Appendix B

Shoreline Access Management Plan

Pu’u Hakina & Kamaka’ipo

Shoreline Access

Management Plan

August 14, 2007

I. **Introduction and Statement of Purpose**

This Shoreline Access Management Plan (SAMP) is for the coastline on the island of Moloka'i, adjacent to Kalae o Ka La'au, on the south shore eastward to Pu'uHakina and on the west shore northward through Kamaka'ipo to Kaupoa on the Island of Molokai (known as the La'au development). It is the result of a long and involved process whereby the Molokai Community, through various organizations and Molokai Properties Limited created a vision for the future of Molokai Ranch. A part of that vision is the creation of a unique, environmentally, culturally and socially sensitive community of 200 homes overlooking the Pu'uHakina & Kamaka'ipo coastlines. The expression of this vision, the "Community Based Master Land Use Plan for Moloka'i Ranch" (the Master Plan), outlined environmental, social and cultural issues posed by the La'au development and how they could be mitigated. This SAMP is the method by which some of the protective measures set forth in the Master Plan can be implemented.

The SAMP was created by the Molokai Land Trust, the Maunaloa subsistence community and Molokai Ranch with the input of area stakeholders. It is intended to be a flexible document, allowing the Molokai Land Trust and the Pu'u Hakina & Kamaka'ipo Homeowners Association the ability to adapt the plan to changing needs and to make changes based on lessons learned.

The Plan sets forth rules and guidelines for Pu'u Hakina & Kamaka'ipo homeowners and visitors to the Pu'uHakina & Kamaka'ipo area with regard to:

1. Access to the property;
2. Social and Cultural sensitivity;
3. Preservation of Environmental resources;
4. Preservation of Cultural resources;
5. Preservation of Marine resources;
6. Recognition of subsistence gathering rights; and
7. Protection of endangered/protected species.

Pursuant to the Master Plan, certain areas within the Pu'u Hakina & Kamaka'ipo development will be subject to a conservation easement. The title to these lands are to be held by the Pu'u Hakina & Kamaka'ipo Homeowner's Association (the "Association") subject to the conservation easement held by the Land Trust. The area will be governed jointly by both. The Kamaka'ipo Gulch, which will be deeded to the Land Trust, is also covered by this document. This SAMP acts as the blueprint for that joint governance.

Chapter 4 of the Master Plan contains community guidelines for land use principles and policies to manage the cultural and natural resources of the Managed Area and appropriate access. Chapter 4 is attached hereto as Appendix A. These guidelines provide the foundation for this SAMP. The SAMP elaborates and refines the Master Plan guidelines and also outlines methods and an organizational framework for their implementation.

Under the *Pu'u Hakina & Kamaka'ipo Declaration of Covenants,* Section 10.13, this SAMP is binding on homeowners and residents of Pu'u Hakina & Kamaka'ipo and their guests.

II. **Management, Operations and Resource Management**

A. Geographic Area

The SAMP covers the 451 acre area contained in the Pu'u Hakina & Kamaka'ipo development and Kamaka'ipo Gulch above the shoreline as set out in Exhibit "A" (the "Managed Areas"). It is specifically recognized that the Land Trust does not have control over the Association Common Area, marked in dark green on Exhibit A).

Generally the Managed Areas are makai of the project roadway to the shoreline with the exclusion of the individual subdivided lots. It also includes the two parks at either end of the development (17 acres) and the 128 acres of the culturally significant Kamaka'ipo Gulch that has been donated to the Land Trust.

B. Governance and Control

The area covered by the SAMP is initially held by MPL and will be transferred to the Pu'u Hakina & Kamaka'ipo Homeowner's Association upon formation of the Association.

1. SAMP Management Council: The effectuation of the SAMP and management of the SAMP Area shall be the responsibility of the "SAMP Council". The SAMP Council shall be made up of a total of 10 members with equal voting rights.

2. Rules and Bylaws: Members shall be appointed and the Council will conduct business in accordance with the "Rules and Bylaws of the Pu'u Hakina & Kamaka'ipo Shoreline Access Management Council".

3. Council Membership: The Council shall consist of 10 members appointed as follows:

   1. Five members to be appointed by the Land Trust who meet one or more of the following criteria:

      a. One such member appointed by the Land Trust shall be a Molokai Ranch employee
      b. One such member appointed by the land Trust shall be a resident of Maunaloa who is a traditional subsistence practitioner/user of the Pu'u Hakina & Kamaka'ipo area.
      c. One such member appointed by the Land Trust shall be a person with significant knowledge of the cultural sites and practices in the Pu'u Hakina & Kamaka'ipo area

   2. Five members to be appointed by the Association

4. Decisions of the Council:: Decisions made by Council members appointed by the Land Trust and the Association shall be by consensus.

5. Council Powers, Duties and Obligation: It is the obligation of the Council to manage and care for the Managed Areas of Pu'u Hakina & Kamaka'ipo consistent with spirit and purpose of the Master Plan. In general, the council will have the power to:

   a. Make rules and requirements for access to the Pu'u Hakina & Kamaka'ipo area under its control
   b. Create and effectuate management plans
   c. Develop a budget, assess fees and spend moneys to further its goals

d. Undertake regular monitoring programs of the resources and the effectiveness of its management plans and protective measures
e. Hire personnel necessary to manage and protect the resources and enforce the rules and regulations of the SAMP
f. Develop and provide any educational programs required by this SAMP.
g. Enforce its rules, regulations and protective measures by any legal means available, to decide on penalties for violation by restricting or denying access to the Managed Areas for violation of the SAMP.

6. Resource Management: The guidelines contained in Appendix A (Chapter 4 of the MasterPlan) constitute the foundation for management of the cultural and natural resources in the Managed Area under this SAMP. This SAMP elaborates and refines the Master Plan guidelines and also outlines methods and an organizational framework for their implementation.

a. Management Plans – Prior to promulgation of any rules and regulations in addition to those contained in this SAMP for the Managed Area and the guidelines and policies of the Master Land Use Plan, the Land Trust shall complete and the Council shall approve, management plans that ensures the protection of the various resources found in the Managed Area, to include:

i. The inventory of the existing natural and cultural resources, as contained in the La'au Point final EIS document;

ii. A monitoring program designed to both monitor the status of the resources and the effectiveness of the mitigation measures;

iii. The monitoring of potential impacts to the resources, such as water quality and marine habits;

iv. Recommendations on additional, enforceable rules to effectuate the mitigation measures;

v. Suggested access regulations and guidelines;

vi. A budget for the effectuation of the plan, and

vii. Any other matter relevant to the protection of the resources.

b. Types of Management Plans – The Council shall develop, at a minimum, management plans that cover:

i. Cultural resources ;
ii. Natural resources (marine & terrestrial);
iii. Subsistence use;
iv. Public access

7. Resource Manager(s): The Council shall retain "Resource Manager(s)" to implement Management Plans.

The Resource Manager(s) will be responsible for:

i. The enforcement of any rules and regulations associated with the SAMP and implementation of the Management Plans

ii. The enforcement of rules and regulations regarding access
iii. The general stewardship of the resources
iv. Day to day monitoring of the resources
v. Ensure that overfishing of the subsistence resource does not occur
vi. Closing any areas to subsistence fishing during periods of spawning or hatching, or because of the likelihood of over-fishing.
vii. Ensure that those who access the area have received the appropriate educational training.

