

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
Office of Conservation and Coastal Lands
Honolulu, Hawai'i
January 25, 2013

Board of Land and
Natural Resources
State of Hawaii
Honolulu, Hawaii

REGARDING: Conservation District Use Application (CDUA) OA-3636

APPLICANT: Sharon E. Geary

AGENT: Joe Simmons, Project Solutions, Inc.

LOCATION: Ko'olaupoko, Kane'ohe, Island of O'ahu

TMK: (1) 4-5-032:001

AREA OF PARCEL: 56.3 ac.

AREA OF USE: 12 ac. (21% of parcel)

SUBZONE: General

DESCRIPTION OF AREA AND CURRENT USE:

The subject parcel is located on the windward side of O'ahu south of Kāne'ohe Bay Drive between Kamehameha Highway and the H-3 Freeway. The parcel is bounded by existing Single Family Residence (SFR) structures northeast to southwest and by steep, undeveloped Conservation District and forest reserve lands to the south and southeast (**Exhibit 1**). The parcel is 56.3 acres in size and is primarily covered with a variety of non-native lowland forest growth and contains some minor development.

Approximately 3.5 acres of land was cleared by a previous owner for the construction of a SFR, approved by the Board of Land and Natural Resources (BLNR) on *February 22, 1980* under Conservation District Use Permit (CDUP) *OA-1188*. A long, unpaved driveway leads to the remains of the SFR which was destroyed by fire in 2001 and not rebuilt. The remains of the SFR include a concrete foundation, minor structural walls and columns. Three small, pre-fabricated storage sheds have been erected on the property with approval granted by the department under Site Plan Approval (SPA) *OA-11-50* and SPA *OA-12-14*. The existing storage sheds are utilized for landscaping and land management equipment (i.e., tools, small tractor) and are not in use as a residence. On *April 22, 1988*, the BLNR permitted, with conditions, a television booster transmission station and shared-use radio/cellular facility under CDUA *OA-1861A*. These antennae facilities are located near the southeastern boundary of the subject property at the top of the mountain ridge.

For ease of review the project area has been demarcated with the following areas; 1) *The Bluff*, 2) *The Meadow*, 3) *The Terrace*, and 4) Kokokahi and Moakaka Valleys (**Exhibit 2**).

Resource and Environment

Because of the topography and location of this parcel, runoff, soil erosion and drainage are a concern. Rainfall on the parcel either enters into the groundwater system, exits the property as runoff via sheet flow or drains via one of two intermittent storm water drainage areas; the property's two main valleys. A site inspection by Office of Conservation and Coastal Lands (OCCL) staff confirmed that runoff to adjacent properties is minimal and the existing vegetation on the periphery of the parcel helps to mitigate the effects of heavy storm events. Runoff from the property generally contributes to the Kawa Stream water basin, which carries fresh water to Kāne'ōhe Bay. Kawa Stream is located about 1,530 feet northwest of the property, across Kāne'ōhe Bay Drive.

The plant species on the property are predominantly introduced (non-native) species. Flora identified during a 2006 botanical survey in areas not adjacent to the property's driveway, or the previously cleared areas (i.e., the Meadow and the Bluff), included invasive and non-native plants common to Hawaii, such as: Guava, African tulip and Ironwood. Previously cleared portions of the property are predominantly covered with California grass along with a row of money trees planted by the previous landowner. Interspersed in the Meadow are silky oak, monkeypod, banyan, and a small grove of swamp mahogany. No rare, threatened or endangered species were observed during the 2006 botanical survey.

Faunal species that may be present on the property include feral mammals common throughout O'ahu, including domesticated dogs and cats, mongoose, rats, and mice. Also present, due to marks and other evidence (i.e., rooting, digging) found on the property, are feral pig populations that migrate throughout the area.

The United States Fish and Wildlife Service (USFWS) identified the possible presence of the federally endangered Hawaiian hoary bat. Though bats are uncommon on Oahu and there are no reports of habitat use in the Kokokahi area, bats are highly mobile and their endangered status mandates some protection protocols.

Culture, Architecture and Archeology

In 2006 an archaeological field investigation and literature review of the project area was conducted by Cultural Surveys Hawai'i, Inc., to investigate the presence and condition of the Ahukini Heiau, which was determined to have been located on or near the Terrace or Bluff area. Ahukini Heiau was placed on the Hawai'i Register of Historic Places in 1971 and is identified by the State Inventory of Historic Places as site *No. 80-10-352*.

By the time the BLNR approved CDUP *OA-1188* for the construction of a SFR on the parcel the heiau had already been previously altered (i.e., removed). The findings of the 2006 archaeological field study determined that the Ahukini Heiau was demolished around 1974 for construction of the SFR which was subsequently destroyed by fire in 2001.

There are no known historic or prehistoric resources currently located at the proposed project site, or within the boundaries of the parcel. Although it is unlikely that any historic resources would be

uncovered during the construction phase of the proposed project, should any artifacts or human remains be uncovered, construction would immediately cease, and the State Historic Preservation Division (SHPD) would be contacted to evaluate the inadvertent discovery. No native or Hawaiian gathering or subsidence practices are currently in operation on the parcel as the property is entirely private and inaccessible except via private driveway from Kokokahi Place.

PROPOSED USE:

The Proposed Action consists of five separate, but integrated, actions:

Landscape the property: The applicant is proposing to landscape the property by planting a variety of native and common Hawaiian grasses, fruits, vegetables, flowers, shrubs, and trees. A licensed landscape architect has prepared a detailed landscaping master plan for the property (**Exhibit 3; 4 pgs.**). The applicant is interested in horticulture as a hobby, and would not be raising plants or plant products to sell commercially. To further the applicant's plan for the property, a wide variety of species would be planted and cultivated to provide ecological diversity to the parcel. The proposed landscaping will increase the diverse biomass of the property with plants that produce flowers, fruits, and scents without the need for major clearing or grubbing of the parcel. Erosion control from landscaping will be a secondary, yet equally beneficial, portion of the proposed landscaping efforts. It is important to note that no new irrigation is proposed for this project. Existing irrigation lines, previously authorized for the project site, will adequately serve the proposed landscaping project without the need for an additional water system.

