STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT
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HONOLULU, HAWAII 96809

STAFF SUBMITTAL

COMMISSION ON WATER RESOURCE MANAGEMENT

September 27, 2011
Honolulu, Hawaii

Mediation or Binding Arbitration for Complaint/Dispute Resolution (CDR.2769.8)
Application for After-the-Fact Stream Channel Alteration Permit,
Stream Diversion Works Permit and Petition to Amend Instream Flow Standard (SCAP.2898.8)
Ainako Branch Stream, Hilo, Hawaii
TMKs: (3) 2-5-025:005, 014 and 006, 2-5-024:028, 029 and 045

APPLICANTS: Leslie Aina Weight 1000 Ainako Avenue Hilo, HI 96720	LANDOWNER: Same TMKs: (3) 2-5-025, parcels 005 and 014
(Robert) Scott Henderson 99 Kokea Street Hilo, HI 96720	Same TMK: (3) 2-5-025, parcel 006
COMPLAINANTS: Dr. David Jung 118 Koula Street Hilo, HI 96720	Same TMKs: (3) 2-5-024, parcels 028 and 029
Mrs. Dora Okazaki 80 Kokea Street Hilo, HI 96720	Same TMK: (3) 2-5-024, parcel 045

SUMMARY OF REQUEST:

1. Mediation or Binding Arbitration for Complaint/Dispute Resolution CDR.2769.8.
2. After-the-Fact (ATF) Application for Stream Channel Alteration Permit, Stream Diversion Works Permit (SDWP) and Petition to Amend Instream Flow Standard (PAIFS) (SCAP.2898.8), Ainako Branch Stream, Hilo, Hawaii, TMKs: (3) 2-5-025:005, 014 and 006; 2-5-024:028, 0029 and 045.

This after-the-fact application is in response to a complaint/dispute resolution CDR.2769.8 that was filed with the Commission by the complainants against the applicants.

LOCATION: See Exhibits: 1a. Location Map
1b. GIS Map
1c. TMK Map

On October 25, 2010, the complainants/plaintiffs complained to Commission staff about Ms. Weight's sluice/flood control gate that was restricting the amount of water in Ainako Branch Stream.

On October 28, 2010, Dr. David Jung, one of the complainants/plaintiffs, contacted Commission staff about setting up a hearing with the Commission regarding his complaint because the Third Circuit Court had referred his civil case to the Commission. This was the first instance when staff learned of the lawsuit.

On November 10, 2010, the Third Circuit Court issued an Order Denying the Plaintiffs' Motion for Summary Judgment Filed September 9, 2010, wherein it stated that "Plaintiffs have no claim under Art. XI §7 of the Hawaii Constitution," and referred the matter to "the Commission on Water Resources (sic) Management [which] has primary jurisdiction over Plaintiffs' statutory and common law claims."

On November 17, 2010, the Third Circuit Court approved a Stipulation and Order Re Stay All Proceedings (Civil no. 10-1-0192) between Mr. Carroll (attorney for the Plaintiffs) and Paul Alston (attorney for Defendant Weight).

On November 23, 2010, Commission staff met with Mr. Carroll, the plaintiffs' attorney, to discuss the Commission's Complaint/Dispute Resolution (CDR) process.

On December 10, 2010, Mr. Carroll filed a Complaint/Dispute Resolution, CDR.2769.8, with the Commission on behalf of David and Malinee Jung, Ronald and Dora Okazaki, Tamae Shindo, Norman Purves and Maren Hauschildt-Purves against Aina Weight regarding Ms. Weight's sluice/flood control gate that is diverting water from Ainako Stream to Ainako Branch Stream #1b and Ms. Weight's alterations to Ainako Branch Streams #1 and #2.

On December 30, 2010, Mr. Carroll filed an amended CDR.2769.8 with the Commission on behalf of his clients.

On January 5, 13, 20, and 25, 2011, Mr. Carroll made further amendments to CDR.2769.8 that was originally filed with the Commission on December 10, 2010. See Exhibit 3.

On February 3, 2011, Commission staff mailed CDR.2769.8 to the applicants, Henderson/Weight, for their response.

On February 22, 2011, Mr. Henderson responded in writing to CDR.2769.8. See Exhibit 4.

On March 10, 2011, Commission staff conducted a field investigation to follow up on CDR.2769.8 and met with:

1. The applicants in the morning and informed them that they must apply for an after-the-fact SCAP for recent work done to the Ainako Branch Stream #1, SDWP and PAIFS for water diverted to three ornamental ponds along Ainako Branch Stream.
2. The complainants, David and Malinee Jung, Ronald and Dora Okazaki, Cal and Tamae Shindo, in the afternoon.

On May 10, 2011, Commission staff sent draft Field Investigation Reports (Report):

1. FI2011031001 Ainako Henderson to the applicants and their lawyers for their review and comment.
2. FI2011031002 Ainako Jung to Dr. Jung and Mrs. Okazaki for their review and comment.

On May 11, 2011, the applicants submitted an after-the-fact application for a SCAP, SDWP and PAIFS, SCAP.2898.8, for Ainako Branch Stream #1 to the Commission as directed by staff.

On May 12, 2011, Dr. Jung emailed a statement from Ronald and Dora Okazaki relating to draft Report FI2011031002 Ainako Jung and a copy of a letter written by Mr. Henderson that was distributed to property owners along the main Ainako Stream alerting them to the possible reduction in Ainako Stream flow due to Dr. Jung's complaint about the sluice gate diversion.

BACKGROUND:

On January 5, 2010, (Robert) Scott Henderson called Commission staff about registering a rock dam diversion and sluice/flood control gate on Ainako Stream in Hilo, Hawaii.

On April 26, 2010, Mr. Henderson submitted a late Registration of Stream Diversion Works and Declaration of Water Use for a dam diversion and sluice/flood control gate on Ainako Stream, REG.2680.8, on behalf Ms. Leslie Aina Weight. See Exhibit 2.

On May 10, 2010, attorney Bill Tam, formerly with Alston Hunt Floyd & Ing, also submitted a late Registration of Stream Diversion Works and Declaration of Water Use for a dam diversion and sluice/flood control gate on Ainako Stream on behalf Ms. Weight. Mr. Tam has since recused himself from this matter when he starting working at the Commission.

On May 18, 2010, the applicants:

- Amended REG.2680.8 for a dam diversion and sluice/flood control gate on Ainako Stream.
- Filed a second and separate late Registration of Stream Diversion Works and Declaration of Water Use for ornamental ponds A and B on Ainako Branch Stream, REG.2649.8.
- Filed a Stream Channel Alteration Permit for Ornamental Pond C on Ainako Branch Stream. However, the application was never accepted pending further verification that Ainako Branch Stream was a stream or a man-made ditch.
- Requested that the registration result in the issuance of certificates of use.

On July 1, 2010, John Carroll, attorney for Plaintiffs David and Malinee Jung, Ronald and Dora Okazaki, Tamae Shindo, Norman Purves and Maren Hauschildt, filed an action in the Third Circuit Court against Aina Weight related to an ongoing dispute between the applicants and the plaintiffs regarding the flood control gate and the amount of water that was being diverted from Ainako Stream to the Branch Stream #1b. This related action was unknown to staff at the time.

On July 9, 2010, Commission staff acknowledged receipt of the applicant's second late Registration of Stream Diversion Works and Declaration of Water Use for the ornamental ponds on Ainako Branch Stream, REG.2649.8. Based on the information, documentation, affidavits and photos that the applicants provided in 2010, Commission staff determined that:

- Ornamental Pond A for Ms Weight on TMK: (3) 2-5-025:014 was constructed before 1956 and is considered a late Declaration of Existing Water Use.
- Ornamental Pond B for Leslie-Aina Weight on TMK: (3) 2 5-025: 005 and Ornamental Pond C, shared between Ms. Weight, TMK: (3) 2 5-025:005, and Mr. Henderson, TMK: (3) 2 5-025: 006, were constructed within the last two years and cannot be considered Declarations of Existing Water Use for registration purposes. Staff did not request a SCAP application at this time because it was still unverified if Ainako Branch Stream was a stream or a man-made ditch.

On July 17, 2010, Commission staff acknowledged receipt of the first applicant's late Registration of Stream Diversion Works and Declaration of Water Use for a dam diversion and flood control gate on Ainako Stream, REG.2680.8. Based on the information, documentation, affidavits and photos that the applicants provided in 2010, the Commission staff determined that:

- The rock dam diversion and flood control gate on Ainako Stream were developed and in use before 1987 when the State Water Code was enacted into law.
- The rock dam diversion and flood control gate on Ainako Stream were registered as existing Stream Diversion Works and did not require a stream diversion works permit from the Commission.
- The Ainako Branch Stream diversion and instream flow were considered a late Declaration of Existing Stream Diversion Works and Declaration of Water Use.

On September 9, 2010, the complainants/plaintiffs filed a Motion for a Summary Judgment with the Third Circuit Court. This was unknown to staff at the time.

On May 13, 2011, Mr. Carroll, attorney for Dr. Jung and Mrs. Okazaki, sent the May 10, 2011, draft Report FI2011031002 Ainako Jung to the applicants' attorney.

On May 24, 2011, the applicant's attorney submitted comments on draft Report FI2011031001 Ainako Henderson and draft Report FI2011031002 Ainako Jung.

On July 6, 2011, Dr. Jung faxed additional comments for draft Report FI2011031002 Ainako Jung and a copy of a letter written by Mr. Henderson that was distributed to property owners along the main Ainako Stream alerting them to possible reductions in Ainako Stream flow due to Dr. Jung's complaint.

On July 29, 2011, Commission staff sent a letter to the applicants and their attorney informing them that:

- The draft Reports were intended for each party to comment on their own report for clarifications to their testimony.
- Mr. Carroll had sent a copy of the draft Report for Dr. Jung and Mrs. Okazaki to the applicants' attorney prior to the Commission staff finalizing the Reports for each party.
- The Commission staff will send a copy of the final Reports to all parties.
- The Commission staff will include the final Reports for both parties with the applicants' application for an ATF SCAP, SDWP and PAIFS for the Commission's consideration.

On August 12, 2011, Commission staff received an email letter from the applicants' attorney stating that:

- Report FI2011031002 Ainako Jung contained "numerous incomplete and incorrect statements."
- The complainants had introduced additional issues that were not raised in their original compliant, CDR.2769.8.
- The applicants' concerns and comments should be incorporated into the draft Report FI2011031002 Ainako Jung.
- The applicants should be given sufficient opportunity to address the new issues raised in the draft Report FI2011031002 Ainako Jung before issuing the final version of the Reports.

On August 12, 2011, Commission staff mailed the final Report FI2011031001 Ainako Henderson and final Report FI2011031002 Ainako Jung to the applicants and their attorney. See Exhibits 5 and 6.

On August 15, 2011, Commission staff mailed the final Report FI2011031001 Ainako Henderson and final Report FI2011031002 Ainako Jung to Dr. Jung, Mrs. Okazaki, and their attorney.

On August 17, 2011, Commission staff received an email from the applicants' attorney stating that staff "failed to incorporate many of the detailed comments and corrections" provided by the applicants and that their attorney would provide a detailed letter setting out "the misrepresentations and inaccuracies that continued to exist in the Weight/Henderson Report..."

On August 18, 2011, Commission staff received a copy of letters from the applicants' attorney responding to comments from the University of Hawaii Environmental Center and the U.S. Army Corps of Engineer's comments on the applicants' SCAP application. See Exhibit 7.

On August 23, 2011, Waimea Water Services, Inc. submitted an application for a Stream Channel Alteration Permit (SCAP.3232.8) on behalf of Dr. David Jung, one of the complainants, for the installation of a weir on Ainako Branch Stream at TMK: (3) 2-5-024:029 to measure and record stream flow in Ainako Branch Stream #1 through Dr. Jung's property.

On August 25, 2011, the U.S. Army Corps of Engineers (COE) responded to the applicants' attorney's August 18, 2011, letter to the COE and informed the applicants that the COE will be conducting its jurisdictional determination (JD) in coordination with the Environmental Protection Agency (EPA) and the COE's Headquarters. An approved COE JD typically takes 45-60 days to complete.

On September 9, 2011, Commission staff received a letter from the applicants' attorney that supplemented the applicants' comments and concerns raised in their May 24, 2011, and August 12, 2011 letters to the Commission. The September 9, 2011, letter alleged that there are continued staff misrepresentations and inaccuracies in the final Report FI2011031001 Ainako Henderson and final Report FI2011031002 Ainako Jung. See Exhibit 8.

DESCRIPTION:

Mr. Henderson, who has a degree in geology, provided the following description of Ainako Stream and Ainako Branch Stream.

Ainako Stream originates at about the 820-foot elevation about 0.4 miles upstream from the Ainako Avenue Bridge. The source for Ainako Stream is roughly a half-mile of boggy scrub forest and grasslands immediately below Akolea Road. Numerous springs arise from the area and converge on the stream channel via a network of ill-defined meandering routes. The substrate under the entire length of the stream is dominated by pahoehoe lava flows dating to 5,000 to 10,000 years of age. Pahoehoe flows are very porous, and lava blisters, tumuli (elliptical, domed volcanic structures) and lava tubes are common. Less than a half-mile south of the stream origin area, an extensive lava tube system contains underground streams that flow most of the year. Similar subterranean systems likely feed the Ainako Stream springs.

In the mid-1940's, Hilo Sugar Plantation company created Ainako subdivision that included the general area of Kokea, Koula and Kapaa Streets. See Exhibit 9. The streams on those properties are owned by the owners on either side of the stream. Some property boundaries are defined by the streams and at least one drainage swale with an intermittent flow. Substantial flood control levees of mortared rock and solid concrete were built along several flood-prone sections of Ainako Stream between Ainako Avenue and Koula Street. The levees are generally two to five feet high and 0.5 to 1.5-feet thick and were most likely built by the Hilo Sugar Plantation Company.

Ms. Weight's parents purchased their Ainako property sometime in 1954 or 1955 and moved onto their property at 1000 Ainako Avenue (014) in 1956. A small, pre-existing sluice/flood gate had been installed at the junction of Ainako Stream and Ainako Branch Stream by the Hilo Sugar Plantation Co. The gate structure appeared to be an integral part of the three-feet-high retaining wall that runs along the entire length of the Weight property (014) on Ainako Stream and pre-dated the Weight's purchase of the property. A steel plate, 14-inches wide and 36-inches high, slid vertically within grooves in the sides of the gate structure. According to the applicants, the steel plate had been jammed in a position that was about 3.5 to 4 inches above the bottom of the gate for several decades.

Ainako Branch Stream extends from the sluice/flood control gate on Ainako Stream and flows across the Weight (014 and 005), Henderson (006) and other properties, under the culverts at Kokea, Koula and Kapaa Streets and finally into a large boggy area where the Branch Stream and Ainako Stream merge together again below the applicants and complainants' properties. This boggy area is also the source and origin of an intermittent tributary to the Wailuku River. The Ainako Branch Stream travels a total distance of about 0.4 mile from the sluice gate to the boggy area and varies in width from about one to 12 feet.

To provide a sufficient flow of water from Ainako Stream to the Ainako Branch Stream during low flow periods, a dam diversion was built of loosely-stacked rocks within a concrete half pipe topped by a length of railroad tie buried in the streambed. The dam diversion was most likely built by either the Hilo Sugar Plantation or by Ms. Weight's father who periodically repaired storm flow damage to the dam by recovering loose rocks in the stream and placing them back on the dam face to increase low flow diversions into the sluice gate.

In the mid-1980's, Hawaii County built a storm control trench along Akolea Road, running cross-slope immediately above the Ainako Stream area to control storm runoff into Ainako Stream. However, some surface flow from the watershed area mauka of the storm control trench continues to flow through the storm control trench into the watershed area below Akolea Road, which is the source for Ainako Stream. Prior to the construction of the storm control trench, properties in the Ainako subdivision along Ainako Stream were subject to several major flood events.

In 2009, Mr. Henderson measured the flow of the Ainako Branch Stream #1b from its source at Ainako Stream at Ainako Avenue to Koula Street and noted that flows were highly erratic but slowly decreased downstream. See Exhibit 10. In some locales, water flowed underground but re-surfaced further downstream. Where the Branch Stream passes under Kokea Street, it lost nearly 60% of the surface flow, but that flow was regained about 100 feet downstream from the culvert. From a point about 150 feet

downstream from Kokea Street to the culvert at Koula Street, the stream lost about 43% of its flow. According to Henderson, water can be seen flowing into voids in the pahoehoe substrate during periods of very low flow in the Branch Stream. Mr. Henderson also made stream flow measurements in April 13, 2011, that showed less losing reaches which were most likely due to his patching of three losing reaches of the Branch Stream channel. See Exhibit 11.

After-the-Fact Stream Channel Alteration Permit, Stream Diversion Works Permit and Petition to Amend Instream Flow Standard:

In 2008, Scott Henderson removed and replaced the metal sluice gate with a new plastic wood sluice gate. A metal bar with seven (7) holes drilled every inch or so from top to bottom of bar is attached to the sluice gate and allows the sluice gate to be raised or lowered. A long nail was placed through a top hole in the bar and rests on top of the retaining wall to keep the sluice gate in the desired position. According to the applicants, the height of the sluice gate height is maintained at the "historic gate setting" of the former metal plate that was rusted in place about four-inches above bottom of channel.

Ainako Branch Stream flows from the sluice diversion gate through several residential properties of the Ainako subdivision, and property owners along the stream have created ornamental ponds fed by water from the Branch Stream. 420 feet of the Ainako Branch Stream flows through two properties of Ms. Weight (014 and 005), and 170 feet of the northern most portion of the Branch Stream is shared between Mr. Henderson (006) and Ms. Weight (005).

The applicants undertook five tasks along Ainako Branch Stream between 2007 and 2010. See Exhibits 12 and 13.

Task 1: Replacement of rotting wooden bridge with a rock/masonry/concrete bridge on the Weight property (014). In June 2007, the applicants built a replacement bridge eight feet wide and 17 feet long to provide access for maintenance vehicles onto the eastern portions of the properties. The foundations for the bridge were incorporated into the existing retaining wall on the banks of Ainako Branch Stream and the upper surface of the bridge is reinforced concrete.

Task 2: Patching three points on the stream floor where significant water flow was lost on the Weight properties (014 and 005). In May 2007, the applicants sealed patch point #1 and patch points #2 and #3 in September 2010 by pushing small packets of fabric-wrapped dry mortar mix into the cracks between the rock walls and spraying water into the cracks to seal the mortar mix. Patch point #1 was about three inches wide and four feet long. Patch point #2 was four inches wide and 10 feet long. Patch point #3 was a three inches wide by four feet long open crack that was sealed by depositing wet concrete mix into the crack. All patching work was performed during periods when the stream flow was very low or dry, and the patch points were dry. Mr. Henderson estimates that patch #1 conserved 30+ gallons per minute (GPM); patch #2 conserved 55+ GPM; patch #3 conserved 3+ GPM.

Task 3: Construction of 450 linear feet of rock retaining wall along Ainako Branch Stream #1 on the Weight (014 and 005) properties. Between March and April 2008, the applicants constructed a retaining wall approximately 16 inches high and 20 inches high using 30 cubic yards of basalt rock from the Weight properties to match the existing retaining walls along the southern section of the stream. The lower tiers of the retaining walls were dry-stacked, and the upper tiers were mortared in place.

Task 4: Construction of a 3,000 gallon ornamental pond #1 (ornamental pond B in 2010 registration), 14 feet by 17 feet by 1.5 feet deep on the Weight property (005). In May-June 2008, the applicants constructed a concrete-lined pond with six-inch thick reinforced concrete sealed with a layer of Thoroseal. Water is diverted from the Branch Stream via a three-inch buried plastic pipe to the pond and exits the pond over a 10-foot wide spillway back to the Branch Stream. Approximately 10 cubic yards of soil was excavated to create the pond. The excess soil was used to backfill voids along the landward edges of the retaining walls.

Task 5: Construction of a 4,900 gallon, ornamental pond #2 (ornamental pond C in 2010 registration), 10 feet by 17 feet on the Weight (005) and Henderson (006) properties. In October 2008, the applicants created a pond by dry-stacking basalt rock to build a 16-inch high dam across the Branch #1 stream bed.

About 0.3 cubic yard of rock was used to build the dam and no changes were made to the streambank. Water flows through the pond and over the dam, and there is no consumptive use of the water.

ANALYSIS and ISSUES:

Agency SCAP Review Comments:

The U.S. Army Corps of Engineers (COE) requested additional information on the unnamed stream which terminates in a bog which could lead to the Wailuku River during heavy rainfall periods. The COE recommended that the applicant(s) conduct an aquatic resource inventory that records any drainage features, streams, ditches, gulches, wetlands, etc., which may be jurisdictional water bodies subject to Section 10 and/or Section 404 regulations.

Hawaii County Planning Department: The subject parcel is not located in the Special Management Area (SMA) and is not subject to the County's regulatory permit or authority.

The University of Hawaii Environmental Center made the following comments:

- Hydrologic Connectivity: It is unclear if Ainako Branch Stream is a naturally-occurring tributary of Ainako Stream that was subsequently altered by humans, or a human-constructed diversion of Ainako Stream that did not originate as a natural water course.
  The nature of the surface and subsurface hydrologic connectivity between (1) Ainako Stream and Wailuku River and (2) Ainako Branch Stream and its reported terminal wetlands and its down-gradient surface water and ground water should be clarified.
- Construction Details: The 2008 work to plug the gap in the submerged Pahoehoe interlayer was not included in the after-the-fact SCAP application. Does this work require a SCAP or can it be considered a routine stream maintenance activity?
- Water Pollution Control Permitting: the discharge from the ornamental ponds to Ainako Branch Stream may require a Section 402 permit and associated effluent limitations and/or Best Management Practices. The applicants should contact the State Department of Health for this determination.

The U.S. Fish and Wildlife Service, Office of Hawaiian Affairs, Department of Hawaiian Home Lands, and Department of Health (DOH) Clean Water Branch (CWB) did not submit comments as of the date of preparation of this submittal.

DLNR SCAP Review Comments:

- Land Division: No objections.
- Engineering: No objections.
- State Parks: Not subject to its authority or permit.
- Forestry and Wildlife: Not subject to its authority or permit.

State Historic Preservation Division (SHPD), and Division of Aquatic Resources (DAR) did not submit comments as of the date of preparation of this submittal.

Chapter 343 Environmental Assessment (EA) Compliance Review:

EA Triggers: In accordance with HRS §343-5 (a), the applicant's proposed action does not trigger the need for an EA because the proposed project is located on private land and will use private funds.
Staff Review

1. Complaint/Dispute Resolution CDR.2769.8
   See Exhibit 3: Complaint/Dispute Resolution CDR. 2769.8.
   See Exhibit 4: Complaint/Dispute Resolution Response CDR. 2769.8.
   See Exhibit 5: Field Investigation Report FI2011031001 Ainako Henderson.
   See Exhibit 6: Field Investigation Report FI2011031002 Ainako Jung.

Some of the issues related to this complaint include:

- Property owners along Ainako Stream as well as owners along Ainako Branch Stream have riparian water rights. According to the applicants, the flood control gate has been frozen in place for several decades. According to the complainants, the flood control gate has been raised and lowered at will over the years. Diverting more water from Ainako Stream to Ainako Branch Stream may also have an impact on property owners along the main Ainako Stream.
- There is insufficient stream monitoring and stream flow information for both Ainako and Ainako Branch Streams to determine how much water is being diverted during high, medium and low conditions and what the flow trends have been during the last 10 or 20 years. Mr. Henderson has measured Ainako and Branch Stream flow between 2009 and 2011, and his information is presented in Exhibits 6 and 7. In addition, Dr. David Jung, a complainant and downstream owner, has applied for a SCAP (SCAP.3232.8) to install a v-notched weir in Ainako Branch Stream to monitor and measure its stream flow.
- The pahoehoe volcanic geology in this area consists of a porous substrate that may contain lava tubes, cracks, fissures and tumuli affecting stream flow on the applicants' properties and the downstream (complainants') properties. According to the information provided by Mr. Henderson, there is a gaining and a losing stretch of Ainako Branch Stream on the applicants' properties and a gaining and losing reach on the downstream properties as well. Patching the leaks in the streambed on the applicants' properties may have affected the downstream flow if the patched leaks prevented water from flowing underground and resurfacing later downstream on the complainants' properties.
- Various alterations to the land and Ainako Stream and Branch Stream have occurred over time based on the 1947 TMK map for the Ainako subdivision. Some of the work occurred before the State Water Code was adopted in 1987, and some work has occurred after the Water Code. The applicants have applied for after-the-fact permits for the five tasks in their application described earlier.
- The complainants' have claimed that Branch #1a on Ainako Stream, Branch #1a at Kokea Street and Branch #2 were located on Ms. Weight's (Defendant's) properties (014 and 005) in the past and do not exist today.
- The stream flow of the Wailuku River may be indicative of climate changes that have occurred over the years and may also be indicative of stream flow in Ainako Stream. The annual USGS stream gaging records for the Wailuku River from 1989 to 2010 showed that there were higher peak discharges before 1990. After 1990, the peak discharges decreased in intensity. See Exhibits 14 and 15.
- Rainfall data from the National Weather Service's rain gage station near the Hilo airport since 1949 to present show that the mean annual rainfall at the Hilo station is 127.57 inches. 1981, 1983, 1995, 2002 and 2010 were low rainfall years with mean annual precipitation below 100 inches. See Exhibit 16.

Because of the number of complex issues listed above, the evolving nature of the complaint, and legal counsel for the applicants and the complainants, staff recommends that the Commission order mediation pursuant to HAR §13-167-83 to 92 or binding arbitration to address CDR.2769.8 if mediation or binding arbitration is mutually agreeable to both parties. This will be a first step in resolving this ongoing dispute. The stream flow monitoring information for Ainako Branch Stream #1 that will be collected by the complainant may result in further action such as an amendment to the Instream Flow Standard for Branch Stream #1 as it currently exists.

After-the-Fact Stream Channel Alteration Permit and Stream Diversion Works Permit (SCAP.2989.8)

Task 1: Replacement of a wooden bridge with a concrete bridge in 2007 does not require a permit because work was done outside of the stream bank and channel.
Task 2: Patching three leaks in Ainako Branch Stream in 2007 and 2008 require an ATF SCAP. However, a fourth patch in 2008 was mentioned in the applicants' application and should be included as part of this ATF SCAP application.
Task 3: Construction of 450 linear feet of rock retaining wall in 2008 requires an ATF SCAP.
Task 4: Constructing of a 3,000 gallon ornamental pond #1 in 2008 requires an ATF SDWP and PAIFS.
Task 5: Construction of a 4,900 gallon ornamental pond #2 in 2008 requires an ATF SDWP and PAIFS.

In addition to the tasks listed above, staff believes that the applicants also did work in the stream channel of the lower reaches of Branch Stream #1b at Kokea Street, which the applicants did not apply for and which should be included as part of this after-the-fact application.

2. Petition to Amend Instream Flow Standard

Scott Henderson measured the flow of Ainako Stream and various locations along Ainako Branch Stream in 2009 and 2011 by placing a heavy fabric "funnel" with a narrow opening at one end on bottom of the streambed and 1) measured the outflow at the choke point with an impeller blade and 2) calculated the time it took to fill a bucket.

In 2009, Mr. Henderson measured the Ainako Branch Stream flow (in liters/second) at eight locations on the applicants' property between Ainako Avenue and Kokea Street. Mr. Henderson's measurements showed gaining and loosing stretches along Ainako Branch Stream between Ainako Avenue and Kokea Street as well as between Kokea and Koula Streets. See Exhibit 10.

Between 2009 and 2011, Mr. Henderson measured the flow of the Ainako Branch Stream at its entry point on Ainako Stream using a Geopact impellor flowmeter. The 13 measurements represent high, medium and low flow conditions, and the arithmetic mean is 419 gallons per minute (GPM).

In 2011, Mr. Henderson measured the flow of Ainako Branch Stream (in gallons per minute) at six locations along the Branch Stream between Ainako Avenue and Kokea Street which showed gaining and loosing stretches along the Branch Stream. See Exhibit 11.

Using a linear regression analysis, Mr. Henderson calculated that the percolation loss over the length of Ainako Branch Stream between Ainako Avenue to Koula Street is 10.7 GPM per 100 feet when stream flow was at 700 GPM and 5.6 GPM per 100 feet when stream flow was at 100 GPM.

The flow measurements for the ponds were calculated as the outflow cannot be directly measured because water exits the ponds over irregular rock weirs spanning eight to ten feet lengths.

Pond #1 is completely watertight and loses no water because of the layer of Thoroseal, and outflow equals the outflow. At an average inflow of 100 GPM, the average residence of water in the pond is only 30 minutes. Evaporative loss was estimated to be insignificant and could not be measured with conventional techniques. The calculated inflow and outflow is 394.5 GPM (419 GPM minus [2.29 foot lengths times 10.7 GPM (percolation loss) per 100 linear feet of stream]).

Pond #2 is lined with fined sediment which provides a fairly effective seal over the pond bed. The total pond volume at a "robust" flow is estimated at 4,900 gallons. At low stream flow, the volume is lower and is estimated at 4,000 gallons. In late August 2010, a dry-up event occurred, and about 90% of the pond's volume was lost over 2.5 days. About 50% of the pond volume was lost in the first 24 hours during the dry-up event. The water loss rate was calculated at approximately 2,000 gallons per day (GPD) = ~83 gallons per hour= ~1.4 gallons per minute.

The calculated inflow for pond #2 is 385 GPM minus 1.4 GPM (percolation loss) equals 383.6 GPM to yield an average estimated outflow.

Staff believes that because there is no consumptive use of water for ornamental pond #1 and pond #2 on Ainako Branch Stream except for evaporative and percolation losses, the Interim Instream Flow Standard for Ainako Branch Stream does not need to be amended due to these ponds. However, staff cannot determine if the IFS must be amended for the three concrete patches as it relates to decreases in flow downstream, due in part, to the sealing off of the underground lava tubes which cannot be determined.

4. Permit Violation Review

Hawaii Revised Statutes (HRS) §174C-71(3)(A) states: *"The commission shall require persons to obtain a permit from the commission prior to undertaking a stream channel alteration; provided that routine streambed and drainageway maintenance activities and maintenance of existing facilities are exempt from obtaining a permit;...."*

HRS §174C-3 states in part:

> *"Channel alteration" means: (1) to obstruct, diminish, destroy, modify, or relocate a stream channel; (2) to change the direction of flow of water in a stream channel; (3) to place any material or structures in a stream channel; and (4) to remove any material or structures from a stream channel.*
>
> *"Stream" means any river, creek, slough, or natural watercourse in which water usually flows in a defined bed or channel. It is not essential that the flowing be uniform or uninterrupted. The fact that some parts of the bed or channel have been dredged or improved does not prevent the watercourse from being a stream.*

HRS §174C-93 states: *"No person shall construct of alter a stream diversion works, other than in the course of normal maintenance, without first obtaining a permit from the commission...."*

HRS §174C-91 states: *"Stream diversion works" means any artificial or natural structure emplaced within the stream for the purpose of diverting stream water."*

Hawaii Administrative Rules (HAR) §13-168-5(a) states: *"Any person making a use of water from a well or stream diversion works in existence on the effective date of these rules in any area of the state shall file a declaration of the person's use with the commission within one year from the effective date of these rules."*

HAR §13-168-7(a) states: *"The owner or operator of any well or stream diversion works from which water is being used shall provide and maintain an approved meter or other appropriate device or means of measuring and reporting total water usage on a monthly (calendar or work schedule) basis...."*

HRS §174C-71(2) states: *"Establish interim instream flow standards;*

(A) Any person with proper standing may petition the commission to adopt an interim instream flow standard for streams in order to protect the public interest pending the establishment of a permanent instream flow standard;...."

The applicants replaced a wooden bridge with a concrete bridge in 2007(Task 1), patched four leaks in Ainako Branch Stream in 2007 and 2008 (Task 2), constructed 450 linear feet of rock retaining wall in 2008 (Task 3), and constructed a 3,000 gallon ornamental pond in 2008 (Task 4) and a 4,900 gallon ornamental pond (Task 5) in 2008 in Ainako Branch Stream without obtaining a SCAP and SDWP from the Commission.

Penalty Policy

Hawaii Revised Statutes (HRS) §174C-15, provides for fines up to $5,000 per day for any violation of any provision of HRS chapter 174C. The Commission adopted an Administrative and Civil Penalty Guideline (G01-01) in 2001 to provide a logical and consistent means to assess penalties and guide the settlement of Commission enforcement cases. See Exhibit 17. The Guideline includes Initial Minimum, Gravity, Mitigative, and Duration Components. Gravity and Duration Components can increase the initial minimum penalty while Mitigative Components can decrease the initial minimum penalty.

Fine Calculation

Initial Minimum Components: The minimum fine established by the Commission's penalty policy is $250 minimum per violation that was set when the maximum fine was $1,000. The Commission has not adjusted the guideline since the fine was increased to up to $5,000 per day for any violation. The Initial

Minimum Components include the following:

Component A: Finding of violation:	$250 per day/incident
Component B: Occurring in a Water Management Area (WMA)	$250 per day/incident
Component C: Repeat Violation	$250 per day/incident

Applicability to Violation:
Component A: The applicants are in violation of HRS §174C-71(3)(A) for patching fours leaks constructing 450 linear feet of retaining wall and constructing two ornamental ponds in Ainako Branch Stream without a SCAP and SDWP.
Component B. Ainako Branch Stream is not in a Surface Water Management Area.
Component C: The applicants have no repeat violations.

Staff recommends the minimum basic fine component of $250 each for: patching the leaks ($250, constructing the retaining wall ($250) and constructing two ornamental ponds ($500) for one day violation of one incident.

Gravity Components: Six elements are outlined in the Commission's Penalty Policy: A) significant risk to resource; B) actual harm or damage to resource; C) multiple or repeat violations of code or regulations; D) evidence that violator should have known; E) refusal to correct violation; F) failure to meet deadlines set by the Commission. The gravity component can add an additional up to a cap of $1,000 per violation and initiate daily fines.

Applicability to Violation:
Components A-F: None applicable, but not listed is the potential harm to downstream users if there is a link between patching the leaks and loss of streamflow downstream from the patches.

Mitigative Components: Six mitigative elements are outlined in the Commission's Penalty Policy: A) insignificant risk to resource; B) attempt to remedy without notice; C) good faith effort to remedy violation once noticed; D) diligent and speedy effort to remedy the violation once noticed; E) self-reporting in a timely manner; F) emergency considerations.

Applicability to Violation:
Components A: There do not appear to be significant risks to Ainako or Ainako Branch Stream.
Components B: The applicant believed that patching the leaks would help downstream users.
Component C: The applicant showed good faith effort by applying for an after-the-fact SCAP, SDWP and PAIFS when they were informed that a permit was required.
Components D-F: Not applicable.

Staff recommends a $100 reduction for each Mitigative Component A, B and C, for a total reduction of $300 in fines.

Duration Component: The duration calculation is determined according to the circumstances surrounding each type of violation. When response and compliance are speedy and the applicant is not a repeat violator, the policy is to limit the duration exposure to fine to a single day minimum.

Applicability to Violation: Staff believes that the circumstances of this case do not warrant more than a single day of fine.

Summary of Recommended Fines:

Minimum Component:	$1,000/day
Gravity Component:	N/A
Mitigative Component:	($300)
Duration	1 day
Total Fine:	$700

RECOMMENDATION:

That the Commission:

A. Complaint/Dispute Resolution:
   1. Order mediation pursuant to HAR §13-167-83 to 92 or binding arbitration to address CDR.2769.8 if either mediation or binding arbitration is mutually agreeable to both parties. If mediation is approved by the Commission, the final report shall be ready within 115 days (January 20, 2012,) unless otherwise extended by the Commission.

B. Permit Violation:
   1. Find that the applicants, Leslie Aina Weight and (Robert) Scott Henderson, are in violation of Hawaii Revised Statutes §174C-71(3)(A) for (1) patching four leaks in Ainako Branch Stream in 2007 and 2008: (2) constructing 450 linear feet of rock retaining wall in 2008 including the lower reach of Branch Stream #1b; and (3) constructing a 3,000 gallon ornamental pond in 2008, and (4) constructing a 4,900 gallon ornamental pond in 2008 in Ainako Branch Stream without obtaining a SCAP and SDWP from the Commission.
   2. Fine the applicants $700 for the violations listed in B.1.
   3. Require that the applicants install a means to measure the amount of water that is diverted by flood control gate on a monthly basis and submit a water use report on an annual basis to the Commission.
   4. Issue a written warning to the applicants indicating any future violations involving the alteration of stream channels or stream diversions without the necessary stream channel alteration permit or stream diversion works permit and petition to amend the instream flow standard may be considered repeat violations with fines up to $5,000 for each day of violation.

C. Application for After-the-Fact Stream Channel Alteration Permit, Stream Diversion Works Permit and Petition to Amend Instream Flow Standard (SCAP.2898.8):
   1. Defer action on this after-the-fact application for a Stream Channel Alteration Permit, Stream Diversion Works Permit and Petition to Amend Instream Flow Standard pending the final report for the mediation or binding arbitration of CDR.2769.8.

   OR

   2. Approve an After-the-Fact Stream Channel Alteration Permit, Stream Diversion Works Permit and Petition to Amend Instream Flow Standard (SCAP.2898.8), Ainako Branch Stream in Hilo, Hawaii at TMKs: (3) 2-5-025:005, 014 and 006, subject to the standard conditions in Exhibit 18 and the following special condition:

      Issuance of the permit is subject to payment of the fines under Recommendation A Permit Violation within 30 days. Failure to pay the fine within 30 days of Commission action may result in further fines and violations.

   Standard Conditions 4 to 8 do not apply to this permit.

Respectfully submitted,

W. Roy Hardy

W. ROY HARDY
Hydrologic Program Manager

Exhibits:
- 1a. Location Map
- 1b. GIS Map
- 1c. TMK Map
- 2. Application for late Registration of Stream Diversion Works and Declaration of Water Use for a dam diversion and sluice/flood control gate on Ainako Stream and "Ainako Stream and Branch Stream (Hilo, Hawaii) Historical Notes & Physical Features."
- 3. Complaint/Dispute Resolution CDR.2769.8
- 4. Complaint/Dispute Resolution Response CDR.2769.8

5. Final Field Investigation Report FI2011031001 Ainako Henderson
6. Final Field Investigation Report FI2011031002 Ainako Jung
7. August 18, 2011, response letters from applicants' attorney to the University of Hawaii Environmental Center and the U.S. Army Corps of Engineers.
8. September 9, 2011, letter from the applicants' attorney.
9. 1947 TMK Map for Ainako Subdivision
10. Henderson October 10, 2009, Ainako Branch Stream Flow Measurements
11 Henderson April 13, 2011, Ainako Branch Stream Flow Measurements
12. Site Plan and Construction Details
13. Site Photos
14. Monthly Mean Discharge for USGS Station 16704000 Wailuku River at Piihonua
15 USGS Surface Water Annual Statistics 16704000 Wailuku River at Piihonua
16. Hilo Airport Annual Rainfall
17. Penalty Policy G01-01
18. Standard Stream Channel Alteration Permit Conditions

APPROVED FOR SUBMITTAL:

WILLIAM J. AILA, JR.
Chairperson

Ainako Stream Channel Alteration & Diversion Sites Location

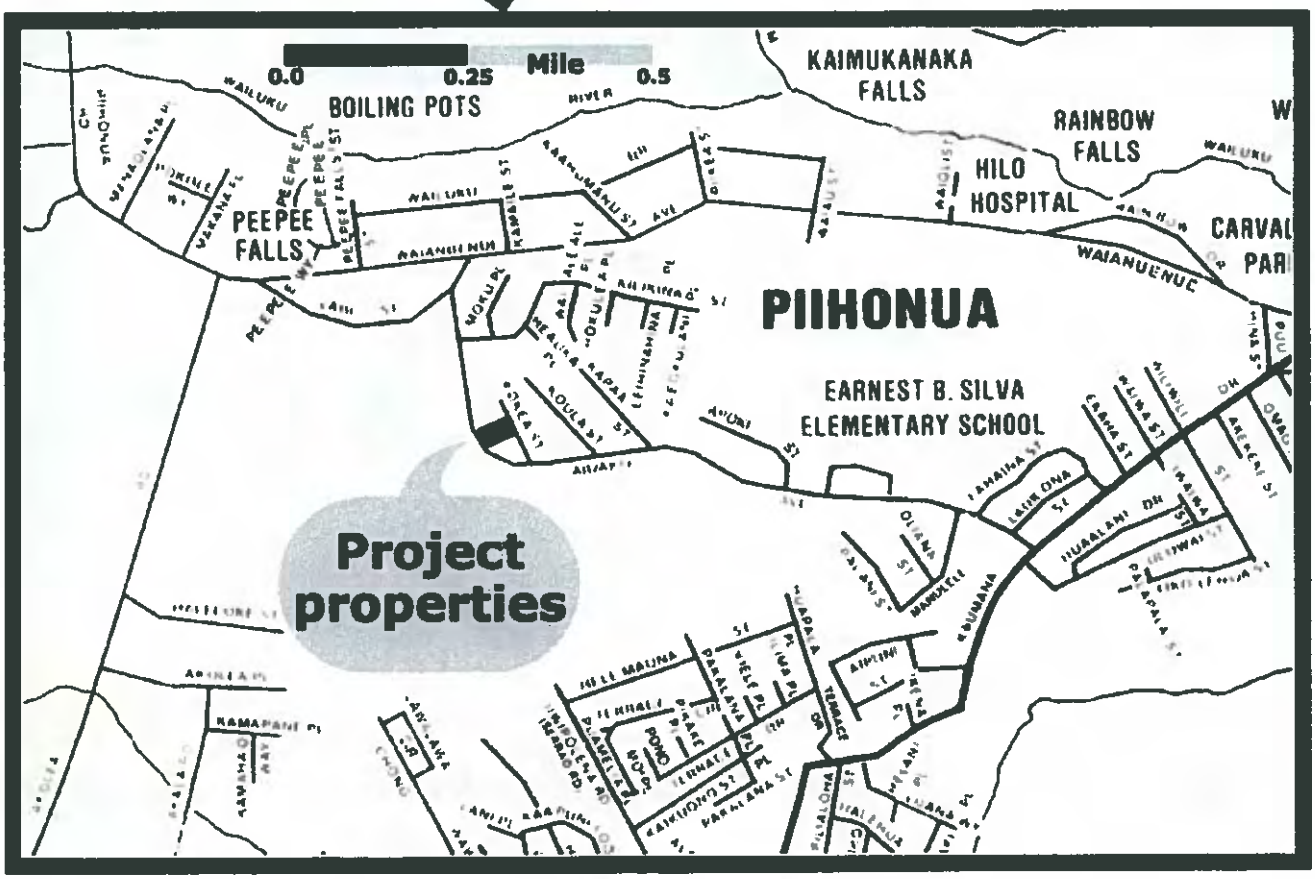
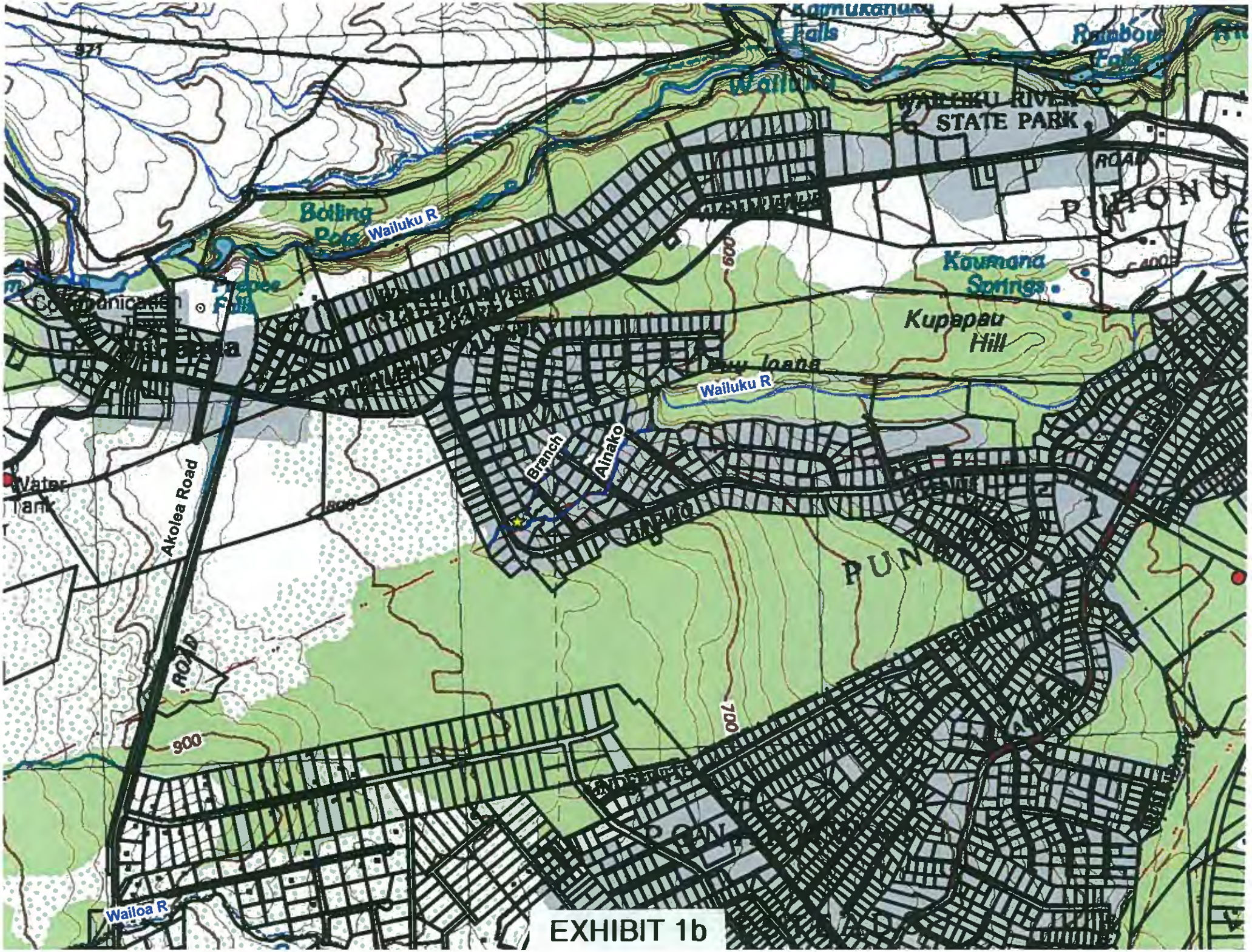
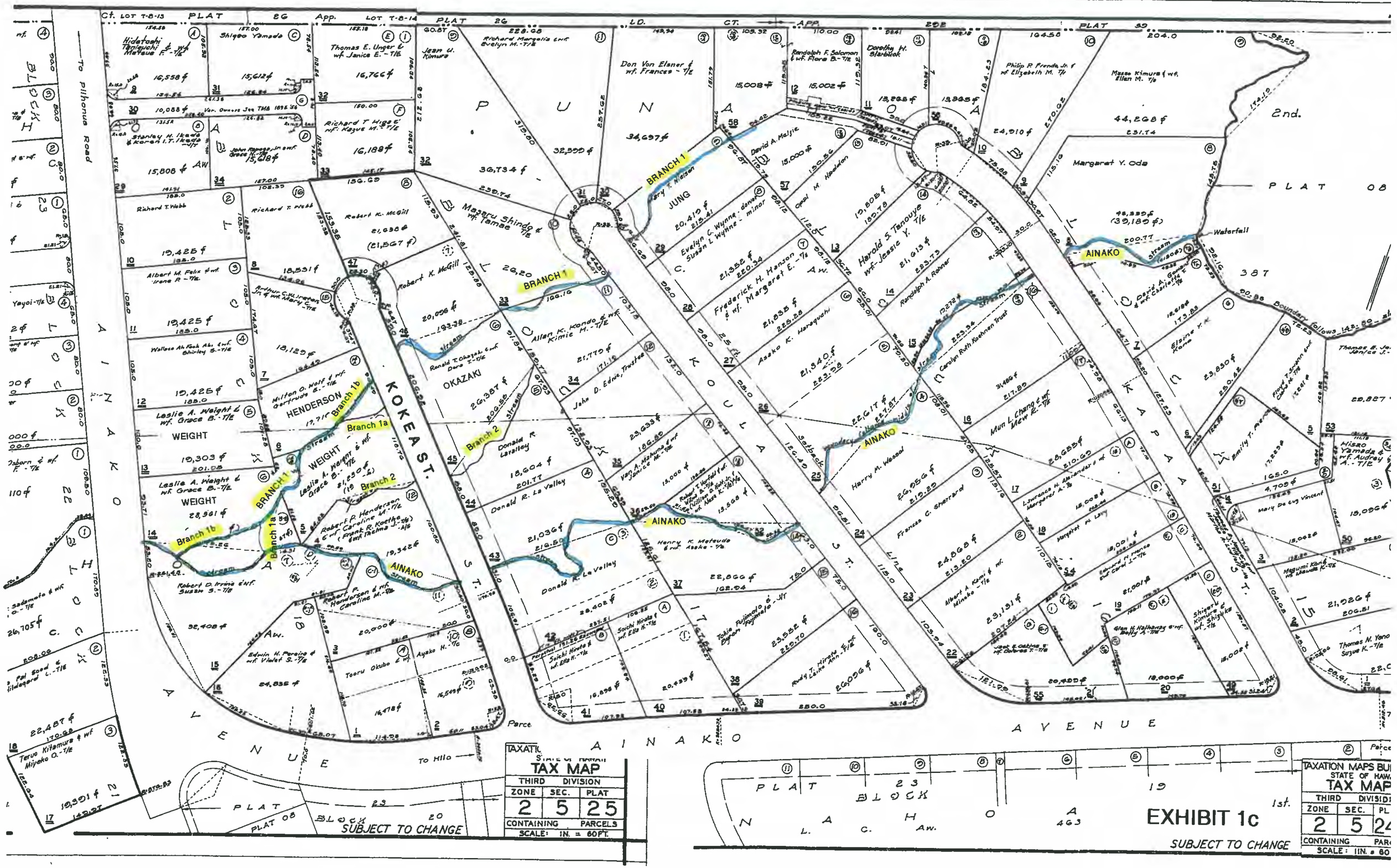


EXHIBIT 1a


Falls
Rainbow Falls
WAILUKU RIVER STATE PARK
ROAD
PUUONO
Boiling Pots
Wailuku R
Kaumana Springs
Kupapau Hill
Wailuku R
Branch
Ainako
Water Tank
Akolea Road
ROAD
PUN
900
700
Wailoa R
EXHIBIT 1b


PLAT 2G
PLAT 2E
PLAT 39
PLAT 08
PUNA
KOKEAST. ST.
KAPAA
KOULA
AINAKO
ALENUE
AVENUE
BRANCH 1
Branch 1a
Branch 1b
Branch 2
AINAKO Stream
Waterfall
Boundary follows 142.80
To Pilhonua Road
To Hilo
Hidetoshi Taniguchi & wf Matsue F. - T/E
Shigeo Yamada
Thomas E. Unger & wf Janice E. - T/E
Richard T. Higa & wf Kazue M. - T/E
Stanley H. Ikeda & Karen I.T. Ikeda - J/T
Richard T. Webb
Albert M. Felix & wf Irene R. - T/E
Wallace Ah Fook Ah Leong & wf Shirley S. - T/E
Leslie A. Weight & wf Grace B. - T/E
Milton O. Wolf & wf Gertrude B. - T/E
Robert K. McGill
Arthur C.H. Ireton Jr. & wf Mary C. - T/E
Robert T. Webb
Robert P. Henderson & wf Caroline M. - T/E
Robert D. Irvine & wf Susan S. - T/E
Edwin H. Pereira & wf Violet S. - T/E
Tooru Okubo & wf Ayako H. - T/C
Ronald T. Okazaki & wf Dora T. - T/E
Donald R. La Valley
Allen K. Kondo & wf Kimie M. - T/E
John D. Ednie, Trustee
Don Von Elsner & wf Frances - T/E
Richard Margolis & wf Evelyn M. - T/E
Jean U. Kimura
Masaru Shindo & wf Tamae - T/E
Gary T. Nielsen
Evelyn C. Wynne - donee
Susan L. Wynne - minor
David A. Maljie
Opal M. Hadden
Randolph F. Salomon & wf Flora B. - T/E
Dorothy M. Slanchek
Harold S. Tanouye & wf Jessie Y. - T/E
Randolph A. Rohner
Frederick H. Hanson & wf Margaret E. - T/E
Asako K. Hasegawa
Carolyn Ruth Kaehnen Trust
Mun L. Chang & wf Mew K. - T/E
Harry M. Wessel
Frances C. Sherrard
Albert A. Komi & wf Mineko - T/E
Lawrence H. Alexander & wf Margaret A. - T/E
Margaret H. Levy
Edward M. Pierce & wf Carol L. - T/E
Glen K. Hathaway & wf Betty A. - T/E
Philip R. Frenda, Jr. & wf Elizabeth M. - T/E
Masao Kimura & wf Ellen M. - T/E
Margaret Y. Oda
Osamu A. Gomez & wf Charlotte T. - T/E
Elaine Y. K. Hara
Emily T. Mendes
Mary De Cuy Vincent
Hisao Yamada & wf Audrey A. - T/E
Megumi Kanemoto & wf Masuko K. - T/E
Thomas M. Yano & wf Suzue K. - T/E
Shigeru & Kimiko Shishido
Yayoi - T/E
Tsuneo Kitamura & wf Miyeko O. - T/E
Fai Sood & wf Hildegard L. - T/E
Osborn & wf F. - T/E
Sadamoto & wf T. - T/E
Tokio Fujimoto & wife Byron Fujimoto - J/T
Rudy T. Hirata & wf Laine Ann - T/E
Setback Line
Parcel
SUBJECT TO CHANGE
TAXATION MAPS BUREAU
STATE OF HAWAII
TAX MAP
THIRD DIVISION
ZONE 2 SEC. 5 PLAT 25
CONTAINING PARCELS
SCALE: 1IN. = 60FT.
EXHIBIT 1c
SUBJECT TO CHANGE
1st.

April 21, 2010

The Commission on Water Resource Management
P.O. Box 621
Honolulu, Hawaii 96809

To whom it may concern,

I am providing the attached information to your agency relating to the history and physical features of "Ainako stream" and a "Branch stream" in the Ainako district of Hilo, Hawaii. The information focuses on the sections of those streams that flow through properties owned by Aina Weight, Robert & Judith Henderson, Hans & Camille Thomsen, and Bret Marsh.

As per phone conversation with Robert Chang of your Planning/Stream Registration office, I include (as Attachment 1) your Form 8810-2, even though it is outdated, as it provides information appropriate for Registration of Stream Diversion Works.

Attachment 2 serves as a summary description of the primary man-made features on the subject stream sections. It also presents maps of 1924 and 1947 vintage showing the "Branch Stream" origin point and route.

Attachment 3 provides more detailed historical and structural information on the streams. This information has been compiled by Robert Scott Henderson and Leslie Aina Weight and is true to the best of their knowledge.

I respectfully request that all of the pre-1987 features and diversion flow of the subject streams included on the properties presently owned by Robert & Judith Henderson (TMK 2-5-25, parcel 6), Hans & Camille Thomsen (TMK 2-5-25, parcel 15), and Bret Marsh (TMK 2-5-25, parcel 4) be grandfather registered with your agency.

Request for registration of features on Aina Weight's property is being submitted separately by her legal counsel.

Thank you for your assistance on this matter.

Respectfully,

Robert Scott Henderson

EXHIBIT 2

Attachments (3)

cc:

Aina Weight

Hans & Camille Thomsen

Bret Marsh

Form 8810-2

Attachment 1.

STATE OF HAWAII
COMMISSION ON WATER RESOURCE MANAGEMENT
DEPARTMENT OF LAND AND NATURAL RESOURCES
DIVISION OF WATER RESOURCE MANAGEMENT

REGISTRATION OF STREAM DIVERSION WORKS AND DECLARATION OF WATER USE

INSTRUCTIONS: Please type or print. If information is not available or not applicable, indicate as N/A. Fill out as completely as possible, sign, and mail form to the Division of Water Resource Management, P.O. Box 373, Honolulu, Hawaii 96809. Phone 548-3949 or 548-7543 for assistance.

MULTI-SOURCE SYSTEMS: For a system of two or more diversion structures, submit a single package to describe the complete system. Include a single location map (or a set of maps if required) showing all diversion structures and measurement points, and a separate copy of this form for each structure and measurement point. On forms describing diversion structures, complete parts A, B, D, and E. On forms describing measurement points, complete parts A, B, and F.

Locally known as

STREAM NAME: "AINAKO STREAM" & "BRANCH STREAM" ISLAND: HAWAII

DIVERSION STRUCTURE NAME: DIVERSION DAM, FLOOD CONTROL GATE, BRANCH STREAM

DIVERSION SYSTEM NAME: AINAKO BRANCH STREAM (RESIDENTIAL CLASSIFICATION STREAM)

A. DIVERSION WORKS OPERATOR
Firm name: MULTIPLE
Contact person: see attachments
Address: _____
Zip: _____ Phone: _____

B. OWNER OF DIVERSION WORKS SITE
Firm name: MULTIPLE
Contact person: see attachments
Address: _____
Zip: _____ Phone: _____

C. STREAM DIVERSION LOCATION
Tax Map Key: 2-5-25 Town, Place, District: AINAKO, HILO, HAWAII
Attach USGS "Quad" map (scale 1:24,000), tax map, or other map showing the diversion location.
multiple properties - see attachments

D. STREAM DATA
Streamflow at diversion site is: ☐ Perennial (Water is always flowing) ☒ Intermittent (Channel is sometimes dry)
Is streamflow gaged? ☒ Yes ☐ No only recently - see attachments
If yes, provide gage name, and show location on map. Name: see Figure A-1
Average flow before diversion: 4.2 ☒ mgd ☐ gpm ☐ cfs
rough estimate

E. DIVERSION STRUCTURE DATA
Year constructed: 1924 (or earlier) Elevation (Above mean sea level): 750 feet
Diversion structure is: ☐ Concrete ☐ Wood ☐ Pipe ☐ Other (Describe): Concrete & steel gate
Loose rock dam
Diverted flow is: ☐ Controlled ☐ Uncontrolled
Divertable capacity is: 1.0 ☒ mgd ☐ gpm ☐ cfs
rough estimate
see attachments
Submit an "as-built" drawing and dated photograph of the diversion works, if available. see attachments

. . . (continued over)

For Official Use Only:
Date received: _____ *Date accepted:* _____
Field checked by: _____ *Date:* _____ *Latitude:* _____ *Hydrologic Unit:* _____
Comments: _____ *Longitude:* _____ *State Diversion No.:* _____

References: Hawaii Revised Statutes, Chapter 174C.
Hawaii Administrative Rules, Chapters 13-167 to 13-171.

F. DECLARATION OF WATER USE

NOTE: The purpose of the Declaration of Water Use is to obtain information necessary for the management of the State's water resources. The Declaration does not confer a legal right to water or its use.

Location and name of measurement point (Show on location map): two stations - see attachments

Water use data are recorded: ☐ Continuously ☐ Daily ☒ Other: intermittantly - see attachments

Method of measurement (Check box and describe below): ☐ Weir ☐ Rating flume ☐ Other

Description: weir (culvert) at brand stream, stream cross-section at Ainako stream - see attachments

Quantity of Use (Report gaged or estimated monthly water use from the diversion described on the reverse side of this form, for the calendar years 1983 through 1987):

WATER USE, IN approximate 240,000 gallons/day (unit of measurement)

	1983	1984	1985	1986	1987
January					
February					
March					
April					
May					
June					
July					
August					
September					
October					
November					
December					
ANNUAL					

Typical times of usage: continuous

Type of Use (Check all category boxes that apply and provide additional information as indicated.):

Category	Additional Information
☐ Municipal (including resorts, hotels, businesses)	Brand stream diversion is used only as aesthetic feature - see attachments
☐ Domestic (systems serving 25 people or less)	Number of service connections:
☐ Irrigation	Acres Irrigated: Crop(s): ☐ Sugar ☐ Pineapple ☐ Other (specify): Non-Crop: ☐ Landscape ☐ Golf Course ☐ Other (specify): Method: ☐ Drip ☐ Furrow ☐ Sprinkler
☐ Industrial	☐ Cooling ☐ Manufacturing ☐ Mill ☐ Other (specify):
☐ Military	
☒ Other	Specify (livestock, hydroelectric, aquaculture, etc.):

Location of Use (Describe the location of water use, relative to the diversion, and indicate on location map. If water is used by others, submit a list of their names and addresses.): see attachments

I declare that the contents of the above Declaration of Water Use are, to the best of my knowledge and belief, true, correct, and complete.

Water User's Signature: Robert Scott Henderson Date: 6/1/2010

Printed Name: ROBERT SCOTT HENDERSON

Firm or Title (Diversion Operator, etc.): PROPERTY OWNER

TMK 2-5-25 parcel 6

One of several property owners involved with this stream works

← see attachments

Attachment 2.

Summary of Historic Stream Diversion Features on
"Ainako Stream" & "Branch Stream", Ainako, Hilo, Hawaii
prepared by Scott Henderson, March 2010

Stream features (X) on the subject property are shown in Figure A-1 and include:

A. **"Branch Stream"** of about ½ mile length with width of one to 12 feet with landscaping features that include ground-level-flush retaining walls, three porous weirs , an arch bridge and two fishponds. Hilo Sugar Company Plantation Field map Sheet #10 dated 1924 (Figure A-2) shows the "Branch Stream" origin point as a water source for a "temporary flume" that extended in straight line distance of about 1,500 feet to sugar cane field lots 71-72 (at the location of lower sections of the present day Ainako Terrace subdivision). The "Branch Stream is depicted on TMK maps of 1947 (Figure A-3) to present on a path that meanders about 12 degrees east of the old temporary flume route.

B. **"Flood Control Gate"** structure with vertical sliding gate of 14-inch width and 36-inch height. This gate likely existed in (or before) 1924 as a device to control flow into temporary flume systems (Figure A-2). Owners and residents of properties at or near to the structure recall that it existed in the late 1950's.

C. **"Diversion Dam"** of loose-stacked rock that raises water-level by several inches to provide flow through the gate into the Branch stream. The dam near water level is about a foot wide and six feet long. It is topped by a length of railroad track that is partially buried in the south stream bank. The dam has been in place for at least 50 years, but may date to 1924 or earlier as its presence is required to raise the main stream level to shunt water into the Branch Stream (and, in the past, into temporary cane flumes).

D. **"Flood Levees"** of solid concrete or mortared rock that create flood-control walls on margins of Ainako stream of two- to five-foot height. These Levees and other sections of Levees that continue downstream for about 0.2-mile have been in place since the late 1950's. They were likely built by the subdivision developer (Hilo Sugar Co.) immediately after a major flood occurred in 1956. Some Levee

sections have been increased in height by 1 to 3 feet by property owners over the last four decades in response to subsequent flood events.

Additional information:

There are no known flow data for the Ainako Stream or Branch Stream prior to 2009. Recent flow measurements by S. Henderson and E. Montgomery are presented in Table A-1. Data taken at "medium" flow levels, show that at "historic" setting of the flood/flow control gate (3.5-inch open gap), about 8% of the Main (Ainako) Stream flow is diverted into the Branch Stream. With gap opening increased to 5 inches, the diversion amount increases to 12%. And, at full open position, 23% of the Main Stream volume is diverted to the Branch Stream.

In interest of maintaining "status quo" relative to the proportion of water diverted from the Main Stream to the Branch Stream, it is intended that the gate gap setting remain at 3.5 - 4 inches. Any alteration to this flow standard would be negotiated with the State Water Commission and property owners that border the Main (Ainako) Stream and Branch Stream down-slope of the flood/flow control gate.

More detailed information on the history and physical setting of the subject streams and associated structures are presented in Attachment A (Ainako Stream and Branch Stream , Hilo, Hawaii, Historical Notes & Physical Features, March 2010). Detailed computational flow rate data are on file with S. Henderson.

Property owners with interest in this registration of stream diversion works existing between Ainako Avenue and Kokea Street (TMK 2-5-25):

Leslie Aina Weight, Parcels 5 & 14 (Flood control/flow control gate, 420 feet of Branch stream length, & 300 feet of flood levee).

Robert Scott & Judith Ann Henderson, Parcel 6 (170 feet of Branch stream length).

Hans & Camille Thomsen, Parcel 15 (Diversion weir/dam & 250 feet of Ainako stream length).

Bret Marsh, Parcel 4 (180 feet of Ainako stream length & 120 feet of flood levee)

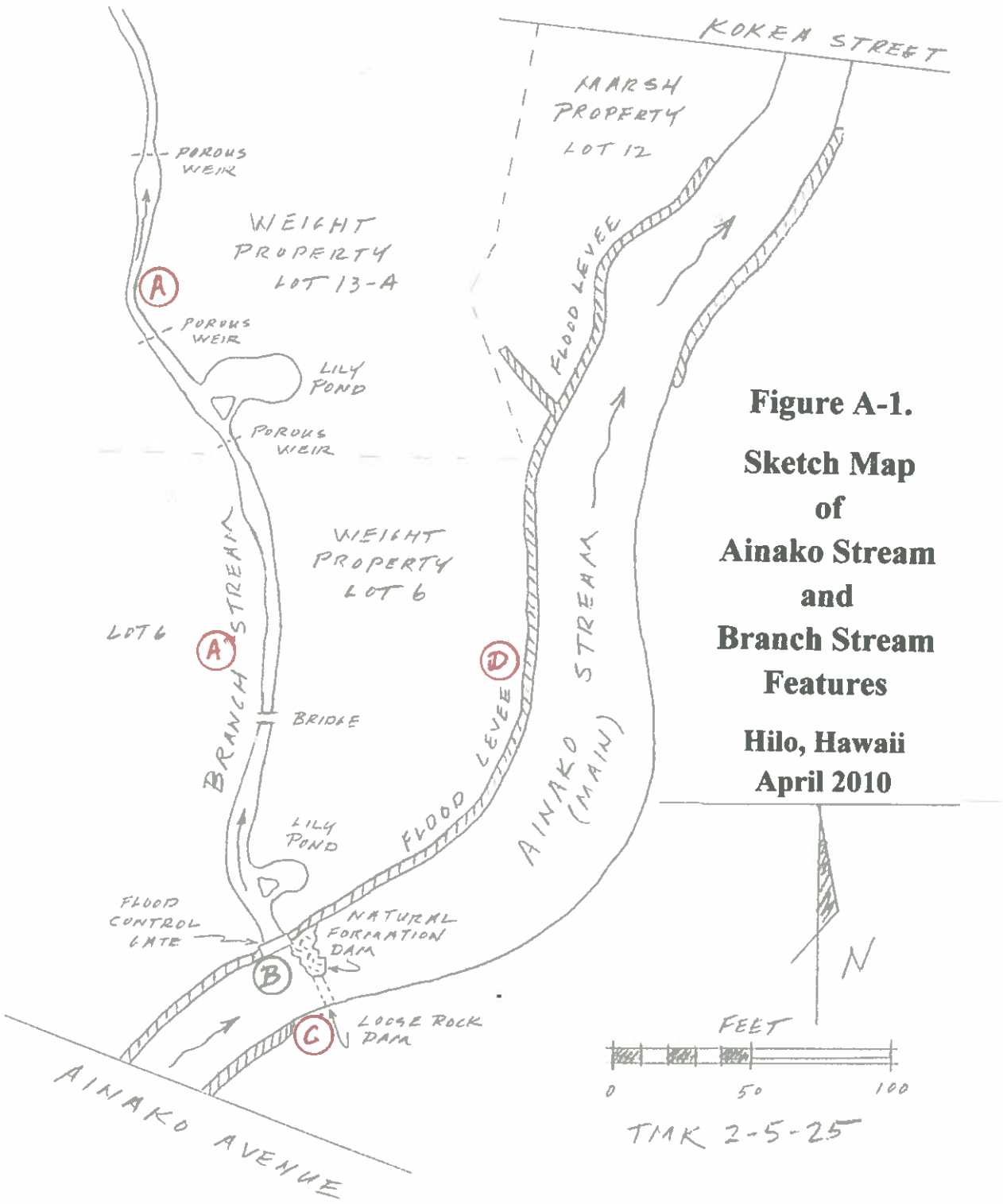


Figure A-1.

Sketch Map of Ainako Stream and Branch Stream Features

Hilo, Hawaii
April 2010

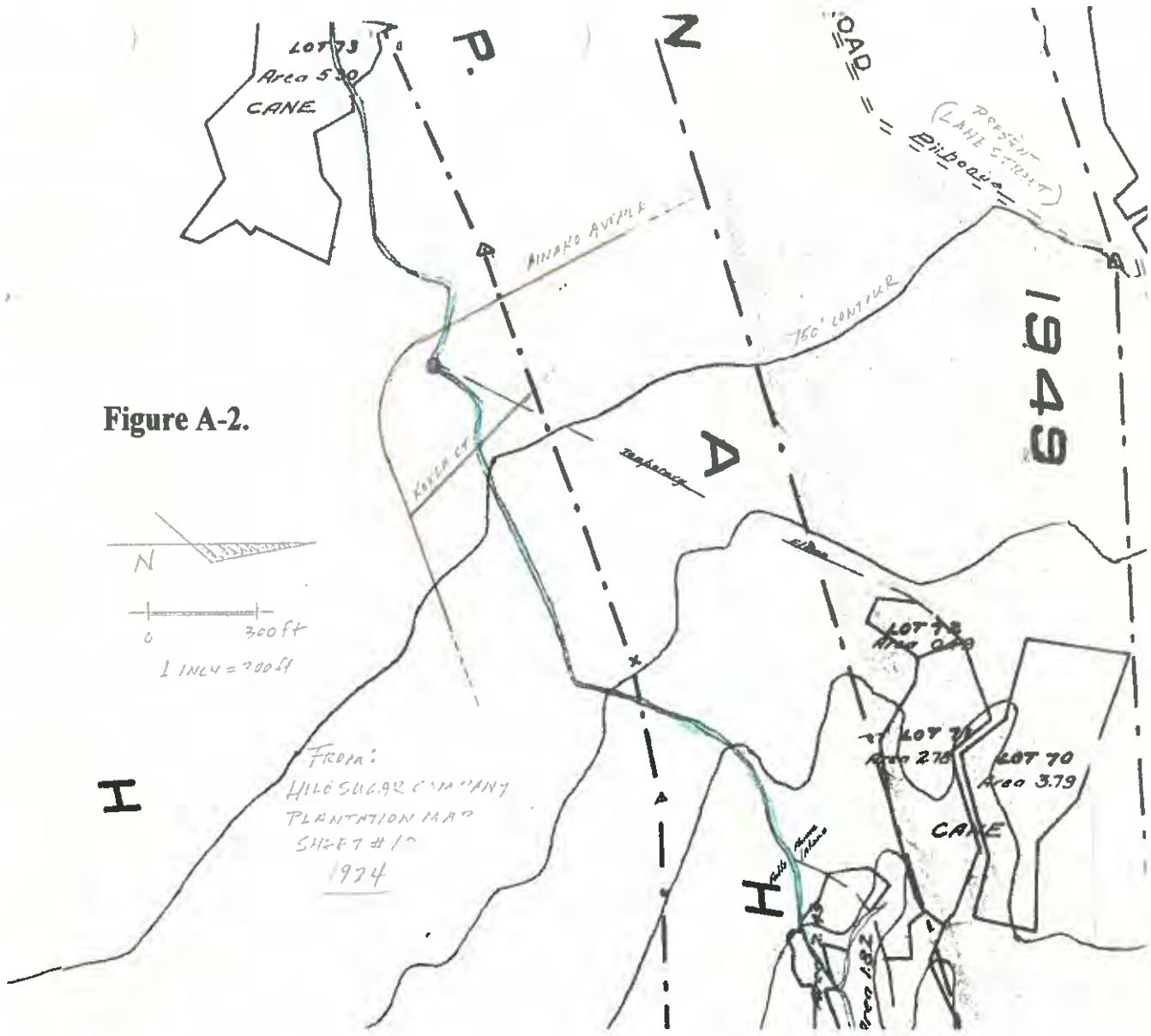


Figure A-2.

Figure A-2. Hilo Sugar Company Plantation Map #10, 1924

("Temporary flume" line extends SE from present day stream origin point at Ainako Stream [blue line, present gate/origin point] to past sugar cane lots to northeast; present day route of Branch Stream is approximately 12 degrees east of that route. Present day sections of Ainako Ave & Kokea St have been added.)

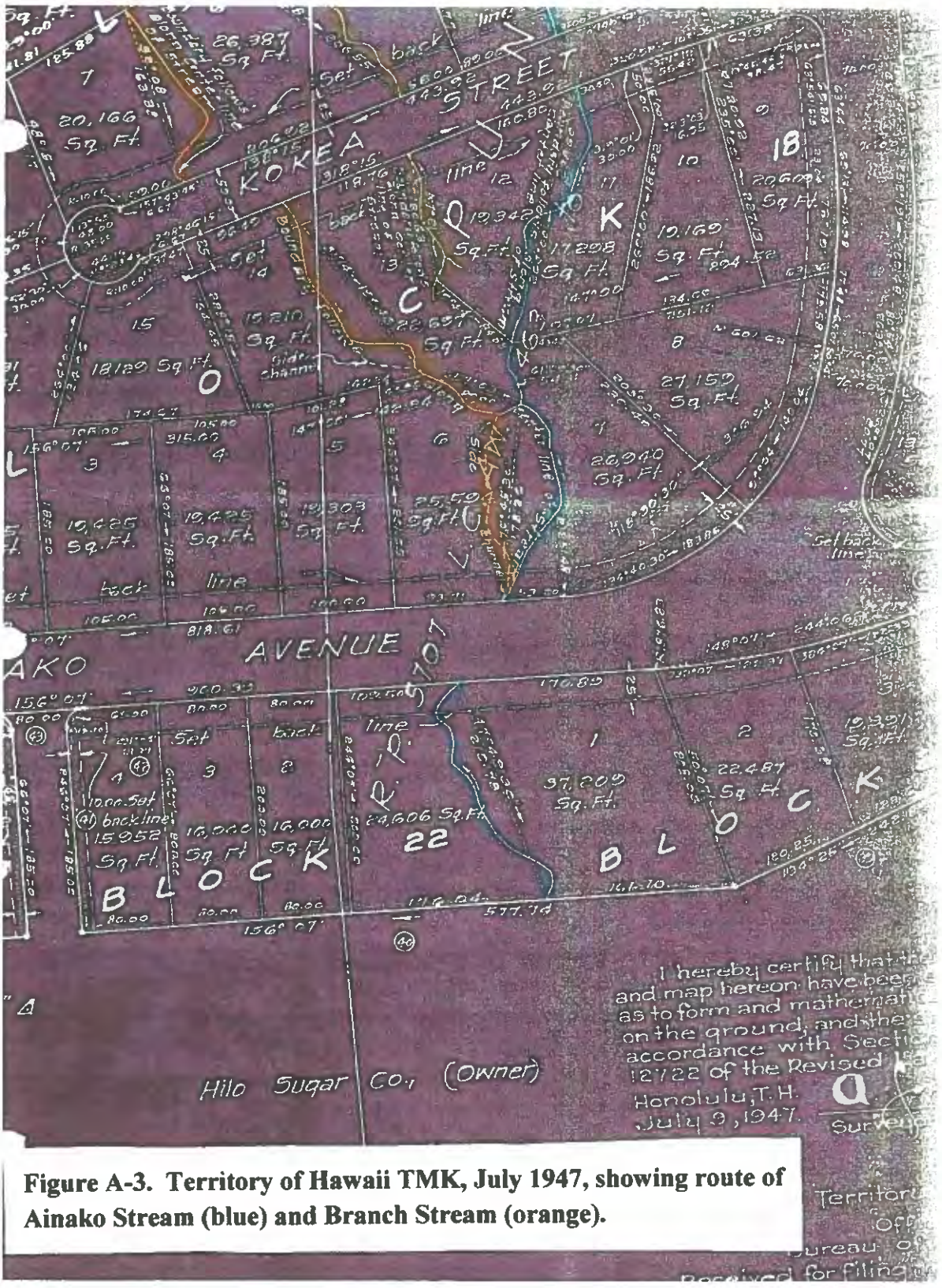


Figure A-3. Territory of Hawaii TMK, July 1947, showing route of Ainako Stream (blue) and Branch Stream (orange).

TABLE A-1. FLOW RATE DATA FOR MAIN (AINAKO) STREAM & BRANCH STREAM

(flow values in gallons per hour)

	April 1, 2010 [1]	Nov. 10, 2009 [2]
A. MAIN STREAM (at Ainako Ave bridge)	**175,560**	**no data**
B. BRANCH STREAM ORIGIN (with full open gate)	**41,738** (=23% of "A")	**no data**
C. BRANCH STREAM ORIGIN		
(with 5-inch gate opening)	**21, 600** (=12% of "A")	**no data**
(with 3.5-inch gate opening)	**14,541** (=8% of "A")	**5,796**
D. BRANCH STREAM CROOK (300 feet downstream from gate)	**9,780** (=23% of "B")	**1,440** (=25% of "C")
E. BRANCH STREAM NARROW (at S-11, Figure 11 & Table 1))	**18,000** (=43% of "B")	**3,528** (=61% of "C")
RAINFALL IN PRECEEDING 30 DAYS	**18.53 inches**	**13.16 inches**

---

[1] = measurements made with Geopacks flowmeter, main stream level = 9.75 inches = "medium" flow

[2] = measurements made with funnel bag-catch bucket method, main stream level not measured, gate at 3.5-inch opening at "low" flow

AINAKO STREAM AND BRANCH STREAM (HILO, HAWAII)

HISTORICAL NOTES & PHYSICAL FEATURES

Author: Scott Henderson, 107 Kokea St, Hilo, HI,

March 2010

Ainako stream originates at about 820-foot elevation about 0.4 mile upslope from the 1000 Ainako Avenue bridge. The origin area is roughly a half-mile square of boggy scrub forest and grasslands immediately below Akolea Road. Numerous springs arise from the origin area (Figure 1) and converge on the stream channel via a network of ill-defined meandering routes. Substrate over the entire length of Ainako stream is dominated by pahoehoe lava flows dating to 5,000 to 10,000 years of age. This same substrate dominates slopes extending more than five miles above the stream origin. The pahoehoe flows are very porous, and lava blisters, tumuli and lava tubes are common. Less than a half-mile to the south of the stream origin area, an extensive lava tube system contains underground streams that flow most of the year. Similar subterranean systems likely feed the Ainako stream springs.

In a few locations, stacked rock lines the borders of the stream (Figure 2), possibly put in place by Hilo Sugar Plantation Company for flood control or water diversion purposes. Below the origin area, the stream flows over gentle relief through forest composed of strawberry guava, tibuchina, ferns, ginger and tall grasses (Figure 3).

Figure 1. Typical springs at Ainako stream origin area (approximate location N 19 42 26.4, W155 07 56.1, 250 meter elevation).

EXHIBIT 3

Figure 2. Ainako stream in lower portion of origin area. The rock embankments were possibly built by Hilo Sugar Plantation Company.

Figure 3. Ainako stream in forest above Ainako subdivision.

In the mid-1980s, a storm control trench was emplaced along Akolea Road, running cross-slope immediately above the Ainako stream origin area. Thus, there is no longer any surface runoff input into the stream origin area other than from the immediate watershed areas below Akolea Road. Prior to the construction of the storm control trench, areas of Ainako along the stream were subjected to several major flood events. A flood in August 1956 caused significant damage to subdivision properties along the stream.

By the time that the Henderson family moved to 51 Kokea Street in August 1958, substantial flood control levees of mortared rock and solid concrete had been built along several flood-prone sections of Ainako stream between Ainako Avenue and Koula Street (a distance of 0.2 mile). Those levees are generally 2 to 5 feet high and 0.5 to 1.5 foot thick (Figures 4 & 5). The levees were likely built by the Hilo Sugar Plantation Company (developer of the Ainako subdivision) and individual landowners in the subdivision. During a major flood in 1964, water level in the Ainako stream rose to within a few inches of the top of the levee in back of the Henderson's house.

In the mid-1940s, Hilo Sugar Plantation Company created a subdivision that included the general area of Kokea Street, Koula Street and Kapaa Street. The streams on those properties were (and still are) classified as "residential" and are owned by the property owners on either side of the stream(s). Some property boundaries are defined by large and small streams and at least one intermittent flow drainage swale.

Figure 4. Flood levee along Ainako stream on upstream border of Marsh property. Built circa 1956-58 soon after damaging flood of 1956.

Figure 5. Levee embankments along the Ainako stream Weight property margin.

The Weights purchased their first Ainako property, that included Lot 6, sometime in 1954-55. At that time the property was covered with tall grass and ferns and the branch stream ran through the property along the same general route that it follows today. The Weights moved onto the Ainako property in 1956. In the 1950s, or possibly earlier, a small flood gate was installed at the junction of the main stream and Ainako stream, most likely by the Sugar Company or Dr. Weight. The gate structure appears to be integral with the 3-foot-high retaining wall that runs along the entire Ainako stream boundary of the Weight property (Figures 5, 6 & 7). A steel plate of 14-inch width and 36-inch height slid vertically within grooves in the sides of the gate structure (Figures 6 & 7). For two or three decades, the steel plate had been jammed in a position that was about 3 ½ inches above the bottom of the gate. Water flows from Ainako stream, through the gate, into a 4-foot section of 14-inch ID concrete culvert (that passes under a sidewalk), and then into the branch stream (Figure 8).

It appears that the concrete culvert piece had been placed onto an unaltered pahoehoe lava surface in a natural low spot through which water would have flowed. Primary function of the flood gate over the last three decades has been to prevent very high levels of water from flowing into the branch stream during storm flow.

