

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
Office of Conservation and Coastal Lands
Honolulu, Hawai`i

180-Day Exp. Date: January 21, 2014

January 10, 2014

**Board of Land and
Natural Resources
State of Hawaii
Honolulu, Hawai`i**

REGARDING: Conservation District Use Application (CDUA) HA-3683: Saddle Road
Baseyard

APPLICANT: State Department of Transportation

AGENT: Chester Koga, R.M. Towill Corporation, Honolulu

LOCATION: Mauna Kea State Recreation Area, Ka`ohe Mauka, Hāmākua, Hawai`i

TMK: (3) 4-4-016:003

AREA OF USE: 4 acres

SUBZONE: Resource

DESCRIPTION OF AREA AND PROPOSED USE:

The State Department of Transportation is proposing to build a maintenance base yard for Saddle Road on four acres of land within the 20-acre Mauna Kea State Recreation Area in Hāmākua, Hawai`i, TMK (3) 4-4-016:003. The State-owned parcel is in the Resource Subzone of the State Land Use Conservation District.

The project area is located on the Humu`ula saddle area between Mauna Kea and Mauna Loa at the 6500-foot elevation. The proposed baseyard will be used for the storage of equipment and provisions to perform maintenance and repair along a 47-mile stretch of Saddle Road.

The Recreation Area is partially developed, with a visitor center, cabins, and a picnic area in the area adjacent to Saddle Road. The Department of Land and Natural Resources (DLNR) also operates a plant nursery on the parcel, and it was also once occupied by DLNR's nēnē breeding facility. The remainder of the parcel is dry shrub vegetation.

Proposed improvements to the site include a 4340 square-foot shop building, a fuel area, a flammable storage building, open material storage area, a vehicle washdown area, parking, and associated utilities. A fence will enclose the area.

Approximately 1400 square-feet of the proposed shop building will be built on concrete slab and contain office space, restrooms, and a storage area. The remainder will be a large covered area with parking space for six vehicles, as well as additional work areas. The front of the open area will be secured with roll-up doors. Potable water will be supplied by pipes located on site, and power will be supplied from a HELCO line to the northeast of the site.

The fuel area will be placed on a concrete slab and occupy 128 square feet. Fuel to be dispensed includes gasoline and diesel. The fuel will be stored in two 1000-gallon tanks.

The 120-square foot flammable storage building will be constructed of concrete masonry blocks placed on a concrete slab. Flammables such as solvents and paints will be stored here.

The 1592-square foot aggregate storage area is an open area that will be divided into three smaller sections, and used for the storage of gravel, rocks, and sand.

The 850-square foot vehicle washdown area will contain a concrete slab with a floor drain. Wash water will be collected and directed to the nearby leach field.

The applicant proposes a paved area for parking for eight vehicles on the north of the site, and a second parking area for four vehicles near the shop building.

A septic system with a leach field is proposed to handle waste. Used oil and other materials will be stored in leak-proof tanks on-site and disposed of in accordance with applicable regulations.

Access will be via Saddle Road using the same entry as the State Park, and will continue along a service road located to the east of the entry. The proposed alignment crosses a portion of Pōhakuloa Gulch, and the applicant proposed building a concrete ford crossing 100 feet long and 20 feet in width. Excavation in the gulch of less than three feet is required in order to establish a level sub-base.

The application and Final Environmental Assessment predict that the project will have little to no adverse effects on surface waters or ground waters, flora and fauna, recreational resources, cultural and historical resources, and island infrastructure. Best management practices have been proposed to deal with dust impacts, noise, and flora & fauna.

This report contains the following exhibits:

1. Regional Map
2. Topographical Map
3. Aerial Photo
4. Ground Photos
5. Site Plan
6. Mitigation Measures

MITIGATION COMMITMENTS

Highlights of the applicant's mitigation measures are summarized below:

Air Quality

- Fugitive dust will be controlled using periodic site washing.
- Centralizing material transfer points and onsite vehicular routes will help limit dust-generating activities
- An adequate water source at the site will be provided prior to start-up of construction.
- Disturbed soils will be stabilized as soon as possible using grass, hydromulch, geofabrics, or other methods of ground cover.

Noise

- Mufflers on construction equipment will be maintained in good working order.
- Repair and maintenance activities will occur during normal workdays. The baseyard is expected to be closed during evenings, holidays, and weekends.

Flora and Fauna

- Woody vegetation taller than fifteen feet will not be cleared during bat pupping and rearing season, June 1 to September 15.
- If night time construction activity is required then all lights will be shielded; if flood lights are needed they will be placed high enough so that the light can be directed downwards.
- Following build out all streetlights, security, or facility lighting will be shielded, which will serve the dual purpose of minimizing the potential of disorienting birds in flight, and minimizing ambient glare that could interfere with astronomical operations higher on the mountain.

Historical and Archeological Resources

- It has been determined that the five identified potentially historic sites lack cultural or scientific significance beyond that documented during the archaeological inventory survey.
- An archaeological monitor will be present during ground disturbing activities.¹

SUMMARY OF COMMENTS:

OCCL sought review and comment from the following agencies: Office of Hawaiian Affairs; Hawai'i County Planning; DLNR - Forestry, Land Division, Historic Preservation, DOCARE, State Parks; US Fish and Wildlife Service; State Civil Defense; State Department of Transportation; and U.S. Army Garrison Pōhakuloa Training Area.

¹ The Final Environmental Assessment determined that an on-site monitor would not be necessary. After consultation with SHPD the applicant has decided that one will be present.

A notice of the application was placed in the August 8, 2013 edition of the Office of Environmental Quality Control's *Environmental Notice*. In addition, copies were available for review at the Kailua-Kona and Hilo Public Libraries as well as on OCCL's website.

Comments were received from the following agencies:

DLNR – Division of Conservation and Resource Enforcement (DOCARE)

DOCARE noted that initial concerns regarding water usage appear to have been assessed. The Division has no other areas of concern.

DLNR – Division of State Parks

The existing water source is not adequate for the park's needs and will not be able to accommodate additional improvements to the site. The applicant should also be aware that the County of Hawai'i has expressed an interest in leasing the Recreation Area. DLNR has made a commitment to negotiate with the county on such a lease.

Applicant's response

The need for potable water is still under consideration, and discussions are on-going. The permittee will consult with State Parks as they get closer to determining their water needs.

