAX (808) 594-1865

STATE OF HAWAI'I
OFFICE OF HAWAIIAN AFFAIRS
711 KAPIOLANI BOULEVARD, SUITE 500
HONOLULU, HAWAII 96813

HRD02-79 (1-2-007-0023)

October 16, 2002

Jerry M. Sessums, Ph.D.
President, South Pacific Geotechnical, Inc.
73-5574 Maiau St. Ste 1
Kailua-Kona, HI 96740

RE: Request for Comment Proposed VoiceStream Wireless Cellular Communications Site. Kalihi Elementary School, Honolulu, HI. TMK (1) 1-2-7:2

Dear Mr. Sessums,

Thank you for information on the above referenced project. This project will not impact Native Hawaiian access and gathering rights, or traditional or cultural properties and is supported by the Kalihi Neighborhood Board and the Kalihi Elementary School. Thus, OHA has no additional comments on this project.

Please contact Pua Aiu, Acting Assistant Director, Hawaiian Rights Division if you have further questions.

Sincerely,

Jalna Keala
Acting Director, Hawaiian Rights Division

SOUTH PACIFIC GEOTECHNICAL, INC.

FACSIMILE TRANSMITTAL SHEET

TO: Mr. David Scott	FROM: Jerry M. Sessums, Ph.D.
COMPANY: Historic Hawaii Foundation	DATE: 10/7/02
FAX NUMBER: (808) 523-0800	TOTAL NO. OF PAGES INCLUDING COVER: 11
PHONE NUMBER: (808) 523-2900	SENDER'S REFERENCE NUMBER:

RE:

Request for Comment
Proposed VoiceStream Wireless Cellular Communication Site
Kalihi Elementary School
Honolulu, Hawaii

Dear Mr. Scott:

South Pacific Geotechnical, Inc. has been retained by VoiceStream Wireless to accomplish an environmental assessment for a cellular communication facility proposed for construction at Kalihi Elementary School in Honolulu, Hawaii.

VoiceStream proposes to construct a cellular communications system within a leased 20' x 20' area of land located in the northeast corner of the school property, identified as TMK: (1) 1-2-7:2 with the address listed as 2471 Kula Kolea Drive, Honolulu, Hawaii. The communications facility will consist of the construction of an 80-feet high "stealth" pine tree tower, equipment cabinets and telephone and electrical panels supported on a concrete grade slab within the leased area. Electricity and telephone will be extended via overhead lines to the site from existing outlets on the school grounds.

The project has been unanimously approved by the Kalihi Valley Neighborhood Board No. 16 and State of Hawaii, DLNR, Historic Preservation Division has provided a finding of "no historic properties effected" by the project.

We respectfully request comment from your office concerning this project. To assist you with review of the project, we are attaching the following:

1. USGS Location Map
2. Site Plan
3. Pole Elevation and Enclosure Plan
4. Photograph of Stealth Pine Tree Tower
5. Photo-simulation of Stealth Pine Tree Tower
6. Letter from Kalihi Valley Neighborhood Board No. 16
7. Our letter to DLNR, Historic Preservation Division
8. DLNR, State Historic Preservation Division's finding of "No Effect"

73-5574 MAIAU STREET, SUITE 1
KAILUA-KONA, HAWAII 96740
TELEPHONE: (808) 322-3706 FACSIMILE: (808) 322-3726

We would appreciate your most expeditious response to our request for comment. You may feel free to fax or email your comments. Should you require additional information, please call.

Sincerely,

SOUTH PACIFIC GEOTECHNICAL, INC.

Jerry M. Sessums, Ph.D.
President

Faxed 10/16/02

SOUTH PACIFIC GEOTECHNICAL, INC.

FACSIMILE TRANSMITTAL SHEET

TO:	FROM:
Ms. Mary Steiner	Jerry M. Sessums, Ph.D.
COMPANY:	DATE:
Outdoor Circle	10/7/02 10/16/02
FAX NUMBER:	TOTAL NO. OF PAGES INCLUDING COVER:
(808) 593-0525	11
PHONE NUMBER:	SENDER'S REFERENCE NUMBER:
(808) 593-0300	

RE:

Request for Comment
Proposed VoiceStream Wireless Cellular Communication Site
Kalihi Elementary School
Honolulu, Hawaii

Dear Ms. Steiner:

South Pacific Geotechnical, Inc. has been retained by VoiceStream Wireless to accomplish an environmental assessment for a cellular communication facility proposed for construction at Kalihi Elementary School in Honolulu, Hawaii.

VoiceStream proposes to construct a cellular communications system within a leased 20' x 20' area of land located in the northeast corner of the school property, identified as TMK: (1) 1-2-7:2 with the address listed as 2471 Kula Kolea Drive, Honolulu, Hawaii. The communications facility will consist of the construction of an 80-feet high "stealth" pine tree tower, equipment cabinets and telephone and electrical panels supported on a concrete grade slab within the leased area. Electricity and telephone will be extended via overhead lines to the site from existing outlets on the school grounds.

The project has been unanimously approved by the Kalihi Valley Neighborhood Board No. 16 and State of Hawaii, DLNR, Historic Preservation Division has provided a finding of "no historic properties effected" by the project.

We respectfully request comment from your office concerning this project. To assist you with review of the project, we are attaching the following:

1. USGS Location Map
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3. Pole Elevation and Enclosure Plan
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5. Photo-simulation of Stealth Pine Tree Tower
6. Letter from Kalihi Valley Neighborhood Board No. 16
7. Our letter to DLNR, Historic Preservation Division
8. DLNR, State Historic Preservation Division's finding of "No Effect"

73-5574 MAIAU STREET, SUITE 1
KAILUA-KONA, HAWAII 96740
TELEPHONE: (808) 322-3706 FACSIMILE: (808) 322-3726

We would appreciate your most expeditious response to our request for comment. You may feel free to fax or email your comments. Should you require additional information, please call.

Sincerely,

SOUTH PACIFIC GEOTECHNICAL, INC.

Jerry M. Sessums, Ph.D.
President

Hawaii Natural Heritage Program

University of Hawaii at Manoa
Center for Conservation Research and Training

3190 Maile Way, Gilmore #409, Honolulu, Hawaii 96822 Ph. (808)956-3744 Fax. (808)956-3605

TO:	Jerry Sessums, Ph.D.	FAX:	(480) 752-10
COMPANY:	South Pacific Geotechnical, Inc.	TEL #:	(480) 752-10
DATE:	7-3-01	PAGES:	11 (inc. cvr
FROM:	Ululani Kahele Hawaii Natural Heritage Program		
FAX:	(808) 956-4001	TEL:	(808)956-751
SUBJECT:	Request for information of threatened or endangered species/habitats of pr cell sites for the State of Hawaii		

Aloha Dr. Sessums,
Here is the information that you requested.

Mahalo,

Ululani
Database Technician

Notice

The Hawaii Natural Heritage Program database is dependent on the research and observations of many scientists and individuals. In most cases this information is not the result of comprehensive site-specific field surveys, and is not confirmed by the Heritage staff. Many areas in Hawaii have never been thoroughly surveyed, and new plants and animals are still being discovered. Database information should never be regarded as final statements or substituted for on-site surveys required for environmental assessments. Data provided by the Heritage Program do not represent a position taken by The Nature Conservancy of Hawaii or The Research Corporation of the University of Hawaii. Heritage information is only for the intended use of the individual or organization who requested it. It may not be distributed in any way without the consent of the Hawaii Natural Heritage Program.

Please cite the Heritage Program and primary sources in all documentation and reports.

Hawaii Natural Heritage Program, 1116 Smith St. Suite 201, Honolulu, HI 96817

Hawaii Natural Heritage Program

University of Hawaii at Manoa
Center for Conservation Research and Training

•Mailing: 3050 Maile Way, Gilmore 409• Honolulu, Hawaii •96822• PH: (808) 956-3744 •FAX (808) 956-4001

July 3, 2001

Jerry M. Sessums, Ph.D.
South Pacific Geotechnical, Inc.
5869 S. Kyrene Road, Suite 5
Tempe, Arizona 85283

Dr. Sessums:

We have reviewed the information contained in the HINHP Natural Diversity Database concerning t distribution of listed or sensitive species in the proposed cell sites for the State of Hawaii. Please fu maps enclosed with dot numbers of concern arrowed. Here are the results:

Site Name	Dot #	Species	*Status	Last Obser-vation
Mt. View-Orchid Farm	3	Branta sandvicensis (Nene, Hawaiian Goose)	LE	1978
Orchidland-Ainialoa Community Center	--	--	--	--
Kamuela-Wee Residence	--	--	--	--
Lahaina GTE	--	--	--	--
Salt Lake Self Storage	--	--	--	--
Harbor Village	--	--	--	--
Pali Palms Plaza	--	--	--	--
Kalihi Elementary School	--	--	--	--

* Status: LE Listed Endangered
LT Listed Threatened
SOC Species of Concern

Please contact Roy Kam, Database Manager (956-6894) or Ululani, Database Technician (956-7518 questions or concerns.

Mahalo,

Ululani Kahele
Database Technician

enclosures (8)

Notice

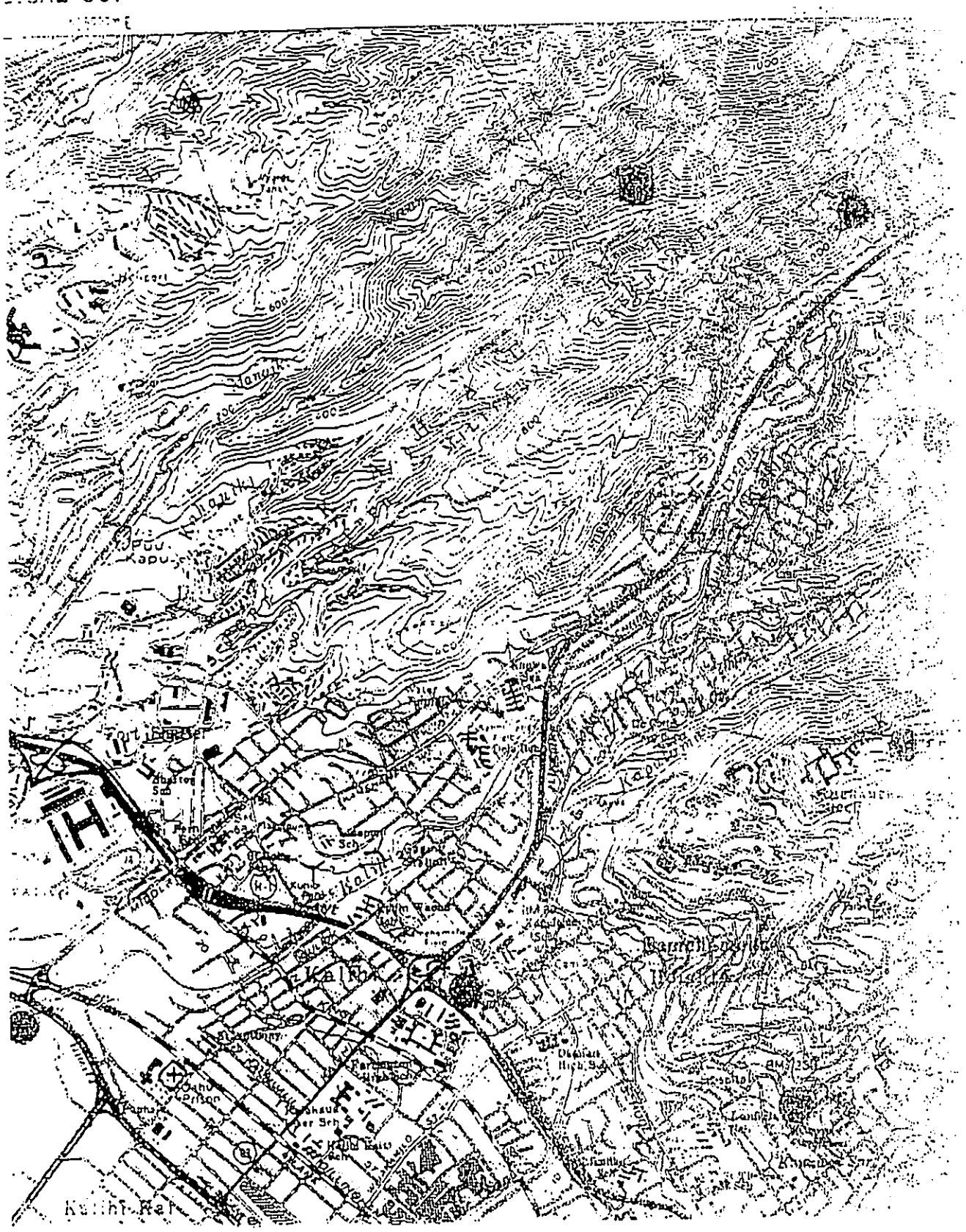
The Hawaii Natural Heritage Program database is dependent on the research and observations of many scientists and individuals. In most cases this information is not the result of comprehensive site-specific field surveys, and is not confirmed by the Heritage staff. Many areas in Hawaii have never been thoroughly surveyed, and new plants and animals are still being discovered. Database information should never be regarded as final statements or substituted for on-site surveys required for environmental assessments. Data provided by the Heritage Program do not represent a position taken by The Center for Conservation Research and Training or The Nature Conservancy of Hawaii. Heritage information is only for the intended use of the individual or organization who requested it. It may not be distributed in any way without the consent of the Hawaii Natural Heritage Program.

Please cite the Heritage Program and *primary* sources in all documentation and reports.

Hawaii Natural Heritage Program, Center for Conservation Research and Training, University of Hawaii at Manoa
3050 Maile Way, Gilmore 409, Honolulu, Hawaii 96822

Honolulu Quad
Kalihi Elementary School Site
& Species in Vicinity

ED STATES
T OF THE INTERIOR
GICAL SURVEY



APPENDIX C

COMMENT LETTERS AND RESPONSES

City and County of Honolulu
Department of Planning and Permitting

State of Hawaii
Department of Health
Environmental Planning Office

State of Hawaii
Office of Environmental Quality Control

State of Hawaii
Department of Land and Natural Resources
Historic Preservation Division

Jacqueline Ralya
Horticulturist

Monica Hembree
Individual

William Joseph Hall
Individual

The Outdoor Circle

Waiakea High School

DEPARTMENT OF PLANNING AND PERMITTING
CITY AND COUNTY OF HONOLULU
650 SOUTH KING STREET • HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-4414 • FAX: (808) 527-6743 • INTERNET: www.co.honolulu.hi.us

JEREMY HARRIS
MAYOR

ERIC G. CRISPIN, AIA
ACTING DIRECTOR

LORETTA K.C. CHEE
DEPUTY DIRECTOR

2002/ED-10(DT)

December 17, 2002

Mr. Roy Irei
VoiceStream PCS II Corporation
615 Piikoi Street, Suite 100
Honolulu, Hawaii 96814

Dear Mr. Irei:

Comments on Draft Environmental Assessment (EA)
Kalihi Elementary School Cellular Communications System
Tax Map Key: 1-4-7: 2

We have reviewed the Draft EA for the proposal to construct an 80-foot high monopole with six antennas, 20x20-foot reinforced concrete slab, and two 4-foot high equipment cabinets. We have the following comments:

1. The format of the EA is somewhat confusing. For example, a brief description of the project description is on page ES2 and page 1. Perhaps the description on page ES2 can be attached to page 1. Also, the "Request for Comment and Information" (page ES2) and the summary of each agency's response (pages 6 to 8) during the preliminary assessment should be relocated to Appendix B, Communications with Organizations.

2. The numbering of the pages is also confusing. There are pages ES1 to ES3. Then there are also regular page numbers. These page numbers are all listed on the upper right hand corner of each page. Another section has Page 1 of 26, 2 of 26, and so forth, on the bottom right hand corner. Perhaps a more standard page numbering system (1, 2, 3, etc.), with the page number on the bottom and center of each page would assist the reviewer.

3. The agent's response letters to the various agencies that were consulted during the preliminary assessment should be included after the agency's comment letter.

4. A discussion of alternate sites and other types of cellular communication systems considered should be included in the EA.

5. Visual impacts should be discussed in the EA. Also, a photosimulation, of the view when one is traveling along Likelike Highway, should be included.

6. The Location Map (Figure 1) in the EA shows contour lines, but it is not readable. Another contour map showing a close-up view of the project area with readable elevation figures should be included in the EA.

7. The EA should indicate the types of materials used for the pine tree tower.

Please call Dana Teramoto of our staff at 523-4648 should you have any questions regarding the above comments or if you have additional questions.

Sincerely yours,

ERIC G. CRISPIN, AIA
Acting Director of Planning
and Permitting

EGC:pl

Doc. no. 189531

T

March 26. 2003

Eric G. Crispin. AIA
Acting Director of Planning and Permitting
City & County of Honolulu
Department of Planning & Permitting
650 South King Street
Honolulu. Hawaii 96813

Re: Response to Comments on Draft Environmental Assessment (EA)
Kalihi Elementary School Telecommunication System
Tax Map Key: 1-4-7:2

Dear Mr. Crispin,

Thank you very much for your comments on our proposed antenna project at the Kalihi Elementary School. In response to your comment letter dated December 17, 2002:

1.

1.1 The executive summary (ES) is presented as a stand-alone synopsis of the project. It is written so that one may peruse the executive summary and have a fair understanding of the proposed project, governing regulations, research, findings, and a preliminary opinion as to the expected result of the Draft Environmental Assessment.

1.2 We will relocate agency responses presented on page 6 and 7 of the report, to Appendix B, Communications with Organizations.

2.

2.1 The page numbering of the various portions of the Draft Environmental Assessment was meant to provide a distinct separation. In the subject Draft Environmental Assessment the page numbering was as follows:

2.1.1 Executive Summary. Pages ES1, ES2 and ES3. Again, the intent was to provide a brief overview of the Draft Environmental Assessment so that a reader could have a fair understanding of the project, process and finding without having to read the entire document.

2.1.2 Report Body, Pages 1 through 8. A detailed presentation of the project, governing regulations, research, findings and preliminary expectation of the outcome of the assessment.

2.1.3 Figures, Pages Figure 1 through Figure 5. The figures were consolidated in one location instead of distributing throughout the report body.

2.1.4 Appendices: The page numbering of an appendix is independent and separate from the report body. Otherwise, it would not be an appendix, it would be a part of the report body. In this particular Draft Environmental Assessment, Appendix A is supporting documentation for research on NEPA related issues. The report was prepared at our request by a sub-consultant. The page numbering of the report is the numbering system devised by the sub-consultant and again, in our opinion, is distinctly separate from the body of the report.

3.

3.1 The letters received by the agent from the various agencies consulted are a response to the agent's request for comment. Thus the agent's letter is presented first, followed by the agency's response. In the Final Environmental Assessment, the agencies comment letters will be presented first followed by our response letter.

4. VoiceStream PCS II Corporation has been working on this search area since 2001, we visited and analyzed four other locations before settling at the school site.
We initially selected the Department of Transportation Testing Lab along Likelike Highway and there was no ground space available. The existing wood pole fronting the property is structurally designed for one carrier and was constructed at a low elevation. To raise the height of the existing pole will have a negative impact along the highway.

The negotiation with the church across the street fell through.
The City Park adjacent to the highway was offered to us, but the geographic configuration of this property was realistically difficult. As we analyzed the park property, we will need to construct a 180 feet monopole to achieve the same result at the school site. This 180' monopole will have a negative visual impact with the Kalihi Valley Community.

The fourth alternative site was the HECO H-framed power pole on the mountaintop of Kalihi Valley. The Kalihi Valley community opposed the HECO site. Since encountering the opposition, we've worked with the community to work out a solution and finally settled with a Pine Tree at the school property.

5. See attached Exhibits A to K

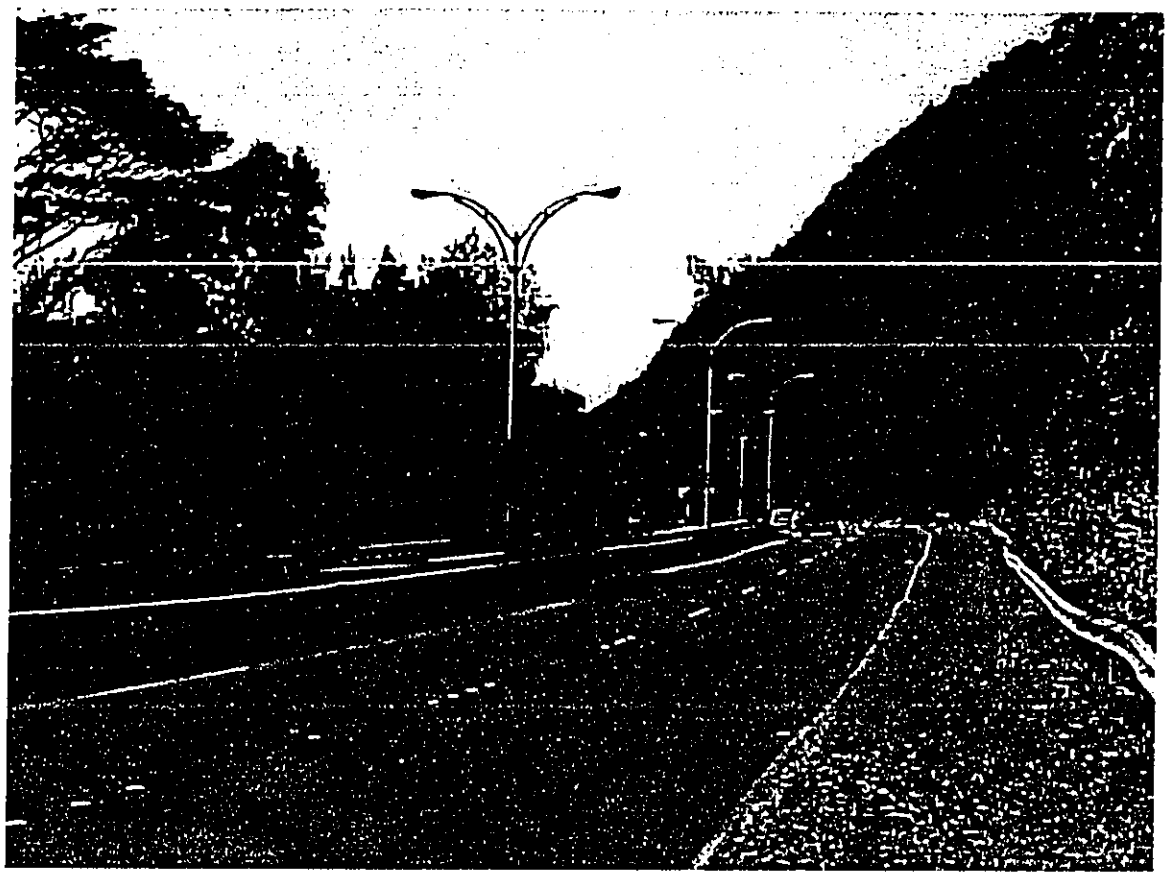
6. We will enlarge and submit a better clarity.

7. The Pine Tree is constructed of a galvanized steel monopole with UV resistant Poly Urethane bark covering the pole to simulate a tree bark. This bark covers only the bottom portion of the tree where there are no branches. The upper portion of the tree is painted with an epoxy based brown paint to simulate the bark. The branches are made of steel mounting base plastic/fiberglass framework, and PVC pine needles. (See exhibit L).

Should you have any further questions to the response that is addressed above, please contact me at 256-0037. Thank you again for voicing your concerns to us, and hopefully we've provided you the information that you were searching for and understand our justification.