Construct two (2) terraced planter boxes: The applicant is proposing to construct *Terraced Planter Boxes* at two locations on the property (**Exhibit 4**). The terraced planter boxes have been designed and situated to reduce runoff and minimize soil erosion by adding flat, vegetated surfaces along the slopes (**Exhibit 5**). The sizes of the planter boxes to be installed on the steep slopes are 1,500 ft² and 1,125 ft² for a combined area of 2,625 ft². In addition to being a tool for minimizing runoff and soil erosion in these two areas, the planter boxes would be used for gardening. Access to the planter boxes will be by a staircase designed to aid in gardening, weeding, and maintenance of these areas (**Exhibit 5**).

Repair and upgrade existing utilities: The existing utilities serving the property (i.e., electrical, telephone, and cable) would be repaired and upgraded as needed. While the property owner does not propose building any residential or other living structures on the property, the utilities would be necessary for additional power (i.e., lighting), providing safe site access, and security (i.e., security cameras) for the project site.

Animal Husbandry: The applicant is proposing to: install fencing to enclose approximately three (3) acres of *the Meadow* and to build two (2) small animal shelters to house and care for up to six (6) goats, six (6) sheep, 24 chickens (female only), and 12 ducks (male only) in that area. A pasture area would be created and would be contained by six (6) foot high perimeter fencing designed to restrict access into and out of the pasture area. The pasture fencing would be set back at least 50 feet from the property boundary, providing a buffer between the animals and neighboring properties (**Exhibit 4**). Fencing would consist of metal "T" posts pounded into the ground with woven wire stretched between and secured to posts. Posts at corner locations and at gate openings will be appropriately braced, and wire secured to the ground to prevent gaps due to

uneven terrain. Fencing design will not only contain the desired animals, but will also serve to restrict access by feral pigs and dogs. On the northern edge of the project sites 50-foot buffer, the Meadow would be planted with grass and a variety of trees and other plants to form a visual buffer, as well as to provide additional sound and odor buffers, between the neighbors and the applicant's animals.

Shelter for the goats and sheep (i.e., ruminants) would be designed to provide shade relief and protection from wind and rain and will measure approximately 20 feet by 20 feet (400 ft²) (**Exhibit 6; 4 pgs.**). The ruminants would be permitted to range freely within their shelter and the fenced pasture. Additional shade relief would be provided by trees and other large vegetation on the parcel.

Within the enclosed area for the ruminants would be a separate area for the chickens and ducks which will be enclosed by a separate fence designed to permit them free range within the ruminant's pasture, but prohibit the ruminants from entering the area intended for the chickens and ducks (**Exhibit 6; 4 pgs.**). Shelters for the chickens and ducks would be provided within this special fenced area, as well as shaded runs, a duck pond, and an outdoor exercise area in which the chickens and ducks would be permitted unrestricted ingress and egress. Shelter for the chickens would be provided by a coop and shaded run and is designed to accommodate up to 24 adult hens. Shelter for the ducks would be provided by a duck house and shaded run and will accommodate up to 12 adult ducks. Additionally, the ducks would be provided with a 100ft² area pond, approximately 4 ft. deep. The duck house, run, and pond would be enclosed by a fence that would separate their space from the pasture. The ducks would be permitted to range freely within their spaces, the spaces for the chickens, and within the pasture. The combined poultry area would be approximately 36-feet by 36-feet (1,296 ft²).

Maintain existing pathways: A system of existing footpaths and service paths will be improved upon to facilitate the proposed landscaping and maintenance activities. The existing main service path is a foot path that will be widened from 4-feet to 6-feet to allow the landowner the ability to access the valley floor via a small service vehicle. In order to widen the path, a number of invasive plants and trees, such as Christmas berry and Java plum, will be cleared by hand. Once the path has been cleared, the applicant will utilize the service vehicle to firm the area, and then add basaltic pea gravel to stabilize the path. The service path is at a slight angle but no digging or grading is planned. Biodegradable matting will be used if erosion becomes an issue along the path and for stabilizing the access path for safety.

MANAGEMENT PLAN:

The applicant, in preparation for applying for land uses in the conservation district, has completed a *Management Plan* along with a detailed report on *Animal and Waste Research* for the proposed project to document the specific management techniques and procedures to be implemented. The Management Plan (MP) has been reviewed by the OCCL and an overview is provided below for land-uses related to landscaping, land management and animal husbandry on the parcel.

Landscaping and Land and Resource Management:

The proposed project will improve and attempt to reclaim the parcels natural condition by utilizing vegetation that will provide biological diversity, a cornerstone of a healthy ecosystem.

Vegetation to be planted includes native and endemic grasses, fruits, vegetables, flower, shrubs, and trees; all known to currently exist in Hawai'i and are not considered invasive species. To support the landscaping portion of the project the applicant is proposing to include the use of *jute* or other erosion-control fabrics, plant ground cover species appropriate to the site, and the addition of fertilizers for healthy, long-term growth. Nutrients would be provided in the form of compost that includes animal waste from the on-site animals.

Animal Husbandry:

Small flocks of domesticated animals would be introduced over a 5-year period, and would consist of up to 24 chickens (no roosters), up to 12 ducks (females only), and up to six (6) goats and six (6) sheep. The animals will not be purposefully bred nor used for any type of commercial enterprise or use. Any offspring produced would be kept on the property until weaned, then relocated. Homes would be found through networking and advertisements. Any eggs left by the chickens will be collected as necessary for personal consumption only.

The duck pond constructed in the area of the shaded run will be fenced in to prevent access from other animals. The duck pond will be established to become a balanced ecosystem by using ducks, small fish, aquatic plants, and other natural resources to create a healthy, stable pond ecosystem. A mechanical filtration and pump system will be used to supplement the natural cleansing by vegetation along with an aerator to oxygenate the pond which will reduce odor and eliminate the breeding of mosquitoes.