DLNR – State Historic Preservation Division (SHPD)

A review of SHPD records indicates that an archaeological inventory survey (AIS) has been conducted for the area, but has not been accepted as final by SHPD. The office reviewed the draft report and requested revisions that pertained to the documentation, assessment, presentation, and proposed mitigation commitments for historic properties within the project area.

The survey identified five potential sites of interest; none were recommended for further work. SHPD had the following comments regarding the conclusions:

Site 29222 - a historic cabin. SHPD requests additional documentation prior to its destruction due to its unique vernacular and its association with Ah Fat Lee².

Site 29223 - nēnē propagation aviaries. SHPD requests additional documentation prior to their destruction.

Site 29244 –a historic stone enclosure used for animal husbandry. SHPD agrees with the survey's recommendation.

² a.k.a. Father Goose; the full-time nēnē propagator at the site from approximately 1955 to 1984.

Site 29226 - ranching feed trough and gates. SHPD requests more documentation in order to assess the treatment recommendation.

Site 29225 - possible housing terrace. The survey concluded that this was in fact a modern bulldozer push pile. SHPD would like to see the pedestrian and excavation surveys integrated.

If the additional documentation requested for sites 29222 and 29233 cannot be accomplished as part of the AIS, then SHPD requests that a data recovery / mitigation report be completed and accepted prior to the commencement of any activities.

In addition, SHPD notes that the Ke`eke`e sandy loam in the project area might hold sub-surface remains, and recommends that the initial ground disturbance should be monitored by a qualified archaeologist.

Applicant's response

The applicant has submitted a revised archaeological inventory survey; SHPD has noted that their earlier concerns have been adequately addressed. They agree with the treatment recommendations, and concur with the recommendation that an archaeological monitor be on site during construction activities.

DLNR – Division of Forestry and Wildlife (DOFAW)

The document does not discuss what the land disposition will be. Will DOT remove the parcel from the forest reserve? If so a subdivision may be necessary.

DOFAW wishes to confirm that the DOT will replace the cabin that is being demolished, and will work with DOT to find an acceptable site in the Forest Reserve for this.

Applicant's response

The specific action regarding the land disposition is still pending. The cabin that is being demolished will not be replaced.

County of Hawai`i Planning Department

The Department notes that the Hawai`i County General Plan contains goals related to recreation include *maintaining the natural beauty of recreation areas* (a2.2(b)0, and state that *the use of land adjoining recreation areas shall be compatible with community values, physical resources, and recreation potential* (§12.2(d)).

In light of this, the Department questions whether an adequate buffer exists between the proposed facilities and the recreational area.

Applicant's response

The applicant notes that the proposed baseyard will be 200 feet from the closest park facility, and believes that the separation will be more than adequate.

United States Department of the Interior

The Department's databases indicate that the site is not near any proposed or designated critical habitat. However, the following species might be found in the vicinity of the proposed project site: Hawaiian hoary bat (*Lasiurus cinereus semotus*), nēnē (*Branta sandvicensis*), Hawaiian petrel (*Pterodroma phaeopygia sandwichensis*), and Newell's shearwater (*Puffinus auricularis newelli*).

To help minimize impacts, the Department recommends the following mitigation measures:

Hoary bats: Woody plants greater than fifteen feet tall should not be trimmed during bat-birthing and pup-rearing season, June 1 to September 15.

Petrels and shearwaters: Outdoor lights shielded so that they are only visible from below bulb height. Outside lights should be turned off when not needed. Night time construction should be avoided during the seabird fledgling season, September 15 to December 15. During night time construction in other seasons lights should be shielded and directed downwards.

Nēnē: If a nēnē appears within 100 feet of ongoing work, all activity should be temporarily suspended.

Additionally, the Department recommends using either native plants or plants with a low risk of becoming invasive in any landscaping work.

Applicant's response

The above recommendations have been incorporated into the project's best management practices, and they will direct contractors to take appropriate action. To the extent feasible, all existing plants will be preserved on site.

ANALYSIS:

Following review and acceptance for processing, the Applicant's Agent was notified, by letter dated July 29, 2013 that:

1. The proposed use is an identified land use in the Conservation District pursuant to Hawai'i Administrative Rules (HAR) §13-5-22, Land Uses in the Protective Subzone, P-6 PUBLIC PURPOSE USES, (D-1), *Not for profit land uses undertaken in support of a public service by an agency of the county, state, or federal government, or by an independent non-governmental entity, except that an independent non-governmental regulated public utility may be considered to be engaged in a public purpose use. Examples of public purpose uses may include but are not limited to public roads, marinas, harbors, airports, trails, water systems and other utilities, energy generation from renewable sources, communication systems, flood or erosion control projects, recreational facilities, community centers, and other public purpose uses, intended to benefit the public in accordance with public policy and the purpose of the conservation district.* This use requires a permit from the Board of Land and Natural Resources, who have the final authority to grant, modify, or deny any permit.
2. Pursuant to §13-5-40 HEARINGS, a public hearing will not be required for the project.

3. Pursuant to HAR §13-5-31 *Permit applications*, the permit requires that an Environmental Assessment (EA) be carried out. An EA was prepared by R.M. Towill for the State Department of Transportation, who issued a Finding of No Significant Impact and published the final EA in the April 8, 2013 edition of the *Environmental Notice*.
4. It is the applicant's responsibility to comply with the provisions of Hawaii's Coastal Zone Management law (HRS Chapter 205A) pertaining to the Special Management Area (SMA) requirements administered by the various counties.

§13-5-30 CRITERIA:

The following discussion evaluates the merits of the proposed land use by applying the criteria established in HAR §13-5-30.

- 1) *The proposed use is consistent with the purpose of the Conservation District.*

The objective of the Conservation District is to conserve, protect and preserve the important natural resources of the State through appropriate management and use to promote their long-term sustainability and the public health, safety and welfare.

The proposed baseyard will allow the Department of Transportation to maintain the Saddle Road, an important link connecting the eastern and western sides of Hawai'i. Locating the baseyard near the center of the road will reduce the need to regularly transport heavy equipment and potentially hazardous materials from Hilo or Kona.

- 2) *The proposed land use is consistent with the objectives of the Subzone of the land on which the use will occur.*

Pursuant to HAR §13-5-12, the objective of the Resource Subzone is to develop, with proper management, areas to ensure sustained use of natural resources of those areas.

The proposal is an identified land use within the Resource Subzone. It is a not for profit land use that will serve a public purpose: maintaining the integrity and safety of the Saddle Road.