8. Education:

a. It is recognized that one of the key mitigation measures set forth in the Master Plan is the education of all residents, visitors and users of the area. The education program will include an overview of the Molokai Community; the Spiritual and Cultural significance of the Pu'uHakina & Kamaka'ipo area and its sites and resources; the rights to access and common practices of the Pu'uHakina & Kamaka'ipo traditional users; the sensitivity of the environment and good stewardship practices required of users of the area.

g. In order to ensure that social conflict is minimized and that there is an understanding of these issues and to ensure that homeowners and users of the property are aware of the rules and regulations governing the Managed Area, an educational program will be developed by the Council in association with experts in various resources.

h. The education program will develop educational materials and programs for all users

i. The education program shall:
   i. Be required of all homeowners and all visitors to the area.
   ii. Be of a level sufficient to meet the goals of the management plan.
   iii. Be developed with input of the community.
   iv. Meet the requirements of Homeowner education, Molokai community education and Managed Area users.
   v. Include development and placement of all cultural, natural resource and environmental informational and regulatory signage for the Managed Area.
   vi. Include rules and regulations for the cultural and natural resources.
   vii. Include an explanation of penalties and enforcement.

j. The education program shall be designed to educate with regard to:
   i. Cultural practices and protocols
   ii. Cultural sensitivity and respect
   iii. Environmental protection and concerns
   iv. The historical significance of the area's sites and resources
   v. The Molokai Community values, traditions and culture

9. Enforcement: the Council shall adopt rules and procedures for enforcement of this SAMP which provide for accountability, a penalty process and a protocol for uses with established consequences for non-compliance.

a. The Resource Manager(s) shall be empowered to enforce the SAMP and notice violations.

b. Penalties may include:

i. Ejection from the premise
ii. Reporting of trespass violations for prosecution.
iii. Prohibition on access for a period of time

c. Unless legally empowered by the State or County to do so, the Resource Manager(s) shall not act as a police force and detain or "arrest" any person.

d. Resource manager(s) are to notify persons of their violation, request conformance and if refused, will report the violation to the Council.

e. If immediate action is required to protect any of the resources on the Managed Area of any type, the Manager(s) will call the police for assistance in removing the person from the premises.

III. **Access - General**

A. Purpose and General Principles:

In development of the Master Plan, the Molokai Community sought to protect the pristine nature of the Managed Area and expressed concern that what had formerly been an area which was accessible only by foot and by few residents because of its remoteness, would suddenly be subject to significant increases in visitation by residents and visitors.

In particular, concern was expressed that unfettered access would be detrimental to the biological, cultural, spiritual and subsistence resources of the area. There was also concern that Pu'u Hakina & Kamaka'ipo homeowners would have preferential access to the shoreline. In order to ensure equal access and to mitigate impacts to the resources of the Managed Area, a system of limited access is set forth in this SAMP.

In addition to the general access guidelines contained in Appendix A (Chapter 4 of the Master Plan), the following specific provisions shall be instituted.

B. Access Points:

1. Vehicular access to the Managed Areas shall be limited to the two public parks. One located adjacent to Hale O Lono and the other at Kamakap'ipo gulch.

2. Parking will not be allowed along the Pu'u Hakina & Kamaka'ipo community access roadways.

C. Non-Vehicular Access Only: Access beyond the two parks shall be by foot only.

1. Vehicular traffic is specifically prohibited.
2. Off-road vehicles, ATV's, motorcycles and any other motorized vehicle are specifically prohibited, except as needed by the Resource Managers.
3. Bicycles can be permitted in the Managed Area only as determined from time to time by the Council.

D. Emergency Access:

1. Vehicular access will be allowed for the fire department, ambulance, police or any other first responder.
2. Vehicular access will be allowed for any vehicle transporting volunteers to assist in fighting a fire.

E. Special Access Permit:

1. Any person who wishes special access to the Managed Area for cultural or other purposes, who are disabled or unable to enter the premises on their own may request permission and assistance from the Council or its designee.
2. Assisted access (including vehicular) may be provided at the discretion of the Council or its designee in an appropriate manner and under conditions designed to protect the resources of the area.
3. Provision of assisted access is at the sole discretion of the Council and its designee.

F. General Requirements for Access:

1. The Council may set whatever reasonable requirements on access it deems necessary to further the goals of this SAMP.
2. The Council may set hours and limitations for access. The initial hours of access are limited to daylight hours.
3. Persons wishing to access the property for any reason will be required to check in at a resource management center to obtain current rules including any restrictions or resource management measures put in place by the council.
4. Persons wishing to access the property will be required to sign a liability waiver upon check in and agree to adhere to the rules and regulations developed under the SAMP.
5. Persons wishing to access the area will be familiarized with the rules associated with endangered species protection including those regarding Monk Seals.

G. Camping: The criteria for camping and any exceptions should be developed in accordance with the guidelines in Appendix A. The SAMP shall provide for accountability, a penalty process and a protocol for users with established consequences for non-compliance.

1. Camping will only be allowed in areas set by the Council that will not impact the cultural or environmental resources of the Managed Area based upon carrying capacity, sanitation, sustainability of the available resources and seasonal variations.
2. Camping is allowed in the Managed Area at the discretion of Resource Manager.
3. Persons wishing to camp on the property will meet all of the requirements for general access and any additional requirements set by the Council or its designee.
4. Campers must sign in and out of the Managed Area.
5. Camping will be on weekends no earlier than Friday or later than Sunday, unless Friday or Monday are holidays.

H. Pets, Domestic Animals and Hunting Dogs:

1. No domestic pets or other animals will be allowed in the Managed Areas.
2. Hunting Dogs are not allowed in the Managed Area
3. Allowing any animals to harass or approach Monk Seals is specifically prohibited and subject to prosecution under State and Federal law and immediate ejection from the Managed Areas for a period not less than one year.

IV. **Subsistence Resource Management & Activity**

A. Purpose and General Principles:

Subsistence fishing and gathering has long taken place in the Pu'u Hakina & Kamaka'ipo geographic area, especially by longtime Ranch families and residents of the Maunaloa community. In the course of developing the Master Plan subsistence fisherman and gatherers were concerned that the opening up of the area to public access would deplete the marine resources. In order to ensure that the resources are protected the Council will, in accordance with this SAMP, adopt rules, protocols and permitted activities for persons engaged in subsistence activity.

The following is the initial framework for an eventual set of protocols based on the assessment in the EIS developed for the subsistence resources and in addition to the guidelines in Appendix A (Chapter 4 of the Master Plan).

B. Initial Assessment of Resources

An initial Assessment of the Marine Resources is detailed in the Marine Biological and Water Quality Baseline Surveys, La'au Point, Molokai" prepared by TEC Inc. for Molokai Properties Limited and made a part of the EIS for La'au Point.

C. Preservation of Resources:

1. The Council shall promulgate rules and regulations designed to preserve and enhance the sustainability of the Marine Resources adjacent to the Managed Area. These rules shall include regulations regarding:
   a. Limitations on individual catch
   b. The strict enforcement of the rule that subsistence users can only "take what they can carry with them".
   c. Prohibitions on commercial activity, defined as taking from the ocean more than the user is able to carry from the Managed Area.
   d. Prohibitions on taking of various resources on a seasonal basis.
   e. The protection of breeding grounds

2. These rules must be adhered to in order to gain access to and from the resources through the Managed Area

3. The carrying and proposed use of gill nets in the ocean and accessed from the resource area is specifically prohibited in order to protect the endangered Monk Seals.