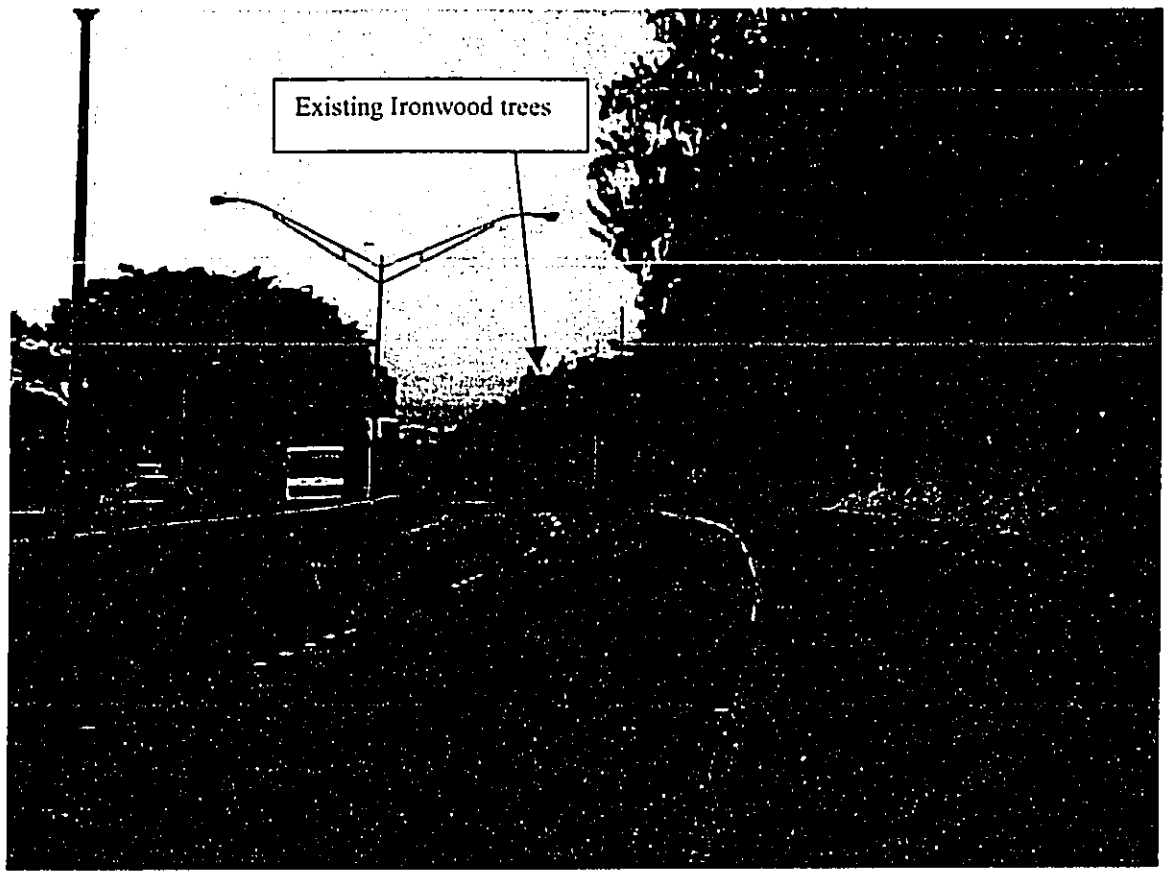
Sincerely,

Roy K. Irei
Site Development Manager
VoiceStream PCS II Corporation
an affiliate of T-Mobile USA



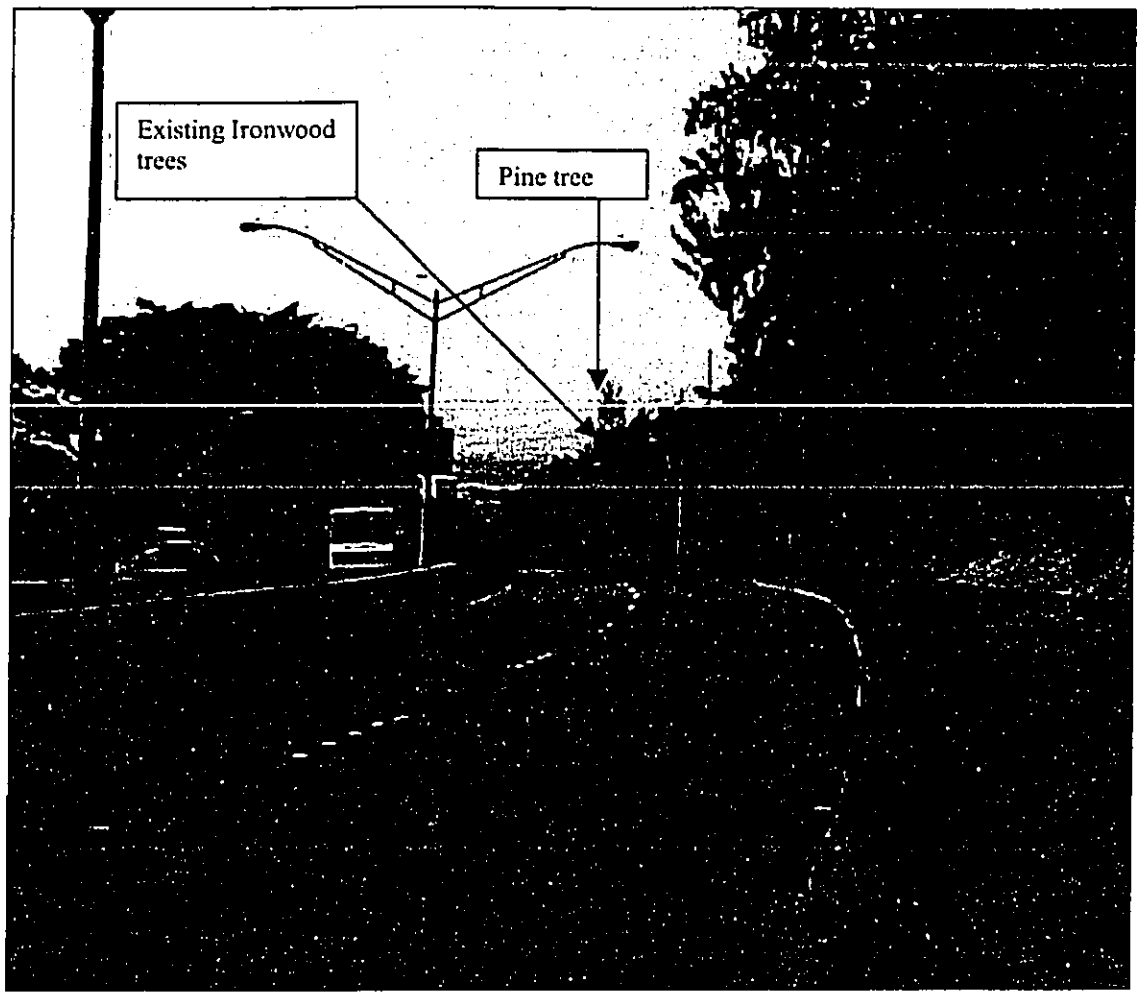
The photo was taken from Likelike Highway heading town bound approximately ½ mile after the Burmeister Bridge. The proposed project site cannot be seen from this location and up towards the Wilson Tunnels.

Exhibit A

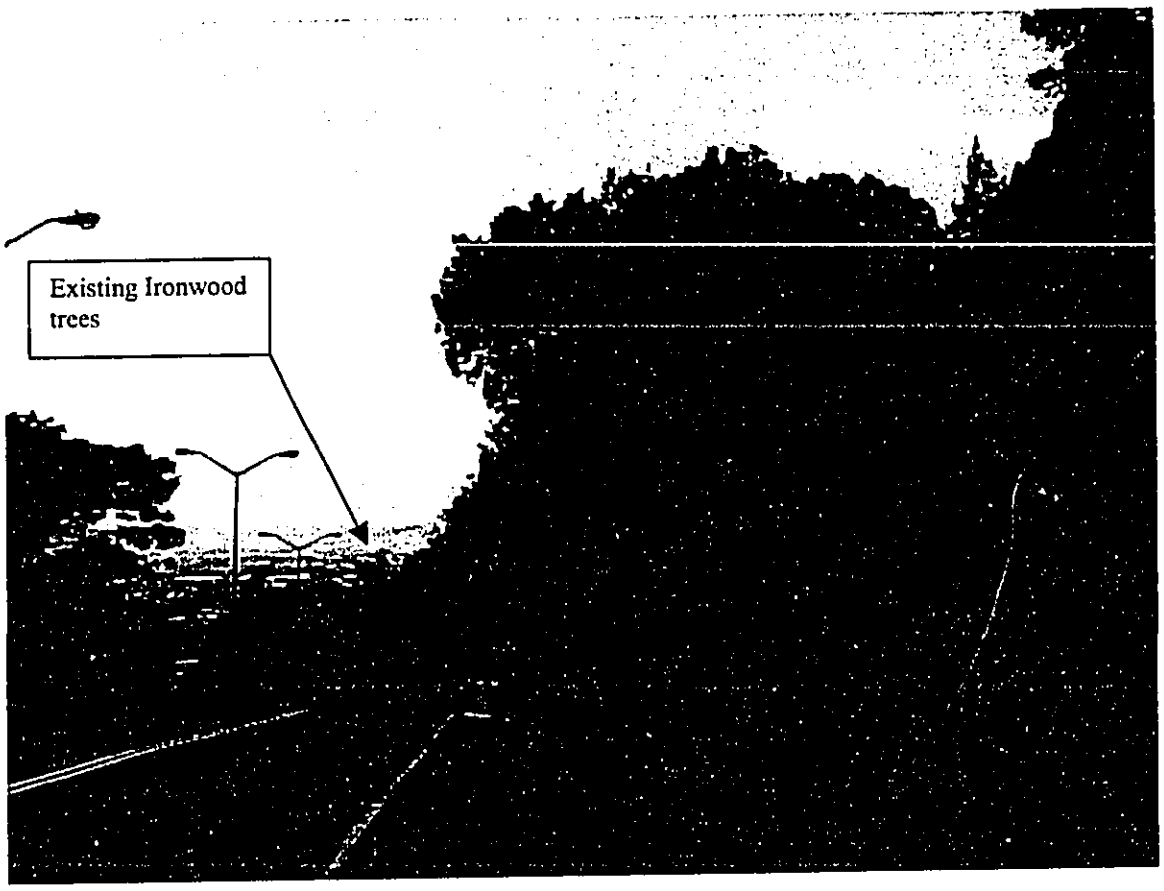


This photo shows the view heading towards town on Likelike Highway just fronting the Department of Transportation Testing Lab. The arrow indicates the proposed project location where there are existing Ironwood trees. See next page for simulation (Exhibit B-2).

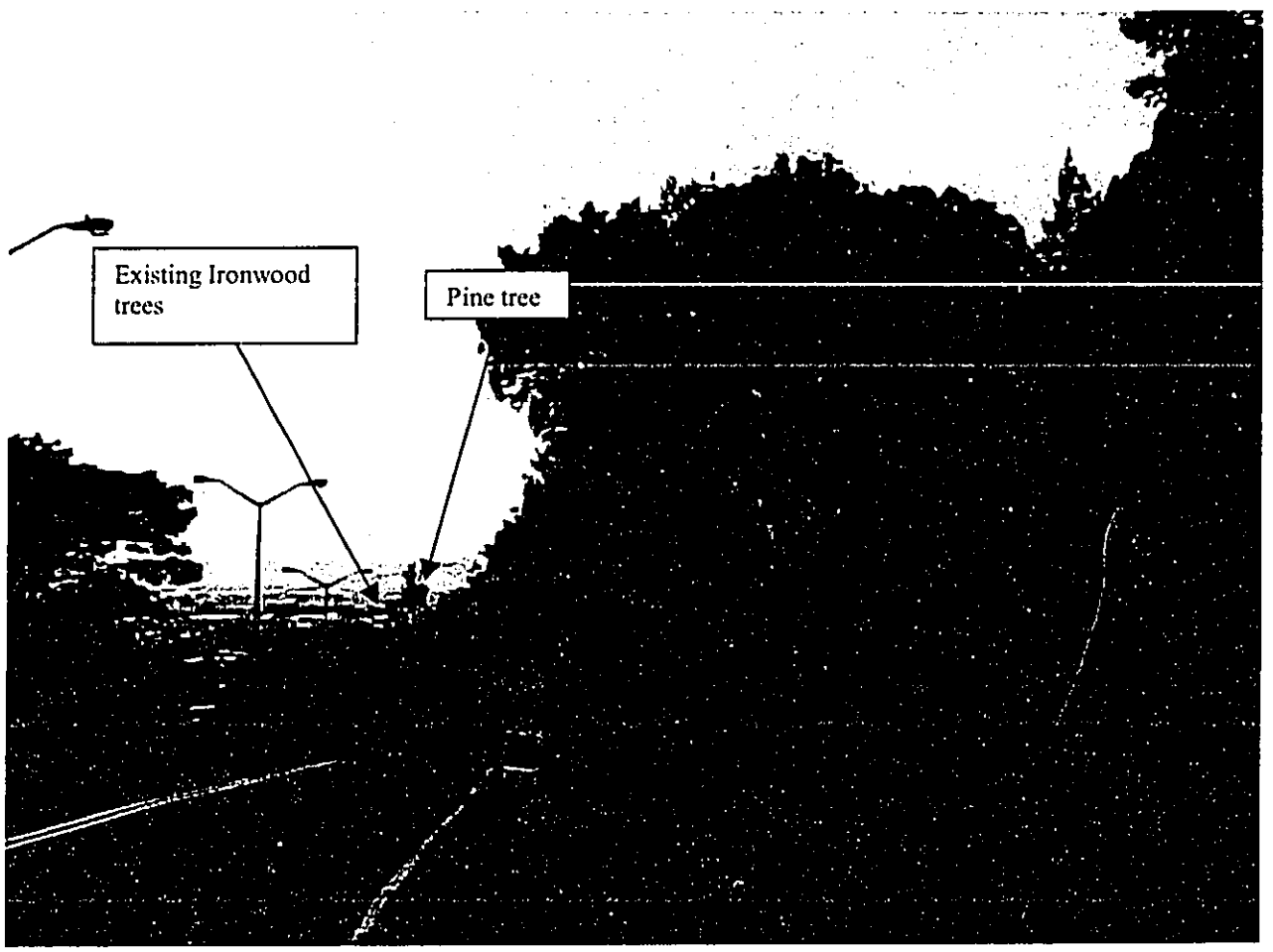
Exhibit B-1



This photo shows the view heading towards town on Likelike Highway fronting the Department of Transportation Testing Lab. The "Stealth" pine tree will blend in with the other Ironwood trees in the proposed project area. Only the top 30 feet of the pine tree will be visible from this location.



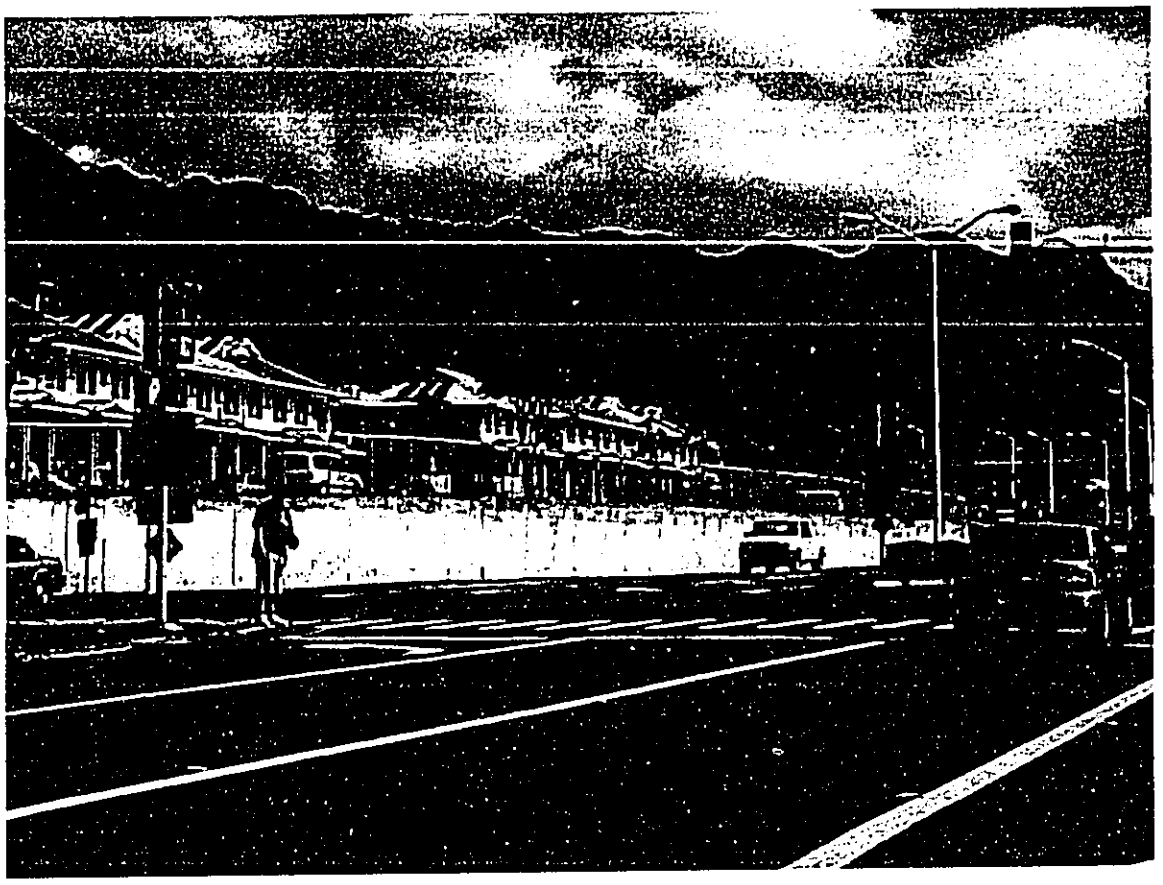
This photo shows the view heading town bound on Likelike Highway just before the runaway truck ramp. The arrow indicates the proposed location of the project area within the area of the existing Ironwood trees. See next page for simulation.



This photo shows the view heading town bound on Likelike Highway just before the runaway truck ramp. The "Stealth" pine tree will blend in with the other Ironwood trees in the proposed project area. Only the top 30 feet of the pine tree will be visible from this location.

This photo was taken from the intersection of Likelike Highway and School Street. The arrow indicates the approximate area of the proposed project site. The pine tree will not be visible from any location of School Street.

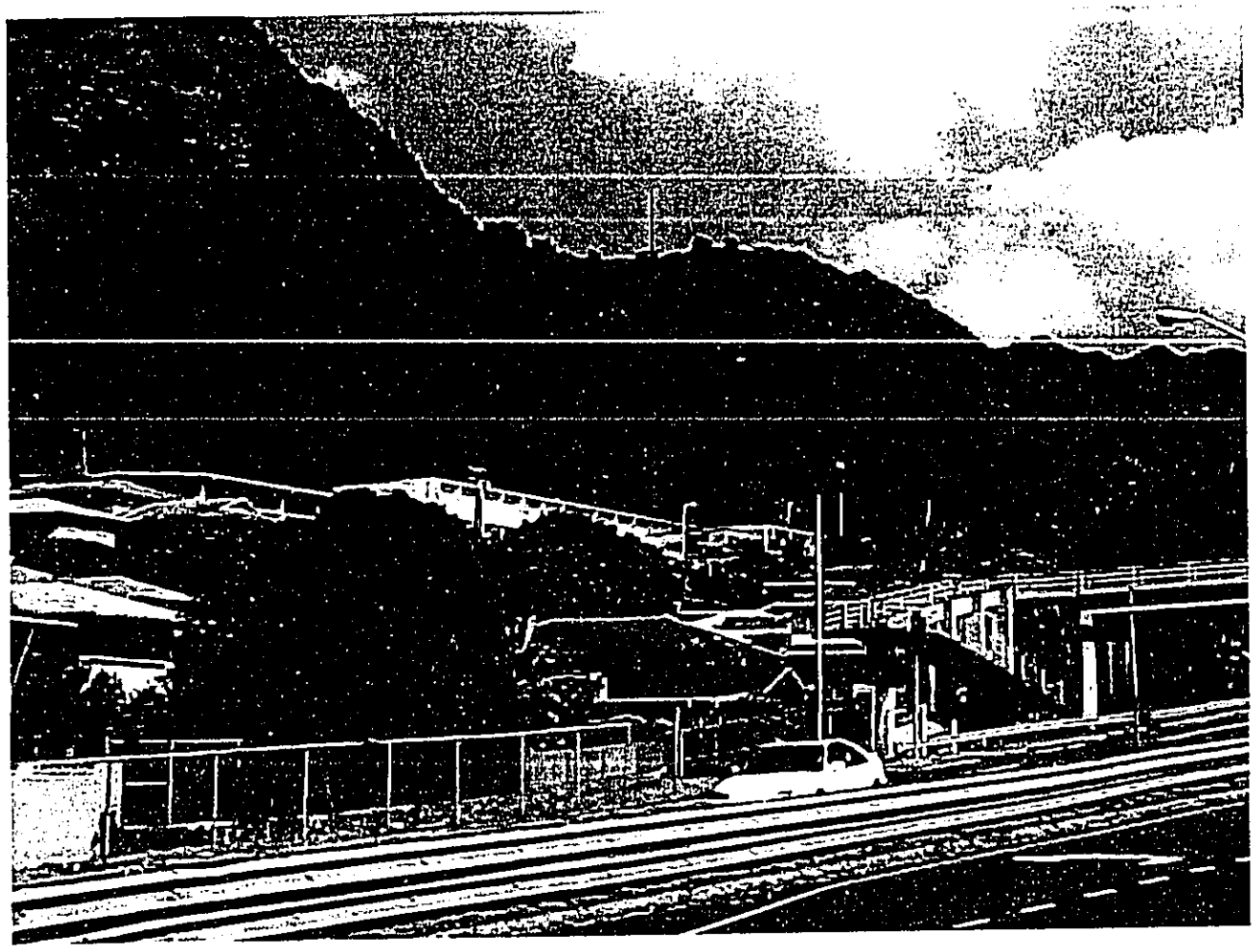
Exhibit D



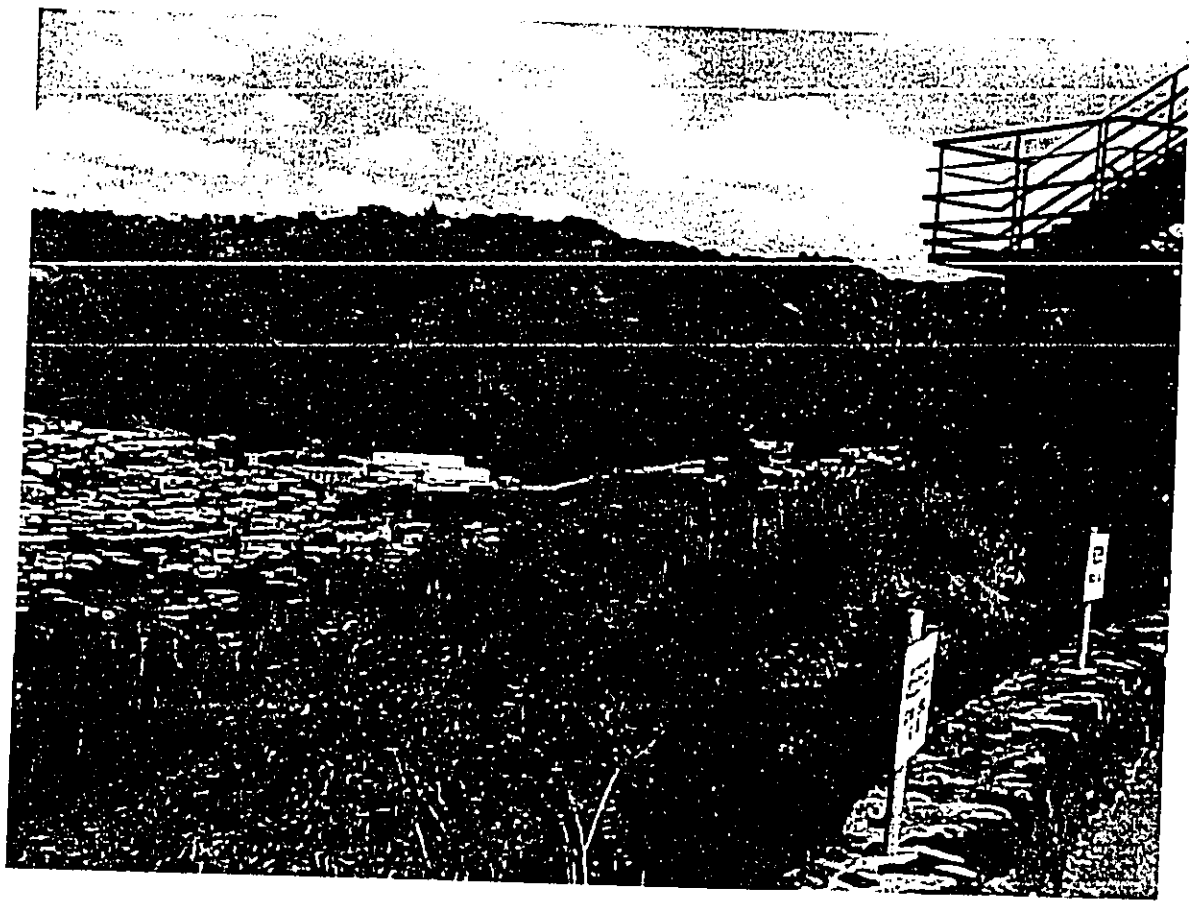
This photo is taken from the intersection of Likelike Highway and Alu Street. Please note that the proposed project will not be visible from this location.