- 3) *The proposed land use complies with the provisions and guidelines contained in Chapter 205A, HRS entitled "Coastal Zone Management (CZM)", where applicable.*

The project complies with many of the objectives of §205A. The potential historic resources have been documented and the archaeological assessment has been approved by SHPD (Objective 2); the location will not impact any important public view planes (Objective 3); and maintaining the Saddle Road is important to the State's economy (Objective 5).

- 4) *The proposed land use will not cause substantial adverse impact to existing natural resources within the surrounding area, community or region.*

As outlined previously, the project contains a substantial number of mitigation commitments to prevent or minimize impacts on air quality, noise levels, flora and fauna, light levels, and historical resources. Staff believes that impacts to the area's natural resources will be minimal if these bmps are followed.

- 5) *The proposed land use, including buildings, structures and facilities, shall be compatible with the locality and surrounding areas, appropriate to the physical conditions and capabilities of the specific parcel or parcels.*

The proposed baseyard is on a previously developed parcel in the Conservation District. OCCL recognizes the need for a baseyard in the area, and supports the proposal to locate it near existing facilities rather than in an undeveloped location.

There has been a concern that there is not an adequate potable water supply. The applicant is currently assessing potential needs, and has agreed to consult with State Parks in developing a final water plan.

- 6) *The existing physical and environmental aspects of the land, such as natural beauty and open space characteristics, will be preserved or improved upon, whichever is applicable.*

As the proposed site has been previously developed, the applicant will be able to minimize the amount of grubbing and grading required. A 100-foot long concrete ford is being proposed to cross Pōhakuloa gulch; beyond this no major changes to the topography are being proposed.

Landscaping will be kept to a minimum, and the existing māmane trees will be preserved. There will be a 200-foot buffer between the baseyard and the existing recreational facilities.

- 7) *Subdivision of land will not be utilized to increase the intensity of land uses in the Conservation District.*

The proposed project does not involve subdivision of Conservation District land.

- 8) *The proposed land use will not be materially detrimental to the public health, safety and welfare.*

Staff is of the opinion that placing a baseyard in the middle of the 47-mile long Saddle Road corridor will allow the Department of Transportation to better maintain the road, and at a lower environmental and economic cost than having a baseyard situated further from the corridor; maintaining the road in good condition will be beneficial to the public's health, safety, and welfare.

DISCUSSION:

Per the above discussion, staff is of the opinion that the proposed Saddle Road Maintenance Baseyard meets the Conservation District criteria established in HAR §13-5-30.

The applicant has incorporated best management practices regarding dust, noise, light levels, and flora fauna protection into the proposal; staff will recommend that these be made a condition of any permit granted.

The Division of State Parks has expressed concern that the existing water supply is not adequate for the proposed development. The applicant has stated that they are still assessing their water needs, and has agreed to consult with State Parks on their final plan. OCCL would recommend that the Board make this consultation a condition of any permit issued.

RECOMMENDATION:

Based on the preceding analysis, Staff recommends that the Board of Land and Natural Resources APPROVE this application for the Saddle Road Maintenance Baseyard at Ka'ohē Mauka, Hāmākua, Hawai`i, TMK (3) 4-4-016:003, subject to the following conditions:

1. The permittee shall comply with all applicable statutes, ordinances, rules, and regulations of the federal, state, and county governments, and applicable parts of this chapter;
2. The permittee shall obtain appropriate authorization from the department for the occupancy of state lands, if applicable;
3. The permittee shall comply with all applicable department of health administrative rules;
4. The permittee shall provide documentation (e.g., book and page or document number) that the permit approval has been placed in recordable form as a part of the deed instrument, prior to submission for approval of subsequent construction plans;
5. Before proceeding with any work authorized by the department or the board, the permittee shall submit four copies of the construction plans and specifications to the chairperson or an authorized representative for approval for consistency with the conditions of the permit and the declarations set forth in the permit application. Three of the copies will be returned to the permittee. Plan approval by the chairperson does not constitute approval required from other agencies;
6. Unless otherwise authorized, any work or construction to be done on the land shall be initiated within one year of the approval of such use, in accordance with construction plans that have been signed by the chairperson, and shall be completed within three years of the approval of such use. The permittee shall notify the department in writing when construction activity is initiated and when it is completed;

7. All representations relative to mitigation set forth in the accepted environmental assessment, as well as in the applicant's response to written comments, for the proposed use are incorporated as conditions of the permit;
8. The permittee understands and agrees that the permit does not convey any vested right(s) or exclusive privilege;
9. In issuing the permit, the department and board have relied on the information and data that the permittee has provided in connection with the permit application. If, subsequent to the issuance of the permit such information and data prove to be false, incomplete, or inaccurate, this permit may be modified, suspended, or revoked, in whole or in part, and the department may, in addition, institute appropriate legal proceedings;
10. When provided or required, potable water supply and sanitation facilities shall have the approval of the department of health and the county department of water supply;
11. The permittee will consult with the DLNR's Division of State Parks regarding their final water needs;
12. Provisions for access, parking, drainage, fire protection, safety, signs, lighting, and changes on the landscape shall be provided;
13. Where any interference, nuisance, or harm may be caused, or hazard established by the use, the permittee shall be required to take measures to minimize or eliminate the interference, nuisance, harm, or hazard;
14. Obstruction of public roads, trails, lateral shoreline access, and pathways shall be avoided or minimized. If obstruction is unavoidable, the permittee shall provide alternative roads, trails, lateral beach access, or pathways acceptable to the department;
15. Except in case of public highways, access roads shall be limited to a maximum of two lanes;
16. During construction, appropriate mitigation measures shall be implemented to minimize impacts to off-site roadways, utilities, and public facilities;
17. Cleared areas shall be revegetated, in accordance with landscaping guidelines provided in this chapter, within thirty days unless otherwise provided for in a plan on file with and approved by the department;
18. Use of the area shall conform with the program of appropriate soil and water conservation district or plan approved by and on file with the department, where applicable;
19. The permittee shall obtain a county building or grading permit or both for the use prior to final construction plan approval by the department;
20. Artificial light from exterior lighting fixtures, including but not limited to floodlights, uplights, or spotlights used for decorative or aesthetic purposes, shall be prohibited if the light directly illuminates or is directed to project across property boundaries toward the shoreline and ocean waters, except as may be permitted pursuant to section 205A-71, HRS. All exterior lighting shall be shielded to protect the night sky;

21. The permittee acknowledges that the approved work shall not hamper, impede, or otherwise limit the exercise of traditional, customary, or religious practices of native Hawaiians in the immediate area, to the extent the practices are provided for by the Constitution of the State of Hawaii, and by Hawaii statutory and case law; and
22. Other terms and conditions as prescribed by the chairperson.
23. Failure to comply with any of these conditions shall render a permit void under the chapter, as determined by the chairperson or board.