4. A monitoring program will be developed that incorporates both scientific and anecdotal evidence.

5. Permits will be required for seasonal subsistence gathering

6. Catch reports may be required of subsistence gatherers.

7. Boat fishing (by access from the Managed Areas) is specifically prohibited

8. Opihi gathering will be limited to subsistence only and limits will be set by the Council.

D. Access Requirements for Subsistence Practitioners:

1. All access to the area will be by permit only. A permit will be issued upon completion of the Access Education Program mentioned below.

2. Attendance and completion of the Access Educational Program will be required to obtain a permit. The program will consist of education classes in traditional subsistence gathering, access responsibilities and safety and be administered by the Molokai Land Trust.
3. All visitors to the Managed Lands must sign in with a Resource Manager.

4. Subsistence practitioners will be required to sign liability waivers as a condition of access.

5. As La'au Point (US Coast Guard Parcel) is a hazardous area, access through the Managed Area for subsistence gathering at La'au Point will be limited to experienced practitioners only. .

E. It is recognized that these rules apply only for subsistence harvesters wishing to utilize the Managed Area for access to the beach. It is the intent of the LPHA & the Land Trust to promulgate formal rules through Hawaii DLNR Division of Aquatic Resources to establish a community-based subsistence fishing management area from the shoreline out ¼ mile on the west side and on the south side to the outer edge of the reef.

V. **Cultural Resource Management**

A. Purpose and General Principles:

The Cultural resources of the Managed Areas are set forth in detail in the Cultural Resource Assessment and the Archaeological Assessment attached to the "La'au Point Final Environmental Statement" as Appendix E and F. The SAMP is designed to preserve and protect the Cultural Resources and to ensure their use and safety for generations to come.

In addition to the cultural resources management guidelines contained in Appendix A (Chapter 4 of the Master Plan), the following specific provisions shall be instituted.

B. Cultural Resource Management Plan:

1. Keeping in mind the need to keep the location of many sacred resources confidential, the Council will develop a Cultural Resource Plan for the Managed Area based on the attached Cultural Report and Archeological Survey prepared for the EIS for La'au Point and the guidelines in Appendix A (Chapter 4 of the Master Plan).

2. The Plan will be in conformance with the Archaeological Preservation Plan prepared for the La'au Point area.

3. Monitoring Plan shall incorporate the Archaeological Monitoring Plan prepared for the La'au Point area.

4. The Management Plan will be regularly reviewed and modified in accordance with the data obtained under the Archeological Data Recovery Plan for the La'au Point area.

5. The Management Plan will designate “Kapu” areas where general access will not be permitted without the permission and supervision of a Resource Manager

6. Appropriate signage will be developed for placement on the property to educate and inform any person accessing the property to protect the Cultural Resources.

7. The Cultural Resource Management Plan shall, where possible, designate significant areas rather than carving out individuals sites for management.

8. Where “stand alone” sites are identified for protection, reasonable and appropriate buffer zones will be designated around the site to ensure protection of the resource.

C. Stewardship of Cultural Sites:

1. The Council will designate *Kahu* (traditional steward) for complexes and sites, as set forth in Appendix A, and other areas it may designate, to assist in preserving the Cultural Resources of the managed area.

2. The *Kahu* shall be knowledgeable in Hawaiian culture and of the cultural practices in the La’au area.

3. Cultural Resource Manager(s) may be volunteer “Kupuna” or others familiar with the area.

4. Kahu shall be consulted before prior to decisions be made affecting their area of designation.

5. Responsibilities of Kahu and Stewardship Resource Person or Resource Manager include, but are not limited to:

   i. Ongoing monitoring of sites – annual assessment during dry season;
   ii. Identify and prioritize sites for stabilization;
   iii. Develop resources for site stabilization and restoration;
   iv. Develop any interpretative signage markers and trails of access;
   v. Identify and prioritize sites for re-dedication;
   vi. Train stewards in mo’olelo protocols and responsibilities of stewardship for each site;
   vii. Implement Management plans; and
   viii. Manage research requests.

D. Requirements for Access to Cultural Resources:

1. Sites can be accessed to fulfill traditional and customary Native Hawaiian responsibilities for cultural, religious and subsistence purposes and shall follow protocols established by the kahu for the site.

2. In order to protect the resources on the Managed Area those wishing to Access the property shall adhere to the requirements of this Section C.

3. Attendance and completion of the Access and Educational Program shall be required.

4. Check in with the Resource Manager is required prior to entry.

5. If a “kapu” area is to be visited or any Cultural or Archaeological resource visited, the person(s) wishing access shall be accompanied by a Cultural Resource Manager.

6. Commercial tour groups and Commercial operations and activities are specifically prohibited

7. Any person damaging or desecrating a cultural resource shall be denied further access to the managed area for a time period and under conditions set by the Council.

8. Adherence to the terms of this SAMP is required for access.

9. Education and training activities can be organized through the kahu or the resource manager(s).

10. In some cases access may be seasonal, such as during the non-hunting season, rainy/muddy season.

VI. **Monk Seal Protection Program**

A. Purpose and General Principles:

The Hawaiian Monk Seal is a protected species under the Federal Endangered Species Act and the Marine Mammals Protection Act. Monk Seals have been known to frequent the shoreline fronting the protected lands. Although the SAMP has no direct impact on activities taking place below the shoreline, what goes on in the Managed Areas can have an impact on the shoreline and potentially, the Monk Seals themselves.

Both from a legal standpoint and as stewards of Hawaii’s marine resources, the users of the Managed Areas have an obligation to ensure that they do not have an adverse impact on the Monk Seals visiting the Shoreline area.

Since 1984, a total of 169 Monk Seal sightings have been documented on the shoreline of the Managed Area Most of these were documented in 2005 and 2006 when increased observations occurred. To date a total of 18 identifiable individuals have been documented. Of the 18, nine were known to have been born at Kalaupapa Peninsula and one was born somewhere on the south shore of the Managed Area.

A number of features of the Pu’u Hakina & Kamaka’ipo area make it desirable habitat for the seals. These include:

1. Remoteness;
2. The sandy beach substrate; and
3. Proximity to the Monk Seals foraging area (Penguin Bank).

In order to protect and maintain the Monk Seal population, threats posed by human caused disturbances, threats from dogs (physical harm and disease transfer) and hooking and entanglement associated with shore based fishing must be prevented or mitigated. The interaction between Monk Seals and subsistence gatherers, fisherman and anyone using the Pu’u Hakina & Kamaka’ipo area must be regulated and minimized.

B. Requirements for Access:

1. Everyone accessing the property must be educated on the law, rules and protocols associated with Monk Seal protection.

2. All of the requirements set forth in this SAMP for access must be adhered to including those regarding check in and vehicular access.

3. Anyone sighting a Monk Seal is obligated to immediately notify the Resource Manager giving the time and location of the citing

C. Restrictions on Activities:

1. All domestic animals are specifically prohibited from the Managed Area.

2. Gill nets are specifically banned from use from the access area at Pu'uHakina & Kamaka'ipo

3. No person shall approach within 50 feet of a Monk Seal.

4. Fishing of any type is banned from within ¼ mile from any Monk Seal whether resting on the beach or sighted in the water.

5. The use of toxins or pesticides is prohibited in the shoreline area.

D. Enforcement and Regulation:

1. The Resource Manager will post signs in regular intervals along the shoreline explaining the rules regarding Monk Seals.