The proposed pasture contains a variety of grasses, weeds, and shrubs; ideal diet for multispecies grazing by small ruminants. The pasture would be managed through a multispecies grazing system; *the Meadow* would be subdivided into two areas to allow rotation of animal grazing, thus preventing overgrazing. The ruminants will graze in one area until grass is left at about two (2) to three (3) inches. The ruminants would then be rotated to the second grazing area until the grass in the first grazing area grows back to about eight (8) inches. Additional dietary needs of the ruminants would be met by supplemental feed as necessary (i.e., during drought conditions).

Animal Waste Management:

Ruminants produce manure high in nutrients and their manure is considered relatively dry compared to other animals such as horses, cattle and poultry. The manure is produced in pellet form, has fewer odors and attracts fewer flies than moister types of manure. Rotating grazing areas is the preferred way to evenly distribute manure in pastures and prevent overgrazing. While collection of manure will be on-going during management of the project site, the transfer of excess manure/waste is predicted to be minimal to non-existent. If manure is to be removed from the property, and disposed of off-site, it will be done using sealed containers loaded and secured safely in a working personal vehicle. No commercial use of the fertilizer is being proposed.

Poultry manure is very high in nitrogen and is one of the most nutrient-rich manures. Poultry manure is very moist. Because of its high nitrogen content, it requires a large carbon amendment when used in compost. High nitrogen content and high pH may contribute to odor from ammonia, therefore the collected poultry manure will be composted before it is used as fertilizer in gardens to reduce the possibility of odor.

A small area in the vicinity of the pet shelters would be used to compost animal waste and other organic material, as well as plant material from pruning and landscaping activities. Three (3) to four (4) manufactured composting units (MCU), designed to contain odors, will be used to produce nutrient-rich compost for the on-site landscaping and gardening activities. Each unit will have a capacity of approximately 100 gallons. Large plastic garbage containers with lids and fasteners will be provided to temporarily store manure and other material that cannot be immediately accommodated in the composters or until arrangements can be made for off-site disposal.

Best management Practices (BMPs):

Proposed “structural” work will be limited to the repair and upgrade of existing utilities, construction of terraced planter boxes, and installation of fences and shelters (with accessory water and feed facilities) for the animals. Clearing, grading and grubbing of land is not anticipated or necessary for the proposed land use. During all phases of construction, land management and animal husbandry activities the following BMPs, provided by the applicant, will be adhered to:

1. *Immediately repair cleared portions of the site which are subject to erosion and siltation by establishing temporary vegetative ground cover until native plants can be grown to bind the soil.*
2. *Maintain existing drainage patterns over the property and periodically monitor drainage ways to ensure that they do not become overgrown and clogged with deadwood and debris. Utilize silt fencing during construction periods and while groundcover is established to minimize soil loss.*
3. *All feed will be stored within a storage shed in airtight, sealable containers to prevent pest infestation. Excess feed not consumed by the animals will be removed daily and used for onsite composting.*
4. *Daily reconnaissance of manure deposits; major accumulation of manure will be removed as necessary from the pasture, animal enclosures and under large trees. Similarly, used bedding will be removed as needed and added to the composting on site.*
5. *Secure animal shelters and feed bins nightly to reduce infestations from rodents and use a licensed pest control contractor to establish and maintain bait stations for rats.*
6. *Keep pond filtration system clear with a daily visual inspection, clean as needed. Also check pre-filter and filter apparatus and clean as needed, approximately every 3-4 weeks (monthly).*
7. *Dredge and periodically remove accumulated material from the base of the pond; compost material or spread on vegetation beds for fertilization. Reusing nutrient-rich sludge from the duck pond as an on-site as fertilizer to nourish planting throughout the property.*
8. *Collect manure from chicken coop and duckhouse, to the extent practicable, and add to the composting bins. Place excess manure that cannot be immediately composted into*

sealable storage bins, or transfer off-site for utilization elsewhere; excess manure will not be disposed in landfills.

9. *Regularly ventilate, turn, water, and apply "green" and "brown" plant materials to the compost to prevent odors from developing and minimize attraction of flies. The composting units will be turned 3 to 5 rotations, bi-monthly.*
10. *Use a compost thermometer to monitor interior temperatures of the compost unit. Allow temperatures to reach at least 131°F for 15 days in order to ensure the killing of pathogens, parasites and weed seeds.*
11. *Provide a separate compost unit for each type of animal waste; the separation of waste facilitates will aid in developing a consistent "compost recipe".*
12. *Keep records concerning the type and volume of materials used, the amount of turning, and amount of watering applied to the composting unit. Record keeping will assist the owner with deriving the best "composting recipe" for each type of manure.*
13. *Practice efficient waste management and the principles of permaculture, with the goal of incorporating the nutrients from manure into compost and providing nutrients for the soil.*

Reporting schedule:

The applicant has offered to provide the following information in the form of an annual report to document the project progress and management activities:

1. *A list of the goals established in the Management Plan for the year the annual report covers. Each item (project or activity) will be evaluated and briefly summarized. This evaluation will discuss progress made towards each goal, problems or challenges encountered, and proposed strategies to mitigate these problems so that the project may proceed to completion.*
2. *A checklist of utilized BMPs proposed in the Management Plan. Those BMPs that were applicable to projects or activities undertaken during the report year will be briefly discussed.*
3. *A summary of the status of compliance with CDUP conditions. The discussion will determine whether or not the condition has been met, any problems encountered, and proposed changes.*
4. *The applicant will provide a refined planting plan for the upcoming year based on planting schedules, plant types and successful vegetation establishment.*

SUMMARY OF COMMENTS:

The Office of Conservation and Coastal Lands (OCCL) referred the application to the following state agencies for review and comment: DLNR - Division of Forestry and Wildlife (DOFAW), Historic Preservation Division (SHPD), Engineering Division, O'ahu Land Division (ODLO),

The Hawaii State Department of Health, the Office of Hawaiian Affairs, City and County of Honolulu - Department of Planning and Permitting, City and County of Honolulu – Board of Water Supply and, the Commission on Water Resource Management (CWRM). The application was also provided to all conterminous property owners, the Kaneohe State Library and to the local community association.