Respectfully submitted,



Michael Cain
Staff Planner

Approved for submittal:



William J. Aila, Chairperson
Board of Land and Natural Resources

EXHIBIT I

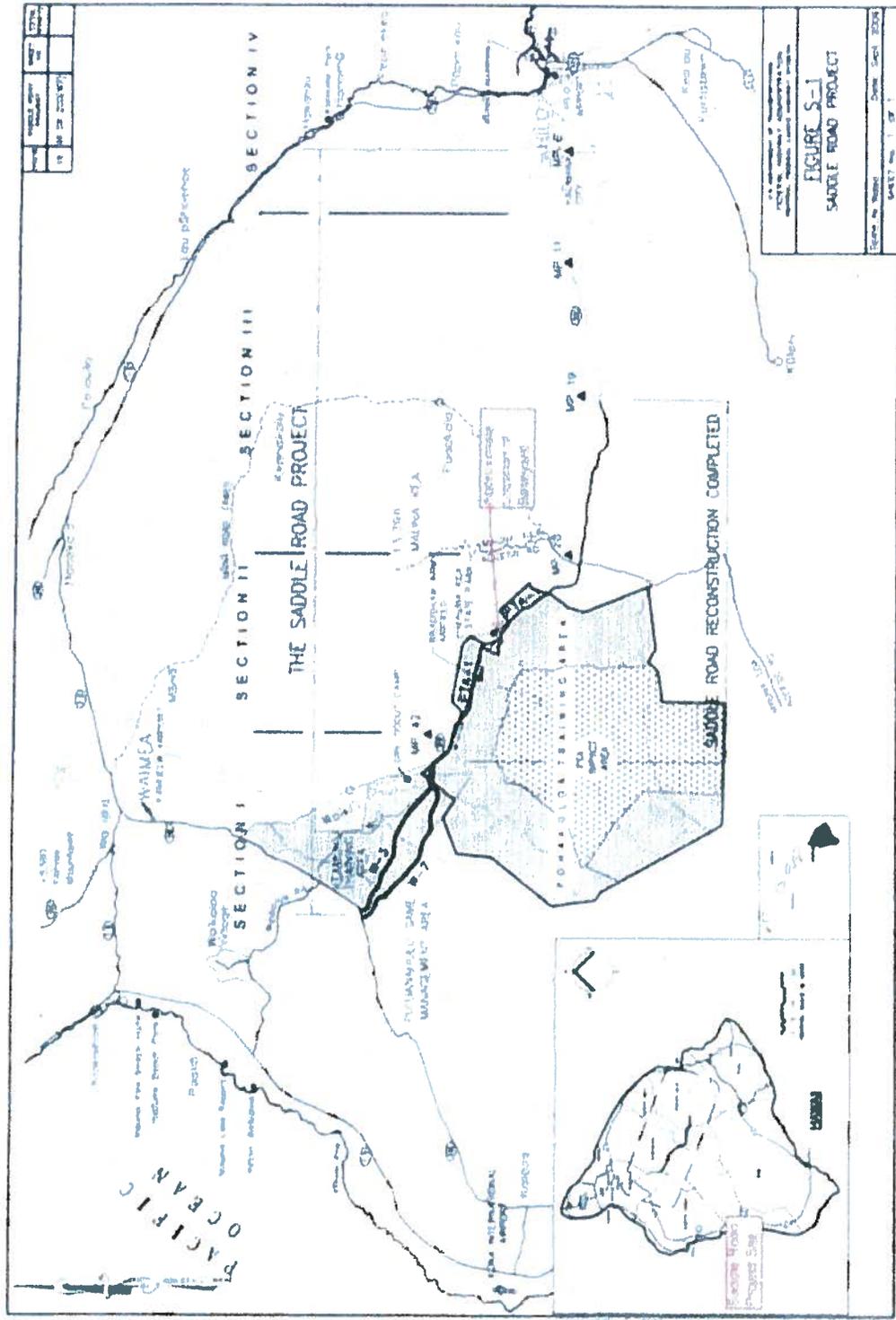


Figure 1 Regional Context Map

State of Hawai'i, Department of Land and Natural Resources, Conservation District Use Application, Revised 10/19/04