Exhibit E

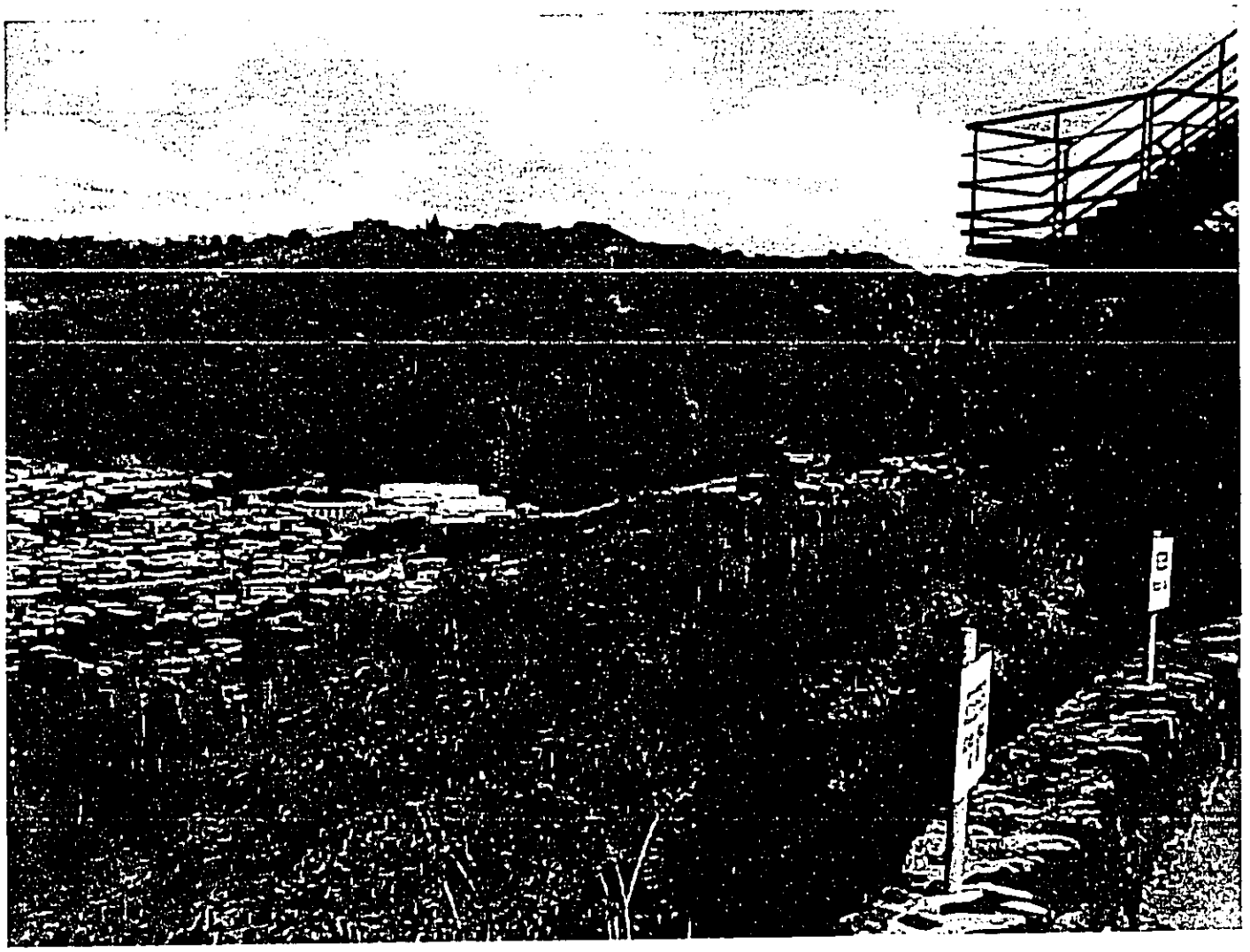
This photo is taken from the intersection of Likelike Highway and Nalanieha Street in Kalihi Valley. The arrow indicates the proposed location of the project site within the vicinity of the existing Ironwood trees.



This view is from the intersection of Likelike Highway and Nalanieha Street. The arrow points to location of the pine tree simulated into the photo. The pine tree will blend in with the backdrop of the mountain and its environment.



This photo is taken from the campus of Kamehameha Schools Bishop Estate. The arrow indicates the location of the proposed project site. Please note that the existing 50 feet Ironwood trees are barely noticeable from this location as it blends in with the environment surrounds this area.

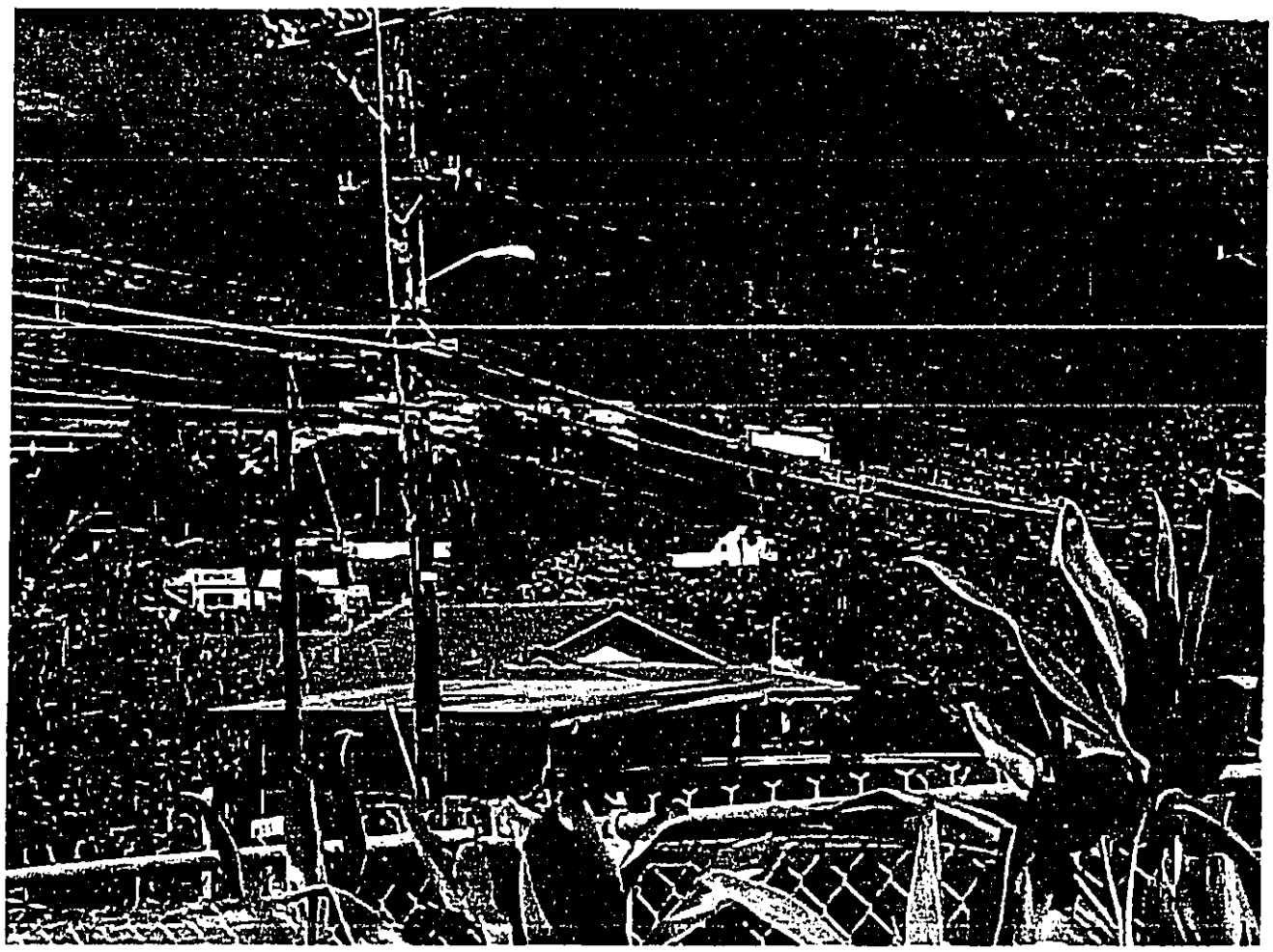


This photo was taken from the campus of Kamehameha Schools. The arrows marks the location of the proposed project site. The simulation shows that the "Stealth" pine tree will blend in with the environment. The backdrop of the mountain and its vegetation will further blend its color.

This photo was taken from Kamehameha IV Road in Kalihi Valley. Please note that the proposed project will not be visible from this Road.

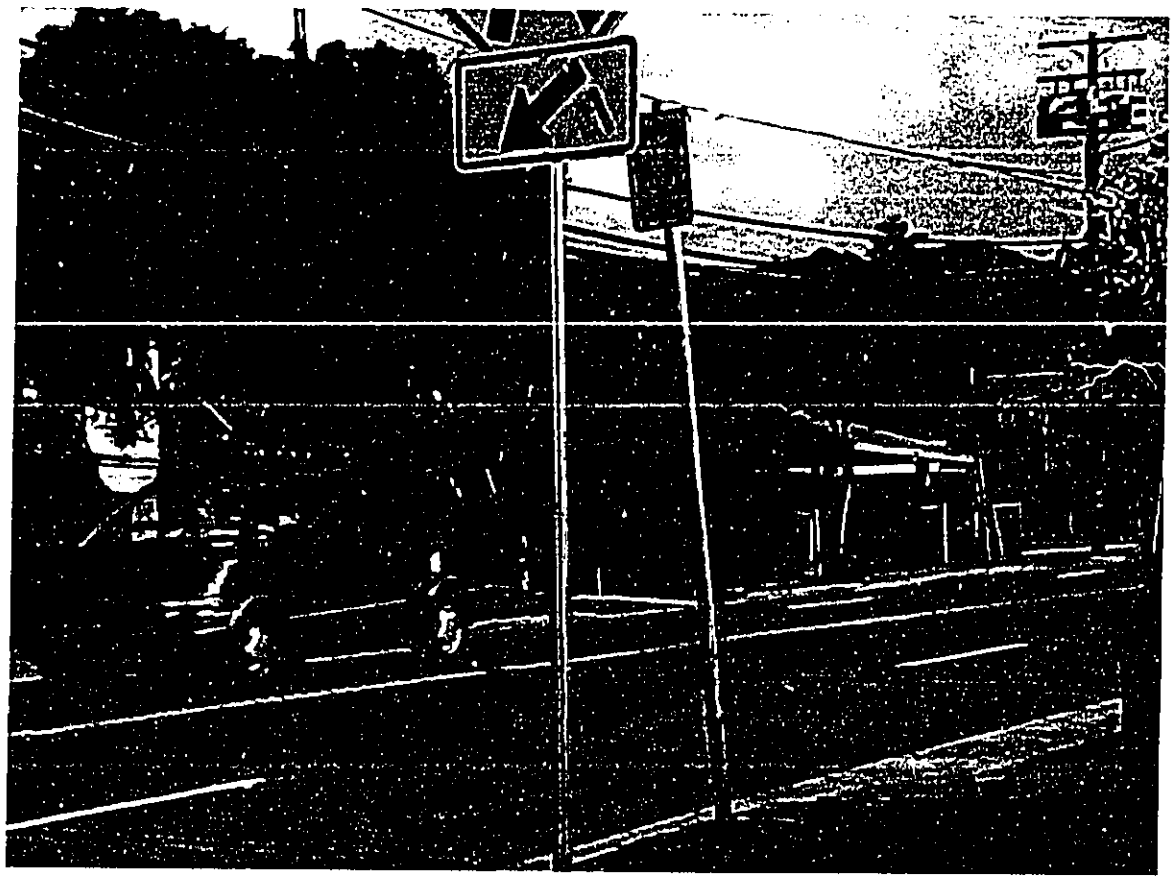
Exhibit H

This photo was taken from the intersection of Kalihi Street and Akone Street in Kalihi Valley. Arrow indicates the location of the proposed project area.



This view is from the intersection of Kalihi and Akone Streets. The arrow points to location of the pine tree simulated into the photo. The pine tree will blend in with the backdrop of the mountain and its environment.

Exhibit I-2

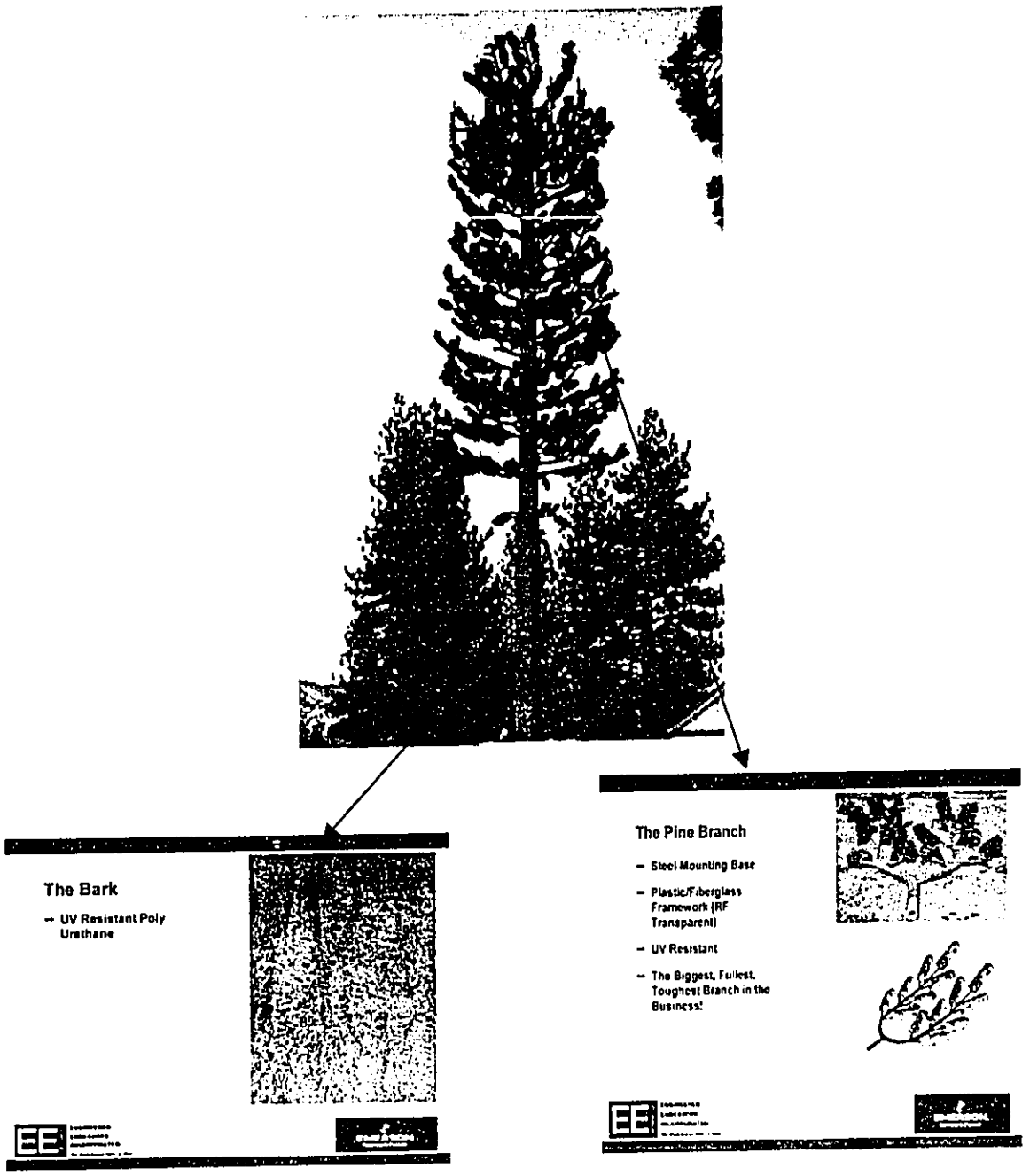


This photo was taken from the intersection of Kalihi and Machado streets in Kalihi Valley. The arrow marks the approximate area of the proposed project site. Please note the "Stealth" pine tree will not be visible from the majority of Kalihi Street.

Exhibit J

This photo was taken from the intersection of Wilson and Jennie Streets. The arrow indicates the approximate area of the proposed project location. View of the "Stealth" pine tree will not be visible from the general vicinity of this intersection.

Exhibit K



Material composition of the "Stealth" pine tree.

The major component of the pine tree will be the galvanized steel monopole with the UV resistant poly urethane bark covering the bottom 40' of the pole. The upper 40' will be painted brown to simulate the color of the bark.

Exhibit L

DEPARTMENT OF PLANNING AND PERMITTING
CITY AND COUNTY OF HONOLULU
650 SOUTH KING STREET • HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-4414 • FAX: (808) 527-6743 • INTERNET: www.co.honolulu.hi.us

JEREMY HARRIS
MAYOR

ERIC G. CRISPIN, AIA
ACTING DIRECTOR

BARBARA KIM STANTON
DEPUTY DIRECTOR

2002/ED-10(DT)

January 9, 2003

Mr. Roy Irei
VoiceStream Wireless
615 Piikoi Street, Suite 100
Honolulu, Hawaii 96814

Dear Mr. Irei:

Project Name : Kalihi Elementary School Cellular Communications System
File No. : 2002/ED-10
Tax Map Keys : 1-4-7: 2
Subject : Draft Environmental Assessment, Chapter 343, Hawaii Revised Statutes (HRS)

We are forwarding copies of all comments we have received relating to the Draft Environmental Assessment (EA) for the above-referenced project.

In accordance with the procedural provisions of Chapter 343, HRS, you must respond in writing to these and any other comments which were received during the 30-day public comment period which began with the publication of a notice of availability of the Draft EA in The Environmental Notice on December 8, 2002. The final EA must include these comments and response, as well as revised text, if appropriate.

If you have any questions, please contact Dana Teramoto of our staff at 523-4648.

Very truly yours,

Elizabeth Chin

For ERIC CRISPIN. AIA
Acting Director of Planning
and Permitting

EGC:cs
Encl.

doc no. 189314

T-Mobile®

March 26, 2003

Eric G. Crispin, AIA
Acting Director of Planning and Permitting
City & County of Honolulu
Department of Planning & Permitting
650 South King Street
Honolulu, Hawaii 96813

Project Name:	Kalihi Elementary School Telecommunication System
File No.:	2002/ED-10
Tax Map Key:	1-4-7:2
Subject:	Draft Environmental Assessment, Chapter 343, Hawaii Revised Statutes (HRS)

Dear Mr. Crispin,

We are in receipt of the letters that was addressed to your office enclosed together with the cover letter dated January 9, 2003. We will be responding to the comments, which were received during the 30-day public comment period in accordance to the procedural provisions of Chapter 343, HRS.

Should you have any questions, please contact me at 256-0037.

Sincerely,

Roy K. Irei
Site Development Manager
VoiceStream PCS II Corporation
an affiliate of T-Mobile USA

Main: (808) 593-0600
Fax: (808) 596-2660
615 Piikoi St Ste 100
Honolulu, HI 96814

LINDA LINGLE
GOVERNOR OF HAWAII

LORETTA J. FUDDY, A.C.S.W., M.P.H.
ACTING DIRECTOR OF HEALTH

'02 DEC 27 AM 10 19

CITY & COUNTY OF HONOLULU

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

In reply, please refer to:
File:

02-305/epo

December 24, 2002

Ms. Loretta K.C. Chee, Acting Director
Department of Planning and Permitting
650 South King Street
Honolulu, Hawaii 96813

Dear Ms. Chee:

Subject: *Environmental Assessment (EA)*
Proposed VoiceStream Wireless Cellular Communications Site
Kalihi Elementary School, Site Number HI1135C
Tax Map Key: 1-4-07:002

Thank you for the opportunity to review and comment on the subject proposal. The EA was routed to the various branches of the Environmental Health Administration. We have the following comments:

Wastewater Branch (WWB)

All wastewater plans must conform to applicable provisions of the Department of Health's Administrative Rules, Chapter 11-62, "Wastewater Systems." We reserve the right to review the detailed wastewater plans for conformance to applicable rules.

If you have any questions, please contact the Wastewater Branch at (808) 586-4294.

Clean Air Branch (CAB)

Control of Fugitive Dust

There is a significant potential for fugitive dust emissions during all phases of construction. Proposed construction activities will occur at a school and in proximity to existing residences and major thoroughfares, thereby exacerbating potential dust problems. It is recommended that a dust control management plan be developed which identifies and addresses all activities that have a potential to generate fugitive dust. Implementation of adequate dust control measures during all phases of development and construction activities is warranted.

Construction activities must comply with the provisions of Hawaii Administrative Rules, §11-60.1-33 on Fugitive Dust.

The contractor should provide adequate measures to control dust from the road areas and during the various phases of construction. These measures include, but are not limited to, the following:

a) Plan the different phases of construction, focusing on minimizing the amount of dust-generating materials and activities, centralizing on-site vehicular traffic routes, and locating potential dust-generating equipment in areas of the least impact;

b) Provide an adequate water source at the site prior to start-up of construction activities;

c) Landscape and provide rapid covering of bare areas, including slopes, starting from the initial grading phase;

d) Minimize dust from shoulders and access roads;

e) Provide adequate dust control measures during weekends, after hours, and prior to daily start-up of construction activities; and

f) Control dust from debris being hauled away from the project site.

If you have any questions, please contact Barry Ching at (808) 586-4200.

Noise, Radiation and Indoor Air Quality (NRIAQ) Branch

All project activities shall comply with the Administrative Rules of the Department of Health, Chapter 11-46, on "Community Noise Control."

If you have any questions, please contact the NRIAQ at (808) 586-4701.

Sincerely,

June F. Harrigan-Lum

JUNE F. HARRIGAN-LUM, MANAGER
Environmental Planning Office

c: WWB
CAB
NRIAQ

T-Mobile®

March 26, 2003

Ms. June F. Harrigan-Lum, Manager
Environmental Planning Office
State of Hawaii, Department of Health
P.O. Box 3378
Honolulu, Hawaii 96801-3378

Subject: Environmental Assessment (EA)
Proposed VoiceStream Wireless Cellular Communications Site
Kalihi Elementary School, Site Number HI1135C
File No.: 02-305/epo
Tax Map Key: 1-4-7:002

Dear Ms. Harrigan-Lum:

Thank you very much for the comments on our proposed antenna project at the Kalihi Elementary School. VoiceStream PCS II Corporation takes community response into consideration at every stage of our planning and building process. This type of approach keeps us constantly looking for ways to solve the difficult take of balancing community concerns with the demand from our customers for quality services. In today's world wireless phones have become an essential service – whether helping with homeland security or keeping families in touch with one another. The following are the response to the following comments:

Wastewater Branch (WWB)

The proposed telecommunications facility is an unmanned facility and will not require the service of the Wastewater Systems.

Clean Air Branch (CAB)

The plan is to have major portion of the project conducted during summer recess. Air quality attributed to the proposed project will be temporary and include exhaust

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615 Piikoi St Ste 100
Honolulu, HI 96814

emissions of construction vehicles and dust generated by construction related activities. During grading of the soil and construction of the telecommunication facility will generate airborne particles. Dust control measures such as regular watering and sprinkling will be implemented as needed to control fugitive dust. The work will be in compliance with the provisions of Hawaii Administrative Rules, Title 11 Chapter 60.1-33, including the measures state from a) to f) in the comment letter.

The general contractor will provide adequate measures to control dust from the road areas and during the various phases of construction. The measures includes, but are not limited to prompt removal of earth or other materials from paved streets which have been transported there by the vehicles, and covering all moving open-bodied trucks transporting materials which may result in fugitive dust.

Noise, Radiation and Indoor Air Quality (NRIAQ) Branch

Existing noise levels at the subject property are high in vehicular traffic as Likelike Highway fronts the property. Construction noise from the machines and vehicles will be confined to daylight working hours only. Construction activities will comply with Hawaii Administrative Rules, Chapter 11-46, Community Noise Control. No grading work will be done during school hours, Saturdays, Sundays and holidays. Upon completion of construction the telecommunication facility will not have an adverse impact upon existing noise levels.

Should you have any questions, please contact me at 256-0037.