Comments received from the following agencies have been summarized by staff as follows:

DLNR – O’ahu District Land Office (ODLO)

No comments on the proposed project.

DLNR – Engineering Division

Please note that the project site, according to the Flood Insurance Rate Map (FIRM), is located in Flood Zones D and X. The Flood Insurance Program does not have any regulations for developments within Flood Zones D and X.

Applicant Response: The applicant understands that the project area is located in the FIRM Flood Zone designation Zones D and X.

State of Hawaii – Office of Hawaiian Affairs (OHA)

No comments on the proposed project.

City and County of Honolulu – DPP

No comments on the proposed project.

City and County of Honolulu – BWS

The existing water system is adequate to accommodate the proposed development. If new water availability is necessary for the site then the applicant will be required to pay water storage and usage fees associated with transmission and daily storage. The onsite fire protection requirements should be coordinated with the Fire Protection Bureau and the Honolulu Fire Department.

Applicant Response: It should be noted that the current owner receives water through an existing service provided by the previous landowner. The water service has been continued by the current owner for gardening and agricultural uses; no residential use is planned. On-site fire protection requirements will be coordinated with the Honolulu Fire Department.

US Fish and Wildlife Service (USFWS):

Because of the potential presence of the Hawaiian hoary bat on the subject property, USFWS recommends that the applicant avoid removing or pruning any trees taller than 15 feet during the Hawaiian hoary bat pupping season from *June 1* through *September 15* of any project year.

Applicant Response: Tree pruning, tree cutting or tree removal will not be conducted between the time-period of June 1 to September 15 of any project year to protect the Hawaiian hoary bat.

ANALYSIS:

Following review and acceptance for processing, the Applicant's Agent was notified, by letter dated *August 13, 2012* that:

1. The proposal to conduct agriculture (flora and fauna), landscaping and land and resource management activities on the subject parcel is an identified land use within the Conservation District General Subzone pursuant to Hawaii Administrative Rules (HAR) §13-5-23, L-1 **AGRICULTURE (D-1)**, *Agriculture, within an area of more than one acre, defined as the planting, cultivating, and harvesting of horticultural crops, floricultural crops, or forest products, or animal husbandry. A management plan approved simultaneously with the permit is also required.* This action will require the applicant complete a Conservation District Use Application (CDUA) and all required documentation for a **Board Permit**;
2. In conformance with §343, Hawaii Revised Statutes (HRS), as amended, and HAR, §11-200-8 this project will require the filing of an Environmental Assessment (EA); and
3. Pursuant to HAR §13-5-40 *Hearings*, a public hearing will not be required.

Notice of this CDUA and Draft Environmental Assessment (DEA) was published in the *October 23, 2012* issue of Office of Environmental Quality Control (OEQC) Environmental Notice. The Final Environmental Assessment (FEA) and a Finding of No Significant Impact (FONSI) was published in the *December 8, 2012* issue of the Environmental Notice.

§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 existing site is a mix of minor development, invasive and non-native species, open space and inconsistent landscaping. The proposed project will conserve and enhance the natural resources of the area by removing invasive species and the propagation of native and endemic species with the goal of restoring a more natural system as well as mitigating runoff into adjacent properties. The proposed project will also work to reduce erosion by introducing native ground cover and bio-degradable textiles as part of the landscape plan and by construction of terraced planter boxes along steep slopes. The reduction in soil erosion and storm water run-off will minimize deleterious stream and groundwater impacts.

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

The objective of the General Subzone is to *designate open space where specific conservation uses may not be defined, but where urban use would be premature*. The proposed use is an identified land use in the General Subzone of the Conservation District pursuant to HAR §13-5-23, L-1 **AGRICULTURE (D-1)**, *Agriculture, within an area of more than one acre, defined as the planting, cultivating, and harvesting of horticultural crops, floricultural crops, or forest products, or animal husbandry. A management plan approved simultaneously with the permit is also required.*

The proposed land uses are consistent with the objective of the General Subzone as no open spaces will be removed or destroyed and the existing natural landscape will be preserved and enhanced by landscaping and the removal of invasive species. The animal husbandry portion of the proposed project will provide the applicant an opportunity to conduct a daily survey of site conditions which will encourage consistent and efficient management of the property and its resources.

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

The CZM program is intended to promote the protection and maintenance of fragile coastal resources through the state of Hawaii. While the proposed project site is located approximately 1100-feet from the nearest shoreline, staff believes every land use project has the potential to affect coastal resources in an island ecosystem. The proposed project has been designed to reduce run-off and minimize soil erosion, both considered potential risks to the coastal zone, and therefore is not expected to have any adverse impact on the coastal zone.

The property is not within the Special Management Area (SMA), and therefore the City and County of Honolulu, Department of Planning and Permitting has determined that the proposed project will not require an SMA permit. OCCL believes that the project is consistent with the guidelines and objectives contained in HRS §205A.

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

Staff believes that the proposed land management, landscaping, and accessory use for animal husbandry will have no adverse impact to natural resources in the surrounding community or region. The landscaping portion of the project will act to conserve the native ecosystem by the planting of native and endemic vegetation, minimize soil erosion, reduce run-off, and to provide invasive species removal. The animal husbandry portion of the project will permit the landowner to utilize the land for sustainable agriculture and presents a worthy use of this large conservation district parcel. Similarly, the proposed project will allow the site to remain minimally developed for the future adding to its conservation potential.

- 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 subject parcel, a large, minimally developed and landscaped conservation district parcel is situated within an area of single family residence structures. Since no major structural development is being proposed this office believes that the proposed project represents a reasonable use of this parcel. While landscaping and animal husbandry uses are not typical in this region, the OCCL believes this use is not incompatible with the surrounding area and presents a reasonable use of this parcel.

The applicant has described protocols for minimizing odor, noise, and other nuisance factors with effective landscape screening, buffers, and proper management of wastes. The proposed project is appropriate to the conditions and capabilities of the parcel, in that the parcel would remain in rural use, preserving and enhancing the character of the site.