2. The Resource Manager will be responsible for cordoning off areas, erecting signs around resting Monk Seals and setting designating areas closed to fishing as a result of a Monk Seal sighting.

3. The Resource Manager shall be responsible for reporting the Monk Seal sighting to the NOAA and taking whatever actions are required by NOAA to ensure the safety of the Monk Seal.

4. The Resource Manager shall be responsible for enforcement of all of the Monk Seal protection rules, regulations and protocols.

5. The Resource Manager may report any violation of Federal or State law to appropriate authorities and act as witness in the prosecution of any person violating federal or State law.

6. The Resource Manager shall be trained as a Monk Seal Protection Specialist.

7. The Resource Manager will be responsible for notifying NOAA of entangled Seals.

8. The Resource Manager will be responsible for removing, or causing to be removed, debris that may be harmful to Monk seals from the shoreline area.

9. The Resource Manager will regularly monitor the shoreline area for contaminants that may be harmful to Monk Seals.

7. The Resource Manager will work with NMFS to develop a volunteer seal monitoring program.

VI. **Terrestrial Biological Resources:**

A. Purpose and General Principles:

The purpose of this SAMP is to protect the environmentally sensitive features of the Managed Areas, including native, rare, threatened and endangered plants and animals which may be found and significant native habitats. To date, one endangered plant species has been found on the site, the 'ihi'ihilauakea (Marsilea villosa). Native bird species have been reported from the Managed Areas, but none are rare, threatened or endangered.

In addition to the environmental principles and policies contained in Appendix A (Chapter 4 of the Master Plan), the following specific provisions shall be instituted.

B. Initial Assessment of Resources

An initial assessment of the terrestrial resources is detailed in the "Botanical Survey" and the "Avifaunal and Feral Mammal Field Survey" prepared for the "La'au Point Environmental Impact Statement".

C. Preservation of Resources:

1. The Council shall promulgate rules and regulations designed to preserve and enhance the sustainability of the Terrestrial Resources contained in the Managed Areas. These rules shall include regulations designed to protect native, rare, threatened or endangered species and habitats founding the Pu'u Hakina & Kamaka'ipo ecosystem.

2. The Council will develop a Natural Resource Management Plan (as outlined in paragraph 6) to identify management needed for these significant terrestrial resources based on the attached Surveys prepared for the La'au Point EIS.

3. Areas where rare, threatened or endangered plants or animals are found will be marked with informational/educational signs and managed such that access will be controlled or denied.

4. Any area closed to access will include a buffer zone to further ensure protection of the sensitive species or habitats.

5. A monitoring program will be developed that incorporates both scientific and anecdotal evidence designed to monitor the environment or ecosystems and to ensure the viability of priority native species and habitats and gather data on their population and progress.

6. The Management Plan and restricted areas will be regularly updated based on the results or findings of the monitoring program.

D. Enforcement:

1. The Resource Manager shall enforce the rules and prohibitions and ensure implementation of the Management Plan for the protection of native, rare, threatened and endangered terrestrial species and habitats.

2. The Resource Manager may report any violation of Federal or State law including the Endangered Species Act to appropriate authorities and act as witness in the prosecution of any person violating federal or State law.

3. All individuals (staff, contract or volunteers) implementing the Management Plan will be required to complete the Access and Education Program and coordinate their activities with the Resource Manager(s).

VII. Revocation and Modification

This SAMP may not be revoked, modified or amended without approval of all the voting members of the Council.

VIII. Subsistence Fishing Area:

Upon designation of the Community-Based Subsistence Fishing Management Area by the State of Hawaii, this Shoreline Access Management Plan will be amended to cover the ocean area proposed for subsistence protection.

Appendix C

Speech for Commencement of EC Project #47

Welcome everybody.

It is very historic that we are all meeting today and I can't thank you enough for taking the time to sit with us.

I feel very humble and a little scared about the next two days because, over the last decade, there has been so much bitterness and anguish between my company and the community which you all represent.

This company has a lot of bridges to build and a lot of trust to earn. I know words are not enough and we will only be judged by our actions.

All of you know how we got to be sitting around this table so I won't go into the history of the last 12 months. But I would like to say a couple of things about my intent:

1. **I have complete authority to act for my company and the parent company BIL International.**
2. **My company accepts that I will not do anything that is contrary to the ethos that is that "Molokai is the last Hawaiian Island." In fact my mission is to enhance that.**
3. **My personal mission is to balance my company's interests with the interests of the Molokai community. I believe strongly that balance can be achieved and I am relying on the Conservation Fund to help us with that.**
4. **I will answer every question you have for me with honesty.**

Many of you have expressed a concern that we are asking for your input into a range of issues that affect Molokai, but not telling you what our development plans are.

It is a valid concern because obviously some level of development is integral to a plan that is aimed at a vision for our 64,000 acres for the next 50 to 100 years.

I want the development on our property confined to the coastal west end of the island.

So, what do I want?

- The Kaluakoi Hotel re-opened.
- The Kaluakoi golf course renovated with a 35% reduction in turf ---its now 120 acres of turf and the current plan is to reduce it to 79 acres.
- At some time in the future we see the need for another golf course. It was a terrible idea to have one entitled below the Lodge and we should talk about where that course might be. If we take the long-term view, we think that the former plantation course in the hills above Maunaloa, is a likely site, but we need to discuss that with the Conservation Fund. There are no immediate plans to build that course.
- Retain the other entitled lots on the Kaluakoi property. There are no immediate plans to develop these.
- Economically, we need some development at La'au Point, **because the Kaluakoi Hotel and Golf Course will almost certainly lose money for many years until a marketing campaign kicks in. We need a larger financial engine than just the hotel and the golf course.**
- The previous La'au Point plan that some of you saw just won't fly with its wall to wall houses from one end of La'au Point to the other. Specifically the number of home sites, the amount of beach access, picnic spots, open spaces and archeological sites to be retained will come out of discussions like today. For example some tell us a 100 acre beach park would be a good idea, others say we need to plan for many more smaller parks.
- The Conservation Fund also wants input and we haven't discussed it with them yet.
- WE DO NOT HAVE A FINAL VERSION OF A LA'AU POINT PLAN YET. I can honestly tell you the level of development there has not been decided.

- The Land trust: We have come to believe that a land trust, and allocating lands to it, should be an integral part of our development plan. Its part of my larger vision for the property which preserves land that can never be developed, for open space for all to use, and puts land aside for agriculture, aquaculture and for other uses.

Maunaloa and Kaulapuu: It will be up to the community to decide whether these communities grow or remain the same. Your input is needed here.

It is important for you to know that BIL is not in a position to fund any of these development options by itself.

When the vision and the plans are complete, we will be seeking an investment partner to join us in the development. We will be looking for investors who believe in whatever vision we come up for the property.

When the time comes we would appreciate your help and your input in finding this partner.

This investor will most likely not be the typical development partner who sees cash returns as the only reason for being on Molokai.

It will be someone who wants more than that, someone who can see Molokai for what it is and realizes that there is more to an investment than just dollars.

Water

The inevitable next question will be "water".

I am sure that if we find common ground on this plan for the future, then I am sure we will find common ground on the water issue.

If we don't find commonality on the plan for our property, then we can't ever discuss water.