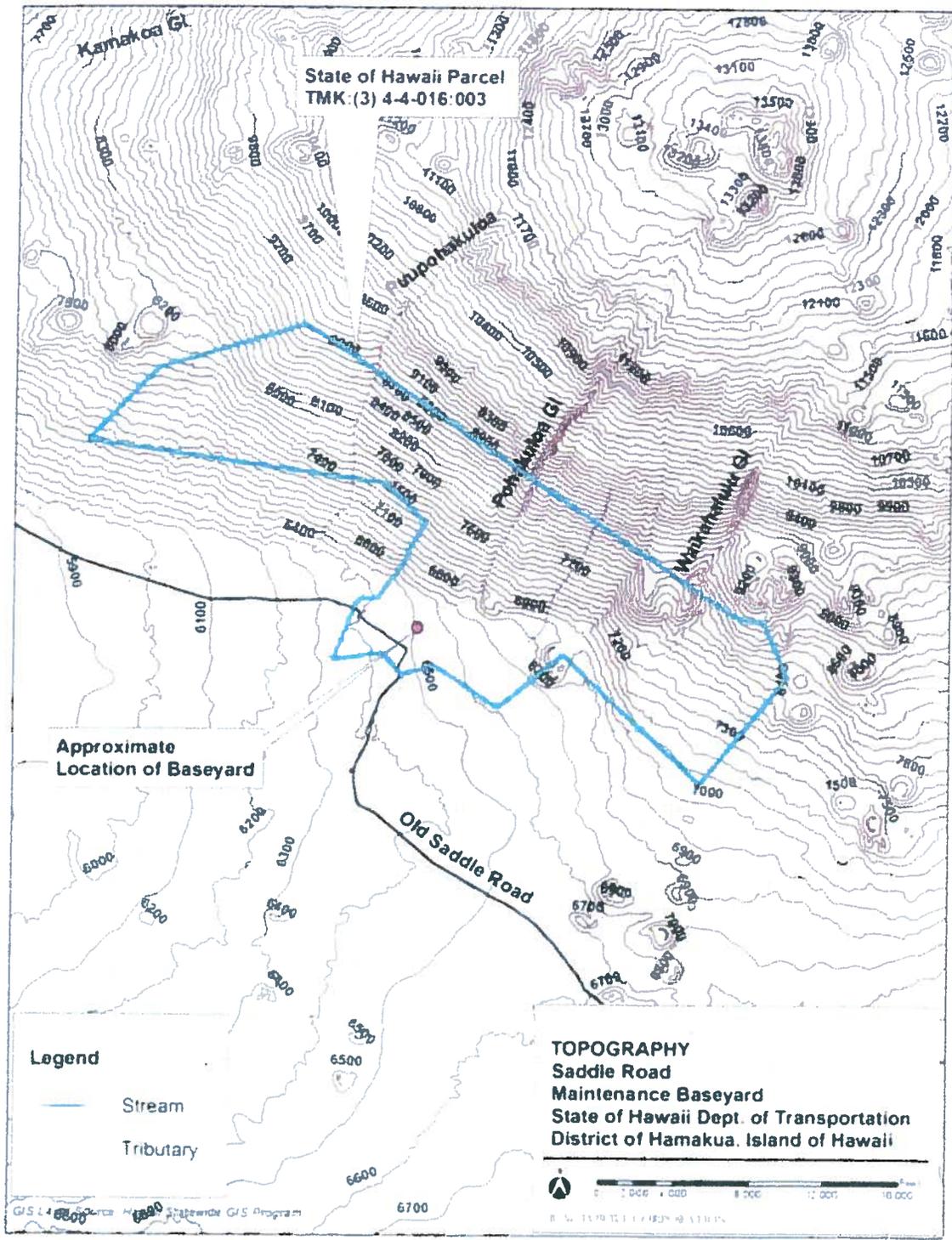


Figure 12 Topography

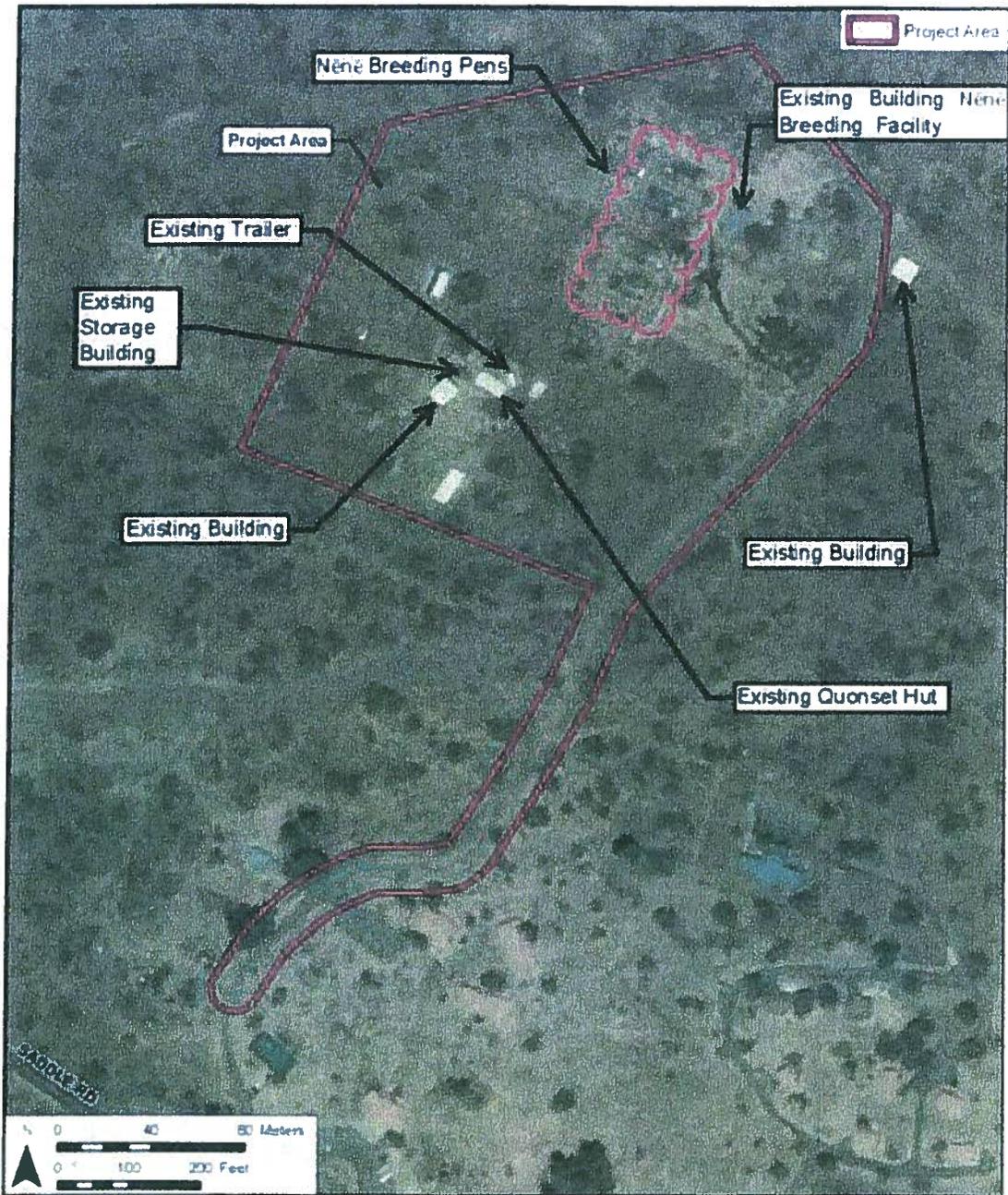


Figure 4 Aerial photo (Google Earth 2011) showing the location of the project

Archaeological Inventory Survey for the Baseyard at the Mauna Kea State Recreation Area

TMK (A) 44-016 003

Figure 8 Existing Structures

State of Hawai'i, Department of Land and Natural Resources, Conservation District Use Application, Revised 10/19/04