Figure 6. Flood control gate that buffers water flow into the branch stream. In back of the gate is a 14-inch ID diameter four-foot section of concrete culvert. Historic (2 to 4 decade) setting of the gate opening gap (3 ½ -4 inches) provides steady day-to-day water supply while keeping storm flow to non-damaging levels on downstream properties. The present gate, built of plastic wood, replaces the pre-existing steel gate and is set at the historical gap. Station1 in Figure 11.

Figure 7. Flood control gate and reinforced embankment at origin of branch stream.

Figure 8. Culvert that supplies flow to branch stream from Ainako stream. View from branch stream side. Station 1 in Figure 11.

To ensure that the water level of Ainako stream is maintained at a level that will provide ample flow of water into the branch stream, a diversion dam was built across half the width of Ainako stream (Figures 9 & 10). The diversion dam is made of loose-stacked rock and is topped by a length of railroad track. Landside end of the track piece is buried in soil. It is not known who first built the diversion dam, but it was likely either the Sugar Company or Dr. Weight. Over the years, Dr. Weight periodically repaired storm flow damage to the dam by recovering loose rocks in the stream and placing them back on the dam face.

Figure 9. Diversion dam (in left foreground) that raises Ainako stream level to divert water into the branch stream culvert. Ainako Avenue bridge is seen in background.

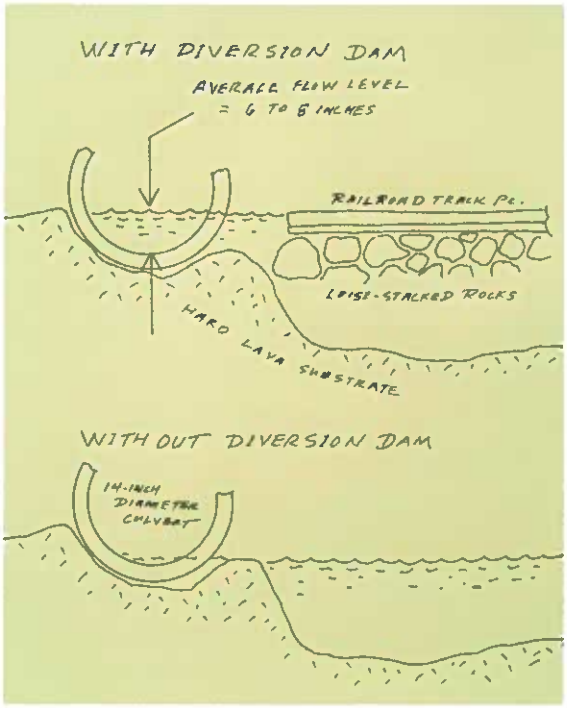


Figure 10. Schematic of water feed flow point to the branch stream with and without diversion dam in place. Note that without the diversion dam, there would be minimal or nil flow allowed into the supply culvert during low-levels of flow in the main (Ainako) stream.

Ainako stream length is about 1.3 miles from origin area to where it flows into a boggy area in a downstream valley below Kapaa Street. Width of the stream ranges from about three to 30 feet. According to Fred Koehnen, who has lived on the stream at Kapaa Street since 1956, Ainako stream has lost all water flow during periods of drought on about 5-6 occasions. Sue Irvine (who lived on Lot 7 for many years) documented dry-up of Ainako stream in March through June of 1992 and for two weeks in March of 1998. The stream experienced a flow stoppage event sometime in 2002-03. And Ainako stream nearly dried up in February of this year (2010).

Average annual water flow through the Wailuku River also shows very low values during the "no-flow" periods experienced in Ainako stream (USGS surface water annual statistics). Of interest is the fact that only two low-flow years were experienced in the Wailuku from 1960 through 1982 (22 years), whereas nine low-flow events occurred since 1983 (a 26 year period). This trend matches patterns of rainfall and El Nino events. If the trend continues, drought and low-flow events will occur on a relatively frequent basis.

The branch stream channel extends from the flood control gate through culverts at Kokea Street, Koula Street and Kapaa Street and onto the boggy valley where its flow and that of Ainako

stream merge and are eventually lost to percolation. The branch stream travels a total distance of about ½ mile. Its width varies from about one to 12 feet. Over the last few decades, retaining walls, bridges and ornamental fishponds have been created at many points along the stream's route (Figure 11 and Table 1).

The natural pahoehoe sill at the flood gate is over a foot higher than the floor of Ainako stream creating a situation wherein water flow to the small stream ceases before all flow to the main stream has been lost. And when dry-up events occur, lower reaches of Ainako stream and the branch stream dry-up before the upper reaches of the streams, likely due to the fact that the streams flow over ground surfaces composed primarily of very porous pahoehoe lava. This natural loss of water is seen in flow rate measurements made in October 2009 (Figure 12).

In 2008, S. Henderson and A. Weight plugged an obvious gap in a submerged pahoehoe inter-layer feature where a significant proportion of flow was being lost from the branch stream on Weight property. The October 2009 flow measurements made from the branch stream origin to Koula Street showed that flow rates were highly erratic, but slowly decreased downslope (Figure 12). It was apparent that in some locales water flow goes underground but re-enters the surface stream further downstream. Where the branch stream passes under Kokea Street, it loses nearly 60% of surface flow, but that flow is regained about 100 feet downstream of the culvert. From a point about 150 feet downstream of Kokea Street to the culvert at Koula Street, the stream loses about 43% of flow. Flow measurements showed that dam or diversion structures along the stream had no apparent deleterious effect on flow. During periods of very low flow in the branch stream several areas can be seen where water flows into voids in the pahoehoe substrate.

With the flood control gate set at an historical gap of 3 ½ to 4 inches, the branch stream channel fills to nearly overflowing level during periods of high storm flow, but does not create any conditions conducive to flooding hazard. Observations of flow in the branch stream during high storm flow consistently show that there are no significant impediments or alterations to flood drainage caused by any retaining walls, bridges or ponds on the streams that presently exist along the branch stream route from origin gate to Kapaa Street.

Historically, no native vertebrate species have been reported from the Ainako stream and branch streams system. Lack of connection to marine environments precludes the access of native animal larval phases to the system. Common alien fish that thrive in the streams include guppies (*Poecilia reticulata*), green swordtails (*Xiphophorus helleri*), and oriental weatherfish (*Misgurnus anguillicaudatus*). Dominant invertebrates include crayfish (*Procambarus clarkia*), bullfrogs (*Rana catesbeiana*), and cane toads (*Bufo marinus*). Waterfowl that frequent a variety of habitats in the streams include black-crowned night herons (*Nycticorax nycticorax hoactli*), golden plovers (*Pluvialis dominica*), and wandering tattlers (*Heteroscelus incanum*). There are no known records of any rare, threatened or endangered species utilizing these streams.

Figure 11. Ainako branch stream route & features. Triangular symbols = GPS-located photo stations. More data on the stations are provided in Table 1 (next page). Photos taken at the stations are shown in Figures 6, 8 and 13 through 26.

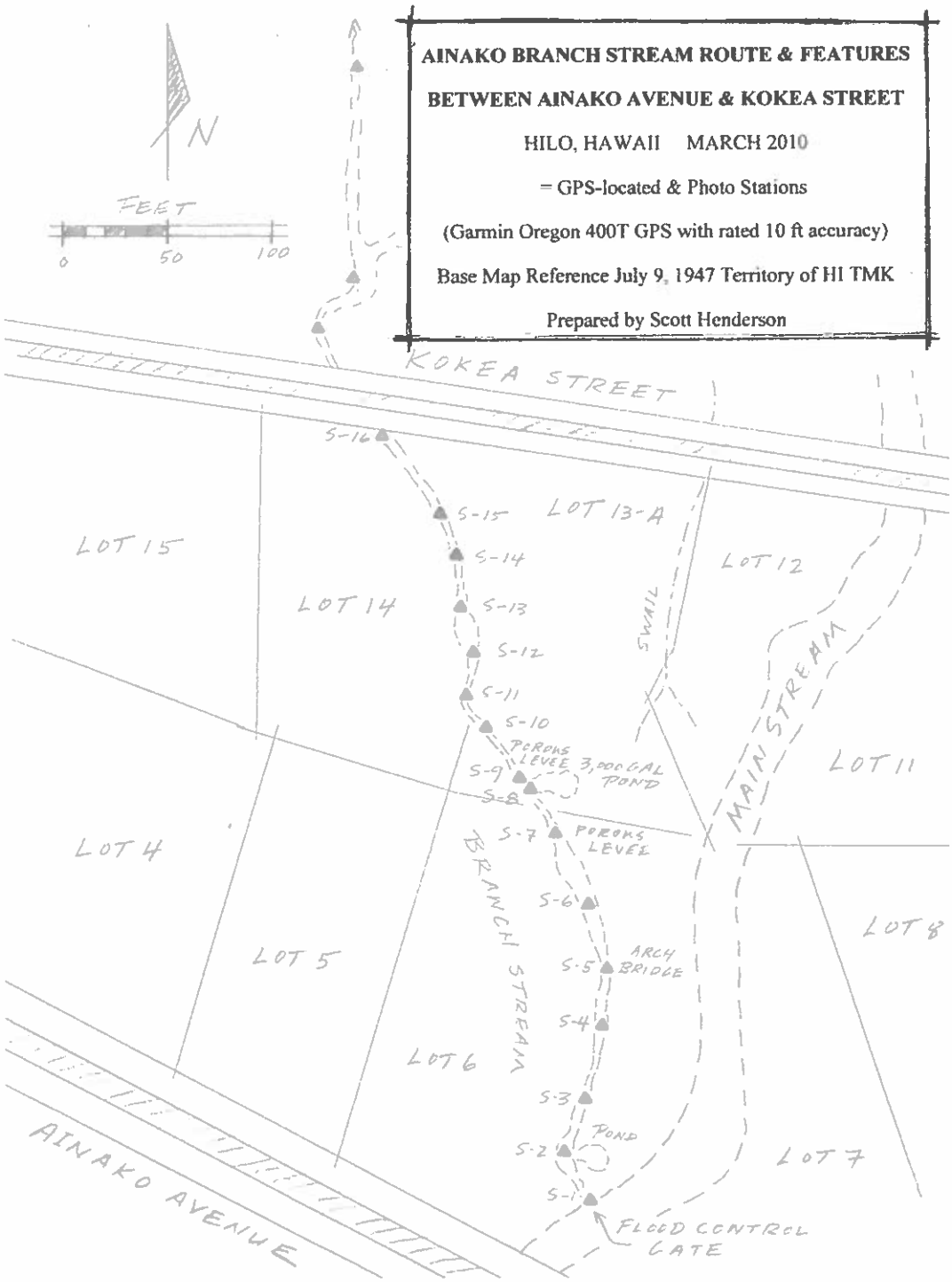


Table 1. Ainako branch stream map & property stakes GPS coordinates for Weight & Henderson properties.

S1	Flood gate: point where water enters branch stream	N19 42 30.9 W155 07 33.8
S2	Branch stream, rapids, 9 ft wide	N19 42 31.1 W155 07 33.7
S3	Branch stream, rapids, 6 ft wide	N19 42 31.2 W155 07 33.5
S4	Branch stream, rapids, 7 ft wide	N19 42 31.4 W155 07 33.1
S5	Branch stream, center of stone bridge, 6 ft wide	N19 42 31.6 W155 07 32.9
S6	Branch stream, long pool, 7 ft wide	N19 42 31.9 W155 07 32.7
S7	Branch stream, porous levee at fishpond inlet, 7 ft wide	N19 42 32.2 W155 07 32.6
S8	Branch stream, at fishpond waterfall, 9 ft wide	N19 42 32.4 W155 07 32.5
S9	Branch stream, porous levee, 5 ft wide	N19 42 32.5 W155 07 32.5
S10	Branch stream, rapids near bend, 5 ft wide	N19 42 32.8 W155 07 32.5
S11	Branch stream, 1 ft wide	N19 42 33.0 W155 07 32.5
S12	Branch stream, rapids at mauka end of pool, 3 ft wide	N19 42 33.1 W155 07 32.2
S13	Branch stream, porous levee, 7 ft wide	N19 42 33.3 W155 07 32.1
S14	Branch stream, 1 ft wide	N19 42 33.5 W155 07 31.9
S15	Branch stream, 2 ft wide	N19 42 33.7 W155 07 31.8
S16	Branch stream, center of bridge, 3 ft wide	N19 42 34.1 W155 07 31.7
P-1	Property stakes (approx locations), 3-12-2010	N19 42 35.6 W155 07 26.6
P-2	Property stakes (approx locations), 3-12-2010	N19 42 31.8 W155 07 34.8
P-3	Property stakes (approx locations), 3-12-2010	N19 42 32.7 W155 07 32.9
P-4	Property stakes (approx locations), 3-12-2010	N19 42 33.5 W155 07 33.5
P-5	Property stakes (approx locations), 3-12-2010	N19 42 34.6 W155 07 32.2
P-7	Property stakes (approx locations), 3-12-2010	N19 42 33.1 W155 07 30.6
P-8	Property stakes (approx locations), 3-12-2010	N19 42 32.4 W155 07 31.7
P-9	Property stakes (approx locations), 3-12-2010	N19 42 31.8 W155 07 32.0

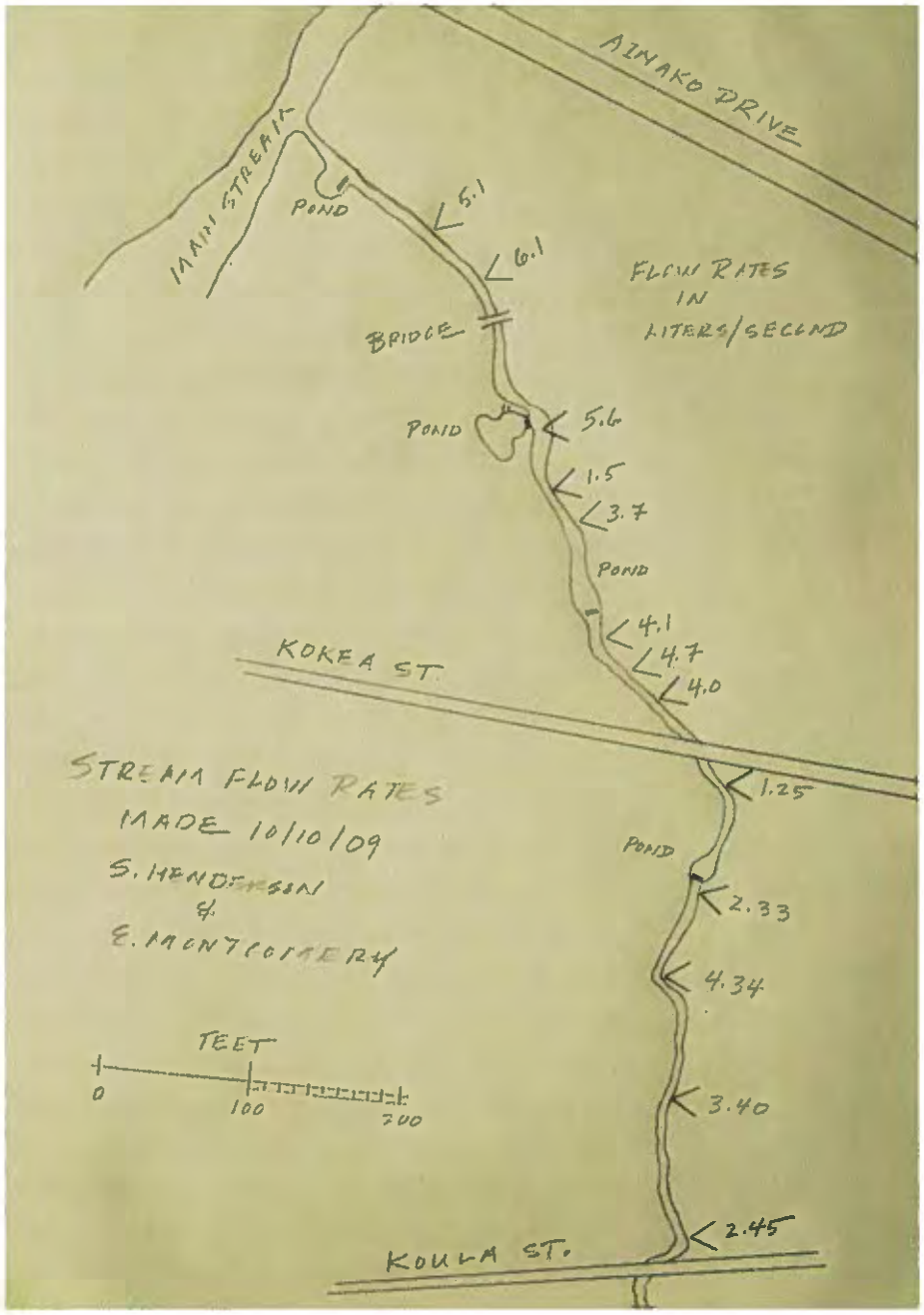


Figure 12. Branch stream flow measurements made in October 2009. Water flows downstream from the "main stream" (Ainako stream).

Figure 13. Station 3 of branch stream looking upstream.

Figure 14. Station 4 of branch stream looking upstream.

Figure 15. Station 5 of branch stream looking upstream.

Figure 16. Station 6 of branch stream looking upstream.

Figure 17. Station 7 of branch stream looking upstream.

Figure 18. Station 8 of branch stream looking across stream to pond overflow.

Figure 19. Station 9 of branch stream looking upstream.

Figure 20. Station 10 of branch stream looking upstream.

Figure 21. Station 11 of branch stream looking upstream.

Figure 22. Station 12 of branch stream looking upstream.

Figure 23. Station 13 of branch stream looking upstream.

Figure 24. Station 14 of branch stream looking upstream.

Figure 25. Station 15 of branch stream looking upstream.

Figure 26. Station 16 of branch stream looking downstream at culvert that passes under Kokea Street.

R. Scott Henderson educational and professional background:

University of Hawaii, Manoa, B.S. Degree in Geology (1966) specializing in Volcanology, with minor in Biology. Two years graduate studies in Oceanography and Geophysics.

Six years of employment by University of Hawaii as field and laboratory assistant in State Shoreline Erosion Project and Pacific-wide geomagnetic/gravity surveys and laboratory studies.

Thirty years as Federal Marine Biology Flow-through Research Laboratory manager, Natural Resources Manager and Chief of Environmental Office with Navy, Marine Corps and Army on islands of Oahu and Hawaii.

Continued business interest: Environmental Consultant, Kuapa Services

Continued personal interests: Marine and freshwater fish ponds, stream and pond ecology, reef ecology, mangrove control, avid hobby aquarist and ponds culturist, wetland management.

Pertinent familial presence on subject streams and proximal properties:

Self and/or parental family lived on Kokea Street properties on or adjacent to Ainako stream and branch stream properties from 1958 through present (52 years).

Spouse and/or parental family lived on Kokea Street properties from 1965 through present (45 years).

Persons that contributed historical information for this report:

Scott Henderson, Aina Weight, Fred Koehnen, Richard Henderson, Judy Henderson, Arthur Herbst

TABLE OF CONTENTS

EXHIBIT 3

State of Hawaii
COMMISSION ON WATER RESOURCE MANAGEMENT
Department of Land and Natural Resources

COMPLAINT / DISPUTE RESOLUTION FILING FORM

Instructions: Please print in ink or type and send completed form with attachments to the Commission on Water Resource Management, P.O. Box 621, Honolulu, Hawaii 96809. For further information and updates to this application form, visit http://www.hawaii.gov/dlnr/cwrm.

For Official Use Only:

Complaint File No: C

1. Name: At the request of: Mr. Ron Okazaki, Date: 01/24/2011

   Address: Mrs. Dora Okazaki, Mr. Carl Okazaki, Mr. Norman Purves, Dr. Maren Hauschildt-Purves, Mrs. Tamae Shindo Dr. David Jung and Mrs. Malinee Jung

   Daytime Phone No.: (808) 526-9111 (Mr. John Carroll, Attorney At Law) Fax No.

2. Location of the violation or water problem: Ainako Branch Streams 1 & 2

   Tax Map Key: 2-5-25-14 and 2-5-25-5

   Landowner's Name: Ms. L. Aina Weight

   Landowner's Address: 1000 Ainako Avenue

   Landowner's Phone No.:

3. The party I have a complaint about or dispute with is: (if more than one party, please attach additional sheets)

   Name: Ms. Aina Weight

   Address: 1000 Ainako Avenue

   Hilo, Hawaii 96720

   Phone No.:

   If the party is not the landowner listed in Section 2 above, please describe the party's relationship to the TMK parcel described in Section 2.

4. Describe the complaint or reason for the dispute:
(Attach a sketch or photograph if that will help explain the problem.)
Ms. L. Aina Weight, with the advice and encouragement of Mr. Scott Henderson has placed a sluice gate at the mouth of branch stream 1 of Ainako Stream (see map). Since the 1990's she and her now deceased father have placed obstructions in the branch stream greatly altering surface waterflow. This new gate (placed by Scott Henderson in 2008) replaced a previous obstruction by Dr. Weight in the mid 1990's which drastically altered free flow of water through branch stream 1. It can be raised and lowered and Ms. Weight will lower or close the gate at times of storms or high flow in Ainako Stream. Ms. Weight will lower this gate to such a degree that a trickle of water is left for residents below Kokea Street.

Mr. Henderson has also completely blocked a second branch stream slowly from the mid 1980's to the point there was no flow by 1990. All that is left of branch stream 2 is a dry stream bed.

5. Describe how your water usage or water rights are specifically affected by the other party, if at all:
Because of the gate at the mouth of branch stream 1 and the blockage of branch stream 2, residents living by the stream branches of Ainako Stream below Kokea Street have no water in their streams nine months of the year and a greatly decreased surface flow in the other months.

Flow is completely controlled now by the lowering and raising of the gate at the mouth of branch stream 1 by Ms. Weight. Work done on the mouth of branch stream 1 began first with vertical bars in the mouth of the branch - this kept out debris and large boulders. Dr. Weight sometime in the early 1990's placed a sheet of metal between the bars to block the flow in branch stream 1. Drastic decrease of water flow was noted by all below the Weight property. Dr. Weight later converted this into a metal grate which could be lowered and raised. Flow was intermittent and decreased for the first time after this metal grate was placed and long of periods of no water in branch stream 1 occurred which had not occurred before the metal sheet was placed to be later replaced by the metal grate. Prior to this flow was almost all year round. After placement of the obstructions of Dr. Weight long periods of no water was present for months at a time. Because the metal grate of Dr. Weight was frozen in place Mr Scott Henderson replaced this with a plastic sluice gate which can be raised and lowered by Ms. Aina Weight. This has led to a trickle of water for all residents below 99 Kokea Street.

With the blockage of branch stream 2 in the 1980's by Dr. Henderson (now deceased), with knowledge Mr. Scott Henderson and Ms. Aina Weight, flow to residents below Kokea Street was reduced and branch stream 2 ceased to exist except as a dry stream bed. Water which flowed between the Okazaki and Purves properties often flowed over to the present day Matsumoto property and then joined branch stream 1. The Shindo property has lost its waterfall and four ponds. Blockage was gradual of branch stream 2 starting mid 1980's and complete by 1990. Thus the Okazaki, Purves, and Shindos have lost this water of branch stream 2, as have all properties below Kokea Street.

6. Date the problem was first noticed: Early 1990's drastic decrease in Stream-flow branch stream 1; Flow in branch stream 2 ended by 1990; drastic change flow branch stream 1 2008 with new gate

7. If this complaint or dispute is related to a water source, was the water source previously declared with the Commission on Water Resource Management?

☒ Yes ☐ No ☐ Don't Know

If yes, what was the name and tax map key of the source?
TMK 2-5-25-14 and 2-5-25-5 Applied March 2010, May 2010 registration given. Ms. Aina Weight and Mr. Scott Henderson applied to register the sluice gate of branch stream 1 and request "useful and beneficial" be given the sluice gate completed in 2008 by Mr. Scott Henderson

8. Have you had any communication with the party/parties described in Section 3 above?

☒ Yes ☐ No

If yes, list the communications and dates: (Attach copies if written communications were made)
1. Early 1990's - Mr. Fraleigh and Dr. Weight
2. Early 1990's - Mr. Ron Okazaki with Dr. Weight
3. 1996 - 1997 - Mr. Ron Okazaki and Mr. Carl Okazaki with Ms. Aina Weight
4. Nov 2009 - Mr. Scott Henderson and Dr. David Jung
5. May 2010 - Ms. Aina Weight and Dr. David Jung

9. Have you sought resolution of this matter with any other entity?
(e.g., government agency, judicial body, or private entity)
Third Circuit Court
-jurisdiction refferred to you.

If so, with whom and what was the outcome?
(Please provide copies of any documentation of this process)

10. Describe what you believe a successful and fair remedy might be:

1. Revoke the registration for the diversion gate at the mouth of branch stream1 of Ainako Stream since no hearing was allowed and information given by Ms. Aina Weight and Mr. Scott Henderson not completely true. TMK 2-5-25-14
2. Remove the diversion gate on Ms. Aina Weight and restore the mouth of the branch stream 1.
3. Restore the second branch stream blocked by the actions of Dr. Henderson (deceased) and Mr. Scott Henderson during the time period approximately 1985 - 1990. TMK 2-5-25-5
4. Restore free surface water flow to the branch streams 1 & 2 so that all residents that live by the streams can enjoy their rightful use of the water.

I request that the Commission on Water Resource Management assist in resolving the matter described herein.

John Carl Esq
Signature
For complainants, Esq, et al.

25 Jan. 2011
Date

REQUEST FOR DISPUTE RESOLUTION MEMORANDUM

I. INTRODUCTION

In this Complaint/Dispute Resolution request before Hawaii COMMISSION Water Commission (HERINAFTER COMMISSION),

Mr. Norman Purves & Dr. Maren Hauschidlt-Purves (husband & wife)
60 Kokea Street
Hilo, Hawaii 96720

TMK: 2-5-24-44

Mr. Ronald & Mrs. Dora Okazaki (husband and wife)
80 Kokea Street
Hilo, Hawaii 96720

TMK: 2-5-24-45

Mrs. Tamae Shindo (widow)
145 Koula Street
Hilo, Hawaii 96720

TMK: 2-5-24-33

Dr. David & Mrs. Malinee Jung (husband and wife)
118 Koula Street
Hilo, Hawaii 96720

TMK: 2-5-24-28 & TMK: 2-5-24-29

(Hereinafter PARTIES), request that the Commission consider what AINA WEIGHT or her Father has done(hereinafter WEIGHT") has done and that she be compelled to remove all obstructions constructed on WEIGHT's land and restore the flow of water in the stream channel to its original, natural, condition. PARTIES seek to have the earth modification at the stream mouth restored

to its original level. PARTIES ask the COMMISSION to order that WEIGHT be perpetually enjoined from obstructing the water flow in the full and natural flow of water in such stream, or permitting or causing said flow to be so obstructed. This request is to ensure that the Commission is fully apprised of the false statements in the Declaration of Use leading to the issuance of a Use Permit or Registration to WEIGHT, the impact on the Ainakoa Stream flow, the diminished flow in Branch Stream One and the elimination of flow in Branch Stream Two. (See Map attached with Pictures 1-24).

II. STATEMENT OF FACTS

PARTIES, David Jung, Melanie Jung, Ronald Okazaki, Dora Okazaki, Tamae Shindo, Norman Purves, Maren Hauschidlt, at all times mentioned were, and now are, the owners and occupiers of real property situated in the County of Hilo, Hawaii, as noted above.

WEIGHT, at all times mentioned in this complaint was, and now is, the owner and occupier of real property subject of this suit. As noted, situate in the County of Hawaii, Hawaii.

For many years prior to the filing of this request for a contested case hearing, a certain stream of water has run along and through WEIGHT's land and down, along, and through

PARTIES' land, where it continues in a downward direction and empties into Hilo Bay.

For many years prior to 1990, the stream flowed through WEIGHT's and PARTIES' land in a natural and well established course, during all weather including periods of natural and ordinary flooding.

From the early 1990's until present, WEIGHT improperly and wrongfully built, and has at all times since then wrongfully maintained, modifications to and upon WEIGHT's land in the natural channel of the stream including but not limited to a sluice gate, elevation of the stream mouth at her property entrance, ponds and other diversions and impediments to the natural channel and surface flow. The sluice gate and appurtenant apparatus rise to the height of approximately seven feet, and extending along the channel for a measurable distance depending upon which structure, wall, gate or pond is being measured. Attached as Exhibit 3 is an affidavit of Carl Okazaki, son of Dora and Ronald Okazaki verifying the matters hereinabove set forth.

In building and maintaining the above-described structures, the predecessor owner of WEIGHT or WEIGHT, herself, altered the natural condition of the stream bed channel in such a way as to change the natural course and flow of said stream

a way as to change the natural course and flow of said stream and to cause the water in such stream to overflow and to be concentrated in increased volume on and over WEIGHT's land and drastically reduced volume over lower lying PARTIES' lands. This diversion and alteration has caused great and irreparable injury to PARTIES' lands and great damage to PARTIES in that such deprivation of surface flowing water has caused a large portion of PARTIES' land to be without adequate water which formerly provided water for plants, aquatic life, aesthetic enhancement and irrigation.

WEIGHT's diversion of the water course, as set forth above, is contrary to the prohibitions contained implicitly in Section Seven (7) of the Constitution of the State of Hawaii, HRS 174C, and as notably set forth in 78 Am Jur 2d, Waters Section 10 et seq., in that such diversion was done in a manner that damaged and continues to damage PARTIES' property by the restricted flow of the water diverted.

As the result of WEIGHT's wrongful and illegal acts, PARTIES have been deprived of the use of a substantial portion of PARTIES' land, to PARTIES' damage in the sum to be shown but in excess of $2,000,000.00 US. Unless WEIGHT is ordered to remove the impediments constructed on WEIGHT's land and be further legally enjoined from obstructing the natural flow of

the water in the natural channel of the Ainakoa Stream flow, the diminished flow in Branch Stream One and the elimination of flow in Branch Stream Two., by any similar or other device or construction, PARTIES will suffer greater, additional, and irreparable damage and will be put to the necessity of bringing a multiplicity of actions to protect their rights and property.

III. DISCUSSION

There is no genuine issue as to any material fact in this complaint. As a matter of law the PARTIES have established the absence of any genuine issue of material fact, and based on the undisputed facts, PARTIES are entitled to the requested relief. French v. Hawaii Pizza Hut, 105 Haw. 462,470, 99 P.3d. 1046, 1054 (2004).

There is no genuine dispute as to any material fact in this case. PARTIES seek restitution of the stream to its original course. That is, that the Ainakoa Stream flow, the diminished flow in Branch Stream One and the elimination of flow in Branch Stream Two are restored and rehabilitated to the same level that existed prior to the alterations, and that all obstructions to the natural flow are removed.

The Permit that was issued was based on false information submitted after Counsel for the Jung Group filed suit against

diminished flow in Branch Stream One and the elimination of flow in Branch Stream Two., by any similar or other device or construction, PARTIES will suffer greater, additional, and irreparable damage and will be put to the necessity of bringing a multiplicity of actions to protect their rights and property.

III. DISCUSSION

There is no genuine issue as to any material fact in this complaint. As a matter of law the PARTIES have established the absence of any genuine issue of material fact, and based on the undisputed facts, PARTIES are entitled to the requested relief. French v. Hawaii Pizza Hut, 105 Haw. 462,470, 99 P.3d. 1046, 1054 (2004). **S174C-2 Declaration of policy.** (a) It is recognized that the waters of the State are held for the benefit of the citizens of the State. It is declared that the people of the State are beneficiaries and have a right to have the waters protected for their use.

(b) There is a need for a program of comprehensive water resources planning to address the problems of supply and conservation of water. The Hawaii water plan, with such future amendments, supplements, and additions as may be necessary, is accepted as the guide for developing and implementing this policy.

(c) The state water code shall be liberally interpreted to obtain maximum beneficial use of the waters of the State for purposes such as domestic uses, aquaculture uses, irrigation and other agricultural uses, power development, and commercial and industrial uses. However, adequate provision shall be made for the protection of traditional and customary Hawaiian rights, the protection and procreation of fish and wildlife, the maintenance of proper ecological balance and scenic beauty, and the preservation and enhancement of waters of the State for municipal uses, public recreation, public water supply, agriculture, and navigation. Such objectives are declared to be in the public interest.

(d) The state water code shall be liberally int4erpreted to protect and improve the quality of waters of the State and to provide that no substance be discharged into such waters without first receiving the necessary treatment or other corrective

action. The people of Hawaii have a substantial interest in the presentation, abatement, and control of both new and existing water pollution and in the maintenance of high stands of water quality.

(e) The state water code shall be liberally interpreted and applied in a manner which conforms with intentions and plans of the counties in terms of land use planning. [L 1987, c 45, pt of S2; am L 1999, c 197, S1]

Case Notes

As water code expressly reserves the counties' authority with respect to land use planning and policy, commission allegedly imposing a "directive" on the counties to designate priorities among proposed uses did not usurp counties' land use planning and zoning authority. 94 H. 97, 9 P.3d 409.

Commission did not err in excluding golf course irrigation from the category of "agricultural use". 94 H. 97, 9 P.3d 409.

Commission on water resource management's conclusion that "no evidence was presented" to suggest that the rights of native Hawaiians would be adversely affected by permit applicant's proposed use erroneously shifted the burden of proof to complainants; thus, commission failed to adhere to the proper burden of proof standard to maintain the protection of native Hawaiians' traditional and customary gathering rights in discharging its public trust obligations. 2126 H. 481, 174 P.3d 320.

Previous Vol03 Ch0121-0200D Next

[S174C-4] **Scope.** (a) All waters of the State are subject to regulation under the provisions of this chapter unless specifically exempted. No provision of this chapter shall apply to coastal waters. Nothing in this chapter to the contrary shall restrict the planning or zoning power of any county under chapter 46.

(b) No state or county government agency may enforce any statute, rule, or order affecting the waters of the State controlled under the provisions of this chapter, whether enacted or promulgated before or after July 1, 1987, inconsistent with the provisions of this chapter. Nothing in this chapter to the contrary shall restrict the power of any county to plan or zone as provided in chapter 46.

(c) No state or county government agency or other person having the power of eminent domain or condemnation under the laws of the State, may exercise the power with respect to condemning property if the condemnation will materially affect water resource in the State, without the written permission of the commission.

(d) No right, title, or interest in the use of any water resources of the State can be acquired by prescription. [L 1987, c 45, pt of S2]

Note

Interpretation of county function. L 1987, c 45, S6.

Revision Note

"July 1, 1987" substituted for "the effective date of this chapter".

Case Notes

As water code expressly reserves the counties' authority with respect to land use planning and policy, commission allegedly imposing a "directive" on the counties todesignate priorities among proposed uses did not usurp counties' land use planning and zoning authority. 94 H. 97, 9 P.3d 409.

Previous Vol03 Ch0121-0200D Next

[S174C-60] Contested cases. Chapter 91 shall apply except where it conflicts with this chapter. In such a case, this chapter shall apply. Any other law to the contrary notwithstanding, including chapter 91, any contested case hearing under this section shall be appealed upon the record directly to the supreme court for final decision. [L 1987, c 45, pt of S2]

Case Notes

A water management area designation is not the product of a contested case hearing, under chapter 91, from which a direct

appeal to the supreme court may be brought under this section. 83 H. 484, 927 P.2d 1367.

This section is inconsistent with and cannot stand together with SS602-5 and 602-57, as amended by Act 202, L 2004, and was deemed amended by implication, effective July 1, 2006, to authorize appeals from the water commission to the intermediate appellate court, not to the supreme court. 113 H. 52, 147 P.3d 836.

Previous Vol03 Ch0121-0200D Next

[S174C-63] Appurtenant rights. Appurtenant rights are preserved. Nothing in this part shall be construed to deny the exercise of an appurtenant right by the holder thereof at any time. A permit for water use based on an existing appurtenant right shall be issued upon application. Such permit shall be subject to sections 174C-26 and 174C-27 and 174C-58 to 174C-62. [L 1987, c 45, pt of S2]

Previous Vol03 Ch0121-0200D Next

[S174C-13] Citizen complaints. The commission shall adopt, pursuant to chapter 91, procedural rules for the processing of citizen complaints including the right of appeal to the commission. If any person files a complaint with the commission that any other person is wasting or polluting water or is making a diversion, withdrawal, impoundment, consumptive use of waters or any other activity occurring within or outside of a water management area, not expressly exempted under this code, without a permit where one is required, the commission shall cause an investigation to be made, take appropriate action, and notify the complainant thereof. [L 1987, c 45, pt of S2]

Previous Vol03 Ch0121-0200D Next

S174C-15 Penalties and common law remedies. (a) The commission may enforce its rules and orders adopted pursuant to this chapter by suit for injunction or for damages or both.

(b) Any person who violates any provision of this chapter, or any rule adopted pursuant to this chapter, may be subject to a fine imposed by the commission. Such fine shall not exceed

$5,000. For a continuing offense, each day during which the offense is committed is a separate violation.

(c) No provision of this chapter shall bar the right of any injured person to seek other legal or equitable relief against a violator of this chapter.

(d) Except as otherwise provided by law, the commission or its authorized representative by proper delegation may set, charge, and collect administrative fines or bring legal action to recover administrative fees and costs as documented by receipts or affidavit, including attorneys' fees and costs; or bring legal action to recover administrative fines, fees, and costs, including attorneys' fees and costs, or payment for damages resulting from a violation of this chapter or any rule adopted pursuant to this chapter. [L 1987, c 45, pt of S2; am L 2004, c 142, S6]

Previous Vol03 Ch0121-0200D Next

S174C-49 Conditions for a permit. (a) To obtain a permit pursuant to this part, the applicant shall establish that the proposed use of water:

(1) Can be accommodated with the available water source;
(2) Is a reasonable-beneficial use as defined in section 174C-3;
(3) Will not interfere with any existing legal use of water;
(4) Is consistent with the public interest;
(5) Is consistent with state and county general plans and land use designations;
(6) Is consistent with county land use plans and policies; and
(7) Will not interfere with the rights of the department of Hawaiian home lands as provided in section 221 of the Hawaiian Homes Commission Act.

(b) Within 60 days after receipt of a notice of a permit application, the county shall inform the commission if the proposed use is inconsistent with county land use plans and policies.

(c) The common law of the State to the contrary notwithstanding, the commission shall allow the holder of a use permit to transport and use surface or ground water beyond overlying land or outside the watershed from which it is taken if the commission determines that such transport and use are consistent with the public interest and the general plans and land use policies of the State and counties.

(d) The commission, by rule, may reserve water in such locations and quantities and for such seasons of the year as in its judgment may be necessary. Such reservations shall be subject to periodic review and revision in the light of changed conditions; provided that all presently existing legal uses of water shall be protected.

(e) All permits issued by the commission shall be subject to the rights of the department of Hawaiian home lands as provided in section 221 of the Hawaiian Homes Commission Act, whether or not the condition is explicitly stated in the permit. [L1987, c 45, pt of S2; am L 1991, c 325, S7]

Law Journals and Reviews

Native Hawaiian Homestead Water Reservation Rights; Providing Good Living Conditions for Native Hawaiian Homesteaders. 25 UH L. Rev. 85.

Case Notes

Permit applicants must demonstrate their actual needs and, within the constraints of available knowledge, the propriety of draining water from public streams to satisfy those needs. 94 H. 97, 9 P.3d 409.

The "reasonable-beneficial use" standard and the related criterion of "consistent with the public interest" demand examination of the proposed use not only standing alone, but also in relation to other public and private uses and the particular water source in question; thus, permit applicants requesting water diverted from streams must duly take into account the public interest in instream flows. 94 H.

S174C-3 Definitions. As used in this Chapter, unless the context otherwise requires:

"Agricultural use" means the use of water for the growing, processing, and treating of crops, livestock, aquatic plants and animals, and ornamental flowers and similar foliage.

"Authorized planned use" means the use or projected use of water by a development that has received the proper state land use designation and county development plan/community plan approvals.

"Board" means the board of land and natural resources.

"Chairperson" means the chairperson of the commission on water resource management.

"Change in use" means any modification or change in water use from or to domestic, municipal, military, agriculture (including agricultural processing), or industrial uses.

"Channel alteration" means: (1) to obstruct, diminish, destroy, modify. Or relocate a stream channel; (2) to change the direction of flow of water in a stream channel; (3) to place any material or structures in a stream channel; and (4) to remove any material or structures from a stream channel.

"Commission" means the commission on water resource management.

"Continuous flowing water" means a sufficient flow of water that could provide for migration and movement of fish, and includes those reaches of streams which, in their natural state, normally go dry seasonally at the location of the proposed alteration.

"Department" means the department of land and natural resources.

"Domestic use" means any use of water for individual personal needs and for household purposes such as drinking, bathing, heating, cooking, noncommercial gardening, and sanitation.

"Emergency" means the absence of a sufficient quantity and quality of water in any area whether designated or not which threatens the public health, safety, and welfare as determined by the commission.

"Existing agricultural use" means replacing or alternating the cultivation of any agricultural crop with any other agricultural crop, which shall not be construed as a change in use.

"Ground water" means any water found beneath the surface of the earth, whether in perched supply, dike-confined, flowing, or percolating in underground channels or streams, under artesian pressure or not, or otherwise.

"Hydrologic unit" means a surface drainage area of a ground water basin or a combination of the two.

"Impoundment" means any lake, reservoir, pond, or other containment of surface water occupying a bed or depression in the earth's surface and having a discernible shoreline.

"In stream flow standard" means a quantity or flow of water or depth of water which is required to be present at a specific location in a stream system at certain specified times of the year to protect fishery, wildlife, recreational, aesthetic, scenic, and other beneficial in stream uses.

"In stream use" means beneficial uses of stream water for significant purposes which are located in the stream and which

are achieved by leaving the water in the stream. In stream uses include, but are not limited to:

(1) Maintenance of fish and wildlife habitats;
(2) Outdoor recreational activities;
(3) Maintenance of ecosystems such as estuaries, wetlands, and stream vegetation;
(4) Aesthetic values such as waterfalls and scenic waterways;
(5) Navigation;
(6) In stream hydropower generation;
(7) Maintenance of water quality;
(8) The conveyance of irrigation and domestic water supplies to downstream points of diversion; and
(9) The protection of traditional and customary Hawaiian right

"Interim in stream flow standard" means a temporary in stream flow standard of immediate applicability, adopted by the commission without the necessity of a public hearing, and terminating upon the establishment of an in stream flow standard.

"Municipal use" mans the domestic, industrial, and commercial use of water through public services available to persons or a county for the promotion and protection of their health, comfort, and safety, for the protection of property from fire, and for the purposes listed under the term "domestic use".

"Noninstream use" means the use of stream water that is diverted or removed from its stream channel and includes the use of stream water outside of the channel for domestic, agricultural, and industrial purposes.

"Nonregulated use" means any u se of water which is exempted from regulation by the provisions of this code.

"Person" means any and all persons, natural or artificial, including an individual firm, association, organization, partnership, business trust, corporation, company, the United States of America, the State of Hawaii, and all political subdivisions, municipalities, and public agencies thereof.

"Reasonable-beneficial use" means the use of water in such a quantity as is necessary for economic and efficient utilization, for a purpose, and in a manner which is both reasonable and consistent with the state and county land use plans the public interest.

"Stream" means any river, creek, slough, or natural watercourse in which water usually flows in a defined bed or channel. It is not essential that the flowing be

uniform or uninterrupted. The fact that some part of the bed or channel has been dredged or improved does not prevent the watercourse from being stream.

"Stream channel" means a natural or artificial watercourse with a definite bed and banks which periodically or continuously contains flowing water. The channel referred to is that which exists at the present time, regardless of where the channel may have been located at any time in the past.

"Stream diversion" means the act of removing water from a stream into a channel, pipeline, or other conduit.

"Stream reach" means a segment of a stream channel having a defined upstream and downstream point.

"Stream system" means the aggregate of water features comprising or associated with a stream, including the stream itself and its tributaries, headwaters, ponds, wetland, and estuary.

"Surface water" means both contained surface water—that is, water upon the surface of the earth in bounds created naturally or artificially including, but not limited to, streams, other watercourses, lakes, reservoirs, and coastal waters subject to state jurisdiction—and diffused surface water—that is, water occurring upon the surface of the ground other than in contained water bodies. Water from natural springs is surface water when it exits from the spring onto the earth's surface.

"Sustainable yield" means the maximum rate at which water may be withdrawn from a water source without impairing the utility or quality of the water source as determined by the commission.

"Time of withdrawal or diversion" means, in view of the nature, manner, and purposes of a reasonable and beneficial use of water, the most accurate method of describing the time when the water is withdrawn or diverted,includ8ing description in terms of hours, days, weeks, months, or physical, operational, or other conditions.

"Water" or "waters of the State" means any and all water on or beneath the surface of the ground, including natural or artificial watercourses, lakes, ponds, or diffused surface water and water percolating, standing, or flowing beneath the surface of the ground.

"Watercourse" means a stream and any canal, ditch, or other artificial watercourse in which water usually flows in a defined bed or channel. It is not essential that the flowing be uniform or uninterrupted.

"Water management area" means a geographic area which has been designated pursuant to section 174C-41 as requiring management of the ground or surface water resource, or both.

"Water source" means a place within or from which water is or may be developed, including but not limited to: (1) Generally, an area such as a watershed defined by topographic boundaries, or definitive ground water body; and (2) specifically, a particular stream, other surface water body, spring tunnel, or well or related combination thereof.

"Well" means an artificial excavation or opening into the ground, or an artificial enlargement of a natural opening by which ground water is drawn or is or say be used or can be made to the usable to supply reasonable and beneficial uses within the State, [L 1987, c 45, pt of S2; and L 1998, c 101, S2].

Case Notes

Commission did not err in excluding golf course irrigation from the category of "agricultural use". 94 H. 97, 9 P. 3d 409.

The "reasonable-beneficial use" standard and the related criterion of "consistent with the public interest" demand examination of the proposed use not only standing alone, but also in relation to other public and private uses and the particular water source in question; thus, permit applicants requesting water diverted from streams must duly take into account the public interest in stream flows. 94 H.97, 9 P.3d 409.

Where it could not be said that closure of hotel and golf course would have no impact on applicant's proposed uses in light of commission on water resource management's findings and conclusions pursuant to the "reasonable-beneficial use" standard set forth in S174C-49 and defined in this section, commission's reliance on S174C-58(4), allowing applicant four years to fulfill its proposed uses before the commission may suspend or revoke a permit, was misplaced; as commission failed to consider the impact the closures may have on applicant's proposed uses when it made its proposed use allocation decision, proposed use permit vacated. 116 H. 481, 174 P.3d 320.

There is no genuine dispute as to any material fact in this case. PARTIES seek restitution of the stream to its original course. That is, that the Ainakoa Stream flow, the diminished flow in Branch Stream One and the elimination of flow in Branch Stream Two are restored and rehabilitated to the same level that existed prior to the alterations, and that all obstructions to the natural flow are removed.

The Permit that was issued was based on false information submitted after Counsel for the Jung Group filed suit against Aina Weight. That permit should be revoked forthwith by order of COMMISION. WEIGHT should be ordered to comply with the request set forth above.

DATED: Honolulu, Hawaii, December 27, 2010.

This request is respectfully submitted.

John S. Carroll

JOHN S. CARROLL
Attorney for PARTIES

OKAZAKI

DAMAGES:

A. Loss of water flow filling an entire pond system large enough, deep enough and extensive enough to cultivate exquisite decorative koi and grow Hapuu, yellow Ohia as well as Tii leaf plants. The beauty of the two streams and pond system and plants with fish attracted tour busses and was the envy of her neighbors. Mr. & Mrs. Shindo carefully picked their lot because of the streams which ran on either side of their property and the abundance of water. There was no comparable property in Hilo at that time.
With the gate which is lowered by Ms. Weight whenever she wishes Stream 1 is a trickle compared to what is once was.
With the total blockage of Stream 2 by Mr. Scott Henderson and the loss/absence of water in Stream 2 the Okazaki's property is a dry lot. Hapuu and yellow Ohia cannot be grown. Ponds have had to be filled in with dirt and rock to cover up a hole.
B. Loss of an entire stream which added water to their property (Stream 2, which has been blocked since at least 1990).
C. Emotional loss/depression/anger with loss of water to the extent that the stream cannot be heard. Plants cannot be grown because of the loss of water. Mr. Okazaki feels depressed when he notes the lack of water in his property. When he cannot hear the sound of water, he avoids the memory of loss of water and sleeps at his farm in Keaukaha.
D. Loss of property value without the streams and water the property value plunged to the extent they cannot borrow on the property to work on their farm.

SEE PICTURES 9, 10, 11

CLAIMS:

2009	Loss of property damage	$ 100,000
	Loss of aesthetics	$ 100,000
	Emotional loss	$ 100,000
		$ 300,000
2010	Loss of property damage	$ 100,000
	Loss of aesthetics	$ 100,000
	Emotional loss	$ 100,000
		$ 300,000
	Subtotal losses	$ 600,000

JUNG

DAMAGES:

A. The placement of a grate/gate by the Weight family in the 1990's and the total blockage of Stream 2 by Mr. Scott Henderson with the help of Dr. Weight and knowledge of Ms. Aina Weight, his daughter. Ms. Weight has reduced Stream 1 flow to the Jung property to a trickle. This now has even became a seasonal trickle whereas before the flow from Stream 1 led to a full almost year long flow.
The stream is dry almost year-long. The time for research in to the stream organizing the families who have been affected by the loss of water in Stream 1 and Stream 2 and discussion with a lawyer to bring about a logical conclusion to the water loss, has required time away from work and family for Dr. Jung.
Knowledge of the circumstances has led to anger and depression for Dr. Jung, which has led to family divisions because of the time he has had to devote to this project.
Loss of property value due to lack of water in the stream has led to higher mortgage rates.

SEE PICTURES 12, 13, 14

CLAIMS:

2009	Loss of property damage	$ 100,000
	Loss of aesthetics	$ 100,000
	Emotional losses & Loss of time	$ 100,000
		$ 300,000
2010	Loss of property damage	$ 100,000
	Loss of aesthetics	$ 100,000
	Emotional losses & Loss of time	$ 100,000
		$ 300,000
	Subtotal losses	$ 600,000

SHINDO

DAMAGES:

A. Loss of water – gentle cascading waterfall running beside house was featured on a local calendar. Four pools along the waterfall gave great aesthetic value and fish were cultivated. The stream and waterfall and pools attracted tour buses.
The total loss of Stream 2 flowed and the marked decrease of water flow since the gate was placed in the 1990's on Stream 1 has led to the loss of all four ponds and the waterfall.

B. Mrs. Shindo and her two sons and their families have keenly felt loss of the water by their house and they often speak of the memories of the house when there was water in the stream.

C. Loss of property value: Mrs. Shindo has placed her house on sale for the past three years. The loss of the waterfall and four ponds has greatly reduced the property value and she has been unable to find a buyer.

SEE PICTURES 8, 11, 17, 18, 19, 23, 24

CLAIMS:

2009	Loss of property damage	$ 100,000
	Loss of aesthetics	$ 100,000
	Emotional loss	$ 100.000
		$ 300,000
2010	Loss of property damage	$ 100,000
	Loss of aesthetics	$ 100,000
	Emotional loss	$ 100.000
		$ 300,000
	Subtotal losses	$ 600,000

PURVES

DAMAGES:

A. Stream 2 has been absent since the Purves have lived at their house on Kokea Street. They have known about the stream's existence since it is on the tax map key of their property.
They have wished the stream restored and have keenly felt the loss of water.

B. They have had their house evaluated for possible sale but have not done it because of low property value. With the stream the value of the house would greatly increase. The number of houses with a stream in Hilo is very limited. The blockage of Stream 2 has prevented them from enjoying this as well.

SEE PICTURES 17, 18, 19, 21, 22

CLAIMS:

2009	Loss of property damage	$ 50,000
	Loss of aesthetics	$ 50,000
		$ 100,000
2010	Loss of property damage	$ 50,000
	Loss of aesthetics	$ 50,000
		$ 100,000
	Subtotal losses	$ 200,000

Total damages

$ 2,000,000

EXHIBIT 1-(A)

CLIENT – ATTORNEY AGREEMENT

THIS AGREEMENT is entered into this _____ day of _____, 2009, between **Ronald Okazaki,** (hereinafter referred to as "Client"), and JOHN S. CARROLL, Attorney at Law (hereinafter referred to as "Counsel"), 345 Queen Street, Room 607, Honolulu, Hawaii 96813 .

I. SCOPE OF ENGAGEMENT

A. The Client has engaged Counsel to undertake the legal representation of Client in a matter (hereinafter referred to as the "Matter") involving the ongoing intrusion, interference, diversion, and obstruction of the natural streambed running through or alongside each individual claimant's property .

B. By the terms of this agreement, Counsel will perform the following legal services relative to the Matter; write appropriate letters, file appropriate pleadings and documents, and make necessary court appearances.

Counsel will not perform legal services other than those specified above without consultation with and authorization from Client.

C. Client agrees to perform the following functions:

1. To pay Counsel for the performance of such legal services and to pay for all expenses incurred in connection therewith, as specified in Section II below.

2. To cooperate fully with Counsel and to provide all information known by or available to Client, which may aid Counsel in representing Client in this Matter.

D. Client authorizes and directs Counsel to take all actions which Counsel deems advisable on Client's behalf in this Matter. Counsel agrees to notify Client promptly of all significant developments and to consult with Client in advance as to any significant decisions attendant to those developments.

E. Counsel will not settle or compromise this Matter without Client's consent; Client will not agree to any settlement or compromise of this Matter without consent of Counsel.

II. LEGAL FEES AND EXPENSES

A. Client agrees to pay Counsel **$275** an hour for office time and **$275** an hour for court time.

B. Client is responsible and will pay for all other fees, charges, and expenses.

III. GENERAL MATTERS

A. Representation of Client in this Matter will not commence until Counsel receives a copy of this Agreement signed by Client.

B. Counsel agrees to use best efforts in representing Client in this Matter; however the Client acknowledges that Counsel has given no assurances regarding the outcome of this matter.

C. Counsel reserves the right to withdraw from this Matter if Client fails to honor this Agreement or for any just reason as permitted or required under the State of Hawaii Code of Professional Responsibility or as permitted by the rules of courts of the State of Hawaii. Notification of withdrawal shall be made in writing to Client. In the event of such withdrawal, Client agrees to promptly pay Counsel for all charges and expenses incurred prior to the date of such withdrawal.

D. Any disputes as to whether Counsel or Client has failed to honor this Agreement or as to the amount of legal fees will be submitted to the Hawaii State Bar Association for arbitration and prompt resolution and both Counsel and Client agree to be bound by the results of such arbitration. Reasonable costs and attorney's fees to be paid to the party which substantially prevails.

E. Should this Matter require a trial, this agreement has reference only to the original trial and a new agreement will be entered into in the event an appeal or new trial is necessary.

F. Counsel shall have all special and/or charging liens known to the common law or provided by statute against the subject matter of Client's claim or any recovery which relates to the matters for which Counsel has been retained, whether the claim is being prosecuted or defended by said Counsel.

G. Client hereby authorizes Counsel to confer with all persons who, in Counsel's opinion, may be of assistance in the handling of this matter, and authorizes the release to Counsel of any and all reports or records (including medical, hospital, and police records, if applicable) of third parties.

H. In the event that Client discharges Counsel, notice of such discharge shall be in writing and delivered to Counsel. Client agrees to pay all fees, costs, and expenses incurred by Counsel to the date when such discharge is delivered to Counsel in writing.

1. This Agreement contains the agreement between Client and Counsel regarding this Matter and the fees, charges, and expenses to be paid relative thereto. This Agreement shall not be modified except by written agreement signed by Client and Counsel. This Agreement shall be binding upon Client and Counsel and their respective heirs, executors, legal representatives and successors.

IN WITNESS THEREOF, the parties hereto have executed this Agreement as of the date and year first above written.

RONALD OKAZAKI
80 Kokea St.
Hilo, HI 96720
935-7859

JOHN S. CARROLL
"Counsel"

CLIENT – ATTORNEY AGREEMENT

THIS AGREEMENT is entered into this _____ day of _____, 2009, between **David Jung,** (hereinafter referred to as "Client"), and JOHN S. CARROLL, Attorney at Law (hereinafter referred to as "Counsel"), 345 Queen Street, Room 607, Honolulu, Hawaii 96813 .

I. SCOPE OF ENGAGEMENT

A. The Client has engaged Counsel to undertake the legal representation of Client in a matter (hereinafter referred to as the "Matter") involving the ongoing intrusion, interference, diversion, and obstruction of the natural streambed running through or alongside each individual claimant's property .

B. By the terms of this agreement, Counsel will perform the following legal services relative to the Matter; write appropriate letters, file appropriate pleadings and documents, and make necessary court appearances.

Counsel will not perform legal services other than those specified above without consultation with and authorization from Client.

C. Client agrees to perform the following functions:

1. To pay Counsel for the performance of such legal services and to pay for all expenses incurred in connection therewith, as specified in Section II below.

2. To cooperate fully with Counsel and to provide all information known by or available to Client, which may aid Counsel in representing Client in this Matter.

D. Client authorizes and directs Counsel to take all actions which Counsel deems advisable on Client's behalf in this Matter. Counsel agrees to notify Client promptly of all significant developments and to consult with Client in advance as to any significant decisions attendant to those developments.

E. Counsel will not settle or compromise this Matter without Client's consent; Client will not agree to any settlement or compromise of this Matter without consent of Counsel.

II. LEGAL FEES AND EXPENSES

A. Client agrees to pay Counsel **$275** an hour for office time and **$275** an hour for court time.

B. Client is responsible and will pay for all other fees, charges, and expenses.

III. GENERAL MATTERS

A. Representation of Client in this Matter will not commence until Counsel receives a copy of this Agreement signed by Client.

B. Counsel agrees to use best efforts in representing Client in this Matter; however the Client acknowledges that Counsel has given no assurances regarding the outcome of this matter.

C. Counsel reserves the right to withdraw from this Matter if Client fails to honor this Agreement or for any just reason as permitted or required under the State of Hawaii Code of Professional Responsibility or as permitted by the rules of courts of the State of Hawaii. Notification of withdrawal shall be made in writing to Client. In the event of such withdrawal, Client agrees to promptly pay Counsel for all charges and expenses incurred prior to the date of such withdrawal.

D. Any disputes as to whether Counsel or Client has failed to honor this Agreement or as to the amount of legal fees will be submitted to the Hawaii State Bar Association for arbitration and prompt resolution and both Counsel and Client agree to be bound by the results of such arbitration. Reasonable costs and attorney's fees to be paid to the party which substantially prevails.

E. Should this Matter require a trial, this agreement has reference only to the original trial and a new agreement will be entered into in the event an appeal or new trial is necessary.

F. Counsel shall have all special and/or charging liens known to the common law or provided by statute against the subject matter of Client's claim or any recovery which relates to the matters for which Counsel has been retained, whether the claim is being prosecuted or defended by said Counsel.

G. Client hereby authorizes Counsel to confer with all persons who, in Counsel's opinion, may be of assistance in the handling of this matter, and authorizes the release to Counsel of any and all reports or records (including medical, hospital, and police records, if applicable) of third parties.

H. In the event that Client discharges Counsel, notice of such discharge shall be in writing and delivered to Counsel. Client agrees to pay all fees, costs, and expenses incurred by Counsel to the date when such discharge is delivered to Counsel in writing.

I. This Agreement contains the agreement between Client and Counsel regarding this Matter and the fees, charges, and expenses to be paid relative thereto. This Agreement shall not be modified except by written agreement signed by Client and Counsel. This Agreement shall be binding upon Client and Counsel and their respective heirs, executors, legal representatives and successors.

IN WITNESS THEREOF, the parties hereto have executed this Agreement as of the date and year first above written.

DAVID JUNG
118 Koula St.
Hilo, HI 96720
969-3752

JOHN S. CARROLL
"Counsel"

CLIENT / COUNSEL FEE AGREEMENT

THIS AGREEMENT is entered into this _____ day of_____, 2010 between TAMAE SHINDO, widow, of 145 Koula Street, Hilo, HI 96720, TOYOKO MATSUMOTO, single, of 125 Koula Street, Hilo, HI 96720, NORMAN PURVES and DR. MAREN HAUSCHILDT-PURVES, husband and wife, of 60 Kokea Street, Hilo, HI 96720 (hereinafter referred to as "Clients"), JOHN S. CARROLL, Attorney at Law (hereinafter referred to as "Counsel"), 810 Richards Street, Suite 810, Honolulu, HI 96813.

I. SCOPE OF ENGAGEMENT

A. The Client has engaged the above-named Counsel to undertake the legal representation of Client in a matter (hereinafter referred to as the "Matter") involving the ongoing intrusion, interference, diversion, and obstruction of the natural streambed running through or alongside each individual claimant's property.

B. By the terms of this agreement, Counsel will perform the following legal services relative to the Matter; write appropriate letters, file appropriate pleadings and documents, and make necessary court appearances.

Counsel will not perform legal services other than those specified above without consultation with and authorization from Client.

C. Client agrees to perform the following functions:

1. To pay Counsel for the performance of such legal services and to pay for all expenses incurred in connection therewith, as specified in Section II below.

2. To cooperate fully with Counsel and to provide all information known by or available to Client, which may aid Counsel in representing Client in this Matter?

D. Client authorizes and directs Counsel to take all actions which Counsel deems advisable on Client's behalf in this Matter. Counsel agrees to notify Client promptly of all significant developments and to consult with Client in advance as to any significant decisions attendant to those developments.

E. Counsel will not settle or compromise this Matter without Client's consent; Client will not agree to any settlement or compromise of this Matter without consent of Counsel.

II. LEGAL FEES AND EXPENSES

A. Client hereby agrees to pay 50% of the total sum recovered, including attorneys'fees, as a result of any judgment, award, settlement, compromise or satisfaction of claim. If the matter concludes before trial, the Client hereby agrees to pay 50% of the total sum recovered, including attorneys' fees, as a result of any judgment, award, settlement, compromise or satisfaction of claim.

NO LEGAL FEE WILL BE CHARGED INCLUDING BUT NOT LIMITED TO ALL COSTS IF THERE IS NO MONEY OR PROPERTY RECOVERED

B. Client is responsible and will pay for all other fees, charges, and expenses as described in Paragraph II.C herein.

C. Client acknowledges that Counsel may incur various expenses in providing services to Client. These costs include, but are not limited to, charges for serving and filing papers, courier or messenger services, recording and certifying documents, depositions, transcripts, investigations, witnesses, long distance telephone calls, copy materials, clerical and paralegal assistance, travel expenses, postage and notarial attestations.

III. GENERAL MATTERS

A. Representation of Client in this Matter will not commence until Counsel receives a copy of this Agreement signed by Client.

B. Counsel agrees to use best efforts in representing Client in this Matter; however the Client acknowledges that Counsel has given no assurances regarding the outcome of this matter.

C. Counsel reserves the right to withdraw from this Matter if Client fails to honor this Agreement or for any just reason as permitted or required under the State of Hawaii Code of Professional Responsibility or as permitted by the rules of courts of the State of Hawaii. Notification of withdrawal shall be made in writing to Client. In the event of such withdrawal, Client agrees to promptly pay Counsel for all charges and expenses incurred prior to the date of such withdrawal.

D. Any disputes as to whether Counsel or Client has failed to honor this Agreement or as to the amount of legal fees will be submitted to the Hawaii State Bar Association for arbitration and prompt resolution and both Counsel and Client agree to be bound by the results of such arbitration. Reasonable costs and attorney's fees to be paid to the party, which substantially prevails.

E. Should this Matter require a trial, this agreement has reference only to the original trial and a new agreement will be entered into in the event an appeal or new trial is necessary.

F. Counsel shall have all special and/or charging liens known to the common law or provided by statute against the subject matter of Client's claim or any recovery which relates to the matters for which Counsel has been retained, whether the claim is being prosecuted or defended by said Counsel.

G. Client hereby authorizes Counsel to confer with all persons who, in Counsel's opinion, may be of assistance in the handling of this matter, and authorizes the release to Counsel of any and all reports or records (including medical, hospital, and police records, if applicable) of third parties.

T.S. H. In the event that Client discharges Counsel, notice of such discharge shall be in writing and delivered to Counsel. Client agrees to pay all fees, costs, and expenses incurred by Counsel to the date when such discharge is delivered to Counsel in writing. Client acknowledges that Counsels fees are **$300.00** an hour for office time and **$350.00** an hour for court time.

I. This Agreement contains the agreement between Client and Counsel regarding this Matter and the fees, charges, and expenses to be paid relative thereto. This Agreement shall not be modified except by written agreement signed by Client and Counsel. This Agreement shall be binding upon Client and Counsel and their respective heirs, executors, legal representatives and successors.

IN WITNESS THEREOF, the parties hereto have executed this Agreement as of the date and year first above written.

Counsel:

John S. Carroll

Clients:

Tamae Shindo 5/5/10
Tamae Shindo

Toyoko Matsumoto

Norman Purves

Maren Hauschildt-Purves

EXHIBIT 1

EXHIBIT 2

LIST OF PHOTOGRAPHS RELATED TO MAP POSITION

1. MAIN STREAM
2. DIVERSION GATE
3. ROCKS RAISING MOUTH TO MAIN STREAM
4. MAIN STREAM FLOWING – MAUKA VIEW
5. MAIN STREAM BLOCKED BY WALL – MAKAI
6. MAIN STREAM FLOWING KOKA STREET – MAUKA (HENDERSON)
7. BRANCH 1 – MAUKA VIEW – KOKEA STREET (HENDERSON)
8. BRANCH 1 – MAUKA VIEW – KOKEA STREET
9. BRANCH 1 – MAUKA VIEW –CULVERT, KOKEA STREET
10. OKAZAKI DRY PONDS
11. SHINDO'S WATER VIA OKAZAKI PROPERTY
12. JUNG PROPERTY – BRANCH 1
13. JUNG PROPERTY - BRANCH 1 – 1990 (FRALEIGH-AFFIDAVIT)
14. JUNG PROPERTY BRANCH 1 – 1990 (LITTLE GIRL)
15. MAIN STREAM – WALL LEADING TO P-16-WHICH BLOCKS OKAZAKI
16. WALL BUILT TO BLOCK STREAM FLOW PAST OKAZAKI PROPERTY
17. OKAZAKI – DRY STREAM BED – BRANCH 2
18. OKAZAKI – DRY STREAM BED – BRANCH 2
19. OKAZAKI – DRY STREAM BED AT KOKEA
20. WALL BLOCKING OKAZAKI STREAM
21. BRANCH 2 – OKAZAKI – HEADS TO SHINDO POND
22. BRANCH 2 – OKAZAKI – HEADS TO SHINDO POND
23. PONDS ON SHINDO PROPERTY – 1980'S
24. MATSUMOTO BACKYARD – BRANCH 2 - BLOCKAGE

PLAT 26

PLAT 32

PLAT 23

PLAT 28

BLOCK 23

BLOCK 22

BLOCK 20

BLOCK 19

BLOCK 18

BLOCK 17

BLOCK 16

BLOCK 15

BLOCK 14

BLOCK 13

BLOCK 12

BLOCK 11

BLOCK 10

BLOCK 9

BLOCK 8

BLOCK 7

BLOCK 6

BLOCK 5

BLOCK 4

BLOCK 3

BLOCK 2

BLOCK 1

PUNA

KUKUAU

KAPAA

NAKOO

AINAKO

ALENUE

AYENUE

To Pithonia Road

To Hilo

HENDERSON

WEIGHT

MARSH

OKAZAKI

PURVES

SHINDO

JUNG

Waterfall

Stream

Branch

Parcels

TAXATION STA
TAX
THIRD
ZONE 2 SEC 5
CONTAINING
SCALE 1 IN = 1 CHAIN

SUBJECT TO CHANGE

SUBJECT TO CHANG

All lots owned by Hilo Sugar Co. Ltd. unless otherwise noted.

Main Stream

PHOTOGRAPH 1

The mouth of this stream coming off the main stream has been modified since 1990 by first Dr. Weight and then by his daughter Ms. Aina Weight. The mouth has been narrowed to allow the gate to be placed. It has been elevated off the main stream floor and angled differently.

PHOTOGRAPH 2

Consequently, a small dam has been placed by Mr. Scott Henderson in the main stream back to the mouth of smaller stream. Otherwise when the main stream runs low not enough water will enter the mouth of the small stream.

PHOTOGRAPH 3

View of main stream. In foreground is seen the main stream as it crosses under Ainako Street. Weight house on right.

PHOTOGRAPH 4

Main stream as it is kept in bounds by wall. Behind the wall is the Weight property.

PHOTOGRAPH 5

The main stream continues past the Marsh (previous Dr. Henderson) and Okino residences.

PHOTOGRAPH 6

The stream below the present gate on Aina Weight's Property and then, as seen in these pictures the Henderson property.

The gate allows "just so much water – not too much not too little to pass – as told me by Mr. Scott Henderson.

PHOTOGRAPH 7

PHOTOGRAPH 8

This results in drastic reduction of water flow below the Henderson property. This shows no water as the stream crosses under Kokea Street and enters the Okazaki residence.

PHOTOGRAPH 9

Three Koi ponds are now empty or filled in of the Okazaki residence and during most of the year. The stream is dry or only a trickle of water is present.

PHOTOGRAPH 10

PHOTOGRAPH 11

The stream crosses under Koula and enters the Jung property. Today the stream is dry eight months of the year.

PHOTOGRAPH 12

PHOTOGRAPH 13

PHOTOGRAPH 14

Beyond the wall to the right, this wall protects the Weight/Henderson (Marsh) properties from flooding from the main stream. However, a stream marked on the title deed has also been blocked. This stream marks the property boundary between the Weight and present day Marsh (formerly Dr. Henderson) properties.

PHOTOGRAPH 15

PHOTOGRAPH 16

Dry stream bed as it descends from the wall to Kokea Street.

PHOTOGRAPH 17

PHOTOGRAPH 18

Dry stream bed just before it crosses under Kokea Street

PHOTOGRAPH 19

Dry stream bed on other side of wall. To right of the Weight property and to the left of the stream bed is the present Marsh property (formerly Henderson).

PHOTOGRAPH 20

The stream went down the back side of the Okazaki residence. The Okazaki's used to have "plenty of water." They now cannot even grow ferns on their property.

PHOTOGRAPH 21

PHOTOGRAPH 22

Ponds of Shindo property 1980's

PHOTOGRAPH 23

The blocked stream used to empty on what is now the back of Matsumoto residence. A garden and Koi pond was fed by this stream. This is what remains of that.

PHOTOGRAPH 24

EXHIBIT 3

JOHN S. CARROLL #0649
810 Richards Street, Suite 810
Honolulu, Hawaii 96813
Telephone: (808) 526-9111

Attorney for petitioners

AFFIDAVIT OF CARL OKAZAKI

1. I, Carl Okazaki, Give this statement of my own free will. This is the truth the whole truth and nothing but the truth. This letter is document my recollections of two streams that border a property my family owns at 80 Kokea Street, Hilo, Hawaii 96720 and the drastic change in water flow that occurred during the early 1990's.

2. Throughout my childhood (time period from 1978 – 1988), the stream that ran along the western edge of the property flowed consistently and filled a number of pools throughout our property. There was rarely an instance during that period that I witnessed low water levels or reduced water flow and never a time that the stream was dry. I spent many afternoons exploring the stream (both upstream and downstream) and there's no question that the stream was a natural feature that added a great deal of character and value to the properties of everyone that bordered it. Please note that this western stream was flowing fully all through my high school years and was there when I graduated from Hilo High School in 1990. During this period I had never noticed the gate that now exists at the mouth of the branch stream within the Weight's property. My recollection was that the mouth of the branch stream was always open and unimpeded.

3. I left home to go to college after high school. While visiting home during the early 1990's, I noticed a significant impact to the stream. Water was no longer filling the streambed and occasionally the stream would dry out. After witnessing the tremendous drop of water flow, my father and I explored upstream and noticed that one of our neighbors had installed a dam wall and sluice gate to create a pond within their property. I recall a conversation my father and I had with one of the family members of that property (Aina Weight) questioning the impact of the dam and gate to the stream. She was insistent that it had no impact on the stream condition. Her reasoning for the reduced stream flow was changes to the streambed caused by an earthquake. In later years, I believe she cited environmental changes as being a reason as well. I don't believe either scenario has been substantiated and from my observations the flow of water upstream of her property hasn't drastically altered from it's historically norms. My recollection is that this encounter occurred during a visit home following my graduation from college, so I believe the conversation took place around 1995. I believe Ms. Aina Weight's parents had passed away at the time of that meeting and Ms. Weight was living in the house at 1000 Ainako.

4. Another stream existed along the eastern edge of our property and was a seasonal creek that also served as an overflow channel during heavy rain. While not as substantial as the stream along the western edge of our property, there was the constant presence of water throughout

the year. All flow came to an end during the same time period (around 1989 – 1990) and by the time I graduated from high school in 1990 flow stopped. From that point on, the creek has been completely dry and all the water life that was once supported there is gone.

5. A number of neighboring property owners have approached the family in question as well, but they seem unwilling to listen to our concerns. I fully support actions taken to substantiate the role the dam and sluice gate may have had in affecting the natural flow of the streams in question.

FURTHER AFFIANT SAYETH NAUGHT.

CARL OKAZAKI

STATE OF California)
) SS:
COUNTY OF San Francisco)

Subscribed and sworn before me 22nd day of November, 2010.

ANDREW F. ALBRIGHT
COMM. #1788733
NOTARY PUBLIC-CALIFORNIA
SAN FRANCISCO COUNTY
My Comm. Expires Feb. 7, 2012

Notary Public
State of California

My commission expires: 2-7-2012

STATEMENT

I, Albert Samuel Fraleigh, on the 1st day of June 2010 at Sequim, Washington, USA, freely and at my own volition, state that I owned and occupied the property at 118 Koula Street, Hilo, Hawaii from 1983 thru 1997. This property featured a year-round, clear, vigorously flowing stream transecting the lot from west to east with many cascades and was a neighborhood attraction which passing motorists often stopped to photograph. The stream supported both minnows and crayfish. Dr. David Jung purchased the house from me in 1997 and I have provided him with two photographs which show the appearance and flow of the stream I am referring to above.

Suddenly, sometime in the early 1990's, the stream stopped flowing for the first time in my experience. I used to jog in the neighborhood on an almost daily basis including Ainako Avenue two blocks above my lot where the stream passed thru and was very familiar with its course. I also had walked the stream thru the yards above me numerous times.

When the stream went suddenly dry I immediately walked up it and was amazed to find that on the lay on the down slope in the east side of Ainako Avenue occupied by a Dr. Weight, a gate had been installed between sturdy posts to block/divert the stream flow. This gate could be raised or lowered easily. I called on Dr. Weight and told him that he had closed the gate and interrupted the stream flow for those down the stream and that he should stop such blockage.

He was not pleased and argued that he had the water rights. I left telling him to please refrain from blocking the stream. He did not lift the gate and two days later I went to his house and told him that if he did not stop the blockage the water for those below him I would personally come and remove his gate and I then went to the gate and lifted it. He seemed to be diverting the water to other parts of his property. From then on the water flowed at my property fairly well though there were numerous small interruptions and the original fairly even flow was never restored.

Dr. Weight claimed that some public body, presumably the county, was interrupting the flow in the cane fields far above him. I was never able to verify this and the flow in to his yard did not appear diminished.

Albert Samuel Fraleigh

Albert Samuel Fraleigh
270 Pond Lane
Sequim, WA 98382
Tel. (360) 683-3291
Email: bfraleigh@olypen.com

STATE OF WASHINGTON, } ss.
COUNTY OF CLALLAM, }

On this day personally appeared before me,
Albert Samuel Fraleigh
to me known to be the individual described in and who executed the within and foregoing instrument and acknowledged that he executed the same as his free and voluntary act and deed, for the uses and purposes therein mentioned.
Given under my hand and official seal
this 1st day of June, 2010

Heather S Wells

Notary Public in and for the State of Washington residing in Sequim
Heather S. Wells

HEATHER S WELLS NOTARY 08/17/2011 PUBLIC STATE OF WASHINGTON

DAVID A. JUNG, M.D.
INTERNAL MEDICINE

41 HOKU STREET
HILO, HAWAII 96720

TELEPHONE (808) 935-5768
FAX (808) 935-7219

November 8, 2010

Mr. Robert Chong
The Commission on Water Resources Management
P.O. Box 621
Honolulu, Hawaii 96809

Dear Mr. Chong:

I respectfully request a hearing of the Water Commission regarding a diversion gate placed by Ms. Aina Weight and Mr. Scott Henderson on branch stream of Ainako Stream. On May 7, 2010, Ms. Weight registered the diversion dam, flood control gate, and the ponds on her property with the Water Commission. She also filed a Declaration of Use to state that her use of the branch stream water was "reasonable and beneficial" under Hawaiian Rev. Stat. Sec. 174C-26 and -27. The Commission determined that the rock dam diversion and flood control gate on Ainako Stream were developed and in use before 1987 when the State Water Code was enacted in law.

I submit affidavits and statements which prove the permit and Declaration of Use was obtained with false information. During November and December of 2009, a gathering of residents below Kokea Street whose streams have been affected by the actions of Ms. Aina Weight and Mr. Scott Henderson met with counsel John Carroll. Ms. Aina Weight and Mr. Scott Henderson were aware of pending legal action on the diversion gate and on a second blocked branch stream. They tried to avoid the possibility for legal actions by registering the gate with your Commission. Because of the flood gate which is raised and lowered according to the whims of Ms. Aina Weight, the branch stream below Kokea Street ceases to exist for 8 to 9 months of the year. Even with heavy rains, with the new gate placed by Mr. Scott Henderson even though Ainako Stream flow is heavy, the branch stream is markedly reduced because of Ms. Aina Weight's propensity to shut the gate if she fears flooding of her ponds and stream. This I have personally witnessed over the past year and photographed. I am an acquaintance of her yard man who without prompting stated that when it rained hard she would shut the gate. This allowed her to control the amount of water flowing to her stream and yard. Mr. Scott Henderson owns the property just below hers and similarly is able to benefit from controlling the stream flow. Ms. Weight in recent years has built in and on the stream bed and has changed the bed to her liking. She does not wish the stream bed she has made to overflow or to overflow the three ponds which she has made beside the stream. Mr. Scott Henderson has similarly built next to the stream and wishes to have only so much flow on his property.

There is no regard for public use for those below Kokea Street and the wants and rights for water for the land owners below Kokea Street (Shindo, Okazaki, Jung, and others) is totally disregarded by their use of the gate and by the blockage of the second branch stream. This does not reach "useful and beneficial criteria" and the Declaration of Use should be revoked as well in my opinion.

Most importantly the history of diversion dam and flood gate as given by Ms. Aina Weight and Mr. Scott Henderson is false. First, all work done on the branch mouth was done by Dr. Weight and Dr. Weight alone initially. Then, further work has been done by his daughter Ms. Aina Weight with the help of Mr. Scott Henderson.

Mr. Ron Okazaki bought property and moved into Kokea Street in 1963. He was attracted to the property because of the abundance of water which flowed through his land. He built his house so that he had two vigorous almost year round streams going on either side of his property. He walked up the branch mouth of the stream on the west side to look at its origins when he first moved there. The only impediment to flow at the branch mouth at that time were iron bars placed horizontally in the stream mouth to keep debris and large rocks out of the branch stream. Mr. Ron Okazaki can attest that no gate was present before the early 1990's. He was able to enjoy several large natural ponds formed by the branch streams that went by his house. He was able to grow ohia trees and ferns as well as cultivate koi. Tour buses would drive by to see his house because of the water in his streams and ponds.

Suddenly, in the early 1990's, water ceased to flow to his western stream. (Flow had previously stopped on the eastern branch stream because of a second branch stream blockage by Mr. Scott Henderson). Flow up and down the entire western branch stream in question abruptly ceased. Mr. Bert Fraleigh went up to the stream to investigate and found Dr. Weight had wedged a piece of metal between two sturdy poles. When Mr. Fraleigh removed the metal piece, flow began again. Dr. Weight gave various excuses for the loss of water in the branch stream but when the piece of metal was removed, flow resumed. Dr. Weight argued to Mr. Fraleigh that the water was his to decide what to do with. When Mr. Fraleigh left, the metal was replaced by Dr. Weight and water flow in the branch stream became less and intermittent.

Mr. Carl Okazaki, youngest son of Mr. Ron Okazaki and Mrs. Dora Okazaki, noted full flow in both streams when he first moved there. Then the first eastern stream ceased by the time he graduated in 1990 from high school in Hilo but the western stream was still strong in 1990. He graduated from Syracuse University in architecture in 1995 and returned to Hilo and noted no stream on the western edge as well. He noted the marked decrease in water on his family's property.

He went up with his father after Dr. Weight's death and Mrs. Weight's death to visit Ms. Aina Weight some time after 1995. He remembers that Ms. Aina Weight did not want to increase water flow across her property and became agitated during the discussion with his father, Ron Okazaki.

Mr. Ron Okazaki was thinking of offering to pay for any work done on the stream so that he could have more flow and Mr. Carl Okazaki was offering to contact an engineering firm and make blue prints so this could be done but he could see that Ms. Aina Weight did not want any of this done.

Mr. Ron Okazaki and his wife, Mrs. Dora Okazaki, went up to talk to Dr. Weight in 1993 or 1994 and shortly after they noticed the acute cessation of flow to their house. They were unable to grow fish and had to give up their hobby of growing koi because of the lack of water and because of the intermittent flow of the stream which was due to an obstruction by an oval gate that was placed by Dr. Weight. He died shortly thereafter. In respect to his grieving widow Mrs. Weight, the Okazaki's decided to wait before they approached for more water again. She died in 1995 and again they gave what they thought was an appropriate time for mourning and approached Ms. Aina Weight, the surviving daughter who had moved back to the property. This was when the conversation with Ron and Carl had occurred. Mr. Carl Okazaki is now an architect running his own firm in San Francisco.