- It's an issue I am committed to finding common ground with you.
- I don't want a 14-inch pipeline across Hooleahua.
- I don't know what the answer is yet, but there might be some options that help us all.
- These could be that you can monitor the flow through your lands to ensure we always comply with what is agreed.
- We are also constantly looking at alternative water sources such as Reverse Osmosis, and although its not looking economic at this stage, I am sure it will in the future.

Please give me some time on this issue. I am learning more every day and exploring lots of options. I really can't say more than that at the moment.

So in summary, I want to come back to you all within 6-8 weeks with firmer development proposals on the items I have mentioned.

I can assure you there won't be any skyscrapers on Molokai and I can't see any traffic lights in my future.

If we are ever going to be successful with the Kaluakoi Hotel and the Lodge and beach Village, then our island has to be unique and not another Kaanapali. For me, that means it's the most Hawaiian island, it portrays peace and tranquility and its offers a range of unique activities that can only take place in the environment we all enjoy now.

Appendix D

Preliminary Geotechnical Engineering Reconnaissance Report

GEOLABS, INC.
Geotechnical Engineering and Drilling Services

August 23, 2007
W.O. 5916-00

Mr. Daniel Orodenker
Molokaʻi Properties Limited dba Molokaʻi Ranch
745 Fort Street Mall, Suite 600
Honolulu, HI 96813

GEOTECHNICAL ENGINEERING RECONNAISSANCE
LAʻAU POINT DEVELOPMENT
TMK: (2) 5-1-02: 30; (2) 5-1-06: 157; (2) 5-1-08: 03, 04, 06, 07, 13, 14, 15, 21, AND 25
WEST MOLOKAʻI, COUNTY OF MAUI, HAWAIʻI

Dear **Mr. Orodenker:**

This report presents the results of our preliminary geotechnical engineering reconnaissance performed for the proposed *Laʻau Point Development* project in the West Molokaʻi area on the Island of Molokaʻi, Hawaiʻi. The project location and general vicinity are shown on the Project Location Map, Plate 1.

This letter report summarizes the findings resulting from our site reconnaissance and laboratory testing of selected soil samples. These findings are intended to assist in the preliminary planning of the project only. The findings and recommendations presented herein are subject to the limitations noted at the end of this report.

PROJECT CONSIDERATIONS

The proposed project involves the development of 200 single-family rural residential lots on approximately 1,492 acres in the vicinity of Laʻau Point at the southwestern tip of the Island of Molokaʻi, Hawaiʻi. Based on the preliminary planning information provided, we understand that the new development will be limited to the lower elevations of the project site generally below about +175 feet Mean Sea Level (MSL). A map showing the preliminary development plan is provided on Plate 2.

We understand that there is some concern with respect to the suitability of the on-site clayey soils for subdivision development. The focus of our study is on the areas reportedly containing expansive "adobe" type clay soils. Therefore, a reconnaissance of accessible areas of the project site was performed to record observations and collect near-surface soil samples for laboratory testing, which are believed to be representative of the predominant soil types encompassing the project site.

PURPOSE AND SCOPE

The purpose of this reconnaissance-level geotechnical engineering study was to obtain preliminary soils information in support of the Draft Environmental Impact Statement (DEIS) and Land Use Commission (LUC) Petition. The soils information obtained was used to develop a generalized soil and/or rock data set to formulate preliminary geotechnical recommendations for project planning. Our scope of work generally consisted of the following tasks:

1. Research and review of our in-house soils reports, available geological and soil survey maps, and aerial photos of the project site and vicinity.

2. Reconnaissance of accessible areas of the project site to observe the site conditions by our senior geologist and field geologist.

3. Collection of near-surface soil samples from selected areas of the project site and transportation of the samples to our testing laboratory in Honolulu.

4. Laboratory testing of selected soil samples for classification purposes and evaluation of the expansion potential of the soils.

5. Analyses of the field and laboratory data to formulate preliminary geotechnical engineering recommendations for the development planning.

6. Preparation of this report summarizing our work on the project and presenting our findings and recommendations.

7. Coordination of our overall work on the project by our senior geologist.

8. Quality assurance of our work and client/design team consultation by our principal engineer.

9. Miscellaneous work efforts such as drafting, word processing, and clerical support.

REGIONAL GEOLOGY

The project site is at the southwest tip of the western half of the Island of Moloka'i. The Island of Moloka'i was built by two coalescing shield volcanoes identified as West Moloka'i and East Moloka'i. The West Moloka'i volcano is broad and relatively flat with no discernable caldera feature. The project site encompasses weathered lava flows extruded from the southwest rift zone (a primary eruptive lineament) of the West Moloka'i volcano, which extruded mainly basaltic lava flows comprising the western half of the Island of Moloka'i.

West Moloka'i resides leeward of the East Moloka'i Mountains; therefore, the climate is very dry and the rate of chemical and physical weathering of the exposed basaltic rocks is reduced. Long periods of post eruption weathering, accompanied by generally slower rates of surface erosion stripping, have left a deep red soil cover over the majority of the West Moloka'i uplands. However, it has been noted in previous geological investigations that many surface soil deposits, particularly on the lower elevation south facing slopes along the southern shoreline, have been largely washed away during earlier higher stands of the sea level. As a result, bare basaltic rock covered by thin surface soils typifies the hillside ground surfaces along the southern facing coastline.

Based on our review of available geological maps and aerial photographs, the majority of the project site is underlain by weathered basaltic rock and derived in-situ residual and saprolitic soils belonging to the Tertiary West Moloka'i Volcanic Series geological mapping unit. Areas of alluvial soil deposits have been mapped by others on flatter terrain near the mouths of the larger drainage gullies along portions of the western and southern coastlines. The most notable areas of mapped alluvial soil deposits occur at Aholehole Flats in the vicinity of Kamakaipo Gulch and at Hakina Gulch.

It appears that the Aholehole Flats area (southwest of Kamakaipo Gulch) is a gently westerly sloping alluvial plain that receives runoff and sediment via multiple inland tributaries that feed into the depositional area. Hakina Gulch, on the southern facing slopes of the project site, is an incised drainage gulch that delivers intermittent stream flow from inland regions.

EXISTING SITE CONDITIONS

The project site encompasses approximately 1,492 acres of vacant land extending along the western and southern shorelines at La'au Point on the Island of Moloka'i. Vehicle access to the project site is from the existing Kaupoa Beach Camp Road at the north end of the project site and from the existing Haleolono Harbor Road at the southeastern end of the project site. Existing foot trails along the coastline provide hiking access between the two vehicle access points. The project site is mostly covered by a dense growth of dry land shrubbery and Kiawe trees with localized areas of bare exposed ground.

Site Reconnaissance

A reconnaissance of accessible areas of the project site was performed to record visual observations of the existing conditions and to collect samples of the near-surface soils believed to be representative of the project area. Our site reconnaissance consisted of a traverse along the coastal perimeter between the two existing roads (mentioned previously) combined with short traverses inland at selected accessible locations.

Five soil samples representing the predominant soils observed at the project site were collected at selected locations. The soil samples are identified as S-1 through S-5. The approximate location of the soil sample collections are shown on the Site Plan, Plate 2. Selected photographs of the existing site conditions and locations of soil sample collection are presented in Appendix B.

Based on our observations and a review of the available topographic maps, the overall project site terrain consists of mainly gentle to moderate sloping ground with multiple small (shallow) drainage ravines imparting an undulatory and irregular surface topography. Some localized moderately steep slopes occur along the southern shoreline and interior portions of the project site. Overall slope gradients range between about 5 and 15 percent inclination. The majority of the observed ground surfaces encompass rocky surface materials. The rocky surface materials consist of relatively thin clayey residual soils (containing appreciable cobbles, boulders, and scattered rock outcroppings) overlying weathered, hard basaltic rock formation. Based on our observations, there appears to be three generalized types of inland surface soils, which we encountered during our site reconnaissance.