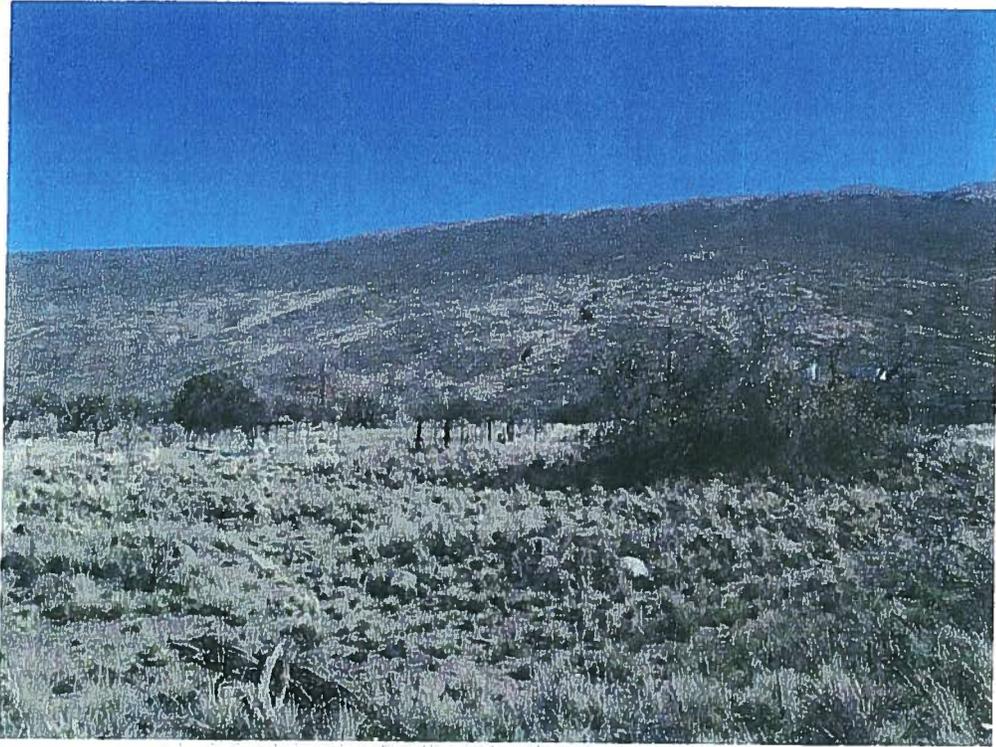


Figure 2 – Baseyard site, looking north, Mauna Kea in the background



Figure 3 – Abandoned captive propagation pens within the site

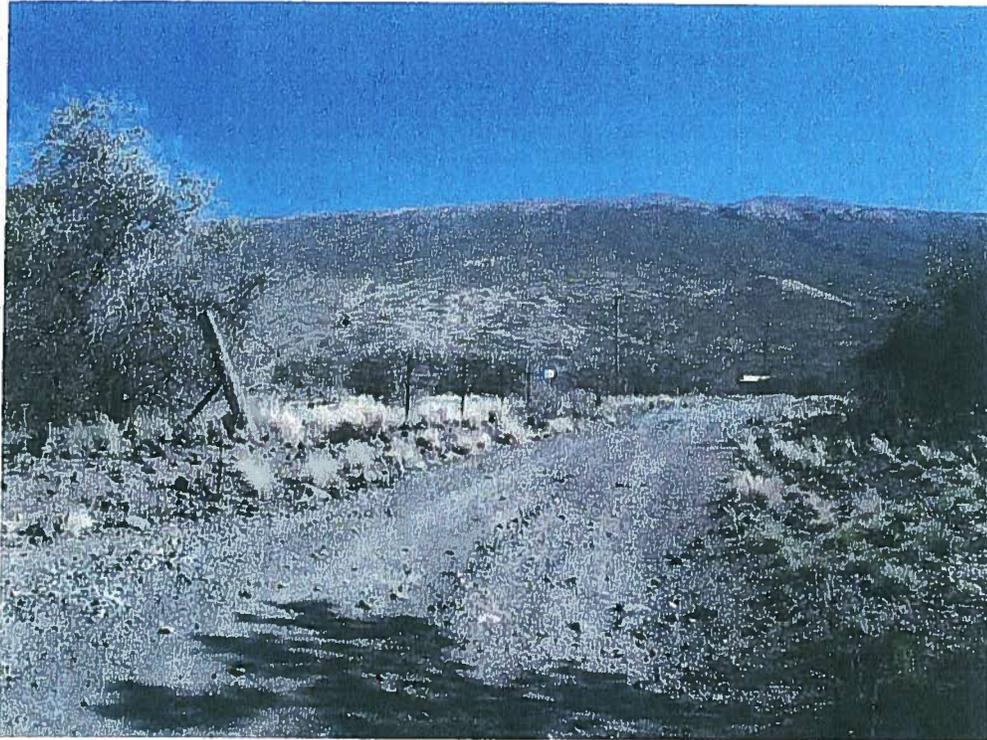


Figure 4 – Current access road located on the eastern boundary of the site, looking north