Mrs. Shindo, living below the Okazaki's on Koula Street, in the meantime noted the decrease in flow. Before 1990, she had a series of waterfalls gently cascading down the slope beside her house and a series of four ponds were formed as the water flowed downward. These ponds and waterfalls were all natural, none were built. These were all lost.

I bought the 118 Koula property and moved there in 1997 after the sale by Mr. Bert Fraleigh. I had heard there was a stream present. I noted an intermittent stream more robust when it rained and there was lots of water in the main Ainako Stream at all times. I always wondered where the source of the stream was but never went to look. I imagine 4 to 6 months out of the year the branch stream as it ran on my property was dry. Mr. Bert Fraleigh related to me recently that until that piece of metal was placed across the branch stream in the early 1990's, flow was vigorous in the stream on 118 Koula Street in this branch and year round. All of the descriptions from everyone involved below Kokea Street note a loss of flow and intermittent flow once a piece of metal was placed by Dr. Weight in the early 1990's. There was an abrupt cessation of flow at that time with that action.

Four to five years ago in about 2005 to 2008, flow improved for awhile. There was more water in the stream and less periods of dry stream. When it rained heavily, the stream going by my house on 118 Koula was very full. About a year ago, in the beginning of 2009, flow changed abruptly again and the stream became almost always dry. Even in times of heavy rains, the branch stream by my house was for several hours quite heavy and then would decrease to a trickle. The flow in the main stream meanwhile would be very robust.

I walked up stream around September in 2009 and met for the first time the Okazaki's. Mr. Scott Henderson found out that I was asking about the loss of water in the streams. He took me on a tour of the branch stream going past his property and up to the mouth of the branch stream on the Weight's property. He noted that the gate now present, which was a totally sluice gate with a plate that could be lowered and raised surrounded by concrete. He stated that this was only an improvement of what had been started by plantation. He noted that all this area once had been sugar cane. He insisted that he took only a small amount from the main stream and insisted that it wasn't the gate's fault that residents below Kokea Street didn't get any water. He cited the repair of a broken main pipe was leaking water into the stream recently at that time, the leaky lava, change of climate and flood control work done in Akolea during the 1980's. However, if the gate is raised, water reappears in the branch stream.

I believe that during the periods of 2005 to 2008 when water reappeared in the stream going by my house and the others up and down the branch stream, Mr. Scott Henderson was releasing water as he flushed materials from the concrete work he was doing on the stream and in ponds two and ponds three on Ms. Aina Weight's property. Mr. Henderson has also built next to the stream on his property as well.

I asked for the meeting with the residents involved with the branch stream: Mrs. Shindo, Mr. and Mrs. Okazaki and I got together shortly after Thanksgiving in 2009. Mr. John Hanneman also was present since he's also been affected. I didn't allow Mr. Scott Henderson to attend this meeting and when I told him he could not come inside, outside my house he cursed at me and insisted that he had spent a long period of time showing me why the gate he had built on Aina's property was not responsible for the lack of water to the area below Kokea Street. But the gate was from plantation days when sugar cane was grown and he had only "improved it".

In about May of 2010, I spoke with Ms. Aina Weight briefly asking her to raise the gate. She said no, that it had been registered with the Water Commission, that I should have asked for more water earlier and that if she raised the gate it would only flood her land. She also stated that she had been here 50 years and I had only been here 15 years.

EXHIBIT 4

FILED

2010 NOV 17 PM 12:27

J. YAGI, CLERK
THIRD CIRCUIT COURT
STATE OF HAWAII

JOHN S. CARROLL 0649
810 Richards Street, Suite 810
Clifford Center
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Facsimile: (808) 545-3800
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Attorney for Plaintiffs
DAVID JUNG, MALINEE JUNG,
RONALD OKAZAKI, DORA OKAZAKI,
TAMAE SHINDO, NORMAN PURVES,
AND MAREN HAUSCHILDT,

IN THE CIRCUIT COURT OF THE THIRD CIRCUIT

STATE OF HAWAI`I

DAVID JUNG, LINEE JUNG, RONALD OKAZAKI, DORA OKAZAKI, TAMAE SHINDO, NORMAN PURVES, and MAREN HAUSCHILDT,,

Plaintiff,

vs.

AINA WEIGHT and DOE DEFENDANTS 1-10,

Defendants.

Civil No. 10-1-~~092~~ 192
(Other Civil Action)

STIPULATION AND ORDER RE STAY ALL PROCEEDINGS

STIPULATION AND ORDER RE STAY ALL PROCEEDINGS

Plaintiffs and Defendant Aina Weight, by and through their respective counsel, John S. Carroll and Paul Alston, hereby stipulate pursuant to HRCP 1, HRCC Rule 19(a) that all proceedings in the above-entitled case

before the Honorable Greg K. Nakamura be stayed until further order of the Court.

DATED: Honolulu, Hawai`i, November 8, 2010.

JOHN S. CARROLL

Attorneys for Plaintiffs
DAVID JUNG, MALINEE JUNG, RONALD OKAZAKI, DORA OKAZAKI, TAMAE SHINDO, NORMAN PURVES, and MAREN HAUSCHILDT,

PAUL ALSTON
WILLIAM M. TAM

Attorneys for Defendant
AINA WEIGHT

APPROVED AND SO ORDERED:

GREG K. NAKAMURA (Seal)
JUDGE OF THE ABOVE-ENTITLED COURT

State of Hawaii
COMMISSION ON WATER RESOURCE MANAGEMENT
Department of Land and Natural Resources

COMPLAINT / DISPUTE RESOLUTION RESPONSE FORM

Instructions: Please print in ink or type and send completed form with attachments to the Commission on Water Resource Management, P.O. Box 621, Honolulu, Hawaii 96809. For further information and updates to this application form, visit http://www.hawaii.gov/dlnr/cwrm.

For Official Use Only:
RECEIVED
COMMISSION ON WATER RESOURCE MANAGEMENT
2011 FEB 22 PM 2:09

Complaint File No: C DR.2769.8

Please answer any applicable questions to the best of your knowledge. This is a standard form and some questions may not pertain to your specific situation.

1. Name: Robert Scott Henderson Date: Feb 16, 2011

   Address: 107 Kokea Street

   Hilo, HI 96720

   Daytime Phone No.: 808-934-8057 Fax No.

2. Were you aware of the problem prior to this complaint? ☒ Yes ☐ No

3 Tax Map Key: Not applicable, Diversion is not on my property.
If you are not the owner, please provide the landowner's information below.

   Landowner's Name: Leslie Aina Weight

   Landowner's Address: 1000 Ainako Avenue, Hilo, HI 96720

   Landowner's Phone No.: 808-935-1522

4. If this complaint or dispute is related to a water source on your property, was the water source previously declared with the Commission on Water Resource Management?

   ☐ Yes ☐ No ☐ Don't know

   If yes, what is the name and tax map key of the source?

   Not applicable, Diversion is not on my property.

FILE ID: CDR. 2769.8
DOC ID: 7451

EXHIBIT 4

5. Attach a sketch or photograph that will give additional details of the situation described by the complainant.

See attached, EXHIBIT A: "Declaration of Robert Scott Henderson", dated October 19, 2010, filed in Civ. No. 10-1-092, Jung et al. vs. Weight. This exhibit includes "Ainako Stream and Branch Stream Historical Notes and Physical Features" by Scott Henderson, March 2010, and "Data Pertinent to request for Registration of Stream Features on Aina Weight Property, 1000 Ainako Avenue, Hilo, Hawaii".

6. Have you had any communication with the complainant(s)?

☒ Yes ☐ No

If yes, list the communications and dates: (Attach copies if written communications were made)

On/about November 1, 2009, I gave David Jung and his daughters a walking tour over Leslie Aina Weight's and my properties and showed them the stream features including the flood control gate and diversion dam at the juncture of the Branch stream and Ainako stream. I provided him with a copy of the flow measurements map and table found in EXHIBIT A above (in "Ainako Stream and Branch Stream [Hilo, Hawaii] Historical Notes & Physical Features", pgs. 10 & 11.

7. Do you know if resolution of this matter has been sought with any other entity? (e.g., government agency, judicial body, or private entity)

☒ Yes ☐ No ☐ Don't Know

If so, with whom and what was the outcome? Please provide copies of any documentation of this process.

Third Circuit Court, Civil No. 10-1-092, Jung et al. vs. Weight. Honorable Greg Nakamura. See, EXHIBIT B: "Order Denying Plantiffs' Motion for Summary Judgement", filed November 10, 2010.

8. Describe what you believe a successful and fair remedy might be:

The Commission should dismiss or deny the Complaint.

I attest that the information given is accurate and complete, to the best of my knowledge.

Robert Scott Hunter
Signature

Feb. 17, 2011
Date

IN THE CIRCUIT COURT OF THE THIRD CIRCUIT

STATE OF HAWAI'I

DAVID JUNG, MALINEE JUNG, RONALD OKAZAKI, DORA OKAZAKI, TAMAE SHINDO, NORMAN PURVES, and MAREN HAUSCHIDLT, Plaintiffs, vs. AINA WEIGHT, and DOE DEFENDANTS 1-10, Defendants.	Civil No. 10-1-092 (Other Civil Action) **DECLARATION OF ROBERT S. HENDERSON**

DECLARATION OF ROBERT S. HENDERSON

I, Robert S. Henderson, do hereby declare as follows:

1. I am a citizen of the State of Hawai'i and I reside at 107 Kokea Street, Hilo, Hawai'i.

2. I make this declaration based on my personal knowledge, unless otherwise stated.

3. I am an Environmental Consultant with more than forty-five years of experience working in the fields of marine biology, geology, and natural resources.

4. My family (father, mother, brother and sister) moved to 51 Kokea Street, Ainako Subdivision in August 1958. The property is bordered on the east side by Ainako Stream and on the northwest side by a drainage swale.

EXHIBIT A.

5. My brother and I were avid aquatic-life and aquarium hobbyists. On numerous occasions from 1958 through the mid-1960s, we visited the "Ainako Stream" and a downstream tributary, the "Branch Stream."

6. A drainage swale that serves as a property boundary along the northwestern property boundary of TMK 2-5-25-4 is labeled as a "stream" on the 1947 TMK map and some subsequent TMK maps. However, it is only an "intermittent" stream, as it only has water flow during very high sustained rainfall and high surface runoff. My brother and I recall this feature was a natural drainage ditch that was nearly always dry.

7. The flood control gate, the diversion dam that provides water flow to the Branch Stream, levees of 2 to 5 feet in height on the western margins of Ainako Stream, and a pair of concrete-lined lily/fishponds near the "Branch Stream" origin point existed in 1958.

8. The levee section that borders the Ainako Stream margin along the southeastern boundary of the 51 Kokea Street property (TMK 2-5-2-4) has not been modified since at least July 1958.

9. I recently replaced the gate on the flood control gate at the origin of the Branch Stream. I used a sledgehammer and bottle jack to free up the steel gate that had been frozen by rust in the slider channels.

10. I replaced the old gate with a new plastic wood gate. The new gate has the same configuration and size as the old gate. I placed the new gate in the same slider channels and positioned it to provide the same 3.5 inch

opening through which Branch Stream water has flowed for at least the last two to three decades.

11. For the last 50 years, storm flow from the Main stream into the Branch Stream has been controlled by the flood control gate. Based on my observations of storm flow in the Ainako and Branch Streams, I believe the flood control gate is necessary to prevent flood damage to the 1000 Ainako Street and 99 Kokea Street properties.

12. I measured the rates of flow along the Branch Stream. There is no significant flow loss from the ponds on Ms. Weight's property.

13. I recorded my observations in a March 2010 report titled "Ainako Stream and Branch Stream (Hilo, Hawaii) Historical Notes & Physical Features." A true and correct copy of selected pages of this report is attached hereto as Exhibit 3.

14. Flows in the Ainako Stream are closely related to flows in the nearby Wailuku River. Wailuku River flow records report only four "low flow" years from 1960 through 1982 (22 years), whereas fourteen low flow events occurred since 1983 (a 26 year period). This trend matches patterns of increasing drought and El Nino events.

15. Several long-time Ainako residents and I noticed a reduction in average flow of the Ainako Stream system in the early 1980s, after completion of the Akolea Road flood control canal immediately upslope of the Ainako Stream's source.

16. In 1996, the Board of Water Supply began drawing up to 3 million gallons per day of ground water from Pi'ihonua Well C', which lies only ¾ mile upslope of the Ainako Stream's origin springs. This likely reduces the available source water for the Ainako Stream.

17. My study of water flow in the Branch Stream shows that there are numerous points along the stream channel where significant water is lost into cracks, tumuli (blisters) and inter-flow voids in the pahoehoe substrate.

18. Attached hereto as Exhibit 4 is a true and correct copy of an annotated sketch map I drew of Ainako Stream and Branch Stream features.

19. Attached hereto as Exhibit 5 is a true and correct reproduction of Hilo Sugar Company Plantation Map #10, dated 1924. I added lines to the map indicating the present day routes of Ainako Avenue and Kokea Street. The "Temporary Flume" diversion point shown on Ainako Stream is located at the site of the present day origin of the Branch Stream and flood control gate/diversion dam structures.

20. Attached hereto as Exhibit 6 is a true and correct copy of two photos of the Ainako Stream from the Henderson family collection. The first photo was taken in August, 1960. The second photo was taken from the same point in May, 2010.

I declare under penalty of perjury that the foregoing is true and correct.

Executed: Hilo, Hawai'i, October 19, 2010.

ROBERT S. HENDERSON

AINAKO STREAM AND BRANCH STREAM (HILO, HAWAII)

HISTORICAL NOTES & PHYSICAL FEATURES

Author: Scott Henderson, 107 Kokea St, Hilo, HI,

March 2010

Ainako stream originates at about 820-foot elevation about 0.4 mile upslope from the 1000 Ainako Avenue bridge. The origin area is roughly a half-mile square of boggy scrub forest and grasslands immediately below Akolea Road. Numerous springs arise from the origin area (Figure 1) and converge on the stream channel via a network of ill-defined meandering routes. Substrate over the entire length of Ainako stream is dominated by pahoehoe lava flows dating to 5,000 to 10,000 years of age. This same substrate dominates slopes extending more than five miles above the stream origin. The pahoehoe flows are very porous, and lava blisters, tumuli and lava tubes are common. Less than a half-mile to the south of the stream origin area, an extensive lava tube system contains underground streams that flow most of the year. Similar subterranean systems likely feed the Ainako stream springs.

In a few locations, stacked rock lines the borders of the stream (Figure 2), possibly put in place by Hilo Sugar Plantation Company for flood control or water diversion purposes. Below the origin area, the stream flows over gentle relief through forest composed of strawberry guava, tibuchina, ferns, ginger and tall grasses (Figure 3).

Figure 1. Typical springs at Ainako stream origin area (approximate location N 19 42 26.4, W155 07 56.1, 250 meter elevation).

Figure 2. Ainako stream in lower portion of origin area. The rock embankments were possibly built by Hilo Sugar Plantation Company.

Figure 3. Ainako stream in forest above Ainako subdivision.

In the mid-1980s, a storm control trench was emplaced along Akolea Road, running cross-slope immediately above the Ainako stream origin area. Thus, there is no longer any surface runoff input into the stream origin area other than from the immediate watershed areas below Akolea Road. Prior to the construction of the storm control trench, areas of Ainako along the stream were subjected to several major flood events. A flood in August 1956 caused significant damage to subdivision properties along the stream.

By the time that the Henderson family moved to 51 Kokea Street in August 1958, substantial flood control levees of mortared rock and solid concrete had been built along several flood-prone sections of Ainako stream between Ainako Avenue and Koula Street (a distance of 0.2 mile). Those levees are generally 2 to 5 feet high and 0.5 to 1.5 foot thick (Figures 4 & 5). The levees were likely built by the Hilo Sugar Plantation Company (developer of the Ainako subdivision) and individual landowners in the subdivision. During a major flood in 1964, water level in the Ainako stream rose to within a few inches of the top of the levee in back of the Henderson's house.

In the mid-1940s, Hilo Sugar Plantation Company created a subdivision that included the general area of Kokea Street, Koula Street and Kapaa Street. The streams on those properties were (and still are) classified as "residential" and are owned by the property owners on either side of the stream(s). Some property boundaries are defined by large and small streams and at least one intermittent flow drainage swale.

Figure 4. Flood levee along Ainako stream on upstream border of Marsh property. Built circa 1956-58 soon after damaging flood of 1956.

Figure 5. Levee embankments along the Ainako stream Weight property margin.

The Weights purchased their first Ainako property, that included Lot 6, sometime in 1954-55. At that time the property was covered with tall grass and ferns and the branch stream ran through the property along the same general route that it follows today. The Weights moved onto the Ainako property in 1956. In the 1950s, or possibly earlier, a small flood gate was installed at the junction of the main stream and Ainako stream, most likely by the Sugar Company or Dr. Weight. The gate structure appears to be integral with the 3-foot-high retaining wall that runs along the entire Ainako stream boundary of the Weight property (Figures 5, 6 & 7). A steel plate of 14-inch width and 36-inch height slid vertically within grooves in the sides of the gate structure (Figures 6 & 7). For two or three decades, the steel plate had been jammed in a position that was about 3 ½ inches above the bottom of the gate. Water flows from Ainako stream, through the gate, into a 4-foot section of 14-inch ID concrete culvert (that passes under a sidewalk), and then into the branch stream (Figure 8).

It appears that the concrete culvert piece had been placed onto an unaltered pahoehoe lava surface in a natural low spot through which water would have flowed. Primary function of the flood gate over the last three decades has been to prevent very high levels of water from flowing into the branch stream during storm flow.

Figure 6. Flood control gate that buffers water flow into the branch stream. In back of the gate is a 14-inch ID diameter four-foot section of concrete culvert. Historic (2 to 4 decade) setting of the gate opening gap (3 ½ -4 inches) provides steady day-to-day water supply while keeping storm flow to non-damaging levels on downstream properties. The present gate, built of plastic wood, replaces the pre-existing steel gate and is set at the historical gap. Station1 in Figure 11.

Figure 7. Flood control gate and reinforced embankment at origin of branch stream.

Figure 8. Culvert that supplies flow to branch stream from Ainako stream. View from branch stream side. Station 1 in Figure 11.

To ensure that the water level of Ainako stream is maintained at a level that will provide ample flow of water into the branch stream, a diversion dam was built across half the width of Ainako stream (Figures 9 & 10). The diversion dam is made of loose-stacked rock and is topped by a length of railroad track. Landside end of the track piece is buried in soil. It is not known who first built the diversion dam, but it was likely either the Sugar Company or Dr. Weight. Over the years, Dr. Weight periodically repaired storm flow damage to the dam by recovering loose rocks in the stream and placing them back on the dam face.

Figure 9. Diversion dam (in left foreground) that raises Ainako stream level to divert water into the branch stream culvert. Ainako Avenue bridge is seen in background.

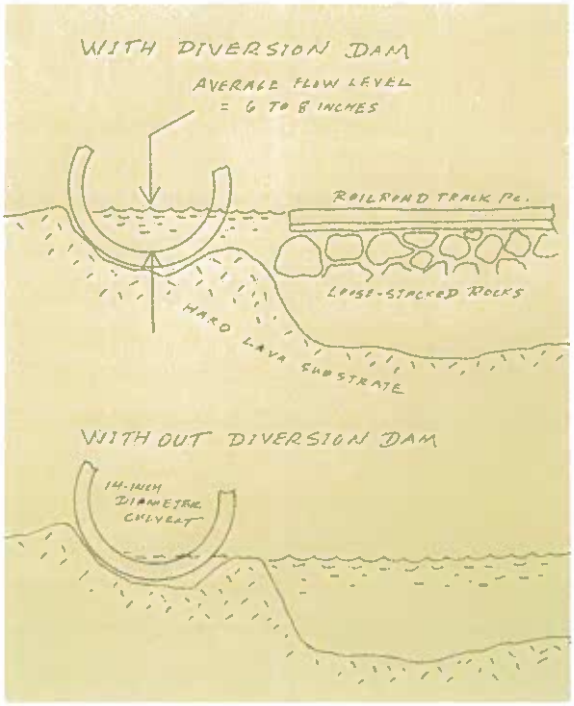


Figure 10. Schematic of water feed flow point to the branch stream with and without diversion dam in place. Note that without the diversion dam, there would be minimal or nil flow allowed into the supply culvert during low-levels of flow in the main (Ainako) stream.

Ainako stream length is about 1.3 miles from origin area to where it flows into a boggy area in a downstream valley below Kapaa Street. Width of the stream ranges from about three to 30 feet. According to Fred Koehnen, who has lived on the stream at Kapaa Street since 1956, Ainako stream has lost all water flow during periods of drought on about 5-6 occasions. Sue Irvine (who lived on Lot 7 for many years) documented dry-up of Ainako stream in March through June of 1992 and for two weeks in March of 1998. The stream experienced a flow stoppage event sometime in 2002-03. And Ainako stream nearly dried up in February of this year (2010).

Average annual water flow through the Wailuku River also shows very low values during the "no-flow" periods experienced in Ainako stream (USGS surface water annual statistics). Of interest is the fact that only two low-flow years were experienced in the Wailuku from 1960 through 1982 (22 years), whereas nine low-flow events occurred since 1983 (a 26 year period). This trend matches patterns of rainfall and El Nino events. If the trend continues, drought and low-flow events will occur on a relatively frequent basis.

The branch stream channel extends from the flood control gate through culverts at Kokea Street, Koula Street and Kapaa Street and onto the boggy valley where its flow and that of Ainako

stream merge and are eventually lost to percolation. The branch stream travels a total distance of about ½ mile. Its width varies from about one to 12 feet. Over the last few decades, retaining walls, bridges and ornamental fishponds have been created at many points along the stream's route (Figure 11 and Table 1).

The natural pahoehoe sill at the flood gate is over a foot higher than the floor of Ainako stream creating a situation wherein water flow to the small stream ceases before all flow to the main stream has been lost. And when dry-up events occur, lower reaches of Ainako stream and the branch stream dry-up before the upper reaches of the streams, likely due to the fact that the streams flow over ground surfaces composed primarily of very porous pahoehoe lava. This natural loss of water is seen in flow rate measurements made in October 2009 (Figure 12).

In 2008, S. Henderson and A. Weight plugged an obvious gap in a submerged pahoehoe inter-layer feature where a significant proportion of flow was being lost from the branch stream on Weight property. The October 2009 flow measurements made from the branch stream origin to Koula Street showed that flow rates were highly erratic, but slowly decreased downslope (Figure 12). It was apparent that in some locales water flow goes underground but re-enters the surface stream further downstream. Where the branch stream passes under Kokea Street, it loses nearly 60% of surface flow, but that flow is regained about 100 feet downstream of the culvert. From a point about 150 feet downstream of Kokea Street to the culvert at Koula Street, the stream loses about 43% of flow. Flow measurements showed that dam or diversion structures along the stream had no apparent deleterious effect on flow. During periods of very low flow in the branch stream several areas can be seen where water flows into voids in the pahoehoe substrate.

With the flood control gate set at an historical gap of 3 ½ to 4 inches, the branch stream channel fills to nearly overflowing level during periods of high storm flow, but does not create any conditions conducive to flooding hazard. Observations of flow in the branch stream during high storm flow consistently show that there are no significant impediments or alterations to flood drainage caused by any retaining walls, bridges or ponds on the streams that presently exist along the branch stream route from origin gate to Kapaa Street.

Historically, no native vertebrate species have been reported from the Ainako stream and branch streams system. Lack of connection to marine environments precludes the access of native animal larval phases to the system. Common alien fish that thrive in the streams include guppies (*Poecilia reticulata*), green swordtails (*Xiphophorus helleri*), and oriental weatherfish (*Misgurnus anguillicaudatus*). Dominant invertebrates include crayfish (*Procambarus clarkia*), bullfrogs (*Rana catesbeiana*), and cane toads (*Bufo marinus*). Waterfowl that frequent a variety of habitats in the streams include black-crowned night herons (*Nycticorax nycticorax hoactli*), golden plovers (*Pluvialis dominica*), and wandering tattlers (*Heteroscelus incanum*). There are no known records of any rare, threatened or endangered species utilizing these streams.

Figure 11. Ainako branch stream route & features. Triangular symbols = GPS-located photo stations. More data on the stations are provided in Table 1 (next page). Photos taken at the stations are shown in Figures 6, 8 and 13 through 26.

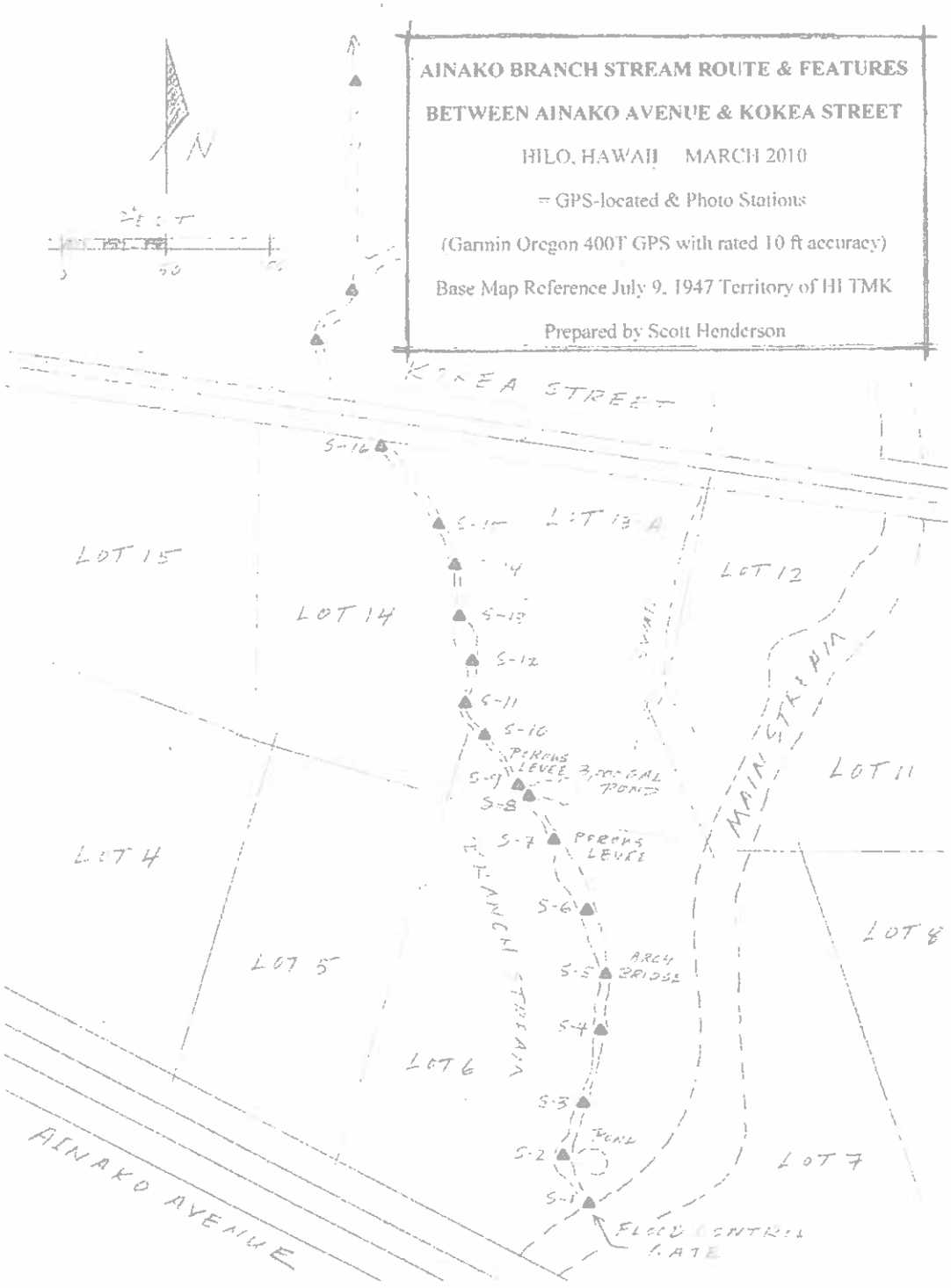


Table 1. Ainako branch stream map & property stakes GPS coordinates for Weight & Henderson properties.

S1	Flood gate: point where water enters branch stream	N19 42 30.9 W155 07 33.8
S2	Branch stream, rapids, 9 ft wide	N19 42 31.1 W155 07 33.7
S3	Branch stream, rapids, 6 ft wide	N19 42 31.2 W155 07 33.5
S4	Branch stream, rapids, 7 ft wide	N19 42 31.4 W155 07 33.1
S5	Branch stream, center of stone bridge, 6 ft wide	N19 42 31.6 W155 07 32.9
S6	Branch stream, long pool, 7 ft wide	N19 42 31.9 W155 07 32.7
S7	Branch stream, porous levee at fishpond inlet, 7 ft wide	N19 42 32.2 W155 07 32.6
S8	Branch stream, at fishpond waterfall, 9 ft wide	N19 42 32.4 W155 07 32.5
S9	Branch stream, porous levee, 5 ft wide	N19 42 32.5 W155 07 32.5
S10	Branch stream, rapids near bend, 5 ft wide	N19 42 32.8 W155 07 32.5
S11	Branch stream, 1 ft wide	N19 42 33.0 W155 07 32.5
S12	Branch stream, rapids at mauka end of pool, 3 ft wide	N19 42 33.1 W155 07 32.2
S13	Branch stream, porous levee, 7 ft wide	N19 42 33.3 W155 07 32.1
S14	Branch stream, 1 ft wide	N19 42 33.5 W155 07 31.9
S15	Branch stream, 2 ft wide	N19 42 33.7 W155 07 31.8
S16	Branch stream, center of bridge, 3 ft wide	N19 42 34.1 W155 07 31.7
P-1	Property stakes (approx locations), 3-12-2010	N19 42 35.6 W155 07 26.6
P-2	Property stakes (approx locations), 3-12-2010	N19 42 31.8 W155 07 34.8
P-3	Property stakes (approx locations), 3-12-2010	N19 42 32.7 W155 07 32.9
P-4	Property stakes (approx locations), 3-12-2010	N19 42 33.5 W155 07 33.5
P-5	Property stakes (approx locations), 3-12-2010	N19 42 34.6 W155 07 32.2
P-7	Property stakes (approx locations), 3-12-2010	N19 42 33.1 W155 07 30.6
P-8	Property stakes (approx locations), 3-12-2010	N19 42 32.4 W155 07 31.7
P-9	Property stakes (approx locations), 3-12-2010	N19 42 31.8 W155 07 32.0

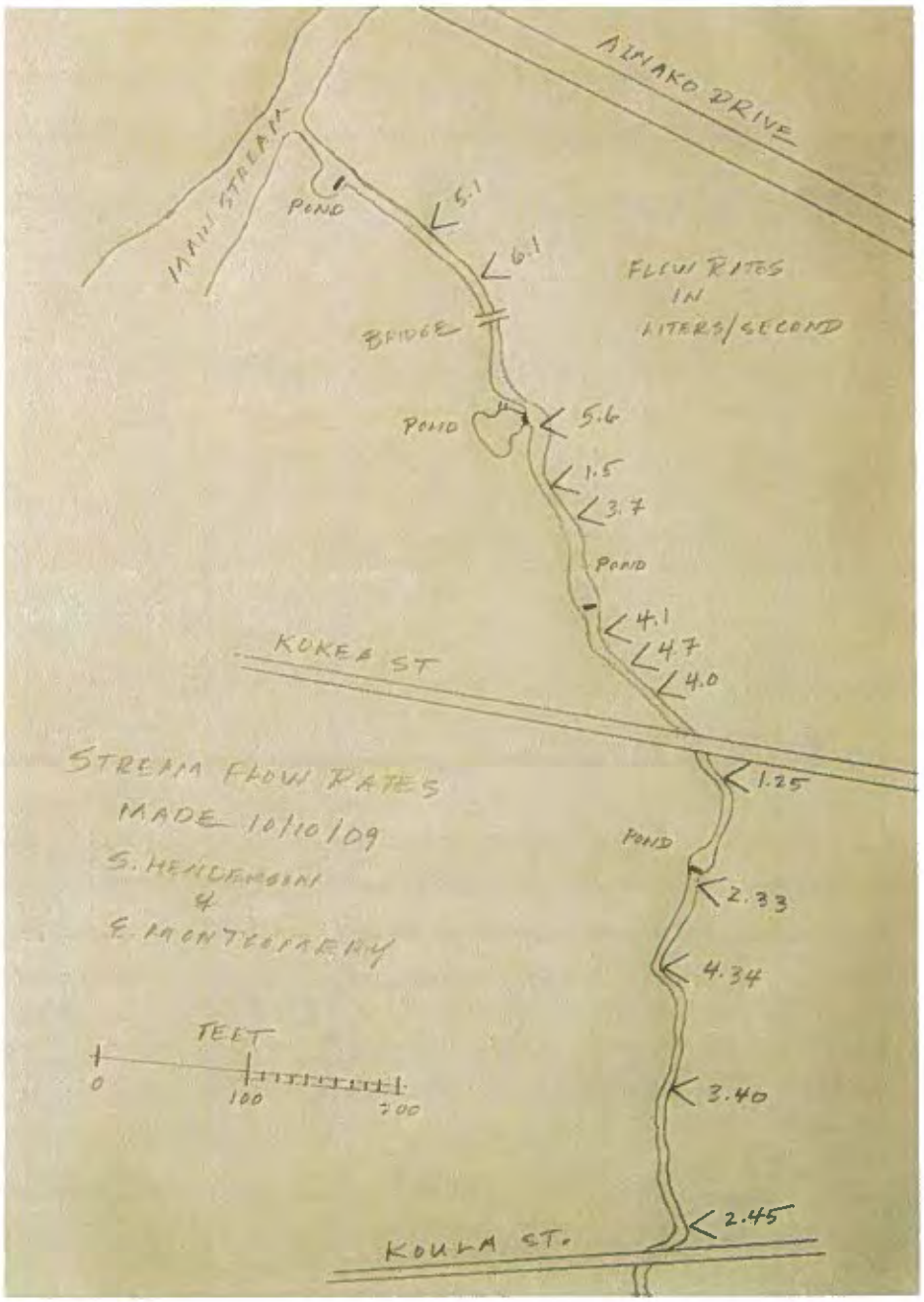


Figure 12. Branch stream flow measurements made in October 2009. Water flows downstream from the "main stream" (Ainako stream).

Figure 13. Station 3 of branch stream looking upstream.

Figure 14. Station 4 of branch stream looking upstream.

Figure 15. Station 5 of branch stream looking upstream.

Figure 16. Station 6 of branch stream looking upstream.

Figure 17. Station 7 of branch stream looking upstream.

Figure 18. Station 8 of branch stream looking across stream to pond overflow.

Figure 19. Station 9 of branch stream looking upstream.

Figure 20. Station 10 of branch stream looking upstream.

Figure 21. Station 11 of branch stream looking upstream.

Figure 22. Station 12 of branch stream looking upstream.

Figure 23. Station 13 of branch stream looking upstream.

Figure 24. Station 14 of branch stream looking upstream.

Figure 25. Station 15 of branch stream looking upstream.

Figure 26. Station 16 of branch stream looking downstream at culvert that passes under Kokea Street.

R. Scott Henderson educational and professional background:

University of Hawaii, Manoa, B.S. Degree in Geology (1966) specializing in Volcanology, with minor in Biology. Two years graduate studies in Oceanography and Geophysics.

Six years of employment by University of Hawaii as field and laboratory assistant in State Shoreline Erosion Project and Pacific-wide geomagnetic/gravity surveys and laboratory studies.

Thirty years as Federal Marine Biology Flow-through Research Laboratory manager, Natural Resources Manager and Chief of Environmental Office with Navy, Marine Corps and Army on islands of Oahu and Hawaii.

Continued business interest: Environmental Consultant, Kuapa Services

Continued personal interests: Marine and freshwater fish ponds, stream and pond ecology, reef ecology, mangrove control, avid hobby aquarist and ponds culturist, wetland management.

Pertinent familial presence on subject streams and proximal properties:

Self and/or parental family lived on Kokea Street properties on or adjacent to Ainako stream and branch stream properties from 1958 through present (52 years).

Spouse and/or parental family lived on Kokea Street properties from 1965 through present (45 years).

Persons that contributed historical information for this report:

Scott Henderson, Aina Weight, Fred Koehnen, Richard Henderson, Judy Henderson, Arthur Herbst

Data Pertinent to Request for Registration of Stream Features on Aina Weight Properties at 1000 Ainako Avenue, Hilo, Hawaii

Stream features (X) on the subject property are shown in Figure A-1 and include:

A. **"Branch Stream"** of about ½ mile length with width of one to 12 feet with landscaping features that include ground-level-flush retaining walls, three porous weirs , an arch bridge and two fishponds. Hilo Sugar Company Plantation Field map Sheet #10 dated 1924 (Figure A-2) shows the "Branch Stream" origin point as a water source for a "temporary flume" that extended in straight line distance of about 1,500 feet to sugar cane field lots 71-72 (at the location of lower sections of the present day Ainako Terrace subdivision). The "Branch Stream is depicted on TMK maps of 1947 (Figure A-3) to present on a path that meanders about 12 degrees east of the old temporary flume route.

B. **"Flood Control Gate"** structure with vertical sliding gate of 14-inch width and 36–inch height. This gate likely existed in (or before) 1924 as a device to control flow into temporary flume systems (Figure A-2). Owners and residents of properties at or near to the structure recall that it existed in the late 1950's.

C. **"Diversion Dam"** of loose-stacked rock that raises water-level by several inches to provide flow through the gate into the Branch stream. The dam near water level is about a foot wide and six feet long. It is topped by a length of railroad track that is partially buried in the south stream bank. The dam has been in place for at least 50 years, but may date to 1924 or earlier as its presence is required to raise the main stream level to shunt water into the Branch Stream (and temporary flumes).

D. **"Flood Levees"** of solid concrete or mortared rock that create flood-control walls on margins of Ainako stream of two- to five-foot height. These Levees and other sections of Levees that continue downstream for about 0.2-mile have been in place since the late 1950's. They were likely built by the subdivision developer (Hilo Sugar Co.) immediately after a major flood occurred in 1956. Some Levee sections have been increased in height by 1 to 3 feet by property owners over the last four decades in response to subsequent flood events.

Additional information:

There are no known flow data for the Ainako Stream or Branch Stream prior to 2009. Recent flow measurements by S. Henderson and E. Montgomery are presented in Table A-1. Data taken at "medium"flow levels, show that at "historic" setting of the flood/flow control gate (3.5-inch open gap), about 8% of the Main (Ainako) Stream flow is diverted into the Branch Stream. With gap opening increased to 5 inches, the diversion amount increases to 12%. And, at full open position, 23% of the Main Stream volume is diverted to the Branch Stream.

In interest of maintaining "status quo" relative to the proportion of water diverted from the Main Stream to the Branch Stream, it is intended that the gate gap setting remain at 3.5 - 4 inches. Any alteration to this flow standard would be negotiated with the State Water Commission and property owners that border the Main (Ainako) Stream and Branch Stream down-slope of the flood/flow control gate.

More detailed information on the history and physical setting of the subject streams and associated structures are presented in Attachment A (Ainako Stream and Branch Stream , Hilo, Hawaii, Historical Notes & Physical Features, March 2010). Detailed computational flow rate data are on file with S. Henderson.

Property owners with interest in this registration of stream diversion works existing between Ainako Avenue and Kokea Street (TMK 2-5-25):

Leslie Aina Weight, Parcels 14 & 5 (Flood/flow control gate & 420 feet of Branch stream length).

Robert Scott and Judith Ann Henderson, Parcel 6, (170 feet of Branch stream length).

Skip and Camille Thomsen, Parcel 15 (Diversion dam & 250 feet of Ainako stream length).

Brett Marsh, Parcel 4, (180 feet of Ainako stream length with about 120 feet of flood levee).

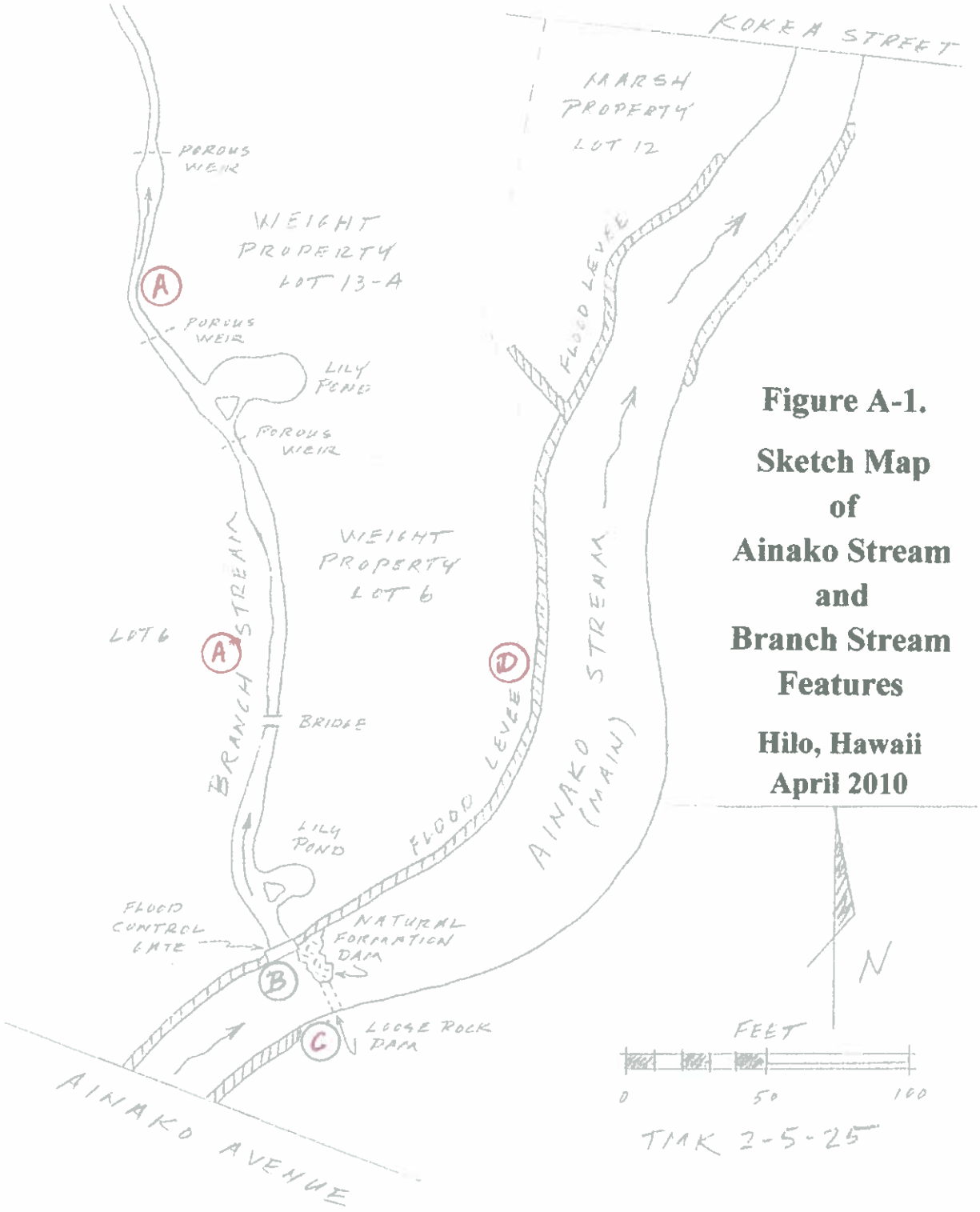


Figure A-1.

Sketch Map of Ainako Stream and Branch Stream Features

Hilo, Hawaii
April 2010

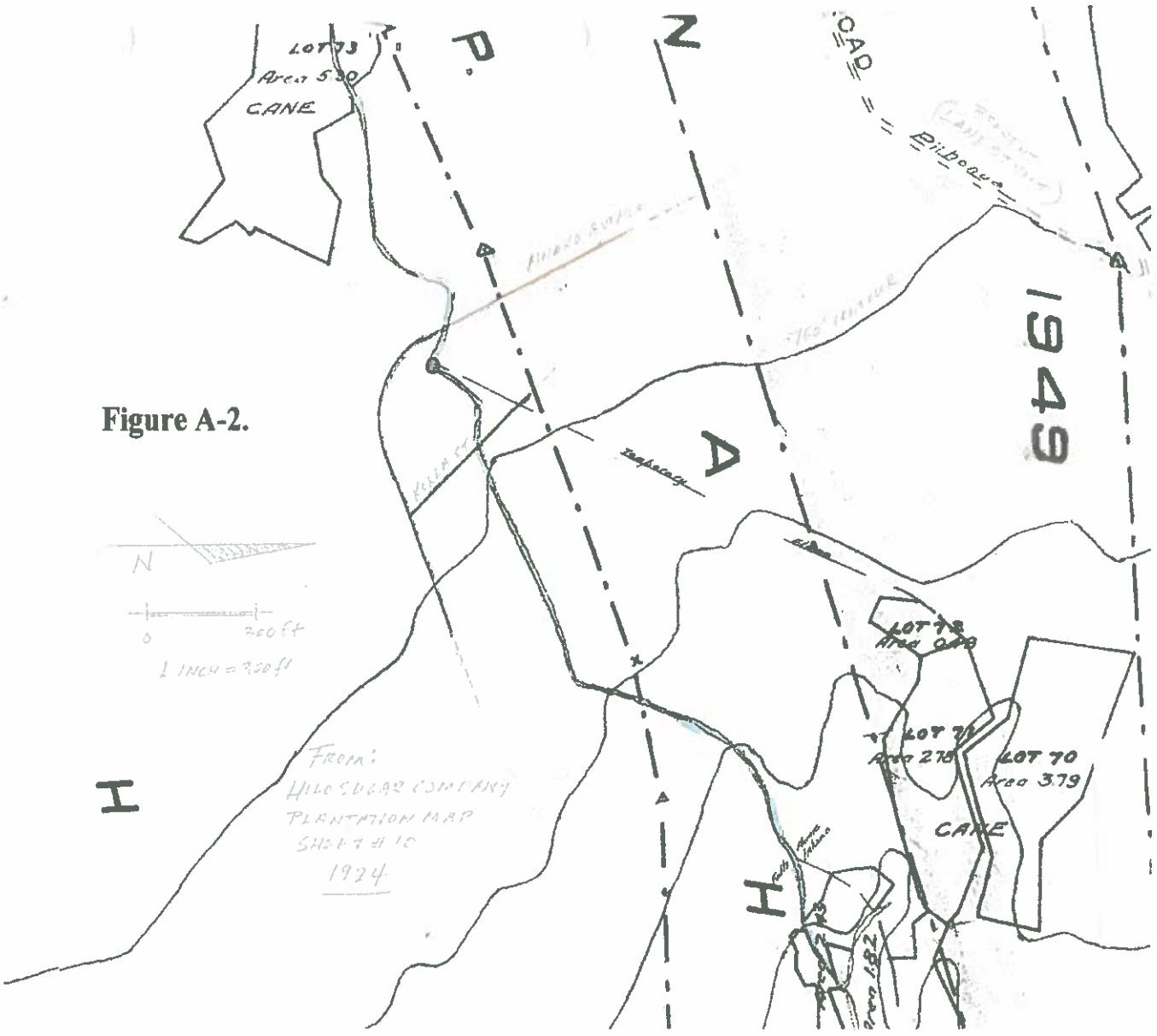


Figure A-2.

Figure A-2. Hilo Sugar Company Plantation Map #10, 1924

("Temporary flume" line extends SE from present day stream origin point at Ainako Stream [blue line, present gate/origin point] to past sugar cane lots to northeast; present day route of Branch Stream is approximately 12 degrees east of that route.)

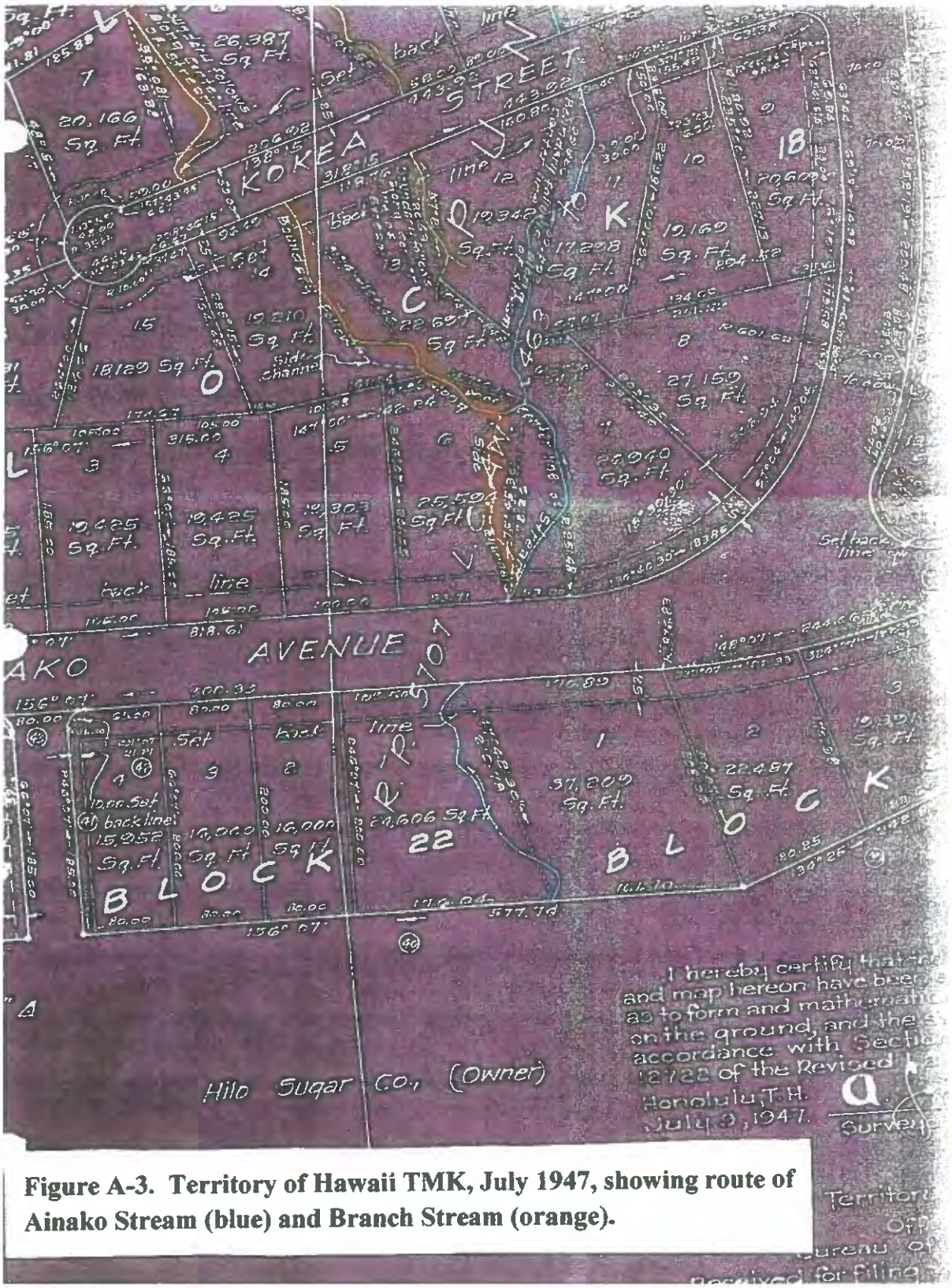
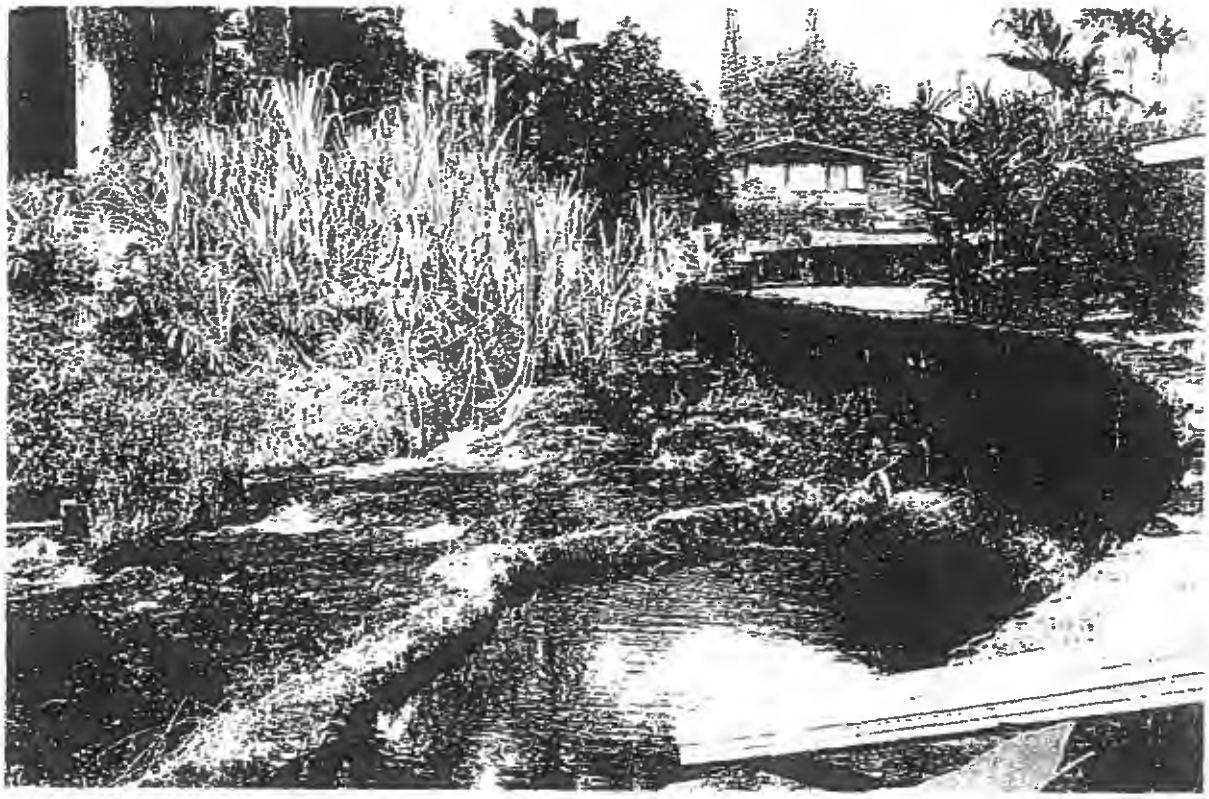


Figure A-3. Territory of Hawaii TMK, July 1947, showing route of Ainako Stream (blue) and Branch Stream (orange).

Figure A-4. View of Ainako stream looking upstream from S side of TMK 2-5-25-4 property. Above photo taken in August 1960 . Below photo taken in May 2010.

Photos from Henderson family photo collection.



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Attorneys for Defendant
AINA WEIGHT

IN THE CIRCUIT COURT OF THE THIRD CIRCUIT

STATE OF HAWAI'I

DAVID JUNG, MALINEE JUNG, RONALD OKAZAKI, DORA OKAZAKI, TAMAE SHINDO, NORMAN PURVES, and MAREN HAUSCHIDLT,

Plaintiffs,

vs.

AINA WEIGHT, and DOE DEFENDANTS 1-10,

Defendants.

Civil No. 10-1-092
(Other Civil Action)

ORDER DENYING PLAINTIFFS; MOTION FOR SUMMARY JUDGMENT FILED SEPTEMBER 9, 2010

Hearing Held:
Date: October 28, 2010
Time: 8:30 a.m.
Judge: Hon. Greg K. Nakamura

ORDER DENYING PLAINTIFFS' MOTION FOR SUMMARY JUDGMENT FILED ON SEPTEMBER 9, 2010

Plaintiffs filed a Motion for Summary Judgment on September 9, 2010. The Motion was heard by the Honorable Greg K. Nakamura on October 28, 2010 at 8:30 a.m. John S. Carroll appeared for Plaintiffs; Paul Alston

I hereby certify that this is a full, true and correct copy of the original on file in this office.

EXHIBIT B.

appeared for Defendant Aina Weight. The Court has considered the memoranda filed by the parties, the arguments of counsel, and the record and files in this action. For good cause,

Plaintiffs' Motion for Summary Judgment filed September 9, 2010 is DENIED. Plaintiffs have no claim under Art. XI §7 of the Hawai`i Constitution; the Commission on Water Resource Management has primary jurisdiction over Plaintiffs' statutory and common law claims

Dated: Hilo, Hawai`i, NOV 10 2010.

GREG K. NAKAMURA (Seal)
JUDGE OF THE ABOVE-ENTITLED COURT

APPROVED AS TO FORM:

JOHN S. CARROLL
Attorney for Plaintiffs

State of Hawaii
COMMISSION ON WATER RESOURCE MANAGEMENT
Department of Land and Natural Resources

COMPLAINT / DISPUTE RESOLUTION RESPONSE FORM

Instructions: Please print in ink or type and send completed form with attachments to the Commission on Water Resource Management, P.O. Box 621, Honolulu, Hawaii 96809. For further information and updates to this application form, visit http://www.hawaii.gov/dlnr/cwrm.

For Official Use Only:
RECEIVED
COMMISSION ON WATER RESOURCE MANAGEMENT
2011 FEB 22 PM 2:09

Complaint File No: C DR.2769.8

Please answer any applicable questions to the best of your knowledge. This is a standard form and some questions may not pertain to your specific situation.

1. Name: Robert Scott Henderson Date: Feb 16, 2011

   Address: 107 Kokea Street

   Hilo, HI 96720

   Daytime Phone No.: 808-934-8057 Fax No.

2. Were you aware of the problem prior to this complaint? ☒ Yes ☐ No

3 Tax Map Key: Not applicable, Diversion is not on my property.
If you are not the owner, please provide the landowner's information below.

   Landowner's Name: Leslie Aina Weight

   Landowner's Address: 1000 Ainako Avenue, Hilo, HI 96720

   Landowner's Phone No.: 808-935-1522

4. If this complaint or dispute is related to a water source on your property, was the water source previously declared with the Commission on Water Resource Management?

   ☐ Yes ☐ No ☐ Don't know

   If yes, what is the name and tax map key of the source?

   Not applicable, Diversion is not on my property.

FILE ID: CDR. 2769.8
DOC ID: 7451

EXHIBIT 4

5. Attach a sketch or photograph that will give additional details of the situation described by the complainant.

See attached, EXHIBIT A: "Declaration of Robert Scott Henderson", dated October 19, 2010, filed in Civ. No. 10-1-092, Jung et al. vs. Weight. This exhibit includes "Ainako Stream and Branch Stream Historical Notes and Physical Features" by Scott Henderson, March 2010, and "Data Pertinent to request for Registration of Stream Features on Aina Weight Property, 1000 Ainako Avenue, Hilo, Hawaii".

6. Have you had any communication with the complainant(s)?

☒ Yes ☐ No

If yes, list the communications and dates: (Attach copies if written communications were made)

On/about November 1, 2009, I gave David Jung and his daughters a walking tour over Leslie Aina Weight's and my properties and showed them the stream features including the flood control gate and diversion dam at the juncture of the Branch stream and Ainako stream. I provided him with a copy of the flow measurements map and table found in EXHIBIT A above (in "Ainako Stream and Branch Stream [Hilo, Hawaii] Historical Notes & Physical Features", pgs. 10 & 11.

7. Do you know if resolution of this matter has been sought with any other entity? (e.g., government agency, judicial body, or private entity)

☒ Yes ☐ No ☐ Don't Know

If so, with whom and what was the outcome? Please provide copies of any documentation of this process.

Third Circuit Court, Civil No. 10-1-092, Jung et al. vs. Weight. Honorable Greg Nakamura. See, EXHIBIT B: "Order Denying Plantiffs' Motion for Summary Judgement", filed November 10, 2010.

8. Describe what you believe a successful and fair remedy might be:

The Commission should dismiss or deny the Complaint.

I attest that the information given is accurate and complete, to the best of my knowledge.

Robert Scott Hunter
Signature

Feb. 17, 2011
Date

IN THE CIRCUIT COURT OF THE THIRD CIRCUIT

STATE OF HAWAI'I

DAVID JUNG, MALINEE JUNG, RONALD OKAZAKI, DORA OKAZAKI, TAMAE SHINDO, NORMAN PURVES, and MAREN HAUSCHIDLT, Plaintiffs, vs. AINA WEIGHT, and DOE DEFENDANTS 1-10, Defendants.	Civil No. 10-1-092 (Other Civil Action) **DECLARATION OF ROBERT S. HENDERSON**

DECLARATION OF ROBERT S. HENDERSON

I, Robert S. Henderson, do hereby declare as follows:

1. I am a citizen of the State of Hawai'i and I reside at 107 Kokea Street, Hilo, Hawai'i.

2. I make this declaration based on my personal knowledge, unless otherwise stated.

3. I am an Environmental Consultant with more than forty-five years of experience working in the fields of marine biology, geology, and natural resources.

4. My family (father, mother, brother and sister) moved to 51 Kokea Street, Ainako Subdivision in August 1958. The property is bordered on the east side by Ainako Stream and on the northwest side by a drainage swale.

EXHIBIT A.

5. My brother and I were avid aquatic-life and aquarium hobbyists. On numerous occasions from 1958 through the mid-1960s, we visited the "Ainako Stream" and a downstream tributary, the "Branch Stream."

6. A drainage swale that serves as a property boundary along the northwestern property boundary of TMK 2-5-25-4 is labeled as a "stream" on the 1947 TMK map and some subsequent TMK maps. However, it is only an "intermittent" stream, as it only has water flow during very high sustained rainfall and high surface runoff. My brother and I recall this feature was a natural drainage ditch that was nearly always dry.

7. The flood control gate, the diversion dam that provides water flow to the Branch Stream, levees of 2 to 5 feet in height on the western margins of Ainako Stream, and a pair of concrete-lined lily/fishponds near the "Branch Stream" origin point existed in 1958.

8. The levee section that borders the Ainako Stream margin along the southeastern boundary of the 51 Kokea Street property (TMK 2-5-2-4) has not been modified since at least July 1958.

9. I recently replaced the gate on the flood control gate at the origin of the Branch Stream. I used a sledgehammer and bottle jack to free up the steel gate that had been frozen by rust in the slider channels.

10. I replaced the old gate with a new plastic wood gate. The new gate has the same configuration and size as the old gate. I placed the new gate in the same slider channels and positioned it to provide the same 3.5 inch

opening through which Branch Stream water has flowed for at least the last two to three decades.

11. For the last 50 years, storm flow from the Main stream into the Branch Stream has been controlled by the flood control gate. Based on my observations of storm flow in the Ainako and Branch Streams, I believe the flood control gate is necessary to prevent flood damage to the 1000 Ainako Street and 99 Kokea Street properties.

12. I measured the rates of flow along the Branch Stream. There is no significant flow loss from the ponds on Ms. Weight's property.

13. I recorded my observations in a March 2010 report titled "Ainako Stream and Branch Stream (Hilo, Hawaii) Historical Notes & Physical Features." A true and correct copy of selected pages of this report is attached hereto as Exhibit 3.

14. Flows in the Ainako Stream are closely related to flows in the nearby Wailuku River. Wailuku River flow records report only four "low flow" years from 1960 through 1982 (22 years), whereas fourteen low flow events occurred since 1983 (a 26 year period). This trend matches patterns of increasing drought and El Nino events.

15. Several long-time Ainako residents and I noticed a reduction in average flow of the Ainako Stream system in the early 1980s, after completion of the Akolea Road flood control canal immediately upslope of the Ainako Stream's source.

16. In 1996, the Board of Water Supply began drawing up to 3 million gallons per day of ground water from Pi'ihonua Well C', which lies only ¾ mile upslope of the Ainako Stream's origin springs. This likely reduces the available source water for the Ainako Stream.

17. My study of water flow in the Branch Stream shows that there are numerous points along the stream channel where significant water is lost into cracks, tumuli (blisters) and inter-flow voids in the pahoehoe substrate.

18. Attached hereto as Exhibit 4 is a true and correct copy of an annotated sketch map I drew of Ainako Stream and Branch Stream features.

19. Attached hereto as Exhibit 5 is a true and correct reproduction of Hilo Sugar Company Plantation Map #10, dated 1924. I added lines to the map indicating the present day routes of Ainako Avenue and Kokea Street. The "Temporary Flume" diversion point shown on Ainako Stream is located at the site of the present day origin of the Branch Stream and flood control gate/diversion dam structures.

20. Attached hereto as Exhibit 6 is a true and correct copy of two photos of the Ainako Stream from the Henderson family collection. The first photo was taken in August, 1960. The second photo was taken from the same point in May, 2010.

I declare under penalty of perjury that the foregoing is true and correct.

Executed: Hilo, Hawai'i, October 19, 2010.

ROBERT S. HENDERSON

AINAKO STREAM AND BRANCH STREAM (HILO, HAWAII)

HISTORICAL NOTES & PHYSICAL FEATURES

Author: Scott Henderson, 107 Kokea St, Hilo, HI,

March 2010

Ainako stream originates at about 820-foot elevation about 0.4 mile upslope from the 1000 Ainako Avenue bridge. The origin area is roughly a half-mile square of boggy scrub forest and grasslands immediately below Akolea Road. Numerous springs arise from the origin area (Figure 1) and converge on the stream channel via a network of ill-defined meandering routes. Substrate over the entire length of Ainako stream is dominated by pahoehoe lava flows dating to 5,000 to 10,000 years of age. This same substrate dominates slopes extending more than five miles above the stream origin. The pahoehoe flows are very porous, and lava blisters, tumuli and lava tubes are common. Less than a half-mile to the south of the stream origin area, an extensive lava tube system contains underground streams that flow most of the year. Similar subterranean systems likely feed the Ainako stream springs.

In a few locations, stacked rock lines the borders of the stream (Figure 2), possibly put in place by Hilo Sugar Plantation Company for flood control or water diversion purposes. Below the origin area, the stream flows over gentle relief through forest composed of strawberry guava, tibuchina, ferns, ginger and tall grasses (Figure 3).

Figure 1. Typical springs at Ainako stream origin area (approximate location N 19 42 26.4, W155 07 56.1, 250 meter elevation).

Figure 2. Ainako stream in lower portion of origin area. The rock embankments were possibly built by Hilo Sugar Plantation Company.

Figure 3. Ainako stream in forest above Ainako subdivision.

In the mid-1980s, a storm control trench was emplaced along Akolea Road, running cross-slope immediately above the Ainako stream origin area. Thus, there is no longer any surface runoff input into the stream origin area other than from the immediate watershed areas below Akolea Road. Prior to the construction of the storm control trench, areas of Ainako along the stream were subjected to several major flood events. A flood in August 1956 caused significant damage to subdivision properties along the stream.

By the time that the Henderson family moved to 51 Kokea Street in August 1958, substantial flood control levees of mortared rock and solid concrete had been built along several flood-prone sections of Ainako stream between Ainako Avenue and Koula Street (a distance of 0.2 mile). Those levees are generally 2 to 5 feet high and 0.5 to 1.5 foot thick (Figures 4 & 5). The levees were likely built by the Hilo Sugar Plantation Company (developer of the Ainako subdivision) and individual landowners in the subdivision. During a major flood in 1964, water level in the Ainako stream rose to within a few inches of the top of the levee in back of the Henderson's house.

In the mid-1940s, Hilo Sugar Plantation Company created a subdivision that included the general area of Kokea Street, Koula Street and Kapaa Street. The streams on those properties were (and still are) classified as "residential" and are owned by the property owners on either side of the stream(s). Some property boundaries are defined by large and small streams and at least one intermittent flow drainage swale.

Figure 4. Flood levee along Ainako stream on upstream border of Marsh property. Built circa 1956-58 soon after damaging flood of 1956.

Figure 5. Levee embankments along the Ainako stream Weight property margin.

The Weights purchased their first Ainako property, that included Lot 6, sometime in 1954-55. At that time the property was covered with tall grass and ferns and the branch stream ran through the property along the same general route that it follows today. The Weights moved onto the Ainako property in 1956. In the 1950s, or possibly earlier, a small flood gate was installed at the junction of the main stream and Ainako stream, most likely by the Sugar Company or Dr. Weight. The gate structure appears to be integral with the 3-foot-high retaining wall that runs along the entire Ainako stream boundary of the Weight property (Figures 5, 6 & 7). A steel plate of 14-inch width and 36-inch height slid vertically within grooves in the sides of the gate structure (Figures 6 & 7). For two or three decades, the steel plate had been jammed in a position that was about 3 ½ inches above the bottom of the gate. Water flows from Ainako stream, through the gate, into a 4-foot section of 14-inch ID concrete culvert (that passes under a sidewalk), and then into the branch stream (Figure 8).

It appears that the concrete culvert piece had been placed onto an unaltered pahoehoe lava surface in a natural low spot through which water would have flowed. Primary function of the flood gate over the last three decades has been to prevent very high levels of water from flowing into the branch stream during storm flow.

Figure 6. Flood control gate that buffers water flow into the branch stream. In back of the gate is a 14-inch ID diameter four-foot section of concrete culvert. Historic (2 to 4 decade) setting of the gate opening gap (3 ½ -4 inches) provides steady day-to-day water supply while keeping storm flow to non-damaging levels on downstream properties. The present gate, built of plastic wood, replaces the pre-existing steel gate and is set at the historical gap. Station1 in Figure 11.

Figure 7. Flood control gate and reinforced embankment at origin of branch stream.

Figure 8. Culvert that supplies flow to branch stream from Ainako stream. View from branch stream side. Station 1 in Figure 11.

To ensure that the water level of Ainako stream is maintained at a level that will provide ample flow of water into the branch stream, a diversion dam was built across half the width of Ainako stream (Figures 9 & 10). The diversion dam is made of loose-stacked rock and is topped by a length of railroad track. Landside end of the track piece is buried in soil. It is not known who first built the diversion dam, but it was likely either the Sugar Company or Dr. Weight. Over the years, Dr. Weight periodically repaired storm flow damage to the dam by recovering loose rocks in the stream and placing them back on the dam face.

Figure 9. Diversion dam (in left foreground) that raises Ainako stream level to divert water into the branch stream culvert. Ainako Avenue bridge is seen in background.

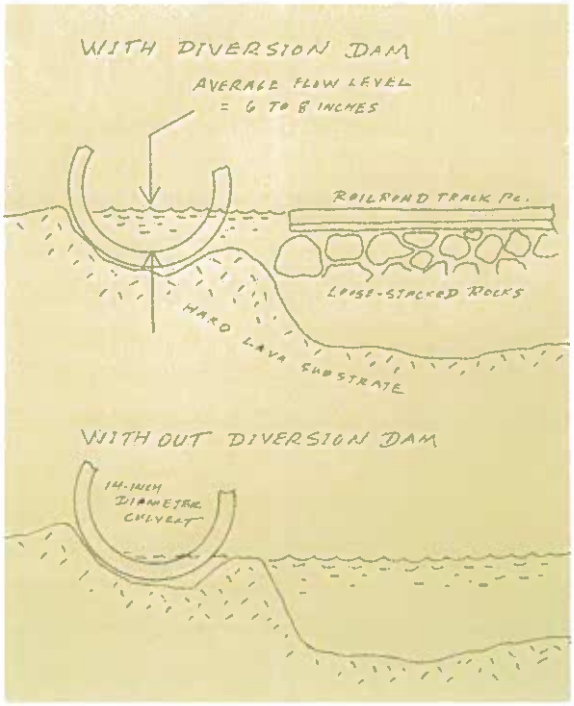


Figure 10. Schematic of water feed flow point to the branch stream with and without diversion dam in place. Note that without the diversion dam, there would be minimal or nil flow allowed into the supply culvert during low-levels of flow in the main (Ainako) stream.

Ainako stream length is about 1.3 miles from origin area to where it flows into a boggy area in a downstream valley below Kapaa Street. Width of the stream ranges from about three to 30 feet. According to Fred Koehnen, who has lived on the stream at Kapaa Street since 1956, Ainako stream has lost all water flow during periods of drought on about 5-6 occasions. Sue Irvine (who lived on Lot 7 for many years) documented dry-up of Ainako stream in March through June of 1992 and for two weeks in March of 1998. The stream experienced a flow stoppage event sometime in 2002-03. And Ainako stream nearly dried up in February of this year (2010).

Average annual water flow through the Wailuku River also shows very low values during the "no-flow" periods experienced in Ainako stream (USGS surface water annual statistics). Of interest is the fact that only two low-flow years were experienced in the Wailuku from 1960 through 1982 (22 years), whereas nine low-flow events occurred since 1983 (a 26 year period). This trend matches patterns of rainfall and El Nino events. If the trend continues, drought and low-flow events will occur on a relatively frequent basis.

The branch stream channel extends from the flood control gate through culverts at Kokea Street, Koula Street and Kapaa Street and onto the boggy valley where its flow and that of Ainako

stream merge and are eventually lost to percolation. The branch stream travels a total distance of about ½ mile. Its width varies from about one to 12 feet. Over the last few decades, retaining walls, bridges and ornamental fishponds have been created at many points along the stream's route (Figure 11 and Table 1).

The natural pahoehoe sill at the flood gate is over a foot higher than the floor of Ainako stream creating a situation wherein water flow to the small stream ceases before all flow to the main stream has been lost. And when dry-up events occur, lower reaches of Ainako stream and the branch stream dry-up before the upper reaches of the streams, likely due to the fact that the streams flow over ground surfaces composed primarily of very porous pahoehoe lava. This natural loss of water is seen in flow rate measurements made in October 2009 (Figure 12).

In 2008, S. Henderson and A. Weight plugged an obvious gap in a submerged pahoehoe inter-layer feature where a significant proportion of flow was being lost from the branch stream on Weight property. The October 2009 flow measurements made from the branch stream origin to Koula Street showed that flow rates were highly erratic, but slowly decreased downslope (Figure 12). It was apparent that in some locales water flow goes underground but re-enters the surface stream further downstream. Where the branch stream passes under Kokea Street, it loses nearly 60% of surface flow, but that flow is regained about 100 feet downstream of the culvert. From a point about 150 feet downstream of Kokea Street to the culvert at Koula Street, the stream loses about 43% of flow. Flow measurements showed that dam or diversion structures along the stream had no apparent deleterious effect on flow. During periods of very low flow in the branch stream several areas can be seen where water flows into voids in the pahoehoe substrate.

With the flood control gate set at an historical gap of 3 ½ to 4 inches, the branch stream channel fills to nearly overflowing level during periods of high storm flow, but does not create any conditions conducive to flooding hazard. Observations of flow in the branch stream during high storm flow consistently show that there are no significant impediments or alterations to flood drainage caused by any retaining walls, bridges or ponds on the streams that presently exist along the branch stream route from origin gate to Kapaa Street.

Historically, no native vertebrate species have been reported from the Ainako stream and branch streams system. Lack of connection to marine environments precludes the access of native animal larval phases to the system. Common alien fish that thrive in the streams include guppies (*Poecilia reticulata*), green swordtails (*Xiphophorus helleri*), and oriental weatherfish (*Misgurnus anguillicaudatus*). Dominant invertebrates include crayfish (*Procambarus clarkia*), bullfrogs (*Rana catesbeiana*), and cane toads (*Bufo marinus*). Waterfowl that frequent a variety of habitats in the streams include black-crowned night herons (*Nycticorax nycticorax hoactli*), golden plovers (*Pluvialis dominica*), and wandering tattlers (*Heteroscelus incanum*). There are no known records of any rare, threatened or endangered species utilizing these streams.

Figure 11. Ainako branch stream route & features. Triangular symbols = GPS-located photo stations. More data on the stations are provided in Table 1 (next page). Photos taken at the stations are shown in Figures 6, 8 and 13 through 26.

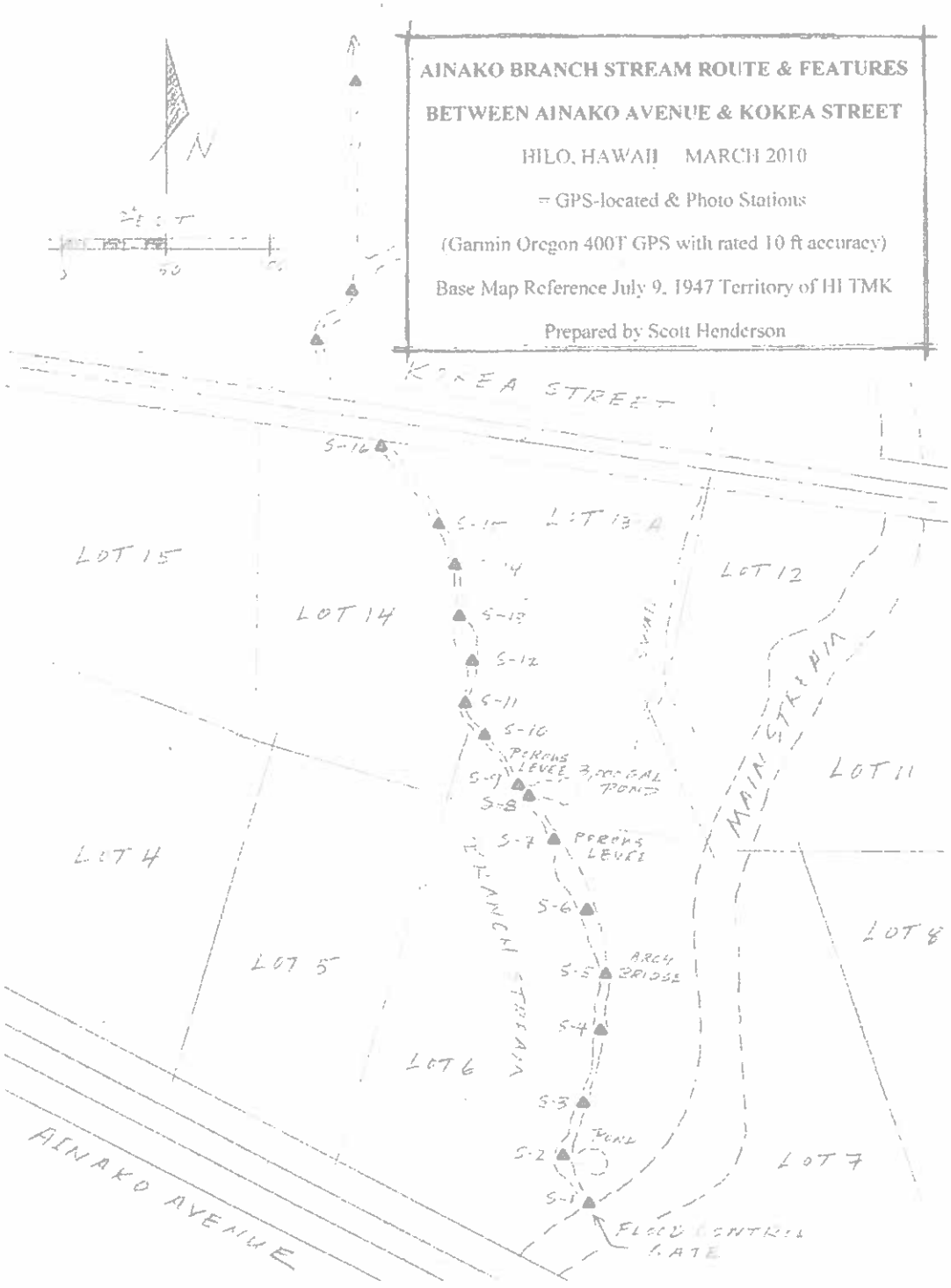


Table 1. Ainako branch stream map & property stakes GPS coordinates for Weight & Henderson properties.