GENERALIZED SOIL TYPES			
Soil Description from Site Reconnaissance	**Typical Depositional Environment**	**Anticipated Geologic Origin**	**Correlation with Soil Conservation Service (SCS) Mapping Unit**
Reddish brown to brown silty clay (CH) with gravel, cobbles, and boulders (TYPE 1)	Widespread inland from the shoreline, overlying and grading with shallow depth weathered basaltic rock	Residual and Saprolitic soils derived from in-situ weathering of the parent basaltic rock	Kapuhikani (KKTC) – Extremely Stony Clay
Reddish brown to brown stratified silty clay (CH) with sand and variable amounts of embedded gravel, cobbles, and boulders (TYPE 2)	Alluvial plains, ravines, dry washes, gully mouths	Alluvial soil eroded and transported from inland regions consisting of residual and saprolitic soils	Mala Silty Clay (MmA)
Dark brown to grayish brown plastic silty clay (CH) mixed with gravel, cobbles, and boulders (TYPE 3)	Localized to isolated deposits along and inland from the shoreline	Alluvial and some residual soils	Kapuhikani (KKTC) – Extremely Stony Clay

TYPE 1 – Based on our observations, the most predominant surface soil encountered throughout the project site consists of reddish brown to brown colored silty clay (CH) representing residual soils derived from the weathering of basaltic rock. The residual soils covered most of the inland sloping terrain. The soils contain an appreciable volume of erosional remnant embedded cobbles and boulders mixed with rock outcroppings. Based on our observations, the residual soils appear to have a generally low expansion potential when subjected to soil moisture fluctuation as evidenced by some occasional slight surface desiccation cracking. Based on our observations, the depth to rock below the residual soils appears to range on the order of less than about 2 to 3 feet across the majority of the project site. Thicker surface soil deposits were encountered, ranging up to about 5 to 10 feet northerly of Kamakaipo Gulch. The soils are believed to represent the soil unit identified and mapped by the Soil Conservation Service (SCS) as the Kapuhikani Extremely Stony Clay (KKTC).

TYPE 2 – Reddish brown to brown alluvial clay (CH) soils with sand were observed within and adjacent to some existing drainage ravines and on the low elevation alluvial plain at the mouths of the ravines and gullies. In places, these soils contain very few embedded rocks such as the broad low gradient alluvial plain at Aholehole Flats. Other more localized areas, underlain by silty and sandy alluvial soils, contain appreciable volumes of embedded stones, cobbles, and boulders, such as within the existing drainage ravines and gullies. The expansion potential of these clayey, silty, and sandy surface soils is believed to be generally low to moderate as evidenced by slight surface desiccation cracking. The soils are believed to represent the soil unit identified and mapped by the SCS as the Mala Silty Clay (MmA).

TYPE 3 – Dark grayish brown clay (CH) soils were observed sporadically mainly along our coastal traverse. These hard plastic soils were also encountered as isolated deposits mixed with the predominant reddish brown residual soils further inland from the shoreline. The dark brown clay soils were less commonly encountered progressing inland from the coastal region. The soils are believed to represent alluvial and residual type soil deposits overlying basalt rock formation at relatively shallow depths. The soils appear to have a moderate to high expansion potential when subjected to soil moisture fluctuation as evidenced by moderate to occasionally strong surface desiccation cracking. The soils are also believed to represent the soil unit identified and mapped by the SCS as the Kapuhikani Extremely Stony Clay (KKTC).

In summary, the predominant surface soils encountered during our reconnaissance consists of reddish brown to brown silty clays (CH) representing residual soil material derived from the weathering of basaltic rock. In general, these soils appear to have a low expansion potential. Reddish brown to brown clayey soils (CH) with sand were encountered mainly in alluvial depositional environments, which appear generally confined to topographic low elevations such as depressions and drainage ravines. These soils appear to have a low to moderate expansion potential. Finally, the dark brown to grayish brown clay (CH) soil was encountered as isolated inland deposits and discontinuous deposits along the lower elevation coastal regions at the southern portion of the project

site. These soils appear to have a relatively high expansion potential. With the exception of the northernmost portions of the project site (northerly of Kamakaipo Gulch), basalt rock formation was encountered at the ground surface and partly exposed at the ground surface mixed with the soils mentioned previously.

Soil Survey Data

Based on our review of the available United States Department of Agriculture Soil Conservation Service (USDASCS) data, inland areas of the project site may contain the following soil types listed in the approximate order of areal coverage as depicted by the SCS soil survey map. The soils were mapped by the USDASCS within lands that are proposed for residential subdivision development. Other minor soil types may exist within the development area as localized or relatively small-scale deposits. A soil survey map depicting the areal distribution of the major soil types described below is provided on Plate 3.

Soil and/or Land Type	Generalized Soil Conservation Service (SCS) Description
KKTC: Kapuhikani Extremely Stony Clay	The representative soil is dark brown, very sticky, very plastic, and has a high shrink-swell (expansion) potential. The soil is very stony at the surface and throughout the soil profile. The soil occurs on slopes ranging between 3 and 15 percent inclination. The soils are underlain by bedrock at depths of about 24 inches.
rVT2: Very Stony Land Eroded	This land type contains areas of stones, cobbles, and boulders, covering 50 to 75 percent of the ground surface on slopes of 3 to 40 percent inclination. The material is mixed with typical area soils with bedrock occurring at depths of about 24 inches.
MmA: Mala Silty Clay	The representative soil is dark reddish brown and grayish brown silty clay with a platy structure containing stratified sub-layers occurring on slopes ranging between 0 and 3 percent (alluvial plain). The soils may extend deeper than about 5 feet thick and are associated with recent alluvial deposits and flooding conditions.

DISCUSSIONS AND RECOMMENDATIONS

We understand that a Draft Environmental Impact Statement (DEIS) was prepared for the project. Based on public comments, there is some concern regarding the suitability and use of the near-surface clay soils at the project site for residential subdivision development including homes, infrastructure, and pavements. The concern is that the

on-site clay soils are a vertisol soil containing montmorillite clay mineralogy, which is known to cause the clay soil to shrink and swell substantially in response to soil moisture fluctuation. The cyclic shrink and swell activity is responsible for deformation cracking and lifting of structural foundations and pavements when improperly used as earth fill material.

In addition, the occurrence of slow landslide earth movement on the southeastern side of the Island of O'ahu is documented within the thick vertisol soil deposits residing on sloping hillside terrain. The present concern is that similar deep seated earth movement and near-surface swelling soil conditions could adversely impact new homes and roadways constructed on the clay materials, similar to the destructive problems encountered with problem clay soils on the Island of O'ahu.