Sincerely,

Roy K. Irei
Site Development Manager
VoiceStream PCS II Corporation
an affiliate of T-Mobile USA

LINDA LINGLE
GOVERNOR OF HAWAII

GENEVIEVE SALMONSON
DIRECTOR

STATE OF HAWAII
OFFICE OF ENVIRONMENTAL QUALITY CONTROL
235 SOUTH BERETANIA STREET
SUITE 702
HONOLULU, HAWAII 96813
Telephone (808) 586-4185
Facsimile (808) 586-4186
Email: oeqc@health.state.hi.us

January 7, 2003

Mr. Roy Irei
VoiceStream PCS II Corporation
615 Pi'ikoi Street, Suite 100
Honolulu, Hawai'i 96814

Mr. Dana Teramoto
Department of Planning and Permitting
City and County of Honolulu
650 South King Street, 7th Floor
Honolulu, Hawai'i 96813

Dear Messrs. Irei and Teramoto:

The Office of Environmental Quality Control has reviewed the October 7, 2002, draft environmental assessment for the proposed VoiceStream Wireless Cellular Communications Site at Kalihi Elementary School, Site No. HI1135C, Tax Map Key (1) 1-4-7, parcel 2, in the judicial district of Honolulu and the ahupua'a of Kalihi, and offers the following comments for your consideration.

1. *Visual Impact Analysis*: Please expound on the visual effects of the proposed project especially as to: (1) the material composition and makeup of the "branches" and "leaves" of the tower; (2) a written visual description of the aesthetic elements in the stealth pine tree design; visual intrusiveness (will the tower stand out against the landscape?) including photographs with superimposed projections of the stealth pine tree from various vantage points in Kalihi Uka and environs such as Kapalama Heights, Kamehameha Schools, Shafter Trail, etc.; and (3) discussion on the number and type of utility lines leading to and from the stealth pine tree.
2. *Electrical and Magnetic Effects (if any)*: Please consult with the Office of Hazard Evaluation and Emergency Response of the Department of Health and discuss electro-magnetic effects on the health and safety of children and faculty of Kalihi Elementary School.
3. *Alternatives Analysis*: Please discuss possible alternatives to the stealth pine tree design as well as their direct, indirect and cumulative impacts.
4. *Use of Native Vegetation and Glassphalt*: The Office recommends that the site be landscaped with native plants and that paved roadways make use of glass-asphalt aggregate.

If there are any questions, please do not hesitate to call Mr. Leslie Segundo of my staff at (808) 586-4185. Thank you for the opportunity to comment.

Sincerely,

GENEVIEVE SALMONSON
Director

LINDA LINGLE
GOVERNOR OF HAWAII

GENEVIEVE SALMONSON
DIRECTOR

STATE OF HAWAII
OFFICE OF ENVIRONMENTAL QUALITY CONTROL
235 SOUTH BERETANIA STREET
SUITE 702
HONOLULU, HAWAII 96813
Telephone (808) 586-4185
Facsimile (808) 586-4186
Email: oeqc@health.state.hi.us

January 7, 2003

Mr. Roy Irei
VoiceStream PCS II Corporation
615 Pi'ikoi Street, Suite 100
Honolulu, Hawai'i 96814

Mr. Dana Teramoto
Department of Planning and Permitting
City and County of Honolulu
650 South King Street, 7th Floor
Honolulu, Hawai'i 96813

Dear Messrs. Irei and Teramoto:

The Office of Environmental Quality Control has reviewed the October 7, 2002, draft environmental assessment for the proposed VoiceStream Wireless Cellular Communications Site at Kalihi Elementary School, Site No. HI1135C, Tax Map Key (1) 1-4-7, parcel 2, in the judicial district of Honolulu and the ahupua'a of Kalihi, and offers the following comments for your consideration.

1. *Visual Impact Analysis*: Please expound on the visual effects of the proposed project especially as to: (1) the material composition and makeup of the "branches" and "leaves" of the tower; (2) a written visual description of the aesthetic elements in the stealth pine tree design; visual intrusiveness (will the tower stand out against the landscape?) including photographs with superimposed projections of the stealth pine tree from various vantage points in Kalihi Uka and environs such as Kapalama Heights, Kamehameha Schools, Shafter Trail, etc.; and (3) discussion on the number and type of utility lines leading to and from the stealth pine tree.
2. *Electrical and Magnetic Effects (if any)*: Please consult with the Office of Hazard Evaluation and Emergency Response of the Department of Health and discuss electro-magnetic effects on the health and safety of children and faculty of Kalihi Elementary School.
3. *Alternatives Analysis*: Please discuss possible alternatives to the stealth pine tree design as well as their direct, indirect and cumulative impacts.
4. *Use of Native Vegetation and Glassphalt*: The Office recommends that the site be landscaped with native plants and that paved roadways make use of glass-asphalt aggregate.

If there are any questions, please do not hesitate to call Mr. Leslie Segundo of my staff at (808) 586-4185. Thank you for the opportunity to comment.

Sincerely,

GENEVIEVE SALMONSON
Director

T-Mobile®

March 26, 2003

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

Subject: Environmental Assessment (EA)
Proposed VoiceStream Wireless Telecommunication Site Kalihi Elementary School, Site Number HI1135C
Tax Map Key: 1-4-7:002

Dear Ms. Salmonson:

Thank you very much for the comments dated January 7, 2003, on our proposed antenna project at the Kalihi Elementary School. VoiceStream PCS II Corporation takes community and agency response into consideration at every stage of our planning and building process. This type of approach keeps us constantly looking for ways to solve the difficult take of balancing community concerns with the demand from our customers for quality services. In today's world wireless phones have become an essential service – whether helping with homeland security or keeping families in touch with one another. The following are the response to the following comments:

1. *Visual Impact Analysis*:

   (1) See Exhibit L.

   (2) The visual aesthetics of the pine tree will blend in with its surroundings. Majority of the viewpoints of this site will have the slopes of the mountain as its background, with lush green shrubs and trees. Surrounding the stealth pine tree are shrubs approximately 5 to 20 feet in height with three 50 to 60 feet tall Ironwood trees. The proposed project site cannot be seen from Kapalama Heights. We could not access Shafter Trail, which was

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Honolulu, HI 96814

restricted by the military. As a substitute for the Shafter Trail we inserted Kam IV Road. See Exhibits A to K.

(3) Preliminary plans are to have the electrical lines placed underground from the school to the proposed site or an overhead line from the existing power pole behind the proposed site. Telephone T-1 line is preliminarily designed to be brought in underground from the school property.

2. *Electrical and Magnetic Effects:*

We consulted with the Office of Hazard Evaluation and Emergency Response of the Department of Health at the Kalihi Elementary School, together with the school principal, and the Chairperson of the Kalihi Neighborhood Board on March 22, 2001. Dr. Au confirmed that the telecommunication facility would not have any affect on the children and faculty of Kalihi Elementary School.

3. *Alternative Analysis:*

VoiceStream PCS II Corporation has been working on this search area since 2001, we visited and analyzed four other locations before settling at the school site.

(a) The initial site that was looked at, the Department of Transportation Testing Lab along Likelike Highway and there was no ground space available. The existing wood pole fronting the property is structurally designed for one carrier and was constructed at a low elevation.
(b) The negotiation with the church across the street fell through.
(c) The City Park adjacent to the highway was offered to us, but the geographic configuration of this property was realistically difficult. As we analyzed the park property, it will be necessary to construct a 180 feet monopole to achieve the same result at the school site. We rejected this site because of the potential adverse visual impact it will have on the community.
(d) The fourth alternative site was the HECO H-framed power pole on the mountaintop of Kalihi Valley. The Kalihi Valley community opposed the HECO site. Since encountering the opposition, we've worked with the community to work out a solution and finally settled with a Pine Tree at the school property.

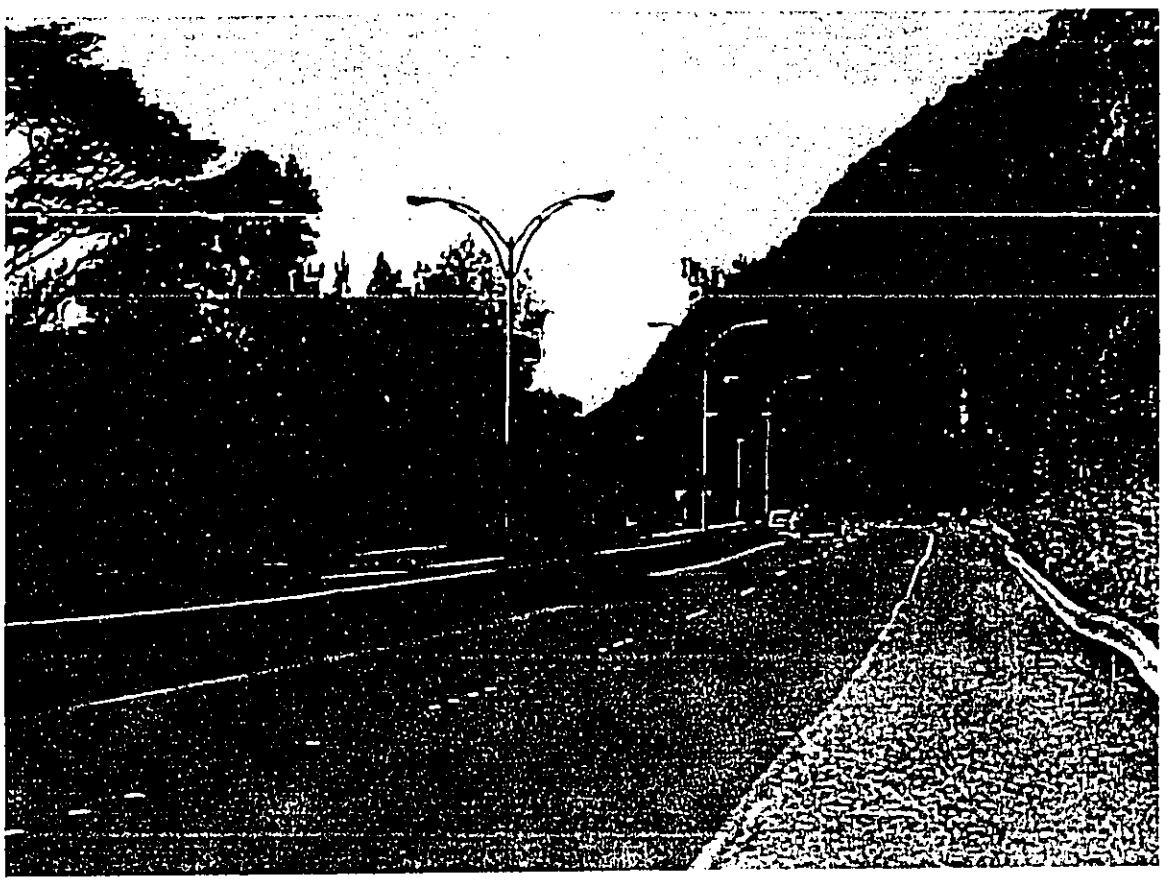
4. *Use of Native Vegetation and Glassphalt*:
There is an extensive amount of vegetation at the proposed site. The height of the brushes in general vicinity of the proposed project area varies from approximately 5 to 15 feet in height and this should cover the proposed 6 feet high fencing. Should the vegetation be destroyed or removed during

construction, we will replace it with native plants landscaping to camouflage the 6 feet high fence.
There are no plans to create paved roadways. Should there be a need to have paved roadways we will make use of glass-asphalt aggregate.

Should you have any questions, please contact me at 256-0037.

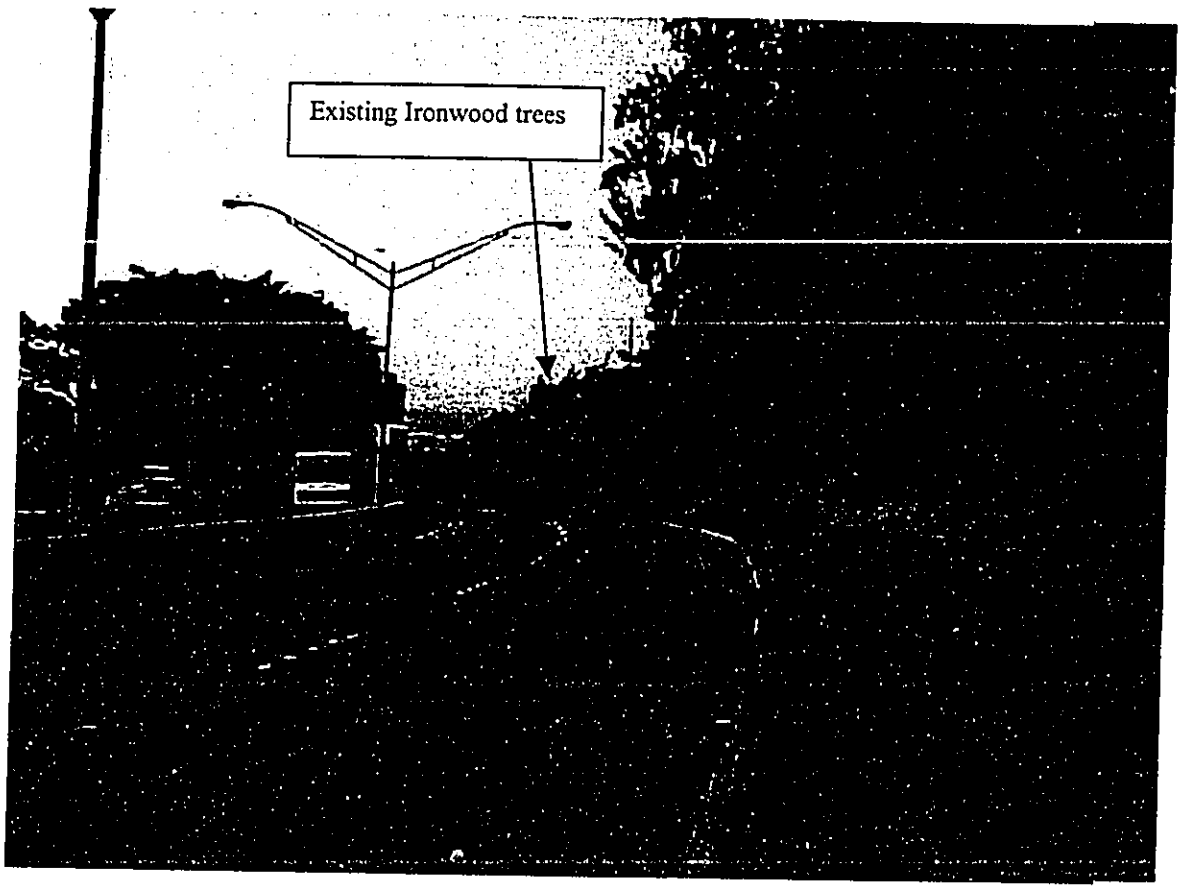
Sincerely,

Roy K. Irei
Site Development Manager
VoiceStream PCS II Corporation
an affiliate of T-Mobile USA

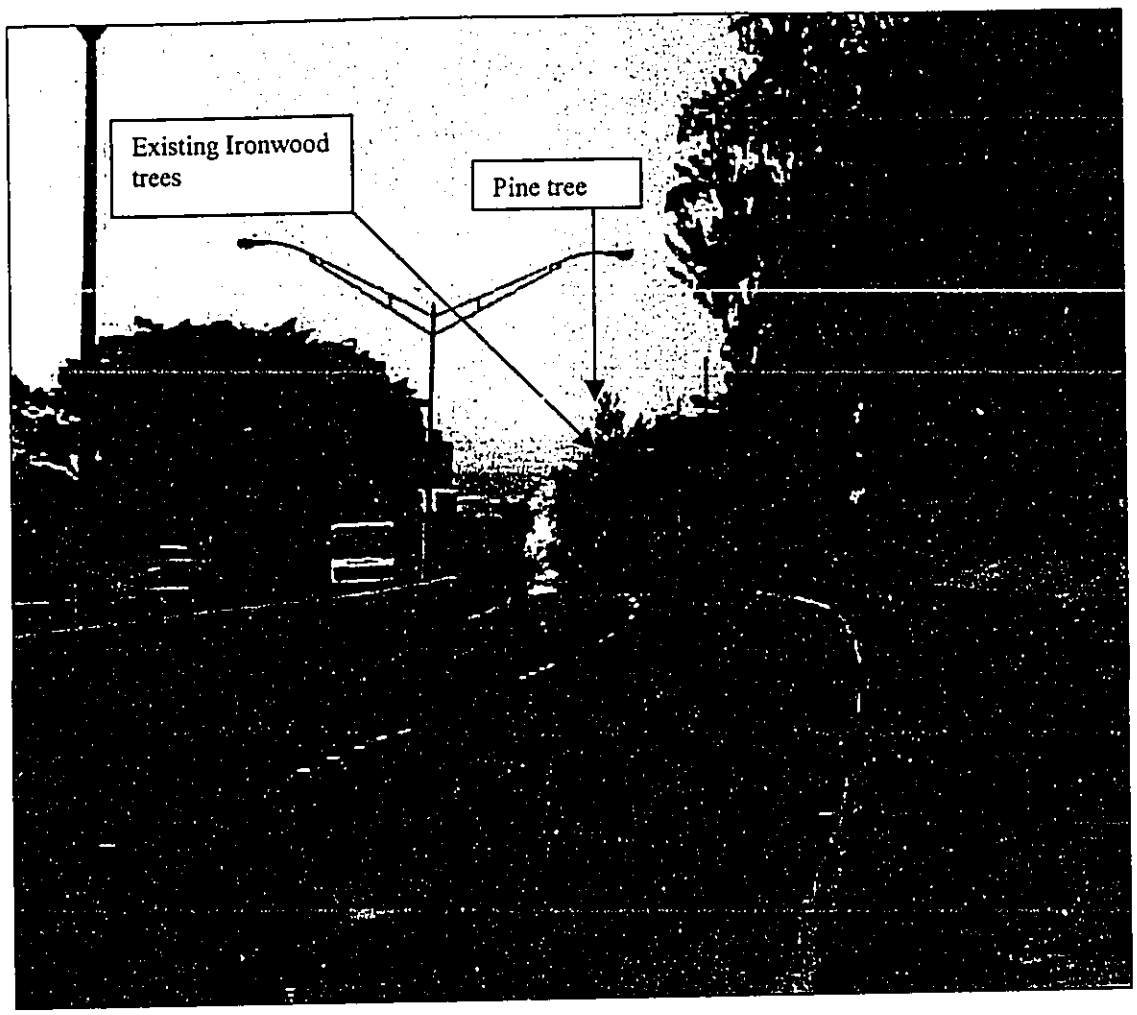


The photo was taken from Likelike Highway heading town bound approximately ½ mile after the Burmeister Bridge. The proposed project site cannot be seen from this location and up towards the Wilson Tunnels.

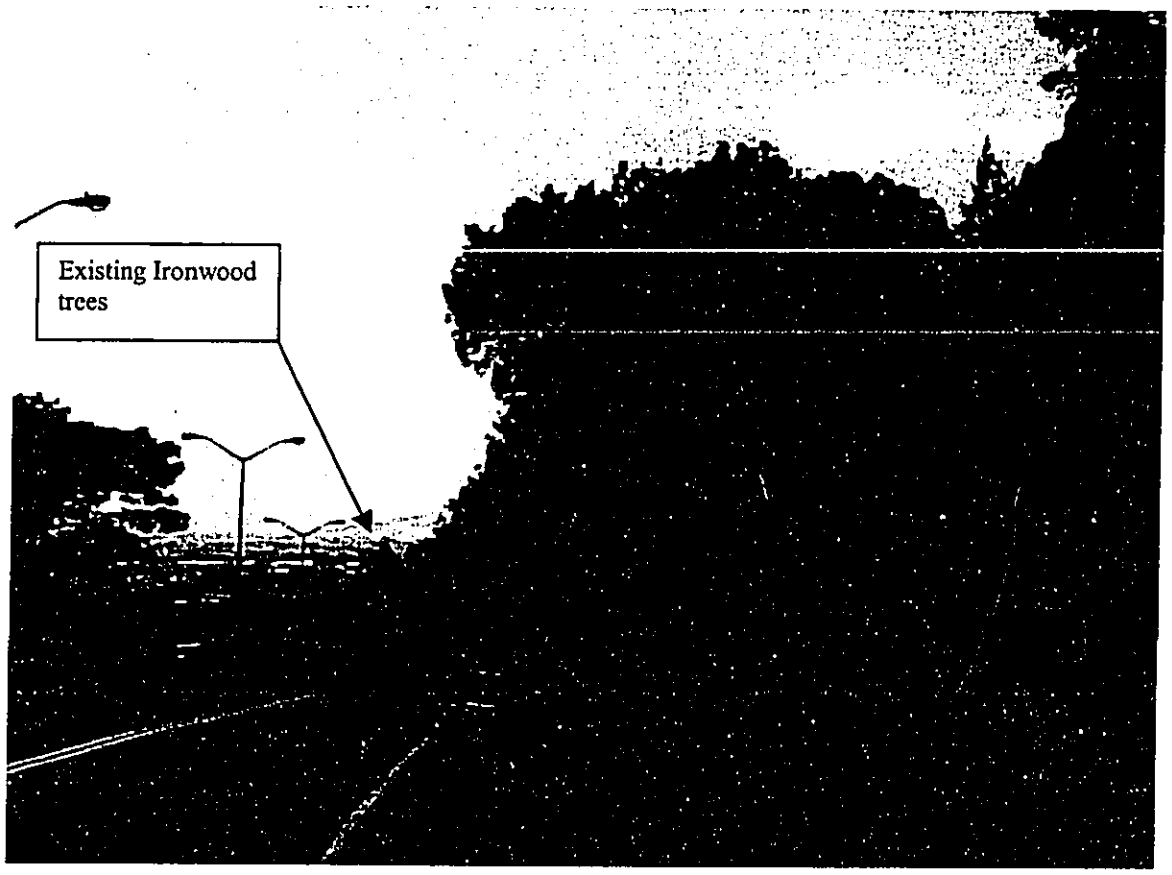
Exhibit A



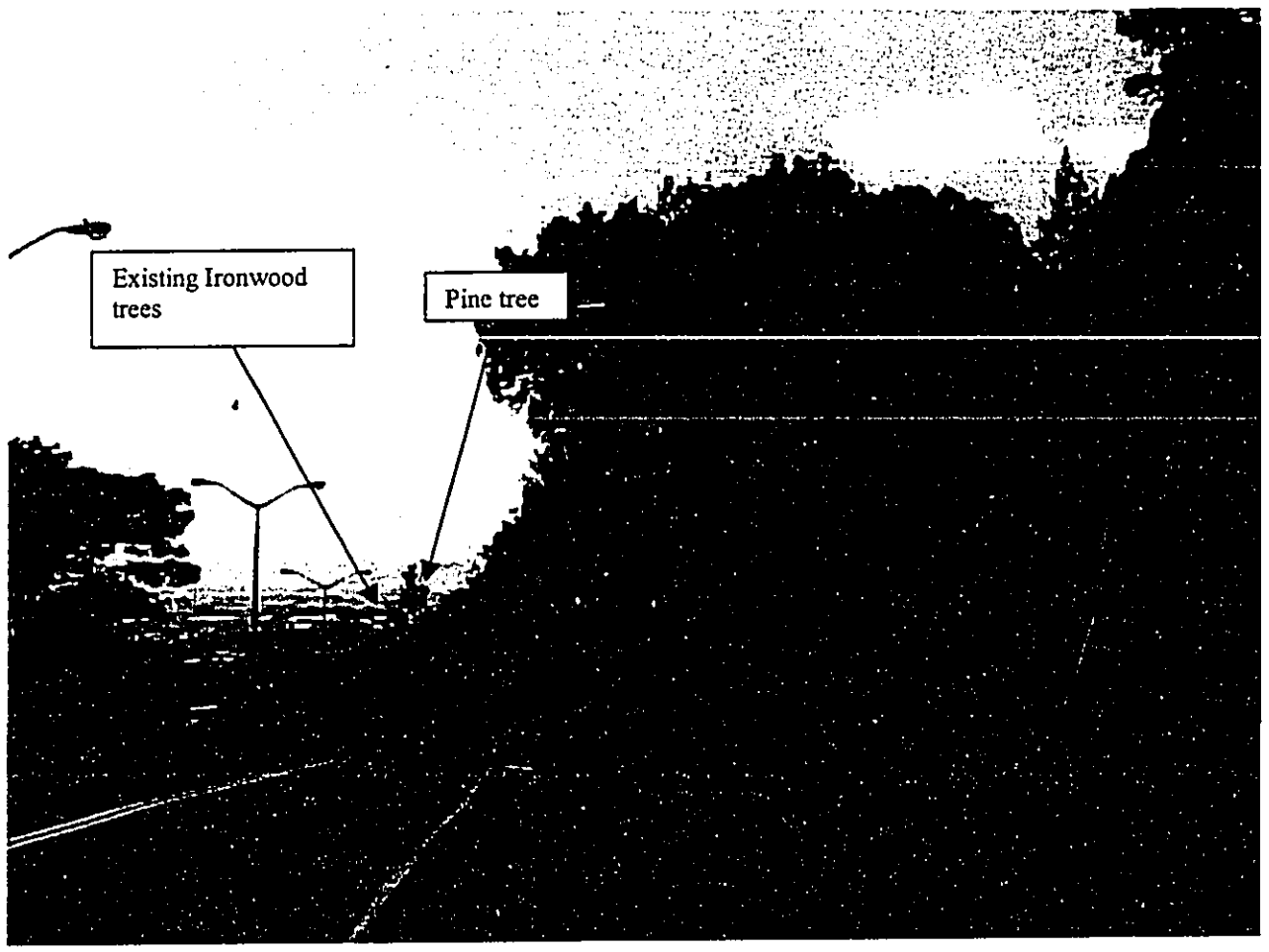
This photo shows the view heading towards town on Likelike Highway just fronting the Department of Transportation Testing Lab. The arrow indicates the proposed project location where there are existing Ironwood trees. See next page for simulation (Exhibit B-2).