S1	Flood gate: point where water enters branch stream	N19 42 30.9 W155 07 33.8
S2	Branch stream, rapids, 9 ft wide	N19 42 31.1 W155 07 33.7
S3	Branch stream, rapids, 6 ft wide	N19 42 31.2 W155 07 33.5
S4	Branch stream, rapids, 7 ft wide	N19 42 31.4 W155 07 33.1
S5	Branch stream, center of stone bridge, 6 ft wide	N19 42 31.6 W155 07 32.9
S6	Branch stream, long pool, 7 ft wide	N19 42 31.9 W155 07 32.7
S7	Branch stream, porous levee at fishpond inlet, 7 ft wide	N19 42 32.2 W155 07 32.6
S8	Branch stream, at fishpond waterfall, 9 ft wide	N19 42 32.4 W155 07 32.5
S9	Branch stream, porous levee, 5 ft wide	N19 42 32.5 W155 07 32.5
S10	Branch stream, rapids near bend, 5 ft wide	N19 42 32.8 W155 07 32.5
S11	Branch stream, 1 ft wide	N19 42 33.0 W155 07 32.5
S12	Branch stream, rapids at mauka end of pool, 3 ft wide	N19 42 33.1 W155 07 32.2
S13	Branch stream, porous levee, 7 ft wide	N19 42 33.3 W155 07 32.1
S14	Branch stream, 1 ft wide	N19 42 33.5 W155 07 31.9
S15	Branch stream, 2 ft wide	N19 42 33.7 W155 07 31.8
S16	Branch stream, center of bridge, 3 ft wide	N19 42 34.1 W155 07 31.7
P-1	Property stakes (approx locations), 3-12-2010	N19 42 35.6 W155 07 26.6
P-2	Property stakes (approx locations), 3-12-2010	N19 42 31.8 W155 07 34.8
P-3	Property stakes (approx locations), 3-12-2010	N19 42 32.7 W155 07 32.9
P-4	Property stakes (approx locations), 3-12-2010	N19 42 33.5 W155 07 33.5
P-5	Property stakes (approx locations), 3-12-2010	N19 42 34.6 W155 07 32.2
P-7	Property stakes (approx locations), 3-12-2010	N19 42 33.1 W155 07 30.6
P-8	Property stakes (approx locations), 3-12-2010	N19 42 32.4 W155 07 31.7
P-9	Property stakes (approx locations), 3-12-2010	N19 42 31.8 W155 07 32.0

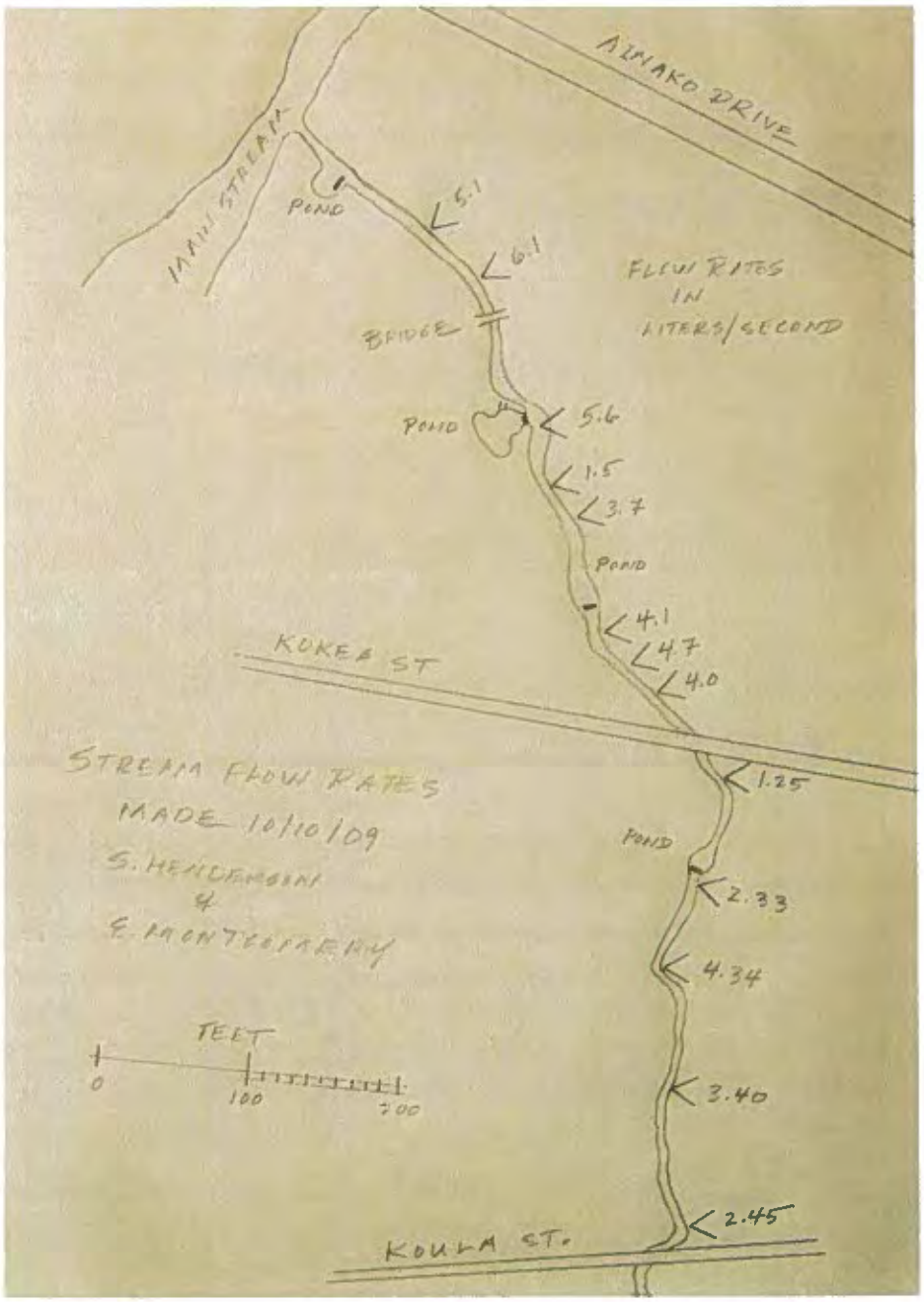


Figure 12. Branch stream flow measurements made in October 2009. Water flows downstream from the "main stream" (Ainako stream).

Figure 13. Station 3 of branch stream looking upstream.

Figure 14. Station 4 of branch stream looking upstream.

Figure 15. Station 5 of branch stream looking upstream.

Figure 16. Station 6 of branch stream looking upstream.

Figure 17. Station 7 of branch stream looking upstream.

Figure 18. Station 8 of branch stream looking across stream to pond overflow.

Figure 19. Station 9 of branch stream looking upstream.

Figure 20. Station 10 of branch stream looking upstream.

Figure 21. Station 11 of branch stream looking upstream.

Figure 22. Station 12 of branch stream looking upstream.

Figure 23. Station 13 of branch stream looking upstream.

Figure 24. Station 14 of branch stream looking upstream.

Figure 25. Station 15 of branch stream looking upstream.

Figure 26. Station 16 of branch stream looking downstream at culvert that passes under Kokea Street.

R. Scott Henderson educational and professional background:

University of Hawaii, Manoa, B.S. Degree in Geology (1966) specializing in Volcanology, with minor in Biology. Two years graduate studies in Oceanography and Geophysics.

Six years of employment by University of Hawaii as field and laboratory assistant in State Shoreline Erosion Project and Pacific-wide geomagnetic/gravity surveys and laboratory studies.

Thirty years as Federal Marine Biology Flow-through Research Laboratory manager, Natural Resources Manager and Chief of Environmental Office with Navy, Marine Corps and Army on islands of Oahu and Hawaii.

Continued business interest: Environmental Consultant, Kuapa Services

Continued personal interests: Marine and freshwater fish ponds, stream and pond ecology, reef ecology, mangrove control, avid hobby aquarist and ponds culturist, wetland management.

Pertinent familial presence on subject streams and proximal properties:

Self and/or parental family lived on Kokea Street properties on or adjacent to Ainako stream and branch stream properties from 1958 through present (52 years).

Spouse and/or parental family lived on Kokea Street properties from 1965 through present (45 years).

Persons that contributed historical information for this report:

Scott Henderson, Aina Weight, Fred Koehnen, Richard Henderson, Judy Henderson, Arthur Herbst

Data Pertinent to Request for Registration of Stream Features on Aina Weight Properties at 1000 Ainako Avenue, Hilo, Hawaii

Stream features (X) on the subject property are shown in Figure A-1 and include:

A. **"Branch Stream"** of about ½ mile length with width of one to 12 feet with landscaping features that include ground-level-flush retaining walls, three porous weirs , an arch bridge and two fishponds. Hilo Sugar Company Plantation Field map Sheet #10 dated 1924 (Figure A-2) shows the "Branch Stream" origin point as a water source for a "temporary flume" that extended in straight line distance of about 1,500 feet to sugar cane field lots 71-72 (at the location of lower sections of the present day Ainako Terrace subdivision). The "Branch Stream is depicted on TMK maps of 1947 (Figure A-3) to present on a path that meanders about 12 degrees east of the old temporary flume route.

B. **"Flood Control Gate"** structure with vertical sliding gate of 14-inch width and 36–inch height. This gate likely existed in (or before) 1924 as a device to control flow into temporary flume systems (Figure A-2). Owners and residents of properties at or near to the structure recall that it existed in the late 1950's.

C. **"Diversion Dam"** of loose-stacked rock that raises water-level by several inches to provide flow through the gate into the Branch stream. The dam near water level is about a foot wide and six feet long. It is topped by a length of railroad track that is partially buried in the south stream bank. The dam has been in place for at least 50 years, but may date to 1924 or earlier as its presence is required to raise the main stream level to shunt water into the Branch Stream (and temporary flumes).

D. **"Flood Levees"** of solid concrete or mortared rock that create flood-control walls on margins of Ainako stream of two- to five-foot height. These Levees and other sections of Levees that continue downstream for about 0.2-mile have been in place since the late 1950's. They were likely built by the subdivision developer (Hilo Sugar Co.) immediately after a major flood occurred in 1956. Some Levee sections have been increased in height by 1 to 3 feet by property owners over the last four decades in response to subsequent flood events.

Additional information:

There are no known flow data for the Ainako Stream or Branch Stream prior to 2009. Recent flow measurements by S. Henderson and E. Montgomery are presented in Table A-1. Data taken at "medium"flow levels, show that at "historic" setting of the flood/flow control gate (3.5-inch open gap), about 8% of the Main (Ainako) Stream flow is diverted into the Branch Stream. With gap opening increased to 5 inches, the diversion amount increases to 12%. And, at full open position, 23% of the Main Stream volume is diverted to the Branch Stream.

In interest of maintaining "status quo" relative to the proportion of water diverted from the Main Stream to the Branch Stream, it is intended that the gate gap setting remain at 3.5 - 4 inches. Any alteration to this flow standard would be negotiated with the State Water Commission and property owners that border the Main (Ainako) Stream and Branch Stream down-slope of the flood/flow control gate.

More detailed information on the history and physical setting of the subject streams and associated structures are presented in Attachment A (Ainako Stream and Branch Stream , Hilo, Hawaii, Historical Notes & Physical Features, March 2010). Detailed computational flow rate data are on file with S. Henderson.

Property owners with interest in this registration of stream diversion works existing between Ainako Avenue and Kokea Street (TMK 2-5-25):

Leslie Aina Weight, Parcels 14 & 5 (Flood/flow control gate & 420 feet of Branch stream length).

Robert Scott and Judith Ann Henderson, Parcel 6, (170 feet of Branch stream length).

Skip and Camille Thomsen, Parcel 15 (Diversion dam & 250 feet of Ainako stream length).

Brett Marsh, Parcel 4, (180 feet of Ainako stream length with about 120 feet of flood levee).

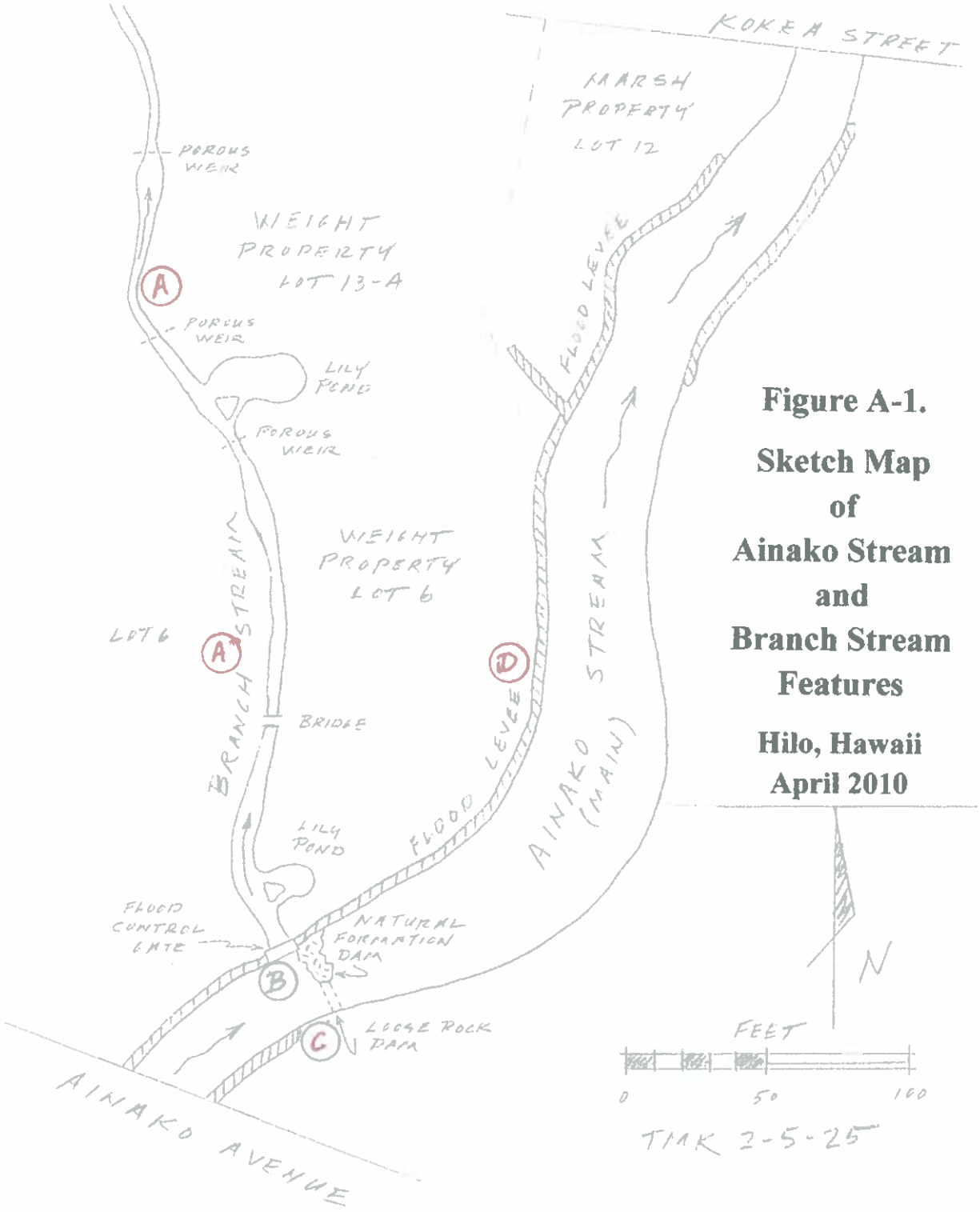


Figure A-1.

Sketch Map of Ainako Stream and Branch Stream Features

Hilo, Hawaii
April 2010

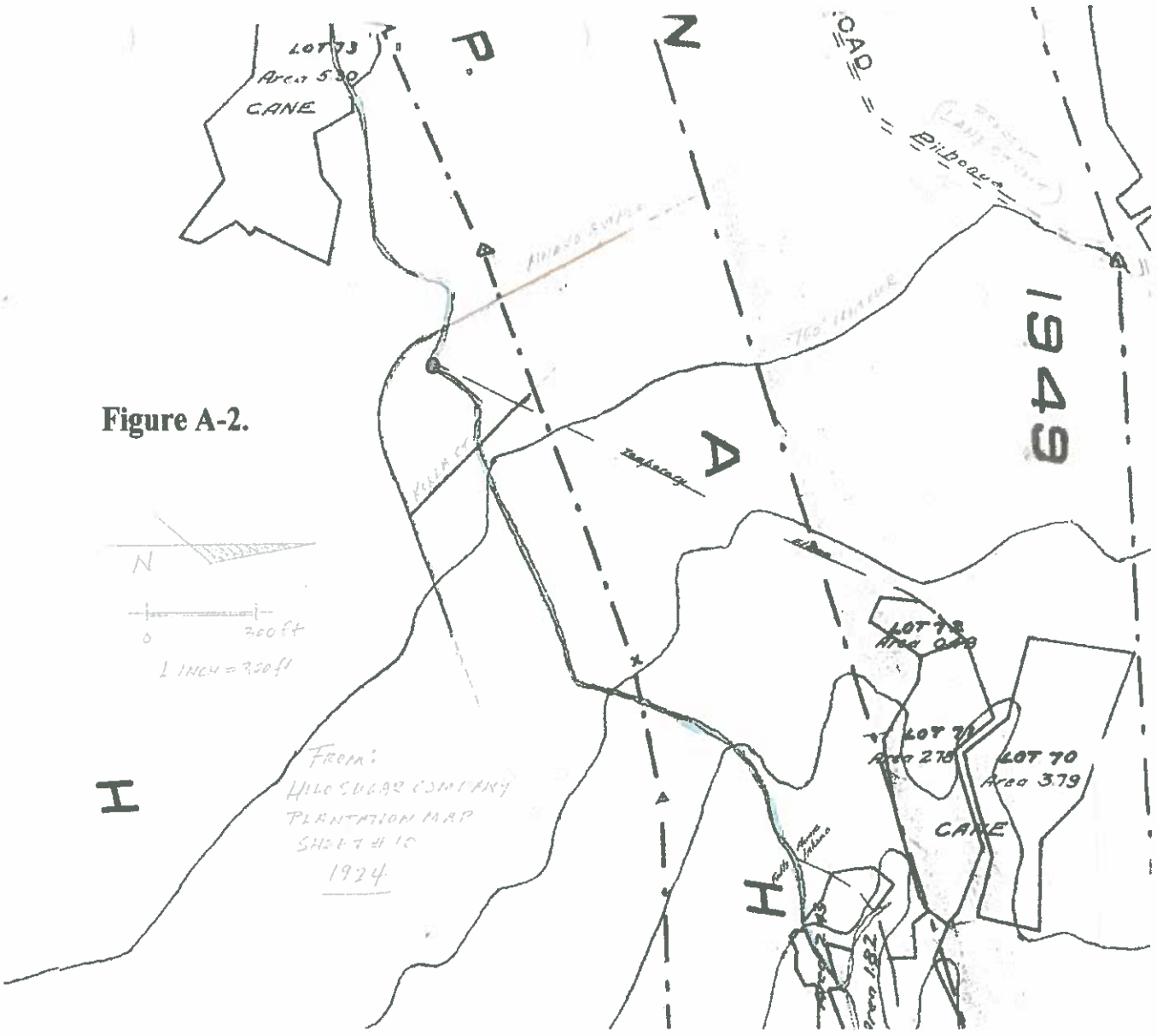


Figure A-2.

Figure A-2. Hilo Sugar Company Plantation Map #10, 1924

("Temporary flume" line extends SE from present day stream origin point at Ainako Stream [blue line, present gate/origin point] to past sugar cane lots to northeast; present day route of Branch Stream is approximately 12 degrees east of that route.)

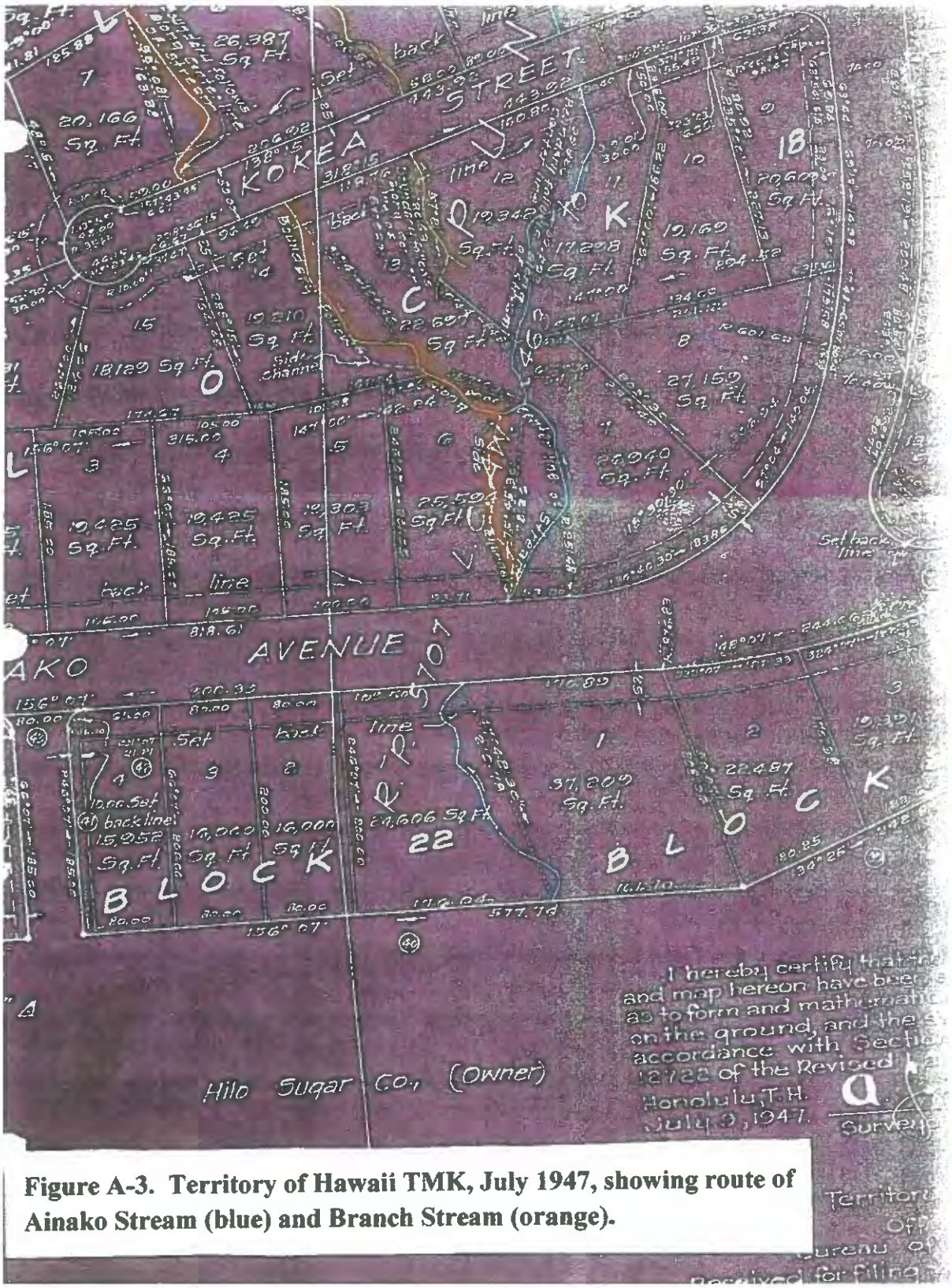
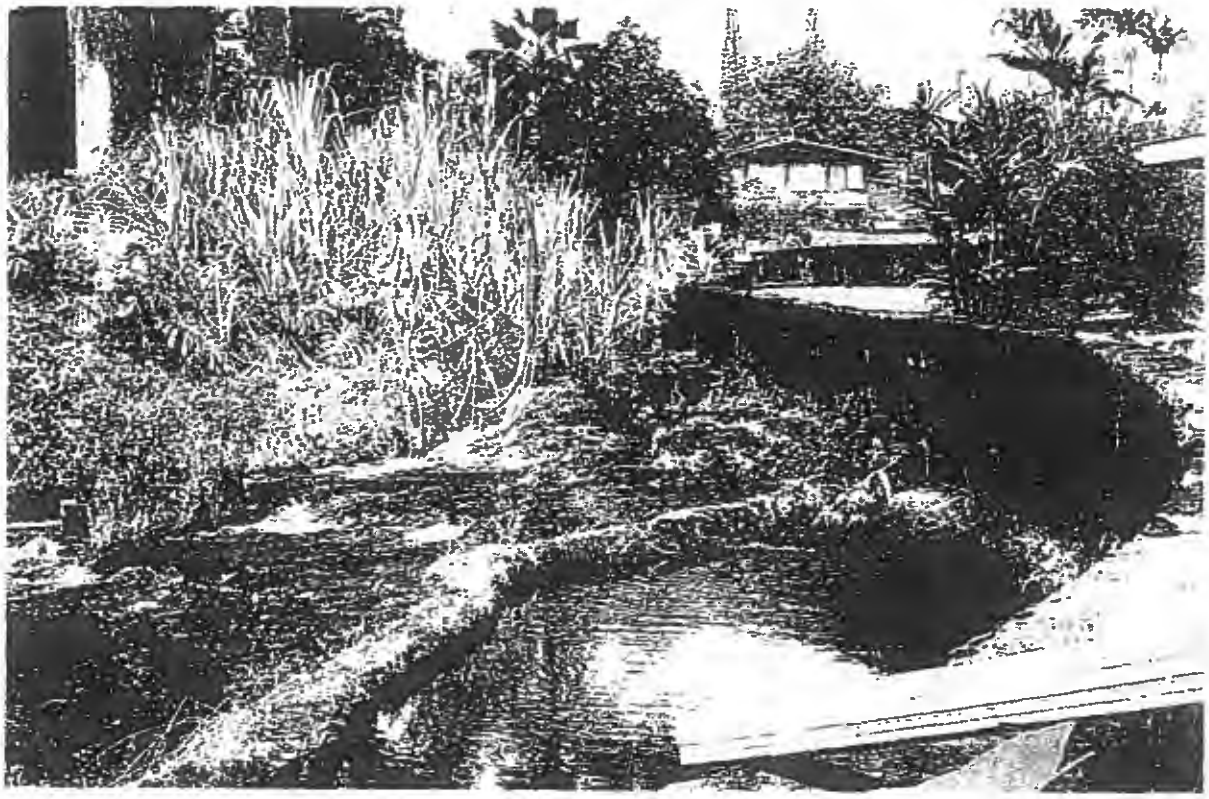


Figure A-3. Territory of Hawaii TMK, July 1947, showing route of Ainako Stream (blue) and Branch Stream (orange).

Figure A-4. View of Ainako stream looking upstream from S side of TMK 2-5-25-4 property. Above photo taken in August 1960 . Below photo taken in May 2010.

Photos from Henderson family photo collection.



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THIRD CIRCUIT COURT
STATE OF HAWAII

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AINA WEIGHT

IN THE CIRCUIT COURT OF THE THIRD CIRCUIT

STATE OF HAWAI'I

DAVID JUNG, MALINEE JUNG, RONALD OKAZAKI, DORA OKAZAKI, TAMAE SHINDO, NORMAN PURVES, and MAREN HAUSCHIDLT,

Plaintiffs,

vs.

AINA WEIGHT, and DOE DEFENDANTS 1-10,

Defendants.

Civil No. 10-1-092
(Other Civil Action)

ORDER DENYING PLAINTIFFS; MOTION FOR SUMMARY JUDGMENT FILED SEPTEMBER 9, 2010

Hearing Held:
Date: October 28, 2010
Time: 8:30 a.m.
Judge: Hon. Greg K. Nakamura

ORDER DENYING PLAINTIFFS' MOTION FOR SUMMARY JUDGMENT FILED ON SEPTEMBER 9, 2010

Plaintiffs filed a Motion for Summary Judgment on September 9, 2010. The Motion was heard by the Honorable Greg K. Nakamura on October 28, 2010 at 8:30 a.m. John S. Carroll appeared for Plaintiffs; Paul Alston

I hereby certify that this is a full, true and correct copy of the original on file in this office.

EXHIBIT B.

appeared for Defendant Aina Weight. The Court has considered the memoranda filed by the parties, the arguments of counsel, and the record and files in this action. For good cause,

Plaintiffs' Motion for Summary Judgment filed September 9, 2010 is DENIED. Plaintiffs have no claim under Art. XI §7 of the Hawai`i Constitution; the Commission on Water Resource Management has primary jurisdiction over Plaintiffs' statutory and common law claims

Dated: Hilo, Hawai`i, NOV 10 2010.

GREG K. NAKAMURA (Seal)
JUDGE OF THE ABOVE-ENTITLED COURT

APPROVED AS TO FORM:

JOHN S. CARROLL
Attorney for Plaintiffs

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT
Stream Protection and Management Branch

FOR STAFF USE ONLY

FIELD INVESTIGATION REPORT

FI2011031001 (Ainako, Henderson)

File ID: _____

Doc ID: _____

Date of Field Investigation:	03/10/11	**Time** (24-hour):	0930 A.M.
CWRM Staff:	Roy Hardy, Robert Chong		
Individuals Present:	Scott Henderson (SH), Leslie Aina Weight (AW)		
Reference:	CDR.2769.8		
TMK Parcels (9-digit):	(3) 2-5-025:003, Okino, 33 Kokea Street (3) 2-5-025:004, Marsh, 51 Kokea Street (3) 2-5-025:005, Weight, 1000 Ainako Avenue (3) 2-5-025:006, Henderson, 99 Kokea Street (3) 2-5-025:007, Henderson, 107 Kokea Street (3) 2-5-025:013 and 014, Weight, 1000 Ainako Avenue (3) 2-5-025:015, Thomsen, 974 Ainako Avenue (3) 2-5-024:028 and 029, Jung, 118 Koula Street (3) 2-5-024:033, Shindo, 145 Koula Street (3) 2-5-024:032, Kimura, 151 Koula Street (3) 2-5-024:034, Matsumoto, 125 Koula Street (3) 2-5-024:042, Metzger, 46 Kokea Street (3) 2-5-024:044, Purves, 60 Kokea Street (3) 2-5-024:045, Okazaki, 80 Kokea Street (3) 2-5-024:046, Hanenburg, 110 Kokea Street (3) 2-5-024:016, Koehnen, 111 Kapaa Street		

Findings: See Exhibit 2 for location of stream branches.

1940's Hilo Sugar Company built the Ainako subdivision.

- Current levees on Ainako Stream were likely built by the Hilo Sugar Co. when the subdivision was built.

SH showed RH and RC a 1947 survey map on his laptop computer showing a Y-shaped line labeled "stream" (Branch Stream #2). 1947 survey map also showed a dry side channel on Branch Stream #1 and a lower run of Branch Stream #1a. See Exhibits and 6.

- SH explained that Y-shaped line was a drainage ditch that only flowed during periods of heavy rain.
- SH showed RH and RC 1957 and 1958 photos of the northeast corner of the AW's property which showed the Ainako Branch Stream #1b across AW's property. There were no dotted lines drawn on the photos.
- SH said that he could provide testimony from other people to verify the existence of the sluice gate.
- RH observed dry side channel on Branch Stream #1. See photos 115 to 120.

AW and SH: Ainako stream has flooded several times in the past (1956, 1964, 1966, 1977, 1999, 2008 and 2009).

1956: Dr. Weight (AW's father) and his family moved to 1000 Ainako Avenue (013 and 014).

- Dr. and Mrs. Weight lived there until their deaths in 1994 and 1995, respectively.

1958: Dr. Henderson (SH's father) and his family moved in to 51 Kokea Street (004).

1963: Ron and Dora Okazaki built their house at 80 Kokea Street (045).

SH and AW mentioned that changes were made to AW's fishponds due to the earthquakes including the one that sunk the beach near Volcanoes National Park.

- Streambed is made up of pahoehoe lava rock.
- The earthquakes cause fissures in the lava rock, and water in the ponds leaked after that.
- One of AW's ponds was filled in.
- Pointed out the location of the filled in pond was between the current diversion on Branch 1b and Branch Stream

EXHIBIT 5

#1.

1976: Dr. Henderson sold house at 51 Kokea Street (004) to Frank Kothe.

1980's: (Al)Bert Fraleigh built house at 110 Koula Street (028 & 029).
- BF asked Dr. Weight to "open up stream."
- SH mentioned that Fraleigh wanted more flow even back in the 1980's.

1995 to present: AW retumed to live at 1000 Ainako Avenue (013, 014 and 005).

1994: Dr. David Jung moved to 110 Koula Street (028), Fraleigh's former residence.

2004 to present: SH lived at 107 Kokea Street (not on any stream) (007).

2006: SH purchased 99 Kokea Street on the Branch Stream (006).

2008: SH: steel sluice gate was frozen in place for estimated 30 years. See photos 1-6 and 132.
- SH removed and replaced metal sluice gate with new plastic wood sluice gate.
- Metal bar attached to gate has seven (7) holes drilled every inch or so from top to bottom of bar to allow gate to be raised or lowered to allow an adjustable flow control.
- A long nail was placed though top hole in the bar and SH said it always remains in that hole and position.
- The nail rests on top of the retaining wall to keep the sluice gate in the desired position.
- The height of the sluice gate height is maintained at the "historic gate setting" of the former metal plate that was rusted in place.
- The "historic gate setting" is four-inches above bottom of channel.

2007: SH patched leak (patch #1) along Branch Stream #1. See photos 23-26.

2007 to 2010: Landscaping has occurred on AW property over the past three years that included additional work in Stream Branch #1 and Branch #1b.

RC asked SH about the exact location of the sluice gate on the TMK map and explained the Dr. David Jung said that the sluice gate was not at Branch Stream #1a on the present TMK map but further upstream closer to Ainako Avenue. SH stated that was correct: the sluice gate is located farther upstream and almost at Ainako Avenue (Branch Stream #1b).

October 2009: Dora Okazaki called SH about removing dam on Branch Stream 1b.
- DO said that DJ's lawyer would file a complaint with the DLNR if AW did not remove the dam.

October 2009: SH measured flow of Ainako Branch Stream #1 and 1b by placing a heavy fabric "funnel" with a narrow opening at one end on bottom of the streambed.
- SH calculated the time it took for the "funneled" water to fill a graduated bucket.
- SH's flow measurement is in liters/sec.
- RH mentioned about the importance of finding the right stream location for flow measurements because the impact of eddies on the meter impeller blades.

November 2009: SH gave a tour of the Weight and Henderson properties to Dr. David Jung and never heard back from DJ.

April 2010: SH and AW filed an after-the-fact Registration of Stream Diversion and Declaration of Water Use with CWRM. AW also registered two existing fish ponds in 2010 with CWRM.

September 2010: SH patched two leaks (patch #2 and #3) during a stream dry-up event.
- SH filled the leaks by pushing small packets of fabric-wrapped dry mortar mix into the cracks at two locations on Branch Stream #1. See photos 121-129.

SH and AW mentioned several factors affecting the flow of Ainako Stream and Branch Stream #1:
- In 1982, Akolea Ditch was built along Akolea Street to prevent downstream flooding of Ainako Stream.
- Earthquakes in1960's and 1970's caused fissures in lava rock stream bed of Ainako Stream.
- Some additional stream flow in Branch Stream #1 was also lost down into the lava tubes due to the earthquakes.

- HI County BWS built Piihonua Well C located about 1 mile upstream.

RH stated that Piihonua Well C is about 1000 ft deep. Since the elevation at the well site is 975 (verified with Charley Ice that morning) the well went below sea level. The ground water level is roughly 250 ft above mean sea level (msl), making it much lower than the stream inverts at the area of dispute, which are at an elevation of over 700 ft msl. Additionally, the well is solid cased and grouted to at least the groundwater level to protect the well and prevent any upper ground water leakage down the casing and effectively seals the well all the way to the ground water level. SH concurred.

SH, AW, RH and RC inspected existing sluice diversion gate on Branch Stream #1b and noted current diversion configuration as mentioned above. See photos 1-22.

- RH and RC verified dam diversion in Ainako stream made up of rocks, half-pipe and railroad tie.
- AW said RO told the Weights that they should dynamite this existing diversion gate to allow more flow into the branch stream.
- RH and RC observed that Branch Stream #1b flows closely along the western edge of AW's house. See photos 27-30.
- AW mentioned and showed RH and RC location where water seeps out of the rocks under AW's house.

SH, AW, RH and RC inspected the location of the jog shown on the current TMK map at Branch 1a and verified the levee walls along Ainako Stream.

- RH and RC noted what appeared to be row of rocks (Photo 50) acting as a dam within Ainako stream at the approximate location of the jog in the stream as shown on the TMK map.
- SH stated that he did not know who built the rock dam.
- There did not appear to be any recent work along the levee to "close" Branch Stream 1a. See photos 52-57.

SH, AW, RH and RC inspected the possible site of Branch Stream #2 coming off of Ainako Stream. See photos 57-76.

RH and RC asked about strange V-shaped levee wall on the Marsh property (004) and the rock dam diversion in Ainako Stream during the site visit.

- SH/AW stated the V-shaped levee had always been there since 1950's.

RH and RC noticed a pile of rocks (see photo 70) near the tip of V-shaped levee wall that seemed different than the levee wall at the TMK map jog where the purported diversion for Branch Stream 1a was located.

SH, AW, RH and RC inspected Ainako Branch Stream #1b at Kokea Street.

- RH and RC noticed a pile of neatly stacked rocks along the lower reach of Branch Stream #1b. See photo 108.
- RH asked AW if this was recent work in the stream.
- AW said that the rocks had been recently stacked.

RH explained riparian rights to SH and AW, and that downstream owners along Branch Stream #1 also have riparian rights.

- SH mentioned that property owners on Ainako Stream located downstream of the sluice gate also have riparian rights and would be affected by any increased flow diversion to Branch Stream #1b.

RH mentioned that it was clear that changes were made to the fish ponds and streambanks (recently stacked rocks and concrete patches) on Branch Stream #1 over the past few years and these modifications require an after-the-fact SCAP application.

- SH/AW must apply for after-the-fact SCAP for the recent Stream Branch 1 modifications.
- RH explained SCAP permit process, including other agency review and potential for fines.

SH/AW asked RH about what they can do to protect the ability for long-term maintenance of the rock dam in Ainako Stream diversion at the sluice gate at headwater of Branch Stream #1b. In the future when SH/AW gone, the need for maintenance of the dam will remain.

- RH explained CWRM's certification process for the 1989 water use declarations and registrations and mentioned that this was a possibility for SH/AW. However, the CWRM Commissioners rejected the original certification efforts for Molokai because of public objections, and CWRM's certification program was effectively stopped after that effort. SH/AW could formally ask the Commission for such a certification.
- RH also suggested the possibility of attaching some documentation about the rock dam diversion and the need to maintain it in its original state in the deeds of property owners on both banks of dam diversion, which would allow such activity to take place when needed. They should talk to a real estate agent or someone with more legal

experience in these matters.

Subsequent information:

3/21/11 DJ faxed copy of unsigned letter to property owners along Ainako Stream dated 3/19/11 stating that there may be significant reduction in Ainako Stream if diversion gate is removed completely. Letter was probably written by SH.

- Received email from: Hans "Skip" Thompsen (3/19/11), Brett Marsh (3/22/11), Peter Okino (3/32/11).
- Received letter from Fred Koehnen (3/23/11).
- Received phone calls from: Elizabeth Wessel (3/21/11), Larry Black (3/23/11), and Margaret Oda (3/28/11).

Fred Koehnen:

- Filed 1987 registration for "mini hydro-electric plant" on Ainako Stream that was installed in 1982.
- Akolea Ditch now intercepts run-off so that only run-off below the ditch now adds to Ainako Stream flow.
- Source of Ainako Stream used to be a grassy bog and is now completely overgrown with strawberry guava bushes, and "considerable" Albizzia growth will contribute to reduced stream flow in future.

Brett Marsh:

- Branch Stream 1b and diversion gate 1b have been unchanged since 1978.
- Branch Stream 2 has been a dry gulch for 33 years.
- Branch 2 did not exist, and there was do diversion gate.
- Branch 2 flows only during heavy or prolonged rain.

4/3, 4/5, 4/6 and 6/12/11: SH emailed RC Piihonua rainfall and Ainako and Wailuku stream flow information.

6/13/11: Mei-Fei Guo (Alston Hunt) mailed RH and RC a copy of architect V. Ossipoff's plot and floor plan dated August 5, 1954, for the proposed residence for Dr. and Mrs. Leslie Weight. The house location and floor plan were deleted from the architect's drawing that was submitted.

Image Listing: (Attach PDF of image contact sheet)

File Name:	**Brief Description:**
Photo ID	Description
201103100001	Weight diversion on Ainako Stream with plastic sluice gate removed.
201103100002	Top of diversion gate. AW, RC, SH shoes for scale.
201103100003	Top of diversion gate. AW, RC, SH shoes for scale.
201103100004	Plastic and 2x4 wood sluice gate held up by SH.
201103100005	Sluice gate in place at "historic 4" opening. AW, SH, RC shoes in photo.
201103100006	Metal spike holding gate in position. SH shoe in photo.
201103100007	**New spot** Standing on rock, half-pipe, railroad tie dam diversion#1 looking at metal spike holding gate in position. AW, SH RC in photo.
201103100008	360° view from previous photo. SH and RC above diversion gate.
201103100009	360° view from previous photo looking at top of diversion with sluice gate. AW shoes in photo.
201103100010	360° view from previous photo looking upstream Ainako Stream.
201103100011	360° view from previous photo looking at rock and half-pipe dam #1 in Ainako Stream.
201103100012	360° view from previous photo looking towards Thomsen parcel (015).
201103100013	360° view from previous photo looking immediately downstream from rock dam diversion #1.
201103100014	360° view from previous photo looking towards Thomsen parcel (015).
201103100015	360° view from previous photo looking towards Thomsen parcel (015).
201103100016	360° view from previous photo looking downstream.
201103100017	360° view from previous photo looking downstream with Thomsen house in background.
201103100018	360° view from previous photo looking downstream with concrete levee wall on Weight parcel (014).
201103100019	360° view from previous photo.
201103100020	360° view from previous photo with Weight corner of home, pools, and recent landscaping in background.
201103100021	**End** 360° view from previous photo with AW and her house in background (note: proximity of Branch Stream #1 channel to house foundation.
201103100022	**New spot** showing sluice gate and beginning of Branch Stream #1b near AW home. AW, SH, & RC in photo.
201103100023	**New spot** looking towards previous photo spot where AW, SH, RC were standing on grass

	near sluice gate. Upper fish pond on Stream Branch #1b channel between Ainako stream and house looking upstream.
201103100024	Location of where crack in lave rock in fish pond was patched with mortar by SH located under SH feet in photo.
201103100025	Close-up view of location of where crack in lave rock in fish pond was patched with mortar by SH.
201103100026	Close-up view of location of where crack in lava rock in fish pond was patched with mortar by SH. RH shoe in photo.
201103100027	360° view from upper fish pond at 2008 concrete patch looking across Branch Stream #1 bank. RH shadow in photo.
201103100028	360° view from previous photo with makai corner of Weight home on top of Stream Branch # 1b bank. Note: large shrub at corner of home.
201103100029	360° view from previous photo with mauka corner of Weight home looking upstream in Branch Stream #1 (note: proximity of home foundation to flowing water in channel).
201103100030	360° view from previous photo looking directly upstream Branch Stream #1b.
201103100031	360° view from previous photo. RC and SH in photo.
201103100032	360° view from previous photo looking towards Thomsen parcel (015) with portion of Ainako Stream in left background.
201103100033	360° view from previous photo looking towards Thomsen parcel (015) grassy area across Ainako Stream, Weight property is grassy area in foreground.
201103100034	360° view from previous photo looking makai at landscaping pathway on Weight property
201103100035	360° view from previous photo looking towards Henderson parcel (006) house in background. AW in foreground on bank of Branch Stream #1b. Note landscape bridge #1 in background behind AW. SH home and parcel 006 in background above AW head.
201103100036	**End** 360° view from previous photo looking towards large shrub at corner of home shown in photo 028..
201103100037	**New spot** at "nipple" on TMK map looking towards Weight home. Note near and downslope of landscape bridge #1 seen in photo 035).
201103100038	360° view from previous photo. Levee on Ainako Stream to the left of SH and RC behind tall vegetation.
201103100039	360° view from previous photo . Levee on Ainako Stream behind SH and vegetation.
201103100040	360° view from previous photo . Levee on Ainako Stream continues downstream on right. Note upper view of "V" levee on Marsh parcel (004) behind ti plants and in front of Marsh home.
201103100041	360° view from previous photo looking towards Okazaki home on parcel (045) with dry Branch Stream #2 beginning at tall palms.
201103100042	360° view from previous photo looking at Branch Stream #1 and landscaping with lower pond in center of photo.
201103100043	360° view from previous photo looking at landscaping and Branch Stream #1b channelized bank.
201103100044	360° view from previous photo looking at landscaping and Branch Stream #1b channelized bank towards parcel 012 home in background.
201103100045	360° view from previous photo looking towards Weight home near landscape bridge #1
201103100046	**End** 360° view from previous photo (similar as photo 037).
201103100047	**New spot** at "nipple" on TMK map (similar as photo 039 but backed away with RC in photo). Rock dam #2 behind vegetation.
201103100048	**New spot** at "nipple" on TMK map standing in Ainako Stream standing on rock dam#2 directly behind vegetation from previous photo looking upstream towards Thomsen home (parcel 015). Levee to the right is on Weight property.
201103100049	360° view from previous photo looking towards Thomsen parcel 015.
201103100050	360° view from previous photo looking directly down at rock dam #2.
201103100051	360° view from previous photo looking looking downstream of rock dam #2. Okino home on parcel 003 in background.
201103100052	360° view from previous photo. Marsh home on parcel 004 in background. Note ginger vegetation at end of levee, which is tip of "V" levee on Marsh parcel 004.
201103100053	360° view from previous photo with close up of levee on Weight property parcel 014. Note large rock in stream approximates end of landscape vegetation and beginning of 'gap' between there and "V" tip levee on Marsh parcel 004 at ginger patch in background.
201103100054	360° view from previous photo. Close up view of rock wall levee near 'nipple' area.
201103100055	360° view from previous photo .Close up view of rock wall levee near 'nipple' area.. SH in

	photo.
201103100056	**End** 360° view from previous photo. Close up view of rock wall levee at rock dam #2. SH in photo.
201103100057	**New spot** near tip of "V" levee on Marsh parcel 004 looking upstream Ainako towards rock dam #2 with Thomsen home in background and levee on right.
201103100058	360° view from previous photo looking across Ainako Stream towards Thomsen parcel 015.
201103100059	360° view from previous photo looking straight down into streambed from previous photo. Note beginning of ginger patch from photo 052
201103100060	360° view from previous photo looking downstream Ainako. Note increased ginger patch from photo 052. SH shoe in photo.
201103100061	360° view from previous photo looking at tip of "V" concrete levee wall between Marsh and Weight properties. Note ginger patch from photo 052. SH in photo.
201103100062	360° view from previous photo looking towards dry Stream Branch #2. SH and RC in photo.
201103100063	360° view from previous photo looking towards Weight landscaping with Branch Stream #1 on left and Branch Stream #2 behind ti plant. RC in photo.
201103100064	360° view from previous photo looking towards Weight landscaping with Branch Stream #1 and lower pond seen in photo 042.
201103100065	360° view from previous photo looking towards Weight landscaping with Branch Stream #1 with home on parcel 012 in background.
201103100066	**End** 360° view from previous photo looking upstream Ainako on left towards Weight landscaping on right with Weight home behind vegetation. Note rocks piled in photo.
201103100067	**New spot** looking at end of "V" concrete levee wall marked by ti plants. Possible portion of Branch Stream #2 along levee?. SH in photo
201103100068	**New spot** looking at other side & end of "V" concrete levee wall along Ainako protecting Marsh parcel 004 home. SH in photo.
201103100069	180° view from previous photo with close-up view of "V" concrete levee wall along Ainako at ginger patch.
201103100070	**End** 180° view with close up view of tip of "V" concrete levee wall. Note rocks piled to the right.
201103100071	**New spot** - standing on "V" tip looking at landscaping on Weight property.
201103100072	180° view from previous photo looking directly along levee wall between Marsh and Weight properties. Possibly looking downstream former Branch Stream #2 to left levee wall
201103100073	**End** 180° view from previous photo looking at Marsh parcel 004. Note can see both sides of "V" levee in this view. SH, RC, AW in photo. Note taro and bougainvillea in photo.
201103100074	**New spot** view of end of "V" concrete levee along Ainako where SH, RC, and AW shown in previous photo. Note curving levee in behind them.
201103100075	180° view from previous photo looking along Ainako portion of "V" concrete levee .
201103100076	180° view from previous photo looking along Ainako portion of "V" concrete levee .
201103100077	**End** 180° view from previous photo looking along Ainako portion of "V" concrete levee Looking towards tip of "V" concrete levee.
201103100078	**New Spot** at possible confluence start of "Y" fork on 1947 survey map in "dry" Branch Stream #2 on Weight parcel 005 looking downstream towards Kokea St.
201103100079	360° view from previous photo looking towards looking towards SH parcel 006.
201103100080	360° view from previous photo.
201103100081	360° view from previous photo. Note AW home in background and possibly looking up western branch of "Y" fork between lava outcrops.
201103100082	360° view from previous photo. Note rocks piled for levee wall on Ainako stream. Right of the wall is bushes and "nipple" area for former start of Branch Stream #1a as noted on TMK map. Left of rock pile for levee wall is tip of "V" concrete levee on Marsh parcel 004.
201103100083	360° view from previous photo. Zoomed close up of tip of "V" concrete levee and rock pile levee on Ainako Stream.
201103100084	360° view from previous photo. Note sidewall of "V" concrete levee.
201103100085	360° view from previous photo. Marsh home in background left of vegetation. Sidewall of "V" concrete levee on right of vegetation.
201103100086	360° view at "dry" Branch Stream #2 looking towards Marsh parcel 004. Note possible portion of eastern branch of dry Y channel possibly linking up with end of "V" concrete levee behind vegetation.
201103100087	**End** 360° view at "dry" Branch Stream #2 looking towards Marsh parcel 004.
201103100088	**New spot** slightly further downstream of photos 078-087 in dry Branch Stream #2 with view directly downstream towards Kokea St.

201103100089	360° view from previous photo & close up view of "dry" Branch Stream #2 channel.
201103100090	360° view from previous photo & close up view of "dry" stream channel.
201103100091	360° view from previous photo. Note possible portion of confluence of dry Y channel and smoothness in channel.
201103100092	360° view from previous photo looking towards Marsh parcel 004. RC in photo.
201103100093	360° view from previous photo looking towards Marsh parcel 004. RC in photo.
201103100094	360° view from previous photo looking towards Marsh parcel 004. Okino home in the background.
201103100095	**End** 360° view from previous photo. Same photo as 088.
201103100096	**New spot** slightly downstream of photos 088-095. Looking downstream towards Kokea St.
201103100097	360° view from previous photo looking towards Kokea St. with Okazaki parcel 045 in background.
201103100098	360° view from previous photo. SH parcel 006 & home in background.
201103100099	360° view from previous photo looking directly upstream.
201103100100	360° view from previous photo looking towards Marsh parcel 004 & home.
201103100101	360° view from previous photo looking towards Marsh garage.
201103100102	360° view from previous photo looking towards Marsh driveway.
201103100103	**End** 360° view from previous photo looking towards Marsh driveway and Kokea St. in background.
201103100104	**New spot.** View from Kokea St., looking at culvert outlet to Okazaki property from junction of Hanenburg parcel 046 and Okazaki parcel 045. Note underground spring like seep at center bottom of photo. This is continuation of Branch Stream #1b below Kokea Street.
201103100105	360° view from previous photo. SH and RC in photo.
201103100106	360° view from previous photo with Kokea St. and Henderson parcel 007 & home in background. AW in photo.
201103100107	360° view from previous photo with Kokea St. and Henderson parcel 006 & home in background.
201103100108	360° view from previous photo with Kokea St. and Henderson parcel 006 & home in background looking directly up Branch Stream #1 to left of home. Note new channelized wall forcing water towards culvert intake.
201103100109	360° view from previous photo looking down Kokea St. with Weight parcel 005 grassy landscape and Marsh parcel 004 & home in background.
201103100110	360° view from previous photo. Okazaki parcel 045 along Kokea St.
201103100111	360° view from previous photo looking at Okazaki parcel 045
201103100112	360° view from previous photo looking at upper pond on Okazaki parcel 045.
201103100113	360° view from previous photo looking at Hanenburg home & parcel 046 with Branch Stream #1 in foreground.
201103100114	**End** 360° view from previous photo looking at culvert outlet at Hanenburg parcel 046 and Okasaki parcel 045.
201103100115	**New spot** - dry side channel near SH home west of Branch Stream#1b. RC and SH in photo. AW home in background parcel 014.
201103100116	180° view from previous photo looking at landscaping and Branch Stream#1b flowing in left of photo.
201103100117	180° view from previous photo looking at landscaping and Branch Stream#1b with Marsh home & parcel 004 in background. Note same taro and bougainvillea to right of home in far background & photo 073. Also note lower end of rock garden to right in photo.
201103100118	180° view from previous photo looking downstream at Branch Stream#1b towards Kokea St. Not sure what home in background – Shindo parcel 033?
201103100119	**End** 180° view from previous photo looking downstream in dry side channel near SH home west of Branch Stream #1b. Note smooth channel.
201103100120	Same shot as photo 115. RC in photo.
201103100121	**New spot**. Further upstream from photos 115-119. SH standing on east bank of Branch Stream #1b at April 2010 concrete patching of two leaks.
201103100122	Close up of concrete patch from previous photo.
201103100123	270° view from previous photo – west bank of Branch Stream #1b further upstream of previous photo looking downstream towards Kokea St.
201103100124	270° view of previous photo looking downstream. Note end of rock garden in background and refer to photo 117 shot below that point.
201103100125	270° view of previous photo. Rock garden landscaping.

201103100126	270° view of previous photo looking towards AW parcel 013 area that drains into PVC shown in photo 131.
201103100127	270° view of previous photo looking towards AW parcel 014 and home.
201103100128	270° view of previous photo looking towards AW parcel 014 and home with RC, AW, and SH in foreground with Branch Stream #1b behind them.
201103100129	**End** 270° view of previous photo looking towards lower elevated pond. Note leakage into stream channel from pond. RC in photo.
201103100130	New spot. SH standing approximately in same spot as photo 128.
201103100131	Close up of previous photo. PVC pipe draining from area on AW parcel 13 – refer to photo 126. SH shoes in photo.
201103100132	Former Steel plate used across sluice gate at Branch Stream#1b headwater.

GPS Listing:

Shapefiles: (List file names of all shapefiles created and a brief description of each)

File Name:	Brief Description:

Waypoints: (List all waypoints in decimal degrees and provide a brief description of each)

WP No.	Latitude	Longitude	Brief Description:

#27 & 28: Sliding wood and plastic sluice gate on Ainako Stream. Also location of rock dam #1 across Ainako Stream.
#29: Concrete patch on pond. SH: above average flow after patch, 500 GPM.
#30: Jog on TMK map and location of rock dam #2 across Ainako Stream.
#31: "V notch" concrete levee between Marsh & Weight properties.
#32-35: "Dry channel" on 1947 survey map.
#36-38: "Dry channel" at culvert above Kokea Street.
#39: "Y" junction of dry channel on 1947 survey map.
#40: Branch stream #1b at inlet culvert under Kokea Street.
#41: Branch stream #1b outlet of culvert under Kokea Street. Water seeping out of rocks next to outlet.
#42: "Dry channel." "Dotted line on 1947 survey map."
#43: "Lower pool" with concrete patch.
#44 "Middle" pool with concrete patch.

Attachments:

Brief Description:

Exhibit 1. Image Contact Sheet
Exhibit 2. TMK map with Branch Stream 1a and 1b at Ainako Branch Stream and Branch Stream 1a and 1b at Kokea Street.
Exhibit 3. GIS map with waypoints and Weight/Henderson and Okazaki/Jung TMKs.
Exhibit 4. June 2, 1947, TMK map off Ainako Subdivision Series 2.
Exhibit 5. June 2, 1947, TMK map off Ainako Subdivision Series 2 enlargement showing streams and side channels on Weight (005 and 014) and Henderson (006 and 004) properties.
Exhibit 6. June 2, 1947, TMK map showing portion of parcel 014 submitted by SH.
Exhibit 7. 1957 photos of Weight house and 19957 photo of Weight property (014).
Exhibit 8. 1958 photo of NE corner of Weight property (014)

Recommendations:

SH and AW should apply for:

1. After-the-Fact (ATF) Stream Channel Alteration Permit (SCAP) for work done to the channel of Ainako Branch Stream #1.
2. ATF Stream Diversion Works Permit (SDWP) for two ornamental ponds on Ainako Branch Stream #1.
3. Petition to Amend Instream Flow Standard (PAIFS) to divert water from Ainako Branch Stream #1 to two ornamental ponds on Ainako Branch Stream #1.

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EXHIBIT 1

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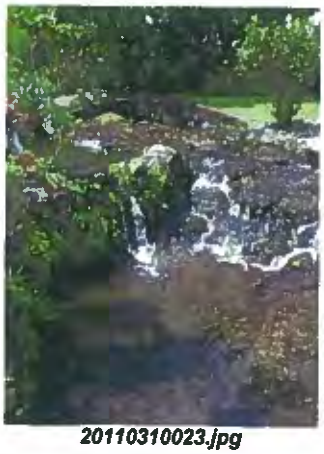

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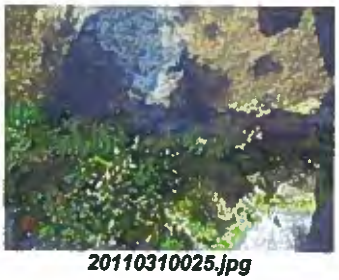

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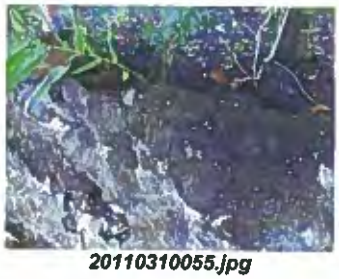
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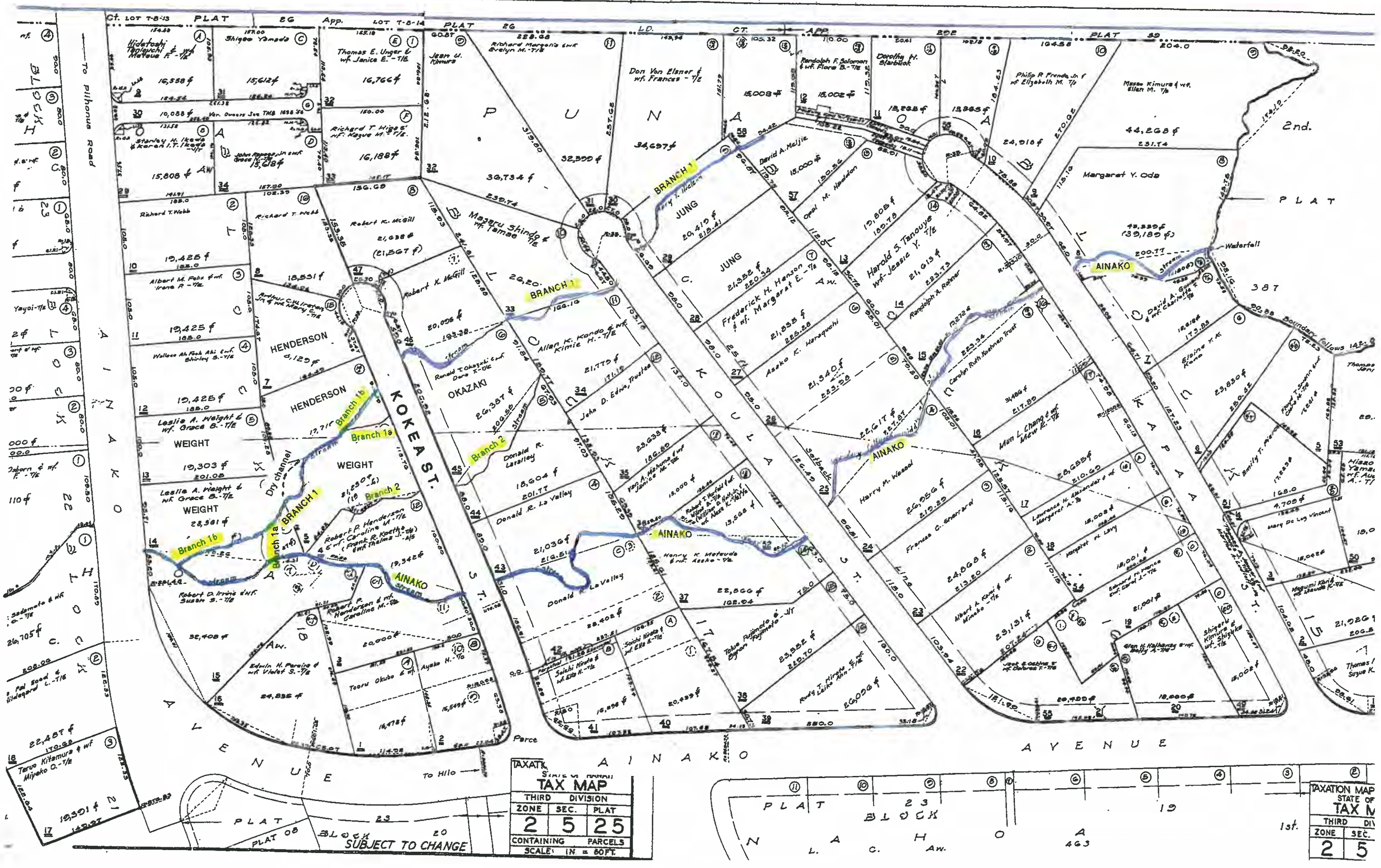
EXHIBIT 2


PLAT 26
PLAT 26
PLAT 39
PUNA
JUNG
HENDERSON
WEIGHT
OKAZAKI
KOKEAST. ST.
KAPAA
AINAKO AVENUE
AINAKO
BRANCH 1
Branch 1a
Branch 1b
Branch 2
Dry channel
Waterfall
Boundary follows
To Pilhonua Road
To Hilo
SUBJECT TO CHANGE
TAX MAP
THIRD DIVISION
ZONE 2 SEC. 5 PLAT 25
CONTAINING PARCELS
SCALE: IN = 60FT.
TAXATION MAP
STATE OF
TAX M
THIRD DIV
ZONE 2 SEC. 5
PLAT 23
BLOCK 19
1st.

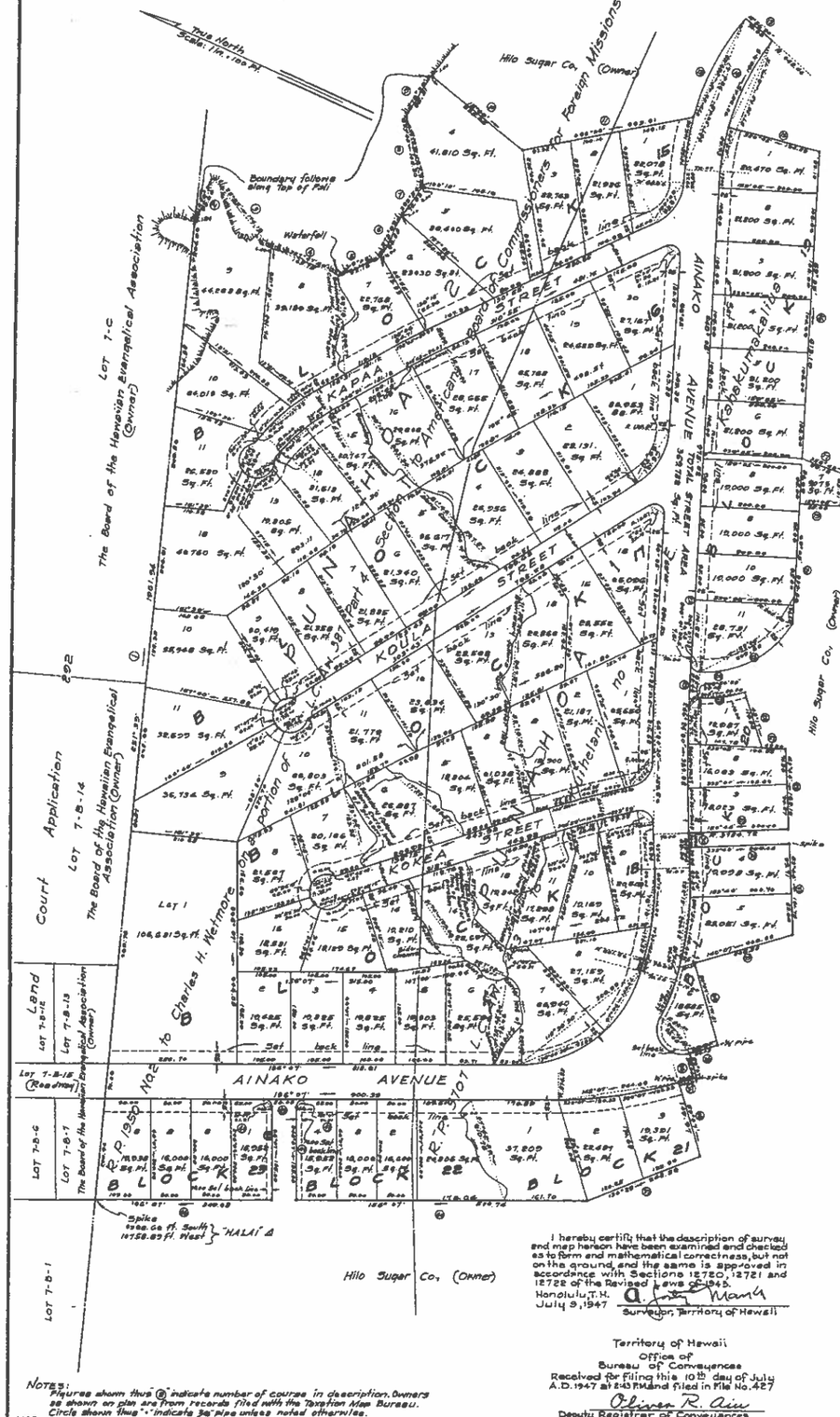

Branch Stream
Jung (029)
WP 50
WP 49
Shindo (033)
Koula Street
Ainako
WP 48
Branch Stream
WP 47
WP 41
Okazaki (045)
WP 46
WP 51
WP 40
WP 52
Henderson (006)
WP 53
Weight (005)
WP 35
WP 36
Ainako Avenue
WP 42
WP 38
WP 37
WP 39
WP 34
Ainako
WP 44
WP 43
WP 32
WP 33
Marsh (004)
WP 45
WP 30
WP 31
Kokea Street
Weight (014)
OKINO PAE
WP 28
Ainako
WP 29
Ainako Avenue
AINA

EXHIBIT 3

FILE PLAN: 427

AINAKO SUBDIVISION SERIES 2

LAND SITUATED IN PUNAHOA 1ST AND PUNAHOA 2ND
SOUTH HILO, HAWAII, T.H.



Being a portion of the Ahupuaa of Punahoa 1st, Royal Patent 5701, Land Commission Award 463 to Kuihelani no E. Kahakumakalua, a Portion of the Ahupuaa of Punahoa 2nd, Royal Patent 1950, No.2 to Charles H. Wetmore on a portion of Land Commission Award 381, Part 4, Section 1 to American Board of Commissioners for Foreign Missions

HILO SUGAR CO.- OWNER

ADDRESS: HILO, HAWAII.

Beginning at a spike at the West corner of this Parcel of land, being also the Southwest corner of Lot 7-B-7 of Land Court Application 202, the coordinates of which referred to Government Survey Triangulation Station "HALAI" being 2326.62 feet South and 10,758.89 feet West, and running by azimuths measured clockwise from true South:

1. 251° 35' 1961.24 feet along Lot 7-B-7, 7-B-15, 7-B-13, 7-B-14 and 7-C of Land Court Application 202, passing over a ¾ iron pipe at 1960.00 feet to top of pali thence along remainder of the land of Punahoa 2nd along top of Pali for the next eight (8) courses, the direct azimuths and distances between points along top of said pali being:
2. 270° 30' 92.20 feet;
3. 25° 55' 174.19 feet;
4. 357° 47' 30" 145.75 feet;
5. 312° 05' 92.16 feet;
6. 272° 02' 90.88 feet;
7. 282° 54' 72.23 feet;
8. 233° 40' 142.80 feet;
9. 274° 30' 95.81 feet; thence
10. 15° 00' 235.05 feet along remainder of the land of Punahoa 2nd. to a ¾" pipe and passing over a ¾" pipe at 1.00 feet.
11. 325° 00' 393.21 feet along remainders of the lands of Punahoa 2nd and Punahoa 1st to a ¾" pipe; thence along remainders of the land of Punahoa 1st, on a curve to the right with a radius of 512.46 feet, the chord azimuth and distance being:
12. 213° 25' 45" 222.63 feet;
13. 15° 56' 30" 70.00 feet along remainder of the land of Punahoa 1st, thence along remainder of the land of Punahoa 1st, on a curve to the left with a radius of 442.46 feet, the chord azimuth and distance being:
14. 23° 20' 45" 192.93 feet to a ¾" pipe;
15. 350° 45' 196.89 feet along remainder of the land of Punahoa 1st to a ¾" pipe;
16. 60° 05' 613.10 feet along remainder of the land of Punahoa 1st to a ¾" pipe;
17. 356° 42' 89.18 feet along remainder of the land of Punahoa 1st to a spike;
18. 65° 05' 65.01 feet along remainder of the land of Punahoa 1st. to a ¾" pipe;
19. 155° 05' 85.00 feet along remainder of the land of Punahoa 1st to a ¾" pipe;
20. 65° 05' 239.56 feet along remainder of the of Punahoa 1st to a ¾" pipe; thence along remainder of the land of Punahoa 1st, on a curve to the right with a radius of 208.40 feet, the chord azimuth and distance being:
21. 128° 05' 209.66 feet to a ¾" pipe; thence along remainder of the land of Punahoa 1st, on a curve to the right with a radius of 20.00 feet, the chord azimuth and distance being:
22. 203° 37' 38" 28.45 feet to a ¾" pipe; thence along remainder of the land of Punahoa 1st, on a curve to the left with a radius of 3784.72 feet, the chord azimuth and distance being:
23. 68° 17' 50.46 feet to a ¾" pipe; thence along remainder of the land of Punahoa 1st, on a curve to the right with a radius of 20.00 feet, the chord azimuth and distance being:
24. 298° 56' 28" 28.45 feet to a ¾" pipe; thence along remainder of the land of Punahoa 1st, on a curve to the left with a radius of 258.40 feet, the chord azimuth and distance being:
25. 328° 17' 80.74 feet to a ¾" pipe;
26. 48° 17' 119.86 feet along remainder of the land of Punahoa 1st to a ¾" pipe;
27. 339° 05' 48.80 feet along remainder of the land of Punahoa 1st to a ¾" pipe;
28. 63° 44' 162.16 feet along remainder of the land of Punahoa 1st to a ¾" pipe;
29. 153° 44' 200.00 feet along remainder of the land of Punahoa 1st to a ¾" pipe;
30. 63° 44' 30.00 feet along remainder of the land of Punahoa 1st to a ¾" pipe;
31. 333° 44' 200.00 feet along remainder of the land of Punahoa 1st to a spike;
32. 63° 44' 181.75 feet along remainder of the land of Punahoa 1st to a ¾" pipe;
33. 140° 07' 206.58 feet along remainder of the land of Punahoa 1st to a ¾" pipe;
34. 50° 07' 171.81 feet along remainder of the land of Punahoa 1st to a ¾" pipe;
35. 140° 07' 58.03 feet along remainder of the land of Punahoa 1st to a ¾" pipe;
36. 50° 07' 50.00 feet along remainder of the land of Punahoa 1st to a spike;
37. 140° 07' 36.50 feet along remainder of the land of Punahoa 1st to a ¾" pipe;
38. 50° 07' 143.97 feet along remainder of the land of Punahoa 1st to a ¾" pipe;
39. 136° 25' 842.89 feet along remainder of the land of Punahoa 1st to a ¾" pipe;
40. 156° 07' 577.74 feet along remainder of the lands of Punahoa 1st and Punahoa 2nd. to a ¾" pipe;
41. 246° 07' 185.00 feet along remainder of the land of Punahoa 2nd to a ¾" pipe; thence along remainder of the land of Punahoa 2nd, on a curve to the right with a radius of 15.00 feet, the chord azimuth and distance being:
42. 201° 07' 21.21 feet to a ¾" pipe;
43. 156° 07' 80.00 feet along remainder of the land of Punahoa 2nd to a ¾" pipe; thence along remainder of the land of Punahoa 2nd, on a curve to the right with a radius of 15.00 feet, the chord azimuth and distance being:
44. 21° 07' 21.21 feet to a ¾" pipe;
45. 66° 07' 185.00 feet along remainder of the land of Punahoa 2nd to a ¾" pipe;
46. 156° 07' 349.38 feet along remainder of the land of Punahoa 2nd to the point of beginning and containing an area of 58.649 acres.

This map and description is from an actual survey on the ground made under the direct supervision of the undersigned between April 15, 1946 and May 10, 1947 and may be checked by the Territorial Surveyor with my field books 324, 324A, 324B, 354, 355, 358, 358A, 374 and 375, Calculation folder 1485 and working sheet 1485

SCHUMAN BLDG.
HONOLULU, T.H.
JUNE 2, 1947

REGISTERED PROFESSIONAL SURVEYOR
CERTIFICATE No. 151

I hereby certify that the description of survey and map hereon have been examined and checked as to form and mathematical correctness, but not on the ground, and the same is approved in accordance with sections 12720, 12721 and 12722 of the Revised Laws of 1945.

Honolulu, T.H.
July 9, 1947

Surveyor, Territory of Hawaii

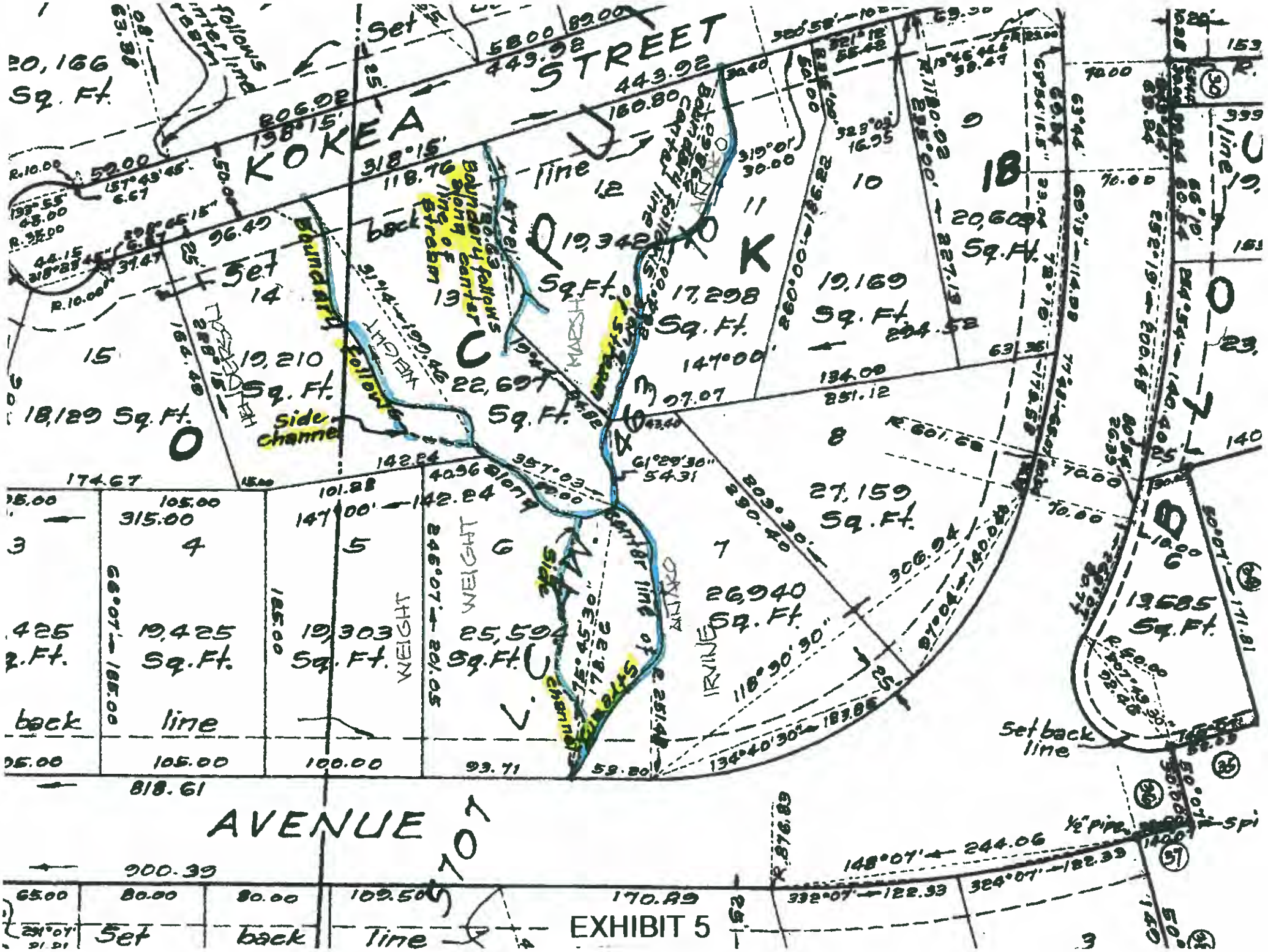
Territory of Hawaii
Office of
Bureau of Conveyances
Received for filing this 10th day of July A.D. 1947 at 2:45 P.M. and filed in File No. 427

Oliver R. Aiu
Deputy Registrar of Conveyances

NOTES:
Figures shown thus ⑥ indicate number of courses in description. Owners as shown on plan are from records filed with the Taxation Map Bureau.
Circle shown thus "○" indicates ¾" pipe unless noted otherwise.