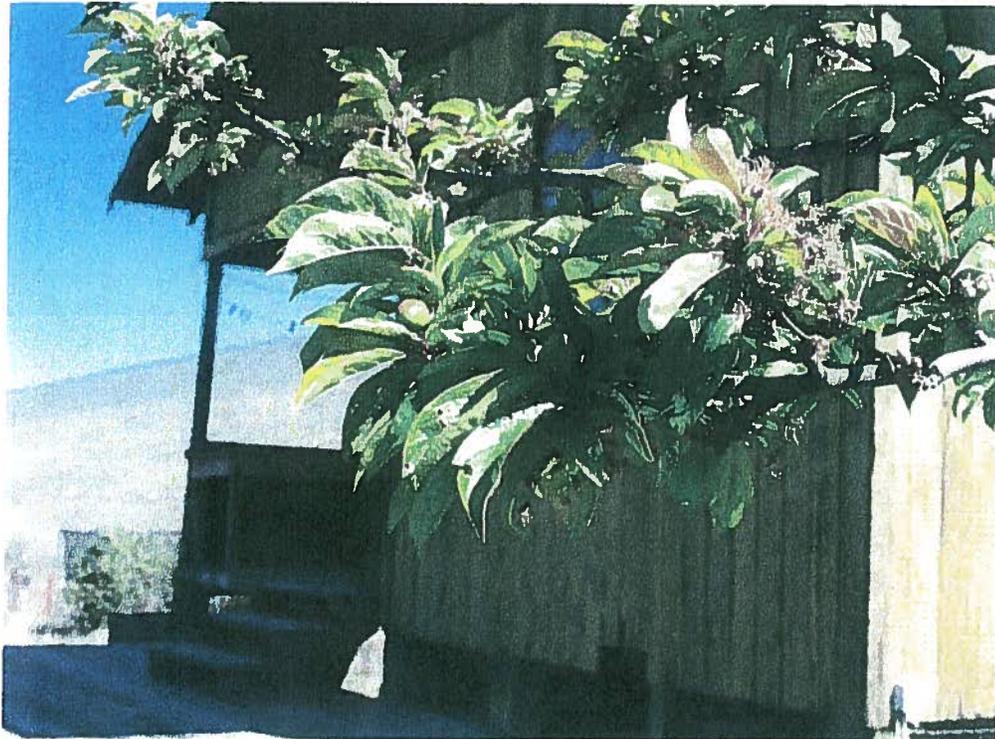
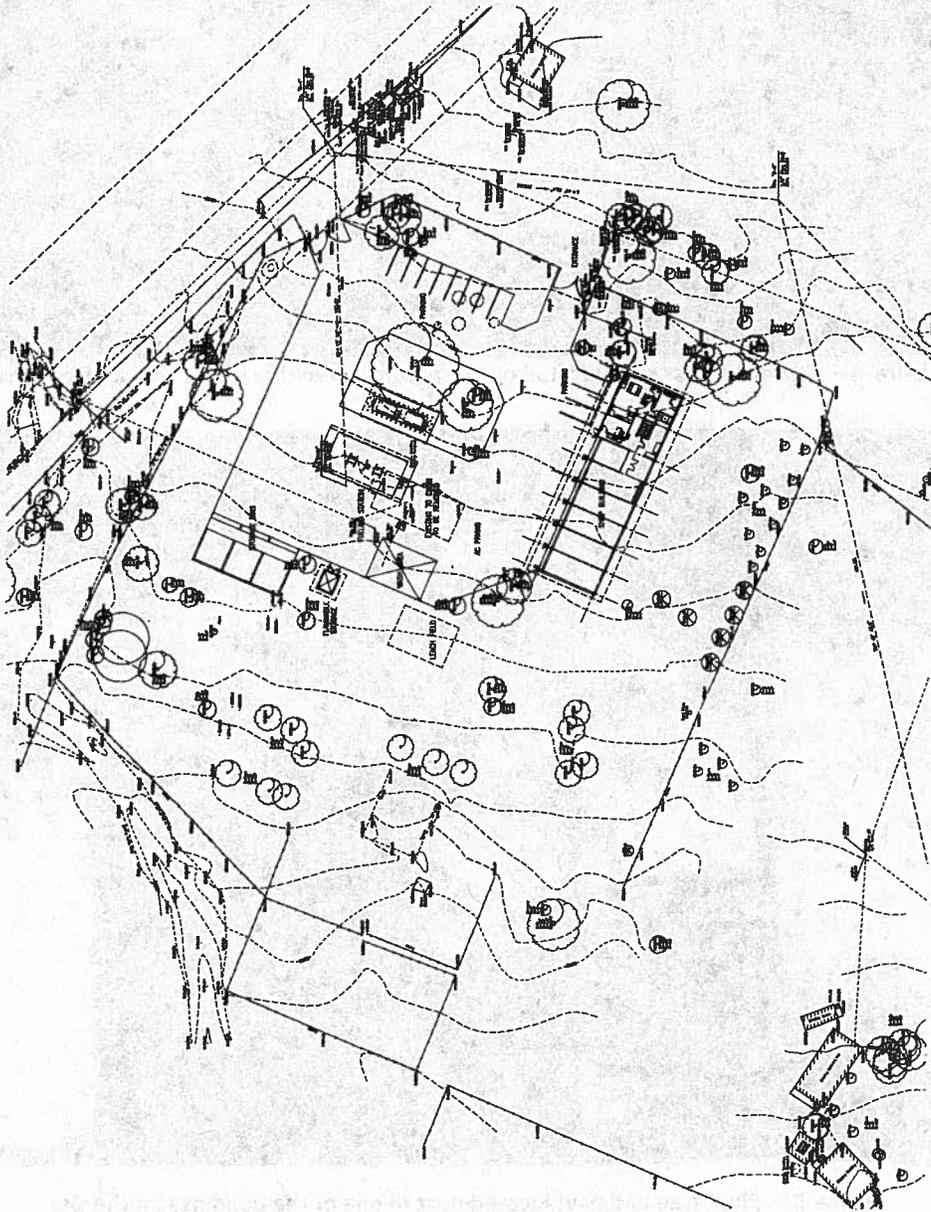


Figure 5 – Plum tree and fruit located next to one of the buildings on the site

CON. NO.	STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
1000	2000A-01-10	2012	0	0



ARCHITECTURAL SITE PLAN



CITY OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 INFRASTRUCTURE DIVISION
SITE PLAN
 SADDLE ROAD BASEYARD
 IMPROVEMENTS
 Saddle Road, Roseauel
 Project No. 200A-01-10
 Scale: As Noted Date: May, 2012
 SHEET No. 1 OF X SHEETS



0 30 60
 Feet
 Scale: 1/32" = 1'-0"

A-1

Table 2 Impact Summary	
AFFECTED RESOURCE	MITIGATION DESCRIPTION
AIR QUALITY	<p>Dust and exhaust emissions will be generated from construction vehicles and equipment including backhoes, trucks, generators, fuel tanks, etc., during construction. Mitigation of fugitive dust generated during construction will be handled through the use of periodic site watering and applicable on-site BMPs. Additional measures as provided in Hawai'i Administrative Rules (HAR) Chapter 11-60.1 – Air Pollution Control will also be followed and will include, but not be limited to, the following:</p> <ul style="list-style-type: none"> • The planning of project construction operations will focus on: minimizing the amount of dust-generating materials and activities; centralizing material transfer points and onsite vehicular traffic routes; and, locating potentially dusty equipment in areas of least impact; • An adequate water source at the site will be provided prior to start-up of construction activities for dust control wet-down application; • Disturbed soils will be stabilized as soon as possible by means of grassing, hydromulch, geo-fabric, or other methods of cover; • Dust will be controlled by stabilizing ground conditions at project entrances to prevent dirt tracking onto adjacent access roads, and by covering or wetting down construction vehicles carrying dust-generating materials; and, • Adequate dust control measures will be provided on weekends, after hours, and prior to daily start-up of construction activities. <p>Vehicle and construction equipment exhausts are a source of air pollution. Mitigation of potential adverse effects associated with use of construction equipment, fuel tanks, and vehicle exhausts will be handled through adherence to applicable Federal, State and County regulations. As required, all machinery and vehicles will be required to be in proper working order with appropriate use of mufflers.</p>
NOISE	<p>Construction activity will result in short-term noise impacts associated with the proposed project. Construction related noise will be generated by use of construction equipment and machinery such as bulldozers, backhoes, compressors, and vehicles. Management of short term noise impacts will involve use of mufflers and related noise reduction technologies. As required, construction equipment with mufflers in poor working condition shall be replaced or repaired. Adverse effects from construction noise are not expected to pose a hazard to public health and welfare due to the temporary nature of the work, the absence of sensitive land uses in the surrounding area, and the application of mitigation measures that will be employed to minimize noise effects.</p> <p>Construction noise will cease at project completion. Long-term noise effects should be minimal. Vehicles and equipment from the baseyard are expected to leave the baseyard at the start of the work shift and return at the end of the workday. There may be repairs and preventive maintenance which occur within a normal workday. The baseyard is expected to close during weekday nights, holidays, and weekends.</p>