Vertisol soils, containing montmorillite clay mineralogy, are common in Hawai'i's soils and are typically associated with lower hillside and valley floor alluvial and colluvial materials deposition. Montmorillite clay is a component of various clay soils encountered throughout Hawai'i. Montmorillite is believed to be one of several clay minerals responsible for the high expansion potential of some clay soils, namely "adobe" type clay. Such "adobe" clay deposits typically occur within the larger leeward valleys, adjacent side slopes, and along the lower elevation hillsides of southeastern O'ahu such as within Kuli'ou'ou and Wailupe Valleys. These vertisol soils are associated with documented deep-seated hillside earth movements, which have occurred in existing residential areas on the Island of O'ahu. In general, the vertisol soils associated with the documented earth movements occur as thick (20 to 40 feet or more) wedge deposits residing on the lower elevation side slopes of the larger valleys on the Island of O'ahu. The problematic vertisol soils are typically dark brown to dark grayish brown in color and are very sticky and plastic when wet. Wide desiccation cracks (on the order of about ½ inch to several inches in width) are common at the ground surface when the soils dry after a wetting episode. Based on our previous experience and review of soil and geology maps, large scale deposits of problematic thick "adobe" type clay have not been encountered on the Island of Moloka'i.

Based on our review of aerial photographs combined with our site reconnaissance and laboratory testing of selected soil samples, we believe that the predominant soil at the project site is represented by a reddish brown to brown colored silty clay with a typical shrink-swell potential of less than about 2 to 4 percent, which is considered to be of generally low expansion potential. Based on our evaluation of the existing site conditions, we believe these soils reside over approximately 70 to 80 percent of the land area within the project limits. The remaining 20 to 30 percent of the land area within the project limits may contain generally isolated and discontinuous deposits of expansive, dark grayish brown colored clay, which may be classified as a true vertisol containing a higher percentage of montmorillite clay mineralogy.

The predominant soil types (reddish brown silty clay, and dark grayish brown clay) were observed as intermixed deposits, thus rendering a detailed surface mapping effort as impractical. Based on our observations, geography may play a role in the preferred

depositional environment. We believe the dark brown expansive soils may be encountered with greater frequency along the southern coastal uplands, and within topographically flat or depressed regions where alluvial materials collect. Regardless of the depositional environment, the potentially expansive soils were observed where underlying basalt rock formation resides within relatively close proximity of the ground surface, estimated on the order of about 2 to 5 feet in depth.

As previously mentioned, five selected soil samples (identified as Soil Samples S-1 through S-5) were tested in our laboratory in support of the classification of the soils and evaluation of the expansion potential of the soils. The approximate locations of the soil sample collections are shown on the Site Plan, Plate 2. The following is a summary of our laboratory test results. An additional and more detailed presentation of the laboratory test results is provided in Appendix A.

SUMMARY OF LABORATORY TEST RESULTS

Soil Sample Identification No.	Soil Description	Soil Moisture Content (percent)	Soil Expansion Potential (percent)	Soil Expansion Classification
S-1	Reddish brown to brown silty Clay (CL) with some fine sand. (Residual and Saprolitic Soil)	14.6	2.2	Low
S-2	Brown silty Clay (CL) with fine sand. (Recent Alluvium Soil)	16.4	6.3	Moderate
S-3	Reddish brown with tan mottling silty Clay (CH) with some decomposed gravel and sand. (Residual and Saprolitic Soil)	14.9	1.2	Low
S-4	Dark grayish brown Clay (CH) with some gravel. (Alluvium and Residual Soil)	10.2	23.6	High
S-5	Dark grayish brown Clay (CH). (Alluvium and Residual Soil)	11.1	20.0	High

Based on our evaluation, an estimated 70 to 80 percent of the project site appears to contain rocky silty clay residual and saprolitic soils having a generally low expansion potential. Some rocky clay soils having a moderate to high expansion potential appear to comprise about 20 to 30 percent of the project site. The expansive soils were encountered

as relatively isolated and discontinuous surface deposits intermixed with the predominant low expansive clay soils observed at the project site. In addition, basalt rock formation is believed to occur at relatively shallow depths of about 2 to 5 feet below the existing ground surface.

The dark brown expansive clay soils encountered at scattered locations of the project site do not represent the thick "adobe" type clay deposits that have caused significant problems with slope stability and foundation disturbance on the Island of O'ahu. The soils and rock formations at the site can be graded to stable slopes. The slopes at the project site may be characterized as gently to moderately inclined (about 5 to 15 percent slope gradient), and are underlain by stable basalt rock formation at shallow depths. The scattered expansive clay deposits are thin and can be readily removed by site grading to expose the underlying basalt rock formation. In addition, other viable engineering controls, such as the use of non-expansive fill materials below foundations and pavements, are an option to mitigate the adverse effects of the potentially expansive soils.

Based on our preliminary soils evaluation conducted for this project and our experience with similar sites and clay soil conditions in Hawai'i, we believe the soils encountered at the La'au Point project site are not extraordinary and do not warrant limitation for residential development. We believe the effects of the potentially expansive soils (where encountered) can be mitigated through appropriate engineering controls and adequate slope stability can be achieved through proper grading design.

A detailed geotechnical engineering exploration should be conducted to evaluate the extent of the potentially expansive soils within the development area. The exploration would assist in the development of an appropriate grading plan for the project. It is our opinion that the proposed subdivision development at La'au Point is similar to other coastal residential developments throughout the State of Hawai'i. We believe that thick expansive clay and adobe clay deposits, which could be difficult to mitigate are not present at the project site. Because of the shallow depth to bedrock and relatively localized occurrence of the expansive clays, the unsuitable soils could be excavated and removed. Alternatively, imported non-expansive fill materials could be utilized beneath foundations and pavements.

Finally, we understand that the coastal project site is in an arid and windy environment. Therefore, dust and runoff from infrequent rainfall will require erosion control for environmental preservation. It is our opinion that storm water runoff and possible sedimentation can be effectively controlled with the use of proper erosion control methods including siltation barriers and sedimentation retention structures. These engineering controls are employed on similar projects throughout the State of Hawai'i.

LIMITATIONS

The analyses and recommendations submitted herein are based, in part, upon information obtained from visual observations and laboratory testing of selected soil samples. Variations of conditions between and beyond our observations and collection of soil samples may occur, and the nature and extent of these variations may not become evident until additional geotechnical exploration is underway. If variations then appear evident, it will be necessary to re-evaluate the recommendations presented herein.

This report has been prepared for the exclusive use of Molokaʻi Properties Limited dba Molokaʻi Ranch for specific application to the *Laʻau Point Development* project in accordance with generally accepted geotechnical engineering principles and practices. No warranty is expressed or implied.

This report has been prepared solely for the purpose of assisting the planner and design engineer in the preparation of an environmental assessment and land use petition for the proposed project. Therefore, this reconnaissance report may not contain sufficient data, or the proper information to serve as a basis for construction cost estimates or contract bidding. A contractor wishing to bid on this project should retain a competent geotechnical engineer to assist in the interpretation of this report and/or performance of site-specific exploration for bid estimating purposes.

The owner/client should be aware that unanticipated soil conditions are commonly encountered. Unforeseen soil conditions, such as perched groundwater, soft deposits, hard layers or cavities, may occur in localized areas and may require additional probing or corrections in the field (which may result in construction delays) to attain a properly constructed project. Therefore, a sufficient contingency fund is recommended to accommodate these possible extra costs.

This geotechnical engineering exploration conducted at the project site was not intended to investigate the potential presence of hazardous materials existing at the site. It should be noted that the equipment, techniques, and personnel used to conduct a geo-environmental exploration differ substantially from those applied in geotechnical engineering.

CLOSURE

We appreciate the opportunity to provide our services to you on this project. If you have questions or need additional information, please contact our office.

Respectfully submitted,

GEOLABS, INC.