1485

EXHIBIT 4


STREET
KOKEA
AVENUE
EXHIBIT 5

1947 TMK Map

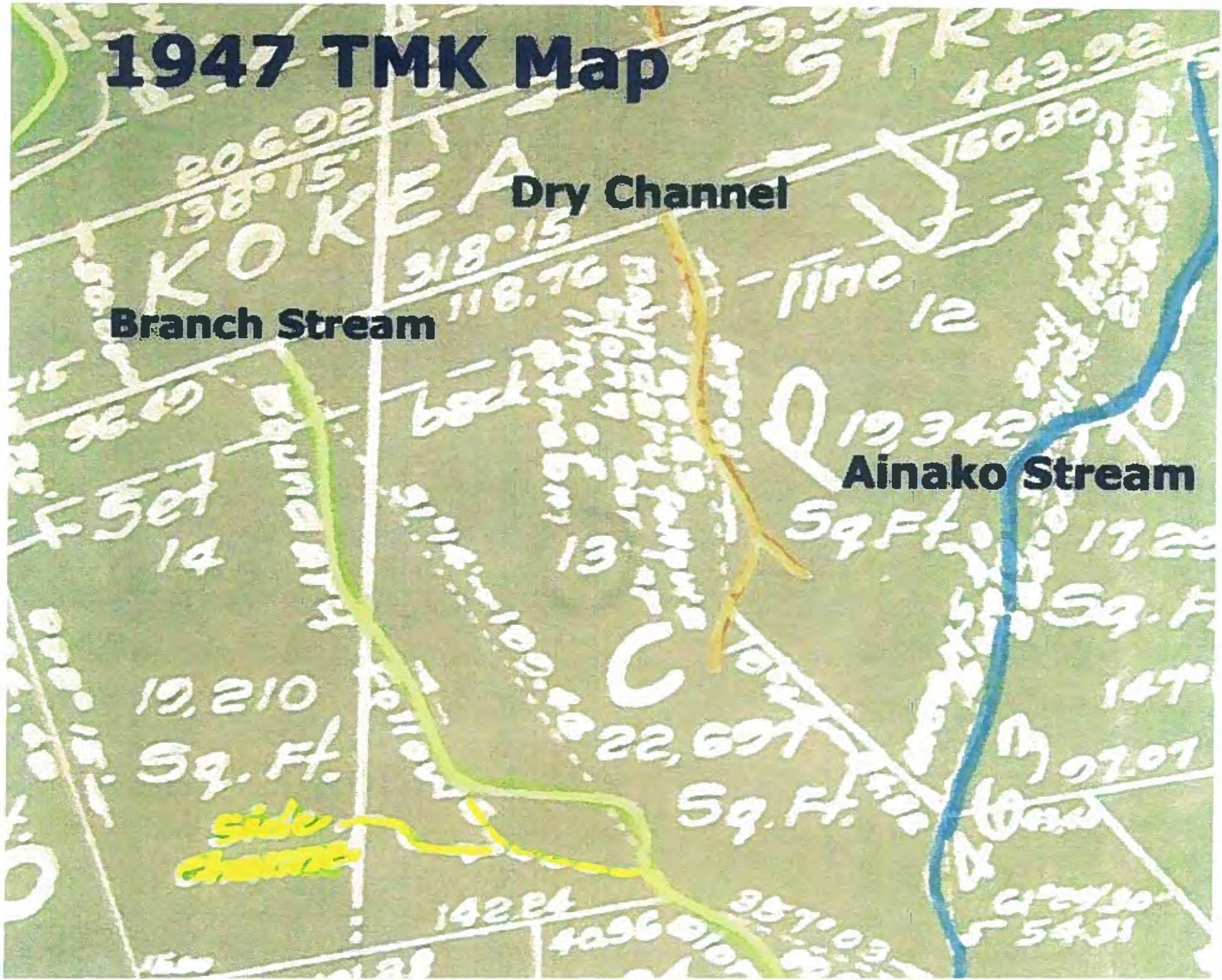
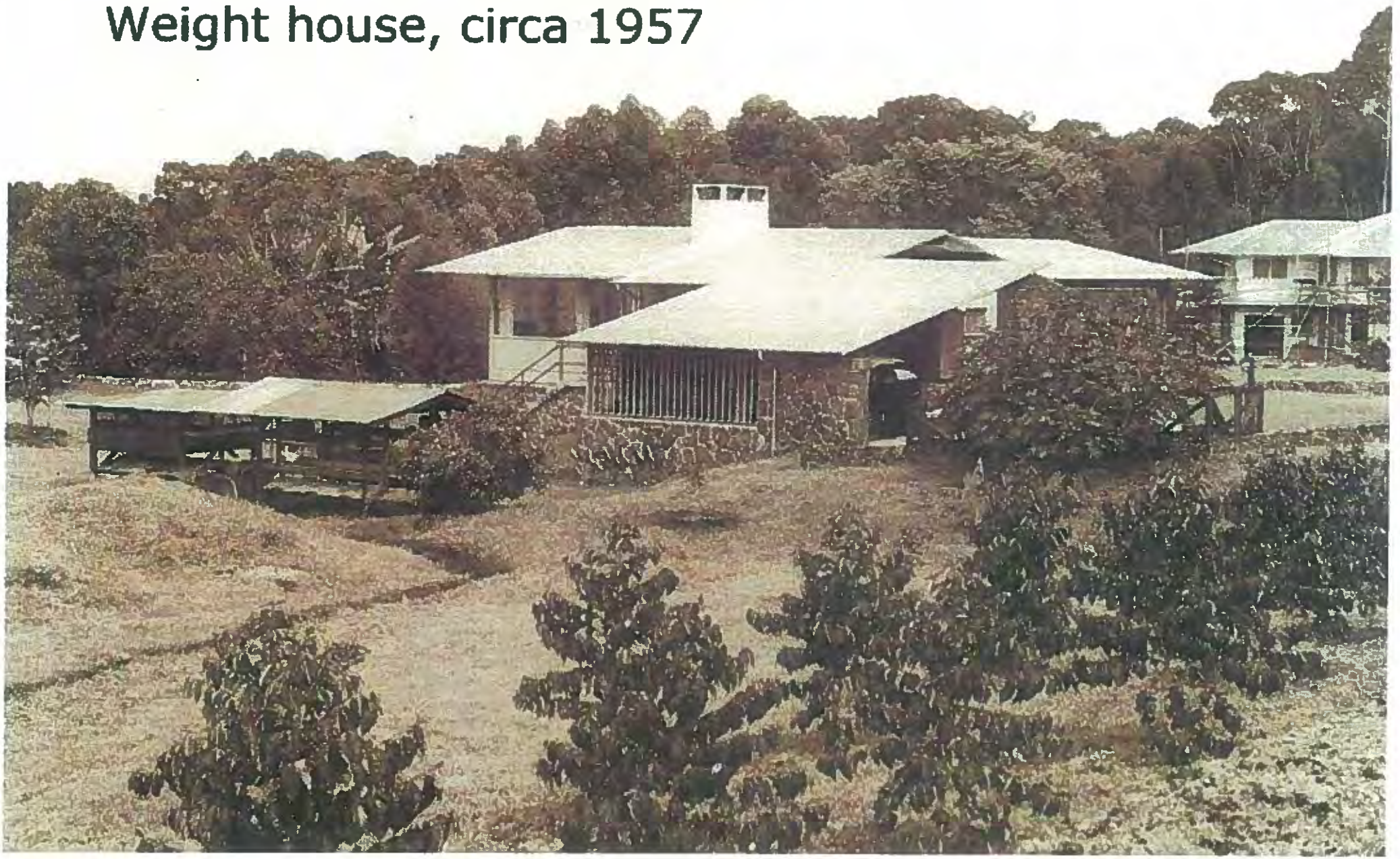


EXHIBIT 6

Weight house, circa 1957



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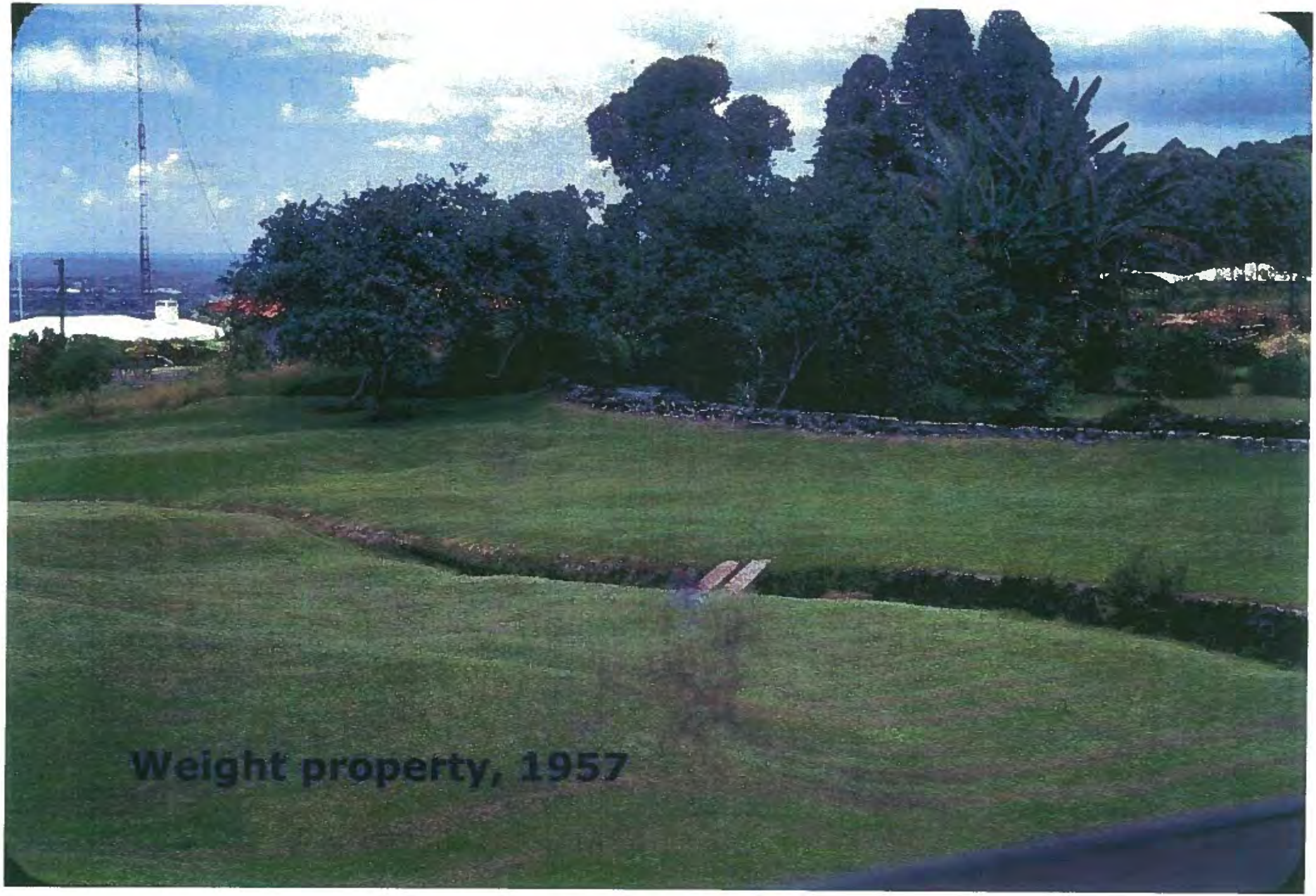
Weight property, 1957

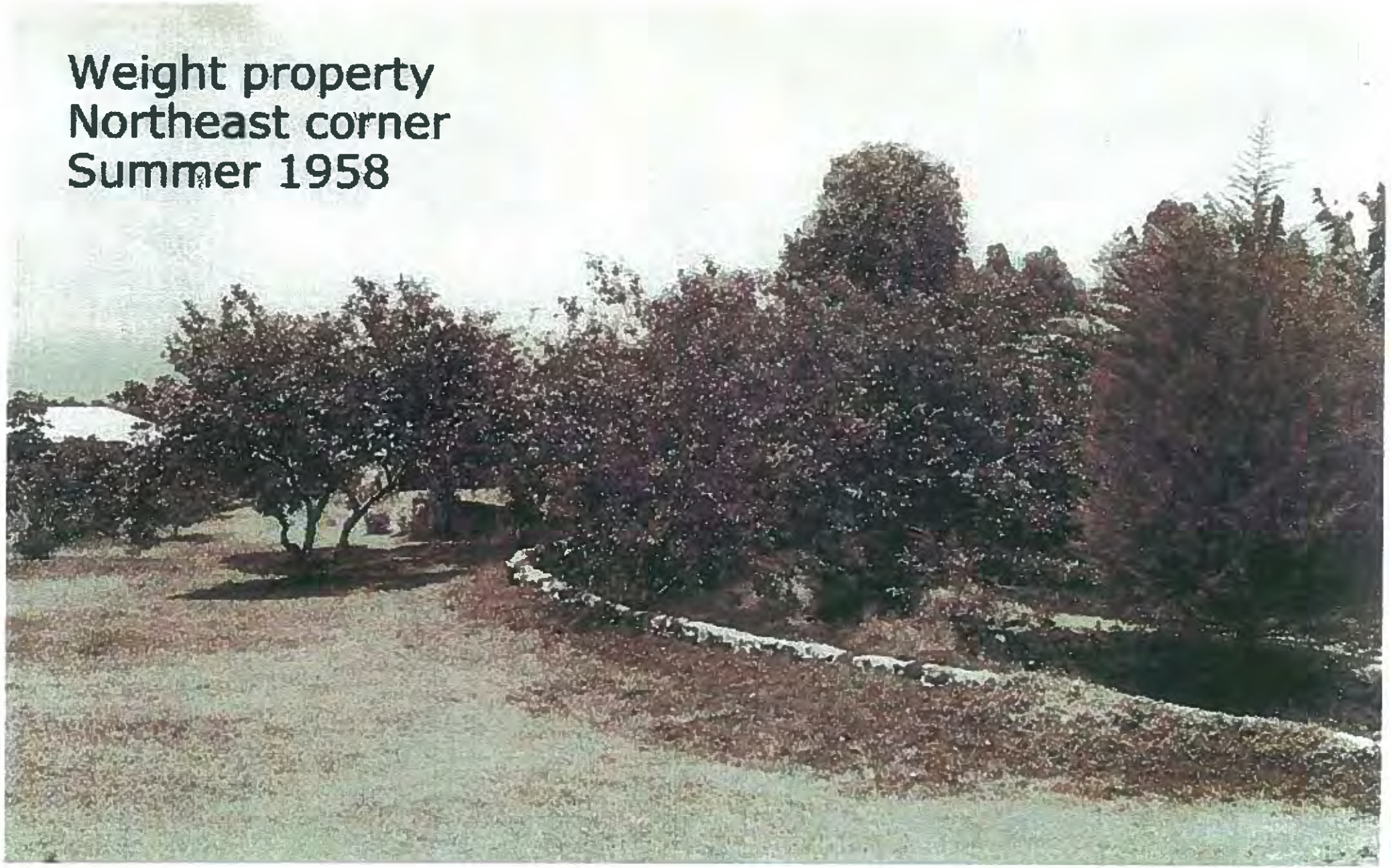

EXHIBIT 8

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT
Stream Protection and Management Branch

FOR STAFF USE ONLY

FIELD INVESTIGATION REPORT

FI2011031002 (Ainako, Jung)

File ID: _____

Doc ID: _____

Date of Field Investigation: 03/10/11	**Time** (24-hour): 1330
CWRM Staff:	Roy Hardy, Robert Chong
Individuals Present:	Ron and Dora Okazaki (RO & DO - married) David and Malinee Jung (DJ & MJ - married) Cal Shindo (CS) Tamae Shindo (TS – Cal's mother)
Reference:	
TMK Parcels (9-digit):	(3) 2-5-025:003, Okino, 33 Kokea Street (3) 2-5-025:004, Marsh, 51 Kokea Street (3) 2-5-025:005, Weight, 1000 Ainako Avenue (3) 2-5-025:006, Henderson, 99 Kokea Street (3) 2-5-025:007, Henderson, 107 Kokea Street (3) 2-5-025:013 and 014, Weight, 1000 Ainako Avenue (3) 2-5-025:015, Thomsen, 974 Ainako Avenue (3) 2-5-024:028 and 029, Jung, 118 Koula Street (3) 2-5-024:033, Shindo, 145 Koula Street (3) 2-5-024:032, Kimura, 151 Koula Street (3) 2-5-024:034, Matsumoto, 125 Koula Street (3) 2-5-024:042, Metzger, 46 Kokea Street (3) 2-5-024:044, Purves, 60 Kokea Street (3) 2-5-024:045, Okazaki, 80 Kokea Street (3) 2-5-024:046, Hanenburg, 110 Kokea Street (3) 2-5-024:016, Koehnen, 111 Kapaa Street

Findings: See map with Ainako Stream and Branch Streams in Exhibit 2.

Dora Okazaki:

- Bought their property (045) in 1960 and built house in 1964.
- Okazakis had four fish ponds along Branch Stream #1. Fish ponds #1 & #2 still exist today.
- Ponds #3 &4 were filled in because lack of water.
- Rock walls along pond #1 and #2 were built in 1965-1966.
- Branch Stream #2 formed the boundary between the Marsh and Weight properties. Though they never were allowed on property, their kids used to play in that area.
- Branch Stream #2 used to always flow, but was a "trickle" when compared to Branch #1.
- Bars were placed at dam on Branch Stream #1a to keep debris from Ainako Stream flowing down Branch Stream #1a. Staff did not see this on Ainako at Branch #1a, 1b or 2.
- Concrete levees were located along Ainako Stream on Weight's property (014) and on Marsh property (004) where the "V" wall is located.
- "V" concrete levee on parcel 004 was constructed after Hendersons moved in and before Marsh bought the property from Henderson, sometime after 1963.
- There was also an oval (egg) or U-shaped opening with poles between the two levees at the headwaters of Branch Stream #1a.
- DJ later clarified that Branch #2 was supposedly closed off between 1985 and 1990, and Branch #1a was closed off when the gap was filled in sometime in the early 1990's.
- In 1992-93, Bert Fraleigh (029) lost water in Branch Stream #1, walked up to Ainako Stream and found that Dr. Weight had placed a sheet of metal between the "bars" at the Ainako Stream diversion for Branch Stream #1b . See BF testimony further down in this report.
- During this same period, DO & RO's son Carl came home from college and noticed a significant reduction in Branch Stream #1 flow and asked what had changed.

DO explained how water stopped flowing in Branch Streams #1a in the 1990's (as clarified by DJ after site visit):

- Early 90's lots of activity on the Weight properties. Lots of trucks working on area.
- Dr. Weight replaced the metal bars across the mouth to the Branch Stream #1a with a U-or egg shaped opening in the concrete wall.
- Dr. Weight placed an oval sliding grate to cover the opening in the concrete wall.

EXHIBIT 6

- RO asked Dr. Weight to lower the concrete lip of the bottom of the diversion structure and suggested jack-hammering the lip to lower it to the level of Ainako Stream to allow more water to flow to the Branch Stream #1a.
- DO drew a diagram of the U-shaped diversion structure that Dr. Weight had built and gave diagram to RC. See Exhibit 5.
- The opening between the Weight and Marsh concrete levees was filled in sometime between 1985 and 1992.
- The rock retaining wall between Branch Streams #1a and #2 was built in the early 1990's and closed off Branch #1a flow from Ainako Stream.

DJ said that 3 people can testify that there was no wall at Branch Streams #1a and #2 between the concrete levees along Ainako Stream on Weight (005 and 014) and Henderson/Marsh properties (004): Dora Okazaki (DO), son Carl Okazaki (CO), and Vince Kimura (VK).

DO said that AW raises and lowers the current sluice gate at diversion #1b on Ainako Stream at AW's whim. RO said that it is not right that someone can control the flow to the detriment of downstream users.

- During heavy rain, AW would lower the diversion gate because AW feared that AW's property would get flooded.
- The sluice gate was recently raised and Branch Stream #1 was flowing "nicely" downstream to DO and DJ properties.
- DO and DJ said that they were happy with the flow at the time of the field investigation.

DO: the rock retaining wall between Ainako Stream Branch #1a and Branch #2 on AW's property (014) was not there before 1992. See photos 53-56. ~~in~~ Field Investigation for Identification

- DO thought that AW was building a patio because of the construction work.
- Shortly after the construction work was completed, water stopped flowing in Branch Stream #1a.

RC mentioned that according to DJ, there were two rock dam diversions in the Ainako Stream. One dam diversion fed water to Branch 1a, and one dam diversion fed water to Branch #1b.
At the time of the field inspection, there was no mouth opening at Branch #1a but one continuous rock retaining wall between the Weight (014) and Marsh (004) property. Branch #1a no longer exists on the Weight property (014).

DO said that they never ventured up to the Ainako Avenue diversion gate by the Weight house and could see the diversion dam at Branch #1a from Kokea Street.

RC also mentioned that there two Branch Streams #1 at Ainako Stream: the Branch Stream #1a shown on the TMK map and the Branch Stream #1b as it exists today. See Exhibit 2.

DO: Branch Stream #1a at Kokea Street used to form the property line between Weight (005) and Henderson (006).

- A pipe in the ground marks the location of the property line, but Branch #1a Stream is not located at the property line marker today.
- Branch Stream #1a used to flow closer to the Marsh (004) property and formed a pond in the low depression at Kokea Street before flowing to the inlet for the culvert under Kokea Street on AW's property (004) for lower reach of Branch Stream #1a.
- Location of (reconfigured) Branch Stream #1b is closer to Henderson property (005) before flowing into culvert under Kokea Street.
- Former pond area on Weight property is now a dry, grassy, depressed area. See photo 202. Notice new stacked rocks channelizing the lower reach of Branch Stream #1b behind RC.

DJ said that water used to flow across the entire width of the streambed on his property.

- Typically, there was only one waterfall on the left side of the streambed.
- Branch Stream #1 was dry during 6-8 month during past year after sluice gate was replaced by SH in 2009.
- Streamflow in Branch #1 only began to flow one day prior to CWRM site visit on 3/10/11.
- On 3/10/11, there were four "mini" waterfalls, but water was not flowing across the entire width of the streambed.

RH asked DJ where water flowed after it exits DJ's property.

- DJ said that water flows on the surface across several properties before emptying into marsh/wetland area downstream which is owned by parents of MMA fighter BJ Penn.

RO & DO said the Akolea Ditch project did not affect the flow of Ainako Stream and did not notice any change back in 1980's.

Subsequent clarifications by DJ after 3/10/11 site visit:

- Branch #1b at Ainako Stream is present location of sliding sluice gate.
- Branch #1a at Ainako Stream was located at "nipple" on TMK map.
- Branch #1a at Kokea Street was where property marker is located and where stream used to flow.
- Branch #2 was covered up sometime between 1985 and 1990.
- Branch #1a stopped flowing in the early 1990's which Okazaki and Fraleigh can testify to.

4/4/11: RC sent email to BF asking for clarification about Branch Stream #1a, #1b and #2 at Ainako Stream.
4/6/11: RC forwarded SH's 4/4/11 email with info on rainfall and streamflows and requested similar info from DJ.
4/7/11: DJ said that BF is 91 years old and has cancer. DJ will try and contact BF. DJ has testimony to verify that there was an "island" between Branch #1a and Branch #2 at Ainako Stream and will provide.

4/11/11: Bert Fraleigh returned RC's phone call:

- Walked up to Ainako Stream near Ainako Ave when water in Branch 1b stopped flowing to BF's property in 1988.
- Found "cement box" with sliding steel gate at Branch 1b and asked Dr. Weight to open gate but Dr. Weight refused.
- Opened diversion gate 5 or 6 times to get more water.
- Thought that BF's deed mentioned 1/3 of the water rights.
- Was not aware of Branch 2.

4/11/11: DJ emailed RC Vince Kimura's (VK) phone number and email address. RC sent email to VK.

4/11/11: Vince Kimura email response to RC: See Exhibit 8.

- VK lived on parcel 032 on Koula Street and used to play in Branch #1a and #2 from 1970-1977.
- Grandparents lived on parcel 009 on Kapaa Street.
- Branch #1a began on AW's property as shown on TMK map that was emailed to VK.
- Kids played along the "two rivers from the top of Ainako in the forest down to Koula Street."
- Branch #2 was usually dry and only flowed during heavy rain.
- By 1998 there "was no ecosystem or anything alive in the stream or if it was running."
- VK did not recall Branch #1b at its present location near Ainako Ave and thought that it was a "drainage ditch that served the house or [was] some kind of overflow from the stream."
- VK thought that "Branch 1b merged into [Branch] 1a at some point downstream."

4/11/11: RC sent email to DJ asking DJ to examine DJ's deed to see if water rights were mentioned in deed.

5/12/11: DJ called RC with the following information:

- Melissa and Dan Bos at 167 Kapaa Street can verify restored stream flow in Branch #1 on 3/09/11. The Bos moved in four months prior and were not aware of streamflow in Branch #1.

7/06/11: DJ faxed following information to RC:

- In 1996 RO and Carl Okazaki visited the mouth of Branch #1a and asked AW to release for more water in Branch #1a.
- AW said that water flow had decreased because of climate changes, earthquake and water control work on Akolea Ditch.
- AW refused to release more water in Branch #1a.
- Water flow to Okazaki property was "almost totally gone" in 1996.

CWRM Findings:

- **Ainako Branch #1a** at Ainako Stream is stream at "nipple" shown on TMK map. See Exhibit 2.
- **Ainako Branch #1a** at Ainako Stream used to be connected to Ainako Stream. (VK)
- **Ainako Branch #1a** at Ainako Stream no longer exists today on Weight property (014).
- **Ainako Branch #1b** is located close to Ainako Avenue and has a sliding diversion gate that was replaced by SH in 2007. (SH)
- **Ainako Branch #1b** is shown in AW's 1957 photo of AW's property (014). See Exhibit 6.
- AW's 1957 and 1958 photos: See Exhibits 6 and 7.
    1. Shows Branch Stream #1b on AW's property (014).
    2. Does not show Branch Stream #1a on AW's property (014).
    3. Is unclear if Branch Stream #2 existed at the edge of the tall grass in background of photo.
    4. Does not show a continuous rock wall along Ainako Stream on AW's property (014).
- **Ainako Branch #1a and #1b** came together and merged on AW's property (014).
- **Ainako Branch #2** used to be connected to Ainako Stream but is no longer connected to Ainako Stream.
- **Ainako Branch #2** was/is dry channel that only flowed during heavy rains. (SH, BM and VK).
- Ainako **Branch #2** is covered up where it used to connect to Ainako Stream.
- A continuous concrete levee and rock wall runs along Ainako Stream between the Weight and Marsh properties.
- **Branch #1a at Kokea Street** used to mark boundary between AW (005) and SH (006) properties. (DO)
- **Branch #1a at Kokea Street** is marked by a pipe in the ground.
- **Branch #1a at Kokea Street** was moved from its former location to its present location at Branch #1b at Kokea Street.
- **Branch #1b at Kokea Street** is present location of Ainako Branch Stream #1b.
- **Branch #1b at Kokea Street** has a neatly stacked rock pile indicating recent work by Branch #1b stream bank/channel.

Bm AND vk

File Name: **Brief Description:**

GPS Listing:

Shapefiles: (List file names of all shapefiles created and a brief description of each)

File Name:	Brief Description:
Photo ID	Description
201103100133	View upstream of Branch #1b across Kokea St. from Okazaki lanai.
201103100134	Left of previous photo view of Kokea St. fill.
201103100135	Right of previous photo view of Kokea St.
201103100136	**New view** Branch #1b stream channel below Kokea Stream from Okazaki lanai looking towards Hanenburg parcel 046 and bank.
201103100137	360° view of previous photo. Note waterfall
201103100138	360° view of previous photo. Zoom out – note waterfall looking at Hanenburg home.
201103100139	360° view of previous photo. Okazaki upper pond below lanai.
201103100140	360° view of previous photo looking towards Shindo parcel 033 and Matsumoto parcel 034.
201103100141	**End** 360° view of previous photo. Jungs and RC in photo.
201103100142	View which should have started 360 view prior to photo 136.
201103100143	**New spot** at other end of lanai where Jungs and RC stood in photo 41.
201103100144	360° view of previous photo looking towards upper pond.
201103100145	360° view of previous photo looking towards lower pond.
201103100146	360° view of previous photo looking towards lower pond
201103100147	360° view of previous photo looking towards lower pond. RH shadow in photo.
201103100148	**End** 360° view of previous photo looking towards lower pond.
201103100149	**New spot**. View of dry drainage canal for Branch #2 below Kokea St. and at Okazaki (045) property line next to Purves (044).
201103100150	360° view of previous photo.
201103100151	360° view of previous photo.
201103100152	360° view of previous photo.
201103100153	360° view of previous photo. Note corner of channel wall DJ and RO standing on – refer to photo 157. RC sitting on channel wall.
201103100154	**End** 360° view of previous photo. Okazaki's parking area MJ, DO, RC in photo.
201103100155	**New spot** standing on corner of channel wall same spot as RO from photo 153 looking back towards previous spot of 360 view.
201103100156	270° view of previous photo.
201103100157	270° view of previous photo. Note looking down at corner of channel wall.
201103100158	270° view of previous photo.
201103100159	270° view of previous photo. Lower channel wall to right with pvc water line running along top. DJ, RO, RC, DO in photo.
201103100160	**End** 360 view of previous photo. Looking at Okazaki home.
201103100161	**New spot**. View upstream of Branch Stream #1b between Okazaki (045) and Hanenburg property (046). RC & RO in photo. Appears to be conjunction of Branch Streams #1 & #2.
201103100162	360° view of previous photo
201103100163	360° view of previous photo
201103100164	360° view of previous photo looking at what would be Branch Stream # 2 flow path in Matusmoto parcel 034.
201103100165	360° view slightly downstream of previous photo looking back up again what would be Branch Stream # 2 flow path in Matusmoto parcel 034.
201103100166	360° view of previous photo with Matsumoto home again.
201103100167	360° view of previous photo
201103100168	360° view of previous photo
201103100169	360° view of previous photo looking downstream Branch Stream #1b after conjunction with Branch Stream #2 towards Koula St.
201103100170	360° view of previous photo
201103100171	360° view of previous photo
201103100172	360° view of previous photo looking towards Shindo parcel 033 and home.
201103100173	360° view of previous photo starting to look upstream Branch Stream #1b
201103100174	**End** 360° view of previous photo
201103100175	**New spot** looking down at culvert intake at Matsumoto parcel 034 on Koula St.
201103100176	90° view of previous photo Various homes in background – Matsumoto, Okazaki, Hanenburg, and Shindo.
201103100177	**End** 90° view of previous photo looking upstream Branch Stream #1b between Matsumoto (034) and Shindo (033) from Koula St.
201103100178	**New spot** looking back at culvert outlet of Branch #1b below Koula St. on Jung property (029).
201103100179	360° view of previous photo looking upstream Branch Stream #1b.
201103100180	360° view of previous photo.
201103100181	360° view of previous photo.
201103100182	360° view of previous photo.
201103100183	360° view of previous photo looking downstream Branch Stream #1b above Jung waterfall (middle right in photo).

201103100184	360° view of previous photo Jung home in background.
201103100185	360° view of previous photo. DJ, RO, RC standing on raised driveway.
201103100186	360° view of previous photo height of raised driveway.
201103100187	360° view of previous photo.
201103100188	360° view of previous photo.
201103100189	360° view of previous photo. Note second dry culvert.
201103100190	360° view of previous photo looking towards Koula St. fill.
201103100191	360° view of previous photo.
201103100192	**End** 360° view of previous photo.
201103100193	**New Spot** – below Jung waterfall (3 small falls in far background). RC in photo.
201103100194	360° view of previous photo looking upstream.
201103100195	360° view of previous photo.
201103100196	360° view of previous photo.
201103100197	360° view of previous photo looking downstream.
201103100198	360° view of previous photo.
201103100199	360° view of previous photo. Jung post at corner of home.
201103100200	**End** 360° view of previous photo.
201103100201	**New spot** - View of Ainako Stream at Koula St..
201103100202	**New spot** - View from Kokea St. of low depression near junction of AW parcel 005 and SH parcel 006. where water from Branch #1a used to form a pool before flowing to the right along Kokea St into inlet culvert (see photo 108) Note new wall behind RC that channelizes water towards inlet culvert above Kokea St. Also not to left of RC previous banks of Branch Stream#1a.

Waypoints: (List all waypoints in decimal degrees and provide a brief description of each)

WP No.	Latitude	Longitude	Brief Description:

#45 DO lanai overlooking Branch #1 and fish ponds (045).
#46 DO paved parking area next to Branch #2 which dried up in early 1990's (045).
#47 Okazaki retaining wall next to Matsumoto (Shindo)(034)where water from Branch #2 used to flow from Okazaki property into Shindo property.
#48 Branch #1 on Shindo property (033) where side channel is located.
#49 Branch 1 inlet to culvert under Koula Street.
#50 Mini-"waterfall" on Branch #1 on DJ property (029).
#51 Ainako Stream inlet to culvert under Koula Street.
#52 Property marker between Weight (005) and Henderson (006) at Kokea Street.
#53 Outlet of Branch #2 under Kokea Street.

Attachments:

Brief Description:

Exhibit 1 Image Contact Sheet
Exhibit 2. TMK map with Branch Stream 1a and 1b at Ainako Branch Stream and Branch Stream 1a and 1b at Kokea Street.
Exhibit 3. GIS map with waypoints and Weight/Henderson and Okazaki/Jung TMKs.
Exhibit 4. June 2, 1947, TMK map off Ainako Subdivision Series 2.
Exhibit 5. DO sketch of u-shaped diversion structure that Dr. Weight built at Branch Stream #1a.
Exhibit 6. 1957 photo of Weight house and 1957 photo of Weight property (014).
Exhibit 7. 1958 photo of NE corner of Weight property (014)
Exhibit 8: Vince Kimura's 4/11/11 email to RC.

Recommendations:

- Okazaki fishponds were built in the 1960's prior to the State Water Code and do not require a SCAP/SDWP/PAIFS.
- Okazakis could have registered and declared their fishponds as instream use of Branch Stream #1 waters.
- Fraleigh could have registered and declared his waterfall as instream use of Branch Stream #1 waters.
- Property owners along Ainako Stream and Branch Stream #1b have riparian rights and are entitled to use and enjoy the stream.
- Stream gage monitors should be installed on Ainako Stream and at the Weight diversion and Okazaki and/or Jung properties to monitor stream flow for short and long term stream flow trends.
- Because of the complexity and inter-relationship between Ainako Stream and Ainako Branch #1b, the work that was done previously to the stream, and the number of property owners along both streams who have riparian rights, either mediation or dispute resolution hearing is recommended.

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20110310134.jpg

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20110310141.jpg

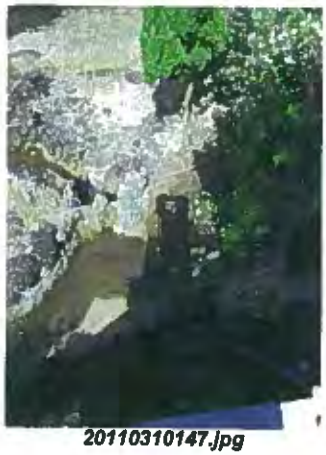
20110310142.jpg

20110310143.jpg

20110310144.jpg

20110310145.jpg

20110310146.jpg



20110310147.jpg

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EXHIBIT 1

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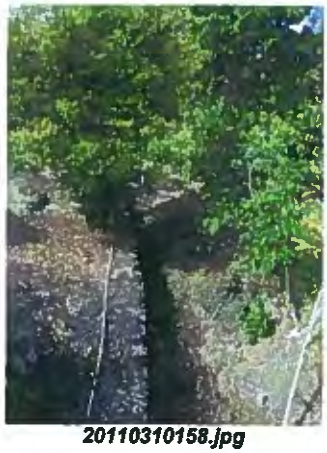

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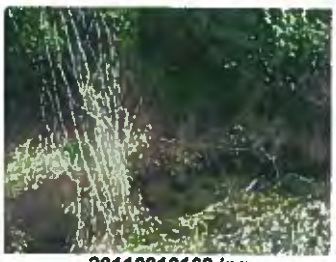

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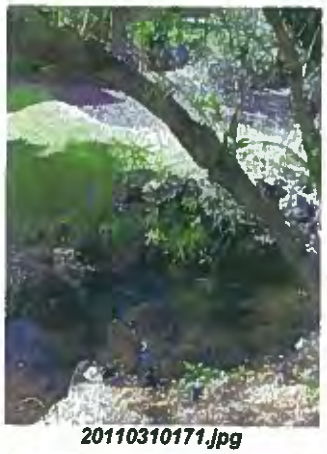

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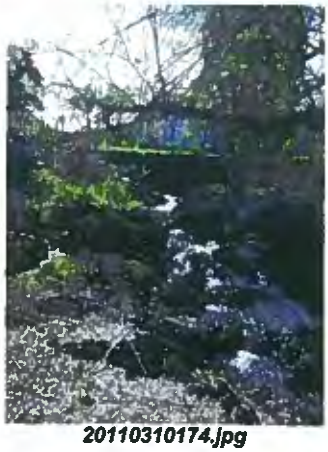

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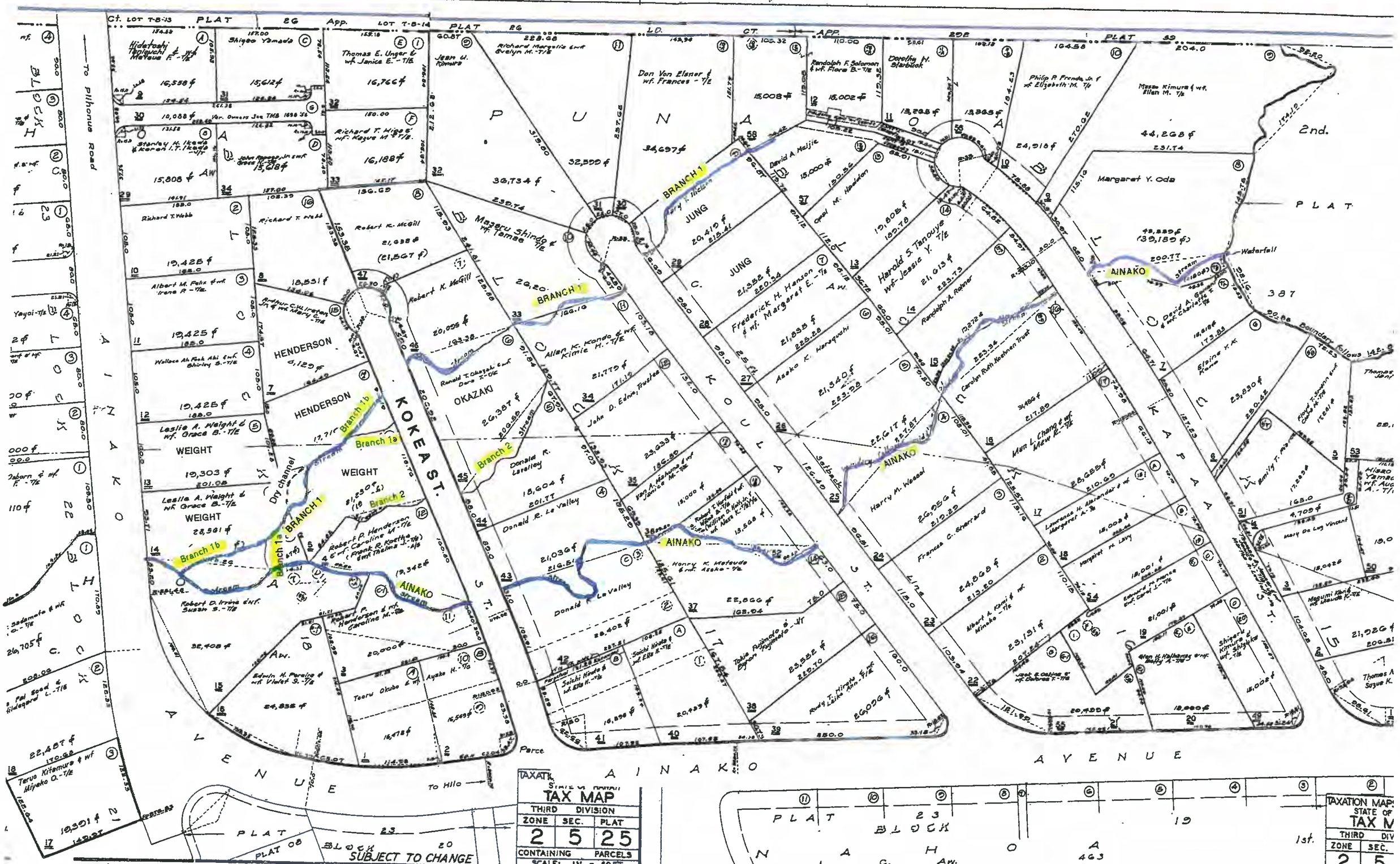
20110310199.jpg

20110310200.jpg

20110310201.jpg

20110310202.jpg

EXHIBIT 2


PUNA
KOKEE ST.
KOULA ST.
KAPAA
AINAKO
AVENUE
PLAT 23
BLOCK 20
PLAT 25
BLOCK 19
PLAT 39
2nd.
1st.
To Pilhonua Road
To Hilo
Parce
Boundary follows
Waterfall
stream
Branch 1
Branch 1a
Branch 1b
Branch 2
Dry channel
JUNG
HENDERSON
OKAZAKI
WEIGHT
Hidetoshi Teraichi & wf Mitsue F. -T/E
Shigeo Yamada
Thomas E. Unger & wf. Janice E. -T/E
Jean U. Kimura
Richard Margolis & wf Evelyn M. -T/E
Don Von Elsner & wf. Frances -T/E
Randolph F. Solomon & wf. Flora B. -T/E
Dorothy M. Starbuck
Philip P. Frenda, Jr. & wf. Elizabeth M. -T/E
Masao Kimura & wf. Ellen M. -T/E
Stanley M. Ikeda & Karen I. T. Ikeda -T/E
John Ramage, Jr. & wf. Grace K. -T/E
Richard T. Higa & wf. Kazue M. -T/E
Richard T. Webb
Robert K. McGill
Mazaru Shindo & wf. Tamae -T/E
David A. Maljie
Mary T. Hidano
Opal M. Hoskins
Albert M. Faix & wf. Irene R. -T/E
Arthur C. H. Ireton Jr. & wf. Mary C. -T/E
Harold S. Tanouye & wf. Jessie Y. -T/E
Frederick H. Hanson & wf. Margaret E. -T/E
Randolph A. Rohner
Wallace Ah Fook Ahi & wf. Shirley S. -T/E
Allan K. Kondo & wf. Kimie M. -T/E
Margaret Y. Oda
David A. Gomes & wf. Charlotte T. -T/E
Elaine Y. K. Kane
Leslie A. Weight & wf. Grace B. -T/E
Ronald T. Okazaki & wf. Dora T. -T/E
John D. Edmiston & wf. Edna Trustee
Donald R. Lesalley
Donald R. La Valley
Robert P. Henderson & wf. Caroline M. -T/E
Robert D. Irvine & wf. Susan S. -T/E
Edwin H. Pereira & wf. Violet S. -T/E
Teoru Okubo & wf. Ayako H. -T/E
Soichi Hirata & wf. Ella H. -T/E
Henry K. Matsuda & wf. Asako -T/E
Tobie Fujinoto & wf. Fujimoto -JT
Rudy T. Hiraki & wf. Laike Ann -T/E
Harry M. Wessel
Francis C. Sherrard
Albert A. Kani & wf. Minako -T/E
Lawrence H. Alexander & wf. Margaret A. -T/E
Margaret M. Levy
Edward M. Prince & wf. Carol I. -T/E
Shigeru & Kimiyo Shigeta wf. -T/E
Mary H. Holloway & wf. -T/E
Emily T. Pang & wf. -T/E
Mary De Loy Vincent
Masumi Kanja & wf. Mauna K. -T/E
Hisao Yamada & wf. Augusta A. -T/E
Floyd T. Sakata & wf. -T/E
Terue Kitamura & wf. Miyeko O. -T/E
Yabarn & wf. -T/E
Yayoi -T/E
Sademoto & wf. -T/E
Pai Seed & wf. Hildegard L. -T/E
Thomas Jones
Susuye K.
TAX MAP
THIRD DIVISION
ZONE 2 | SEC. 5 | PLAT 25
CONTAINING PARCELS
SCALE: IN. = 80 FT.
SUBJECT TO CHANGE

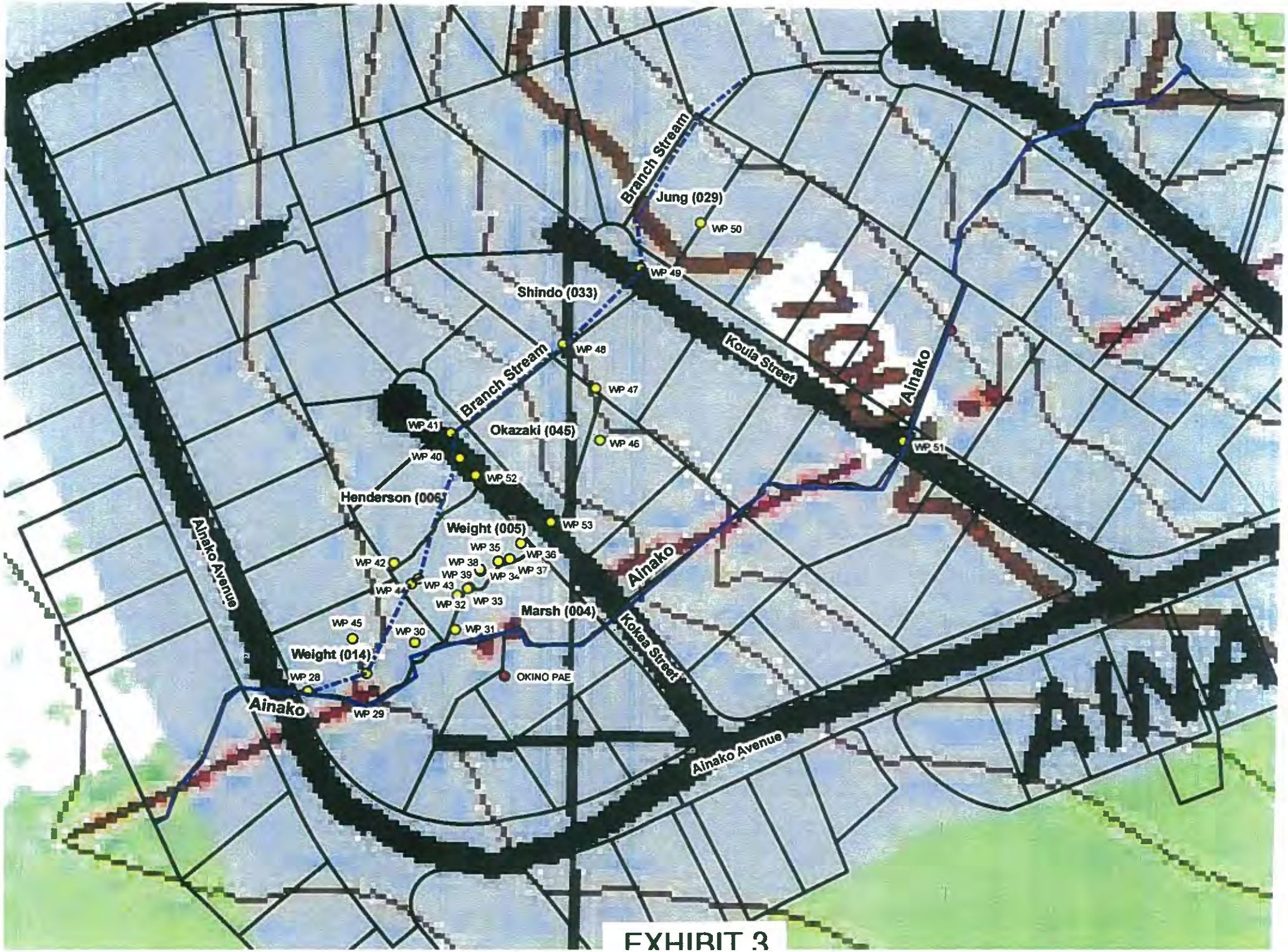
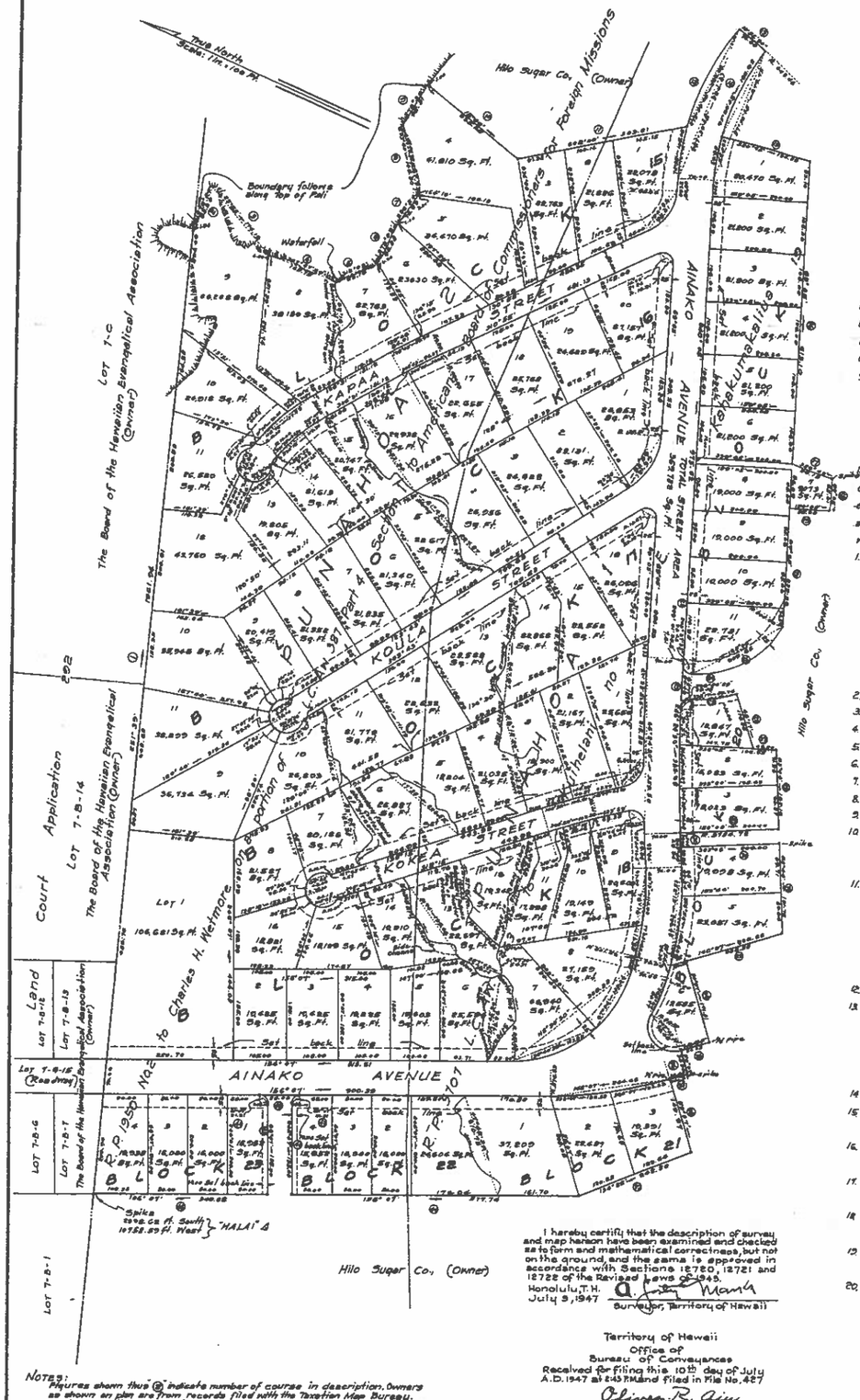

Branch Stream
Jung (029)
WP 50
WP 49
Shindo (033)
Koula Street
Ainako
WP 48
Branch Stream
WP 47
WP 41
Okazaki (045)
WP 46
WP 51
WP 40
WP 52
Henderson (006)
Weight (005)
WP 53
WP 35
WP 36
WP 42
WP 38
WP 37
WP 39
WP 34
WP 43
WP 44
WP 32
WP 33
Marsh (004)
Ainako Avenue
Ainako
WP 45
WP 30
WP 31
Kokea Street
Weight (014)
OKINO PAE
WP 28
Ainako
WP 29
Ainako Avenue
AINA

EXHIBIT 3

FILE PLAN 427

AINAKO SUBDIVISION SERIES 2

LAND SITUATED IN PUNAHOA 1ST. AND PUNAHOA 2ND.
SOUTH HILO, HAWAII, T.H.



Being a portion of the Ahupuaa of Punahoa 1st, Royal Patent 3707, Land Commission Award 463 to Kuihelani no E. Kahakumakaliiu, a Portion of the Ahupuaa of Punahoa 2nd, Royal Patent 1950, No. 2 to Charles H. Wetmore on a portion of Land Commission Award 381, Part 4, Section 1 to American Board of Commissioners for Foreign Missions

HILO SUGAR CO. - OWNER

ADDRESS: HILO, HAWAII.

Beginning at a spike at the West corner of this Parcel of land, being also the Southwest corner of Lot 7-B-7 of Land Court Application 202, the coordinates of which referred to Government Survey Triangulation Station "HALAI" being 2322.62 feet South and 10,758.89 feet West, and running by azimuths measured clockwise from true South:

1. 251° 33' 1961.24 feet along Lot 7-B-7, 7-B-15, 7-B-13, 7-B-14, and 7-C of Land Court Application 202, passing over a 3/4" iron pipe at 1960.00 feet to top of pali thence along remainder of the land of Punahoa 2nd along top of Pali for the next eight (8) courses, the direct azimuths and distances between points along top of said pali being:
2. 270° 30' 92.20 feet;
3. 25° 55' 174.19 feet;
4. 357° 47' 30" 145.75 feet;
5. 316° 08' 92.16 feet;
6. 272° 08' 90.88 feet;
7. 282° 54' 72.23 feet;
8. 283° 00' 142.80 feet;
9. 276° 30' 95.81 feet; thence
10. 15° 00' 235.05 feet along remainder of the land of Punahoa 2nd. to a 3/4" pipe and passing over a 3/4" pipe at 1.00 feet.
11. 325° 00' 342.21 feet along remainders of the lands of Punahoa 2nd and Punahoa 1st to a 3/4" pipe; thence along remainders of the land of Punahoa 1st, on a curve to the right with a radius of 512.46 feet, the chord azimuth and distance being:
12. 213° 25' 45" 222.63 feet;
13. 15° 56' 30" 70.00 feet along remainder of the land of Punahoa 1st; thence along remainder of the land of Punahoa 1st, on a curve to the left with a radius of 446.46 feet, the chord azimuth and distance being:
14. 28° 20' 45" 102.58 feet to a 3/4" pipe;
15. 350° 45' 156.89 feet along remainder of the land of Punahoa 1st to a 3/4" pipe;
16. 69° 05' 613.10 feet along remainder of the land of Punahoa 1st to a 3/4" pipe;
17. 356° 42' 80.18 feet along remainder of the land of Punahoa 1st to a spike;
18. 69° 05' 65.01 feet along remainder of the land of Punahoa 1st. to a 3/4" pipe;
19. 159° 05' 85.00 feet along remainder of the land of Punahoa 1st to a 3/4" pipe;
20. 69° 05' 239.56 feet along remainder of the of Punahoa 1st to a 3/4" pipe; thence along remainder of the land of Punahoa 1st, on a curve to the right with a radius of 208.40 feet, the chord azimuth and distance being:
21. 128° 05' 209.56 feet to a 3/4" pipe; thence along remainder of the land of Punahoa 1st, on a curve to the right with a radius of 20.00 feet, the chord azimuth and distance being:
22. 203° 37' 53" 28.45 feet to a 3/4" pipe; thence along remainder of the land of Punahoa 1st, on a curve to the left with a radius of 3784.72 feet, the chord azimuth and distance being:
23. 68° 17' 30.46 feet to a 3/4" pipe; thence along remainder of the land of Punahoa 1st, on a curve to the right with a radius of 20.00 feet the chord azimuth and distance being:
24. 206° 56' 28" 28.45 feet to a 3/4" pipe; thence along remainder of the land of Punahoa 1st, on a curve to the left with a radius of 2584.60 feet, the chord azimuth and distance being:
25. 328° 17' 82.74 feet to a 3/4" pipe;
26. 48° 17' 119.86 feet along remainder of the land of Punahoa 1st to a 3/4" pipe;
27. 339° 05' 48.80 feet along remainder of the land of Punahoa 1st to a 3/4" pipe;
28. 63° 44' 162.16 feet along remainder of the land of Punahoa 1st to a 3/4" pipe;
29. 153° 44' 200.00 feet along remainder of the land of Punahoa 1st to a 3/4" pipe;
30. 63° 44' 30.00 feet along remainder of the land of Punahoa 1st to a 3/4" pipe;
31. 333° 44' 200.00 feet along remainder of the land of Punahoa 1st to a spike;
32. 63° 44' 181.75 feet along remainder of the land of Punahoa 1st to a 3/4" pipe;
33. 140° 07' 206.58 feet along remainder of the land of Punahoa 1st to a 3/4" pipe;
34. 50° 07' 171.21 feet along remainder of the land of Punahoa 1st to a 1/2" pipe;
35. 140° 07' 58.03 feet along remainder of the land of Punahoa 1st to a 1/2" pipe;
36. 50° 07' 50.00 feet along remainder of the land of Punahoa 1st to a spike;
37. 140° 07' 36.50 feet along remainder of the land of Punahoa 1st to a 1/2" pipe;
38. 50° 07' 162.97 feet along remainder of the land of Punahoa 1st to a 3/4" pipe;
39. 134° 25' 242.82 feet along remainder of the land of Punahoa 1st to a 3/4" pipe;
40. 136° 07' 577.74 feet along remainder of the lands of Punahoa 1st and Punahoa 2nd. to a 3/4" pipe;
41. 246° 07' 185.00 feet along remainder of the land of Punahoa 2nd to a 3/4" pipe; thence along remainder of the land of Punahoa 2nd, on a curve to the right with a radius of 13.00 feet, the chord azimuth and distance being:
42. 291° 07' 21.21 feet to a 3/4" pipe;
43. 156° 07' 80.00 feet along remainder of the land of Punahoa 2nd to a 3/4" pipe; thence along remainder of the land of Punahoa 2nd, on a curve to the right with a radius of 13.00 feet, the chord azimuth and distance being:
44. 21° 07' 21.21 feet to a 3/4" pipe;
45. 66° 07' 185.00 feet along remainder of the land of Punahoa 2nd to a 3/4" pipe;
46. 136° 07' 349.38 feet along remainder of the land of Punahoa 2nd to the point of beginning and containing an area of 58.649 acres.

This map and description is from an actual survey on the ground made under the direct supervision of the undersigned between April 15, 1946 and May 10, 1947 and may be checked by the Territorial Surveyor with my field books 326, 326A, 364B, 384, 385, 388, 388A, 374 and 376, Calculation folder 1485 and Working Sheet 1485

SCHUMAN BLDG.
HONOLULU, T.H.
JUNE 2, 1947

REGISTERED PROFESSIONAL SURVEYOR
CERTIFICATE No. 181

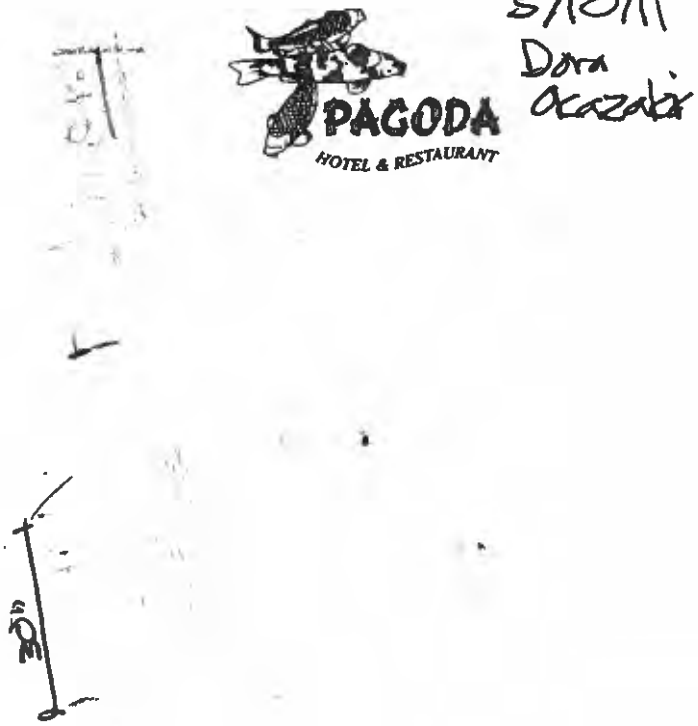
I hereby certify that the description of survey and map hereon have been examined and checked as to form and mathematical correctness, but not on the ground, and the same is approved in accordance with Sections 12720, 12721 and 12722 of the Revised Laws of 1945.
Honolulu, T.H.
July 9, 1947
Surveyor, Territory of Hawaii

Territory of Hawaii
Office of
Bureau of Conveyances
Received for filing this 10th day of July A.D. 1947 at 2:45 P.M. and filed in File No. 427
Oliver R. Aiu
Deputy Registrar of Conveyances

NOTES:
Figures shown thus ② indicate number of course in description. Owners as shown on plan are from records filed with the Taxation Map Bureau.
Circle shown thus "○" indicate 3/4" pipe unless noted otherwise.

1485

EXHIBIT 4



3/10/11
Dora
Ocazaki

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EXHIBIT 5

Weight house, circa 1957

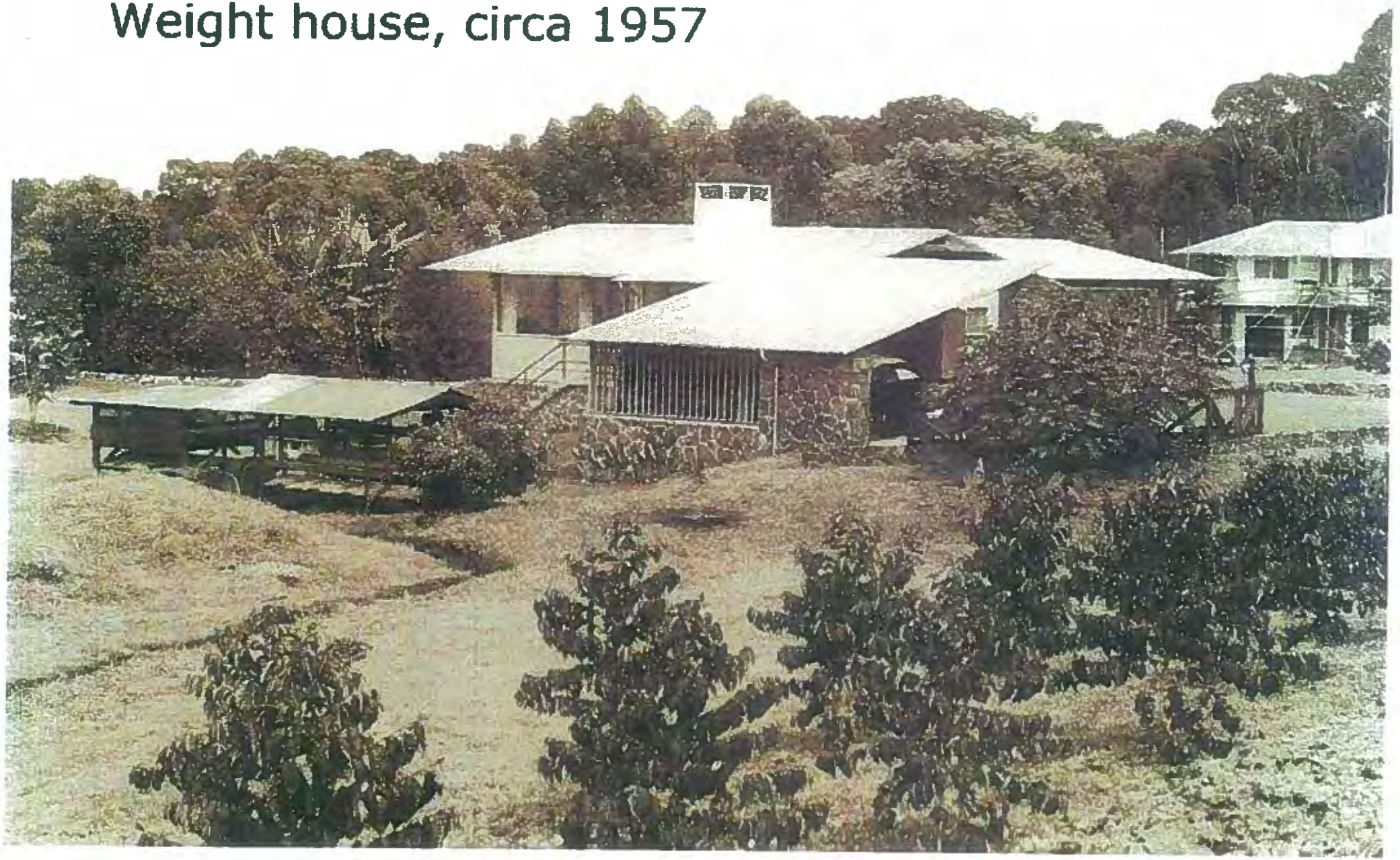
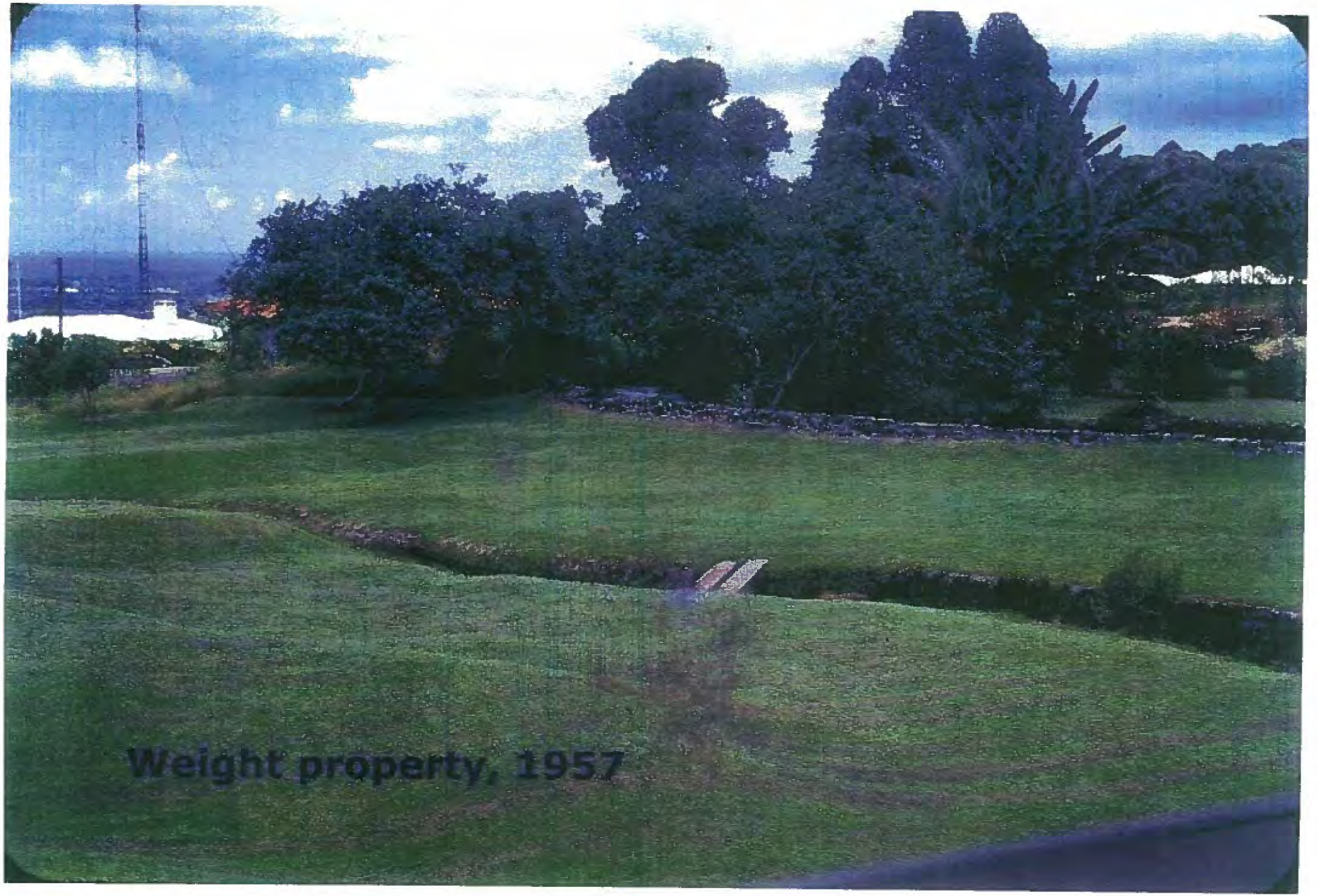


EXHIBIT 6


Weight property, 1957

Weight property
Northeast corner
Summer 1958

EXHIBIT 7

"Vince Kimura"
<vinniek@csinchawaii.com>
04/11/2011 03:03 PM

To <Robert.K.Chong@hawaii.gov>
cc
bcc
Subject RE: Ainako Stream

History: This message has been replied to and forwarded.

Robert,

I was surprised to know that there is a problem with the Ainako stream and neighbors, but glad to help in any way...

I was born in 1965 and played in the main stream, branch #1, and branch #2 from 1970-1977. I grew up on lot 32 on Koula Street and my grandparents on lot 9 on Kapaa Street. Branch #2 only acted up during heavy rain and actually bordered the Okazaki property ending in lot 34 on Koula Street. So Branch #2 is normally dry.

Branch #1 began in the Weight's property #14 just as it is shown on your map. I also recall this stream to slightly enter the Henderson property as it goes under Kokea Street. There was a bunch of us kids in the neighborhood that played along the two rivers from the top of Ainako in the forest down to Koula Street. By the time my kids came around to play in the stream during 1998, there was no ecosystem or anything alive in the stream when or if it was running. The living environment in my day included birds, guppies, swordtails, tadpoles, frogs, toads, rats, mongoose, and various river plants. My recent survey of this river reports nothing alive.

I hope this information is helpful to you. Please don't hesitate to contact me at anytime.

Vince M. Kimura
President
Ph: 808-938-7742
31 Makaala Street
Email: vinniek@csinchawaii.com

From: Robert.K.Chong@hawaii.gov [mailto:Robert.K.Chong@hawaii.gov]
Sent: Monday, April 11, 2011 5:02 PM
To: vinniek@csinchawaii.com
Subject: Fw: Ainako Stream

Robert K. Chong, Planner

Commission on Water Resource Management
1151 Punchbowl Street, Room 227
Honolulu, HI 96813
Phone: (808) 587-0266

EXHIBIT 8

----- Forwarded by Robert K Chong/DLNR/StateHiUS on 04/11/2011 02:01 PM -----

Robert K Chong/DLNR/StateHiUS

04/11/2011 01:59 PM

To vinniek@csinc.hawaii.com

cc Roy Hardy/DLNR/StateHiUS@StateHiUS

Subject Ainako Stream

Hello Vince,

This is Robert Chong with the State Water Commission in Honolulu.
David Jung gave me your name and email address and said that you have information about Ainako Stream.
As you may know, we are investigating a dispute among David Jung/Dora Okazaki and Scott Henderson/Aina Weight and others.

Would you be able to assist us in our investigation?
I have attached a map of the area showing Branch #1 and Branch #2 Stream at Ainako Stream.
We understand that the location of Branch today #1 is closer to Ainako Avenue than what is shown on the map.
Can you tell us what you know about Ainako Stream and Branch Streams #1 and 2?
David Jung thinks that there was a Branch 1a (shown on the map but no longer exists) and Branch 1b where it currently exists closer to Ainako Avenue (not shown on map).

Thank you very much for your help.

Aloha,
Robert

Robert K. Chong, Planner

Commission on Water Resource Management
1151 Punchbowl Street, Room 227
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www.ahfi.com

Mei-Fei Kuo
Phone: (808) 441-6131
Fax: (808) 524-4591
E-mail:
MKuo@ahfi.com

August 18, 2011

Via Facsimile (808-956-3980)
and U.S. Mail

Mr. Philip Moravich
University of Hawaii Manoa
Water Resources Research Center
2500 Dole Street, Krauss Annex 19
Honolulu, Hawaii 96822

Re: Response Letter to the Water Resource Research Center's Comments to Petitioners Leslie Aina Weight and Robert Scott Henderson's Application for an After-the-Fact Stream Channel Alteration Permit, After-the-Fact Stream Diversion Works Permit, and Petition to Amend Instream Flow Standard Ainako Branch Stream Hilo, Hawaii
TMK: 2-5-025: 005, 014, and 006

Dear Mr. Moravich:

On behalf of Ms. Leslie Aina Weight and Mr. Robert Scott Henderson (collectively, the "Applicants"), this letter responds to the June 15, 2011 letter from the University of Hawaii, Water Resources Research Center ("UH Center") to Mr. W. Roy Hardy, Hydrologic Program Manager for the State of Hawaii, Commission on Water Resource Management ("Water Commission").

We recently received a copy of the UH Center's letter commenting on the Applicants after-the-fact permit applications and petition to amend the instream flow (collectively, "Permit Applications") from Mr. Hardy, who forwarded it to Mr. Henderson by e-mail on August 1, 2011.

We have the following responses to the questions and concerns set forth in the UH Center's Letter commenting on the Project and Permit Applications:

1. Information on the Hydrologic Connectivity between Ainako Stream, the Branch Stream, and Wailuku River

In your letter, among your primary concerns are whether the section of Ainako Stream at issue related to the Project (hereinafter, the

EXHIBIT 7

"Branch Stream") is connected to the Wailuku Steam, which flows into the ocean, and whether the Project has the potential to affect "marine environments". *See* UH Center Letter at 2. However, the UH Center provides no citations, documents, or maps to support this unverified statement. As further explained below, there is no proof to indicate that the Branch Stream flows into or otherwise connects to the Wailuku River. Rather, the Branch Stream flows into and terminates at the Kaumana bog and there is no known mapped or observed connection to Wailuku River and/or the ocean. Thus, the Project has not and will not affect "marine environments." *See* Section 2 at pg. 3.

As background, it is necessary to distinguish between the main "Ainako Stream" and the Branch Stream. In the upper reaches of the Ainako subdivision, many residents have adopted "Ainako Stream" as name for the present day main stream that originates at springs in the forest above Ainako Avenue and flows through the vicinity of Kokea, Koula and Kapaa Streets. As reflected in the base map data of 1935, which was used for TMK maps from that date through 1981 (*see* Exhibit "A", attached), the main "Ainako Stream" follows a route similar to the present day, at least to point of where it entered the Kaumana bog. In the bog, the main "Ainako Stream" connected to "Hilo Boarding School Ditch", which has no link on the map to Wailuku River. That ditch does not exist today. *See* Exhibit "B", attached.

Today, the main "Ainako Stream" originates at several robust springs in a forested area about 0.4 mile above Ms. Weight's Ainako Avenue Property. The "Branch Stream" then branches off of "Ainako Stream" at the upslope portion of Ms. Weight's Property. Both streams follow slightly diverging southwest courses (notably, away from Wailuku River) down-slope through Ainako subdivision for about 0.9 mile to a steep escarpment near the end of Kapaa Street where flow of both streams fall into a heavily forested bog, known as the Kaumana bog. There is no information, documents, or maps that define the flow of the streams beyond the escarpment. And, extremely dense, nearly-impenetrable vegetation covers the area within about a 0.3-mile radius, preventing reasonable foot access into the base of the escarpment.

Of relevance, there is an un-named stream, which apparently originates at a spring in the bog approximately 500 feet north from where "Ainako Stream" and the "Branch Stream" enter the bog at 600 foot-elevation. *See* Exhibit "B". The un-named stream flows through the bog on an easterly path and eventually merges with Wailuku River. It is possible that the UH Center may have confused the main "Ainako Stream" and the "Branch Stream" with this un-named stream.

In short, there is no direct evidence reflecting that the portions of either "Ainako Stream" or the "Branch Stream" of relevance to the Project have a nexus with Wailuku River

and ocean waters. Therefore, the Project at issue in the Permit Application has not and will not affect marine environments.

2. Biological Status of the Bog Stream System

In course of an informal survey of the extreme eastern end of the Kaumana bog (near where several small streams in the Kaumana bog discharge into the Wailuku River) on August 12, 2011, Mr. Scott Henderson observed biota in a variety of habitats in the streams and recorded the following: *Poecillia reticulata* (guppies, abundant), *Xiphorus helleri* (swordtails, uncommon *Archocentrus nigrofasciatus* (convict cichlid, abundant), *Rana catesbeiana* (bullfrog, common), *Procambarus clarkia* (American swamp crayfish, common) and *Macrobrachium lar* (Tahitian prawn, one individual). No native fish, crustaceans or mollusks were seen. The abundance of non-native aggressive convict cichlids in waters of the downstream portions of the Kaumana bog presents a major potential barrier to upstream migration of juvenile native fish.

In a recent study of the Kaumana streams ecosystems in the same area as that examined by Mr. Scott Henderson and in an area close to origin of "Ainako Stream", the investigators recorded no native fish species. (*See* Potential Effects of an Invasive Nitrogen-Fixing Tree on a Hawaiian Stream Food Web. 2010. T.B. Atwood,T. N. Wiegner, J. P. Turner, & R. A. MacKenzie. Pacific Science.)

In the stream system within the bog, the dominance of aquatic biota by introduced species, particularly by highly-predatory convict cichlids, considerably reduces the likelihood that upslope streams in or near the bog could be re-colonized by less-competitive native species.

3. Is the Branch Stream "(1) a naturally-occurring tributary of Ainako Stream that was subsequently altered by humans, or (2) a human-constructed diversion of Ainako Stream that did not originate as a natural watercourse"?

The Branch Stream is likely a *human-constructed diversion* of Ainako Stream that did not originate as a natural watercourse. Evidence supporting this fact is contained in the 1924 field map where the origin (diversion point) is shown as a "temporary flume diversion" and that the Branch Stream is not depicted in either the 1924 field map or the 1935 base map. Exhibits "A" and "C".

This conclusion is further supported by data presented to the Water Commission by the Applicants, which show that under average to low flow conditions of Ainako Stream,

water would not flow into the Branch Stream concourse from Ainako Stream without the existence of the man-made loose-rock dam placed at the diversion point. In practice, water flow would have been turned on or off through the diversion by the Hilo Sugar Company dependent on their needs for flume flow. This would have been accomplished by opening and closing the gate and by adjusting height of the loose-rock dam.

Notably, the diversion flood control gate that provides water to the Branch Stream remains at the same "historic" opening that it has been set at for several decades (5-inch gap) providing unchanged proportional level of flow diversion from "Ainako Stream".

4. Request for Information on the "historic range of surface and subsurface flow conditions" of the Branch Stream.

As the Branch Stream does not flow into nor is it otherwise connect to the Wailuku River (*see supra* at 1-2), the UH Center's request for historic flow conditions and data is unnecessary. *See* UH Center Letter at pg. 2. Additionally, such a request would pose an unfair and onerous burden on the Applicants to be responsible for the extensive time and resources needed to conduct such research, studies, and monitoring.

Neither the Applicants nor the Water Commission is aware of any party historically measuring or studying the flow of the Ainako streams systems (aside from the measurements made by Mr. Scott Henderson over the last two years). The After-the-Fact Stream Channel Alternation Permit Application contain the stream flow data requested by the Water Commission (*see* pages. 9-13 of application) and this flow data contains information from 2009-2011, which is more than sufficient to assess the effects of the diversions.

Importantly, as emphasized in the Permit Applications, the water use for the Project is non-consumptive (i.e., the same amount of water flow diverted is returned to the stream) and, thus, the Project does not impact any other stream users.

5. Information on Registered Users of the Branch Stream

The Applicants are not aware of any registered users of the Branch Stream. There are only two registered water users of the "Ainako Stream", but the Applicants' proposed (or performed) actions related to the Project will have no measurable effects on "Ainako Stream" flow.

As an aside, the Flood Control Gate and Rock Diversion Dam have been properly registered by Ms. Weight with the Water Commission. On May 7, 2010, Ms. Weight registered

the Rock Diversion Dam, Flood Control Gate, and the ponds on her property with the Water Commission pursuant to Haw. Rev. Stat. § 174C-92. She also filed a Declaration of Use to confirm that her use of the Branch Stream water was "reasonable and beneficial" under Haw. Rev. Stat. § 174C-26 and -27.

On July 9, 2010, the Commission responded and determined that "[t]he rock dam diversion and flood control gate on Ainako Stream were developed and in use before 1987 when the State Water Code was enacted into law," and issued a Declaration of Existing Water Use for the diversion dam and flood control gate. The Water Commission also determined that the first pond on Ms. Weight's property pre-dated the Water Code, and issued a Declaration of Existing Water Use for that pond as well. The Commission found that the other two ponds were not "existing" uses because they had been built in the last two years, and therefore postdated the enactment of the Water Code in 1987.

Additionally, the Permit Applications have been submitted for other improvements that include retaining walls, an in-stream pond, and an off-stream flow-through sealed pond.

6. The Plugging of the Gaps in the Submerged Paheohoe Interlayer

With respect to the UH Center's question about the nature of the activity to the plugging of gaps in the submerged paheohoe interlayer, this activity is not construction and it does not divert any water from the stream. Rather, this action is taken by the Applicants as mere routine maintenance and the Applicants will be requesting the Water Commission to remove this action from the purview of the Project at issue in the Permit Applications.

As background, over periods during the last few decades, the Branch Stream is subjected to natural annual cycles typically consisting of several months of low to moderate water flow interrupted by one or more short-term storm-flow events. During lower water flow, vegetative litter gradually is drawn into leak points in the stream bed where substantial water flow is normally diverted (lost) into voids in the paheohoe rock structures. Over extended periods of moderate to low flow, these leak points gradually become plugged with litter; and leakage declines, conserving water flow in the stream channel. However, when storm flow occur, the stream channel is scoured and sealing debris is washed out of the leak point cracks, causing substantial resumption of flow loss in the stream. That flow loss again gradually declines as litter accumulation occludes the leakage gaps.

In the process of searching for appropriate points along the Branch Stream to measure flow rates, Mr. Henderson observed several locations where a significant portion of

the stream flow was lost into gaps in paheohoe layers, but reemerged a few feet downstream. Thus, at those points, a portion of the stream flow is lost for a short distance. However, three major water loss points were noted where flow was lost but did not re-enter the stream.

It was determined that permanent closure of the leak points would conserve long-term flow through the Branch Stream for purposes of ecological stability and aesthetic enhancement. The three leak point patches were performed during periods when the Branch Stream water flow had ceased or had dropped below level of the patch action. Thus, there were no effects on water quality (chemistry or sedimentation) within the Branch Stream channel.

As an action to conserve in-stream flow in the Branch Stream, with no significant probability of effect on any nearby surface flow features, this was deemed an appropriate repair/maintenance to conserve flow in this stream (which is a pre-1988-man-made stream channel). The action prevents water waste on the stream and increases reasonable beneficial water use by other parties downstream of the patches.

7. Sections 402 and 404 of the Clean Water Act and the Best Management Practice Plan Are Inapplicable to the Project.

As more fully set forth in the Permit Applications, Sections 402 and 404 of the Clean Water Act and the Best Management Practice Plan are not applicable to the Project.

First, Section 404 of the Clean Water Act, related to the Harbors and Rivers Act, does not apply because the Branch Stream is not classed as United States waters, *i.e.* it does not have oceanic connection as it terminates in a bog at 600-feet elevation. *See supra* at pgs. 1-3 and Exhibits "A" and "B".

Second, Section 402 of the Clean Water Act and the Best Management Practice Plan, which require a permit for the discharge of pollutants, is not applicable because the Project has not, does not, and will not discharge nor cause any pollutants to enter in the Branch Stream. Rather, the Project diverts and then returns the water to the Branch Stream in the same condition.

The movement, placement, and mortaring of rocks in construction of the retaining walls and repair of stream leaks were performed during periods of low to nil stream flow. This strategy minimized contamination of the stream flow with construction-related sediment and mortar products. Base layers of retaining wall rock were dry-stacked to minimize placement of mortar near the stream bed. If the Applicants were required to demolish the

retaining walls and stream patches, disturbance of surrounding substrates would be unavoidable and significant, and would likely cause elevated levels of turbidity in the stream. Additionally, long-term benefits of soil erosion control and reduced herbicide use along the stream margins would not be realized.

Feel free to contact me if you have any additional questions or need any additional information related to the Permit Applications.

Very truly yours,

PAUL ALSTON
MEI-FEI KUO

(Enclosures Exhibits "A" – "C")

MFK:blk

cc:
(Via E-Mail)
Mr. Robert Chong, Commission on Water Resource Management
Mr. W. Roy Hardy, Commission on Water Resource Management
Ms. Leslie Aina Weight
Mr. Robert Scott Henderson

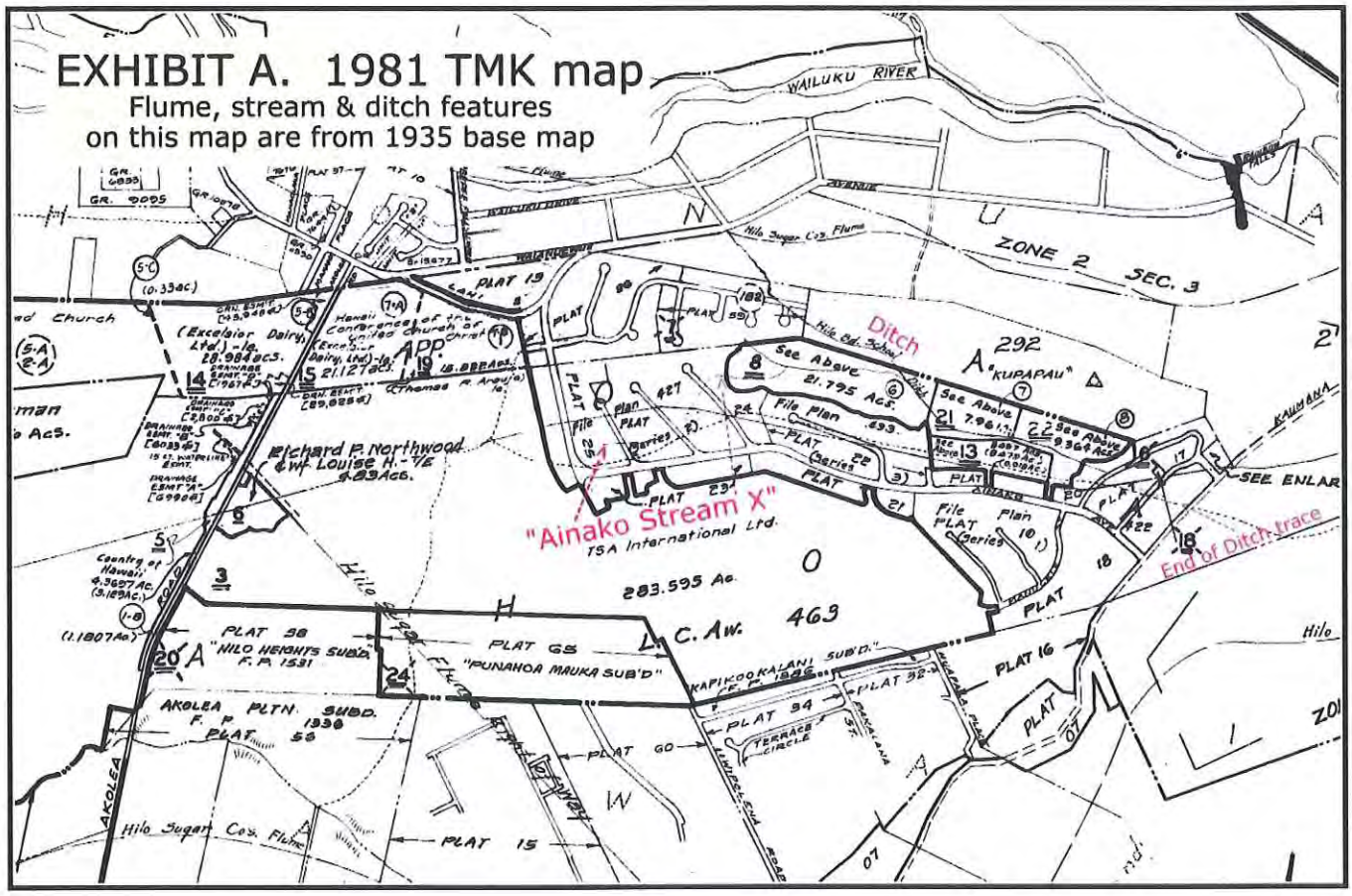
EXHIBIT A. 1981 TMK map
Flume, stream & ditch features
on this map are from 1935 base map
WAILUKU RIVER
ZONE 2 SEC. 3
Hilo Sugar Co's Flume
Ditch
"Ainako Stream X"
TSA International Ltd.
End of Ditch trace
283.595 Ac.
C. Aw. 463
Richard P. Northwood & Wf. Louise H. T/E
3.89Acs.
PLAT 58
"NILO HEIGHTS SUBD."
F. P. 1531
PLAT 65
"PUNAHOA MAUKA SUB'D"
KAPIICOO KALANI SUB'D."
F. P. 1846
AKOLEA PLTN. SUBD.
F. P. 1338
PLAT 56
PLAT 54
PLAT 32
PLAT 16
PLAT 60
PLAT 15
TERRACE CIRCLE
AKOLEA
Hilo Sugar Co's Flume
Hilo
SEE ENLAR
KAUMANA
"KUPAPAU"
292
See Above
21.795 Acs.
7.961 Ac.
9.369 Ac.
(Excelsior Dairy) Ltd. - Ig.
28.984 acs.
Hawaii Conference of the United Church of Christ
(Thomas M. Angus) Ig.
Country of Hawaii
4.3607 Ac.
(3.189Ac.)
(1.1807Ac.)