- 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.*

The existing site characteristics are unrefined and undermanaged. This proposal will provide an opportunity for the landowner to improve the natural aspects of the land, thus improving the character and open space characteristics. New native plantings would co-exist with existing vegetation and areas currently overrun by invasive species would be improved. Vegetative screening will reduce visual impacts from the animal husbandry, as well as odors and noise. Existing view planes from the adjacent residential properties will be enhanced as the proposal includes additional vegetative plantings at the property boundaries.

- 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 believes that the proposed project will not be detrimental to the public health, safety and welfare. Utility connections and services will comply with all applicable state and county requirements. Standard BMPs for construction and landscaping, such as use of erosion-control measures during construction, would be implemented to mitigate any potential impacts. Similarly the design of the proposed project aims to improve the natural site characteristics thus having the potential to benefit the public. No commercial activities are being proposed at this time.

DISCUSSION:

The purpose of the proposed project is to improve the natural character of the subject parcel, and provide an impetus for low-impact sustainable uses, such as limited animal husbandry and landscaping.

Based on representations of the applicant via a detailed management plan, staff believes that the proposed animal husbandry portion of the project will have minimal impact on air quality, water quality, or ambient noise levels during all phases of construction and will provide the landowner an avenue for judicious use and management of the property.

The contractor will be required to implement standard construction BMPs to reduce potential impacts during the construction phase of the animal shelters, fencing, and planter boxes. Construction activities would comply with applicable federal, State and County regulations and standards, and noise and air quality potential impacts will be mitigated through compliance with the Department of Health regulations. The applicant will implement long-term BMPs through the execution of the management plan to ensure that animal husbandry does not become a nuisance to abutting landowners.

In the unlikely event subsurface prehistoric deposits or human burials are inadvertently discovered during construction or land uses activities, such activities would be immediately suspended in the vicinity of the discovery and SHPD would be notified. OCCL has concluded that the applicant meets the Conservation Criteria outlined in Hawai'i Administrative Rules (HAR) §13-5 and after careful review of the application, OCCL recommends that the Chair approve this proposal.

RECOMMENDATION:

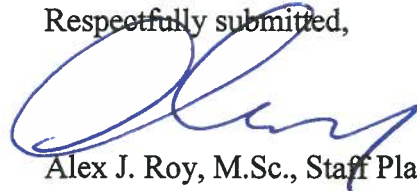
Based on the preceding analysis, Staff recommends that the Board of Land and Natural Resources **APPROVE** this application, including the management plan, for landscaping, land and resource management and animal husbandry located in Ko'olaupoko, Kane'ohe, Island of O'ahu, on Tax Map Key: (1) 4-5-032:001, 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, its successors and assigns, shall indemnify and hold the State of Hawaii harmless from and against any loss, liability, claim, or demand for property damage, personal injury, and death arising out of any act or omission of the applicant, its successors, assigns, officers, employees, contractors, and agents under this permit or relating to or connected with the granting of this permit;
3. The permittee shall obtain appropriate authorization from the department for the occupancy of state lands, if applicable;
4. The permittee shall comply with all applicable department of health administrative rules, and the applicable parts of HAR §13-5-42;

5. 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;
6. 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;
7. Unless otherwise authorized, any work or construction to be done on the land shall be initiated within one (1) year of the approval of such use, in accordance with construction plans that have been signed by the chairperson, and shall be completed within six (6) 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;
8. All representations relative to mitigation set forth in the accepted environmental assessment and management plan for the proposed use are incorporated as conditions of the permit;
9. The permittee understands and agrees that the permit does not convey any vested right(s) or exclusive privilege;
10. 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;
11. 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;
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 to the program of an appropriate soil and water conservation district or plan approved by and on file with the department, where applicable;
19. Specific Best Management Practices (BMP) outlined in the accepted Management Plan and throughout this staff report shall be utilized during all phases of the proposed project;
20. Animal husbandry activities shall be limited to sustainable levels in accordance with good soil conservation and vegetation management practices;
21. If an animal is determined to be a nuisance, (i.e., excessive noise or aggressive behavior), the permittee may be required to remove the nuisance animal and relocate it to an appropriate off-site area;
22. The permittee will submit yearly management reports for the first 6 years of project construction as outlined by the permittee in the management plan accepted by the Department;
23. The permittee shall obtain a county building or grading permit or both for the use prior to final construction plan approval by the department;
24. For all landscaped areas, landscaping and irrigation shall be contained and maintained within the property, and shall under no circumstances extend seaward of the shoreline as defined in section 205A-1, HRS;
25. 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;
26. 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;
27. Other terms and conditions as prescribed by the chairperson;
28. 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,