This photo shows the view heading towards town on Likelike Highway fronting the Department of Transportation Testing Lab. The "Stealth" pine tree will blend in with the other Ironwood trees in the proposed project area. Only the top 30 feet of the pine tree will be visible from this location.



This photo shows the view heading town bound on Likelike Highway just before the runaway truck ramp. The arrow indicates the proposed location of the project area within the area of the existing Ironwood trees. See next page for simulation.



This photo shows the view heading town bound on Likelike Highway just before the runaway truck ramp. The "Stealth" pine tree will blend in with the other Ironwood trees in the proposed project area. Only the top 30 feet of the pine tree will be visible from this location.

This photo was taken from the intersection of Likelike Highway and School Street. The arrow indicates the approximate area of the proposed project site. The pine tree will not be visible from any location of School Street.

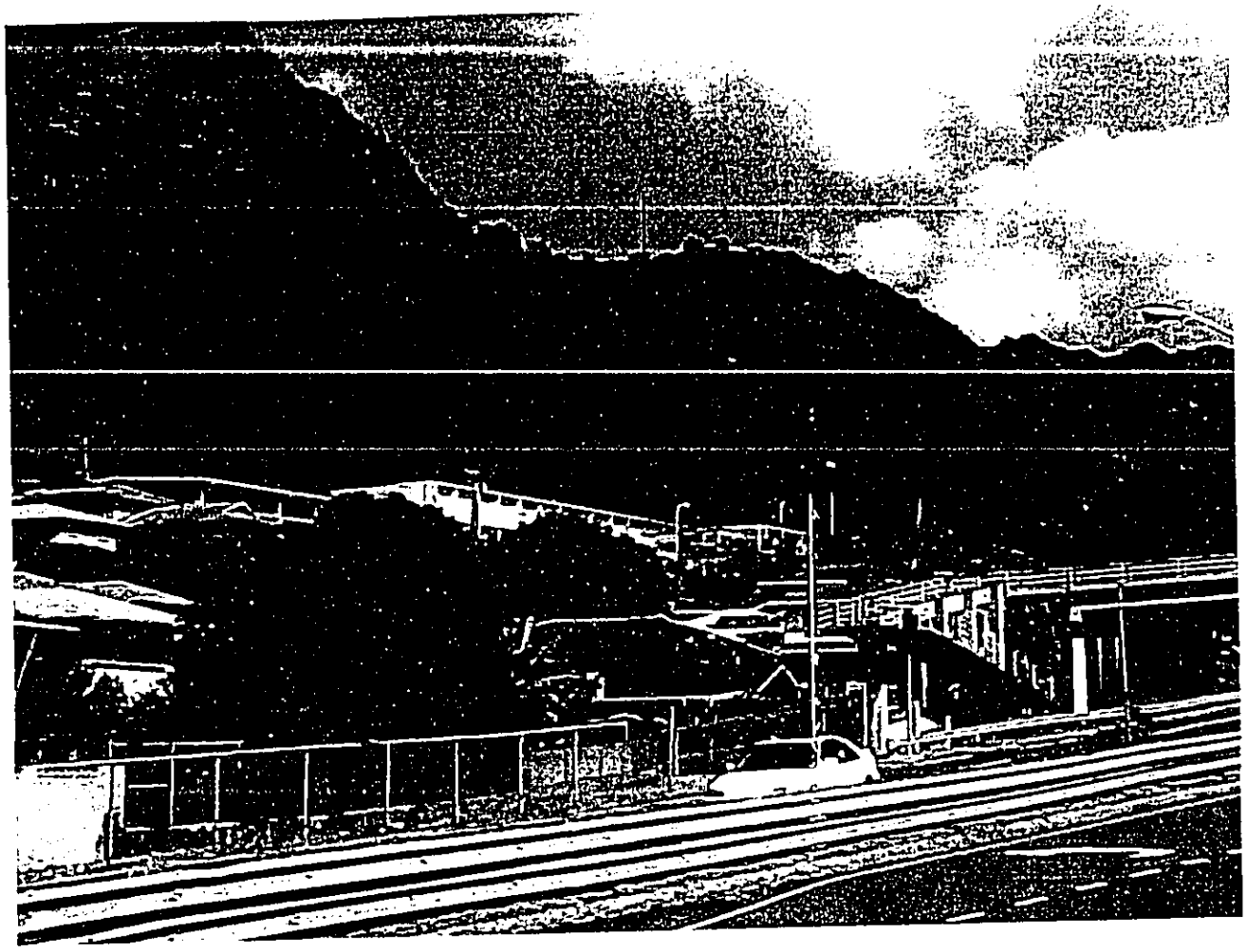
Exhibit D

This photo is taken from the intersection of Likelike Highway and Alu Street. Please note that the proposed project will not be visible from this location.

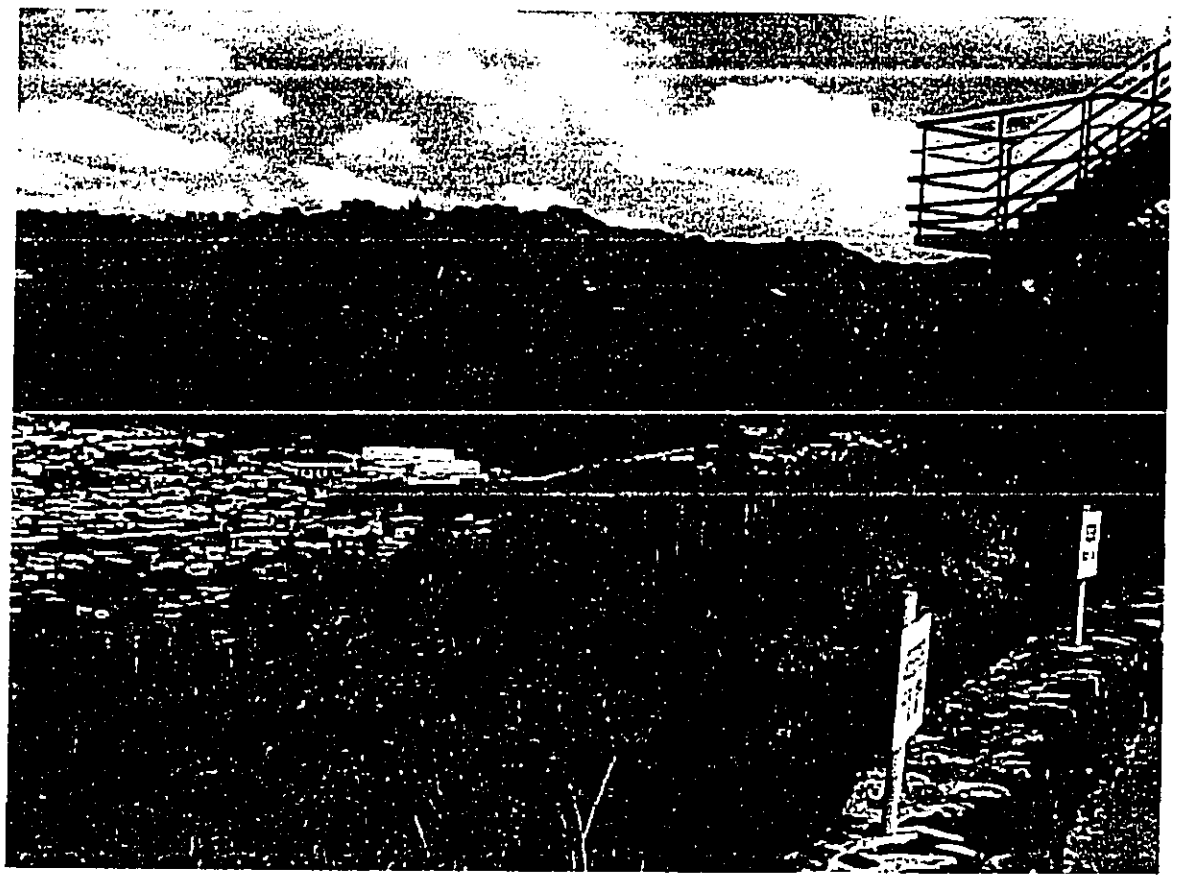
Exhibit E

This photo is taken from the intersection of Likelike Highway and Nalanieha Street in Kalihi Valley. The arrow indicates the proposed location of the project site within the vicinity of the existing Ironwood trees.

Exhibit F-1

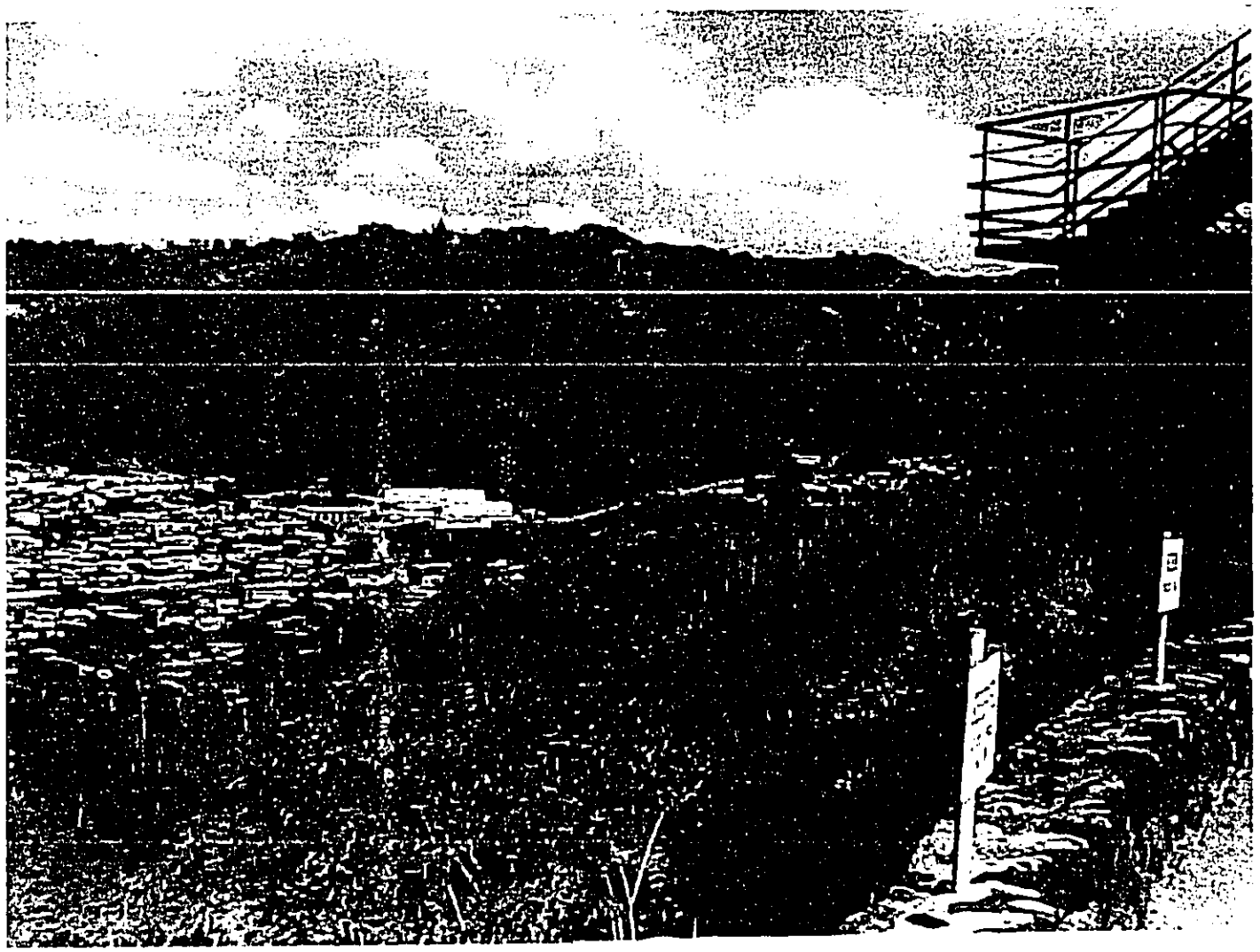


This view is from the intersection of Likelike Highway and Nalanieha Street. The arrow points to location of the pine tree simulated into the photo. The pine tree will blend in with the backdrop of the mountain and its environment.



This photo is taken from the campus of Kamehameha Schools Bishop Estate. The arrow indicates the location of the proposed project site. Please note that the existing 50 feet Ironwood trees are barely noticeable from this location as it blends in with the environment surrounds this area.

Exhibit G-1

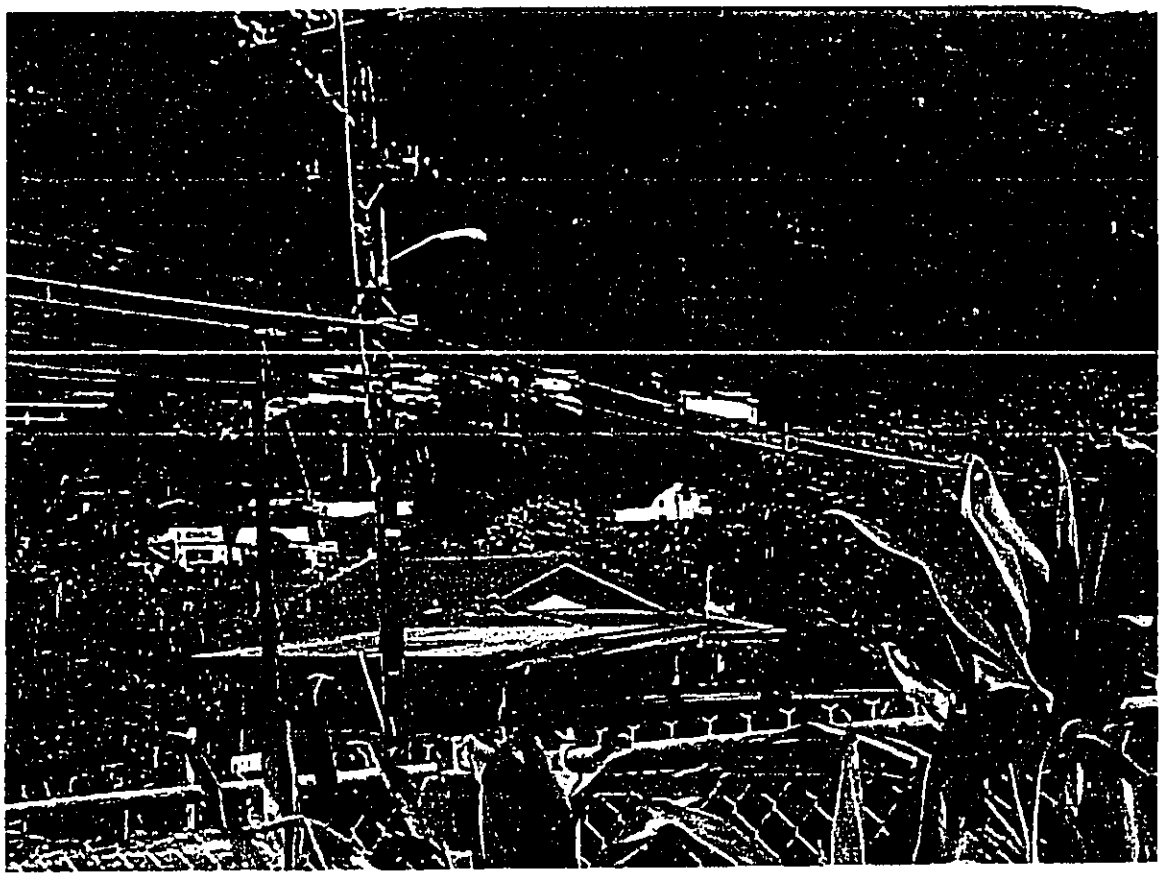


This photo was taken from the campus of Kamehameha Schools. The arrows marks the location of the proposed project site. The simulation shows that the "Stealth" pine tree will blend in with the environment. The backdrop of the mountain and its vegetation will further blend its color.

Exhibit G-2

This photo was taken from Kamehameha IV Road in Kalihi Valley. Please note that the proposed project will not be visible from this Road.

Exhibit H



This photo was taken from the intersection of Kalihi Street and Akone Street in Kalihi Valley. Arrow indicates the location of the proposed project area.

Exhibit I-1

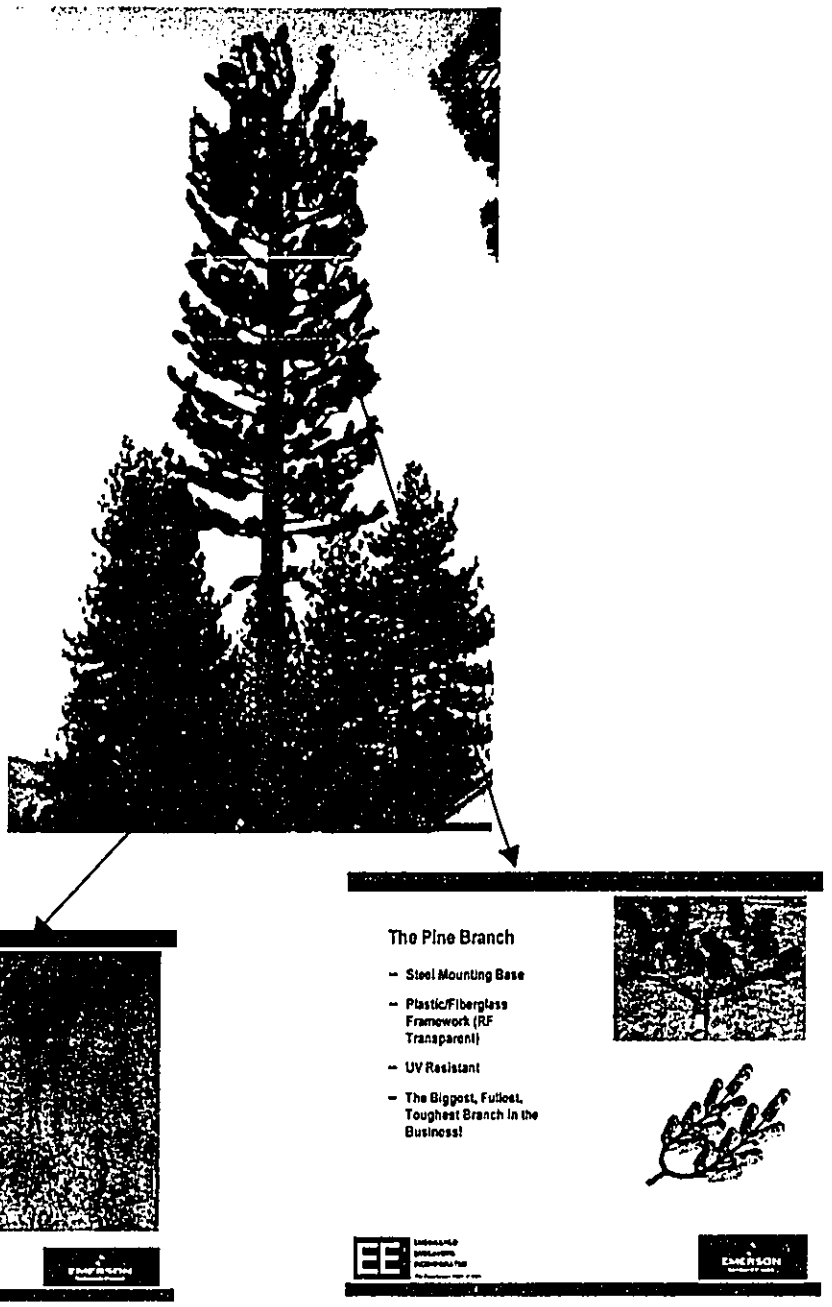
This view is from the intersection of Kalihi and Akone Streets. The arrow points to location of the pine tree simulated into the photo. The pine tree will blend in with the backdrop of the mountain and its environment.

Exhibit I-2

This photo was taken from the intersection of Kalihi and Machado streets in Kalihi Valley. The arrow marks the approximate area of the proposed project site. Please note the "Stealth" pine tree will not be visible from the majority of Kalihi Street.

This photo was taken from the intersection of Wilson and Jennie Streets. The arrow indicates the approximate area of the proposed project location. View of the "Stealth" pine tree will not be visible from the general vicinity of this intersection.

Exhibit K



Material composition of the "Stealth" pine tree.

The major component of the pine tree will be the galvanized steel monopole with the UV resistant poly urethane bark covering the bottom 40' of the pole. The upper 40' will be painted brown to simulate the color of the bark.

Exhibit L

2002/DOC-168
ED-192695

'02 DEC 4 P1

BENJAMIN J. CAYETANO
GOVERNOR OF HAWAII

GILBERT S. COLOMA-AGARAN, CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCES MANAGEMENT

DEPUTIES
ERIC T. HIRANO
LINNEL NISHIOKA

STATE OF HAWAII

DEPARTMENT OF LAND AND NATURAL RESOURCES

HISTORIC PRESERVATION DIVISION
KAKUHIHEWA BUILDING, ROOM 555
601 KAMOKILA BOULEVARD
KAPOLEI, HAWAII 96707

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

HAWAI'I HISTORIC PRESERVATION DIVISION REVIEW

Log #: 31200
Doc #: 0211EJ17

Applicant/Agency: Loretta K. C. Chee
Acting Director
Department of Planning and Permitting
City & County of Honolulu
650 South King Street
Honolulu, Hawaii 96813

SUBJECT: Chapter 6E-42 Historic Preservation Review – Environmental Assessment for the Proposed Voice Stream Wireless Kalihi Elementary School Cellular Communications Site

Ahupua'a: Kalihi
District, Island: Kona, O'ahu
TMK: (1) 1-4-007:002

1. We believe there are no historic properties present, because:

____ a) intensive cultivation has altered the land
__✓__ b) residential development/urbanization has altered the land
__✓__ c) previous grubbing/grading has altered the land
____ d) an acceptable archaeological assessment or inventory survey found no historic properties
__✓__ e) other: The site is located within an existing developed school property. Our previous comments during the EA preparation phase are included in Appendix B of the EA

2. This project has already gone through the historic preservation review process, and mitigation has been completed ___.

__✓__ Thus, we believe that "no historic properties will be affected" by this undertaking

Staff: /s/ Elaine Jourdane Date: 12/27/02

Title: Elaine Jourdane, Assistant Archaeologist O'ahu Phone (808) 692-8027

SOUTH PACIFIC GEOTECHNICAL, INC.

73-5574 Maiau Street, Suite 1
Kailua-Kona, Hawaii 96740

Telephone: (808) 322-3706 Facsimile: (808) 322-3726

April 15, 2003
Project No. M189.44.4

State of Hawaii
Department of Land and Natural Resources
Historic Preservation Division
Kakuhihewa Building, Room 555
Kapolei, Hawaii 96707

Attention: Ms. Elaine Jourdane,
Assistant Archaeologist, Oahu

Subject: Proposed VoiceStream Wireless Cellular Communications Site
Kalihi Elementary School

Dear Ms. Jourdane:

Thank you for your letter of November 11, 2002 and the "no historic properties will be affected" determination for the subject project.

We sincerely appreciate your assistance in the environmental assessment review process.