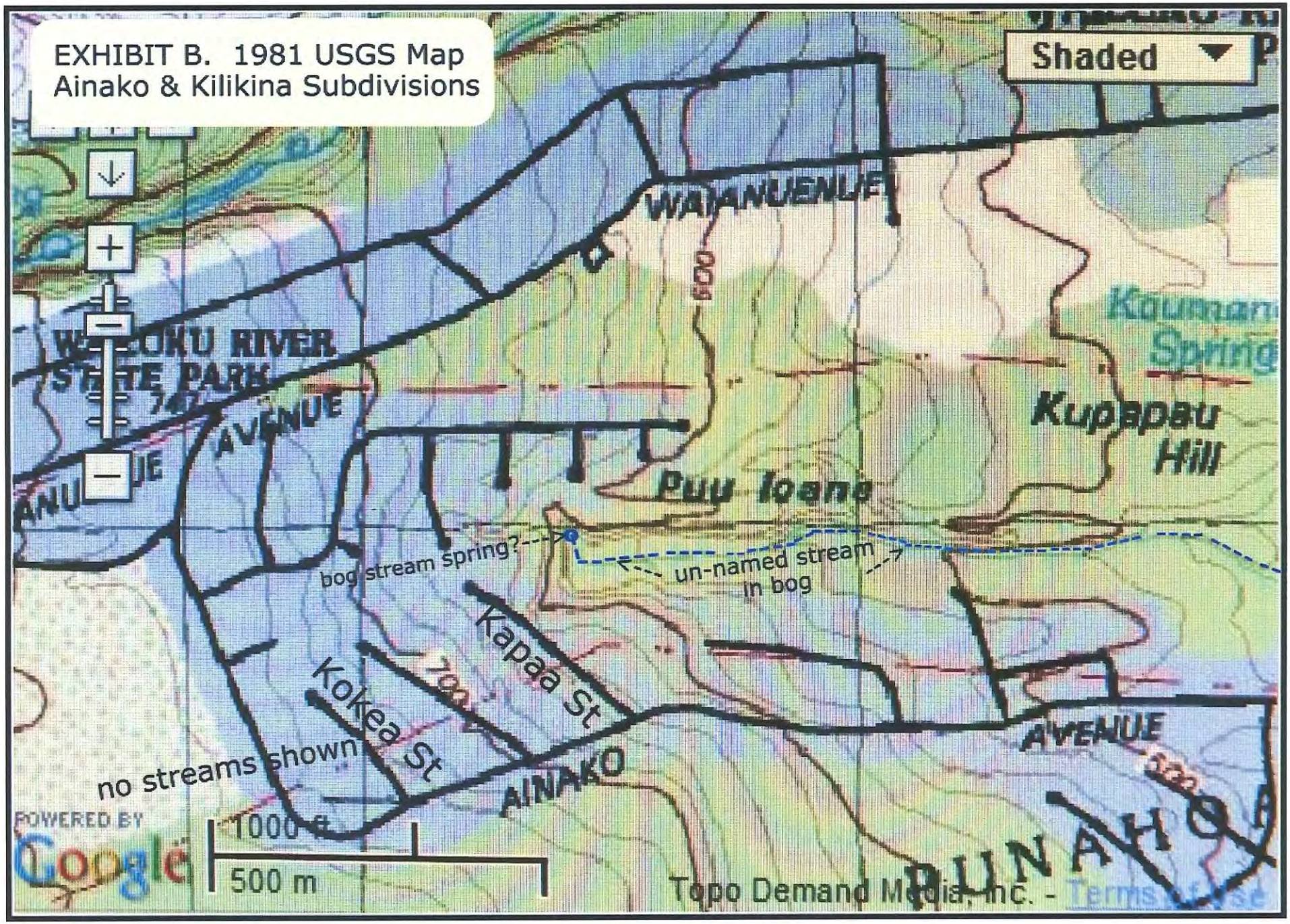
EXHIBIT B. 1981 USGS Map
Ainako & Kilikina Subdivisions
Shaded
WAIANUENUE
600
Kaumana
Spring
Kupapau
Hill
Puu Ioane
AVENUE
bog stream spring?
un-named stream
in bog
Kapaa St
700
Kokea St
no streams shown
AINAKO
AVENUE
500
PUNAHOA
POWERED BY
Google
1000 ft
500 m
Topo Demand Media, Inc. - Terms of Use

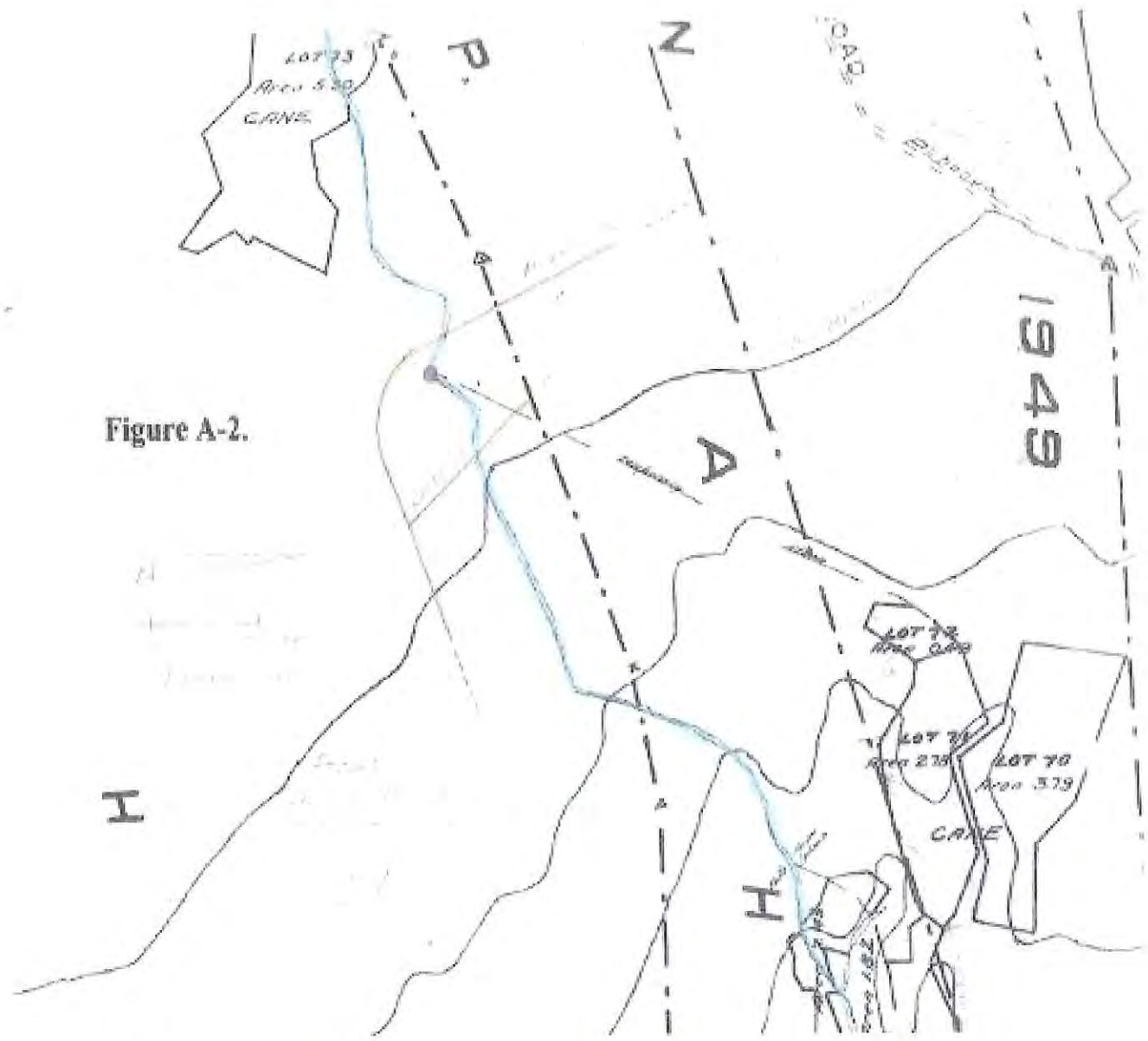

Figure A-2.

Figure A-2. Hilo Sugar Company Plantation Map #10, 1924

("Temporary flume" line extends SE from present day stream origin point at Ainako Stream [blue line, present gate/origin point] to past sugar cane lots to northeast; present day route of Branch Stream is approximately 12 degrees east of that route. Present day sections of Ainako Ave & Kokea St have been added.)

EXHIBIT C

ALSTON HUNT FLOYD & ING LAWYERS

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www.ahfi.com

August 18, 2011

Via E-mail (Deserie.M.Bala@usace.army.mil) and U.S. Mail

Mr. George P. Young, P.E.
Chief, Regulatory Branch
Department of the Army
U.S. Army Corp of Engineers, Honolulu District
Fort Shafter, Hawaii 96858-5440

Ms. Deserie M. Bala
Department of the Army
U.S. Army Corp of Engineers, Honolulu District
Fort Shafter, Hawaii 96858-5440

Re: Response Letter to the Department of the Army, U.S. Army Corps of Engineers' Comments to Petitioners Leslie Aina Weight and Robert Scott Henderson's Application for an After-the-Fact Stream Channel Alteration Permit, After-the-Fact Stream Diversion Works Permit, and Petition to Amend Instream Flow Standard Ainako Branch Stream Hilo, Hawaii TMK: 2-5-025: 005, 014, and 006

Dear Mr. Young and Ms. Bala:

On behalf of Ms. Leslie Aina Weight and Mr. Robert Scott Henderson (collectively, the "Applicants"), this letter responds to the June 30, 2011 letter from the Department of the Army, U.S. Army Corps of Engineers ("US Army") to Mr. W. Roy Hardy, Hydrologic Program Manager for the State of Hawaii, Commission on Water Resource Management ("Water Commission").

We recently received a copy of the US Army's letter commenting on the Applicants after-the-fact permit applications and petition to amend the instream flow (collectively, "Permit Applications") from Mr. Hardy, who forwarded it to Mr. Henderson by e-mail on August 1, 2011.

We have the following responses to the questions and concerns set forth in the US Army's letter commenting on the Project and Permit Applications:

Mei-Fei Kuo
Phone: (808) 441-6131
Fax: (808) 524-4591
E-mail:
MKuo@ahfi.com

1. Information on the Hydrologic Connectivity between Ainako Stream, the Branch Stream, the "Unnamed Stream" and Wailuku River

In your letter, your primary concern is whether the section of Ainako Stream at issue related to the Project (hereinafter, the "Branch Stream") is connected to the "unnamed stream which is a tributary to the Wailuku River" because of the fact that Wailuku River flows into the ocean. *See* US Army Letter at 1. As further explained below, there is no proof to indicate that the Branch Stream flows into or otherwise connects to either the "unnamed stream" or the Wailuku River. Rather, the Branch Stream flows into and terminates at the Kaumana bog and there is no known mapped or observed connection of the Branch Stream to the "unnamed stream", Wailuku River, and/or the ocean. Thus, the Project has not and will not affect any navigable waters of the United States under the Rivers and Harbors Act of 1899, Section 404 of the Clean Water Act. *See* Application for an After-the-Fact Stream Channel Alteration Permit at Section A-3.

As background, it is necessary to distinguish between the main "Ainako Stream" and the Branch Stream. In the upper reaches of the Ainako subdivision, many residents have adopted "Ainako Stream" as name for the present day main stream that originates at springs in the forest above Ainako Avenue and flows through the vicinity of Kokea, Koula and Kapaa Streets. As reflected in the base map data of 1935, which was used for TMK maps from that date through 1981 (*see* Exhibit "A", attached), the main "Ainako Stream" follows a route similar to the present day, at least to point of where it entered the Kaumana bog. In the bog, the main "Ainako Stream" connected to "Hilo Boarding School Ditch", which has no link on the map to Wailuku River. That ditch does not exist today. *See* Exhibit "B", attached.

Today, the main "Ainako Stream" originates at several robust springs in a forested area about 0.4 mile above Ms. Weight's Ainako Avenue Property. The "Branch Stream" then branches off of "Ainako Stream" at the upslope portion of Ms. Weight's Property. Both streams follow slightly diverging southwest courses (notably, away from Wailuku River) down-slope through Ainako subdivision for about 0.9 mile to a steep escarpment near the end of Kapaa Street where flow of both streams fall into a heavily forested bog, known as the Kaumana bog. There is no information, documents, or maps that define the flow of the streams beyond the escarpment. And, extremely dense, nearly-impenetrable vegetation covers the area within about a 0.3-mile radius, preventing reasonable foot access into the base of the escarpment.

With respect to the concerns of the US Army, there is an "unnamed stream", which apparently originates at a spring in the bog approximately 500 feet north from where "Ainako Stream" and the "Branch Stream" enter the bog at 600 foot-elevation. *See* Exhibit "B". The "unnamed stream" flows through the bog on an easterly path and eventually merges with Wailuku River. In short, there is no direct evidence reflecting that the portions of either "Ainako Stream" or the "Branch Stream" of relevance to the Project have a nexus with Wailuku River, the ocean waters, or any other navigable waters of the United States.

2. The Project Has Not and Will Not Affect Marine Environments and an Aquatic Resource Inventory is Not Necessary

In its letter, the US Army recommends that the Applicants "conduct an aquatic resource inventory [and t]he inventory should record any drainage feature, streams, ditches, gulches, wetlands, etc. . . . " *See* US Army Letter at 1. It appears that this suggestion is related to the US Army's concerns about whether the Branch Stream is connected to either the "unnamed stream" or Wailuku River, which flows into the ocean.

As the Project at issue in the Permit Application has not and will not impact or affect any navigable waters of the United States, it is not necessary to conduct an aquatic resource inventory. Additionally, such a request would pose an unfair and onerous burden on the Applicants to be responsible for the extensive time and resources needed to conduct such a study. It would also be difficult for the Applicants to conduct such a study, which would require access into and onto various privately owned properties and residences.

To alleviate the US Army's concerns on this issue, Applicants have information reflecting that the Project has not and will not affect marine environments. In course of an informal survey of the extreme eastern end of the Kaumana bog (near where several small streams in the Kaumana bog discharge into the Wailuku River) on August 12, 2011, Mr. Scott Henderson observed biota in a variety of habitats in the streams and recorded the following: *Poecillia reticulata* (guppies, abundant), *Xiphorus helleri* (swordtails, uncommon *Archocentrus nigrofasciatus* (convict cichlid, abundant), *Rana catesbeiana* (bullfrog, common), *Procambarus clarkia* (American swamp crayfish, common) and *Macrobrachium lar* (Tahitian prawn, one individual). No native fish, crustaceans or mollusks were seen. The abundance of non-native aggressive convict cichlids in waters of the downstream portions of the Kaumana bog present a major potential barrier to upstream migration of juvenile native fish.

In a recent study of the Kaumana streams ecosystems in the same area as that examined by Mr. Scott Henderson and in an area close to origin of "Ainako Stream", the

investigators recorded no native fish species. (*See* Potential Effects of an Invasive Nitrogen-Fixing Tree on a Hawaiian Stream Food Web. 2010. T.B. Atwood,T. N. Wiegner, J. P. Turner, & R. A. MacKenzie. Pacific Science.)

3. Sections 402 and 404 of the Clean Water Act Are Inapplicable to the Project

As more fully set forth in the Permit Applications, Sections 402 and 404 of the Clean Water Act are not applicable to the Project.

First, Section 404 of the Clean Water Act, related to the Harbors and Rivers Act, does not apply because the Branch Stream is not classed as United States waters, *i.e.* it does not have oceanic connection as it terminates in a bog at 600-foot elevation. *See supra* at pgs. 1-3 and Exhibits "A" and "B".

Second, Section 402 of the Clean Water Act, which requires a permit for the discharge of pollutants, is not applicable because the Project has not, does not, and will not discharge nor cause any pollutants to enter in the Branch Stream. Rather, the Project diverts and then returns the water to the Branch Stream in the same condition. Also, as background, the water use for the Project is non-consumptive (i.e., the same amount of water flow diverted is returned to the stream) and, thus, the Project does not impact any other stream users.

The movement, placement, and mortaring of rocks in construction of the retaining walls and repair of stream leaks were performed during periods of low to nil stream flow. This strategy minimized contamination of the stream flow with construction-related sediment and mortar products. Base layers of retaining wall rock were dry-stacked to minimize placement of mortar near the stream bed. If the Applicants were required to demolish the retaining walls and stream patches, disturbance of surrounding substrates would be unavoidable and significant, and would likely cause elevated levels of turbidity in the stream. Additionally, long-term benefits of soil erosion control and reduced herbicide use along the stream margins would not be realized.

4. Telephone Call Between Mr. Henderson and Ms. Bala on August 10, 2011

On August 10, 2011, Mr. Henderson, one of the Applicants, spoke to Ms. Bala about the US Army's concerns in its letter. Mr. Henderson described the known origin, paths and discharge points of the main "Ainako Stream", the "Branch Stream" and the "unnamed stream" shown in the USGS map that apparently originates at a spring in the bog. Mr. Henderson explained that there are no known maps or direct evidence that show linkage of the

"Branch Stream" with the bog discharge into Wailuku River. Mr. Henderson also mentioned that access into the central bog areas is presently not allowed by landowners.

Ms. Bala stated to Mr. Henderson that the US Army will send a revised letter to the Water Commission on its comments to the Permit Applications citing the above information that Mr. Henderson recounted to her on issues of the known origin and path of the "Branch Stream". Ms. Bala stated that based on the above information, the revised letter would include her opinion that given there is no documented linkage of the "Branch Stream" to the Wailuku River, the 404 Permit process would not be required.

As the Water Commission has scheduled a meet on the Permit Applications for August 31, 2011, we would greatly appreciate the US Army revising its letter to Mr. Hardy and submitting it to the Water Commission sometime next week so that the letter can be reviewed and considered in advance of the Commission's meeting.

Thank you for your assistance and cooperation on this.

Feel free to contact me if you have any additional questions or need any additional information related to the Permit Applications.

Very truly yours,

PAUL ALSTON
MEI-FEI KUO

Enclosures (Exhibits "A" and "B")

MFK:blk

cc:
(Via E-Mail)
Mr. Robert Chong, Commission on Water Resource Management
Mr. W. Roy Hardy, Commission on Water Resource Management
Ms. Leslie Aina Weight
Mr. Robert Scott Henderson

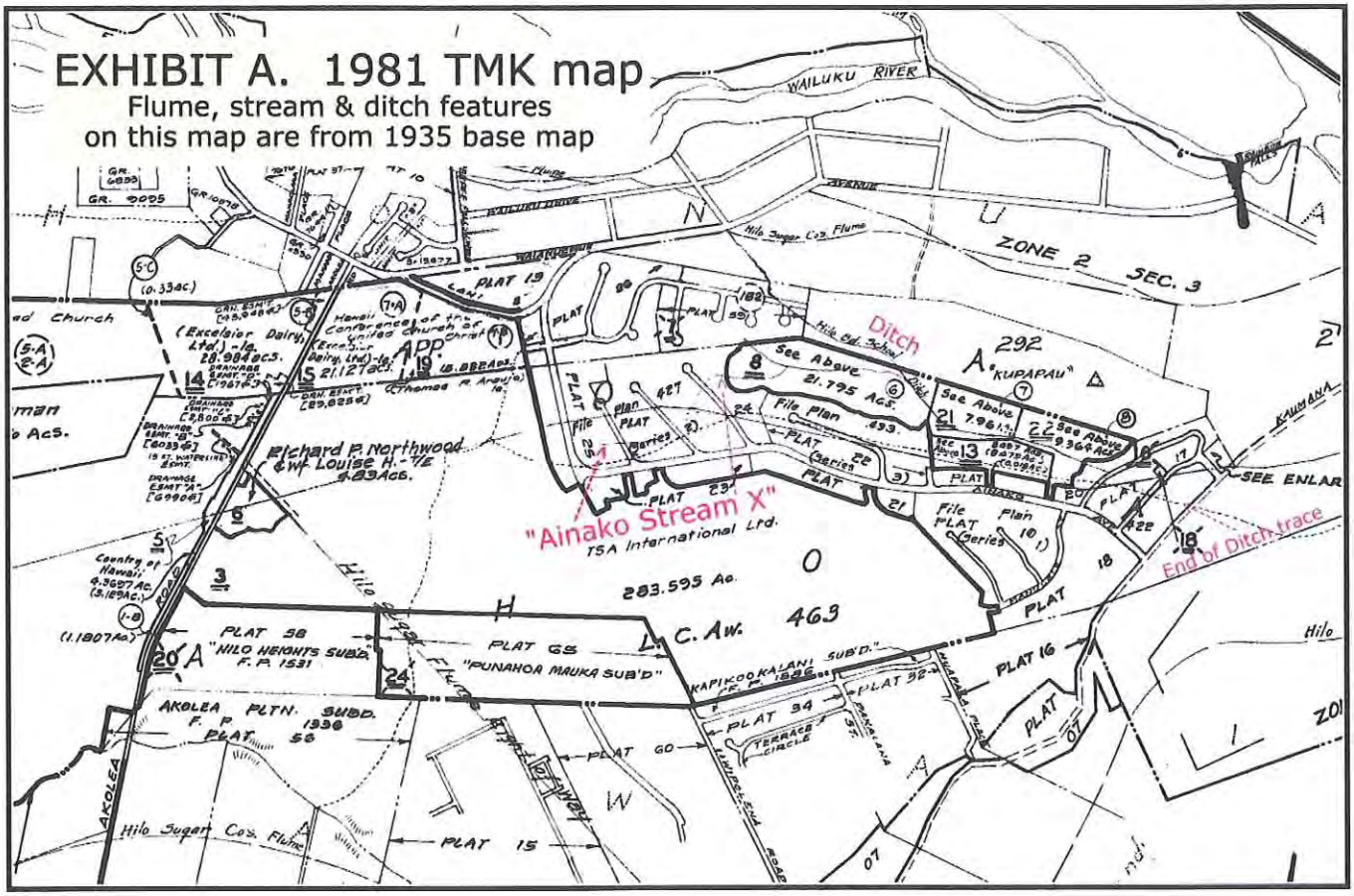
EXHIBIT A. 1981 TMK map
Flume, stream & ditch features
on this map are from 1935 base map
WAILUKU RIVER
Hilo Sugar Co's Flume
ZONE 2 SEC. 3
Ditch
"KUPAPAU"
292
See Above
21.795 Acs.
"Ainako Stream X"
TSA International Ltd.
283.595 Ac.
C. Aw. 463
Richard P. Northwood & wf Louise H. - T/E 4.83Acs.
Hawaii Conference of the United Church of Christ
(Excelsior Dairy, Ltd.) - fee 20.984acs.
PLAT 58
"HILO HEIGHTS SUBD." F. P. 1531
PLAT 65
"PUNAHOA MAUKA SUB'D"
KAPIOOLANI SUB'D." F. P. 1826
AKOLEA PLTN. SUBD. F. P. 1936
PLAT 19
PLAT 34
PLAT 16
PLAT 15
PLAT 60
TERRACE CIRCLE
AKOLEA
KAUMANA
SEE ENLAR
End of Ditch trace
Hilo

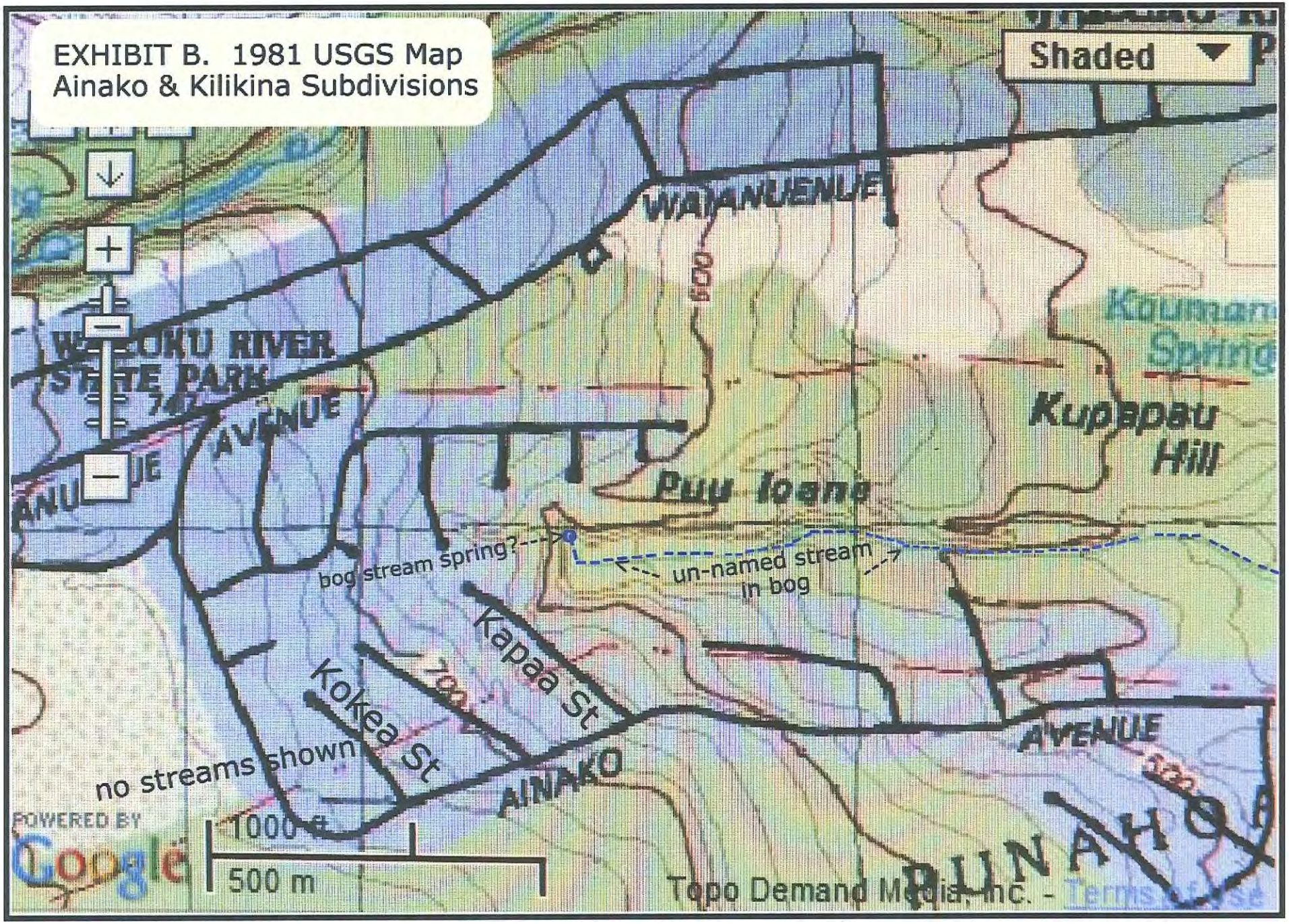
EXHIBIT B. 1981 USGS Map
Ainako & Kilikina Subdivisions
Shaded
WAIANUENUE
AVENUE
Puu Ioane
Kupapau Hill
bog stream spring?
un-named stream in bog
Kapaa St
Kokea St
no streams shown
AINAKO
AVENUE
POWERED BY Google
1000 ft
500 m
Topo Demand Media, Inc.

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September 9, 2011

Via Hand-Delivery and E-Mail

Mr. Robert Chong
Mr. W. Roy Hardy
Commission on Water Resources Management
1151 Punchbowl Street, Room 227
Honolulu, Hawaii 96809

Re: Supplemental Submission to Water Commission to Correct Misrepresentations and Clarify Information in Final Field Investigation Report for Leslie Aina Weight/Scott Henderson (Report No. FI2011031001), dated August 12, 2011

Regarding Complaint/Dispute Resolution CDR.2769.8
Diversion on Ainako Stream and Ainako Branch Stream, Hilo, Hawaii
TMK: (3) 2-5-024: 005, 006, and 014

Dear Mr. Chong and Mr. Hardy:

On behalf of Ms. Leslie Aina Weight and Mr. Robert Scott Henderson (collectively, the "Respondents"), this letter supplements our comments and concerns raised in our May 24, 2011 and August 12, 2011 letters to the State of Hawaii, Commission on Water Resource Management ("Water Commission") on the Field Investigation Reports issued in this dispute. Attached as Exhibits "1" and "2" are copies of the Respondents' May 24, 2011 and August 12, 2011 Letters.

A Final Field Investigation Report (Report No. F12011031001) for the Respondents ("Final Henderson/Weight Report") was sent out by the Water Commission's Staff on August 12, 2011. This Final Report continues to contain numerous misrepresentations and inaccuracies despite the Respondents' prior clarifications and explanations on the misrepresentations, inaccuracies, and other errors in both draft Field Investigation Reports. *See* Exhs. "1" and "2", Respondents' May 24, 2011 and August 12, 2011 Letters.

EXHIBIT 8

Therefore, the Water Commission's Staff is permitting Respondents to submit this supplemental letter to address their continuing concerns with the Final Henderson/Weight Report. Pursuant to our understanding, this supplemental letter will be forwarded to the Water Commission as part of the documents relevant for its review and determination in considering the allegations in Jung *et. al.*'s Complaint.

Additionally, Respondents' disagree with the Water Commission's Staff's position that Respondents can only comment upon their own Field Investigation Report (*see* Exh. "2"), and respectfully requests the Water Commission to review and consider the Respondents' comments to the Complainants Jung *et. al.*'s initial draft Field Investigative Report, which are further set forth in the May 24, 2011 letter (*see* Exh. "1"). Not only does the Jung Field Investigation Report continue to contain numerous incomplete and incorrect statements, but also that report contains several issues which were not raised in the initial Complaint and appeared for the very first time in the Jung Field Investigative Report. It will be highly prejudicial and gravely unfair to the Respondents if the Water Commission fails to consider and incorporate the Respondents' comments on the errors, misrepresentations, and new statements in the Jung Field Investigative Report.

A. Respondents' Comments, Corrections, and Clarifications on the Final Henderson/Weight Field Investigation Report

To properly reference the Respondents' comments, corrections, and clarification to the Final Henderson/Weight Report, attached as Exhibit "3" is a copy of the Final Henderson/Weight Report with numeric notations, which link the following comments to the statements in the Report.

Item No. 1. <u>CWRM Staff's Statements in Final Henderson/Weight Report</u>:

SH [Scott Henderson] *showed RH* [Roy Hardy] *and RC* [Robert Chong] *a 1947 survey map on his laptop computer showing a Y-shaped line labeled "stream" (Branch Stream #2). 1947 survey map also showed a dry side channel on Branch Stream #1 and a lower run of Branch Street #1a. See Exhibits and 6.*

<u>Respondents' Comments, Corrections, and Clarifications to Statement</u>:

The Respondents' comments to these statements in the initial draft of the Henderson/Weight Report are omitted by the CWRM's Staff. Respondents hereby provide the

Water Commission with their comments to these statements, which are relevant to description of Branch Stream 2.

The channel has **never** had a connection to the Ainako Stream, and the southern chord of the boundary line that links to the stream is **not** part of the stream (as claimed by DO) or the dry channel. The chord is a straight line defined on the TMK map with surveyed vector of 19° 44 min., 84. 82 ft. There are long-existing property pins marking both ends of this chord and they were shown to RH and RC as part of the field investigation. There is **no** existing stream bed on this chord and **no** material evidence that stream bed ever existed along that line.

All of this information was recounted by SH during the site visit with RH and RC and it is critical to the Respondents' position in countering the allegations by Jung *et. al.*

Item No. 2. **CWRM Staff's Statements in Final Henderson/Weight Report:**

SH showed RH and RC 1957 and 1958 photos of the northeast corner of the AW's [Aina Weight] *property which showed the Ainako Branch Stream #1b across AW's property. There were no dotted lines drawn on the photos.*

Respondents' Comments, Corrections, and Clarifications to Statement:

These statements contain incomplete information, which the Respondents would like to further clarify.

Although these statements are true and relevant, there are significant omissions from the CWRM Staff related to SH pointing out to RH and RC the locations where Branch Stream 2 and Branch 1a supposedly/allegedly existed. As SH informed RH and RC, those alleged stream features clearly **do not** and **did not** exist at those points.

At time of the field visit, it is correct that there were no "dotted lines drawn on the photos" to depict the alleged routes. Rather, the dotted lines were later added to the images by the Respondents for clarity and as part of their comments to the draft Field Investigation Report ("FIR") (*See* Exh. "1", at Exhibit "B" to May 24, 2011 Letter). Those lines were obtained by running a taut line between the property pins that delineated each route and transcribing those routes to the photos. The alleged Branch Stream 2 route as claimed by DO runs as a straight line between the property pins delineating the surveyed chord. That line originates on the mortared rock levee, 10.5 feet west from termination of the solid concrete levee. The survey line does **not** run along the base of the solid concrete buttress, nor is it

parallel to the buttress. Its route *diverges* from point where the buttress joins the solid concrete levee, and is 10.5 feet to 18 feet away from the buttress (toward foreground in the photographs.)

The photographs provided in the Respondents' May 24 comment letter were shown to RC and RH during the field visit, but they were omitted by CWRM from the final FIR. Additionally, other photographs presented to the CWRM also do **not** show any gaps or gates along the stream-side mortared levee face. (*See* Exh. "1", photographs at Exhibit "C" to May 24, 2011 Letter.)

Item No. 3. **CWRM Staff's Statement in Final Henderson/Weight Report:**

SH said that he could provide testimony from other people to verify the existence of the sluice gate.

Respondents' Comments, Corrections, and Clarifications to Statement:

This is an incorrect statement that was not previously contained in the draft FIR.

As clarification, SH does **not** recall making this statement. Respondents have provided to the CWRM Staff signed statements from several individuals testifying to the pre-1970 existence of flood gate and dam, and the non-existence of Branch 1a and Branch 2. These statements were provided by Scott Henderson, Aina Weight, Abel Awong, and Robert and Sue Irvine. *See* Exhibits G–J to Respondents' Response to the Complaint/Dispute Resolution submitted to CWRM on February 17, 2011. Additionally, an email from Bret Marsh to RC, dated March 22, 2011, reiterated the same comments of the above individuals.

Item No. 4. **CWRM Staff's Statement in Final Henderson/Weight Report:**

1958: Dr. Henderson (SH's father) and his family moved in to 51 Kokea Street (004).

Respondents' Comments, Corrections, and Clarifications to Statement:

Respondents provide the following corrections and clarifications to this statement.

Dr. Henderson departed the property located at 51 Kokea Street in 1972 (he only lived on the property for 14 years). SH left 51 Kokea St. in 1962 (he only lived on the property

for four years). AW did **not** "live continuously at 1000 Ainako Ave. since 1958". As clarification, AW has lived continuously on the property since 1995.

Item No. 5. **CWRM Staff's Statement in Final Henderson/Weight Report:**

SH mentioned that Fraleigh wanted more flow even back in the 1980's.

Respondents' Comments, Corrections, and Clarifications to Statement:

Respondents provide the following corrections to this statement.

SH did **not** mention that Fraleigh wanted more flow even back in the 1980s. In fact, SH did **not** live in Hilo in the 1980s and **has never had any contact** with Fraleigh.

Item No. 6. **CWRM Staff's Statement in Final Henderson/Weight Report:**

Metal bar attached to gate has seven (7) holes drilled every inch or so from top to bottom of bar to allow gate to be raised or lowered to allow an adjustable flow control.

Respondents' Comments, Corrections, and Clarifications to Statement:

Respondents provide the following corrections to this statement, which was previously provided in the Respondents' comments to the draft FIR in the May 24 letter, but not incorporated into the Final Henderson/Weight Report by the CWRM Staff.

SH did **not** say that the "...holes were drilled every inch or so from top to bottom of bar to allow gate to be raised or lowered to allow an adjustable flow control." This was a quote by RC in an early April telephone conversation, when RC asked SH what the function of the multiple adjustment holes was. SH explained that when rebuilding the gate, he was unsure what distance on the bar would equate to the "historic" four-inch gate gap and, therefore, he simply drilled holes along the entire length. **The holes have not been used to apply variable adjustment of flow through the gate,** only to set gate level at historic (2 to 4 decade) level of 3 ½ - 4 inches. *See* Exh. "4", attached hereto and previously produced to the CWRM Staff, Report by S. Henderson, entitled "Ainako Stream and Branch Stream (Hilo, Hawaii) Historical Notes & Physical Features", March 2010 at pgs. 4, 5, and 8 and Figures 6 and 7.

Item No. 7. **CWRM Staff's Statements in Final Henderson/Weight Report:**

October 2009: Dora Okazaki called SH about removing dam on Branch Stream 1b.

- *DO* [Dora Okazaki] *said that DJ's* [David Jung] *lawyer would file a complaint with the DLNR if AW did not remove the dam.*

Respondents' Comments, Corrections, and Clarifications to Statement:

These statements contain completely erroneous information that has been altered by the CWRM Staff. The Respondents provided detailed information on these statements in their comments to the draft FIR, but these comments were disregarded and omitted by the CWRM Staff.

As clarification, Dora Okazaki did **not** call SH about removing dam on Branch Stream **1b.** And DO did **not** say that DJ's lawyer would file a complaint with DLNR if **AW** did not remove the dam. The truth, as recounted during the field visit with RH and RC, is that DO called SH regarding threat made to DO by D. Jung to effect that she (DO) must remove the dam on her (**DO's**) stream property or DJ would have his lawyer take legal action.

Item No. 8. **CWRM Staff's Statement in Final Henderson/Weight Report:**

RH mentioned about the importance of finding the right stream location for flow measurements because the impact of eddies on the meter impeller blades.

Respondents' Comments, Corrections, and Clarifications to Statement:

This statement contains incomplete information. Significantly, the following relevant facts are omitted from the Final Henderson/Weight Report.

SH recognized the RH statement regarding impact of eddies on the meter measurements, and recounted that he (SH) had selected measurement stations based on criteria that included (1) narrow, readily-defined stream cross-section, (2) minimal to nil peripheral loss of water and (3) minimal turbulence.

Item No. 9. **CWRM Staff's Statement in Final Henderson/Weight Report:**

September 2010: SH patched two leaks (patch #2 and #3) during a stream dry-up even.

Respondents' Comments, Corrections, and Clarifications to Statement:

As clarification, the exact date of this patch work, which was September 17, 2010, was previously provided to the CWRM Staff. This exact date is significant because it further supports the Respondents' representation that the patch work was done on a date when the stream was dry.

Item No. 10. **CWRM Staff's Statements in Final Henderson/Weight Report:**

SH and AW mentioned several factors affecting the flow of Ainako Stream and Branch Stream #1:

- *In 1982, Akolea Ditch was built along Akolea Street to prevent downstream flooding of Ainako Stream.*
- *Earthquakes in 1960's and 1970's caused fissures in lava rock stream bed of Ainako Stream.*
- *Some additional stream flow in Branch Stream #1 was also lost down into the lava tubes due to the earthquakes.*
- *HI County BWS built Piihonu Well C located about 1 mile upstream.*

Respondents' Comments, Corrections, and Clarifications to Statement:

These statements misrepresent the information provided to CWRM Staff by the Respondents.

The Respondents mentioned that there were several factors **that possibly affected** the flow of Ainako Stream and the Branch Stream. However, the Respondents have no knowledge or information on the extent that these factors may have affected the flow.

Item No. 11. CWRM Staff's Statement in Final Henderson/Weight Report:

RH and RC verified dam diversion in Ainako stream made up of rocks, half-pipe and railroad tie.

Respondents' Comments, Corrections, and Clarifications to Statement:

To correct the incongruities in this statement, there is no such "half-pipe" material or structure in either the dam or the culvert. "Railroad tie" is a misnomer. There are two lengths of steel railroad **track** embedded in the bank stream, running the width of the dam. The higher of the two railroad track pieces defines the upper edge of the dam.

Item No. 12. CWRM Staff's Statement in Final Henderson/Weight Report:

AW said RO [Ron Okazaki] *told the Weights that they should dynamite this existing diversion gate to allow more flow into the branch stream.*

Respondents' Comments, Corrections, and Clarifications to Statement:

The following corrections to this statement, which were provided in the May 24 letter, were not made by the CWRM Staff: "AW said RO told the ~~Weights~~ AW that ~~they~~ she should dynamite . . . " Thus, this statement should read "AW said RO told AW that she should dynamite . . . "

Item No. 13. CWRM Staff's Statement in Final Henderson/Weight Report:

SH stated that he did not know who built the rock dam.

Respondents' Comments, Corrections, and Clarifications to Statement:

The CWRM Staff omitted the following relevant information in this statement, which was provided as part of the Respondents' comments to the draft FIR in their May 24 letter.

As clarification, it is correct that SH does not know who built the rock dam. However, SH previously informed the CWRM Staff that the dam has obviously been put in place since 2008 or 2009 storm events, as the loose-placed rocks would not be able to remain in place during typical storm flow. This clarification, which is omitted from the Final Henderson/Weight Report, is relevant to the Water Commission's determination of whether or not the dam was in place several decades ago or was recently placed.

Item No. 14. CWRM Staff's Statement in Final Henderson/Weight Report:

RH and RC noticed a pile of rocks (see Photo 70) near the tip of V-shaped levee wall that seemed different than the levee wall at the TMK map jog where the purported diversion for Branch Stream 1a was located.

Respondents' Comments, Corrections, and Clarifications to Statement:

This statement contains inconsistent and unsubstantiated statements and/or inferences.

As clarification, Photo 70 is taken at the tip of the V-shaped levee. However, this is **not** the position of "the purported diversion for Branch Stream 1a." The tip of the V-shaped levee is located 10.5 feet west of the intersection of surveyed chord line that intersects the levee. That chord is alleged by DO to be the origin route of a section of Branch Stream 2 that previously existed.

Assuming this is the area of interest addressed by CWRM Staff in the Final Report, it is unclear what is meant by the statement that "a pile of rocks . . . near the tip of V-shaped levee that seemed different than the levee wall at the TMK jog". To the contrary, Photo 70 does nothing to indicate any "*difference*" between the rocks near the tip of the V levee and the rocks at the levee wall at the jog. Additionally, this location is not relevant to any aspect of the Complaint because the alleged origin of the Branch Stream 2 is 10.5 feet west of the location of area in Photo 70.

Moreover, several stream-side and land-side photographs of the alleged Branch Stream 2 origin point were attached to the Respondents' comments to the draft FIR. *See* Exh. "1", May 24, 2011 Letter at photos attached as Exhibit "D". These photographs show **no** visually distinguishable anomalies in the wall sections of alleged origin points of Branch Streams 2 or 1a. As previously explained to the CWRM Staff, "the rocks and mortar that occur near the 'tip' are not different from rocks and mortar that occur along the upstream portion of the mortared level"; however, the loose rocks (used as back-fill along the landward edge of the levees within about 60 feet of the 'V' buttress) have been disturbed by several years of invasion by a ginger patch and its recent removal." *See* Exh. "1", May 24, 2011 Letter at photos attached as Exhibits "C" and "D". AW pointed this fact out to CWRM Staff during the site visit on March 11, 2011.

The actual property pins (chord markers) that have been in place since Dr. Weight purchased the property in the 1950s are shown in those photographs. These relevant photographs (contained in Exhibit "D" to the May 24, 2011 Letter) were not incorporated into Final Henderson/Weight Report, even though those structures and view-planes were examined and discussed in considerable detail during the field visit and positions of the property pins were pointed out.

Notably, RC/RH comment in the Final Henderson/Weight Report (at the sentence below item 10) that "There did **not** appear to be any recent work along the levee to close Branch Stream 1a. See photos 52-57". This sentence contradicts the statement above by RC and RH that they noticed a pile of rocks that seemed "different", thus, incorrectly inferring that there had been recent work.

Item No. 15. <u>CWRM Staff's Statements in Final Henderson/Weight Report</u>:

SH, AW, RH and RC inspected Ainako Branch Stream #1b at Kokea Street.

- *RH and RC noticed a pile of neatly stacked rocks along the lower reach of Branch Stream #1. See photo 108.*
- *RH asked AW if this recent work was in the stream.*
- *AW said that the rocks had been recently stacked.*

<u>Respondents' Comments, Corrections, and Clarifications to Statement</u>:

These statements were not previously included in the draft FIR and they improperly raise new allegations and claims by the Complainants, which the Respondents have not had a fair and adequate opportunity to respond to.

Respondents hereby clarify that the "neatly stacked rocks along the lower reach of Branch Stream 1b" is a wall that has been in place for several decades and was covered by dense growth of alamanda vine and ginger. That vegetative cover was removed on February 13, 2009, uncovering a dry-stacked rock wall in moderate disrepair. Damaged sections of the walls were repaired by re-stacking rock. The footprint of the wall was not changed. This re-stack was simply repair/maintenance work.

Item No. 16. CWRM Staff's Statements in Final Henderson/Weight Report:

3/21/11 DJ faxed copy of unsigned letter to property owners along Ainako Stream dated 3/19/11 stating that there may be significant reduction in Ainako Stream if diversion gate is removed completely. Letter was probably written by SH.

- *Received email from Hans "Skip" Thompsen (3/19/11). Bret Marsh (3/22/11), Peter Okino (3/32/11).*
- *Received letter from Fred Koehnen (3/23/11).*
- *Received phone calls from Elizabeth Wessel (3/21/11), Larry Black (3/23/11), and Margaret Oda (3/28/11).*

Fred Koehnen:

- *Filled 1987 registration for "mini hydro-electric plant" on Ainako Stream that was installed in 1982.*
- *Akolea Ditch now intercepts run-off so that only run-off below the ditch now adds to Ainako Stream flow.*
- *Source of Ainako Stream used to be a grassy bog and is now completely overgrown with strawberry guava bushes, and "considerable" Albizzia growth will contribute to reduced stream flow in future.*

Bret Marsh:

- *Branch Stream 1b and diversion gate 1b have been unchanged since 1978.*
- *Branch Stream 2 has been a dry gulch for 33 years.*
- *Branch 2 did not exist, and there was do diversion gate.*
- *Branch 2 flows only during heaving or prolonged rain.*

Respondents' Comments, Corrections, and Clarifications to Statement:

Respondents provide the following corrections and clarifications to this statement, which was previously provided in the Respondents' comments to the draft FIR in the May 24 letter, but not incorporated into the Final Henderson/Weight Report by the CWRM Staff.

As clarification, DJ did **not** fax "copy of unsigned letter to property owners along Ainako Stream. . . ". Instead, DJ only faxed that letter to CWRM. The letter was written by SH and distributed to property owners along Ainako Stream by AW and SH.

In their comments to the draft FIR, the Respondents objected to the fact that CWRM provided only limited (and irrelevant) summary of comments received for two of the potentially-affected property owners. In the draft comments, the Respondents stated that it is misleading and inaccurate to **not report** the concerns that those property owners voiced over the possibility that they could experience considerably lessened flow and increased vulnerability to flooding on Branch Stream if the Complainants succeeded in this dispute. The only information summarized for the responses was "historical" and did not include or represent the Respondents' true concerns. SH forwarded all e-mail responses that he received on this issue to CWRM shortly after they were received in late May 2011.

Item No. 17. CWRM Staff's Statement in Final Henderson/Weight Report:

4/3, 4/5, 4/6 and 6/12/11: SH emailed RC Piihonua rainfall and Ainako and Wailuku stream flow information.

Respondents' Comments, Corrections, and Clarifications to Statement:

Respondents provide the following corrections and comments to this statement, which was previously provided in the Respondents' comments to the draft FIR in the May 24 letter, but not incorporated into the Final Henderson/Weight Report by the CWRM Staff.

This statement does **not** reflect that the stated purpose of compiling and presenting this data to the Water Commission is to provide supporting evidence that the point that rainfall and stream flow in the Ainako area have simultaneously significantly declined over the last three decades. These well-documented climatologic changes have caused more frequent droughts and dry-up of streams. These events, which are not due to any fault, act or omission of the Respondents, caused all parties along the affected streams to lose water flow and aquatic life. The Complainants have failed to recognize that rainfall is directly correlated with droughts and decreased stream flow experienced in the last 30 years.

Item No. 18. CWRM Staff's Statement in Final Henderson/Weight Report:
6/13/11: Mei-Fei Guo [sic Kuo] *(Alton Hunt) mailed RH and RC a copy of architect V. Ossipoff's plot and floor plan dated August 5, 1954, for the proposed residence for Dr. and Mrs. Leslie Weight. The house location and floor plan were deleted from the architect' drawing that was submitted.*

Respondents' Comments, Corrections, and Clarifications to Statement:

The CWRM Staff has failed to recognize the following relevant facts reflected in the 1954 Ossipoff to-scale plot plan (attached as Exhibit "E" to the May 24, 2011 Letter, attached as Exhibit "1" to this letter), which are significant to the Water Commissions determination of this dispute.

The 1954 Ossipoff plan depicts that (1) the connection of Branch Stream 1b to Ainako Stream is at the location of the present day culvert/dam/gate as further supported by the signed statements submitted by the Respondents (*see* Item 3 above) and (2) the alleged "Branch 1a" as an apparent "swale" without open passage between Ainako Stream and Branch Stream.

Feel free to contact me if you have any questions or need any additional information to complete your investigation of the Complaint and Response to the Complaint on this dispute.

Very truly yours,

PAUL ALSTON
MEI-FEI KUO

MFK:blk
Enclosures Exhibits "1" - "4"

cc:
Ms. Leslie Aina Weight
Mr. Robert Scott Henderson

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May 24, 2011

Via E-Mail and U.S. Mail

Mr. Robert Chong
Mr. W. Roy Hardy
Commission on Water Resources Management
P.O. Box 621
Honolulu, Hawaii 96809

Re: Response to March 10, 2011 Field Investigation Reports on Ainako Stream and Ainako Branch Stream, Hilo, Hawaii TMK: (2) 2-5-024:028, 029, 033, 044, and 045

Dear Mr. Chong and Mr. Hardy:

On behalf of Ms. Leslie Aina Weight and Mr. Robert Scott Henderson (collectively, the "Respondents"), this letter responds to the May 10, 2011 letter from the State of Hawaii, Commission on Water Resource Management ("Water Commission") related to the March 10, 2011 Field Investigation Report No. F12011031001 ("Henderson/Weight Field Report"). There are incomplete and inaccurate information, as well as incorrect representations and statements, contained in the Henderson/Weight Investigation Report, which are further clarified and explained in the comments attached as Exhibit "A". The additional information contained in Exhibit "A" provides the Water Commission with a more complete factual background to render a decision on the dispute.

On May 13, 2011, Mr. John Carroll, counsel for the Complainants Dr. David Jung, (collectively, the "Complainants"), forwarded a copy of Field Investigation Report No. F12011031002 related to the Claimants ("Jung Field Report") to Mr. Paul Alston, counsel for Ms. Weight. Therefore, Ms. Weight and Mr. Henderson take this opportunity to also respond to the incomplete and incorrect statements in that report, which are further detailed in Exhibit "G" to this letter.

EXHIBIT 1

A. History of Ownership and Residence of Properties by Owned Weight and Henderson

The following provides the ownership and residence histories for the properties owned by Ms. Weight and Mr. Henderson, which are relevant to the Complaint and the Field Reports.

1. Weight Ownership and Residence

1956: Weight family moved into 1000 Ainako property.

Dr. and Mrs. Weight lived at 1000 Ainako Ave until their deaths in 1994 & 1995, respectively.

1962 – 1979: Aina Weight lived in Oahu, Pennsylvania, Molokai, Keaukaha and Kona.

1979 – June 1995: Aina Weight lived at Kaumana, Hilo.

June 1995 – present: Aina Weight lived at 1000 Ainako Ave.

2. Henderson Ownership and Residence

1958: Henderson family moved into 51 Kokea St property.

1962 – 1996: Scott Henderson lived on Oahu.

1972: Dr. Henderson and wife moved permanently to Oahu.

1976: Dr. Henderson sold 51 Kokea St property to Frank Kothe.

1996 – 2004: Scott Henderson lived at 1455 Waianuenue Ave & 1170 Ainako Ave, Hilo.

2004 to present: Scott Henderson lived at 107 Kokea St (this property is not on any stream).

2006: Scott Henderson purchased 99 Kokea (on Branch Stream).

B. Henderson/Weight Investigation Report

With respect to the Henderson/Weight Field Report, *among the other comments detailed in Exhibit "A"*, the Water Commission did not consider the numerous historic photographs attached to the Response to the Complaint, dated February 17, 2011, and

subsequently emailed by Mr. Henderson on March 12, 2011 (approximately 20 photographs), which show the flood levees and lawn areas in the vicinity of purported past branch streams connections to Ainako Stream. *See* Response to Complaint, Henderson's Ainako Stream and Branch Stream Report, dated March 2010, at Figures 4-5 (attached as Exh. "C" to Response to Complaint). Attached hereto as Exhibits "B", "C", and "D" to this letter are some of the relevant photographs, which **clearly** and **irrefutably** show that in the 1950's and 1960's there were **no stream paths extant** where the Claimants mistakenly claimed existed. These photographs were shown to and discussed with Mr. Chong and Mr. Hardy on their site visit/field investigation on March 10, 2011.

The lawn areas and flood levee walls have been undisturbed in those areas for more than 50 years. The "V-shaped levee" has been in place at least since the 1950's and 1960's as it appears in the above referenced photographs from those time periods. Most likely function of that structure was as a buttress to reinforce the upstream end of the solid concrete levee and it is integral with the solid concrete levee. The pertinent declarations and witness testimonies by Mr. Able Awong, Dr. Robert Irvine and Mrs. Susan Irvine, and Brett Marsh, which were previously provided to the Water Commission, further support that the dry channel and "Branch 1a" connections to Ainako Stream did not exist. These key testimonies and the photographs were discussed in the Response to the Complaint and at the March 10, 2000 site visit, but were not mentioned in the Henderson/Weight Investigation Report and are relevant to a determination of this dispute.

Also of relevance to the Water Commission's determination of this dispute, is a recently discovered "Plot and Floor Plan" drawing by V. Ossipoff, which was dated August 5, 1954. This drawing shows (1) a culvert located in the same location as where the existing culvert and gate are located and (2) that there is no alleged "Branch 1a" stream between the Branch Stream and the Ainako Stream. Significantly, Mr. Ossipoff did not shade in this area as he/she did with the other stream waters, which is indicative that there is no stream or other water body in this area. *See* Exhibit "E", Redacted Copies of the Ossipoff drawing one with and another without labels (a larger copy of this drawing will be provided to the Water Commission at a later date).

This fact is further supported by the recollection of Ms. Weight, who recalls that back in the 1950s, this area between the Branch Stream and Ainako Stream was a slightly depressed low ground area that was covered with head high tall California grass, as was the remainder of the property and the contiguous parcels.

The Water Commission did not consider and report the concerns of other property owners, who expressed that they could experience considerably lessened flow and

increased vulnerability to flooding if the Complainants succeeded in this dispute. The only information summarized in the report is "historical" in nature and is not adequately represent the Respondents' true concerns on the potential ramifications of the actions sought by the Complainants. Mr. Henderson forwarded all e-mail responses that he received on this issue to the Water Commission in later March 2011, and the Respondents respectfully request the Water Commission to consider these emails in its final analysis.

C. Jung Investigation Report

With respect to the Jung Investigation Report, *among the other comments detailed in Exhibit "G"*, the Respondents want to emphasize that the 1956 and 1957 photographs confirm that the Branch 1a stream did not exist even back in 1957 as incorrectly suggested by the Complainants. This fact was not only confirmed by Ms. Weight and Mr. Henderson, but Mrs. Susan Irvine is aware of the Complainants' false claims and she can testify that there was no penetration through the flood levees along Ms. Weight's property other than the existing Branch Stream culvert.

Branch 1a first appeared on the 1947 TMK. That map has been used as the base map for subsequent TMK maps and, therefore, Branch 1a appears on subsequent TMK maps. There is no official indication that the geographic/geomorphologic features on the subsequent maps have been field-verified at any time after 1947 (according to a personal conversation that Mr. Henderson had with Mary Aken, Zoning Clerk, County of Hawaii, Planning Department on May 19, 2011). Moreover, there is no official record showing that Ms. Weight's properties have been surveyed since the Weight family acquired the properties in 1954 from the Ferreiras. For this reason, Branch 1a exists to present only on TMK maps as an artifact of non-updated field data.

The TMK maps and photographs reflect that Branch 1a could have existed, but only in the interval of 1947 to 1956. If Branch 1a was in-filled then that would have been done either by the Ferrereiras or the Weights back in the 1940s or 1950s, thereby, constituting an abandonment well before the State Water Code was created in 1987.

Additionally, contrary to the observations of Ron and Dora Okazaki, many other property owners have noted significant decline in average flow of Ainako Stream since mid-1980's, including but not limited to, Ms. Weight, Mr. Henderson, Brett and Judy Marsh, Peter and Judy Okino, Robert and Sue Irvine, and Mr. Fred Koehnen.

With respect to the Recommendations in the Jung Field Report, the Water Commission states that the "Okazaki fishponds were built in the 1960's prior to the State Water Code and do not require a SCAP/SDWP/PAIFS". There is no indication whether this claim is based on anything other than the representation of Okazakis. The Respondents are unclear as to why the Okazakis are not required to apply for after-the-fact Registration of their diversions, when such registration was properly done for the pre-1987 structures on Ms. Weight's property.

The Recommendations should be expanded to require the Complainants to periodically record stream flow on at least the properties owned by the Okazakis and Jungs and at Ainako Stream. Daily rainfall should also be monitored to enable the Complainants and the Water Commission to understand that the stream(s) flow is dependent on rainfall, not gate manipulations. Moreover, the Respondents may consider submit an after-the-fact Application for Permit for a Stream Diversion Works Abandonment that took place before 1956 (by unknown party), which would produce official and public record that the Branch 1b diversion no longer exists on the Weight property.

Lastly, the Jung Field Report contains numerous issues, which were not raised in the initial Complaint and, therefore, have prejudiced the Respondents by not providing them a sufficient opportunity to respond to the false allegations. For instance, when the Complainants filed their Complaint on January 24, 2011, they only raised two major issues: (1) whether the sliding flood control gate at the Ainako Stream junction had been manipulated by Ms. Weight, Mr. Henderson, and Dr. Weight to cause decreased flow on the Complainants properties and (2) whether Mr. Henderson or Dr. Henderson blocked flow of "Branch Stream 2" sometime in the 1980's or 1990's.

On February 17, 2011, Ms. Weight and Mr. Henderson submitted a Response to the Complaint to the Water Commission addressing these issues. However, in the course of the March 10, 2011 site visit and field investigation by the Water Commission, the Complainants inappropriately raised claims on additional issues, which were entirely unrelated to the claims in the original Complaint. These new claims are labeled in the Jung Field Report, attached behind the comments as part of Exhibit "G", as items 4-7, 10, 11, 13-16, 18-23, 26-30, 33, 36, 38-49, 52 & 53. Therefore, nearly half of the "Findings" in the Jung Field Report were new information that Ms. Weight and Mr. Henderson were not previously aware of and did not have a fair opportunity to respond to in both the Response to the Complaint and at the site visit/field investigation. On the other hand, virtually all information set forth in the Response to the Complaint and discussed with Water Commission at the site visit/field investigation of Ms. Weight's property had been provided previously to the Complainants.

Feel free to contact me if you have any questions or need any additional information to complete your investigation of the Complaint and Response to the Complaint on this dispute.

Very truly yours,

PAUL ALSTON
MEI-FEI KUO

MFK:blk
Enclosures

cc:
Ms. Leslie Aina Weight
Mr. Robert Scott Henderson

EXHIBIT "A"

REVIEW COMMENTS ON WATER COMMISSION'S FIELD INVESTIGATION REPORT NO. F12011031001 (Ainako, HENDERSON)

Comments by Aina Weight and Scott Henderson

For purpose of identifying text that is commented on in this Exhibit, the subject text locations are marked with handwritten numbers in the margin of the attached copy of the Water Commission's Field Investigation Report located immediately after the comments section as part of this Exhibit.

Acronym codes: AW=Aina Weight, SH=Scott Henderson, DO=Dora Okazaki, RO=Ron Okazaki, BF=Burt Fraleigh, DJ=David Jung, RH=Roy Hardy, RC=Robert Chong. CWRM=Commission on Water Resource Management, Report=Field Investigation Report for AW/SH portion of site visit.

1. 1940's: Current levees on Ainako Stream were *likely* built when Hilo Sugar Company developed the Ainako subdivision in the mid-to late-1940s. Otherwise, many properties would have been exposed to severe stream flow flooding, even during relatively modest flood events.

2. 1947: The 1947 TMK map expanded view presented by SH showed what is labeled as a "stream". It was explained by SH that this is actually a drainage ditch that contains flowing water **only** during periods of heavy rain. It has **never** had connection to the Ainako Stream, and the southern chord of the boundary line that links to the "stream" is **not** part of the "stream". The chord is a **straight line** defined on the TMK with surveyed vector of "19 degrees 44 minutes, 84.82 ft". There are property pins marking both ends of this chord that were shown to RH and RC. There is **no** existing stream bed on this chord and **no** evidence that stream bed ever existed along that line. All of this info was recounted by SH during the site visit.

3. Ainako Stream floods have occurred in 1956, 1964, 1966, 1977, 1994, 1999, 2008 and 2009.

4. 1958: *See* chronology of Ownership and Residence of Properties owned by AW & SH contained in Section A, at pg. 2, of Response Letter. Dr. Henderson departed the property located at 51 Kokea St. in 1972 (he only lived on the property for 14 years). SH left 51 Kokea St in 1962 (he only lived on the property for 4 years). AW did **not** "live continuously at 1000 Ainako Ave since 1958".

5. SH did **not** make all of the statements as claimed here. SH did **not** reside in Hilo during the mentioned dates and had no first-hand knowledge of the earthquake effects. Respondents do not know what the "Estimated that more than 60-70% of water leaked after that" refers to. Comments made regarding the ponds may have been made by AW. SH did state that the "streambed(s) consist of pahoehoe" and that substrate is rife with voids, gaps and tumuli where portions of water flow through the streambed is commonly lost.

6. 1976. Dr. Henderson sold the 51 Kokea St. property to Frank Kothe, not "Marsh". Scott Henderson did not live at the 107 Kokea St. property until 2004.

7. 1980's: No detail is provided as to when BF "asked Dr. Weight to "open up stream". There is no mention in the Report regarding the status of stream, drought conditions, etc. What was outcome of BF's request to "open up stream"? Respondents are not aware of any complaints or formal proceedings related to BF's request to Dr. Weight to "open up stream". SH did not have knowledge that Fraleigh made complaint in the 1980's, only became aware of this in recent Jung *et. al.* Complaints.

8. 1995 [1997]: Respondents are unclear what the actual date is that DJ moved to 110 Koula St.

9. 2008: SH: steel sluice gate was frozen in place for **estimated** 30 years. "Metal bar attached to gate has (7) holes drilled every inch or so from top to bottom of bar to allow gate to be raised or lowered to allow an adjustable flow control". In an early-April telephone conference, RC asked SH what the function of the multiple adjustment holes was and SH explained that when rebuilding the gate, he was unsure what distance on the bar would equate to the "historic" 4-inch gate gap and, therefore, he simply drilled holes along the entire length. **The additional holes have not been used to govern or adjust flow through the gate.**

10. 2008: Patch 1 was made by SH and AW in 0.5 day in May 2007. No flow measurement was available as stream level was too low. Patches 2 and 3 were made by SH in 0.5 day on September 17, 2010. At that time there was no water flow reaching the Patch 3 site. Therefore, no flow measurement could be made. All flow entering the Branch Stream (measured at the entry culvert at 55 GPM) was leaving the stream through the Patch 3 leak.

11. October 2009. *"Dora Okazaki called SH about removing dam on Branch Stream #1."* This is an overly simplified statement on what SH actually recounted on this significant event. As SH and AW provided in "Notes on Water Commission site visit to Aina Weight & Scott Henderson properties", March 10, 2011 (e-mailed to the Water Commission on about March 12 and also attached hereto as Exhibit "F") the following is quoted: *"Early Oct 2009 SH get phone-call from Dora Okazaki. She recounted that D. Jung said that he would have his lawyer make complaint to DLNR if she did not remove the dam on her property which he claimed was reducing stream flow to his property. She provided SH phone number to Jung."* DJ never made any attempt to contact SH. SH initiated contact with DJ about two weeks later when DJ was walking on Kokea Street and SH provided DJ with a cordial walking tour of SH and AW stream properties. DJ voiced no questions or concerns in course of the tour.

12. October 2009. In the description of the flow measurements: Flow was **not** measured on Ainako Stream; at that time the Respondents did not have an impellor flow measure device. On the Branch Stream, flow was measured by funneling flow into a graduated bucket and fill time was measured. An impellor device was **not** used or needed in this method.

13. 2009. The specific date that SH gave the tour of the Weight's property to DJ was November 1, 2009.

~~April/May 2010~~: The Patches 2 & 3 sites were plugged on *September 17, 2010* during a Branch Stream dry-up event. At that time, no water was flowing past Patch site 3 where the dribble of water was only 55 GPM and was all lost through the leak point. A sand bag was put into the inlet culvert to block the slow flow for about three hours while the patch was performed.

14. ~~2009 to present~~: Portions of landscaping that involved work in the Branch Stream occurred on AW's property only in period of *June 2007 to September 2010.*

15. April 2010: SH *and AW* filed an after-the-fact Registration of Stream Diversion and Declaration of Water use with CWRM for pre-1987 structures that included the Branch Stream diversion culvert/gate/dam and an ornamental pond.

16. The first two sentences in this item are redundant to information provided in item 2 above.

17. SH did **not** make comments about earthquakes; this was likely attributable to AW. *See* item 5 above.

18. AW said Ron Okazaki told *AW* that *she* should dynamite some rock structure in Ainako Stream outside of the Branch Stream culvert to allow more water flow into the Branch Stream.

19. SH did **not** state that the rock dam in Ainako Stream "had always been there…". As stated though, SH "did not know who built it". That dam has obviously been put in place since the 2008 or 2009 storm flow events, as the loose-placed rocks would not be able to remain in place during typical storm flow.

20. 3/21/11 Respondents believe that that DJ may have faxed the copy of the letter addressed to property owners to the CWRM and not to the property owners. Notably, the CWRM only provides a limited summary of comments received for only two of several other property owners. It is misleading and inaccurate to **not report** the concerns that those property owners voiced over the possibility that they could experience considerably lessened flow and increased vulnerability to flooding if the Complainants succeeding in this dispute. The only information summarized in this section is "historical" and is not representative of the Respondents' true concerns. SH forwarded all e-mail responses that he received on this issue to CWRM shortly after they were received in late-May 2011.

21. The Report fails to mention that there was considerable discussion on declining rainfall and stream flow in Ainako area that has occurred over the last three decades. These climatologic changes cause more frequent droughts and dry-up of the streams. These events, which are not due to any fault, act, or omission of AW and SH, cause all parties along the affected streams to lose water and aquatic life. The Complainants have yet to recognize these natural causes and correlation of rainfall and droughts with stream flow.

Comment on "Recommendations":

AW and SH have submitted after-the-fact applications for SCAP, SDWP and PAIFS. Letter of CWRM receipt of applications received by AW and SH on April 19, 2011.

As an aside, for the purposes of reviewing these comments by the Respondents, a recounting of SH and AW recollections of the tour and discussions that transpired during the March 10, 2011 site visit by CWRM are provided in the attached Exhibit "F".

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT
Stream Protection and Management Branch

FOR STAFF USE ONLY

FIELD INVESTIGATION REPORT

FI2011031001 (Ainako, Henderson)

File ID: _____

Doc ID: _____

Date of Field Investigation: 03/10/11	Time (24-hour): 0930
CWRM Staff:	Roy Hardy, Robert Chong
Individuals Present:	Scott Henderson, Aina Weight
Reference:	CDR 2769.8
TMK Parcels (9-digit):	(3) 2-5-025:003, Okino, 33 Kokea Street (3) 2-5-025:004, Marsh, 51 Kokea Street (3) 2-5-025:005, Weight, 1000 Ainako Avenue also 2-5-025:014 (manka stream lot) (3) 2-5-025:006, Henderson, 99 Kokea Street (3) 2-5-025:007, Henderson, 107 Kokea Street (3) 2-5-025:013 and 014, Weight, 1000 Ainako Avenue (3) 2-5-025:015, Thomsen, 974 Ainako Avenue (3) 2-5-024:028 and 029, Jung, 118 Koula Street (3) 2-5-024:033, Shindo, 145 Koula Street (3) 2-5-024:032, Kimura, 151 Koula Street (3) 2-5-024:034, Matsumoto, 125 Koula Street (3) 2-5-024:042, Metzger, 46 Kokea Street (3) 2-5-024:044, Purves, 60 Kokea Street (3) 2-5-024:045, Okazaki, 80 Kokea Street (3) 2-5-024:046, Hanenburg, 110 Kokea Street (3) 2-5-024:016, Koehnen, 111 Kapaa Street

Findings:

1. 1940's Hilo Sugar Company built the Ainako subdivision. Current levees on Ainako Stream were in place prior to the development of subdivision.

2. 1947 TMK presented by SH showed what appeared to be "dry channel" for Branch Stream #2.

3. 1956 and 1978 Ainako stream flooded.

4. 1958: Dr. Henderson (Scott Henderson's father) moved in to 51 Kokea Street (004).
   - AW stated she had lived at 1000 Ainako Ave (014) since 1958 (53 yrs).

   1963: Ron and Dora Okazaki built their house at 80 Kokea Street (045).

5. SH mentioned that some changes were made to AW's fishponds due to the earthquakes in 1973 and 1975, the big one that sunk the beach near Volcanoes National Park.
   - Streambed is made up of Pahoehoe lava rock.
   - Estimated that more 60-70% of water leaked after that.
   - One of AW's ponds was filled in.
   - Pointed out the location of the filled in pond was between the current diversion and stream #1.

6. 1976: Dr. Henderson sold house at 51 Kokea Street (004) to Marsh.
   - Scott Henderson now lives at 107 Kokea Street (007).

7. 1980's: (Al)Bert Fraleigh built house at 110 Koula Street (028 & 029).
   - BF asked Dr. Weight to "open up stream."
   - SH mentioned that Fraleigh wanted more flow even back in the 1980's.

   1994: Dr. Weight passed away.

8. 1995 [1997]: Dr. David Jung moved to 110 Koula Street (028 & 029), Fraleigh's former residence.

9. 2008: SH: steel sluice gate was frozen in place for 30 years.
- SH removed and replaced metal sluice gate with new plastic wood sluice gate.
- Metal bar attached to gate has seven (7) holes drilled every inch or so from top to bottom of bar to allow gate to be raised or lowered to allow an adjustable flow control.
- A long nail was placed though top hole in the bar and SH said it always remains in that hole and position.
- The nail rests on top of the retaining wall to keep the sluice gate in the desired position.
- The height of the sluice gate height is maintained at the "historic gate setting" of the former metal plate that was rusted in place.
- The "historic gate setting" is four-inches above bottom of channel.

10. 2008: SH patched leak in lava tube along Branch Stream #1. SH estimated 55 gpm was lost to the tube.

RC asked SH about the exact location of the sluice gate on the TMK map and explained the Dr. David Jung said that the sluice gate was not at Branch Stream #1a on the present TMK map but further upstream closer to Ainako Avenue. SH stated that was correct: the sluice gate is located farther upstream and almost at Ainako Avenue (Branch Stream 1b).

11. October 2009: Dora Okazaki called SH about removing dam on Branch Stream #1.

12. October 2009: SH measured flow of Ainako Stream and Branch Stream #1 by placing a heavy fabric "funnel" with a narrow opening at one end on bottom of the streambed and 1) measured the outflow at the choke point with an impeller blade and 2) calculated the time it took to fill a bucket. SH flow measurement is in liters/sec.
- RH mentioned about the importance of finding the right stream location for flow measurements because the impact of eddies on the meter impeller blades.

13. 2009: SH gave a tour of the Weight property to Dr. David Jung and never heard back from DJ.

April/May 2010: SH closed sluice gate to patch holes/lava tubes with bags of mortar placed in the cracks in the streambed at two locations on Branch Stream #1.

14. 2009 to present: Landscaping has occurred on AW property over the past two years that included additional work in Stream Branch #1.

15. April 2010: SH filed an after-the-fact Registration of Stream Diversion and Declaration of Water Use with CWRM. AW also registered two existing fish ponds in 2010 with CWRM.

16. SH showed RH and RC a 1947 survey map on his laptop computer indicating that Branch Stream #2 was a Y-shaped dry channel and did not extend to Ainako Stream. 1947 survey map also showed (Branch #1) side channel almost at Ainako Ave.

SH mentioned several factors affecting Ainako Stream flow:

17.
- In 1982, Akolea Ditch was built along Akolea Street to prevent downstream flooding of Ainako Stream.
- Earthquakes in1960's, 1973 and 1975 caused fissures in lava rock stream bed of Ainako Stream. Some stream flow in Branch Stream #1 was lost down into the lava tubes.
- HI County BWS built Piihonua Well C located about 1 mile upstream.

RH stated that Piihonua Well C is about 1000 ft deep. Since the elevation at the well site is 975 (verified with Charley Ice that morning) the well went below sea level. The ground water level is roughly 250 ft above mean sea level (msl), making it much lower than the stream inverts at the area of dispute, which are at an elevation of over 700 ft msl. Additionally, the well is solid cased and grouted to at least the groundwater level to protect the well and prevent any upper ground water leakage down the casing and effectively seals the well all the way to the ground water level.

18. SH, AW, RH and RC inspected existing diversion gate on Branch Stream #1b and noted current diversion configuration as mentioned above, and also verified dam within Ainako stream with rocks, half-pipe and railroad tracks. AW said Ron Okazaki told the Weights that they should dynamite the existing diversion gate to allow more flow into the branch stream.

SH, AW, RH and RC inspected the location of the jog shown on the current TMK map at Branch 1a and verified levee

walls along Ainako Stream. RH and RC noted what appeared to be row of rocks acting as a dam within Ainako stream at the approximate location of the jog in the stream. SH stated that the rock dam in Ainako Stream had always been there and he did not know who built it.

SH, AW, RH and RC inspected the possible site of Branch Stream #2 coming off of Ainako Stream. RH and RC asked about strange V notch levee on the Marsh property (004) and the rock dam diversion in Ainako Stream during the site visit. SH/AW stated the V-shaped levee had always been there since 1950's. RH and RC noticed a pile of rocks near tip of V-shaped levee that seemed different than the upper levee area and V-notch levee along Ainako Stream.

RH explained riparian rights to SH and AW, and those downstream in Branch Stream #1 have riparian rights. SH mentioned that property owners on Ainako Stream located downstream of the sluice gate also have riparian rights and would be affected by any increased flow diversion to Branch Stream #1.

RH mentioned that it was clear that changes were made to the fish ponds and streambanks on Branch Stream #1 over the past few years and these modifications require at least an after-the-fact SCAP application. SH/AW must apply for ATF SCAP permit for stream modifications. RH explained SCAP permit process, including other agency review, and potential for fines.

SH/AW asked RH about what they can do to protect the ability for long-term maintenance of the rock dam in Ainako Stream diversion at the sluice gate at headwater of Branch Stream #1. In the future when they are gone, the need for maintenance of the dam will remain.

- RH explained CWRM's certification process for the 1989 water use registrations and mentioned that this was a possibility for SH/AW. However, the CWRM Commissioners rejected the original certification efforts for Molokai because of public objections, and CWRM's certification program was effectively stopped after that effort. SH/AW could formally ask the Commission for such a certification.
- RH also suggested the possibility of attaching some documentation about the rock dam diversion and the need to maintain it to the deeds of property owners on both banks of dam diversion, which to allow such activity to take place when needed. They should talk to a real estate agent or someone with more legal experience in these matters.

Subsequent information:

3/21/11 DJ faxed copy of unsigned letter to property owners along Ainako Stream dated 3/19/11 stating that there may be significant reduction in Ainako Stream if diversion gate is removed completely. Letter was probably written by SH.

- Received email from: Hans "Skip" Thompsen (3/19/11), Brett Marsh (3/22/11), Peter Okino (3/32/11).
- Received letter from Fred Koehnen (3/23/11).
- Received phone calls from: Elizabeth Wessel (3/21/11), Larry Black (3/23/11), and Margaret Oda (3/28/11).

Fred Koehnen:

- Filed 1987 registration for "mini hydro-electric plant" on Ainako Stream that was installed in 1982.
- Akolea Ditch now intercepts run-off so that only run-off below the ditch now adds to Ainako Stream flow.
- Source of Ainako Stream used to be a grassy bog and is now completely overgrown with strawberry guava bushes, and "considerable" Albizzia growth will contribute to reduced stream flow in future.

Brett Marsh:

- Branch Stream 1b and diversion gate 1b have been unchanged since 1978.
- Branch Stream 2 has been a dry gulch for 33 years.
- Branch 2 did not exist, and there was do diversion gate.
- Branch 2 flows only during heavy or prolonged rain.

SH emailed RC Piihonua rainfall and Ainako and Wailuku stream flow information. 4/3/11, 4/5/11, 4/6/11.

Image Listing: (Attach PDF of image contact sheet)

File Name:	Brief Description:
Photo ID	Description
201103100001	Weight diversion on Ainako Stream with plastic sluice gate removed.
201103100002	Top of diversion gate. AW, RC, SH shoes for scale.

Recommendations:

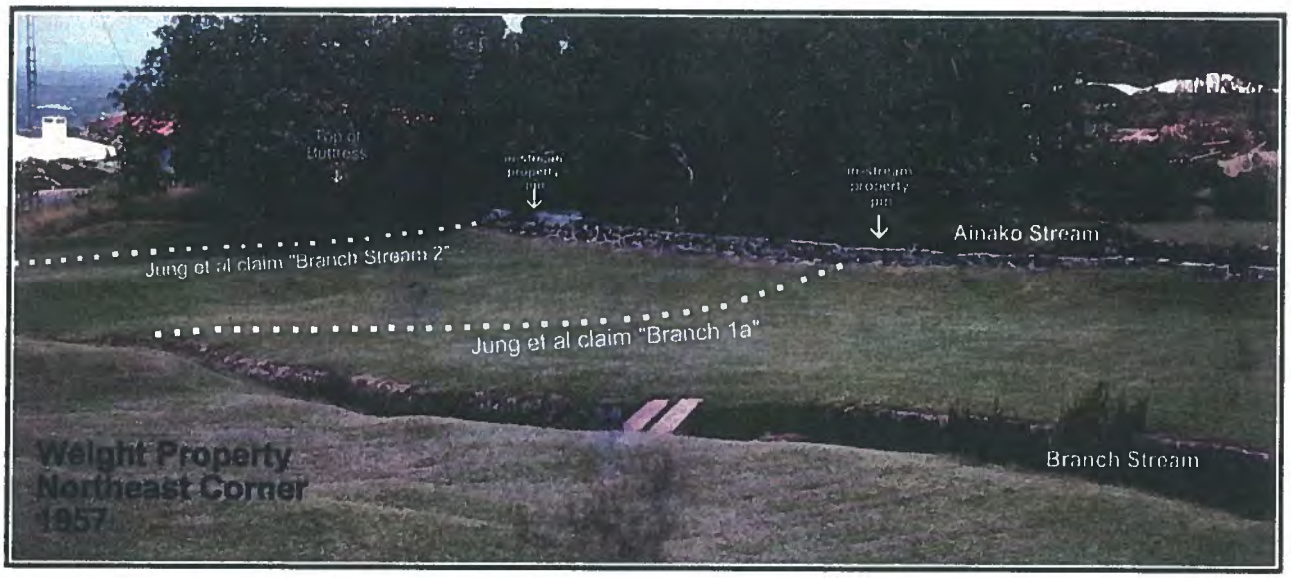
SH and AW should apply for:

1. After-the-Fact (ATF) Stream Channel Alteration Permit (SCAP) for work done to the channel of Ainako Branch Stream #1.
2. ATF Stream Diversion Works Permit (SDWP) for two ornamental ponds on Ainako Branch Stream #1.
3. Petition to Amend Instream Flow Standard (PAIFS) to divert water from Ainako Branch Stream #1 to two ornamental ponds on Ainako Branch Stream #1.