By _____
Steven F. Carr, R.G.
Senior Geologist

CLAYTON S. MIMURA
LICENSED PROFESSIONAL ENGINEER
No. 4176-C
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY
ME OR UNDER MY SUPERVISION.

By _____
Clayton S. Mimura, P.E.
President

_____ 4-30-08
SIGNATURE EXPIRATION DATE OF THE LICENSE

CSM:SC:mj

Attachments: Project Location Map, Plate 1
Site Plan, Plate 2
Soil Survey Map, Plate 3
Appendix A - Laboratory Test Results, Plates A-1 and A-2
Appendix B - Site Condition Photographs, Plates B-1 thru B-4

(6 Copies to Addressee)

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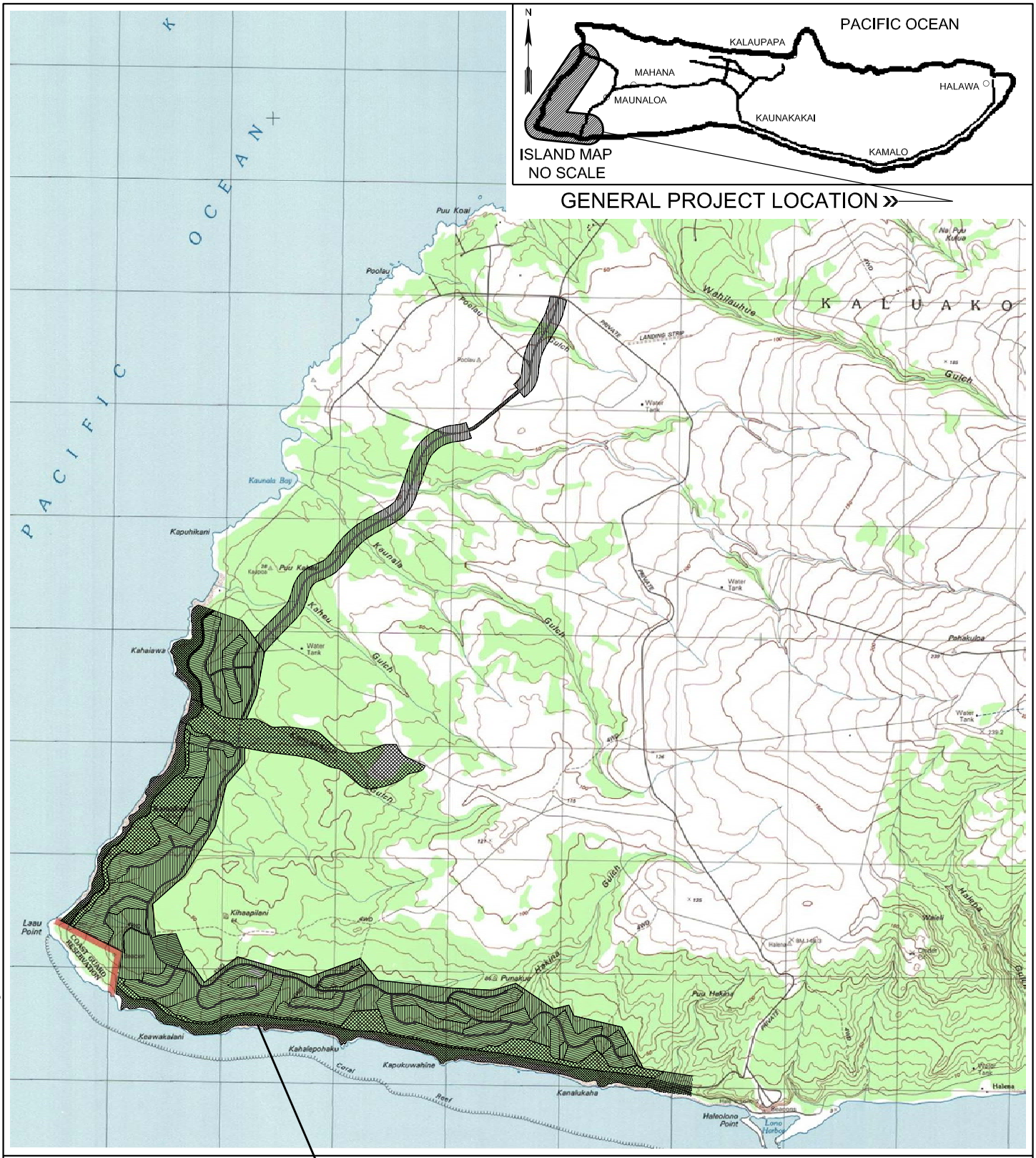
PLATES



PROJECT LOCATION MAP

LA'AU POINT DEVELOPMENT
ISLAND OF MOLOKA'I, COUNTY OF MAUI, HAWAI'I

REFERENCE: MAP CREATED WITH TOPO!® ©2001 NATIONAL GEOGRAPHIC (WWW.NATIONALGEOGRAPHIC.COM/TOPO).

GEOLABS, INC.
Geotechnical Engineering

DATE	DRAWN BY	PLATE
JULY 2007	KHN	1
SCALE: 1" = 4,000'	W.O.: 5916-00	

User: JJP File Created: July 30, 2007 File Last Updated: August 08, 2007 10:03:08am
File: T:\Drafting-9904\Working\5916-00LaauPointMolokaiRanch\5916-00PLM.dwg\PLM

CAD User: JJP File Last Updated: August 08, 2007 10:03:38am Plot Date: August 09, 2007 - 9:36:34am
File: T:\Drafting-9904\Working\5916-00La'auPointMolokaiRanch\5916-00SitePlan.dwg\SITEPLAN

Petition Area Summary

Agricultural to Rural	
House Lots (200)	± 400 Acs.
Roadways	± 46 Acs.
Infrastructure (Wastewater Treatment Plant)	± 14 Acs.
Parks	± 8 Acs.
Open Space	± 382 Acs.
Total Agricultural to Rural	± 850 Acs.
Conservation to Rural (for Park Use)	± 9 Acs.
Agricultural to Conservation	± 254 Acs.
Total Petition Area	± 1,113 Acs.

Project Area Summary

Petition Area	± 1,113 Acs.
Existing Conservation District (along Shoreline)	± 180 Acs.
Offsite Road Corridor	± 139 Acs.
Total Project Area	± 1,432 Acs.

KALUAKOI ESTATES

EX. KAUPOA BEACH CAMP ROAD

AHOLEHOLE FLATS

S-1

S-2

KAMAKAIPO GULCH

SAM WIGHTS BEACH

S-3

LA'AU POINT

EX. USA LIGHTHOUSE STATION

S-4

HAKINA GULCH

S-5

OCEAN

OCEAN

EX. HALEOLONO HARBOR ACCESS ROAD

N

LEGEND:

APPROXIMATE NEAR-SURFACE SOIL SAMPLE LOCATION

REFERENCE: FIGURE 1, PROJECT AREA & LUC PETITION AREA PLAN TRANSMITTED BY PBR HAWAII ON JULY 30, 2007.

0 1000 2000 4000 6000 FT.

GRAPHIC SCALE

SITE PLAN

LA'AU POINT DEVELOPMENT
ISLAND OF MOLOKA'I, COUNTY OF MAUI, HAWAI'I

GEOLABS, INC.
Geotechnical Engineering

DATE	DRAWN BY	PLATE
JULY 2007	KHN	2
SCALE: 1" = 2000'	W.O.: 5916-00	