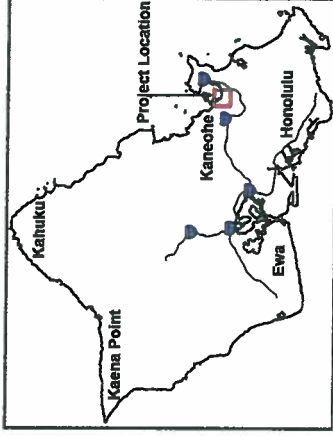
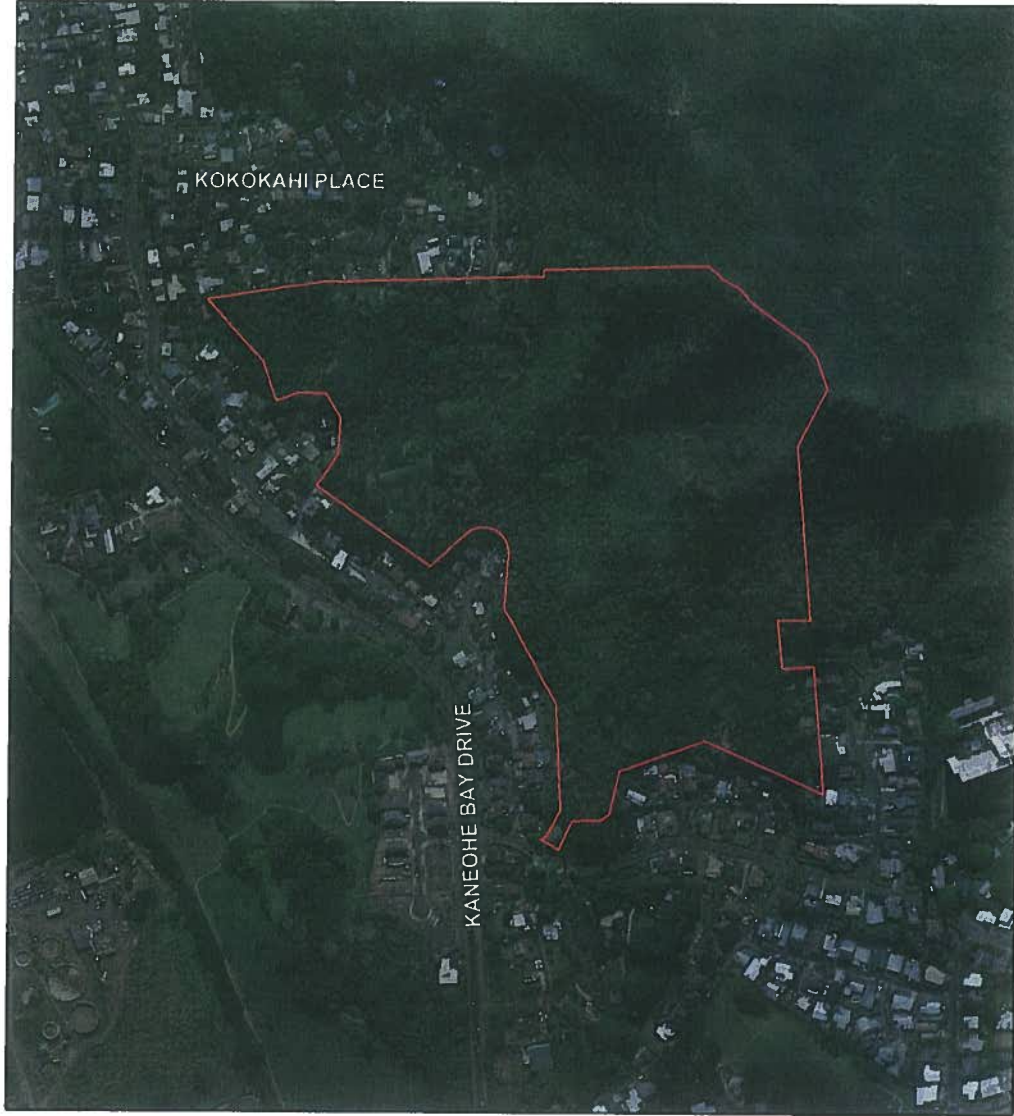
A handwritten signature in blue ink, appearing to read 'Alex J. Roy', written in a cursive style.

Alex J. Roy, M.Sc., Staff Planner
Office of Conservation and Coastal Lands

Approved for submittal:

A handwritten signature in black ink, appearing to read 'William J. Aila, Jr.', written in a cursive style.