Pages 4 through 7of the Report are not included here.
They consist of descriptions of images that RH & RC captured while on the site visit.
Also not included are nine pages of showing the 132 images.
AW & SH have no comments on the descriptions or images.

EXHIBIT "B"

Photographs of northeast corner of Weight property showing areas where Jung et al make false claims that connections existed between branch streams and Ainako Stream. Also showing in these views are the concrete buttress (at the junction of the solid concrete and mortared rock levee wall) and fully intact rock levees. Photographs from Weight family photo collection.



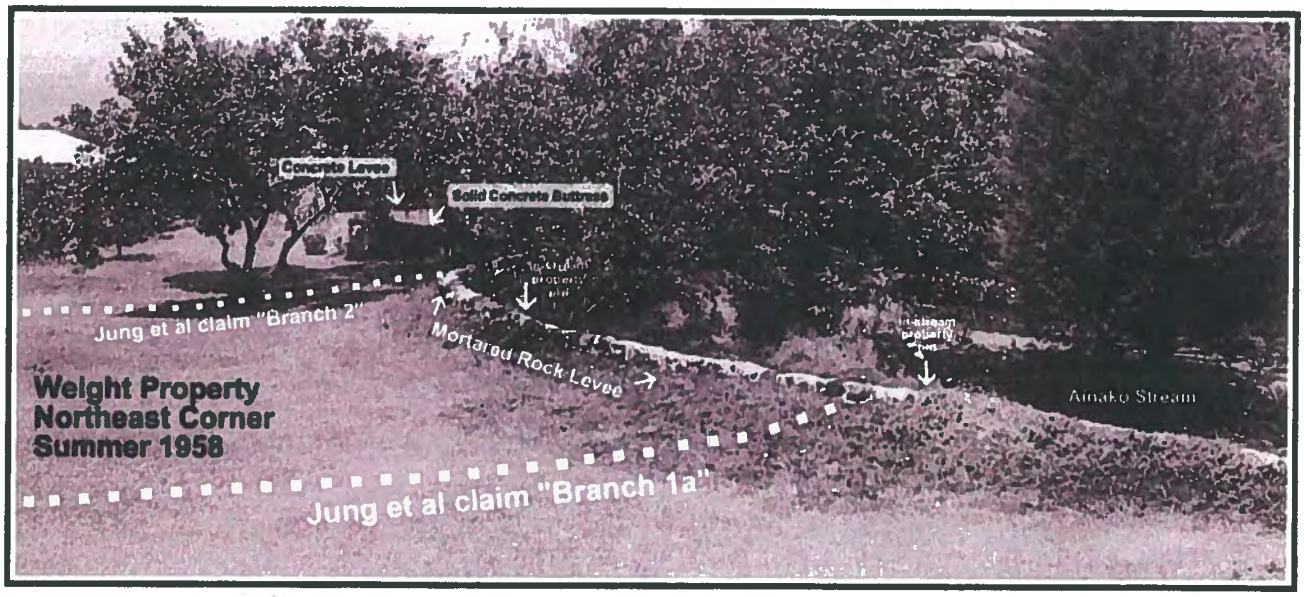
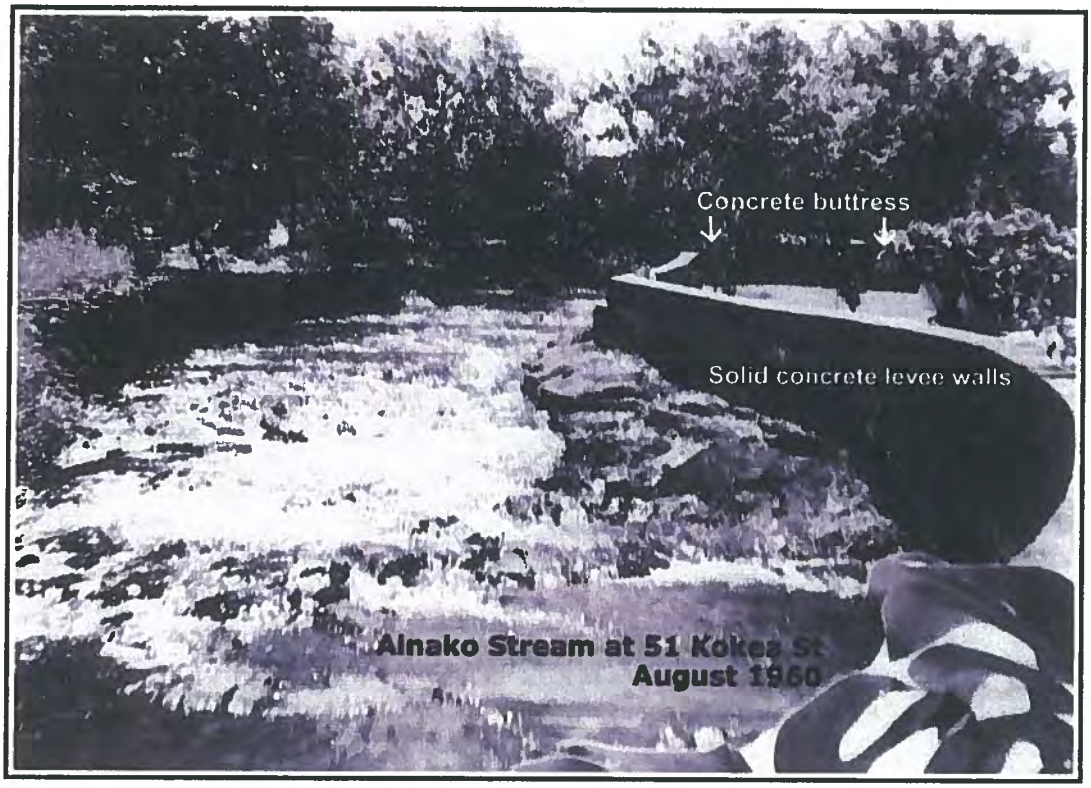


EXHIBIT "C"

Stream-side views of rock and concrete levees walls on present-day Marsh and Weight properties. Photographs from Henderson photo collection, 1960 & 1964.



SH & AW can identify no "pile of rocks near tip of V-shaped levee that seemed different than the upper levee area and V-notch levee along Ainako Stream." Such an anomaly simply does not exist. The rocks and mortar that occur near the "tip" are no different from rocks and mortar that occur along the upstream portion of the mortared levee. Many of the loose rocks (used as back-fill along the landward edge of the levees within about 60 feet of the "V" buttress) have been disturbed by several years of invasion by a ginger patch and its recent removal. Attached photographs in *Exhibit D* show streamside and landside views of the "tip" area in question and show that rock and mortar structure over the entire area is homogenous.

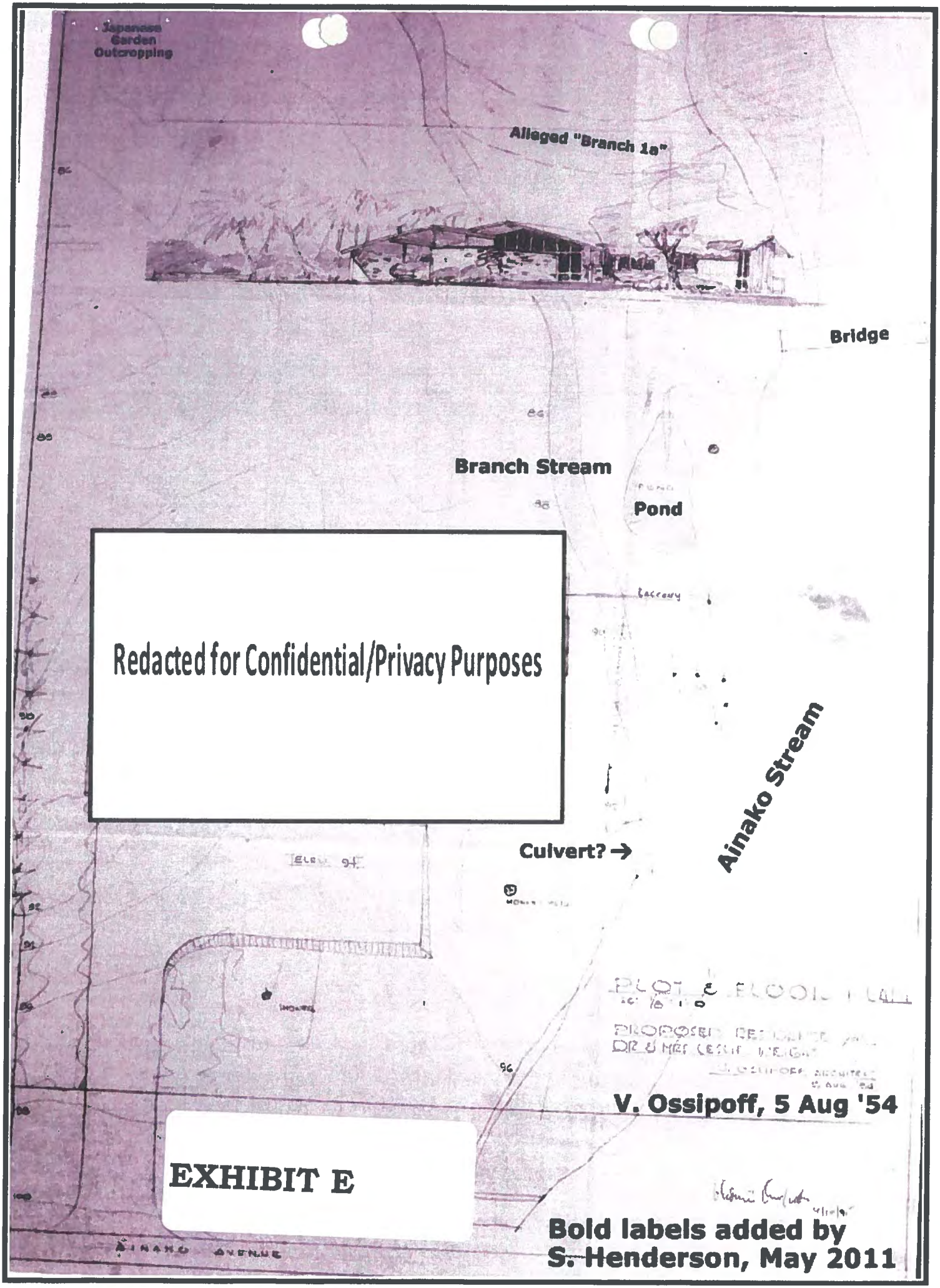
EXHIBIT "D"

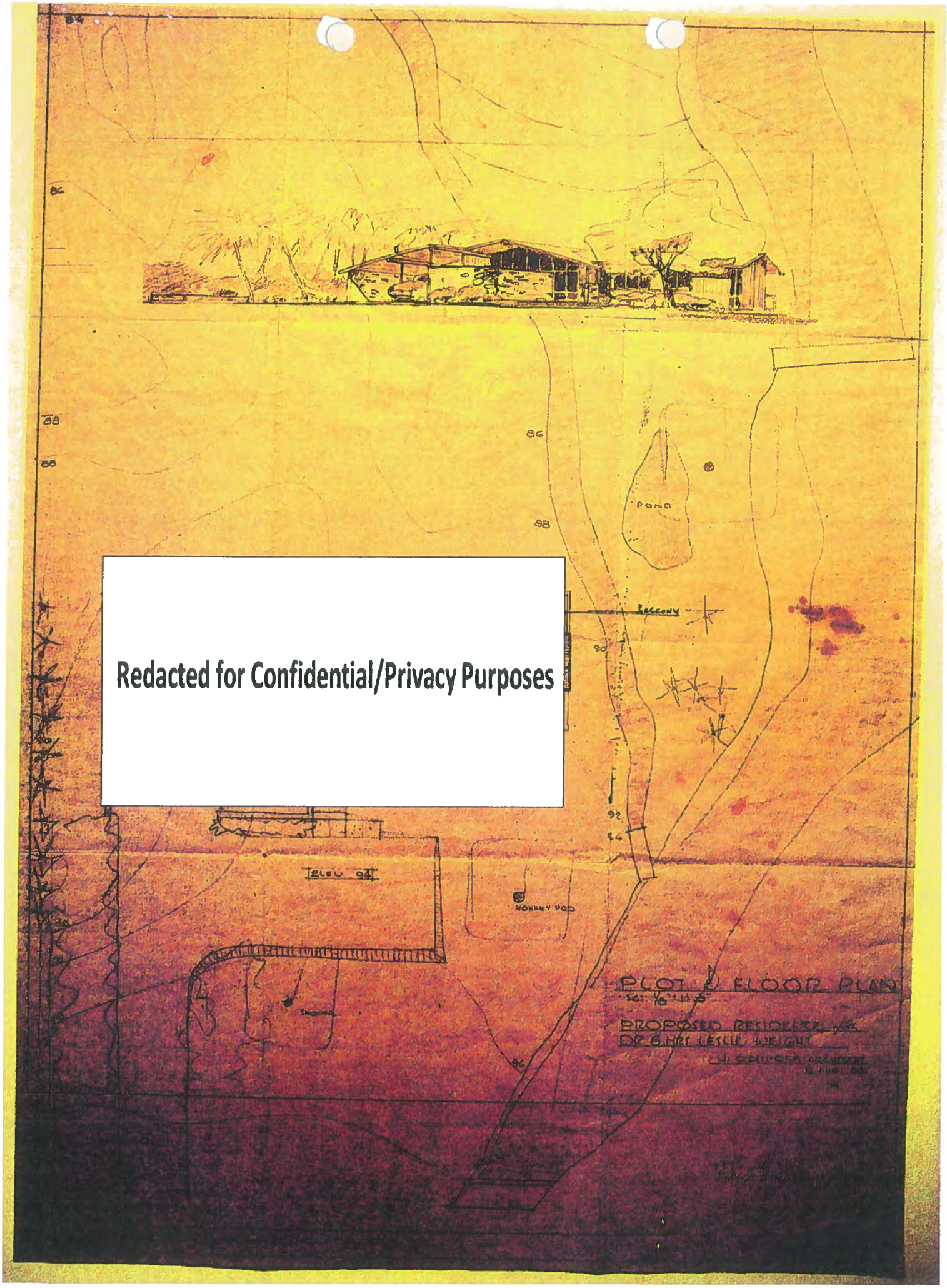
Land-side and stream-side views of mortared rock levees on Weight property at junction of concrete buttress.

Exhibit D. (continued)

Exhibit D. (continued)


Thomsen (Irvine) Property, May 2011
Claimed "Branch 2"


Japanese Garden Outcropping
Alleged "Branch 1a"
Bridge
Branch Stream
Pond
Redacted for Confidential/Privacy Purposes
Culvert? →
Ainako Stream
V. Ossipoff, 5 Aug '54
EXHIBIT E
AINAKO AVENUE
Bold labels added by S. Henderson, May 2011



Redacted for Confidential/Privacy Purposes

EXHIBIT "F"

Notes on Water Commission site visit to Aina Weight & Scott Henderson properties. ***March 10, 2011.*** Compiled by Scott Henderson & Aina Weight
Present at visit: Scott Henderson (SH), Aina Weight (AW), Roy Hardy (RH) & Robert Chong (RC).

0915 hrs. RH & RC arrive at Aina Weight property.

0915 – 1040 hrs. **Sit-down meeting.** Look over maps & photos. SH give account of beginning of "complaint" to provide human side of story. Early to mid-1990s…Okazaki stream dried up & Ron Okazaki went to Dr. Weight to ask for more water… no particulars offered on exactly what was requested or what status of ainako stream was. At a later (unspecified) date Ron also approached AW with same request. No follow-up on these requests/complaints. AW read notes on May 6, 2010 encounter with Jung near gate.

Early Oct 2009 SH get phone-call from Dora Okazaki. She recounted that D. Jung said that he would have his lawyer make complaint to DLNR if she did not remove the dam on her property which he claimed was reducing stream flow to his property. She provided SH phone number to Jung.

Early Nov 2009, SH provide Jung with cordial 45 minute tour of Weight/Henderson properties. Provide him with copy of stream flow measurements. Jung voiced no questions or concerns.

Dec 6 Jung meeting with neighbors & his lawyer…SH & AW not invited.

Mid Dec 2009, Dora's bogus claims on Hendersons building walls in 1980s blocking "stream". SH mentioned (to RH & RC) dates of Henderson family ownership of 51 Kokea (1958-1976) and fact that Hendersons moved to Oahu by 1971. In other words, Hendersons were creating walls at 51 Kokea several years after they sold it???

Lawsuit against AW followed (July 2010) that included damage claims totaling $2M.

SH showed RH & RC laptop image of 1947 TMK map showing dry channel & upper pin-to-pin surveyor straight-line. Also, in same image, looked at "Ulu tree" side channel of Branch stream that never existed. Showed several 1957 photos with views of the lawn at the "Ulu tree" side channel....no sign of any channel there.

SH recount that dramatic declines in rainfall & Wailuku flow began in early 1980's. For 1950 thru 1980, Wailuku experienced only 4 low- flow (<200 ft cube/sec average) events. In 1981 thru 2010, there were 15 low-flow events. Ditch stream along Waianuenue Ave lost regular flow in 1980s. The Ainako branch stream has also experienced declining flow, with complete dry-up events occurring with increasing frequency. Two occurred last year (in February & August) and the Branch stream nearly dried up in late-Feb this year.

SH noted that Piihonua Well C located immediately upslope of Ainako Stream started draw of ground water in 1991. Average daily draw in 2010 was 201,000 gal. Drilled well depth is 800 feet. R. Hardy comments on well: drilled to 250 ft above SL to upper portion of water lens. The well hole is concrete cased. SH & Hardy agree that well likely has no significant effect on Ainako Stream water source. On a Google map SH showed RH & RC location of Akolea ditch, Well C, and Ainako Stream origin.

SH note that complainants have given no recognition to the Akolea diversion and decreased long-term rainfall that have had effect on Ainako Stream flow over the last 3 decades. They do not recognize that the entire Branch Stream has dried up completely several times over the last decade, and that the Ainako Stream has dried up completely on at least 2 occasions over the same period (March-June 1992 & March 1998, as per Sue Irvine). These events are in no way the fault of the defendants and have caused all parties with ponds along the streams to lose all aquatic life in those ponds. Since 1982, there has been decline in average Ainako Stream flow, no occurrence of storm flow events overtopping levees, and

increased frequency of dry-up events. RH concurred....Wat Com long-term records show State-wide declines in stream flows over the last 3 decades.

1040 hrs. **Begin walking tour**. View diversion dam and flood control gate at Ainako Stream/Branch Stream junction.
Viewed gate, took gate out, and examined pahoehoe surface supporting gate culvert. All persons agreed that the pahoehoe base is natural and undisturbed. Comment by AW that Ron Okazaki had suggested dynamiting the gate opening to get more flow into Branch stream.

Pertinent facts and physical evidence pointed out by SH & AW that counter false claims made by Complainants:

Diversion dam & flood control gate are located at origin point for "temporary flume" shown on 1924 Hilo Sugar Company field map.

Several persons (Awong, Irvines, AW & SH) have noted that the flood control gate & dam existed at least in the late 1960s and some persons reported its presence in the late 1950s. They noted that the dam, gate and gate opening were in the same configuration as seen today. Note that the corroded gate was replaced with new plastic wood gate in 2009, and that the new gate is set at the same approximate historic opening gap (5 inches).

The flood control gate culvert lies on an undisturbed sill of pahoehoe bedrock. There is no evidence that the natural sill was either created by excavation or that it was created by addition of fill.

If the loose rock dam on the east side of Ainako Stream were not in place, water would only flow into the Branch Stream during very high flow in Ainako Stream. Dr. Weight was the primary person that performed periodic maintenance on the dam by restacking rock on the upstream side of the railroad track bars. Dr. Weight died in 1994 and the dam received minimal maintenance from about 1992 until 2009 when it was repaired by SH. Slow deterioration of the

dam would have been another factor reducing water flow diverted into the Branch Stream. SH pointed out the piece of railroad track that is used as a guide for stacking rocks to maintain the dam and noted that the track is embedded in the stream-bank soil.

The flood control gate had been rusted in place for several decades and serves to prevent flooding of Branch Stream properties during storm flow. At end of site visit, we viewed the old steel gate and noted the heavily corroded and irregular lower edge. Also viewed weeping ground and drain pipes under steamside portion of AW house.

SH noted that at "average" Ainako Stream flow, about 8% of Ainako Stream flow is diverted to the Branch Stream with a gate-open gap of 3 ½ inches. At a gap of 5 inches the diverted amount increases to 12%, and at full open (no gate occlusion) 23% of Ainako Stream flow is diverted. Significant increases in gate gaps above the "historic" gap would cause significant increases in amounts of water diverted from Ainako Stream. Greater gate openings would also greatly increase possibility of flooding downstream of the gate. With no gate structure in place, storm flow could easily exceed 100,000 gallons per minute.

Viewed (3) leak patches on Branch Stream. Water loss at the upper-most leak (just before repair) was measured at 55 gallons per minute. First "middle" leak was repaired in 2008. The upper & lower leaks were repaired when the stream was dry in mid-September 2010 when Branch stream dried up. Water loss at the middle & lower leaks was estimated to have been of about the same magnitude as the upper leak. If this were the case, total increase in flow following the repairs would be about 150 gallons per minute. SH noted that typical average flow of Branch Stream at origin is about 300 gpm. Typical higher flow is 500 gpm.

View Flood Levees on Weight and Marsh properties. The levees run for a distance of about 0.2 mile downstream from and have existed since at least the early 1950s. They were likely built by the subdivision developer (Hilo Sugar Company) to prevent flooding of properties. The solid concrete levees along the Marsh property were in place in 1951 (phonecon & e-mail communications with Arthur Pancook, Jr) and extended from the upstream boundary of the 51 Kokea St

boundary to the middle of that property above the waterfall. On makai side of Kokea St, the concrete flood control walls extended through the Stemmerman's (present day Meltzer) property and downstream as far as could be seen from Kokea Street. The levees existed in present day configuration when the Hendersons acquired the 51 Kokea property in 1958. (Hendersons moved to Oahu in 1971 and sold the 51 Kokea property in 1976.) Since the early 1950s, the levees have on many occasions prevented flood stream flow property damage.

View dry stream channel between Weight & Marsh properties. Contrary to claims by some of the Complainants, this dry stream channel has never (at least since early 1950s) contained regularly flowing water. This would have been physically impossible as the flood control levees along Ainako Stream (in existence since the early 1950s) block any possible surface water flow from that vector. And TMK maps show the dry channel exactly as it exists today, with upstream prongs dead-ending about 50 feet below the levees.

View lower section of Branch Stream and Kokea St culvert. Very little water that flows under Kokea St actually flows through the under-road culvert. Instead, it flows through porous fill under the road, emerging on a broad, diffuse front on the downstream side of the road. Photograph 9 in the Complainants package shows the culvert on the downstream side and they claim that "This shows no water as the stream crosses under Kokea Street and enters the Okazaki residence". Water can clearly be seen in the stream (being fed by diffuse flow around the culvert). Twenty-six hours after the photo was taken (on 05/06/2010, 0726 hrs), the Branch Stream Inlet Culvert Depth was 8.5 inches (SH records). That level is considered slightly above "average normal" for the Branch Stream and maintains the Hannenburg pond and Okazaki pond at overflowing levels. The claim by the Complainants that the photo shows "no water" is erroneous and misleading.

Photograph 14 (taken on Shindo property, undated) is also misleading. The amount of water flow seen is this picture is experienced only during storm flow.

It is not an honest and true representation of average water flow at that occurs at that point.

1200 hrs. **Complete walking tour. Entertain questions.** SH asked how future operation of the Branch Stream diversion (gate & dam) should be governed? Can the Water Commission mandate or "certify" appropriate settings/configurations and flow percentages for the diversion? And who would be responsible for maintaining the loose-rock dam (that is not on Weight property)?

RH suggested that a possible solution might be to have a real estate professional draft a "condition", "covenant" or "agreement" that would part of the dam-side property owner's deed. It would remain to be resolved as to what party would implement the dam maintenance.

RH noted that it would be beneficial to "certify" the gate & dam. All that would be needed would be a requesting letter that would cite the registration data already submitted to Wat Com.

RH further noted that the two un-permitted ponds and channel modifications can be permitted after-the-fact. The process would entail submitting a requesting letter and "as built" drawings as provided previously by SH. Might be a nominal fine (such as $250) assessed. Wat Com would staff the request through Dept of Health and County offices for their concurrence. If Wat Com asks that actions be taken to register & permit the modifications, daily fines of about $250 could be assessed if no permitting action(s) were taken by the property owner after notification by Wat Com.

RH asked if any native biota in Ainako streams. SH said none seen (and thus, no Federally-listed species issues). Alien biota noted are listed in SH Exhibit report.

1215 hrs. RC & RH departed.

1330-1650 hrs. RC & RH meet with Jung group.

EXHIBIT "G"

REVIEW COMMENTS ON WATER COMMISSION'S FIELD INVESTIGATION REPORT No. F1201103100 (for Ainako, JUNG)

Comments by Aina Wight and Scott Henderson

For purpose of identifying text that is commented on in this Exhibit, the subject text locations are marked with handwritten numbers in the margin of the attached copy of the Water Commission's Field Investigation Report located immediately after the comments section as part of this Exhibit.

Acronym codes: AW=Aina Weight, SH=Scott Henderson, BM=Bret Marsh, SI=Sue Irvine, RI=Robert Irvine, AA=Abel Awong, DO=Dora Okazaki, RO=Ron Okazaki, BF=Burt Fraleigh, DJ=David Jung, RH=Roy Hardy, RC=Robert Chong. CWRM=Commission on Water Resource Management, Report=Field Investigation Report for AW/SH portion of site visit.

1. Add (3) 2-5-025:014

2. Please clarify when the "lack of water" occurred?

3. On the statement - "Though they never were allowed on property…" – please clarify who was not allowed on property? And whose "kids"? Respondents are unclear as to the relevance of this statement given there is no reference to the water flow.

4. Please explain how the "bars were placed at dam…." and what is the source of the DO's observations when, according to item 3 above, she claims "they never were allowed on property". Also it is not identified who made the observation "Did not see this on Ainako at Branch #1 or 2".

5. "Concrete levees were **and are** located along Ainako Stream on Weight's property (014) and on Marsh property (004) *where the "V" wall is located.*" Bold needs to be added. Italicized portion of statement implies that levees existed on Marsh property only at the "V" wall, which is incorrect.

6. Now DO is claiming an entirely new timeframe "sometime after 1963" for when the "V" feature was constructed. Supposedly, she is claiming that the creation of the "V" closed off the fictitious connection to the dry channel. This is contrary to what she has claimed in previous testimony (some of it notarized). Her claim that it was constructed at any time after 1963 is proven false in the fact that the buttress is **clearly present in photos taken in the late 1950's and 1960.** These photos have been presented in several documents previously conveyed to Jung et al and CWRM and are included in AW's and SH's comments to the Henderson/Weigh Field Investigation Report,

Furthermore, the junction of the solid concrete buttress with the solid concrete levee is absolutely seamless. It is apparent that they were created in the same concrete pour. The buttress did not

post-date the levees. This was pointed out by SH in course of the site visit and was recognized on site by RH.

7. DO's claim of "opening with poles between the two levees at headwaters of Branch stream #1 and 2" is an entirely new allegation. And, it continues to be perplexing how DO she is able to observes such things when she was "never allowed on the property" (item 3). This statement also conflicts with item 4 that she did not see "bars" at Branch #1 or 2.

"DJ later clarified that Branch #2 was supposedly closed off between 1985 and 1990…", but there is no source on where Jung obtained such "clarifying" information. This "clarifying information" represents yet another change in time frame for the purported close-off of the dry channel. It also needs to be clarified as to who closed this off Branch #2. In any event, this claim that the close-off happened in the cited time-frame (1950's and 1960's) is inconsistent with many photographs from that period. Also the statement that "….and Branch # 1 *(which one, 1a or 1b ?)* was closed off when the gap was filled in sometime in the early 1990's" is also a false statement that conflicts with contemporaneous photographs and testimony from witnesses, cited by Respondents, who have noted that no stream or gap ever existed at the location claimed. Furthermore, DO has made repeated claims that SH and/or his father (Dr. Henderson) were responsible for closing off the fictitious channel in the 1980's or 1990's, a timeframe when both individuals had no **ownership or presence** on the property.

8. Statements of BF and DO son Karl are meaningless as they do not mention flow status of the source stream (Ainako Stream). Complainants have made numerous statements over the last two years claiming that several up-stream property owners are responsible for their decreased flow. However, in none of these cases do they give any indication that they were aware of what the rainfall and source streams flow status were.

9. Another vague statement relating to sometime "in the 1990's" with no mention of main stream flow. What was the result of "Verify with DO if this Branch Stream 1a or 1b"?

The use of the terms Branch 1a and 1b should be clarified or completely changed as each term is used for two different locations. This a very confusing convention that obfuscates many of the Complainants' claim in this dispute.

10. What is the relevance of the statement regarding early 90's activity with trucks, etc?

11. What is the result of verification "with DO the location of the metal bars"? And which "Branch Stream" & which entry (1a or 1b?). And there is not even an approximate time-frame provided for this purported action.

12. There is no "concrete lip at the bottom of the diversion structure", the base of the diversion is solid, undisturbed basaltic bedrock.

13. A copy of the "diagram of the U-shaped diversion structure.." should be provided in the Report.

14. There was no opening to fill in, as is shown in the 1950's & 1960's photos.

15. The solid concrete and mortared rock levees were not built in the early 1990's, as shown in the 1950's and 1960's photos.

16. *See* Comment to item 15. How is DO able to make such observations when she was "not allowed on the property"? Also it is important to note that the stream-side face of the levees is not visible from Kokea Street.

17. What is the basis or source for this statement claiming that "AW raises or lowers the current sluice gate…at AW's whim"? The gate has been consistently maintained at the historic level that is was at when it was replaced. This is verified by testimony from AW, SH, SI, RI, and AA.

18. The rock retaining wall *was* in place before, as shown in the 1950's and 1960's photos. Confirmed by AW and SH testimony.

19. There was no structure of any kind build anywhere near any stream on AW property in the 1992 time-frame as claimed.

20. Need *verification* of the claim regarding location of two diversion gates.

21. It is *not* possible to see the Ainako Stream stream-side features from Kokea St.

22. It is <u>important to note</u> that the 1956 and 1957 photos also show that Branch1a <u>does not exist in 1957</u>. This fact is confirmed by AW and SH. SI has noted that as Respondents are now aware of this false claim, that she can testify that there was no penetration through the flood levees along AW property other than the existing Branch Stream culvert.

23. AW recalls that the area discussed in this item has existed in its present configuration for at least three decades.

24. DJ says "On 3/10/11, there were four "mini" waterfalls, but water was not flowing across the entire width of the streambed." His point appears to be that he had lower than "normal" stream flow on his property at that time. This would have been fully expected as rainfall at Ainako in the preceding month (February) was only 2.64 inches. The level of flow in Ainako Stream was very low and the Branch Stream nearly lost all flow. The gate was permanently set at 4-inch (historic) setting, but had *no effect on water flow* as meager flow in Ainako Stream was not high enough to contact the gate. In the first 10 days of March, Ainako rainfall was 4.9 inches and Ainako Stream flow was slowly increasing, but was still very low. This is a classic example of conditions where sparse long-term rainfall had caused very low stream flow….and *DJ incorrectly blames the flow decrease on AW actions.*

25. Contrary to RO's and DO's observations of Ainako Stream flow, AW, SH, Brett & Judy Marsh, Peter & Judy Okino, Robert & Sue Irvine, and Fred Koehnen have all noted significant decline in average flow of Ainako Stream since mid-1980's.

26. There never was a "Branch 1a" at the "nipple", as shown in the 1950's and 1960's photos.

27. This is a confused statement that matches up with no known facts.

28. When was this true?

29. Branch 2 never existed, as shown in the 1950's and 1960's photos.

30. Which "Branch 1a"? Upper Branch 1a never existed as shown in the 1950's and 1960's photos.

31. It is incomplete for the CWRM to only refer to the email from BF without noting that the CWRM had later responded to this email. It appears there was an April 11, 2011 telephone conference (as mentioned below) in response to this email.

32. What is result of request for "similar info from DJ"?

33. Where is "testimony to verify that there was an island between Branch 1a and Branch 2 at Ainako Stream" that DJ said he "will provide"? This claim is contradicted by AW, SH, AA, SI, RI & BM.

34. Please clarify what was Ainako Stream flow in 1988?

35. Who "Opened diversion gate 5 or 6 times to get more water" and when and at what frequency? How did BF know that the gate was opened?

36. AW and SH know of no other stream-side property owner's deeds that contained any covenants regarding water rights.

37. This is significant statement from BF noting that he *"Was not aware of Branch 2"*. It would have been unlikely that he would not have noticed it if he had walked up to Weight property on several occasions.

38. Which Branch 1a? Please clarify as there are two claimed.

39. What "two rivers from the top of Ainako in the forest down to Koula Street"? There is only one stream (Ainako Stream) that runs from the forest.

40. Statement that "Branch 2 was usually dry and only flowed during heavy rain" *is as noted by SH, AW, AA, and BM.* It has never had connection to Ainako Stream and only receives runoff from immediately adjacent land surfaces.

41. What stream does this statement refer to? It would not have been unusual if the Branch stream had dried up in a drought. What does the end of this statement "or if it was running" mean?

42. This statement is contradictory and confusing because how could Vince Kimura "not recall Branch 1b at its present location near Ainako Ave" but "thought that it was a drainage ditch".

43. This statement is vague and does not support the Complainant's position.

44. What is result of query regarding water rights in DJ deed?

45. & 46. Branch 1a (upper) never existed as per 1950's & 1960's photos.

47. Photographs of 1957, 1958, 1960 & 1964 (shown as Exhibits B & C in AW & SH Review comments on their CWRM Field Investigation Report) **clearly do show** a continuous concrete and rock wall along Ainako Stream on AW's property.

48. This is an untrue statement as shown in the 1950's photos.

49. There is **no evidence** to show that the dry channel was ever connected to Ainako Stream. Other persons that lived or worked along the adjacent Ainako Stream margin (AW, SH, BM and wife, SI, RI, and AA), counter the claim that there were ever any water diversions penetrating the flood levees other than the existing entry to the Branch Stream.

50. Add AW as testifying to this statement.

51. This is an untrue statement as shown in the 1950's photos. Additionally, the 1947 and all subsequent TMK maps show a straight-line survey chord connecting the uphill terminus of the dry channel to the Ainako Stream. There was no stream channel along that chord as demonstrated by the fact that its entire length is a straight line defined by compass azimuth and length. This convention/standard definition was verified by the County Planning Department (on a May 19, 2011 personal communication with Mary Aken, the Zoning Clerk). The reference text "follows along center of stream" label on TMK maps is limited to the irregular stream path and **does not** extend onto the straight chord.

52. A continuous concrete levee and rock wall runs along Ainako Stream ~~between~~ *along* the Weight and Marsh properties.

53. In 2009, maintenance work along 60 feet of old rock wall, removed extensive growth of alamanda vine that was growing into the Branch Stream. The "neatly stacked rock pile" uncovered by the vine removal parallels the eastern Branch Stream margin, and had existed in its present location for several decades. It was neatly restacked.

54. Respondents are confused as to why the CWRM is exempting the Complainants from having to submit after-the-fact Permits for Stream Alterations for the alterations performed prior to 1987.

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT
Stream Protection and Management Branch

FOR STAFF USE ONLY

FIELD INVESTIGATION REPORT

FI2011031002 (Ainako, Jung)

File ID: _____
Doc ID: _____

Date of Field Investigation: 03/10/11	**Time (24-hour):** 1330
CWRM Staff:	Roy Hardy, Robert Chong
Individuals Present:	Ron and Dora Okazaki (RO & DO - married) David and Malinee Jung (DJ & MJ - married) Cal Shindo (CS) Tamae Shindo (TS – Cal's mother)
Reference:	
TMK Parcels (9-digit):	(3) 2-5-025:003, Okino, 33 Kokea Street (3) 2-5-025:004, Marsh, 51 Kokea Street 1. → (3) 2-5-025:005, Weight, 1000 Ainako Avenue (3) 2-5-025:006, Henderson, 99 Kokea Street (3) 2-5-025:007, Henderson, 107 Kokea Street (3) 2-5-025:013 and 014, Weight, 1000 Ainako Avenue (3) 2-5-025:015, Thomsen, 974 Ainako Avenue (3) 2-5-024:028 and 029, Jung, 118 Koula Street (3) 2-5-024:033, Shindo, 145 Koula Street (3) 2-5-024:032, Kimura, 161 Koula Street (3) 2-5-024:034, Matsumoto, 125 Koula Street (3) 2-5-024:042, Metzger, 46 Kokea Street (3) 2-5-024:044, Purves, 60 Kokea Street (3) 2-5-024:045, Okazaki, 80 Kokea Street (3) 2-5-024:046, Hanenburg, 110 Kokea Street (3) 2-5-024:016, Koehnen, 111 Kepaa Street

Findings:

Dora Okazaki:

- Bought their property (046) in 1960 and built house in 1964.
- Okazakis had four fish ponds along Branch Stream #1: #1 & 2 still exist today.

2. • — Ponds #3 &4 were filled in because lack of water.

- Rock walls along pond #1 and 2 were built in 1965-1966.

3. • — Branch Stream #2 formed the boundary between the Marsh and Weight properties. Though they never were allowed on property, their kids used to play in that area.

- Branch Stream #2 used to always flow, but was a "trickle" when compared to Branch #1.

4. • — Bars were placed at dam on Branch Stream #1 to keep debris from Ainako Stream flowing down Branch Stream #1. (Did not see this on Ainako at Branch #1 or 2.)

5. • — Concrete levees were located along Ainako Stream on Weight's property (014) and on Marsh property (004) where the "V" wall is located.

6. • — "V" concrete levee on parcel 004 was constructed after Hendersons moved in and before Marsh bought the property from Henderson, sometime after 1963.

7. • — There was also an oval (egg) or U-shaped opening with poles between the two levees at the headwaters of Branch Stream #1 and 2. DJ later clarified that Branch #2 was supposedly closed off between 1985 and 1990, and Branch #1 was closed off when the gap was filled in sometime in the early 1990's.

8. • In 1992-93, Bert Fraleigh (029) lost water in Branch Stream #1, walked up to Ainako Stream and found that Dr. Weight had placed a sheet of metal between the bars. See BF testimony further down in this report.
• During this same period, DO & RO's son Karl came home from college and noticed a significant reduction in Branch Stream #1 flow and asked what had changed.

9. — DO explained how water stopped flowing in Branch Streams #1a in the 1990's (as clarified by DJ after site visit): (Verify with DO if this was Branch Stream 1a or 1b.)

10. — Early 90's lots of activity on the Weight properties. Lots of trucks working on area.

11. — Dr. Weight replaced the metal bars across the mouth to the Branch stream with a U-or egg shaped opening in the concrete wall. Verify with DO the location of the metal bars.

- Dr. Weight placed an oval sliding grate to cover the opening in the concrete wall.

12. — RO asked Dr. Weight to lower the concrete lip of the bottom of the diversion structure and suggested jack-hammering the lip to

— lower it to the level of Ainako Stream to allow more water to flow to the Branch Stream #1a.

13. • — DO drew a diagram of the U-shaped diversion structure that Dr. Weight had built and gave diagram to RC.
14. • — The opening between the Weight and Marsh concrete levees was filled in sometime between 1985 and 1992.
15. • — The rock retaining wall between Branch Streams #1 and 2 was built in the early 1990's and closed off Branch #1 flow from Ainako Stream.

16. — DJ said that 3 people can testify that there was no wall at Branch Streams #1a & 2 between the concrete levees on Henderson/Marsh and Weight properties: (Dora and son Karl Okazaki, Bee Fraleigh. Verify with DJ.

Vinet Knowles

17. — DO said that AW raises and lowers the current sluice gate at diversion #1 on Ainako Stream at AW's whim. RO added it is not right that someone can control the flow to the detriment of downstream users.
- During heavy rain, AW would lower the diversion gate because AW feared that AW's property would get flooded.
- The sluice gate was recently raised and Branch Stream #1 was flowing "nicely" downstream to DO and DJ properties, and they were happy with the flow at the time of the field investigation.

18. — DO: the rock retaining wall between Weight and Marsh properties was not there before 1992.
- DO thought that AW was building a patio because of the construction work.

19 • — Shortly after the construction work was completed, water stopped flowing in Branch Stream #2. Verify with DO.

20. — RC mentioned that according to DJ there were two diversion gates. Verify with DJ and DO the location of the two diversion gates.

21. • — DO said that they never ventured up to the Ainako Avenue diversion gate and could see the diversion gate at Branch #1b from Kokea Street.

22. — RC also mentioned that there two Branch Streams #1 at Ainako Stream: the Branch Stream #1a shown on the TMK map and the Branch Stream #1b that was reconfigured as it still exists today. Weight's 1957 photo of Branch Stream #1 shows #1b at its current reconfigured location on the Weight property.

23. — DO: Branch Stream #1a at Kokea Street used to form the property line between Weight (005) and Henderson (006).
- A pipe in the ground marks the location of the property line, but Branch #1a Stream is not located at the property line marker.
- Branch Stream #1a used to flow closer to the Marsh (004) property and formed a pond in the low depression at Kokea Street before flowing to inlet to culvert under Kokea Street.
- Location of (reconfigured) Branch Stream #1b is closer to Henderson property (005) before flowing into culvert under Kokea Street.
- Former pond area on Weight property is now a grassy lawn in a depressed area.

DJ said that water used to flow across the entire width of the streambed on his property, and there were four waterfalls.
- Typically, there was only one main waterfall on the left side of the streambed.

24. • — On 3/10/11, there were four "mini" waterfalls, but water was not flowing across the entire width of the streambed.

RH asked DJ where water flowed after it exits DJ's property.
- DJ said that water flows on the surface across several properties before emptying into marsh/wetland area downstream which is owned by parents of MMA fighter BJ Penn.

25. — RO & DO said the Akolea Ditch project did not affect the flow of Ainako Stream and did not notice any change back in 1980's.

Subsequent clarifications by DJ after 3/10/11 site visit:
- Branch 1b at Ainako Stream is present location of sliding sluice gate.

26. • — Branch 1a at Ainako Stream was located at "nipple" on TMK map.
27. • — Branch 1b at Kokea Street is where Ainako Stream located today.
28. • — Branch 1a at Kokea Street was where property marker is located and where stream used to flow.
29. • — Branch 2 was covered up sometime between 1985 and 1990.
30. • — Branch 1a stopped flowing in the early 1990's which Okazaki and Fraleigh can testify to.

31. — 4/4/11: RC sent email to BF asking for clarification about Branch Stream 1a, 1b and 2 at Ainako Stream.
32. — 4/6/11: RC forwarded SH 4/4/11 email with info on rainfall and streamflows and requested similar info from DJ.
33. — 4/7/11: DJ said that BF is 91 years old and has cancer. DJ will try and contact BF. DJ has testimony to verify that there was an "island" between Branch 1a and Branch 2 at Ainako Stream and will provide.

4/11/11: Bert Fraleigh returned RC's phone call:

34. • — Walked up to Ainako Stream near Ainako Ave when water in Branch 1b stopped flowing to BF's property in 1988.
- Found "cement box" with sliding steel gate at Branch 1b and asked Dr. Weight to open gate but Dr. Weight refused.

35. • — Opened diversion gate 5 or 6 times to get more water.
36. • — Thought that BF's deed mentioned 1/3 of the water rights.
37. • — Was not aware of Branch 2.

4/11/11: RC got Vince Kimura's phone number and email address from DJ. RC sent email to VK.

4/11/11: Vince Kimura email information to RC:

- Lived on parcel 032 on Koula Street and used to play in Branch 1a and 2 from 1970-1977.
- Grandparents lived on parcel 009 on Kapaa Street.

38. • — Branch 1a began on AW's property as shown on TMK map that was emailed to VK.
39. • — Kids played along the "two rivers from the top of Ainako in the forest down to Koula Street."
40. • — Branch 2 was usually dry and only flowed during heavy rain.
41. • — By 1998 there "was no ecosystem or anything alive in the stream or if it was running."
42. • — Did not recall Branch 1b at its present location near Ainako Ave and thought that it was a "drainage ditch that served the house or [was] some kind of overflow from the stream."
43. • — Thought that "Branch 1b merged into [Branch] 1a at some point downstream."

44. 4/11/11: RC sent email to DJ asking DJ to examine DJ's deed to see if water rights were mentioned in deed.

CWRM Findings:

45. • — Ainako Branch 1a at Ainako Stream is stream at "nipple" shown on TMK map.
46. • — Ainako Branch 1a at Ainako Stream used to be connected to Ainako Stream. (VK)
- Ainako Branch 1a at Ainako Stream no longer exists today on Weight property.
- Ainako Branch 1b is located close to Ainako Avenue and has a sliding diversion gate.
- Ainako Branch 1b is shown in AW's 1957 photo of AW's property.

47. • — AW's 1957 photo did not show a continuous concrete or rock wall along Ainako Stream on AW's property.
48. • — Ainako Branch 1a and 1b came together and merged on AW's property.
49. • — Ainako Branch 2 used to be was connected to Ainako but is no longer connected to Ainako Stream.
50. • — Ainako Branch 2 was/is dry channel that only flows during heavy rains. (SH, BM and VK).
51. • — Ainako Branch 2 is covered up where it used to connect to Ainako Stream.
52. • — A continuous concrete levee and rock wall runs along Ainako Stream between the Weight and Marsh properties.
- Branch 1a at Kokea Street used to mark boundary between Weight and Henderson properties. (DC)
- Branch 1a at Kokea Street is marked by a pipe in the ground.
- Branch 1a at Kokea Street was moved to its former location to its present location at Branch 1b at Kokea Street.
- Branch 1b at Kokea Street is present location of branch stream.

53. • — Branch 1b at Kokea Street has a neatly stacked rock pile indicating recent work by Branch 1b stream bank/channel.

Bm AND vk

File Name:	Brief Description:

GPS Listing:

Shapefiles: (List file names of all shapefiles created and a brief description of each)

File Name: Photo ID	Brief Description: Description
201103100133	View upstream of Branch #1b across Kokea St. from Okazaki lanai.
201103100134	Left of previous photo view of Kokea St. fill.
201103100135	Right of previous photo view of Kokea St.
201103100136	New view Branch #1b stream channel below Kokea Stream from Okazaki lanai looking towards Hanenburg parcel 046 and bank.
201103100137	360° view of previous photo. Note waterfall
201103100138	360° view of previous photo. Zoom out – note waterfall looking at Hanenburg home.
201103100139	360° view of previous photo. Okazaki upper pond below lanai.
201103100140	360° view of previous photo looking towards Shindo parcel 033 and Matsumoto parcel 034.
201103100141	End 360° view of previous photo. Jungs and RC in photo.
201103100142	View which should have started 360 view prior to photo 136.
201103100143	New spot at other end of lanai where Jungs and RC stood in photo 41.
201103100144	360° view of previous photo looking towards upper pond.
201103100145	360° view of previous photo looking towards lower pond.
201103100146	360° view of previous photo looking towards lower pond
201103100147	360° view of previous photo looking towards lower pond. RH shadow in photo.
201103100148	End 360° view of previous photo looking towards lower pond.
201103100149	New spot. View of dry drainage canal for Branch #2 below Kokea St. and at Okazaki (045) property line next to Purves (044).
201103100150	360° view of previous photo.

201103100151	360° view of previous photo.
201103100152	360° view of previous photo.
201103100153	360° view of previous photo. Note corner of channel wall DJ and RC standing on – refer to photo 157. RC sitting on channel wall.
201103100154	End 360° view of previous photo. Okazaki's parking area MJ, DO, RC in photo.
201103100155	New spot standing on corner of channel wall same spot as RO from photo 153 looking back towards previous spot of 360 view.
201103100156	270° view of previous photo.
201103100157	270° view of previous photo. Note looking down at corner of channel wall.
201103100158	270° view of previous photo.
201103100159	270° view of previous photo. Lower channel wall to right with pvc water line running along top. DJ, RO, RC, DO in photo.
201103100160	End 360 view of previous photo. Looking at Okazaki home.
201103100161	New spot. View upstream of Branch Stream #1b between Okazaki (045) and Hanenburg property (046). RC & RO in photo. Appears to be conjunction of Branch Streams #1 & #2.
201103100162	360° view of previous photo
201103100163	360° view of previous photo
201103100164	360° view of previous photo looking at what would be Branch Stream # 2 flow path in Matsumoto parcel 034.
201103100165	360° view slightly downstream of previous photo looking back up again what would be Branch Stream # 2 flow path in Matsumoto parcel 034.
201103100166	360° view of previous photo with Matsumoto home again.
201103100167	360° view of previous photo
201103100168	360° view of previous photo
201103100169	360° view of previous photo looking downstream Branch Stream #1b after conjunction with Branch Stream #2 towards Koula St.
201103100170	360° view of previous photo
201103100171	360° view of previous photo
201103100172	360° view of previous photo looking towards Shindo parcel 033 and home.
201103100173	360° view of previous photo starting to look upstream Branch Stream #1b
201103100174	End 360° view of previous photo
201103100175	New spot looking down at culvert intake at Matsumoto parcel 034 on Koula St.
201103100176	90° view of previous photo Various homes in background – Matsumoto, Okazaki, Hanenburg, and Shindo.
201103100177	End 90° view of previous photo looking upstream Branch Stream #1b between Matsumoto (034) and Shindo (033) from Koula St.
201103100178	New spot looking back at culvert outlet of Branch #1b below Koula St. on Jung property (029).
201103100179	360° view of previous photo looking upstream Branch Stream #1b.
201103100180	360° view of previous photo.
201103100181	360° view of previous photo.
201103100182	360° view of previous photo.
201103100183	360° view of previous photo looking downstream Branch Stream #1b above Jung waterfall (middle right in photo).
201103100184	360° view of previous photo Jung home in background.
201103100185	360° view of previous photo. DJ, RO, RC standing on raised driveway.
201103100186	360° view of previous photo height of raised driveway.
201103100187	360° view of previous photo.
201103100188	360° view of previous photo.
201103100189	360° view of previous photo. Note second dry culvert.
201103100190	360° view of previous photo looking towards Koula St. fill.
201103100191	360° view of previous photo.
201103100192	End 360° view of previous photo.
201103100193	New Spot – below Jung waterfall (3 small falls in far background). RC in photo.
201103100194	360° view of previous photo looking upstream.
201103100195	360° view of previous photo.
201103100196	360° view of previous photo.
201103100197	360° view of previous photo looking downstream.
201103100198	360° view of previous photo.
201103100199	360° view of previous photo. Jung post at corner of home.
201103100200	End 360° view of previous photo.
201103100201	New spot - View of Ainako Stream at Koula St..
201103100202	New spot - View from Kokea St. of low depression near junction of AW parcel 005 and SH parcel 006. where water from Branch #1a used to form a pool before flowing to the right along Kokea St into inlet culvert (see photo 108) Note new wall behind RC that channelizes water towards inlet culvert above Kokea St. Also not to left of RC previous banks of Branch Stream#1a.

Waypoints: (List all waypoints in decimal degrees and provide a brief description of each)

WP No.	Latitude	Longitude	Brief Description:

#45 DO lanai overlooking Branch #1b and fish ponds.
#46 DO paved parking area next to Branch #2 which dried up in early 1990's.
#47 Okazaki retaining wall next to Matsumoto (Shindo) where water from Branch #2 used to flow from Okazaki property into Shindo property.
#48 Branch #1b on Shindo property where side channel is located.
#49 Inlet to culvert under Kouia Street.
#50 Mini-"waterfall" on Branch #1 at DJ property purchased in 1997. Typically there is only one waterfall. On 3/10/11 there were four waterfalls. Water used to flow across the entire width of streambed.
#51 Ainako Stream inlet to culvert under Kouia Street.
#52 Property marker between Weight and Henderson at Kokea Street.
#53 Outlet of Branch #2 under Kokea Street.

Attachments:
Brief Description:
1. Image Contact Sheet

Recommendations:

54.

- Okazaki fishponds were built in the 1960's prior to the State Water Code and do not require a SCAP/SDWP/PAIFS.
- Property owners along Ainako Stream and Branch Stream 1b have riparian rights and are entitled to use and enjoy the stream.
- Because of the complexity and inter-relationship between Ainako Stream and Ainako Branch 1b, the work that was done previously to the stream, and the number of property owners along both streams who have riparian rights, either mediation or legal recourse is recommended.

Copy of this Report was received by SH/AW *without* pictures.

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August 12, 2011

Via E-Mail and U.S. Mail
(robert.k.chong@hawaii.gov and
roy.hardy@hawaii.gov)

Mr. Robert Chong
Mr. W. Roy Hardy
Commission on Water Resources Management
P.O. Box 621
Honolulu, Hawaii 96809

Re: Response to July 29, 2011 Letter Regarding March 10, 2011 Field Investigation Reports

Ainako Stream and Ainako Branch Stream, Hilo, Hawaii
TMK: (2) 2-5-024:028, 029, 033, 044, and 045

Dear Mr. Chong and Mr. Hardy:

On behalf of Ms. Leslie Aina Weight and Mr. Robert Scott Henderson (collectively, the "Respondents"), this letter responds to the July 29, 2001 letter from Mr. W. Roy Hardy, Hydrologic Program Manager for the State of Hawaii, Commission on Water Resource Management ("Water Commission") related to the March 10, 2011 Field Investigation Reports.

In the letter, the Water Commission states that the purpose of the draft Field Investigation Reports is provide each side an opportunity to comment on their own respective reports. However, the Water Commission explained that it would not be considering the concerns of Respondents or the comments of Respondents to the Field Investigation Report No. F12011031002 related to the Claimants ("Jung Field Report"), which were more fully set forth in the Respondent's May 24, 2011 letter.

Although the draft Jung Field Report was not intended to be forwarded to the Respondent's counsel. The simple fact is that it was forwarded by Mr. John Carroll, on behalf of the Complainants, to Mr. Paul Alston, counsel for the Respondents. And Mr. Carroll claimed that the report

EXHIBIT 2

supported his clients' claims. For this reason, it will be highly prejudicial and gravely unfair to the Respondents if the Water Commission fails to consider and incorporate the Respondents' comments on the errors and false statements in the Jung Field Report.

Not only does the Jung Field Report contain numerous incomplete and incorrect statements, but also that report contains several issues, which were not raised in the initial Complaint and appeared for the very first time in the Jung Field Report. The Respondents were never provided an opportunity to respond to the false allegations subsequently raised by the Claimants. For instance, when the Complainants filed their Complaint on January 24, 2011, they only raised two major issues: (1) whether the sliding flood control gate at the Ainako Stream junction had been manipulated by Ms. Weight, Mr. Henderson, and Dr. Weight to cause decreased flow on the Complainants properties and (2) whether Mr. Henderson or Dr. Henderson blocked flow of "Branch Stream 2" sometime in the 1980's or 1990's.

On February 17, 2011, Ms. Weight and Mr. Henderson submitted a Response to the Complaint to the Water Commission addressing these issues. However, in the course of the March 10, 2011 site visit and field investigation by the Water Commission, the Complainants inappropriately raised claims on additional issues, which were entirely unrelated to the claims in the original Complaint. These new claims are labeled in the Jung Field Report as items 4-7, 10, 11, 13-16, 18-23, 26-30, 33, 36, 38-49, 52 and 53. Therefore, nearly half of the "Findings" in the Jung Field Report were new information that Ms. Weight and Mr. Henderson were not previously aware of and did not have a fair opportunity to respond to in both the Response to the Complaint and at the site visit/field investigation. On the other hand, virtually all information set forth in the Response to the Complaint and discussed with Water Commission at the site visit/field investigation of Ms. Weight's property had been provided previously to the Complainants.

In light of the fact that the Jung Field Report contains numerous inaccurate statements and raises several new issues, the Water Commission will be violating its duties and responsibilities if it (1) fails to incorporate the concerns and comments of the Respondents to the Jung Field Report and/or (2) fails to provide Respondents a sufficient opportunity to address the new issues and allegations raised in the Jung Field Report.

Under Haw Rev. Stat. § 174C-13 and Haw. Admin. Rules §§ 13-167-3, 13-167-82, among the powers, duties, and responsibilities of the Water Commission is to "**carry out . . . investigations** into all aspects of water use and water quality" and, in relation to "Citizen Complaints" filed with the Water Commission alleging "a diversion, withdrawal, impoundment, consumptive use of waters . . . **the commission shall cause an investigation to be made,** take appropriate action, and notify the complainant thereof." (Emphases added). Obviously, by

only reviewing and considering the Complainants' biased one-sided position in the Jung Filed Report, the Water Commission is not conducting a fair, thorough, and detailed investigation of all issues, facts, testimony, documentation, etc. relevant to the Complaint. By doing so, the Water Commission is unfairly prejudicing the Respondents and their right to a due process.

By and through this letter, the Respondents respectfully request the Water Commission to review, consider, and incorporate their concerns and comments raised to both the Weight/Henderson Report and the Jung Field Report before issuing final versions of these reports.

Feel free to contact me if you have any questions or need any additional information to complete your investigation of the Complaint and Response to the Complaint on this dispute.

Very truly yours,

PAUL ALSTON
MEI-FEI KUO

MFK:blk

cc: Ms. Leslie Aina Weight
Mr. Robert Scott Henderson

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOUR(
COMMISSION ON WATER RESOURCE MANA(
Stream Protection and Management Branch

FOR STAFF USE ONLY

FIELD INVESTIGATION REPORT

FI2011031001 (Ainako, Henderson)

Final FIR for Henderson
Keyed comment items,
four (4) pages

Date of Field Investigation: 03/10/11	**Time (24-hour):** 0930 A.M.
CWRM Staff:	Roy Hardy, Robert Chong
Individuals Present:	Scott Henderson (SH), Leslie Aina Weight (AW)
Reference:	CDR.2769.8
TMK Parcels (9-digit):	(3) 2-5-025:003, Okino, 33 Kokea Street (3) 2-5-025:004, Marsh, 51 Kokea Street (3) 2-5-025:005, Weight, 1000 Ainako Avenue (3) 2-5-025:006, Henderson, 99 Kokea Street (3) 2-5-025:007, Henderson, 107 Kokea Street (3) 2-5-025:013 and 014, Weight, 1000 Ainako Avenue (3) 2-5-025:015, Thomsen, 974 Ainako Avenue (3) 2-5-024:028 and 029, Jung, 118 Koula Street (3) 2-5-024:033, Shindo, 145 Koula Street (3) 2-5-024:032, Kimura, 151 Koula Street (3) 2-5-024:034, Matsumoto, 125 Koula Street (3) 2-5-024:042, Metzger, 46 Kokea Street (3) 2-5-024:044, Purves, 60 Kokea Street (3) 2-5-024:045, Okazaki, 80 Kokea Street (3) 2-5-024:046, Hanenburg, 110 Kokea Street (3) 2-5-024:016, Koehnen, 111 Kapaa Street

Items commented on by SH & AW on August 16, 2011

Findings: See Exhibit 2 for location of stream branches.

1940's Hilo Sugar Company built the Ainako subdivision.

- Current levees on Ainako Stream were likely built by the Hilo Sugar Co. when the subdivision was built.

1. SH showed RH and RC a 1947 survey map on his laptop computer showing a Y-shaped line labeled "stream" (Branch Stream #2). 1947 survey map also showed a dry side channel on Branch Stream #1 and a lower run of Branch Stream #1a. See Exhibits and 6.
   - SH explained that Y-shaped line was a drainage ditch that only flowed during periods of heavy rain.
2. - SH showed RH and RC 1957 and 1958 photos of the northeast corner of the AW's property which showed the Ainako Branch Stream #1b across AW's property. There were no dotted lines drawn on the photos.
3. - SH said that he could provide testimony from other people to verify the existence of the sluice gate.
   - RH observed dry side channel on Branch Stream #1. See photos 115 to 120.

AW and SH: Ainako stream has flooded several times in the past (1956, 1964, 1966, 1977, 1999, 2008 and 2009).

1956: Dr. Weight (AW's father) and his family moved to 1000 Ainako Avenue (013 and 014).

- Dr. and Mrs. Weight lived there until their deaths in 1994 and 1995, respectively.

4. 1958: Dr. Henderson (SH's father) and his family moved in to 51 Kokea Street (004).

1963: Ron and Dora Okazaki built their house at 80 Kokea Street (045).

SH and AW mentioned that changes were made to AW's fishponds due to the earthquakes including the one that sunk the beach near Volcanoes National Park.

- Streambed is made up of pahoehoe lava rock.
- The earthquakes cause fissures in the lava rock, and water in the ponds leaked after that.
- One of AW's ponds was filled in.
- Pointed out the location of the filled in pond was between the current diversion on Branch 1b and Branch Stream

EXHIBIT 3

#1.

1976: Dr. Henderson sold house at 51 Kokea Street (004) to Frank Kothe.

1980's: (Al)Bert Fraleigh built house at 110 Koula Street (028 & 029).

- BF asked Dr. Weight to "open up stream."
- SH mentioned that Fraleigh wanted more flow even back in the 1980's.

1995 to present: AW returned to live at 1000 Ainako Avenue (013, 014 and 005).

1994: Dr. David Jung moved to 110 Koula Street (028), Fraleigh's former residence.

2004 to present: SH lived at 107 Kokea Street (not on any stream) (007).

2006: SH purchased 99 Kokea Street on the Branch Stream (006).

2008: SH: steel sluice gate was frozen in place for estimated 30 years. See photos 1-6 and 132.

- SH removed and replaced metal sluice gate with new plastic wood sluice gate.
- Metal bar attached to gate has seven (7) holes drilled every inch or so from top to bottom of bar to allow gate to be raised or lowered to allow an adjustable flow control.
- A long nail was placed though top hole in the bar and SH said it always remains in that hole and position.
- The nail rests on top of the retaining wall to keep the sluice gate in the desired position.
- The height of the sluice gate height is maintained at the "historic gate setting" of the former metal plate that was rusted in place.
- The "historic gate setting" is four-inches above bottom of channel.

2007: SH patched leak (patch #1) along Branch Stream #1. See photos 23-26.

2007 to 2010: Landscaping has occurred on AW property over the past three years that included additional work in Stream Branch #1 and Branch #1b.

RC asked SH about the exact location of the sluice gate on the TMK map and explained the Dr. David Jung said that the sluice gate was not at Branch Stream #1a on the present TMK map but further upstream closer to Ainako Avenue. SH stated that was correct: the sluice gate is located farther upstream and almost at Ainako Avenue (Branch Stream #1b).

October 2009: Dora Okazaki called SH about removing dam on Branch Stream 1b.

- DO said that DJ's lawyer would file a complaint with the DLNR if AW did not remove the dam.

October 2009: SH measured flow of Ainako Branch Stream #1 and 1b by placing a heavy fabric "funnel" with a narrow opening at one end on bottom of the streambed.

- SH calculated the time it took for the "funneled" water to fill a graduated bucket.
- SH's flow measurement is in liters/sec.
- RH mentioned about the importance of finding the right stream location for flow measurements because the impact of eddies on the meter impeller blades.

November 2009: SH gave a tour of the Weight and Henderson properties to Dr. David Jung and never heard back from DJ.

April 2010: SH and AW filed an after-the-fact Registration of Stream Diversion and Declaration of Water Use with CWRM. AW also registered two existing fish ponds in 2010 with CWRM.

September 2010: SH patched two leaks (patch #2 and #3) during a stream dry-up event.

- SH filled the leaks by pushing small packets of fabric-wrapped dry mortar mix into the cracks at two locations on Branch Stream #1. See photos 121-129.

SH and AW mentioned several factors affecting the flow of Ainako Stream and Branch Stream #1:

- In 1982, Akolea Ditch was built along Akolea Street to prevent downstream flooding of Ainako Stream.
- Earthquakes in1960's and 1970's caused fissures in lava rock stream bed of Ainako Stream.
- Some additional stream flow in Branch Stream #1 was also lost down into the lava tubes due to the earthquakes.

- HI County BWS built Pihonua Well C located about 1 mile upstream.

RH stated that Piihonua Well C is about 1000 ft deep. Since the elevation at the well site is 975 (verified with Charley Ice that morning) the well went below sea level. The ground water level is roughly 250 ft above mean sea level (msl), making it much lower than the stream inverts at the area of dispute, which are at an elevation of over 700 ft msl. Additionally, the well is solid cased and grouted to at least the groundwater level to protect the well and prevent any upper ground water leakage down the casing and effectively seals the well all the way to the ground water level. SH concurred.

SH, AW, RH and RC inspected existing sluice diversion gate on Branch Stream #1b and noted current diversion configuration as mentioned above. See photos 1-22.

(11.) - RH and RC verified dam diversion in Ainako stream made up of rocks, half-pipe and railroad tie.

(12.) - AW said RO told the Weights that they should dynamite this existing diversion gate to allow more flow into the branch stream.

- RH and RC observed that Branch Stream #1b flows closely along the western edge of AW's house. See photos 27-30.
- AW mentioned and showed RH and RC location where water seeps out of the rocks under AW's house.

SH, AW, RH and RC inspected the location of the jog shown on the current TMK map at Branch 1a and verified the levee walls along Ainako Stream.

- RH and RC noted what appeared to be row of rocks (Photo 50) acting as a dam within Ainako stream at the approximate location of the jog in the stream as shown on the TMK map.

(13.) - SH stated that he did not know who built the rock dam.

- There did not appear to be any recent work along the levee to "close" Branch Stream 1a. See photos 52-57

SH, AW, RH and RC inspected the possible site of Branch Stream #2 coming off of Ainako Stream. See photos 57-76.

(14.) RH and RC asked about strange V-shaped levee wall on the Marsh property (004) and the rock dam diversion in Ainako Stream during the site visit.

- SH/AW stated the V-shaped levee had always been there since 1950's.

RH and RC noticed a pile of rocks (see photo 70) near the tip of V-shaped levee wall that seemed different than the levee wall at the TMK map jog where the purported diversion for Branch Stream 1a was located.

(15.) SH, AW, RH and RC inspected Ainako Branch Stream #1b at Kokea Street.

- RH and RC noticed a pile of neatly stacked rocks along the lower reach of Branch Stream #1b. See photo 108.
- RH asked AW if this was recent work in the stream.
- AW said that the rocks had been recently stacked.

RH explained riparian rights to SH and AW, and that downstream owners along Branch Stream #1 also have riparian rights.

- SH mentioned that property owners on Ainako Stream located downstream of the sluice gate also have riparian rights and would be affected by any increased flow diversion to Branch Stream #1b.

RH mentioned that it was clear that changes were made to the fish ponds and streambanks (recently stacked rocks and concrete patches) on Branch Stream #1 over the past few years and these modifications require an after-the-fact SCAP application.

- SH/AW must apply for after-the-fact SCAP for the recent Stream Branch 1 modifications.
- RH explained SCAP permit process, including other agency review and potential for fines.

SH/AW asked RH about what they can do to protect the ability for long-term maintenance of the rock dam in Ainako Stream diversion at the sluice gate at headwater of Branch Stream #1b. In the future when SH/AW gone, the need for maintenance of the dam will remain.

- RH explained CWRM's certification process for the 1989 water use declarations and registrations and mentioned that this was a possibility for SH/AW. However, the CWRM Commissioners rejected the original certification efforts for Molokai because of public objections, and CWRM's certification program was effectively stopped after that effort. SH/AW could formally ask the Commission for such a certification.
- RH also suggested the possibility of attaching some documentation about the rock dam diversion and the need to maintain it in its original state in the deeds of property owners on both banks of dam diversion, which would allow such activity to take place when needed. They should talk to a real estate agent or someone with more legal

experience in these matters.

Subsequent information:

(15.) 3/21/11 DJ faxed copy of unsigned letter to property owners along Ainako Stream dated 3/19/11 stating that there may be significant reduction in Ainako Stream if diversion gate is removed completely. Letter was probably written by SH.

- Received email from: Hans "Skip" Thompsen (3/19/11), Brett Marsh (3/22/11), Peter Okino (3/32/11).
- Received letter from Fred Koehnen (3/23/11).
- Received phone calls from: Elizabeth Wessel (3/21/11), Larry Black (3/23/11), and Margaret Oda (3/28/11).

Fred Koehnen:

- Filed 1987 registration for "mini hydro-electric plant" on Ainako Stream that was installed in 1982.
- Akolea Ditch now intercepts run-off so that only run-off below the ditch now adds to Ainako Stream flow.
- Source of Ainako Stream used to be a grassy bog and is now completely overgrown with strawberry guava bushes, and "considerable" Albizzia growth will contribute to reduced stream flow in future.

Brett Marsh:

- Branch Stream 1b and diversion gate 1b have been unchanged since 1978
- Branch Stream 2 has been a dry gulch for 33 years.
- Branch 2 did not exist, and there was do diversion gate.
- Branch 2 flows only during heavy or prolonged rain.

(17.) 4/3, 4/5, 4/5 and 6/12/11: SH emailed RC Pāhonua rainfall and Ainako and Waāuku stream flow information.

(18.) 6/13/11: Mei-Fei Guo (Alston Hunt) mailed RH and RC a copy of architect V. Ossipoff's plot and floor plan dated August 5, 1954, for the proposed residence for Dr. and Mrs. Leslie Weight. The house location and floor plan were deleted from the architect's drawing that was submitted.

Image Listing: (Attach PDF of image contact sheet)

File Name:	Brief Description:
Photo ID	Description
201103100001	Weight diversion on Ainako Stream with plastic sluice gate removed.
201103100002	Top of diversion gate. AW, RC, SH shoes for scale.
201103100003	Top of diversion gate. AW, RC, SH shoes for scale.
201103100004	Plastic and 2x4 wood sluice gate held up by SH.
201103100005	Sluice gate in place at "historic 4" opening. AW, SH, RC shoes in photo.
201103100006	Metal spike holding gate in position. SH shoe in photo.
201103100007	New spot Standing on rock, half-pipe, railroad tie dam diversion#1 looking at metal spike holding gate in position. AW, SH RC in photo.
201103100008	360° view from previous photo. SH and RC above diversion gate.
201103100009	360° view from previous photo looking at top of diversion with sluice gate. AW shoes in photo.
201103100010	360° view from previous photo looking upstream Ainako Stream.
201103100011	360° view from previous photo looking at rock and half-pipe dam #1 in Ainako Stream.
201103100012	360° view from previous photo looking towards Thomsen parcel (015).
201103100013	360° view from previous photo looking immediately downstream from rock dam diversion #1.
201103100014	360° view from previous photo looking towards Thomsen parcel (015).
201103100015	360° view from previous photo looking towards Thomsen parcel (015).
201103100016	360° view from previous photo looking downstream.
201103100017	360° view from previous photo looking downstream with Thomsen house in background.
201103100018	360° view from previous photo looking downstream with concrete levee wall on Weight parcel (014).
201103100019	360° view from previous photo.
201103100020	360° view from previous photo with Weight corner of home, pools, and recent landscaping in background.
201103100021	End 360° view from previous photo with AW and her house in background (note: proximity of Branch Stream #1 channel to house foundation.
201103100022	New spot showing sluice gate and beginning of Branch Stream #1b near AW home. AW, SH, & RC in photo.
201103100023	New spot looking towards previous photo spot where AW, SH, RC were standing on grass

AINAKO STREAM AND BRANCH STREAM (HILO, HAWAII)

HISTORICAL NOTES & PHYSICAL FEATURES

Author: Scott Henderson, 107 Kokea St, Hilo, HI,

March 2010

Ainako stream originates at about 820-foot elevation about 0.4 mile upslope from the 1000 Ainako Avenue bridge. The origin area is roughly a half-mile square of boggy scrub forest and grasslands immediately below Akolea Road. Numerous springs arise from the origin area (Figure 1) and converge on the stream channel via a network of ill-defined meandering routes. Substrate over the entire length of Ainako stream is dominated by pahoehoe lava flows dating to 5,000 to 10,000 years of age. This same substrate dominates slopes extending more than five miles above the stream origin. The pahoehoe flows are very porous, and lava blisters, tumuli and lava tubes are common. Less than a half-mile to the south of the stream origin area, an extensive lava tube system contains underground streams that flow most of the year. Similar subterranean systems likely feed the Ainako stream springs.

In a few locations, stacked rock lines the borders of the stream (Figure 2), possibly put in place by Hilo Sugar Plantation Company for flood control or water diversion purposes. Below the origin area, the stream flows over gentle relief through forest composed of strawberry guava, tibuchina, ferns, ginger and tall grasses (Figure 3).

Figure 1. Typical springs at Ainako stream origin area (approximate location N 19 42 26.4, W155 07 56.1, 250 meter elevation).

EXHIBIT 4

Figure 2. Ainako stream in lower portion of origin area. The rock embankments were possibly built by Hilo Sugar Plantation Company.

Figure 3. Ainako stream in forest above Ainako subdivision.

In the mid-1980s, a storm control trench was emplaced along Akolea Road, running cross-slope immediately above the Ainako stream origin area. Thus, there is no longer any surface runoff input into the stream origin area other than from the immediate watershed areas below Akolea Road. Prior to the construction of the storm control trench, areas of Ainako along the stream were subjected to several major flood events. A flood in August 1956 caused significant damage to subdivision properties along the stream.

By the time that the Henderson family moved to 51 Kokea Street in August 1958, substantial flood control levees of mortared rock and solid concrete had been built along several flood-prone sections of Ainako stream between Ainako Avenue and Koula Street (a distance of 0.2 mile). Those levees are generally 2 to 5 feet high and 0.5 to 1.5 foot thick (Figures 4 & 5). The levees were likely built by the Hilo Sugar Plantation Company (developer of the Ainako subdivision) and individual landowners in the subdivision. During a major flood in 1964, water level in the Ainako stream rose to within a few inches of the top of the levee in back of the Henderson's house.

In the mid-1940s, Hilo Sugar Plantation Company created a subdivision that included the general area of Kokea Street, Koula Street and Kapaa Street. The streams on those properties were (and still are) classified as "residential" and are owned by the property owners on either side of the stream(s). Some property boundaries are defined by large and small streams and at least one intermittent flow drainage swale.

Figure 4. Flood levee along Ainako stream on upstream border of Marsh property. Built circa 1956-58 soon after damaging flood of 1956.

Figure 5. Levee embankments along the Ainako stream Weight property margin.

The Weights purchased their first Ainako property, that included Lot 6, sometime in 1954-55. At that time the property was covered with tall grass and ferns and the branch stream ran through the property along the same general route that it follows today. The Weights moved onto the Ainako property in 1956. In the 1950s, or possibly earlier, a small flood gate was installed at the junction of the main stream and Ainako stream, most likely by the Sugar Company or Dr. Weight. The gate structure appears to be integral with the 3-foot-high retaining wall that runs along the entire Ainako stream boundary of the Weight property (Figures 5, 6 & 7). A steel plate of 14-inch width and 36-inch height slid vertically within grooves in the sides of the gate structure (Figures 6 & 7). For two or three decades, the steel plate had been jammed in a position that was about 3 ½ inches above the bottom of the gate. Water flows from Ainako stream, through the gate, into a 4-foot section of 14-inch ID concrete culvert (that passes under a sidewalk), and then into the branch stream (Figure 8).

It appears that the concrete culvert piece had been placed onto an unaltered pahoehoe lava surface in a natural low spot through which water would have flowed. Primary function of the flood gate over the last three decades has been to prevent very high levels of water from flowing into the branch stream during storm flow.

Figure 6. Flood control gate that buffers water flow into the branch stream. In back of the gate is a 14-inch ID diameter four-foot section of concrete culvert. Historic (2 to 4 decade) setting of the gate opening gap (3 ½ -4 inches) provides steady day-to-day water supply while keeping storm flow to non-damaging levels on downstream properties. The present gate, built of plastic wood, replaces the pre-existing steel gate and is set at the historical gap. Station1 in Figure 11.

Figure 7. Flood control gate and reinforced embankment at origin of branch stream.

Figure 8. Culvert that supplies flow to branch stream from Ainako stream. View from branch stream side. Station 1 in Figure 11.

To ensure that the water level of Ainako stream is maintained at a level that will provide ample flow of water into the branch stream, a diversion dam was built across half the width of Ainako stream (Figures 9 & 10). The diversion dam is made of loose-stacked rock and is topped by a length of railroad track. Landside end of the track piece is buried in soil. It is not known who first built the diversion dam, but it was likely either the Sugar Company or Dr. Weight. Over the years, Dr. Weight periodically repaired storm flow damage to the dam by recovering loose rocks in the stream and placing them back on the dam face.

Figure 9. Diversion dam (in left foreground) that raises Ainako stream level to divert water into the branch stream culvert. Ainako Avenue bridge is seen in background.

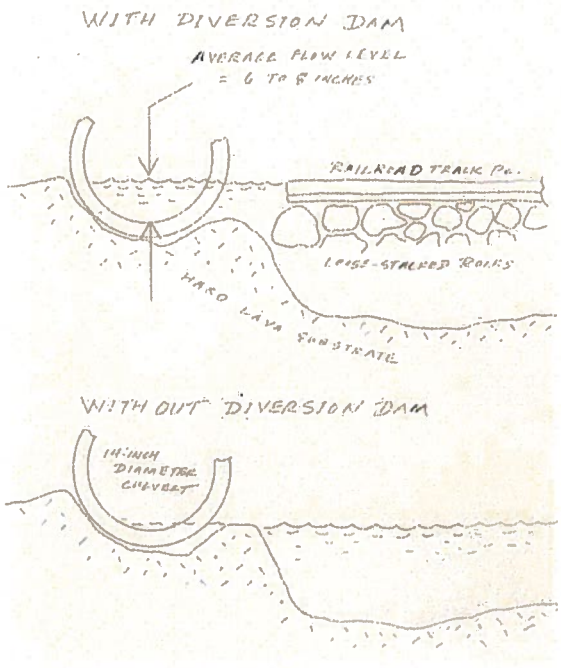


Figure 10. Schematic of water feed flow point to the branch stream with and without diversion dam in place. Note that without the diversion dam, there would be minimal or nil flow allowed into the supply culvert during low-levels of flow in the main (Ainako) stream.

Ainako stream length is about 1.3 miles from origin area to where it flows into a boggy area in a downstream valley below Kapaa Street. Width of the stream ranges from about three to 30 feet. According to Fred Koehnen, who has lived on the stream at Kapaa Street since 1956, Ainako stream has lost all water flow during periods of drought on about 5-6 occasions. Sue Irvine (who lived on Lot 7 for many years) documented dry-up of Ainako stream in March through June of 1992 and for two weeks in March of 1998. The stream experienced a flow stoppage event sometime in 2002-03. And Ainako stream nearly dried up in February of this year (2010).

Average annual water flow through the Wailuku River also shows very low values during the "no-flow" periods experienced in Ainako stream (USGS surface water annual statistics). Of interest is the fact that only two low-flow years were experienced in the Wailuku from 1960 through 1982 (22 years), whereas nine low-flow events occurred since 1983 (a 26 year period). This trend matches patterns of rainfall and El Nino events. If the trend continues, drought and low-flow events will occur on a relatively frequent basis.

The branch stream channel extends from the flood control gate through culverts at Kokea Street, Koula Street and Kapaa Street and onto the boggy valley where its flow and that of Ainako stream merge and are eventually lost to percolation. The branch stream travels a total distance of

about ½ mile. Its width varies from about one to 12 feet. Over the last few decades, retaining walls, bridges and ornamental fishponds have been created at many points along the stream's route (Figure 11 and Table 1).

The natural pahoehoe sill at the flood gate is over a foot higher than the floor of Ainako stream creating a situation wherein water flow to the small stream ceases before all flow to the main stream has been lost. And when dry-up events occur, lower reaches of Ainako stream and the branch stream dry-up before the upper reaches of the streams, likely due to the fact that the streams flow over ground surfaces composed primarily of very porous pahoehoe lava. This natural loss of water is seen in flow rate measurements made in October 2009 (Figure 12).

In 2008, S. Henderson and A. Weight plugged an obvious gap in a submerged pahoehoe inter-layer feature where a significant proportion of flow was being lost from the branch stream on Weight property. The October 2009 flow measurements made from the branch stream origin to Koula Street showed that flow rates were highly erratic, but slowly decreased downslope (Figure 12). It was apparent that in some locales water flow goes underground but re-enters the surface stream further downstream. Where the branch stream passes under Kokea Street, it loses nearly 60% of surface flow, but that flow is regained about 100 feet downstream of the culvert. From a point about 150 feet downstream of Kokea Street to the culvert at Koula Street, the stream loses about 43% of flow. Flow measurements showed that dam or diversion structures along the stream had no apparent deleterious effect on flow. During periods of very low flow in the branch stream several areas can be seen where water flows into voids in the pahoehoe substrate.

With the flood control gate set at an historical gap of 3 ½ to 4 inches, the branch stream channel fills to nearly overflowing level during periods of high storm flow, but does not create any conditions conducive to flooding hazard. Observations of flow in the branch stream during high storm flow consistently show that there are no significant impediments or alterations to flood drainage caused by any retaining walls, bridges or ponds on the streams that presently exist along the branch stream route from origin gate to Kapaa Street.

Historically, no native vertebrate species have been reported from the Ainako stream and branch streams system. Lack of connection to marine environments precludes the access of native animal larval phases to the system. Common alien fish that thrive in the streams include guppies (*Poecilia reticulata*), green swordtails (*Xiphophorus helleri*), and oriental weatherfish (*Misgurnus anguillicaudatus*). Dominant invertebrates include crayfish (*Procambarus clarkia*), bullfrogs (*Rana catesbeiana*), and cane toads (*Bufo marinus*). Waterfowl that frequent a variety of habitats in the streams include black-crowned night herons (*Nycticorax nycticorax hoactli*), golden plovers (*Pluvialis dominica*), and wandering tattlers (*Heteroscelus incanum*). There are no known records of any rare, threatened or endangered species utilizing these streams.