Respectfully,

SOUTH PACIFIC GEOTECHNICAL, INC.

Jerry M. Sessums, P.E., Ph.D.
President

92-1293 Hauone Street
Kapolei Hi 96707
December 11, 2002

Voice Stream PCSII Corp
615 Pi'ikoi Street Suite 100
Honolulu, HI 96814

Dear Sir/Madam,

Your stealth tree will stick out like a sore thumb. It will be very noticeable because it is too stiff, the wrong shade of green, one even shade of green and too symmetrical. I sported one like it right away as a passenger in a car going 60 mph along the freeway in Phoenix. Hawaii is tropical. The species is all wrong. It will stick out like a sore thumb. This tree will work in the northwest USA where pines like it abound. How many like it do you find in Kalihi that look like the one you have in the paper?

I vote no to this tree. If you had another design that will blend in, I might go for it. Cooke pine would work. Why not built a regular tower into a big existing monkey pod tree and paint it green and brown.

I am enclosing two other copies of this letter for the City Department of Planning and Permitting and the State Office of Environmental Quality Control.

Aloha,

Jacqueline Ralya

Jacqueline Ralya
Horticulturist

Cc. Mary Steiner, The Outdoors Circle

T-Mobile®

March 26, 2003

Ms. Jacqueline Ralya
92-1293 Hauone Street
Kapolei, HI 96707

Dear Ms. Ralya,

Thank you very much for your comments on our proposed antenna project at the Kalihi Elementary School. VoiceStream PCS II Corporation takes community response into consideration at every stage of our planning and building process. This type of approach keeps us constantly looking for ways to solve the difficult task of balancing community concerns with the demand from our customers for quality service. In today's world wireless phones have become an essential service – whether helping with homeland security or keeping families in touch with one another.

Technology changes every year. The pine tree that you mentioned that you saw in Phoenix may have been designed during the infancy stage of the "stealth" concept. Nonetheless, Phoenix is relatively flat land with desert like conditions. A stealth pine tree will not fit in as well in those areas.

The Kalihi Elementary School is situated on the slopes of the mountain. The proposed site is planned to be located at the back corner of the school property and the topography takes a steep turn upward nearly 1,000 feet. The hillside is covered with lush green vegetation ranging in height from 5' brushes to 70' tall iron Wood trees. There were other alternatives presented to the community and the pine tree was suggested by the community, agreed to and supported by the Kalihi Neighborhood Board, and to be the type of tree that would best blend right into the background, in color and tree type.

VoiceStream contacted neighbors surrounding the school property and invited them to attend any one of the six presentations that were presented to the Kalihi Neighborhood Board, the Principal and Faculty of the School, as well as other community meetings. The result has been quite positive and the community and the school faculty is in unanimous support of our project.

Our staff researched your request on the possibility of a Cooke pine. We've contacted the State Agriculture Department, Lyon Arboretum, University of Hawaii Department of Agriculture, and Foster Botanical Gardens, no one knows what a Cooke pine looks like. The big existing monkey pod tree at the rear of the school property is in a location that will be difficult for us to have a site there. If a site is to be constructed at this location, the height of the monopole will be approximately 250' tall. There is a ridgeline that will be preventing the signals from transmitting into the valley. Therefore, in order for us to meet our objective of providing coverage into the valley the antennas will need to be positioned above the ridgeline.

Main: (808) 593-0600
Fax: (808) 596-2660
615 Piikoi St Ste 100
Honolulu, HI 96814

In summary, we would like to add that VoiceStream PCS II Corporation has designed this low visual impact site to accommodate up to three wireless phone carrier's antennas, as well as other small wireless antennas that might have future use. The pine tree concept was not created solely by us, but with the input and involvement with the Kalihi Valley Community.

Thank you again for voicing your concerns to us, and hopefully you'll understand our justification. We appreciate your comments and share in your desire to keep Hawaii beautiful.

Sincerely,

Roy K. Irei
Site Development Manager
VoiceStream PCS II Corporation
An affiliate of T-Mobile USA

December 12, 2002

Aloha

I would like to offer my opinion on the proposed Voice-Stream Wireless Stealth pine tree project at Kalihi Elementary.

I am very affected by not having service at my residence because of the valley walls. I just moved to Kalihi Valley and I was upset when I found out that I couldn't get any reception at all. I was planning to call and ask for cancellation without a fee until I read this article. So hopefully now I wont have to do that at all.

I would hope that all safe guards are in place for the children and adults in the area of the proposed antenna. If so, I am definitely in favor of the proposed plan for the cellular phone antenna.

Mahalo for the chance to offer my opinion.

Monica Hembree
3583 D Kalihi Street
Honolulu, Hawaii 96819

808-845-7531

Cc: Department of Planning and Permitting
State Office of Environmental Quality Control

T-Mobile®

March 26, 2003

Ms. Monica Hembree
3583-D Kalihi Street
Honolulu, Hawaii 96819

Dear Ms. Hembree,

Thank you very much for your comments on our proposed antenna project at the Kalihi Elementary School. VoiceStream PCS II Corporation takes community response into consideration at every stage of our planning and building process. This type of approach keeps us constantly looking for ways to solve the difficult task of balancing community concerns with the demand from our customers for quality service. In today's world wireless phones have become an essential service – whether helping with homeland security or keeping families in touch with one another.

We apologize for the lack of coverage service to your residence. We recognize this issue and we are making every attempt to resolve it. VoiceStream PCS II Corporation is licensed with the Federal Communications Commissions (FCC) and we comply with very strict emission guidelines established by them.

It is important to understand that cellular service is nothing more than radio waves. Even though the FCC has established strict radio frequency (RF) emission guidelines, the wireless industry believes that it is important to operate cell sites at even lower RF and power emission levels than the government recommends. The emissions are set so low that items found in your home such as a microwave oven or a baby monitor operate at higher levels.

The consensus of the scientific community, both in the U.S. and internationally, is that the power from these wireless telecommunication antennas is far too low to produce health hazards. At a height of 80', there is very minimal EMF radiation.

A representative from the State Department of Health met with the school principal to address any and all concerns in respect to health risks of having this tower near the school. The State Department of Health reassured him that there is no exposure to health risks. The result has been quite positive and the community and school faculty is in unanimous support of this project.

Main: (808) 593-0600
Fax: (808) 596-2660
615 Piikoi St Ste 100
Honolulu, HI 96814

Thank you again for voicing your concerns to us, as well as offering your support for our project and service. Most of all, thank you for your patience. We appreciate your comments and your loyalty towards VoiceStream, and we share in your desire to keep Hawaii beautiful.

Sincerely,

Roy K. Irei
Site Development Manager
VoiceStream PCS II Corporation
An affiliate of T-Mobile USA

December 12, 2002

Aloha

I would like to offer my opinion on the proposed Voice-Stream Wireless Stealth pine tree project at Kalihi Elementary School.

First, as State of Hawaii employee who is assigned a Voice-Stream cell phone and a resident of upper Kalihi Valley, I am affected by not having service at my residence because of the valley walls.

Second, I would hope that all save guards are in place for the children and adults in the area of the proposed antenna.

I am basically in favor of the proposed a stealth iron wood pine type of cellular phone antenna.

Mahalo for the chance to offer my opinion.

William Joseph Hall
3583 D Kalihi Street
Honolulu, Hawaii 96819

William Joseph Hall, II

808-845-7531

Cc: Department of Planning and Permitting
State Office of Environmental Quality Control

T-Mobile

March 26, 2003

Mr. William Joseph Hall
3583-D Kalihi Street
Honolulu, Hawaii 96819

Dear Mr. Hall,

Thank you very much for your comments on our proposed antenna project at the Kalihi Elementary School. VoiceStream PCS II Corporation takes community response into consideration at every stage of our planning and building process. This type of approach keeps us constantly looking for ways to solve the difficult task of balancing community concerns with the demand from our customers for quality service. In today's world wireless phones have become an essential service – whether helping with homeland security or keeping families in touch with one another.

We apologize for the lack of coverage service to your residence. We recognize this issue and we are making every attempt to resolve it. VoiceStream PCS II Corporation is licensed with the Federal Communications Commissions (FCC) and we comply with very strict emission guidelines established by them.

It is important to understand that cellular service is nothing more than radio waves. Even though the FCC has established strict radio frequency (RF) emission guidelines, the wireless industry believes that it is important to operate cell sites at even lower RF and power emission levels than the government recommends. The emissions are set so low that items found in your home such as a microwave oven or a baby monitor operate at higher levels.

The consensus of the scientific community, both in the U.S. and internationally, is that the power from these wireless telecommunication antennas is far too low to produce health hazards. At a height of 80', there is very minimal EMF radiation.

A representative from the State Department of Health met with the school principal to address any and all concerns in respect to health risks of having this tower near the school. The State Department of Health reassured him that there is no exposure to health risks. The result has been quite positive and the community and school faculty is in unanimous support of this project.

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Fax: (808) 596-2660
615 Piikoi St Ste 100
Honolulu, HI 96814

Thank you again for voicing your concerns to us, as well as offering your support for our project and service. Most of all, thank you for your patience. We appreciate your comments and your loyalty towards VoiceStream, and we share in your desire to keep Hawaii beautiful.

Sincerely,

Roy K. Irei
Site Development Manager
VoiceStream PCS II Corporation
An affiliate of T-Mobile USA

THE OUTDOOR CIRCLE
1314 South King St., Suite 306 • Honolulu, HI 96814
Phone: 808-593-0300 Fax: 808-593-0525

January 2, 2003

Mr. Roy Irei
VoiceStream PCS II Corp.
615 Pi'ikoi Street, Ste. 100
Honolulu, HI 96814

RE: Draft Environmental Assessment
VoiceStream Wireless Cellular Communications Site at Kalihi Elementary School

Dear Mr. Irei:

Thank you for sending us the above referenced Draft Environmental Assessment (DEA). We have reviewed the document and offer the following comments/questions for your review and response:

Why is the transmittal attached to the DEA stating that the approving agency for the project is the State of Hawai'i, Department of Accounting and General Services, but the OEQC Environmental Notice proposes the approving agency as the City and County of Honolulu, Department of Planning and Permitting?

Please explain why VoiceStream does not plan to co-locate with other providers. This would minimize the overall negative visual impact created by these towers.

The photo simulation of the Stealth Pine Tree Tower (figure 5) does not blend in with the environment and instead is quite a bit taller than the surrounding vegetation. VoiceStream should commit to more plantings at the base of tower to make it blend with its environs.

We would like you to provide details about the landscaping which will camouflage the six foot high chain link fence surrounding the stealth pine. Without landscaping, the project site will be unsightly.

According to Hawaii's Revised Statutes, Chapter 343, a Draft Environmental Assessment should contain an analysis of a project's effects which include "the sum of effects on the quality of the environment, including actions that irrevocably commit a natural resource, curtail the range of beneficial uses of the environment, are contrary to the State's environmental policies or long-term environmental goals as established by law, or adversely affect the economic welfare, social welfare, and cultural practices of the community and State." The

information in this DEA is insufficient to determine a finding of no significant impact as is drawn in the conclusion of the document. For example, the DEA lacks a discussion regarding the potential health effects of communication towers in general on their surroundings. This proposal calls for the placement of a wireless cellular site at an elementary school yet no studies are cited detailing the health effects these towers might have on the students and teachers at the school.

In addition, The Outdoor Circle does not feel that a cellular tower should be designed to look like a tree. We believe that cellular service providers should be required to make their cellular sites blend with the environment. There are cell site designs on the mainland (and even a few in Hawai'i) where the designers have gone out of their way to blend the site into its surroundings. We do not believe that erecting an 80-foot stealth pine tree is the way to accomplish this goal.

In conclusion, we do not believe this Draft Environmental Assessment contains enough information on which to make a finding of no significant impact. More information must be provided.

Thank you for the opportunity to comment.

Sincerely,

Mary Steiner
CEO

cc: City & County of Honolulu, Department of Planning & Permitting
Office of Environmental Quality Control

T-Mobile

March 26, 2003

Mary Steiner
The Outdoor Circle
1314 South King Street, Suite 306
Honolulu, Hawaii 96814

Re: Draft Environmental Assessment
VoiceStream Wireless Telecommunication Facility
at Kalihi Elementary School

Dear Ms. Steiner,

Thank you very much for your comments on our proposed antenna project at the Kalihi Elementary School. VoiceStream PCS II Corporation takes community response into consideration at every stage of our planning and building process. This type of approach keeps us constantly looking for ways to solve the difficult task of balancing community concerns with the demand from our customers for quality service. In today's world wireless phones have become an essential service – whether helping with homeland security or keeping families in touch with one another.

I have not seen the attached transmittal that was attached to the DEA, which was probably prepared by the Accepting Agency, City & County of Honolulu, Department of Planning and Permitting. They are possibly referring to leasing of the ground space which needs to be approved by the State of Hawaii and a Conditional Use Permit – Minor and a zoning waiver must be issued by the City & County of Honolulu, Department of Planning & Permitting prior to construction of the facility.

It is our intention to co-locate on to existing towers whenever possible. Kalihi Valley does not have an existing tower for us to co-locate onto. We've looked at and proposed to co-locate onto an existing HECO power pole on the mountaintop in Kalihi Valley but was opposed by the Kalihi Valley community. The selected location and design of the site was the alternative solution after reviewing several proposals with the community.

Main: (808) 593-0600
Fax: (808) 596-2660
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Honolulu, HI 96814

The photo simulation of the pine tree was not intended to show exactly how the site will look but more of general feel of what it will look like. We lightened the color of pine tree so that the location of pine tree can be seen from the photo. The actual height of the pine tree will be approximately 15 to 20 feet taller than the existing Ironwood trees. See attached for a better simulation, the base of the pine tree will not be visible from the highway.

There is an extensive amount of vegetation at the proposed site. The height of the brushes in general vicinity of the proposed project area varies from approximately 5 to 15 feet in height and this should cover the proposed 6 feet high fencing. Should the vegetation be destroyed or removed during construction, we will replace it with landscaping to camouflage the 6 feet high fence.

South Pacific Geotechnical, Inc., conducted an extensive environmental research on this proposed project. It is stated in their research that the proposed project will not have a significant environmental effect or impact as defined by Hawaii Administrative Rules, Department of Health, Title 11, Chapter 200, Subchapter 2. The State of Hawaii, Historic Preservation Division, the Historic Hawaii foundation and the Office of Hawaiian Affairs have substantiated the determination of no significant environmental effect. In addition, the Kalihi Valley Neighborhood Board No. 16 has unanimously approved the project. In response to the potential health effects of the communication towers in general on their surroundings, VoiceStream PCS II Corporation is licensed with the Federal Communications Commissions (FCC) and we comply with very strict emission guidelines established by them.

It is important to understand that cellular service is nothing more than radio waves. Even though the FCC has established strict radio frequency (RF) emission guidelines, the wireless industry believes that it is important to operate cell sites at even lower RF and power emission levels than the government recommends. The emissions are set so low that items found in your home such as a microwave oven or a baby monitor operate at higher levels.

The consensus of the scientific community, both in the U.S. and internationally, is that the power from these wireless telecommunication antennas is far too low to produce health hazards. At a height of 80', there is very minimal EMF radiation.

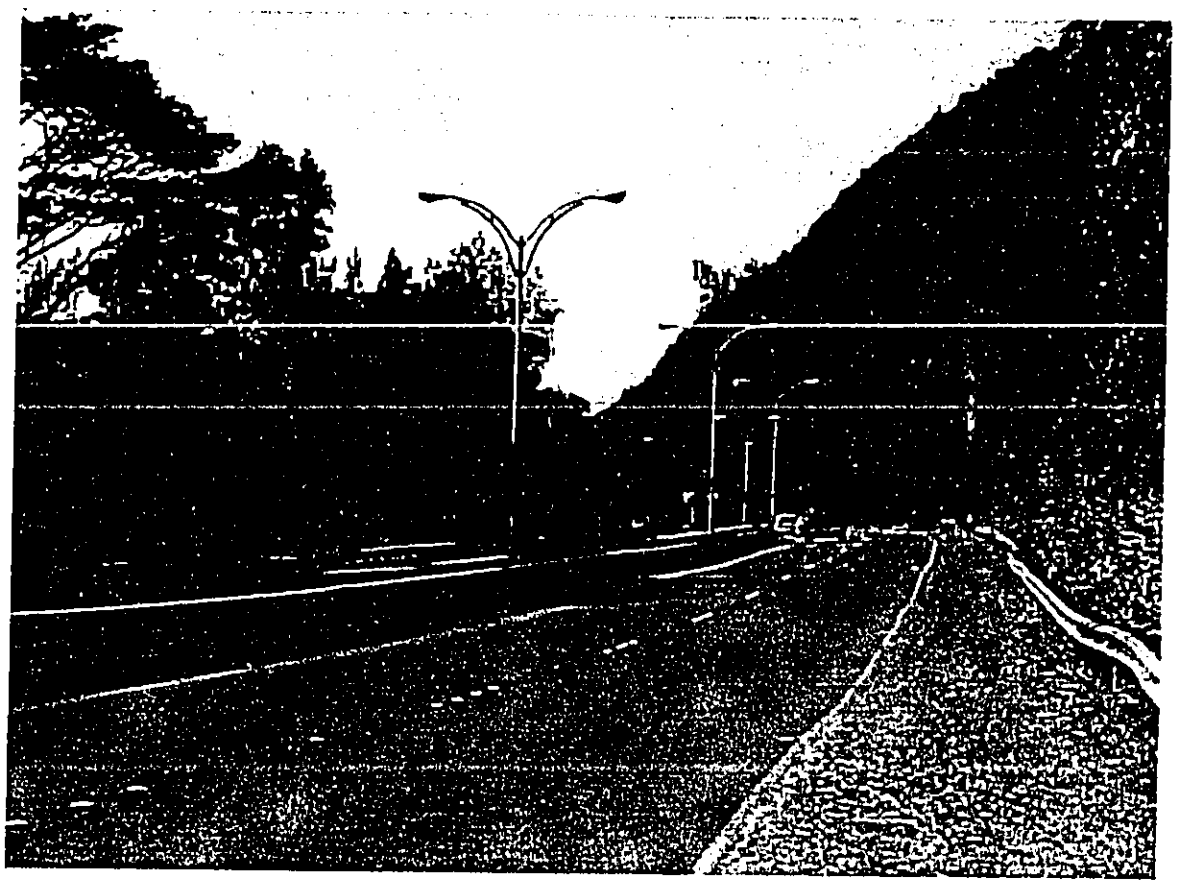
A representative from the State Department of Health met with the school principal to address any and all concerns in respect to health risks of having this tower near the school. The State Department of Health reassured him that there is no exposure to health risks. The result has been quite positive and the community and school faculty is in unanimous support of this project.

It is generally our preference to construct a standard monopole telecommunication site. The community and the Kalihi Valley Neighborhood Board suggested that the "stealth" pine tree concept be used at this project. This is something that the community wanted and we are willing to work with them.

Thank you again for voicing your concerns to us, and hopefully we've provided you the information that you were searching for and understand our justification. We appreciate your comments and share in your desire to keep Hawaii beautiful.

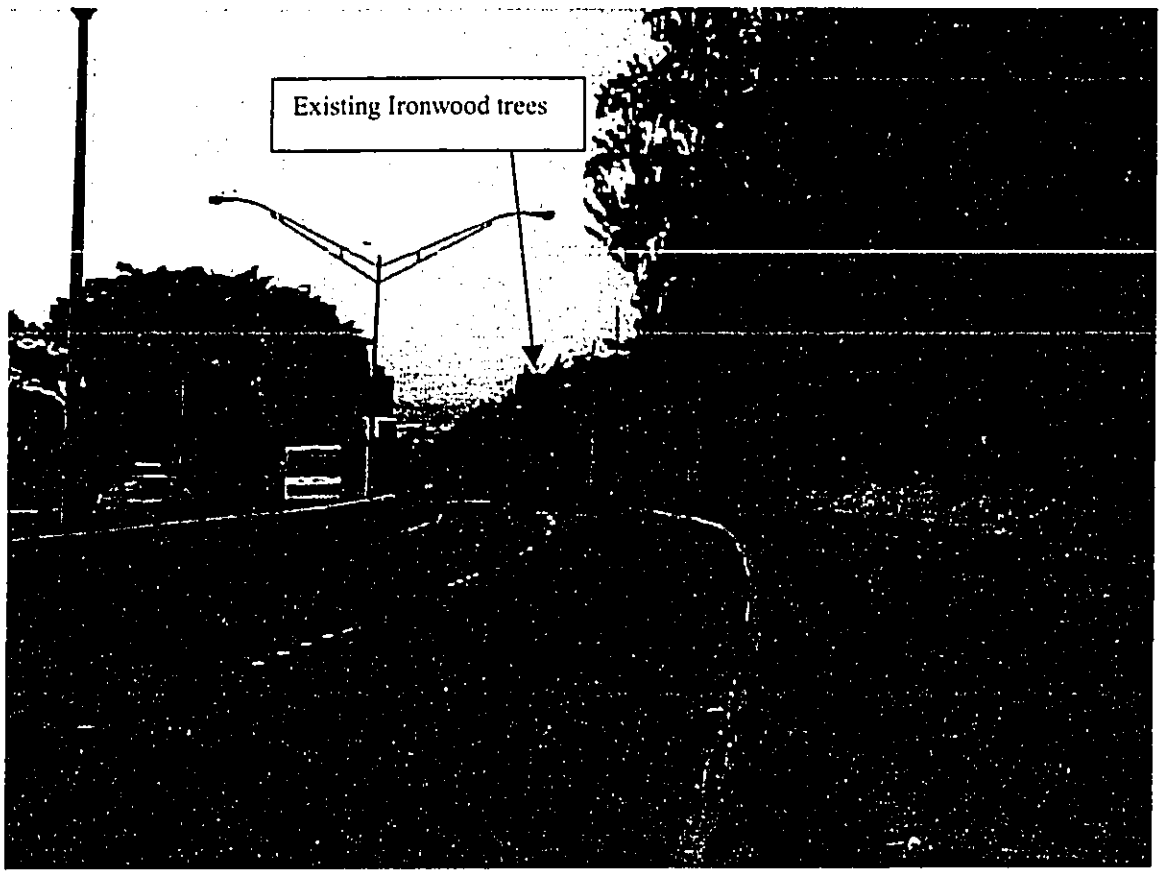
Sincerely,

Roy K. Irei
Site Development Manager
VoiceStream PCS II Corporation
an affiliate of T-Mobile USA



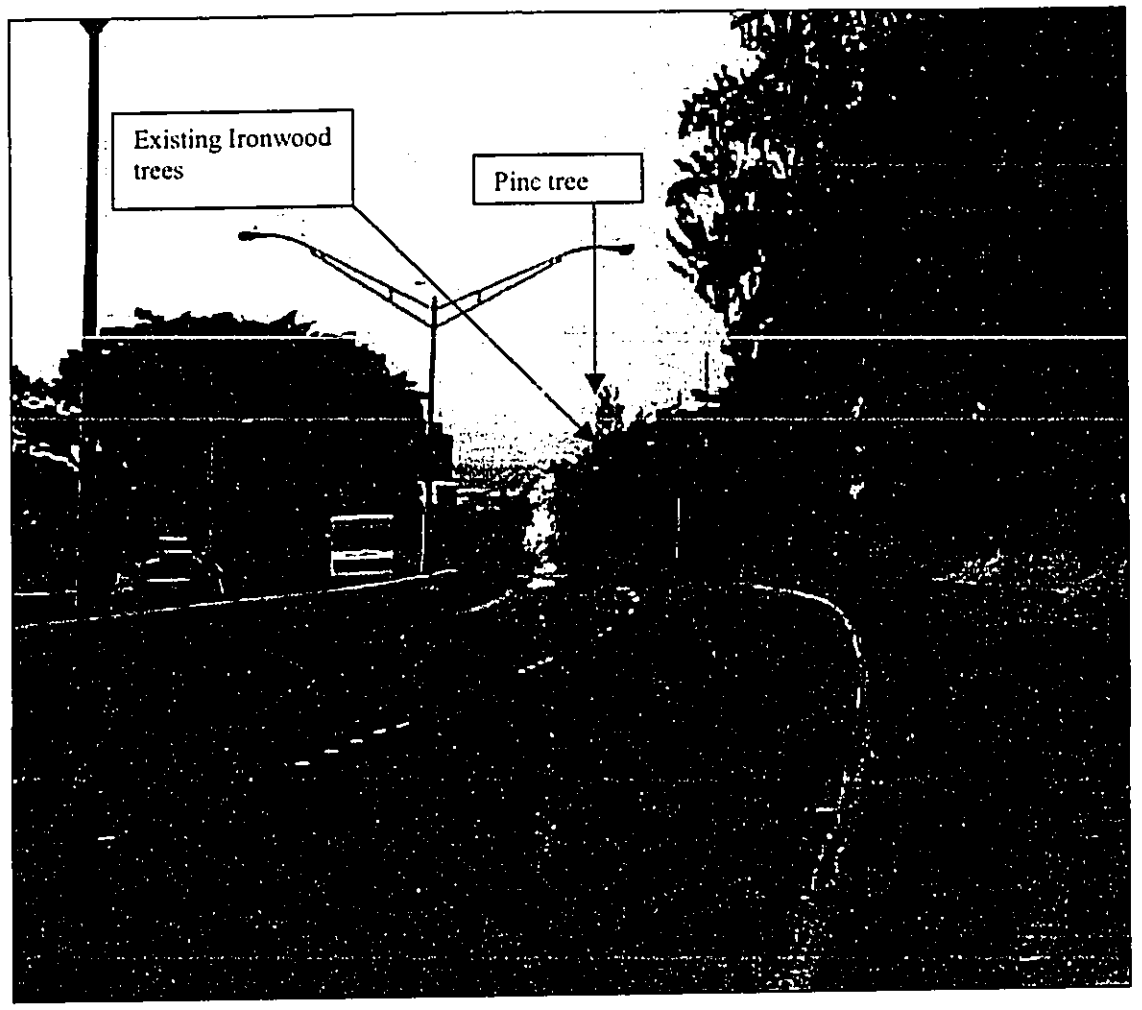
The photo was taken from Likelike Highway heading town bound approximately ½ mile after the Burmeister Bridge. The proposed project site cannot be seen from this location and up towards the Wilson Tunnels.