<p>FLORA AND FAUNA</p>	<p>No impacts are anticipated. The following are avoidance and minimization measures adopted.</p> <ol style="list-style-type: none"> 1. It is recommended that woody vegetation taller than 4.6 meters (15 feet), not be cleared between June and September 15th, the period in which bats are potentially at risk from vegetation clearing 2. If nighttime construction activity or equipment maintenance is proposed during the construction phases of the project, all associated lights should be shielded, and when large flood /work lights are used, they should be placed on poles that are high enough to allow the lights to be pointed at the ground. 3. Following build-out it is recommended that any streetlights, security or facility lighting be shielded (Reed et al.1985, Telferet al.1987). This minimization measure would serve the dual purpose of minimizing the threat of disorientation and downing of Hawaiian Petrel and Newell's Shearwaters, while at the same time complying with the Hawai'i County Code Section 14-50 et seq. which requires the shielding of exterior lights so as to lower the ambient glare caused by unshielded lighting to astronomical observatories located on Mauna Kea.
<p>HISTORIC AND ARCHAEOLOGICAL RESOURCES</p>	<p>No recommendations to undergo further research are made at any of the five sites identified within the project area, because it has been determined that these historic properties lack cultural or scientific significance beyond that documented during this archaeological inventory survey. Therefore, no further work is recommended at any of the five historic properties within the project area. These historic properties are classified under Criterion B and/or D significance only and are characterized as consisting of remnants of twentieth century historic features that were utilized for ranching operations or nēnē propagation. SIHP #50-10-22-29223 is associated with a historic figure, Ah Fat Lee, who was also known as "Father Goose". Ah Fat Lee was instrumental in the success of the propagation of the Hawaiian nēnē goose at SIHP #50-10-22-29223, and the subsequent reintroduction of the geese back into the wilds of Hawai'i and Maui Islands.</p> <p>It is unlikely that the removal of these features would disturb any undiscovered subsurface features because they would have likely been impacted during the construction of the existing buildings and facilities. Therefore, archaeological monitoring is not recommended for construction-related ground disturbance.</p> <p>However, if at any time during construction subsurface features (including lava tubes) or deposits are encountered, Cultural Survey Hawai'i (CSH) recommends that construction activities cease and that the SHPD be contacted immediately.</p>

<p>CULURAL RESOURCES AND PRACTICES</p>	<p>The findings of the CIA indicate that there is a wealth of Native Hawaiian cultural resources, beliefs and on-going practices associated with Ka'ohē Ahupua'a and the proposed project area. The results of the CIA present a number of possible mitigation measures for the landowner/developer's consideration. The following recommendations are offered as a way to begin to address some of the concerns expressed:</p> <ol style="list-style-type: none"> 1. Construction consideration to the natural resources within the proposed project area. 2. If at any time during construction subsurface features (including lava tubes) or deposits are encountered, CSH recommends that construction activities cease and that SHPD be contacted immediately. 3. CSH's project specific effect recommendation is "effect, with agreed upon mitigation measures." <p>The construction of the HDOT Base Yard will involve ground disturbing activities that may include the partial or complete destruction and/or removal of all of the historic properties identified within the project area. The recommended mitigation measures will reduce the project's potential adverse effect on these significant historic properties.</p>
<p>TRAFFIC AND TRANSPORTATION SYSTEMS</p>	<p>No significant increase in traffic associated with the proposed baseyard project is expected. On a short-term basis, construction-related traffic may be temporarily noticeable. However due to the limited scope of the project, construction-related traffic will not significantly alter the total volume of traffic on Saddle Road. The contractor will be required to keep all construction vehicles in proper operating condition and ensure that material loads are properly secured to prevent dust, debris, leakage, or other adverse conditions from affecting public roadways. No other mitigation measures are required or recommended.</p> <p>Traffic generated by the baseyard should not result in an adverse effect on the Saddle Road level of service. Minor addition of traffic volume can be attributed to the baseyard. However, it is noted that without the baseyard, maintenance would still have to be performed on Saddle Road. Thus, any net addition of traffic resulting from the project can be considered negligible.</p>
<p>DRAINAGE SYSTEM</p>	<p>No adverse changes to existing drainage patterns are expected to result from the project. The project does not involve any modifications to the existing drainage patterns and will not result in an increase in peak runoff. The project contractor will employ construction stormwater BMPs to prevent sediment or other pollutants from discharging in stormwater runoff from the site. The construction site and staging area will exceed one acre, therefore a National Pollutant Discharge Elimination System (NPDES) Construction Stormwater Permit is required. Hydrotesting may also be required. If required, NPDES Hydrotesting permit will be prepared for approval.</p>
<p>WATER SYSTEM</p>	<p>Construction activities will require use of water for dust control, vehicle wash down, concrete mixing, general housekeeping activities, and for pipe pressure testing. These uses will be intermittent and of short duration and will cease upon project completion. Quantities of water required for these uses are relatively minor. The specific source of water to be used for construction would be the responsibility of the contractor, but contractors may opt to purchase and truck water from County Department of Water Supply standpipes in Kaumana, above Hilo. Since the West Hawai'i connection is on Mamalahoa Highway, Waimea may also provide an option.</p>

<p>WASTEWATER SYSTEM</p>	<p>During the period of construction, portable toilets will be provided for construction personnel. In the long term, the septic system would serve wastewater needs of the baseyard. Collection of other oils and waste materials would ensure that no adverse environmental impacts would result from the project. No other mitigation measures are recommended or required.</p>
<p>SOLID WASTE DISPOSAL</p>	<p>Construction activities will result in the generation of small amounts of construction and demolition debris. The Pu'uana'hulu Landfill handles construction waste in accord with applicable State Department of Health regulations. No additional mitigation measures for solid waste are proposed.</p>