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



Project Location Map
Geary Property at Kokokahi Place
Kane'ohē, Hawaii'i 96744

EXHIBIT I

OA-3636



Figure 1. Project Location Map

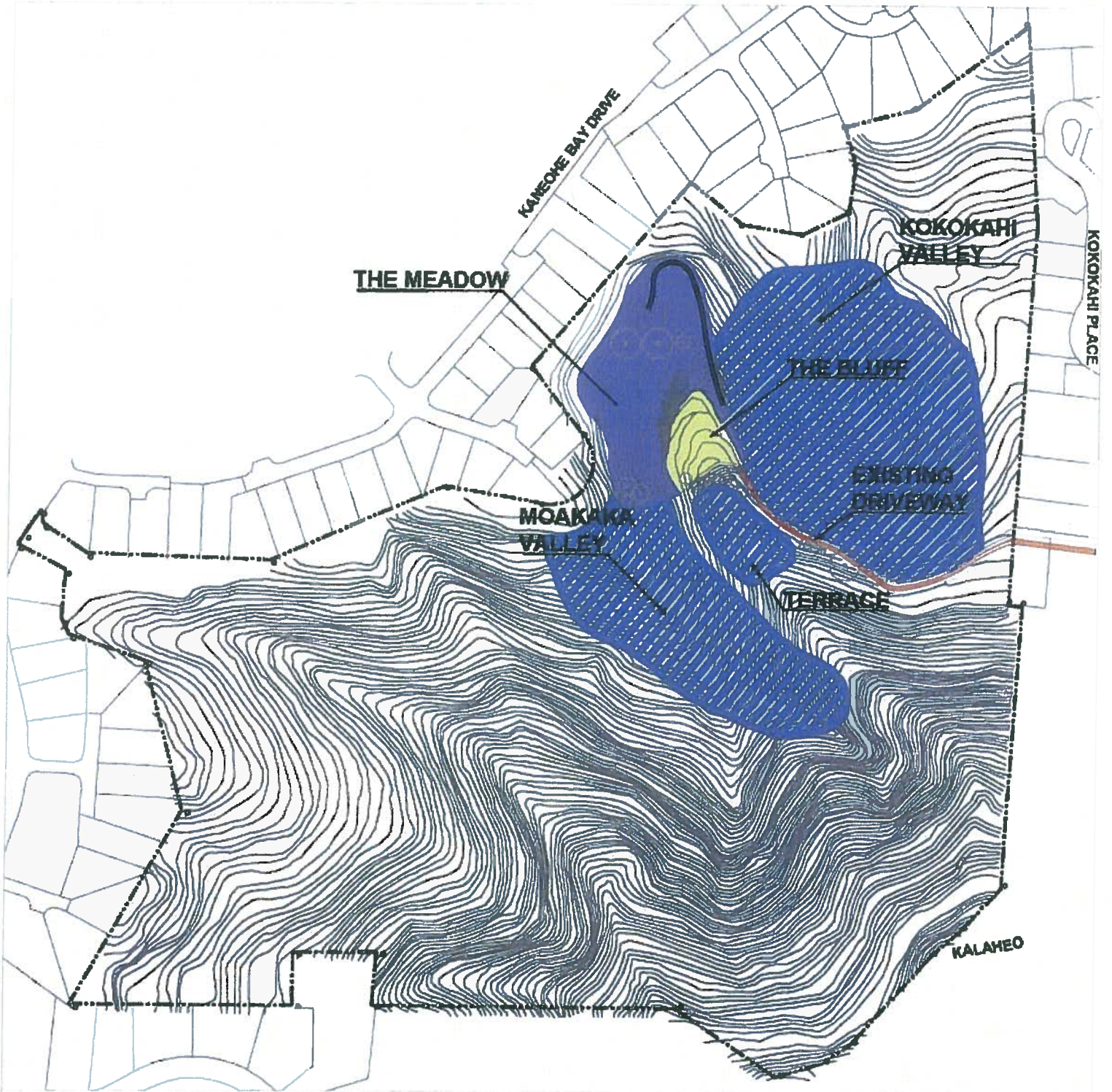


Figure 2. Overview of Proposed Project Locations on the Property

EXHIBIT 2

OA-3636



0A-3036

EXHIBIT 3

1 (4)

LEGEND

Service path (for small, low impact utility vehicle and Entry Drive (for passenger vehicles))

Existing Footpath

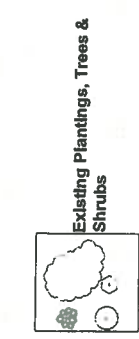


Figure 4
Overview of the Landscaping and Planting Components of the Proposed Action

Based on
 Urenobo Cassano Design Corporation
 Landscape Master Plan

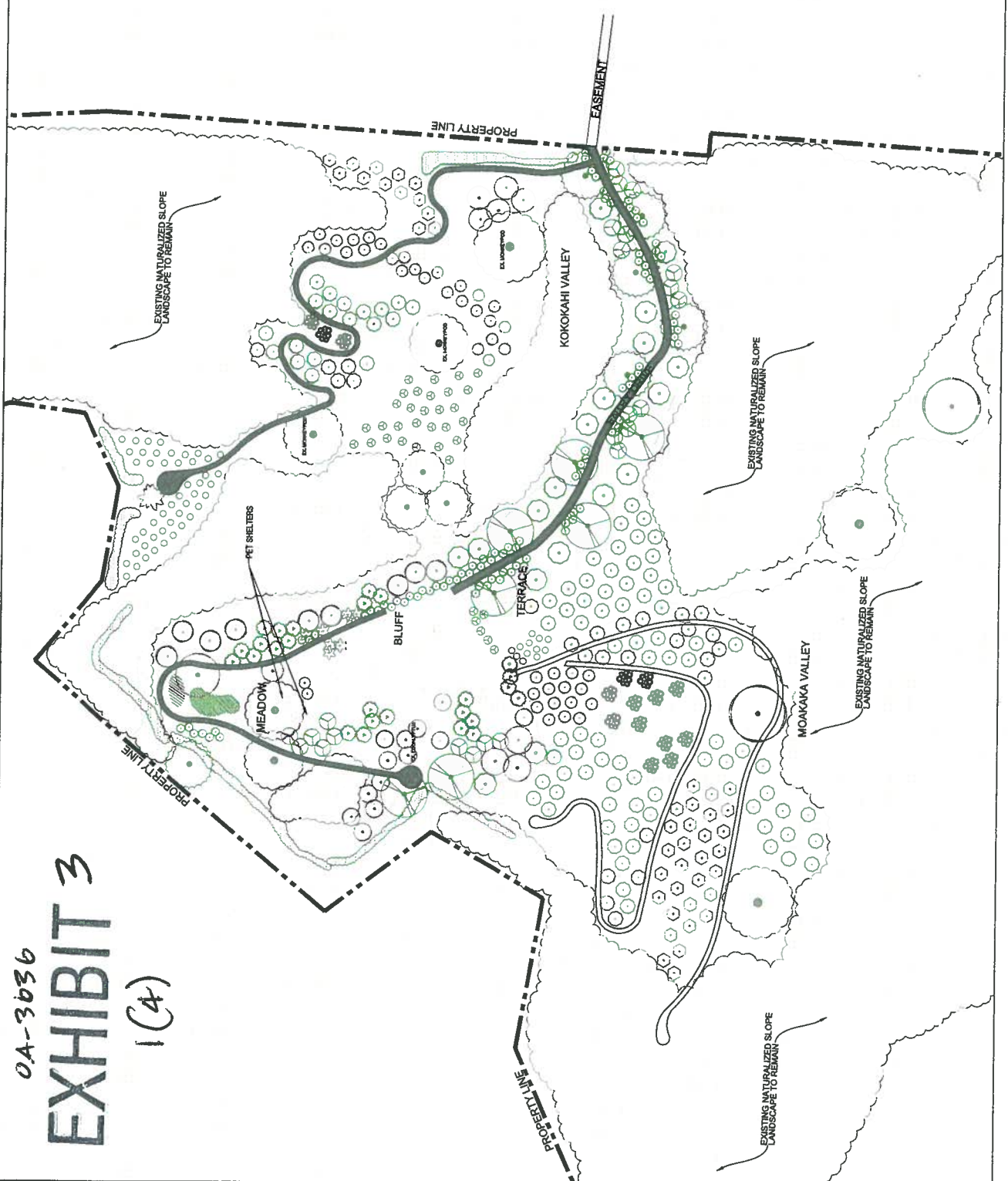
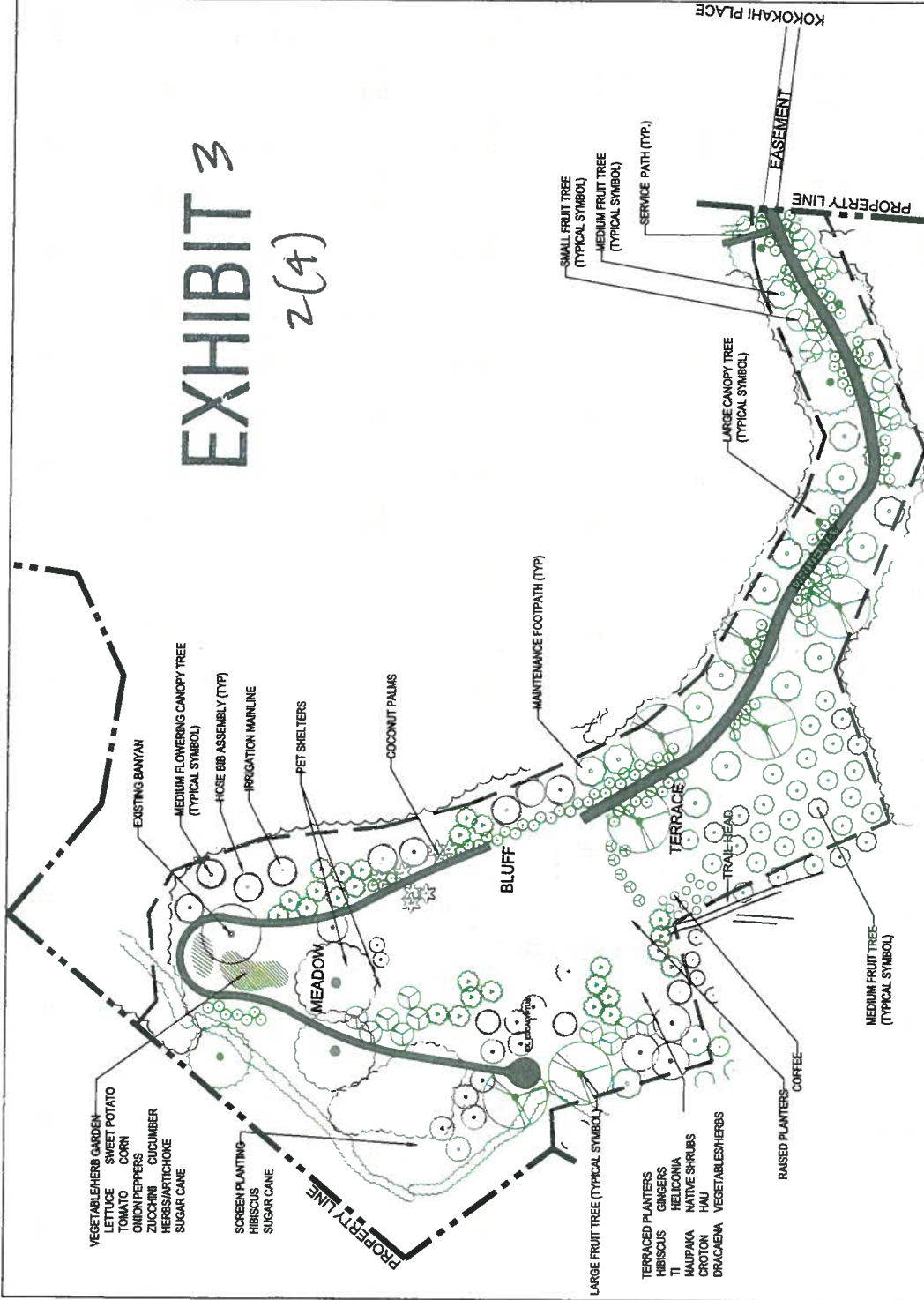