Exhibit A

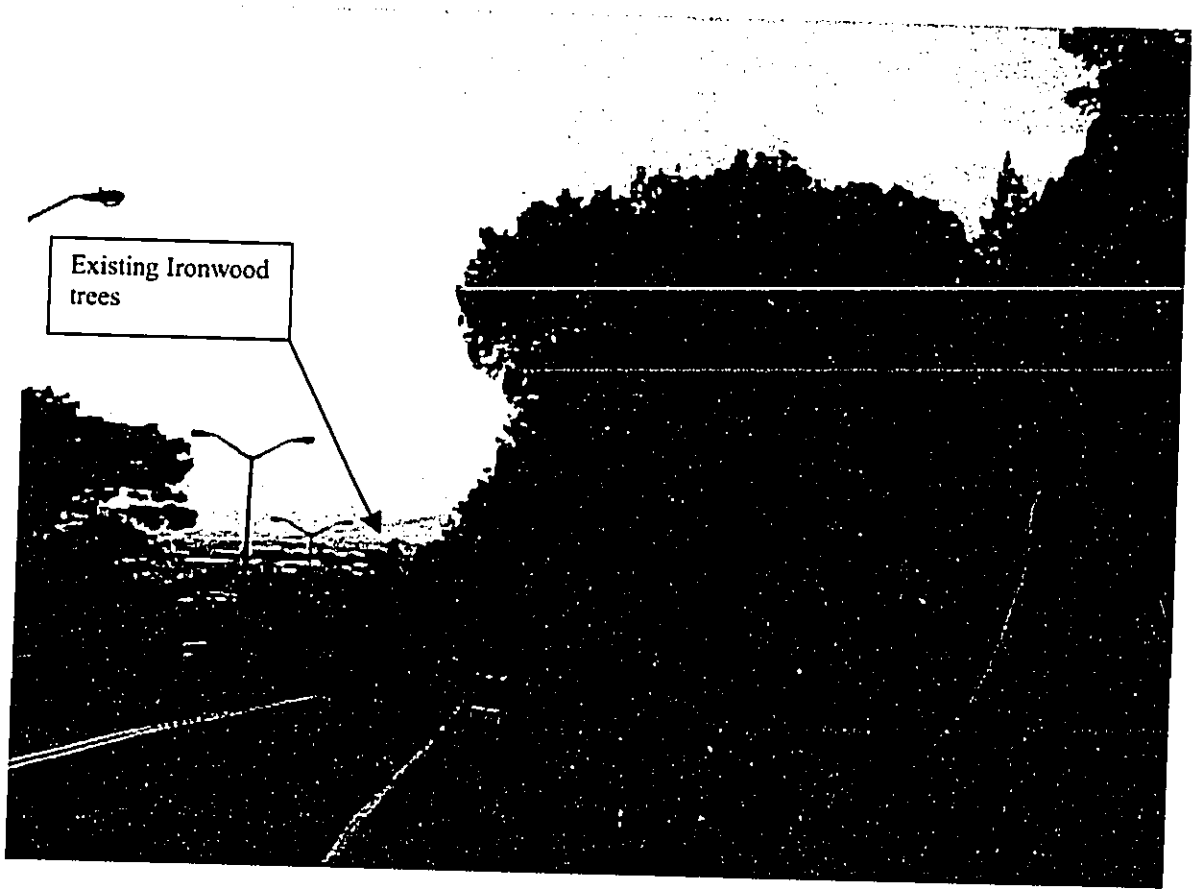


This photo shows the view heading towards town on Likelike Highway just fronting the Department of Transportation Testing Lab. The arrow indicates the proposed project location where there are existing Ironwood trees. See next page for simulation (Exhibit B-2).

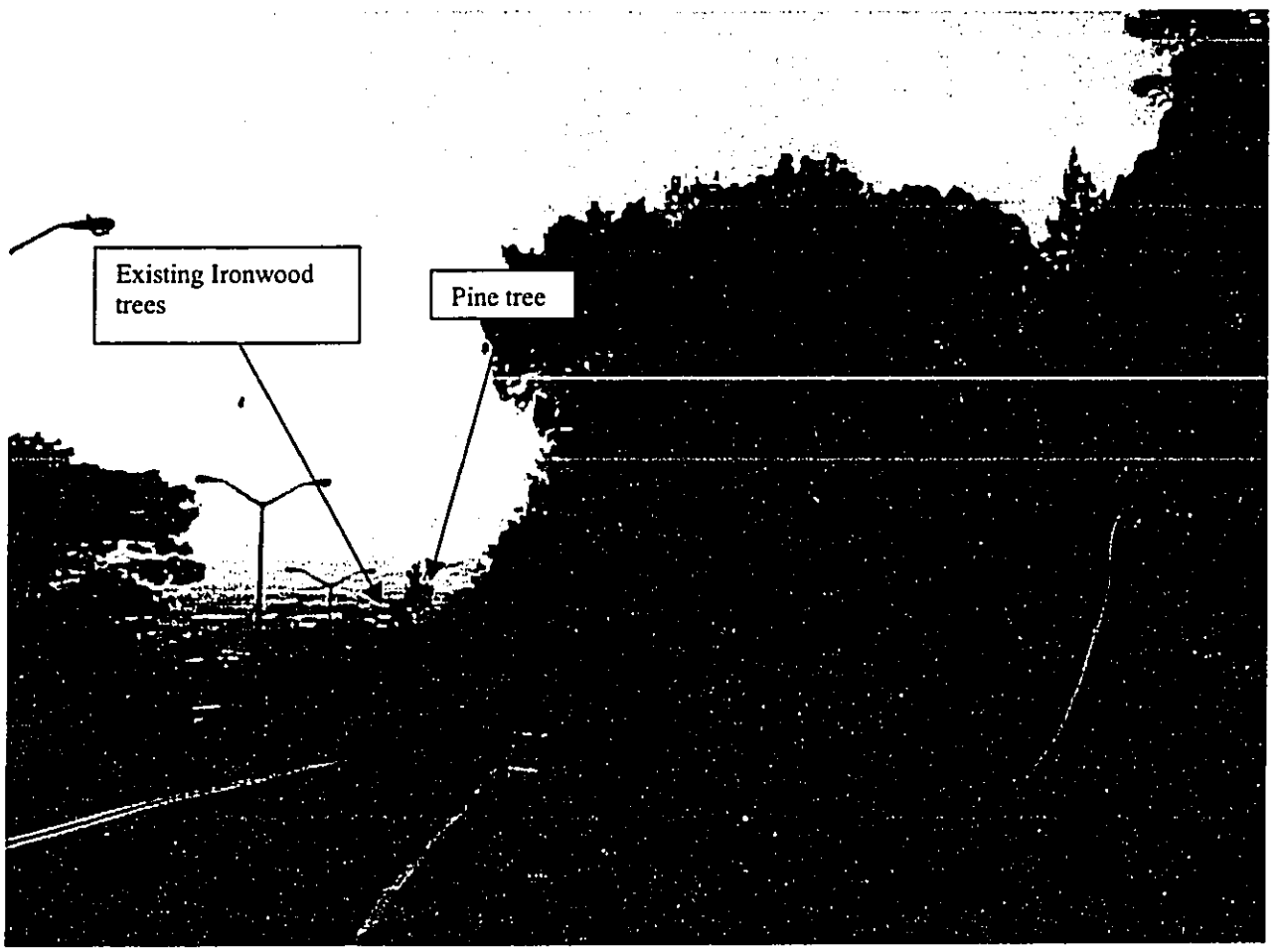
Exhibit B-1



This photo shows the view heading towards town on Likelike Highway fronting the Department of Transportation Testing Lab. The "Stealth" pine tree will blend in with the other Ironwood trees in the proposed project area. Only the top 30 feet of the pine tree will be visible from this location.

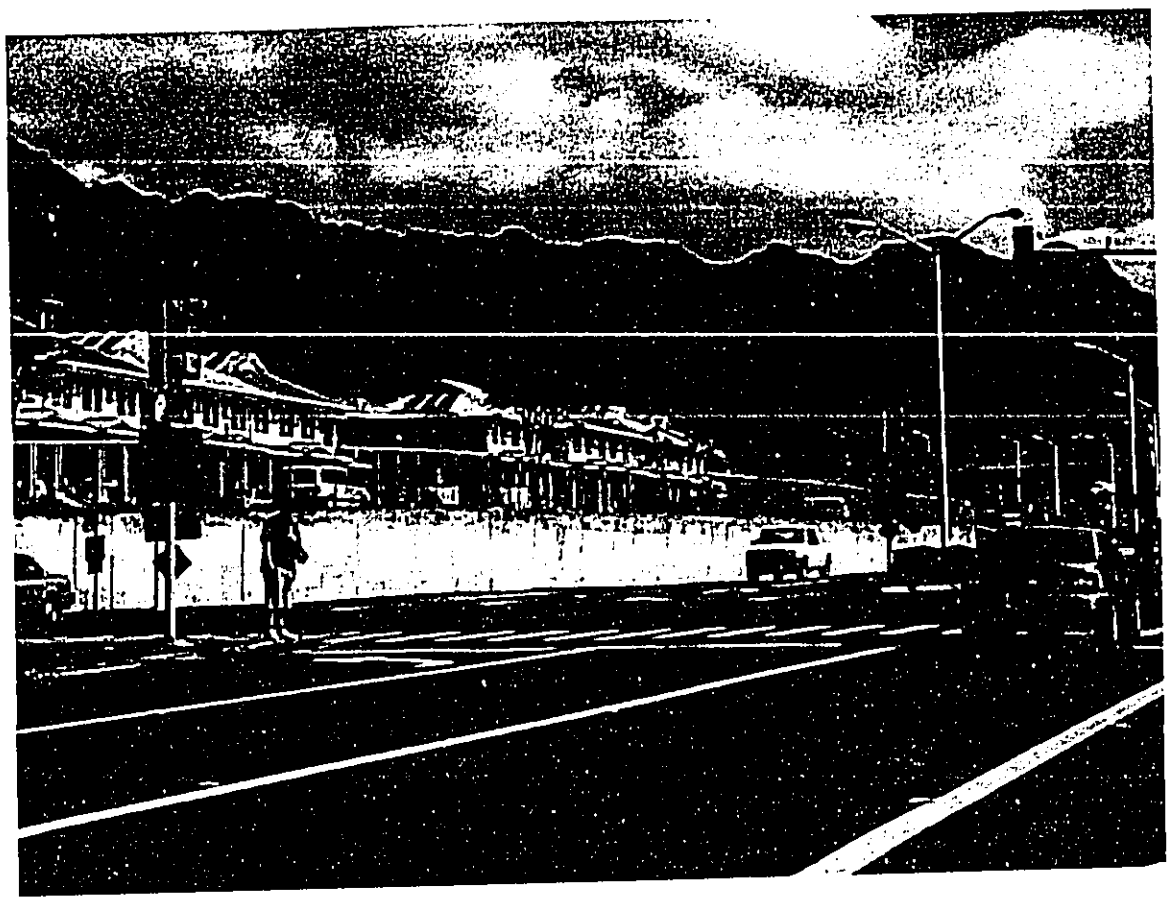


This photo shows the view heading town bound on Likelike Highway just before the runaway truck ramp. The arrow indicates the proposed location of the project area within the area of the existing Ironwood trees. See next page for simulation.



This photo shows the view heading town bound on Likelike Highway just before the runaway truck ramp. The "Stealth" pine tree will blend in with the other Ironwood trees in the proposed project area. Only the top 30 feet of the pine tree will be visible from this location.

This photo was taken from the intersection of Likelike Highway and School Street. The arrow indicates the approximate area of the proposed project site. The pine tree will not be visible from any location of School Street.



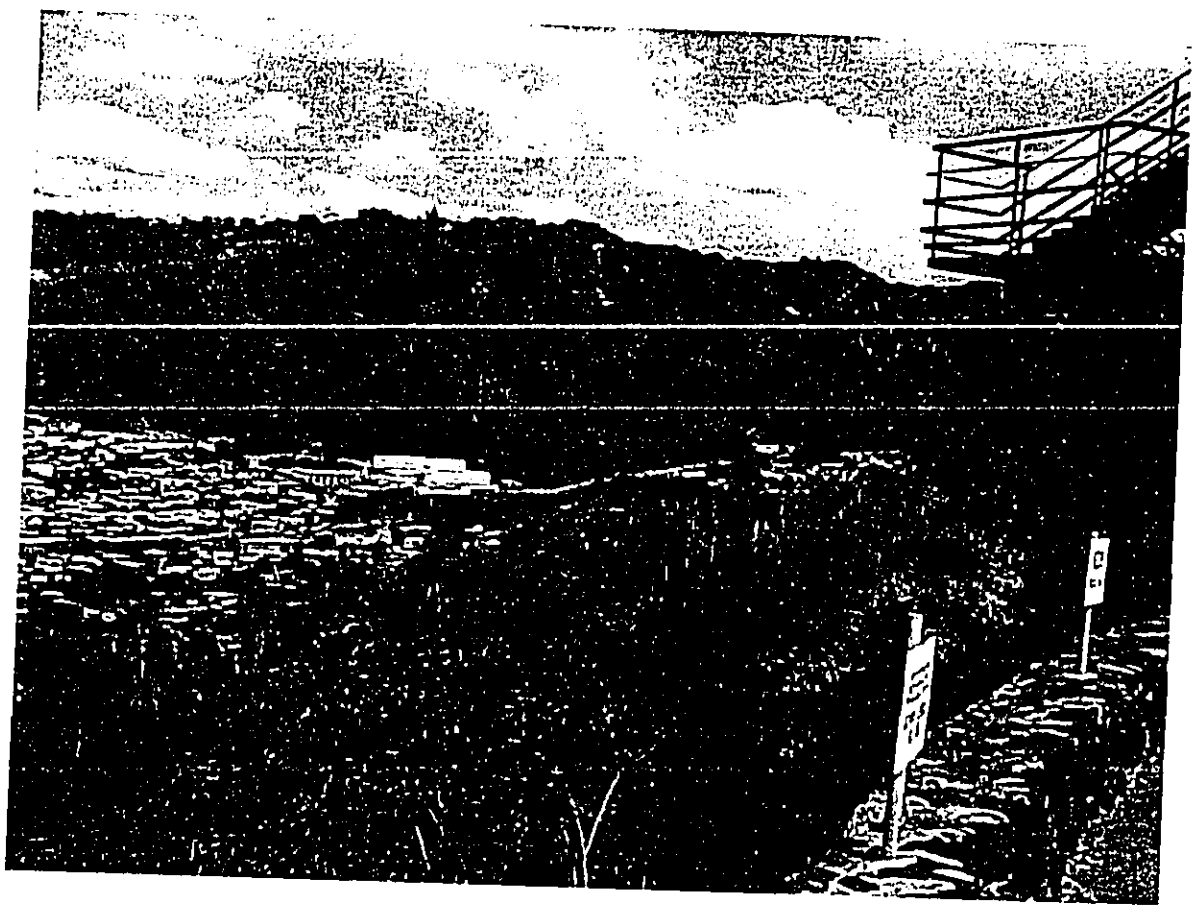
This photo is taken from the intersection of Likelike Highway and Alu Street. Please note that the proposed project will not be visible from this location.

Exhibit E

This photo is taken from the intersection of Likelike Highway and Nalanieha Street in Kalihi Valley. The arrow indicates the proposed location of the project site within the vicinity of the existing Ironwood trees.

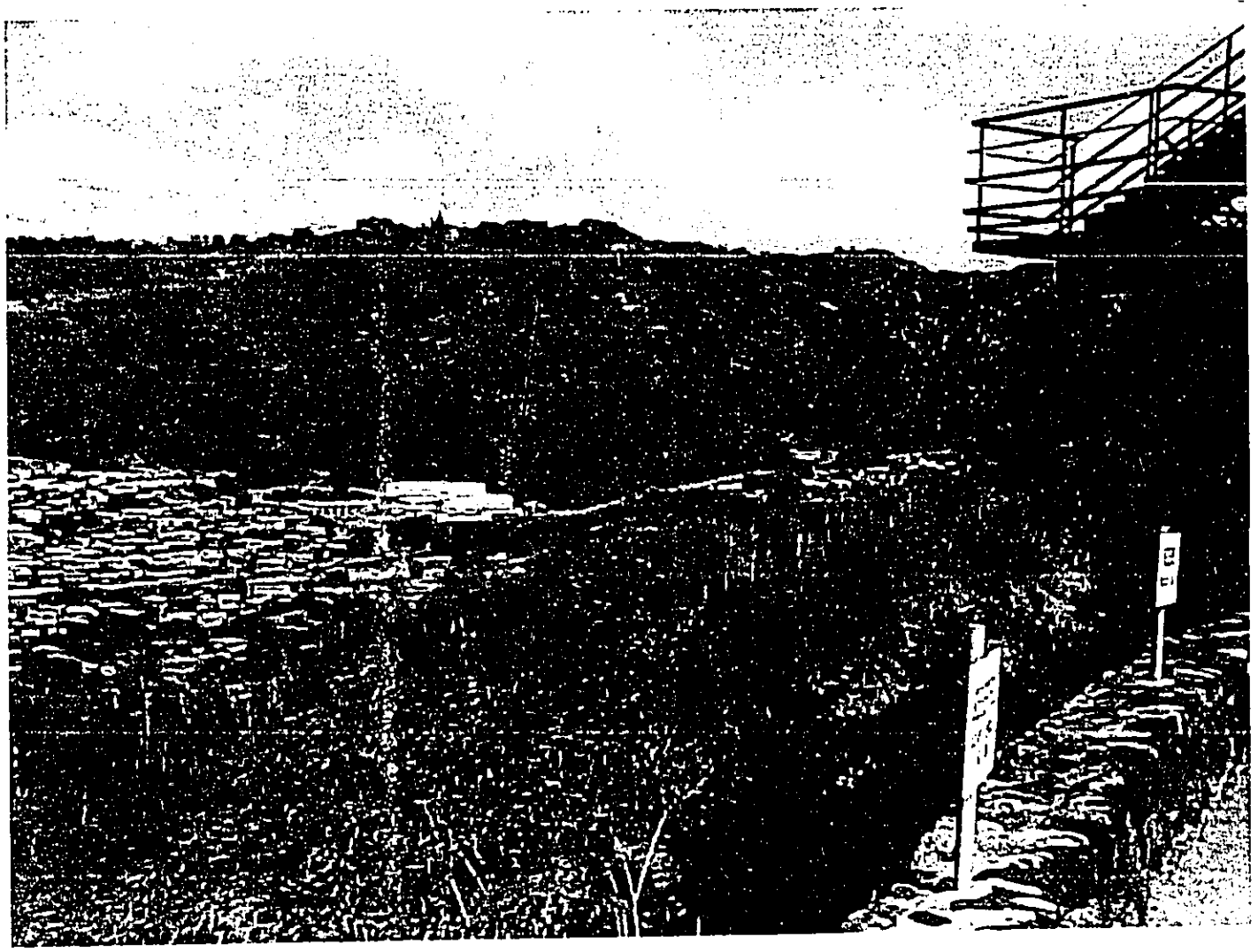
Exhibit F-1

This view is from the intersection of Likelike Highway and Nalanieha Street. The arrow points to location of the pine tree simulated into the photo. The pine tree will blend in with the backdrop of the mountain and its environment.



This photo is taken from the campus of Kamehameha Schools Bishop Estate. The arrow indicates the location of the proposed project site. Please note that the existing 50 feet Ironwood trees are barely noticeable from this location as it blends in with the environment surrounds this area.

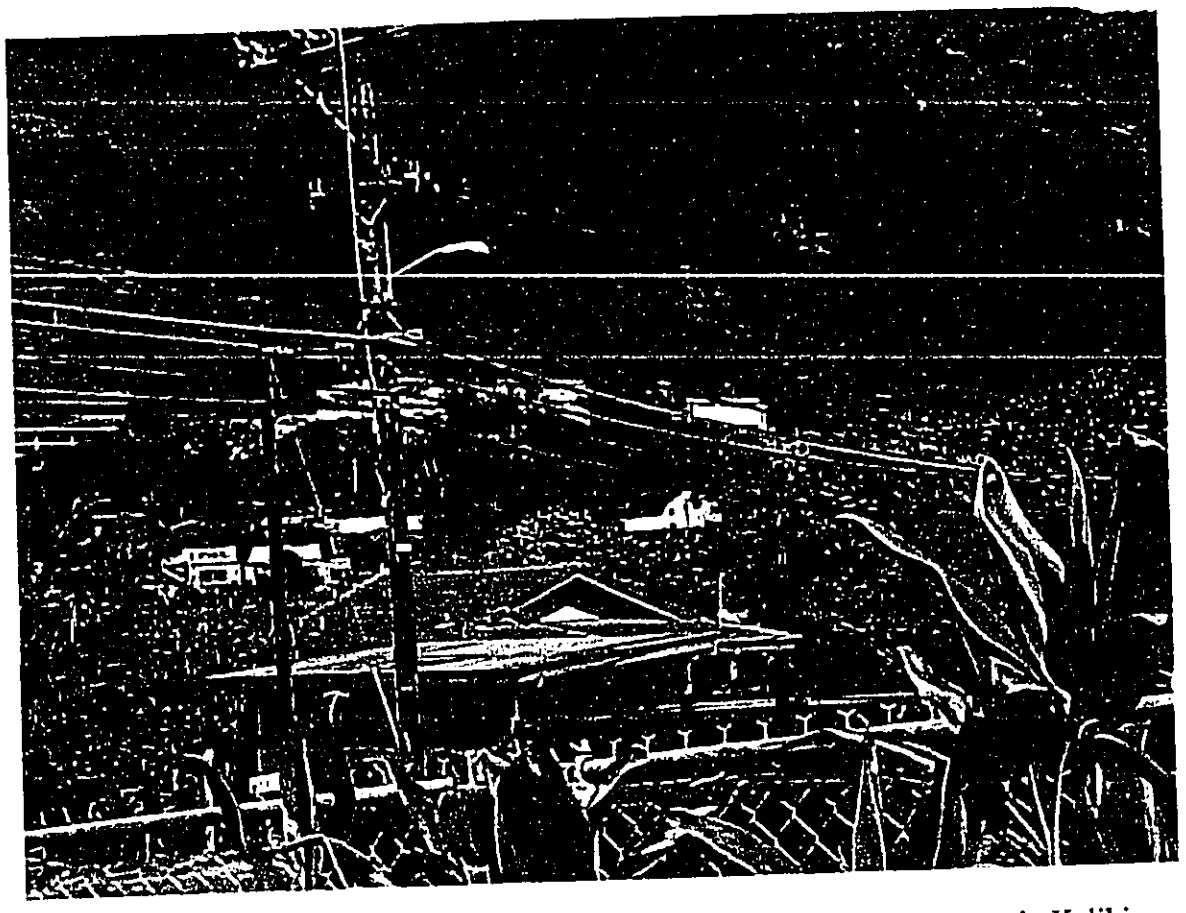
Exhibit G-1



This photo was taken from the campus of Kamehameha Schools. The arrows marks the location of the proposed project site. The simulation shows that the "Stealth" pine tree will blend in with the environment. The backdrop of the mountain and its vegetation will further blend its color.