Figure 11. Ainako branch stream route & features. Triangular symbols = GPS-located photo stations. More data on the stations are provided in Table 1 (next page). Photos taken at the stations are shown in Figures 6, 8 and 13 through 26.

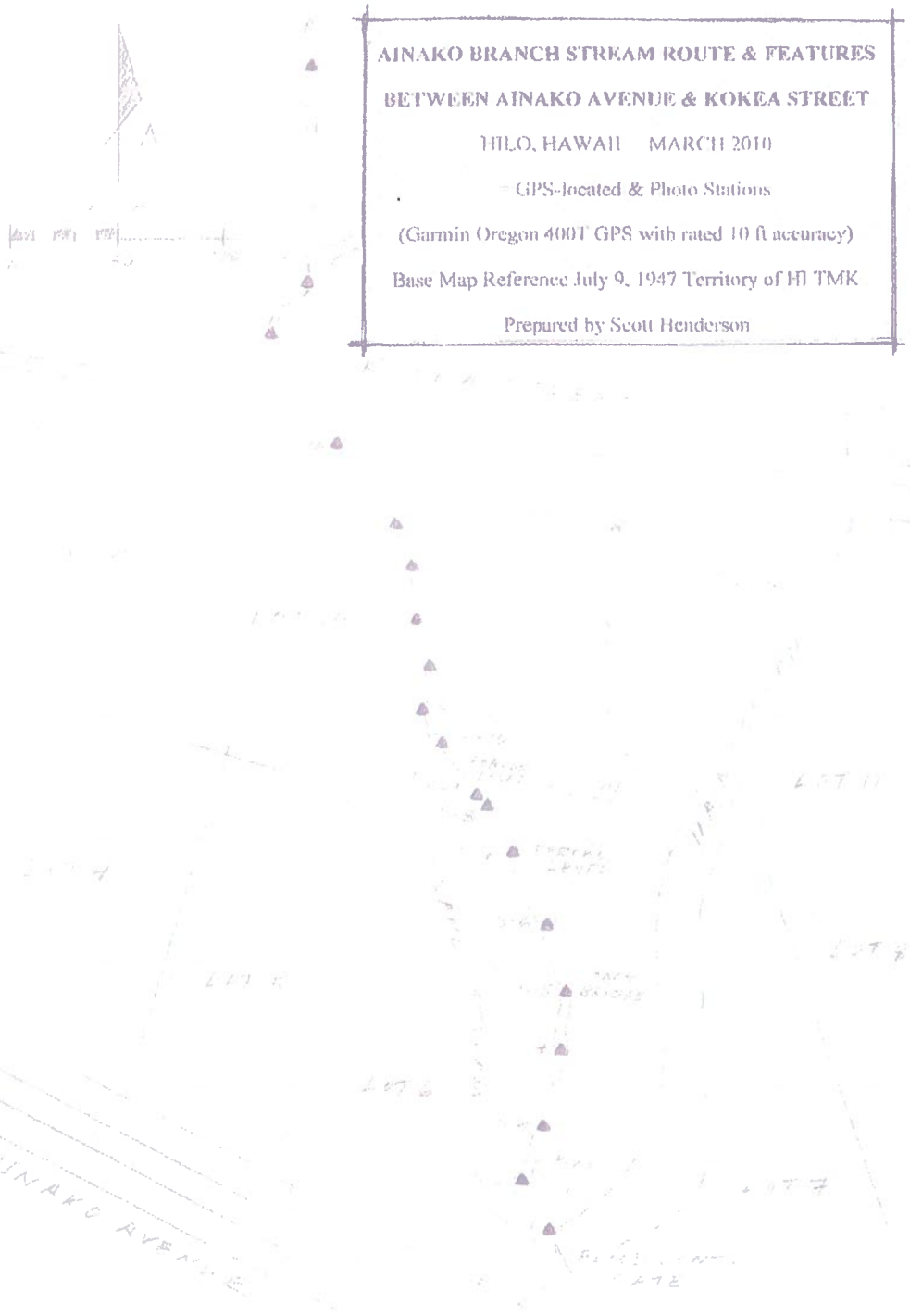


Table 1. Ainako branch stream map & property stakes GPS coordinates for Weight & Henderson properties.

S1	Flood gate: point where water enters branch stream	N19 42 30.9 W155 07 33.8
S2	Branch stream, rapids, 9 ft wide	N19 42 31.1 W155 07 33.7
S3	Branch stream, rapids, 6 ft wide	N19 42 31.2 W155 07 33.5
S4	Branch stream, rapids, 7 ft wide	N19 42 31.4 W155 07 33.1
S5	Branch stream, center of stone bridge, 6 ft wide	N19 42 31.6 W155 07 32.9
S6	Branch stream, long pool, 7 ft wide	N19 42 31.9 W155 07 32.7
S7	Branch stream, porous levee at fishpond inlet, 7 ft wide	N19 42 32.2 W155 07 32.6
S8	Branch stream, at fishpond waterfall, 9 ft wide	N19 42 32.4 W155 07 32.5
S9	Branch stream, porous levee, 5 ft wide	N19 42 32.5 W155 07 32.5
S10	Branch stream, rapids near bend, 5 ft wide	N19 42 32.8 W155 07 32.5
S11	Branch stream, 1 ft wide	N19 42 33.0 W155 07 32.5
S12	Branch stream, rapids at mauka end of pool, 3 ft wide	N19 42 33.1 W155 07 32.2
S13	Branch stream, porous levee, 7 ft wide	N19 42 33.3 W155 07 32.1
S14	Branch stream, 1 ft wide	N19 42 33.5 W155 07 31.9
S15	Branch stream, 2 ft wide	N19 42 33.7 W155 07 31.8
S16	Branch stream, center of bridge, 3 ft wide	N19 42 34.1 W155 07 31.7
P-1	Property stakes (approx locations), 3-12-2010	N19 42 35.6 W155 07 26.6
P-2	Property stakes (approx locations), 3-12-2010	N19 42 31.8 W155 07 34.8
P-3	Property stakes (approx locations), 3-12-2010	N19 42 32.7 W155 07 32.9
P-4	Property stakes (approx locations), 3-12-2010	N19 42 33.5 W155 07 33.5
P-5	Property stakes (approx locations), 3-12-2010	N19 42 34.6 W155 07 32.2
P-7	Property stakes (approx locations), 3-12-2010	N19 42 33.1 W155 07 30.6
P-8	Property stakes (approx locations), 3-12-2010	N19 42 32.4 W155 07 31.7
P-9	Property stakes (approx locations), 3-12-2010	N19 42 31.8 W155 07 32.0

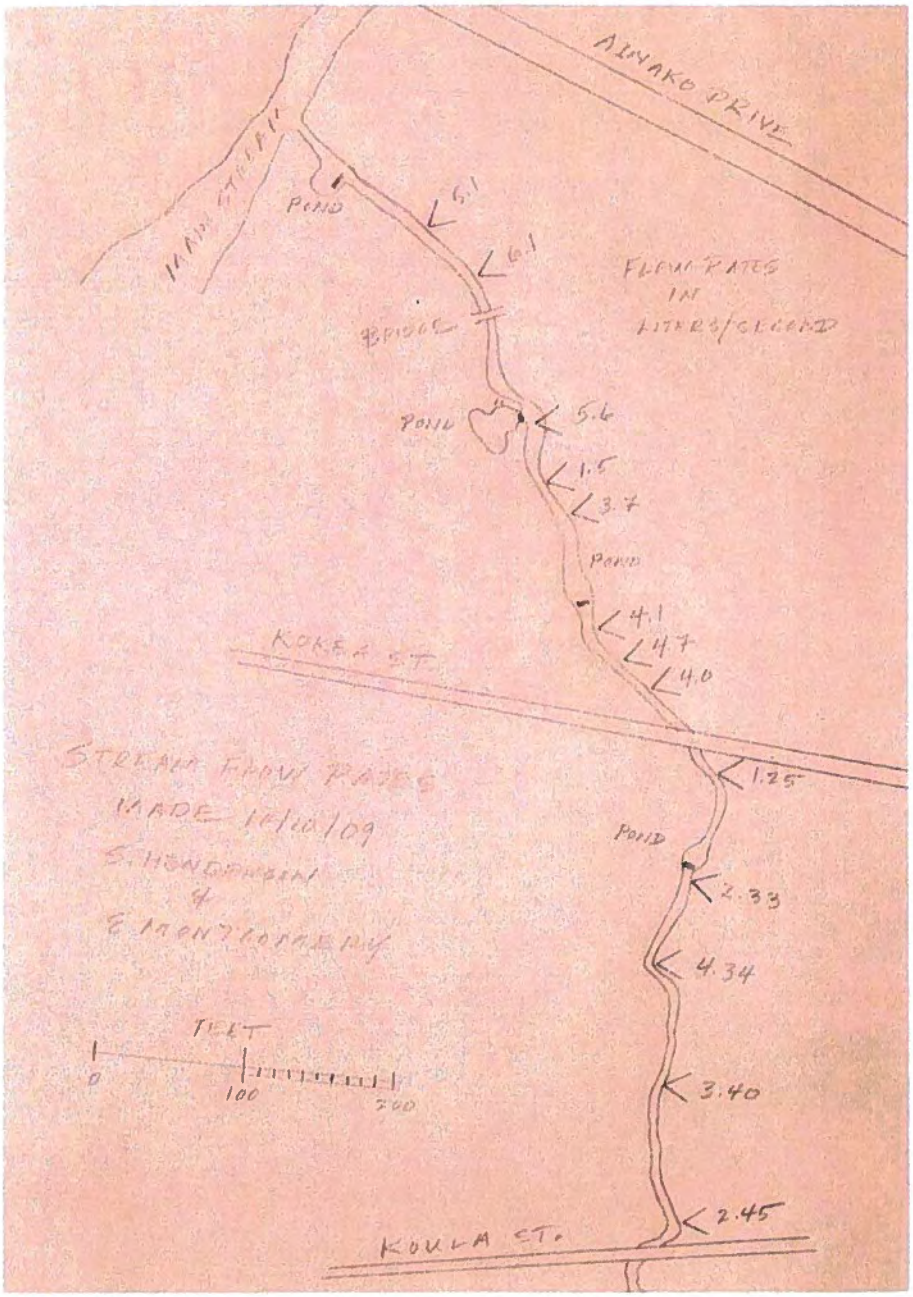


Figure 12. Branch stream flow measurements made in October 2009. Water flows downstream from the "main stream" (Ainako stream).

Figure 13. Station 3 of branch stream looking upstream.

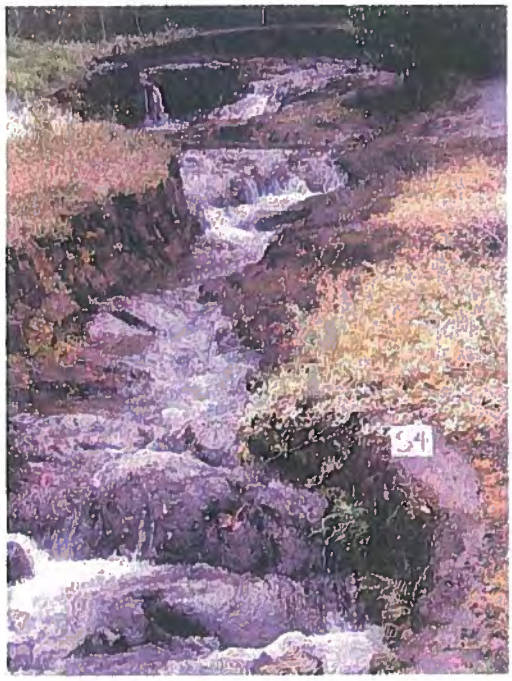


Figure 14. Station 4 of branch stream looking upstream.

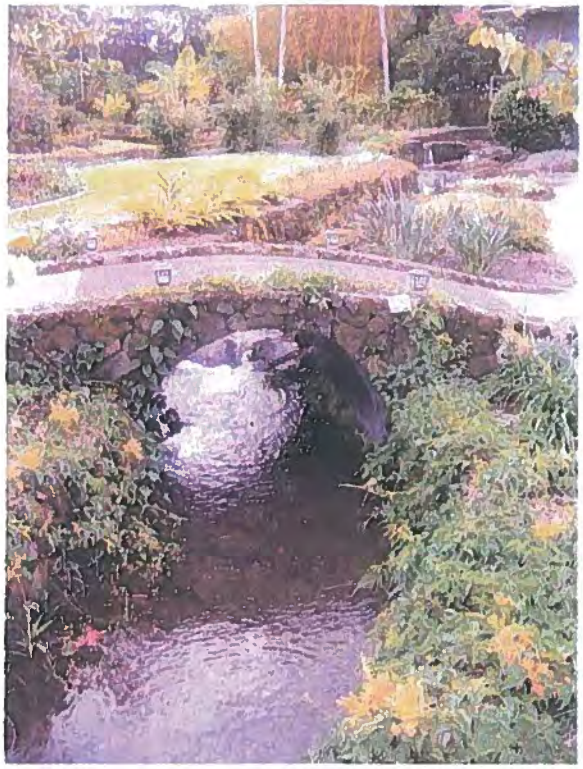


Figure 15. Station 5 of branch stream looking upstream.

Figure 16. Station 6 of branch stream looking upstream.

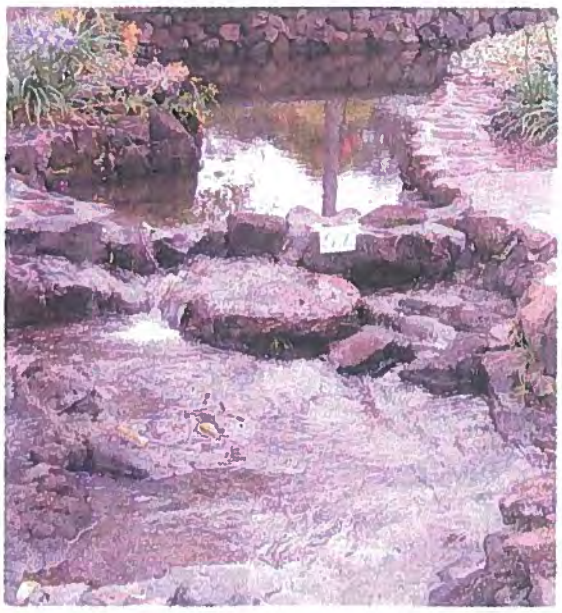


Figure 17. Station 7 of branch stream looking upstream.

Figure 18. Station 8 of branch stream looking across stream to pond overflow.

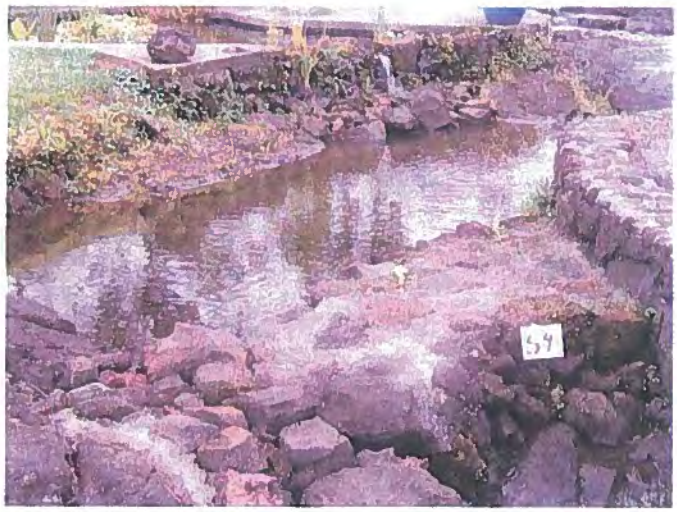


Figure 19. Station 9 of branch stream looking upstream.

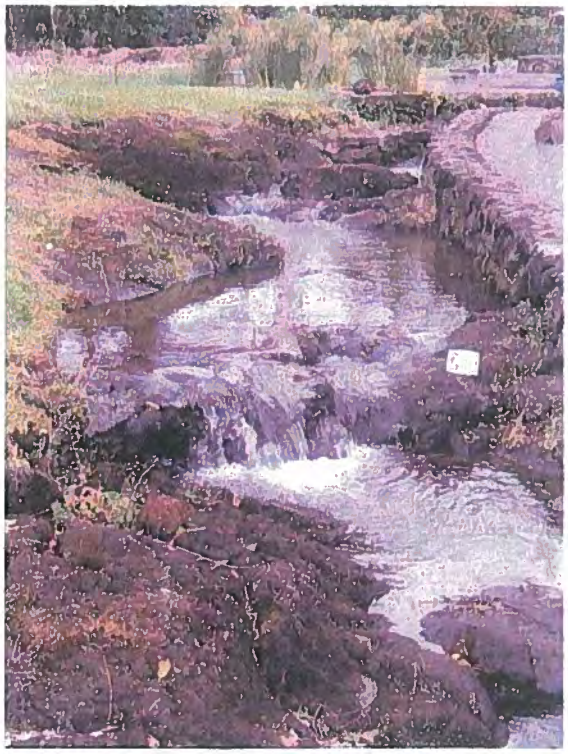


Figure 20. Station 10 of branch stream looking upstream.

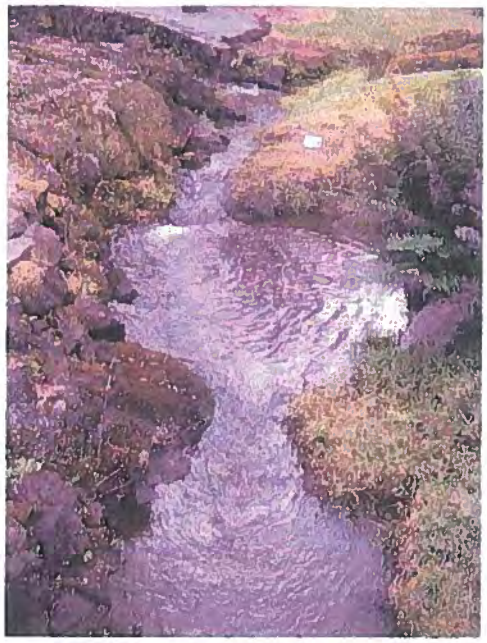


Figure 21. Station 11 of branch stream looking upstream.

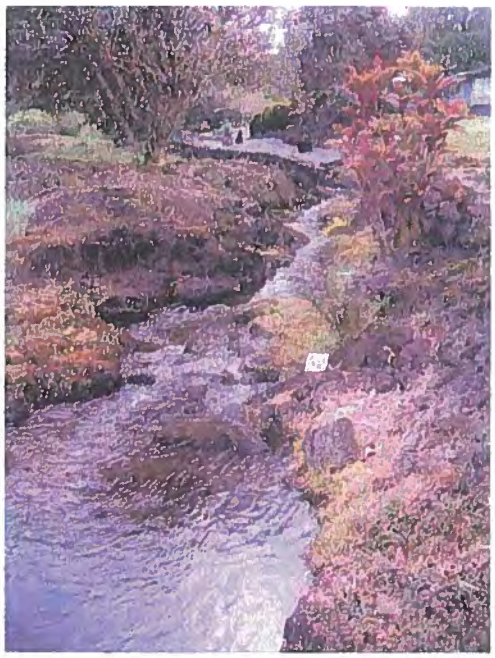


Figure 22. Station 12 of branch stream looking upstream.

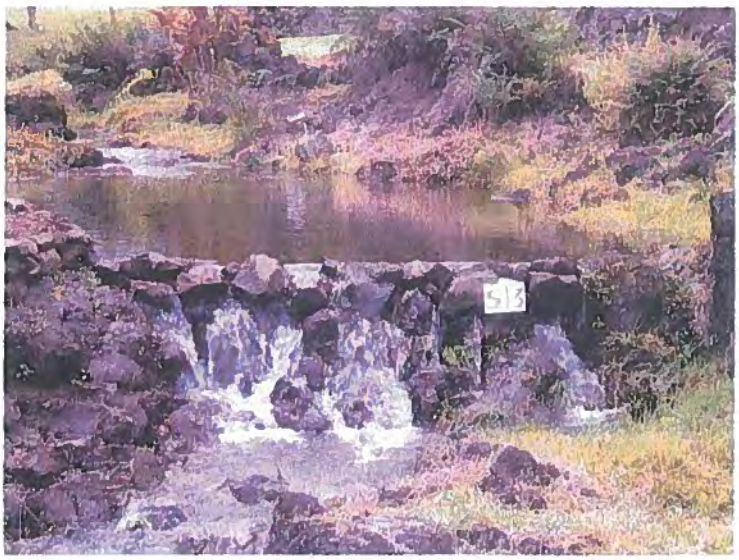


Figure 23. Station 13 of branch stream looking upstream.

Figure 24. Station 14 of branch stream looking upstream.

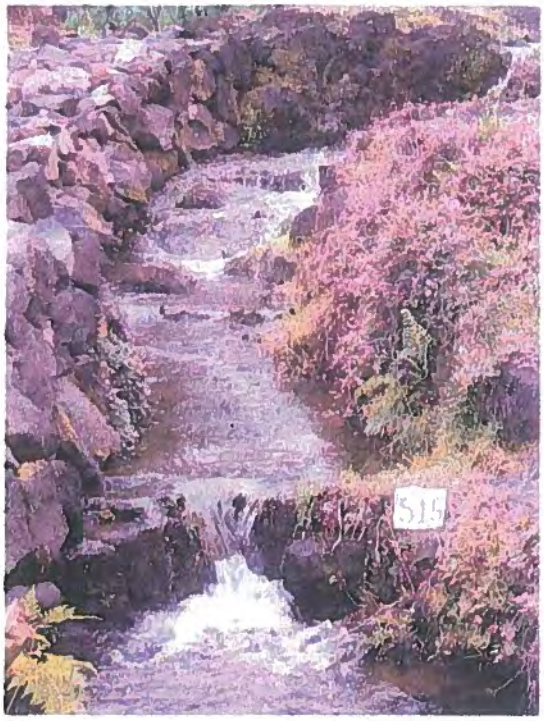


Figure 25. Station 15 of branch stream looking upstream.

Figure 26. Station 16 of branch stream looking downstream at culvert that passes under Kokea Street.

R. Scott Henderson educational and professional background:

University of Hawaii, Manoa, B.S. Degree in Geology (1966) specializing in Volcanology, with minor in Biology. Two years graduate studies in Oceanography and Geophysics.

Six years of employment by University of Hawaii as field and laboratory assistant in State Shoreline Erosion Project and Pacific-wide geomagnetic/gravity surveys and laboratory studies.

Thirty years as Federal Marine Biology Flow-through Research Laboratory manager, Natural Resources Manager and Chief of Environmental Office with Navy, Marine Corps and Army on islands of Oahu and Hawaii.

Continued business interest: Environmental Consultant, Kuapa Services

Continued personal interests: Marine and freshwater fish ponds, stream and pond ecology, reef ecology, mangrove control, avid hobby aquarist and ponds culturist, wetland management.

Pertinent familial presence on subject streams and proximal properties:

Self and/or parental family lived on Kokea Street properties on or adjacent to Ainako stream and branch stream properties from 1958 through present (52 years).

Spouse and/or parental family lived on Kokea Street properties from 1965 through present (45 years).

Persons that contributed historical information for this report:

Scott Henderson, Aina Weight, Fred Koehnen, Richard Henderson, Judy Henderson, Arthur Herbst

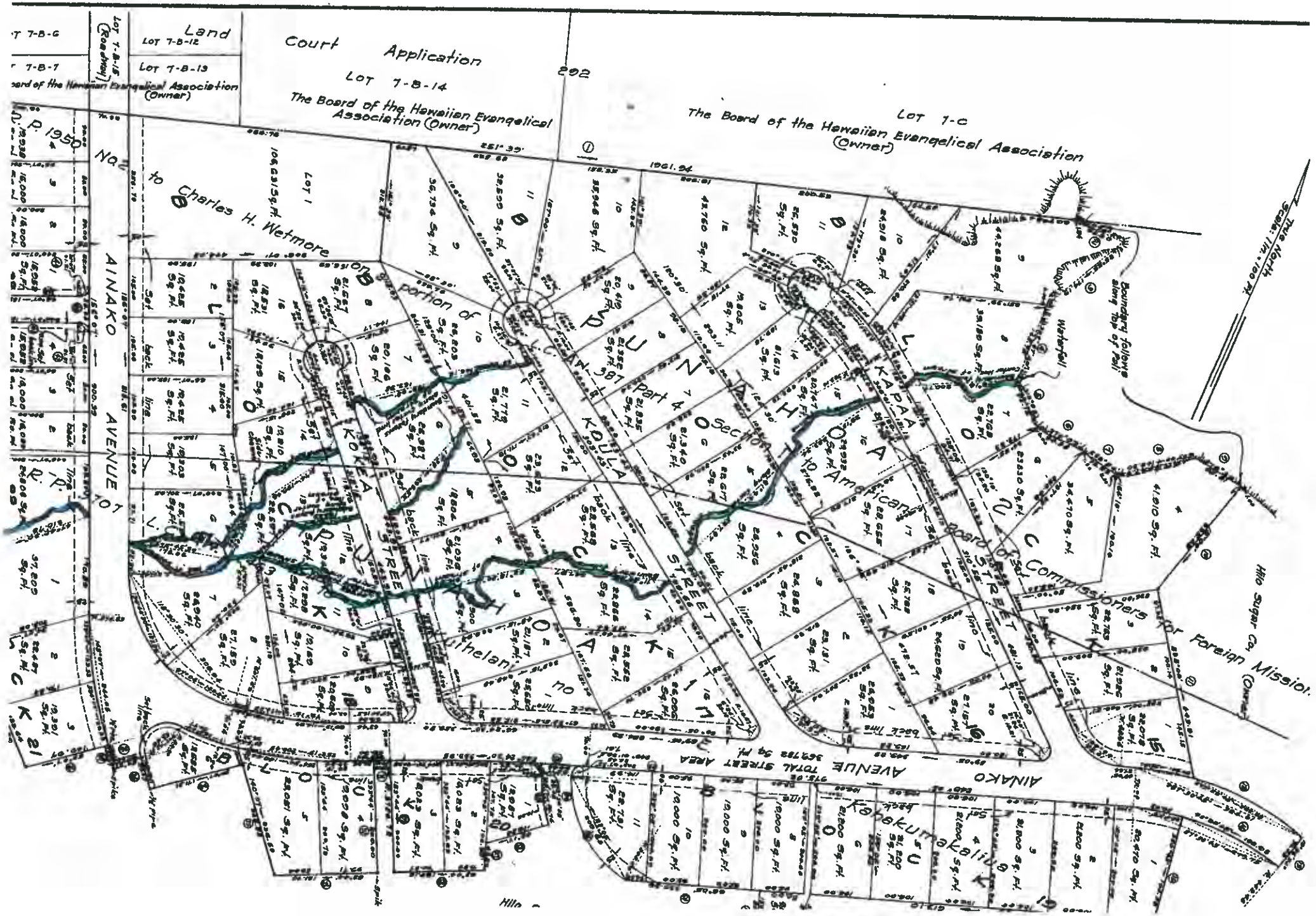
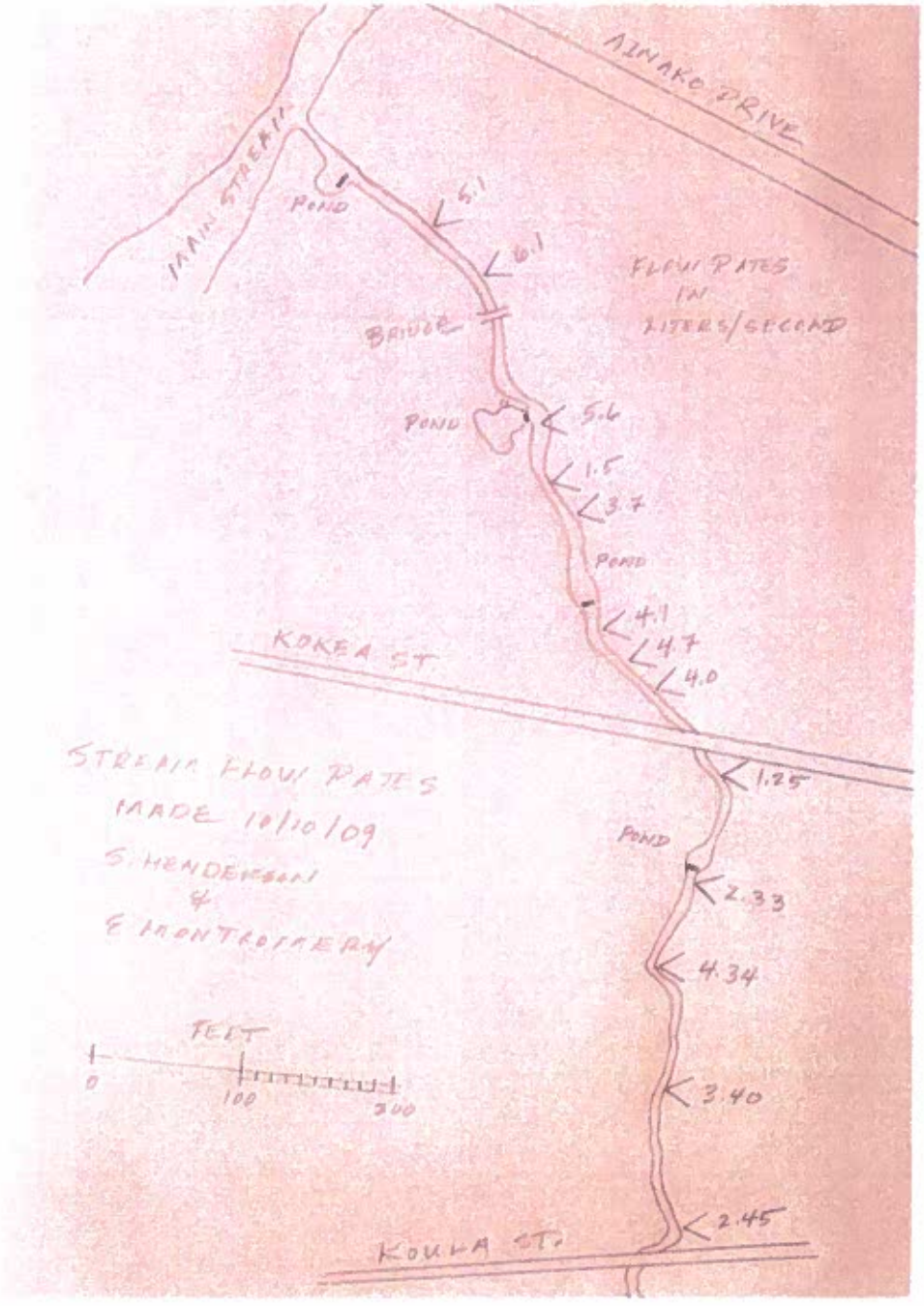

Land Court Application
LOT 7-B-14
The Board of the Hawaiian Evangelical Association (Owner)
LOT 7-B-12
LOT 7-B-13
LOT 7-C
The Board of the Hawaiian Evangelical Association (Owner)
292
Charles H. Wetmore
portion of
Section 1
Kapaa
Waterfall
Boundary follows along top of wall
True North
Scale: 1in. = 100 ft.
Hilo Sugar Co.
Foreign Mission
Commissioners
Board of
AINAKO AVENUE
KOKEA STREET
KOULA STREET
KAHELAMOKU STREET
KAKAUMAKALIU STREET
TOTAL STREET AREA 362782 Sq. Ft.

EXHIBIT 9



Branch stream flow measurements made in October 2009. Water flows downstream from the "main stream" (Ainako stream).

EXHIBIT 10

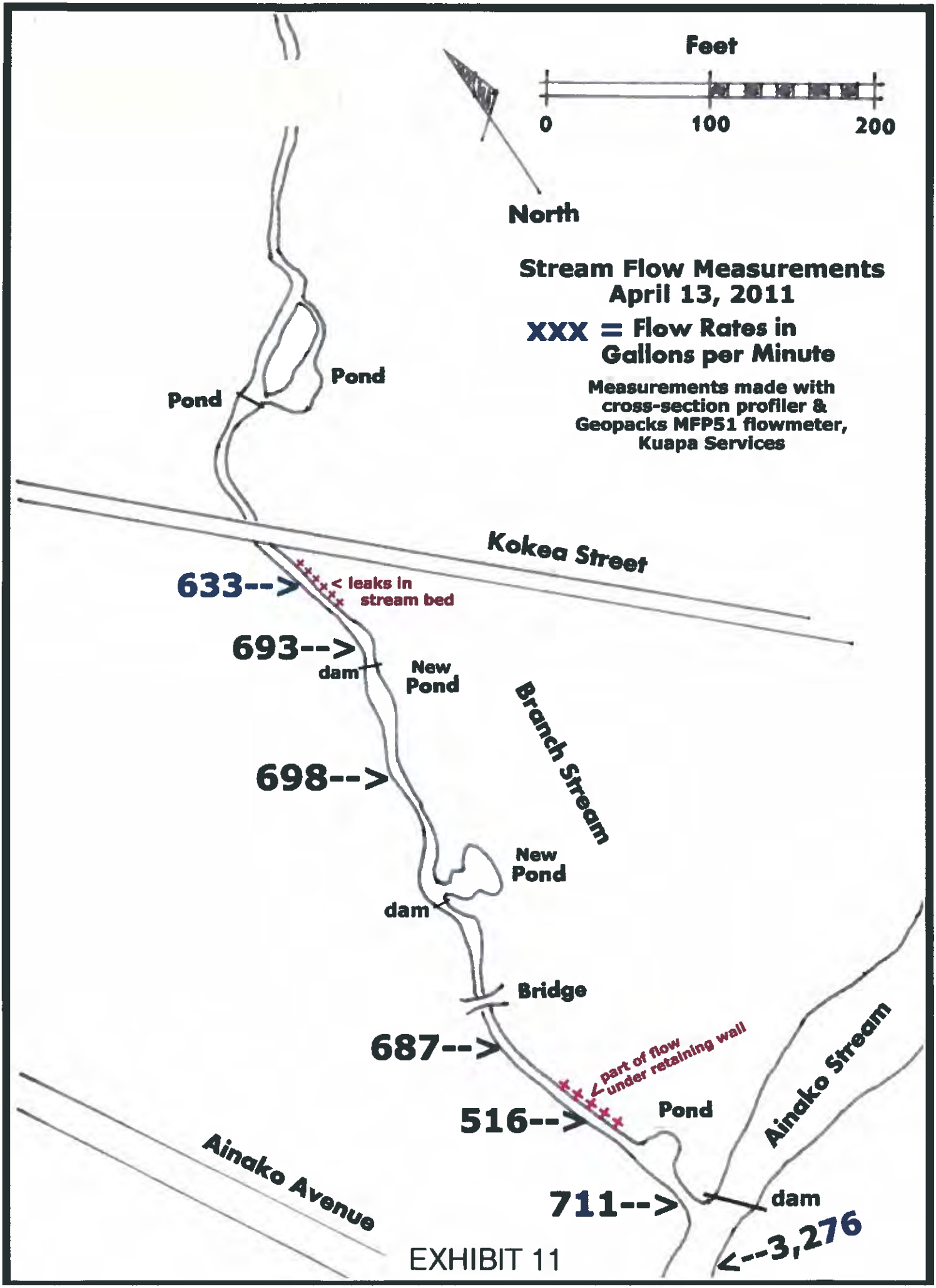

Feet
0
100
200
North
Stream Flow Measurements
April 13, 2011
XXX = Flow Rates in Gallons per Minute
Measurements made with cross-section profiler & Geopacks MFP51 flowmeter, Kuapa Services
Pond
Pond
Kokea Street
633-->
< leaks in stream bed
693-->
dam
New Pond
Branch Stream
698-->
New Pond
dam
Bridge
687-->
part of flow under retaining wall
516-->
Pond
Ainako Stream
Ainako Avenue
711-->
dam
<--3,276

EXHIBIT 11

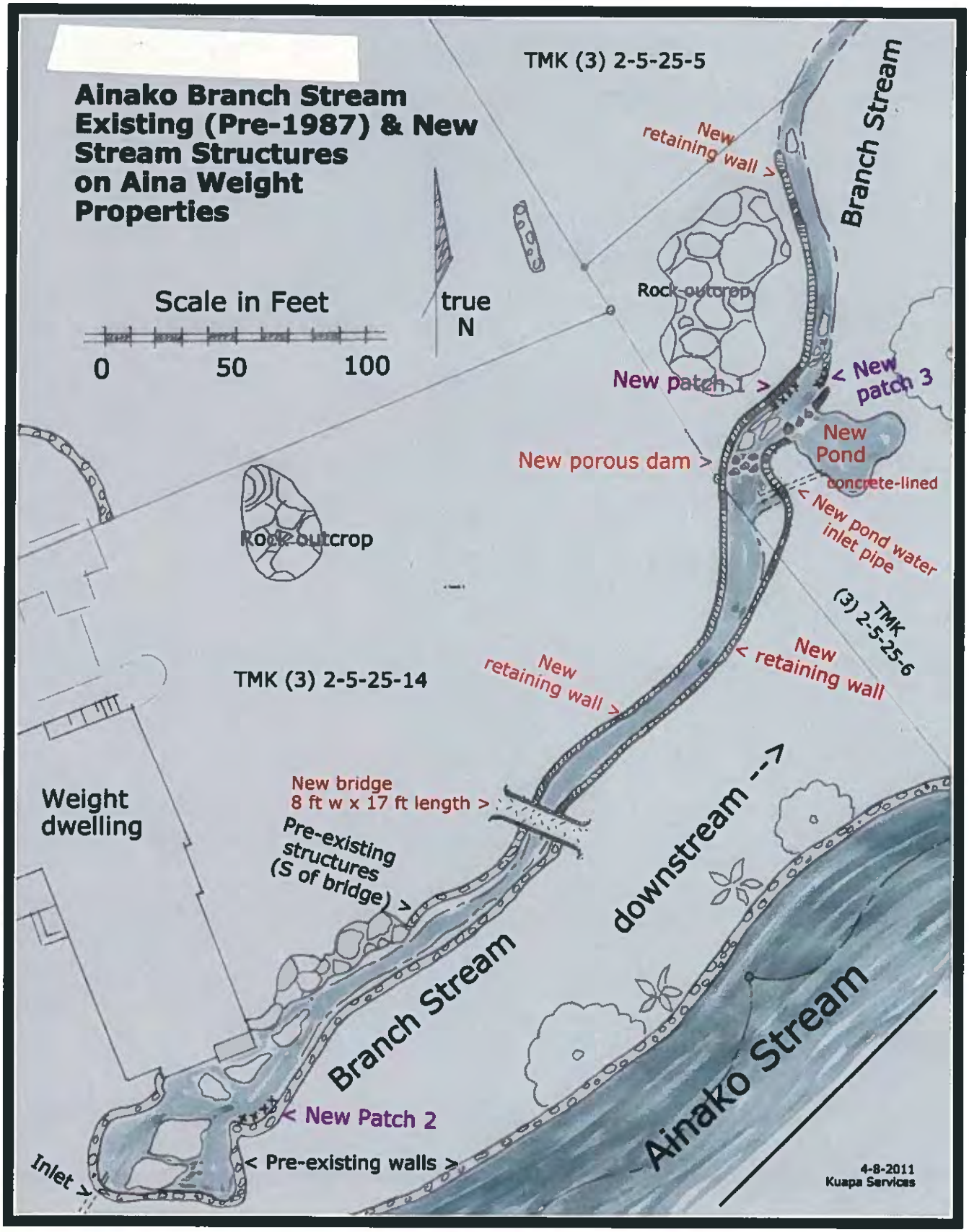
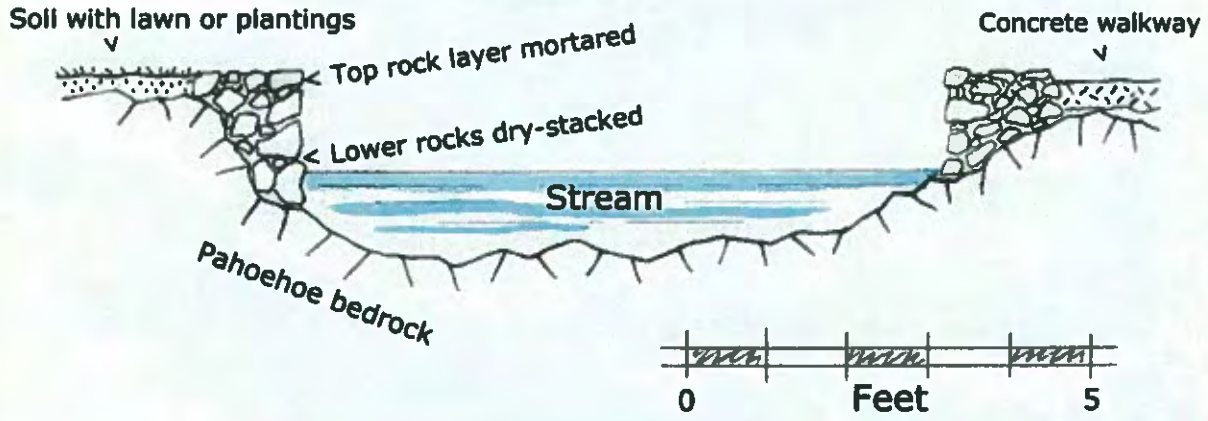
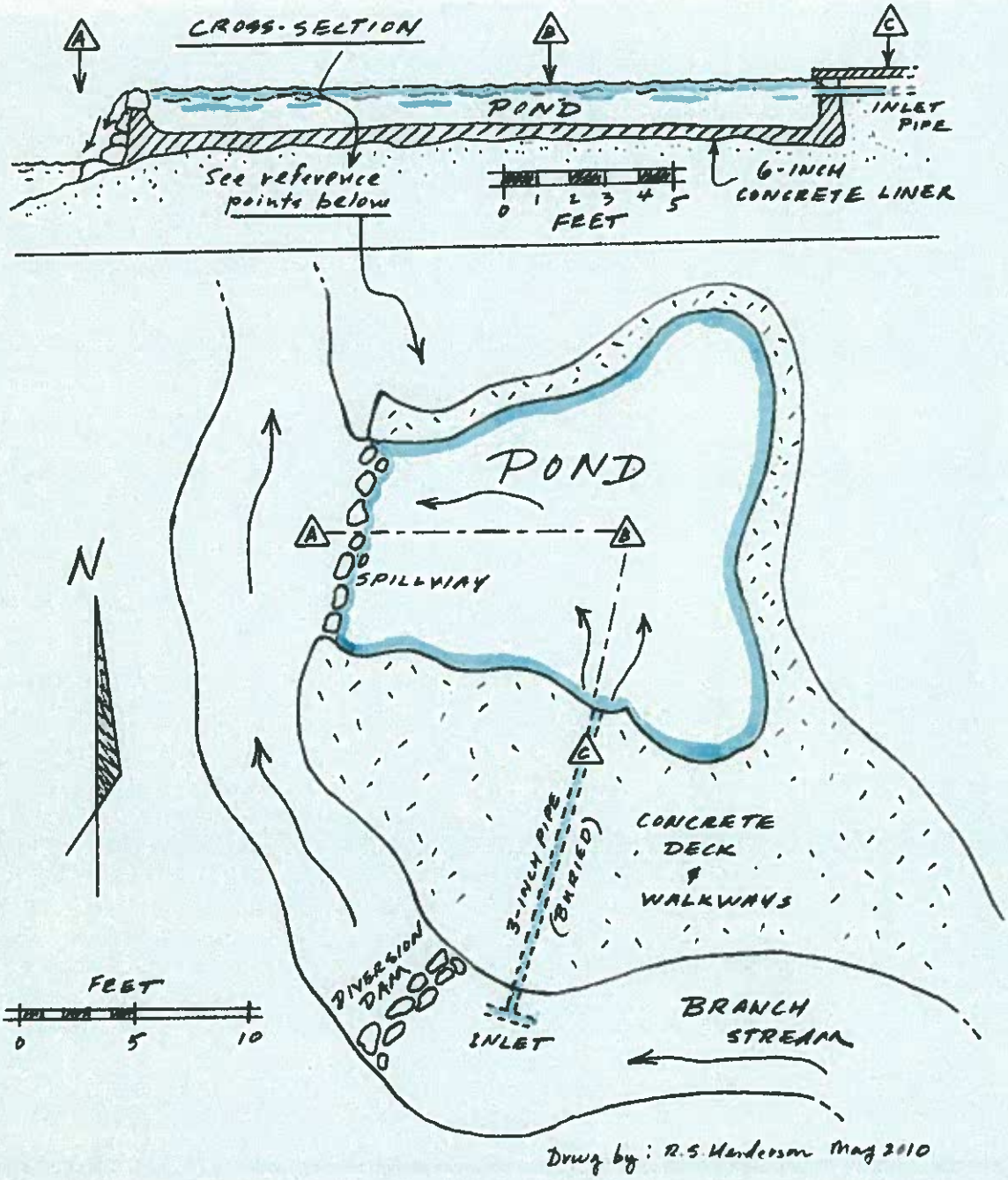

Ainako Branch Stream Existing (Pre-1987) & New Stream Structures on Aina Weight Properties
TMK (3) 2-5-25-5
Scale in Feet
0
50
100
true N
New retaining wall >
Branch Stream
Rock outcrop
New patch 1 >
< New patch 3
New Pond
concrete-lined
New porous dam >
< New pond water inlet pipe
Rock outcrop
TMK (3) 2-5-25-6
TMK (3) 2-5-25-14
New retaining wall >
< New retaining wall
New bridge 8 ft w x 17 ft length >
Weight dwelling
Pre-existing structures (S of bridge) >
downstream -->
Branch Stream
Ainako Stream
< New Patch 2
< Pre-existing walls >
Inlet >
4-8-2011
Kuapa Services

EXHIBIT 12

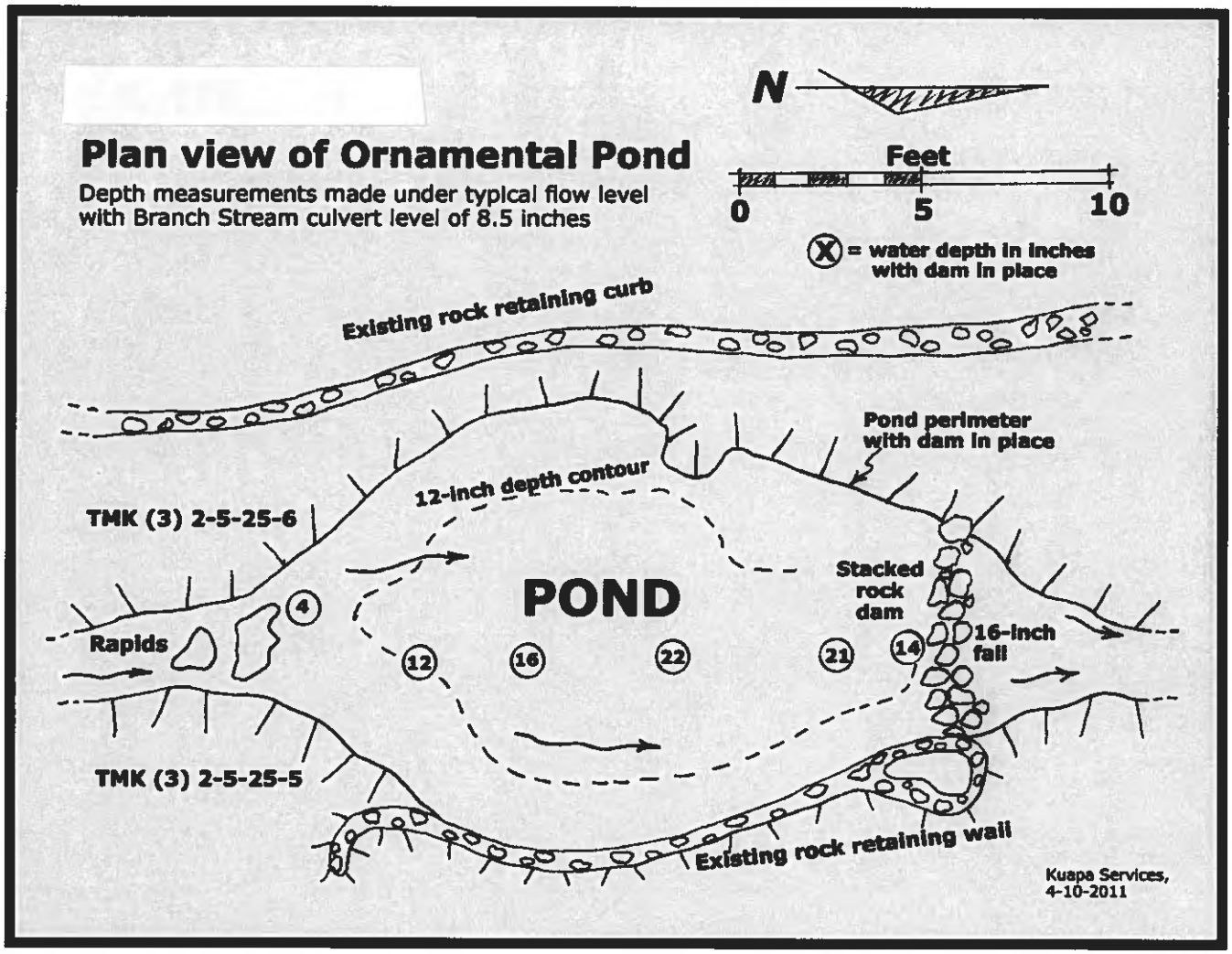
Typical bank to bank cross-section of stream and retaining walls



Concrete-lined pond on Aina Weight property
TMK (3) 2-5-25-5



ORNAMENTAL POND #1



ORNAMENTAL POND #2

20110310010.jpg

20110310011.jpg

EXHIBIT 13

20110310004.jpg

20110310005.jpg


New concrete-lined pond
TMK 2-5-25-5
TMK 2-5-25-5
New retaining wall


TMK 2-5-25-6
Loose-stacked >
rock dam
New in-stream pond
TMK 2-5-25-5

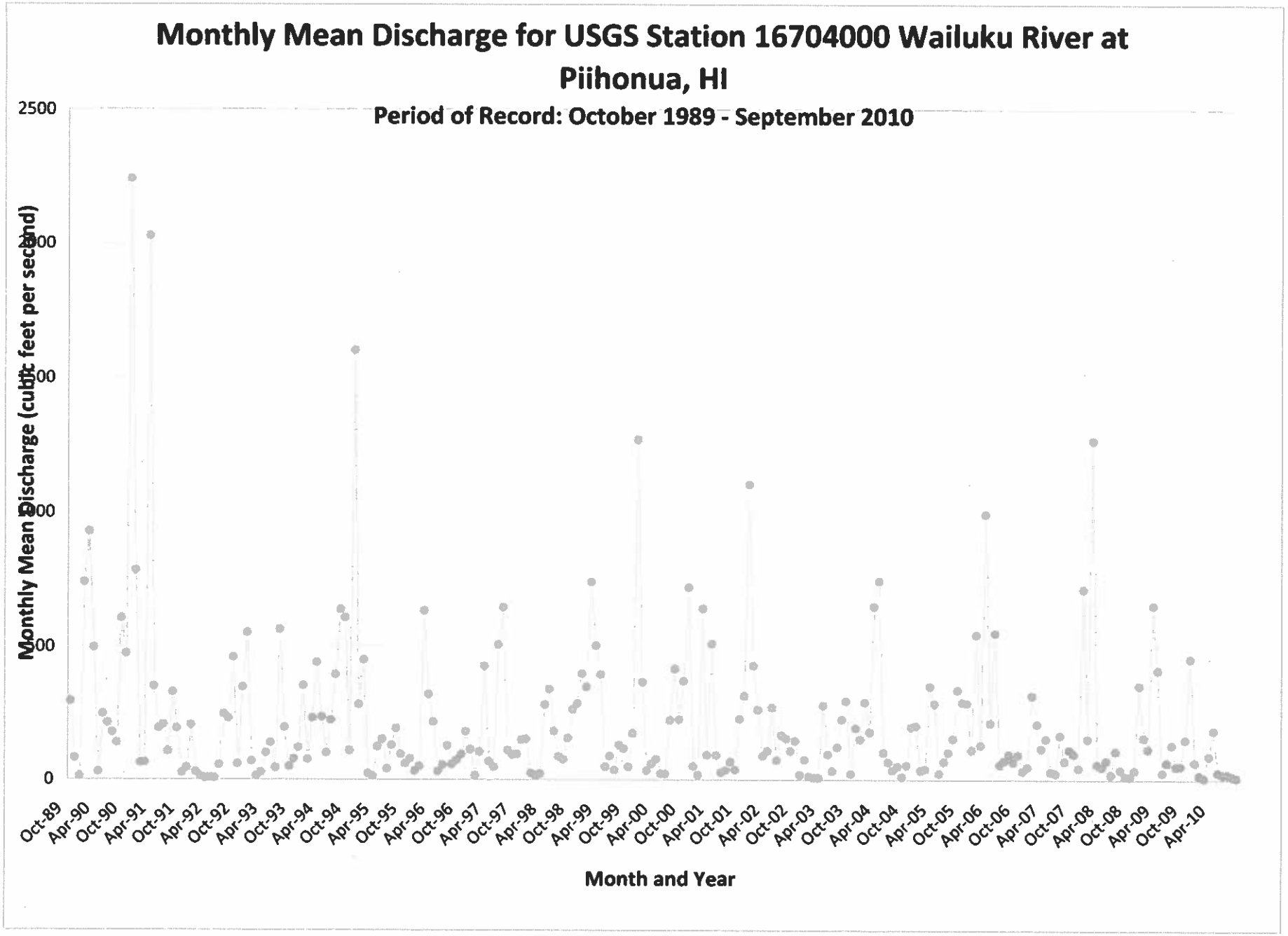

Monthly Mean Discharge for USGS Station 16704000 Wailuku River at Piihonua, HI
Period of Record: October 1989 - September 2010
Monthly Mean Discharge (cubic feet per second)
2500
0
Oct-89
Apr-90
Oct-90
Apr-91
Oct-91
Apr-92
Oct-92
Apr-93
Oct-93
Apr-94
Oct-94
Apr-95
Oct-95
Apr-96
Oct-96
Apr-97
Oct-97
Apr-98
Oct-98
Apr-99
Oct-99
Apr-00
Oct-00
Apr-01
Oct-01
Apr-02
Oct-02
Apr-03
Oct-03
Apr-04
Oct-04
Apr-05
Oct-05
Apr-06
Oct-06
Apr-07
Oct-07
Apr-08
Oct-08
Apr-09
Oct-09
Apr-10
Month and Year

EXHIBIT 14

National Water Information System: Web Interface

News updated July, 2011

USGS Surface-Water Annual Statistics for Hawaii

The statistics generated from this site are based on approved daily-mean data and may not match those published by the USGS in official publications. The user is responsible for assessment and use of statistics from this site. For more details on why the statistics may not match, click here.

USGS 16704000 Wailuku River at Piihonua, HI

Available data for this site Time-series: Annual statistics | GO

Hawaii County, Hawaii
Hydrologic Unit Code 20010000
Latitude 19°42'43.7", Longitude 155°09'02.7" NAD83
Drainage area 220 square miles
Contributing drainage area 148.6 square miles
Gage datum 1,090 feet above HILOCAL

Output formats

HTML table of all data
Tab-separated data
Reselect output format

Water Year	00060, Discharge, cubic feet per second
1929	235.7
1930	464.8
1931	207.6
1932	322.3
1933	245.4
1934	127.9
1935	261.3
1936	186.2
1937	581.5
1938	294.9
1939	395.1

EXHIBIT 15

Water Year	00060, Discharge, cubic feet per second
1942	288.4
1943	193.2
1944	149.9
1945	231.2
1946	221.9
1947	246.6
1949	324.9
1950	295.7
1951	270.1
1952	336.8
1953	205.4
1954	156.2
1955	324.0
1956	375.2
1957	329.4
1958	300.6
1959	191.2
1960	342.3
1961	201.5
1962	286.3
1963	349.6
1964	367.7
1965	208.8
1966	192.6
1967	338.2
1968	283.4
1969	475.6
1970	269.3
1971	252.6
1972	298.3
1973	238.5
1974	286.9
1975	389.3

Water Year	00060, Discharge, cubic feet per second
1976	343.7
1977	304.6
1978	169.0
1979	344.0
1980	381.7
1981	102.5
1982	511.3
1983	109.8
1984	107.6
1985	353.7
1986	322.0
1987	206.9
1988	234.0
1989	483.4
1990	325.8
1991	587.5
1992	110.9
1993	181.7
1994	291.0
1995	267.4
1996	141.6
1997	200.8
1998	131.9
1999	275.9
2000	247.0
2001	217.0
2002	277.1
2003	110.1
2004	207.0
2005	154.1
2006	285.9
2007	113.7
2008	214.3

Water Year	00060, Discharge, cubic feet per second
2009	171.5
2010	87.1

** No Incomplete data have been used for statistical calculation

Title: Surface Water data for Hawaii: USGS Surface-Water Annual Statistics
URL: http://waterdata.usgs.gov/hi/nwis/annual?

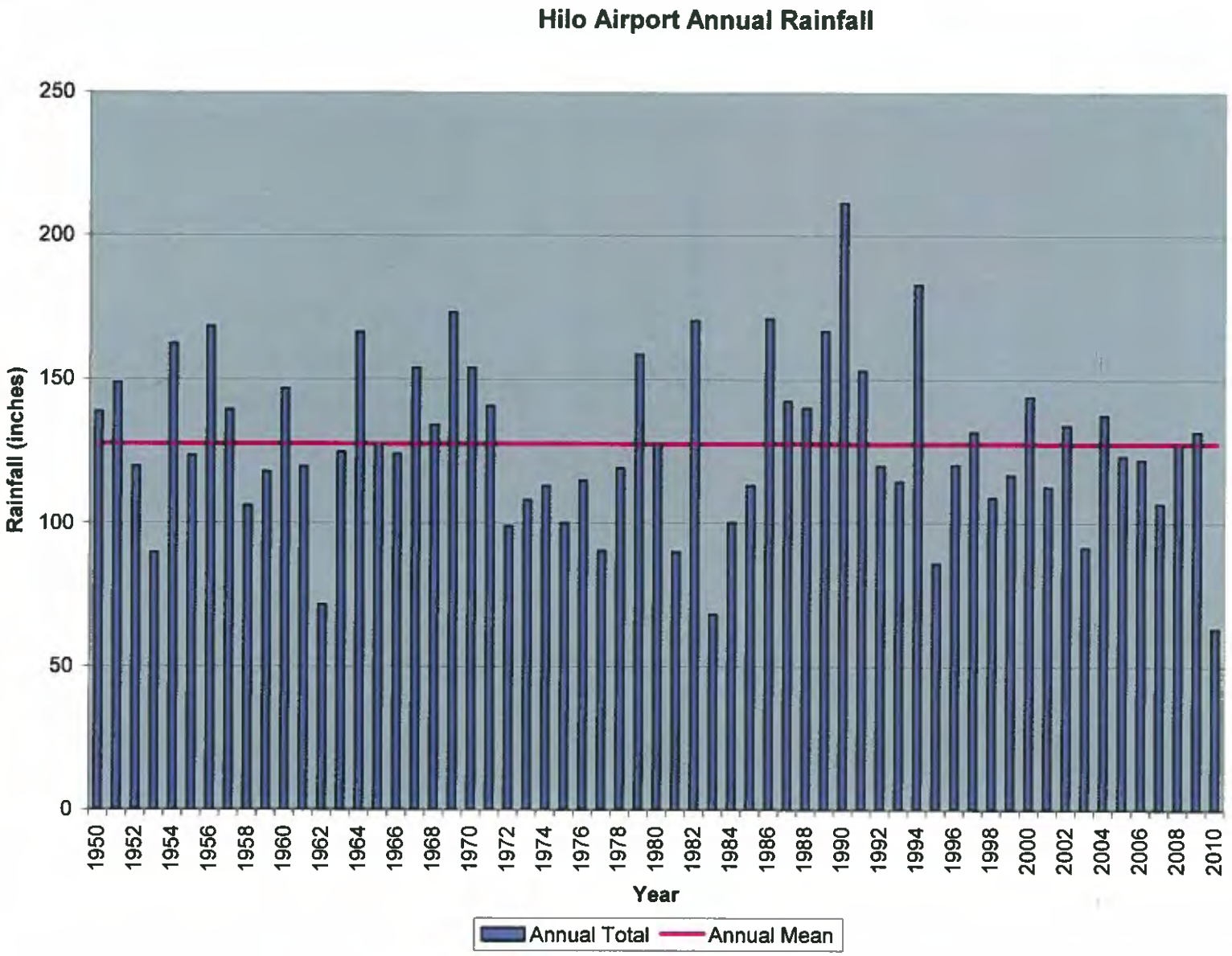

Hilo Airport Annual Rainfall
Rainfall (inches)
250
200
150
100
50
0
1950
1952
1954
1956
1958
1960
1962
1964
1966
1968
1970
1972
1974
1976
1978
1980
1982
1984
1986
1988
1990
1992
1994
1996
1998
2000
2002
2004
2006
2008
2010
Year
Annual Total
Annual Mean

EXHIBIT 16

HILO WSO AP 87, HAWAII

Monthly Total Precipitation (inches)

(511492)

File last updated on Mar 24, 2011
*** Note *** Provisional Data *** After Year/Month 201012
a = 1 day missing, b = 2 days missing, c = 3 days, ..etc..,
z = 26 or more days missing, A = Accumulations present
Long-term means based on columns; thus, the monthly row may not
sum (or average) to the long-term annual value.
MAXIMUM ALLOWABLE NUMBER OF MISSING DAYS : 5
Individual Months not used for annual or monthly statistics if more than 5 days are missing.
Individual Years not used for annual statistics if any month in that year has more than 5 days missing.

YEAR(S)	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
1949	0.00z	0.00z	0.00z	0.00z	0.00z	0.00z	0.00z	0.00z	0.00z	9.04	11.77	12.80a	33.61
1950	9.16	18.19	6.97	30.34	15.75a	5.03	8.96	5.18b	6.01	7.17	10.17	15.90	138.83
1951	9.33	25.81a	16.42	4.38	3.76	3.22b	11.97	10.21	2.40	26.10	14.68a	20.59a	148.87
1952	13.60a	7.76	21.24	11.39	6.57	9.71	6.52	6.88	5.86	9.61	13.54	7.03	119.71
1953	0.36	13.01	21.83	4.15	10.97	5.62	4.25	5.39	3.63	4.41	7.57	8.49	89.68
1954	5.73	15.87	13.37	3.07	9.72	6.33	11.28	13.62	8.22	8.26	16.04	50.82	162.33
1955	12.17	20.52	9.16	16.80	10.69	4.80	11.13	8.03	3.99	5.64	15.62	4.90	123.45
1956	7.95	39.32	15.08	6.04	14.45	9.78	5.74	18.40	4.03	14.44	22.76	10.37	168.36
1957	8.80	8.95	3.90	17.50	6.32	4.74	13.27	26.42	4.20	13.23	12.30	19.71	139.34
1958	2.91	5.41	5.04	4.99	7.84	6.53	14.89	16.56	7.41	14.64	16.87	2.86	105.95
1959	8.44	13.09	7.83	8.06	6.70	3.12	5.57	7.48	7.27	9.26	27.03	13.97	117.82
1960	25.95	15.97	7.13	15.04	11.70	6.73	9.68	12.86	12.00	10.69	14.93	4.12	146.80
1961	2.34	20.50	5.75	5.52	8.12	5.78	5.47	7.63	6.76	22.95	12.84	16.04	119.70
1962	2.51	5.31	10.88	2.93	13.58	3.25	8.01	4.15	9.49	2.40	6.63	2.31	71.45
1963	1.14	1.70	15.85	31.94	12.60	10.91	12.40	7.66	10.18	11.36	8.24	0.77	124.75
1964	14.65	18.22	19.58	11.03	25.01	7.01	6.39	7.33	12.62	11.56	23.39	9.65	166.44
1965	9.28	3.71	8.33	18.49	21.05	8.85	7.15	4.79	5.72	5.80	19.18	14.94	127.29
1966	12.56	7.63	5.59	5.24	5.04	7.49	13.26	7.22	8.37	15.69	20.83	15.09	124.01
1967	8.04	10.35	9.46	21.26	9.84	6.26	14.03	19.55	6.78	10.08	21.25	17.10	154.00
1968	4.77	11.46	10.21	29.68	2.71	8.72	7.43	9.62	8.53	5.97	10.22	24.82	134.14
1969	19.66	43.66	30.64	14.57	7.83	2.76	11.75	17.50	7.24	3.19	6.33	8.10	173.23
1970	2.76	2.56	4.89	28.60	20.26	5.60	12.27	20.53	5.61	8.44	7.21	35.25	153.98
1971	13.47	5.31	12.04	27.82	6.49	2.79	4.13	2.66	8.63	7.28	17.88	32.19	140.69
1972	10.96	10.13	0.88	17.79	4.71	4.58	9.07	8.77	5.20	9.52	13.23	4.01	98.85
1973	3.45	5.51	18.84	7.34	8.34	3.69	4.40	3.54	8.07	9.72	26.88	8.19	107.97
1974	5.88	7.57	13.47	19.11	8.07	4.76	7.81	4.25	1.59	6.65	14.56	19.20	112.92
1975	19.62	9.28	10.40	10.23	3.01	4.20	3.83	8.13	2.73	8.88	11.15	8.47	99.93
1976	15.62	11.63	25.00	11.58	6.01	2.97	5.46	5.13	5.31	11.35	7.24	7.37	114.67
1977	1.22	9.56	15.49	10.90	10.86	2.46	6.36	7.60	4.19	10.30	8.78	2.66	90.38
1978	5.41	4.26	12.95	6.53	9.64	10.99	11.19	13.53	5.44	10.12	20.21	8.82	119.09

1979	32.24	45.55	5.32	9.90	4.10	10.45	6.54	7.04	3.64	5.03	21.56	7.40	158.77
1980	0.91	4.14	49.93	11.01	5.88	9.66	9.17	8.24	13.70	7.69	7.13	0.28	127.74
1981	1.51	4.95	5.66	4.63	4.16	2.43	4.32	8.97	12.79	10.23	11.73	18.53	89.91
1982	13.58	1.35	48.50	12.00	6.89	6.03	28.59	25.45	9.92	6.53	4.74	6.78	170.36
1983	0.90	0.83	1.98	10.31	9.60	3.94	7.21	7.48	12.08	8.06	2.33	3.37	68.09
1984	10.76	10.06	3.37	12.08	6.59	4.28	6.63	9.36	4.05	2.52	18.38	12.00	100.08
1985	2.25	16.14	21.28	10.61	17.04	1.80	9.86	6.71	11.78	8.19	4.71	2.59	112.96
1986	4.95	0.58	15.37	43.24	8.61	9.11	11.17	10.64	14.36	11.53	35.72	5.75	171.03
1987	9.02	5.06	4.79	9.24	15.65	12.91	18.26	3.69	11.56	14.21	15.83	22.19	142.41
1988	10.31	9.95	13.09	12.90	7.77	5.11	5.50	16.56	11.30	8.50	25.74	13.46	140.19
1989	27.46	6.54	7.33	37.19	19.80	7.03	22.93	8.82	9.73	13.16	1.01	5.71	166.71
1990	29.13	15.24	10.80	4.02	8.13	10.04	10.78	7.80	18.47	20.96	45.75	30.10	211.22
1991	3.81	9.32	37.88	11.02	8.08	9.85	9.82	26.92	9.41	5.15	6.74	15.04	153.04
1992	1.33	1.29	3.90	6.62	2.99	9.36	17.63	13.62	17.59	3.38	25.16	17.02	119.89
1993	2.17	2.67	11.96	9.04	7.54	6.63	18.43	11.38	4.99	12.83	10.74	16.11	114.49
1994	10.39	25.52	18.48	8.59	7.18	13.29	11.71	14.58	21.82	8.73	35.91	6.61	182.81
1995	4.52	1.56	4.17	8.14	8.68	5.35	15.13	13.93	4.20	7.62	8.52	4.10	85.92
1996	14.29	11.81	16.66	6.27	3.65	10.33	13.22	4.77	7.03	11.07	14.22	6.89	120.21
1997	2.33	7.84	19.25	6.03	10.75	22.70	19.38	4.75	8.98	12.64	8.86	8.10	131.61
1998	0.13	2.40	3.67	8.86	15.65	11.27	6.09	8.48	10.76	16.01	15.57	9.89	108.78
1999	16.68	19.34	12.13	16.04	2.84	4.66	3.54	10.14	5.65	3.61	7.74	14.41	116.78
2000	17.87	0.52	5.81	7.25	3.36	8.19	13.16	10.54	9.20	17.65	45.90	4.59	144.04
2001	2.28	12.47	8.35	12.56	2.94	3.64	6.54	7.90	9.01	13.16	19.89	13.77	112.51
2002	26.14	19.00	10.76	7.41	14.95	7.16	6.98	13.65	8.14	6.53	2.86	10.45	134.03
2003	1.24	5.44	1.50	14.13	4.71	5.84	10.26	8.26	7.76	3.88	18.32	10.04	91.38
2004	13.14	8.29	27.25	20.51	8.91	6.28	4.44	6.83	5.69	14.13	11.02	11.00	137.49
2005	3.94	15.19	15.07	7.10	3.29	10.27	9.24	7.64	19.73	13.86	12.75	5.24	123.32
2006	11.43	8.46	26.42	8.69	22.51	4.19	7.82	5.69	9.52	7.43	3.21	6.66	122.03
2007	12.23	14.23	4.25	7.39	2.32	6.38	7.26	7.77	8.74	8.24	10.38	17.56	106.75
2008	14.20	39.06	5.21	5.91	4.12	2.18	6.17	3.88	4.27	5.40	6.73	30.38	127.51
2009	8.72	10.36	29.28	11.38	2.13	5.37	8.14	4.92	6.94	9.48	23.60	11.49	131.81
2010	0.94	1.38	8.65	7.07	2.71	5.26	3.98	4.31	2.75	8.29	10.82	7.13	63.29

Period of Record Statistics

MEAN	9.32	11.62	13.38	12.61	8.87	6.72	9.73	9.86	8.25	9.83	15.05	12.28	127.57
S.D.	7.80	10.22	10.35	8.66	5.44	3.54	4.95	5.63	4.25	4.70	9.47	9.23	29.04
SKEW	1.06	1.69	1.64	1.62	1.07	1.65	1.40	1.39	1.09	1.08	1.32	1.71	0.21
MAX	32.24	45.55	49.93	43.24	25.01	22.70	28.59	26.92	21.82	26.10	45.90	50.82	211.22
MIN	0.13	0.52	0.88	2.93	2.13	1.80	3.54	2.66	1.59	2.40	1.01	0.28	63.29
NO YRS	61	61	61	61	61	61	61	61	61	62	62	62	61

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT
P.O. BOX 621
HONOLULU, HAWAII 96809

ADMINISTRATIVE AND CIVIL PENALTY GUIDELINE (G01-01) COMMISSION ON WATER RESOURCE MANAGEMENT DEPARTMENT OF LAND AND NATURAL RESOURCES STATE OF HAWAII

I. GOALS

This penalty guideline seeks to provide a logical and consistent means to assess penalties and guide the settlement of Commission on Water Resource Management (Commission) enforcement cases. The Commission and staff should use this system to:

A. Deter violations;

B. Remove the economic benefit of violations;

C. Provide fair treatment of the regulated community; and

D. Offer the violator a chance to undertake a beneficial alternative, under proper conditions, in a partial or total replacement of a cash penalty.

II. LEGAL AUTHORITY

Hawaii Revised Statutes (HRS) § 174C-15 provides for fines of up to $1,000 for any violation of any provision of HRS § 174C. For a continuing offense, each day during which the offense is committed is a separate violation.

Administrative Rule § 13-167-10 provides for fines of up to $1,000 for any violation of any provision of Title 13, any permit condition or limitation established pursuant to Title 13, or for negligent or willful failure to comply with any final order of the Commission. For a continuing offense, each day during which the offense is committed is a separate violation.

III. APPLICABILITY

A. This guideline applies to the Commission programs, which include but are not limited to:

1. Measuring and reporting of water data;
2. Well Construction and Pump Installation Permits;
3. Stream Diversion Works Permits;
4. Stream Channel Alteration Permits;

EXHIBIT 17

5. Instream Use Protection Program;
6. Instream Flow Standards;
7. Water Use Permits;
8. Violations of any permit issued by the Commission;
9. Violations for failure to comply with final orders issued by the Commission; and
10. Violations of Hawaii Administrative Rules Title 13.

B. This guideline is only for use by Commission personnel. The guideline is not intended and cannot be relied upon to create rights, substantive or procedural, enforceable by any party in litigation with the Commission on Water Resource Management, Department of Land and Natural Resources or the State of Hawaii. The Commission's staff reserves the right to act at variance with this guideline and to change it at any time without notice. The Commission's staff expects to change this guideline as it gains experience with the guideline's implementation.

IV. PENALTY CALCULATION METHOD

A. The Commission's staff shall calculate an initial minimum penalty figure for daily fines for settlement purposes based on the following:

1. Finding of violation = $250 per day/incident

2. Occurring in Water Management Area = $250 per day/incident

3. Repeat Violation = $250 per day/incident

(A repeat violation is deemed to occur when the party has previously been found to be a violator by the Commission. A repeat violation is tied to the party involved and is irrespective of the nature of the violation.)

B. Adjustments to Initial Minimum Penalty Figure in Section A: Mitigative and Gravity Factors.

Reduction or enhancement of any recommended fine will be made based on:(1) the degree of risk or actual harm to water resources or the environment and (2) specific factors listed below. Where the risk or actual harm is slight, reduction of the recommended fine should be considered and where the risk or actual harm is great, enhancement of the recommended fine should be imposed.

1. Mitigation Component

Mitigative factors can be considered in the recommendation of any fine or alternative penalty. Presence of one or more mitigative factors can reduce or eliminate the fine or alternative penalty recommendation. Mitigative factors include but are not limited to: insignificant impact on the resource, attempt to remedy the violation without notice, good faith effort to remedy violation once noticed, self reporting in a timely manner, and diligent and speedy effort to remedy the violation once noticed.

2. Gravity Component

Gravity factors can be considered in the recommendation of any fine or alternative penalty. Presence of one or more gravity factors can enhance the fine or alternative penalty recommendation. Gravity factors include but are not limited to: significant risk of or actual damage or harm to the water resources or the environment, multiple or repeat violations of the code or regulations, evidence that the violator should have known about the violation, refusal to correct the violation once noticed, failure to meet deadlines as set by the Commission or its staff.

C. Calculation of the Number of Days for the Recommended Fine.

1. If one or more of the gravity components are met, a daily fine may be imposed. Those fines shall accrue on the following basis:

1. Violation where no permit is issued and no prior permits have been issued or no permit is required.

The date the violation has occurred.

2. Violation where no permit is issued but prior permits have been issued

The date the violation has occurred.

3. Violation where permit has been issued

Either:

a. The date the violation has occurred
b. The date of permit approval
c. The date permit issued
d. The date of Commission meeting for conditions or deadlines imposed by the Commission not contained in a permit

4. Tolling. In calculating a recommendation for the imposition of a daily fine, the time may be tolled for upon the filing of a permit application, satisfactory progress in addressing the violation, or for good cause.

5. End. In calculating a recommendation for the imposition of a daily fine, the period of the violation ends upon: (1) satisfactory resolution of the violation, or (2) removal or remedy of the violation.

D. No staff recommendation shall exceed the maximum amount allowable in Section 174C-15, HRS.

V. ALTERNATIVE SETTLEMENT

The following considerations will guide the Commission's staff recommendation in deciding whether to allow a project to substitute for or be credited against a cash penalty. However, any finding of a violation by the Commission shall result in a minimum one-time $500 cash fine in addition to an alternative settlement. Failure to successfully meet the alternative will result in re-institution of the fines as calculated in IV.

1. The project must be something that the violator was not required to do anyway, either because of legal or other obligation. Projects committed to, or started before a settlement is finally agreed upon may be eligible for credit, but such projects must be carefully examined to determine the extent to which they resulted from the enforcement case or were due to other factors, or prior plans or commitments. In some cases, partial credit may be appropriate.

2. The project must result in new water resources (including aquatic biota) information, provide water resources education, or benefit the water resources of the state.

3. The project may consist of corrective action to be completed within a timeframe established by the Commission. Failure to abide by the timeframe will result in re-institution of the fines as calculated in IV.

VI. FUTURE APPLICATIONS

Future applications from an applicant who has not paid fines or met alternative settlements or for a project with outstanding violations may be considered incomplete until sanctions are fulfilled and/or violations are corrected.

LINNEL T. NISHIOKA
Deputy Director

ADMINISTRATIVE AND CIVIL PENALTY GUIDELINE
SCAP.2898.8

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
		DAILY FINES						DURATION CALCULATION								
Item No.	Description	Finding of violation (minimum $250)	Occurring in SWMA (minimum $250)	Repeat violation (minimum $250)	Gravity component	Mitigative component	TOTAL DAILY FINES	Start date	End date	No. of days	Compliance within 45 days (Yes/No)	Total duration of violation	Alternate settlement (Yes/No)	Subtotal fine for one incident	No. of incidents	Subtotal fines
							C+D+E+F+G			J-I				H*M		O*P
1	SCAP.2898.8	$1,000	$0	$0	$0	-$300	$700	Not appl.	Not appl.	Not appl.	Not appl.	1	No	$700	1	$700
TOTAL FINES																$700

NOTES

A Individual violation item and corresponding number.

B Description - description of the violation, see submittal text for specific rules violated.

C Finding of violation (min. $250) - where there is a violation, there is a minimum daily fine of $250.

D Occurring in SWMA (min. $250) - When the violation is in a designated Surface Water Management Area (SWMA), there is a minimum additional daily fine of $250.

E Repeat violation (min. $250) - When the violator has committed violations in the past separately from the item number, there is a minimum additional daily fine of $250.

F Gravity component - allows for the increase of the daily fine, includes: significant risk of, or actual damage or harm to the water resources or the environment, multiple or repeat violations of the code or regulations, evidence that the violator should have known about the violation, refusal to correct the violation once noticed, and failure to meet deadlines as set by the Commission or its staff.

G Mitigative component - allows for the decrease of the daily fine, includes: insignificant impact on the resource, attempt to remedy the violation without notice, good faith effort to remedy violation once noticed, self reporting in a timely manner, diligent and speedy effort to remedy the violation once noticed, and emergency considerations.

H TOTAL DAILY FINES - the sum of the values in columns C through G.

I Start date - the date where calculation of daily fines begins (date of notice of violation, or permit approval, or permit fully signed, or violation occurred, or CWRM order).

J End date - the date of the end of the violation or latest CWRM meeting or completed permit application.

K No. of days - calculated between start and end dates.

L Compliance within 45 days (Yes/No) - if the applicant complies with the Commission staff's notice of violation requirements within 45 days.

M Total duration of violation - if there was compliance with staff notice of violation within 45 days, the duration shall be one (1) day. If there was no compliance with staff notice of violation within 45 days, the duration shall be the total days of the violation.

N Alternate settlement (Yes/No) an alternate settlement in lieu of the daily fine was recommended. See submittal for description.

O Subtotal fine for one incident - per incident fine.

P No. of incidents - of similar violations that occurred for this investigation.

Q Subtotal fines - the subtotal of fines, calculated by multiplying (per incident fine) * (no. of incidents).

EXHIBIT 17

STANDARD STREAM CHANNEL ATERATION PERMIT CONDITIONS
(Revised 9/19/07)

1. The permit application and staff submittal approved by the Commission at its meeting on September 27, 2011, shall be incorporated herein by reference.

2. The applicant shall comply with all other applicable statutes, ordinances, and regulations of the Federal, State and county governments.

3. The applicant, his successors, assigns, officers, employees, contractors, agents, and representatives, shall indemnify, defend, and hold the State of Hawaii harmless from and against any claim or demand for loss, liability, or damage including claims for property damage, personal injury, or death arising out of any act or omission of the applicant or his successors, assigns, officers, employees, contractors, and agents under this permit or related to the granting of this permit.

4 The applicant shall notify the Commission, by letter, of the actual dates of project initiation and completion. The applicant shall submit a set of as-built plans and photos of the completed work to the Commission upon completion of this project. This permit may be revoked if work is not started within six (6) months after the date of approval or if work is suspended or abandoned for six (6) months, unless otherwise specified. The proposed work under this stream channel alteration permit shall be completed within two (2) years from the date of permit approval, unless otherwise specified. The permit may be extended by the Commission upon showing of good cause and good-faith performance. A request to extend the permit shall be submitted to the Commission no later than three (3) months prior to the date the permit expires. If the commencement or completion date is not met, the Commission may revoke the permit after giving the permittee notice of the proposed action and an opportunity to be heard.

5. Before proceeding with any work authorized by the Commission, the applicant shall submit one set of construction plans and specifications to determine consistency with the conditions of the permit and the declarations set forth in the permit application.

6. The applicant shall develop site-specific, construction best management practices (BMPs) that are designed, implemented, operated, and maintained by the applicant and its contractor to properly isolate and confine construction activities and to contain and prevent any potential pollutant(s) discharges from adversely impacting state waters. BMPs shall control erosion and dust during construction and schedule construction activities during periods of low stream flow.

7. The applicant shall protect and preserve the natural character of the stream bank and stream bed to the greatest extent possible. The applicant shall plant or cover lands denuded of vegetation as quickly as possible to prevent erosion and use native plant species common to riparian environments to improve the habitat quality of the stream environment.

8. In the event that subsurface cultural remains such as artifacts, burials or deposits of shells or charcoal are encountered during excavation work, the applicant shall stop work in the area of the find and contact the Department's Historic Preservation Division immediately. Work may commence only after written concurrence by the State Historic Preservation Division.

EXHIBIT 18