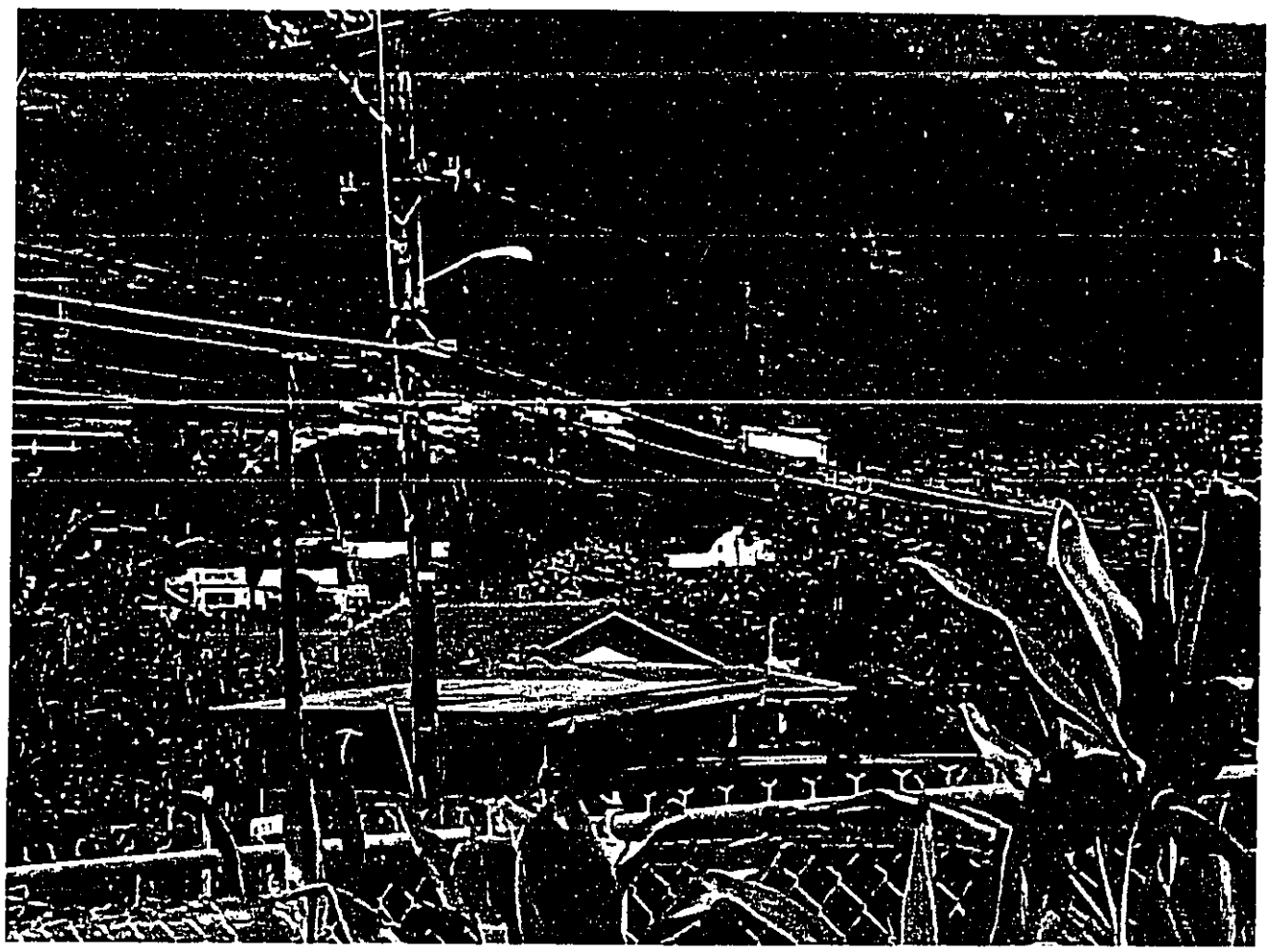
This photo was taken from Kamehameha IV Road in Kalihi Valley. Please note that the proposed project will not be visible from this Road.

Exhibit H



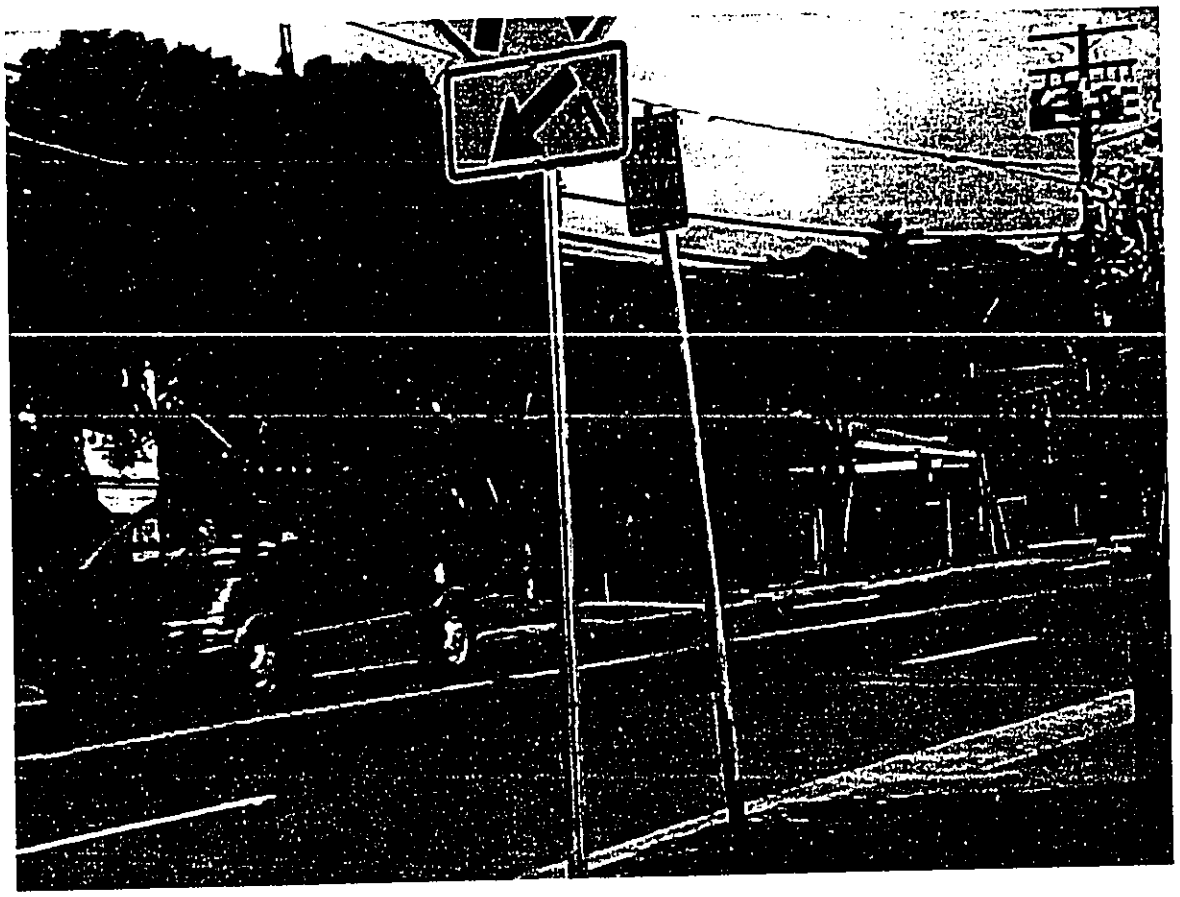
This photo was taken from the intersection of Kalihi Street and Akone Street in Kalihi Valley. Arrow indicates the location of the proposed project area.

Exhibit I-1



This view is from the intersection of Kalihi and Akone Streets. The arrow points to location of the pine tree simulated into the photo. The pine tree will blend in with the backdrop of the mountain and its environment.

Exhibit I-2

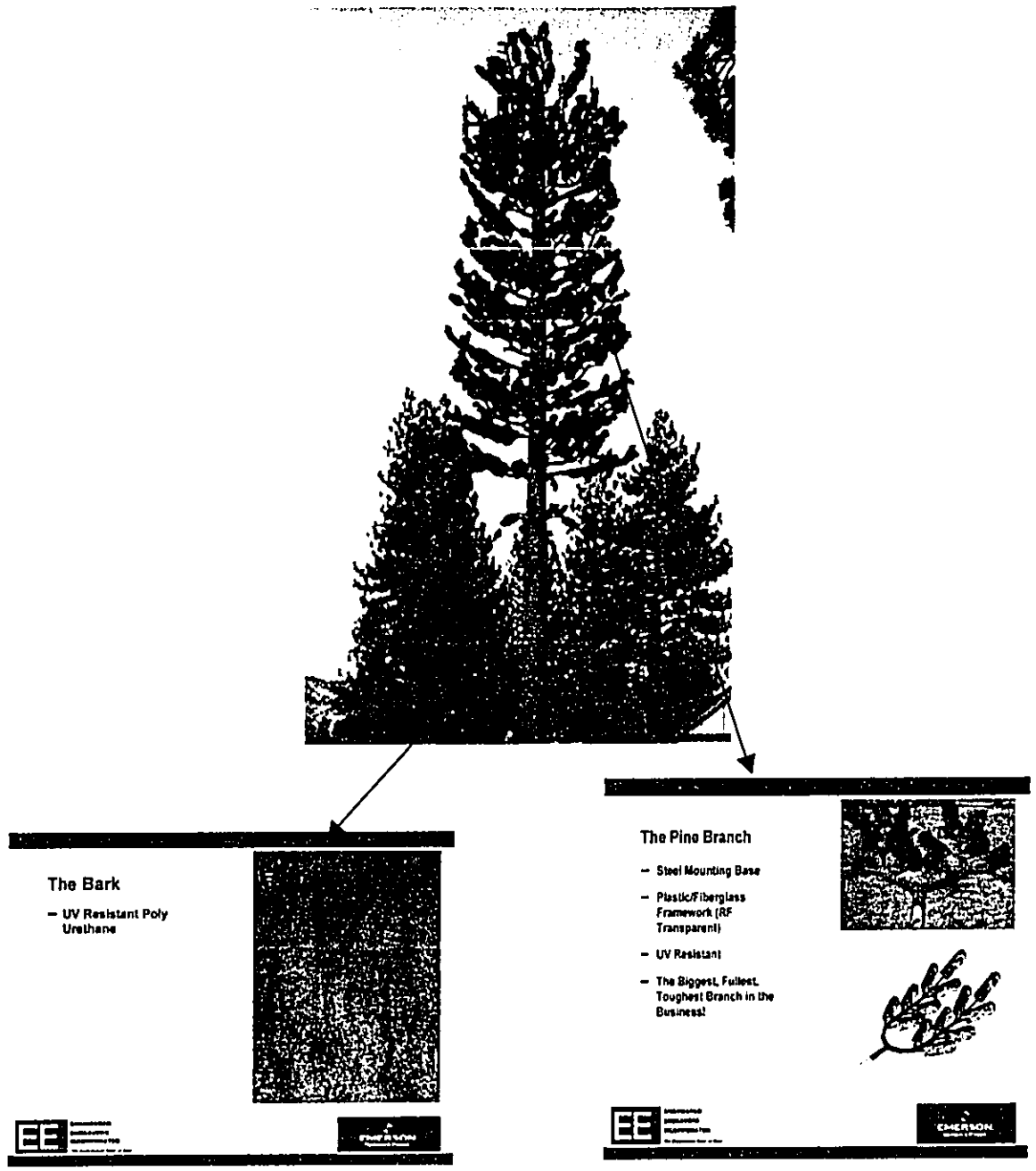


This photo was taken from the intersection of Kalihi and Machado streets in Kalihi Valley. The arrow marks the approximate area of the proposed project site. Please note the "Stealth" pine tree will not be visible from the majority of Kalihi Street.

Exhibit J

This photo was taken from the intersection of Wilson and Jennie Streets. The arrow indicates the approximate area of the proposed project location. View of the "Stealth" pine tree will not be visible from the general vicinity of this intersection.

Exhibit K



Material composition of the "Stealth" pine tree.

The major component of the pine tree will be the galvanized steel monopole with the UV resistant poly urethane bark covering the bottom 40' of the pole. The upper 40' will be painted brown to simulate the color of the bark.

Exhibit L

Waiakea High School

Dan Banks, Business Department
155 West Kawili Street
Hilo, Hawaii 96720-5038

Fax & Telephone (808) 974-4888

December 18, 2002

VOICESTREAM PCS II CORP
615 Pi'ikoi Street Suite 100
Honolulu, HI 96814

Dear Voicestream People:

I saw the recent article in the Honolulu paper and copied it for one of my classes. I asked them to read and to respond to this issue.

We understand it can be a devisie issue within a community and I tried to give the students some pros and cons initially ... but left it up to them to make their own decision on whether or not to support such a structure.

I personally think that you are making a sincere effort to alleviate what some consider an eyesore. I think your ingenious ideas deserve a kudo – so much of our society now use and some depend on celluar technology that we need towers to disseminate or transfer signal information.

I support your project and wish you success in completing it – whether or not it is disguised.

Sincerely,

Dan Banks
Business Department Chair

Voicestream PCS 2 Corp.

I have a couple of opinions and questions about the fake cellular tree story that was printed in the Honolulu Advertiser. I think that the "tree" would bring much needed money to the school and that the children would benefit greatly, but is the statement that exposure to cell phone radiation increases the risk of cancer true? If it is then I suggest that the company move the "tree" away from the school, since the school is elementary level. And wouldn't the "tree" provoke the children to climb it? If the company can get rid of the more dangerous aspects of having the tower at the current proposed location, then I fully support it, but until then I am against it.

Anonymous

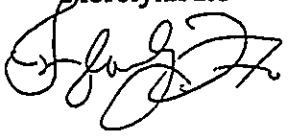
December 12,2002

Dear VoiceStream PCS II Corp.

Based upon the information given in your article I do agree with the stealth pine tree, yet disagree for the fact of the radio frequency emissions. I'm happy your company is focusing as much as you possibly can towards the community, though isn't there any other way your planting of these pine trees be more distant from schools? Lawsuits could extremely effect your company from angered parents. What if you spend more money to these adults rather on the pine tree plan itself? Couldn't it be possible to keep radio antennas inside flag poles and such? These are just my only concerns towards the people. If I was in that position, I wouldn't want radiology near to me which can increase the risk of cancer.

Sincerely,

Florelynn Ito



December 12, 2002

VoiceStream PCS II Corp.
615 Pi'ikoi Street Ste. 100
Honolulu, Hawaii 96814

To Whom It May Concern:

While reading the Honolulu Advertiser, I came upon the article titled "Fake tree may hide new cellular tower." I would like to voice my concern for the students. As a student myself, how safe is it having a cellular tower so close to the school? It is know that cell phone towers emit a type of radiation that is alleged to cause cancer. If your son or daughter were attending classes there, would you like her/him to be exposed to that type of medical risks?
I also feel that you are taking advantage of the economic situations in the area. It is common knowledge that the schools in Kalihi need all the income sources that they can get. It seems that the effort that you are investing doesn't do an effective job of masking the tower. You also acknowledge that there are no other pine trees, and no trees anywhere near the height of eighty feet. Doesn't that defeat the purpose of having a tower that is a tree but sticks out like a sore thumb.
I feel that you should survey the community through calls to see weather they want the tower. If you get their approval, then there may be no need to mask it. The pine tree would just make the situation worse. Also the six-foot fence would also just make it more obvious.

Sincerely,

Kiera Yabusaki

Kiera Yabusaki

December 12, 2002

VoiceStrream PCS II Corp.
615 Pi'ikoi Street., Suite 100
Honolulu, Hawaii 96814

To Whom It May Concern:

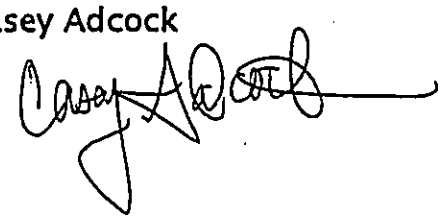
After reading the Honolulu Advertiser I came across an Article titled "Fake tree may hide new cellular tower", and found it to be very interesting! I was very surprised to hear of such a thing because of its location and where abouts.

Although I think this was a good idea I feel because the school and the roads are so bent out of shape that the money could have been used for something more helpful. Also I haven't seen the tree yet but I'm guessing it doesn't blend in with its surroundings. Because the area has such poor income I don't think the money was spent wisely.

Thank you so much for giving me the opportunity to voice my opinion and I hope these comments I have presented will add to your knowledge.

Sincerely,

Casey Adcock



December/12/02

Voice Stream Pcs II Corps
615 Pi'ikoi st, Suite 100
Honolulu, HI 96814

Dear, Whom it may concern

I think that your intentions are good, but I just don't think that you should put this 80 foot metal tree near children because it is a safety hazard, and what are you guys going to do with the tree when you cant use it no more , how are u going to throw it away and get it out of the school. So thank you for your time, and please consider my thought.

Thank you ,
Kari Okano
Kari Okano

Voicestream Wireless

After reading this article about building a cellular tower in an elementary school, I feel that it will somewhat be a good idea. This would help the school a lot because of the money that would be coming in from the rent. If this were to happen at my school, I would be all for it. My school would be able to buy more new things like textbooks and fixing up places in the campus that seems to be damaged with the rent money. I think that hiding the cellular tower with a fake tree is a good idea. It will really blend in with other trees, except for the fact that it will be very outstanding because of its height. I feel that people won't be bothered by a cellular tower being built if a fake tree covers it up because maybe they won't know that it's there. People who use the cell phone a lot will be happy also because of the better service.

Sincerely

Lena Hamakawa

Lena Hamakawa
Waiakea High School

December 12, 2002

VoiceStream PCS II Corp.
615 PiiKoi St.
Suite 100 Honolulu, HI 96814

To Whom It May Concern:

I totally agree wit your plans to put this fake tree to hide the cellular tower on the school grounds. Benefits go both ways. The school is getting paid $1,200 a month in rent. This is really good for the school and community because Kalihi Valley is a poor neighborhood. Also cell phone users will have better service and reception. With the more and more good plans and opportunity to get cellular phones, it is more likely to have more fake trees hiding towers. I like this idea an wish there was a tower on my school.

Sincerely,

Lena Ho

Lena Ho

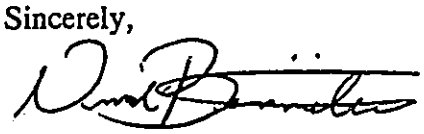
December 12, 2002

Voice Stream PCS II Corp.
615 pi'ikoi St.
Suite 100 Honolulu, HI 96814

To whom it may concern

In my opinion I think it would be a great idea to hide the huge antenna and offer the school rent money, but at the same time it would create huge health problems and chaos among the residents in the Kalihi Valley Neighborhood. The stealth tree will benefit towards the outlook appearance of the neighborhood due to the fact it is a really small area. I think the stealth tree is the best solution towards making the huge antenna non-obtrusive.

Sincerely,



Nick Bermudes
Waiakea High School

Voice Stream PCS II Corp.
615 Pi'ikio Street
Suite 100 Honolulu, HI 96814

To whom it may concern,

I saw this article in the Honolulu Advertiser, and it struck my attention. I'm from New Jersey, and I have lived in Hawaii from about four months. In New Jersey, and we have these 80ft pine trees. These antennas don't cause any harm to the community. I think that the biggest thing is that it wouldn't blend in with the natural surroundings here. It seems that we need this antenna, because everyone has cell phones. If people oppose to this, then I think you should tell them to stop using there cell phone. They are the ones that are making you put this antenna up anyway. I don't that that having this antenna near Kaihi Elementary School is going to cause it any harm. It's also great that it will be giving the school extra money. To me this seems like a win- win situation. The cellular phone customers will be getting better service, and the school will have extra money.

Sincerely,

Courtney Dinges

Courtney Dinges
Waiakea High School

Dec. 16, 2002

Dear Voicestream PC,

I am Jastine Daquep, a senior at Waiakea High School. I have read your article about the new cellular tower. I'm for it. I'm a type of person who uses my cell often. I am never home and it replaces my house phone. A cell connection will do good. What I'm impressed the most was how you will cover up the atenna to lessen the visual effects. Having it undercover won't let people wonder and worry about radio active. Also having a fence around it will lessen harm. It will also do good for the school, helping to pay a monthly rate will help the school. Big time. One of my main questions are that when it is being built, just hope none of the students will be around and get hurt. I am for this cellular tower and I hope your project will turn out great.

Sincerely,

Jastine D

Done

My opinion on this siturtion is. Nuetral.
I think that both the pros and cons of the situation are equal. They Should put it ~~there~~ their because it would bring extra income to the School, but it says that radio frequency emissions leads to an increased risk of cancer. If they found that this is not true I would agree with them putting it there because eventually there will be one. I alsoagree with the fake tree idea because it is less of a eye sore.

T-Mobile

January 29, 2003

Mr. Dan Banks, Business Department
Waiakea High School
155 West Kawili Street
Hilo, Hawaii 96720-5038

Dear Mr. Banks and Students,

Thank you very much for your comments on our proposed antenna project at the Kalihi Elementary School. VoiceStream PCS II Corporation takes community response into consideration at every stage of our planning and building process. This type of approach keeps us constantly looking for ways to resolve the difficult task of balancing community concerns with the demand from our customers for quality service. In today's world wireless phones have become an essential service – whether helping with homeland security or keeping families in touch with one another.

Since there were a few unsigned letters, we would like to incorporate all of the responses in one letter.

Are there health hazards associated with living, working, playing, or going to school near a cellular phone or PCS antenna? – VoiceStream PCS II Corporation is licensed with the Federal Communications Commission (FCC) and we comply with very strict emission guidelines established by the FCC.

It is important to understand that cellular service is nothing more than radio waves. Even though the FCC has established strict radio frequency (RF) emission guidelines, the wireless industry believes that it is important to operate cell sites at even lower RF and power emission levels than the government recommends. The emissions are set so low that items found in your home such as a microwave oven or a baby monitor operate at higher levels.

The consensus of the scientific community, both in the US and internationally, is that the power from these wireless telecommunication antennas is far too low to produce health hazards. At a height of 80', there is very minimal EMF radiation.

If there are no other pine trees in this area, won't an 80' pine stand out? No. The Kalihi Elementary School is up against the side of the mountain. Directly behind the school the topography takes a steep turn upward nearly 1,000 feet. The hillside is covered with lush green vegetation ranging in height from 2' brush to 70' tall Iron Wood

Main: (808) 593-0600
Fax: (808) 596-2660
615 Piikoi St Ste 100
Honolulu, HI 96814

trees. The pine tree was chosen to be the type of tree that would best blend right into the background, in color and tree type.

Will the six foot fence stand out? In the area that we have proposed to build the tower, the fence would be hidden from view by the trees which umbrella the ground area. We have also made provisions to have the fence extend over the top of the area, to create a cage, so that no one would be able to enter the area.

What will be done with the tree when we are done with it? VoiceStream has stipulated in our agreement with the State, that we will remove the tower and return the land to useable form at the end of our lease term.

Why don't we poll the neighborhood to get Neighborhood Approval? We did better than polling – we met with people face to face. VoiceStream contacted neighbors surrounding the school property and invited them to attend any one of the six presentations that were given to the Neighborhood Board, the Principle and faculty of the school, as well as other community meetings. A representative from the State Department of Health met with the School principal to address any and all concerns in respect to health risks of having this tower near the school. The State Department of Health reassured him that there is no exposure to health risks. The result has been quite positive and the community and school faculty is in unanimous support of our project.

Timing of construction - It is our hope to start construction on this project during the summer break. The actual construction of the tree will take approximately 2-3 weeks.

In conclusion, we would like to add that VoiceStream PCS II has designed this low visual impact site to accommodate up to three wireless phone carriers antennas, as well as other small wireless antennas that might have future use. This "pine tree" will improve the quality of service for our customers.

Thank you again for voicing your concerns to us, as well as offering your support for our project and service. We appreciate your comments and share in your desire to keep Hawaii beautiful.

Sincerely,

Roy K. Irei
VoiceStream PCS
d.b.a. T-Mobile USA