EXHIBIT 3 2(4)



EROSION CONTROL GROUNDCOVERS:
 TO ADDRESS TO THE MANY EXISTING BARE EARTH
 SLOPED AREAS AND AREAS WITH EROSION CONDITIONS,
 THE FOLLOWING NATIVE GROUNDCOVERS MAY BE USED
 WITH OR WITHOUT BIODEGRADABLE EROSION CONTROL
 MATTING LIKE COCONUT FIBER MATTING.
 BACOPA
 PAUCHIWAKA
 NEHE
 NAIO PAPA
 KUPUKUPU
 IUMA PAPA
 POHIAHINA
 AKA

PLANT MATERIAL LEGEND

- Specimen Large Canopy Tree
Monkeypod
- Large Canopy Tree
Gold Tree
Jacaranda
Rainbow Shower Tree
Royal Pohobana
Hala
- Accent Tree
Breadfruit Tree (Ulu)
Wilkiwi
Munukdenron
Hala
Oshai All
Kou
Calabash Tree
Lignum Vitae
Ohia
Milo
Reforestation Tree
Kou
Kou
Wilkiwi
Alahes
Teak
Milo
Medium Accent Tree
Oshai All
Kou
Pua Kenikeni
Ohia
Munukdenron
Racemosa
Singapore Plumera
Lei Plumera
Soapberry
Mango
Sapote
Avocado
Breadfruit (Ulu)
Nutmeg
Clove
Lychee
Medium Fruit Tree
Starfruit
Coffee
Brown Turkey Fig
Mangosteen
Mangosteen Nut
Mountain Apple
Cacao
- Small Fruit Tree
Papaya
Lemon
Tangerine
Orange
Pomeelo
Surinam Cherry
Banana
Pomegranite
Screen Planting
Kokio Koo Koo
Kokio Ula
Mock Orange
Nalo
Alahes

PLAN SYMBOLS

- Veggie/ Herb Garden
- Existing Vegetation
- Hose Bib (irr. Control)
- Waterlines

LEGEND

Service path (for small, low impact utility vehicle) and Entry Drive (for passenger vehicles)

Existing Footpath

Proposed Plantings, Trees & Shrubs

Existing Plantings, Trees & Shrubs

Figure 5
Overview of the Proposed Landscaping Along the Driveway

Based on
 Umemoto Cassandro Design Corporation
 Landscape Master Plan



Scale: 1"=100'-0"

EXHIBIT 3

3(A)



EROSION CONTROL GROUNDCOVERS:
 TO ADDRESS TO THE MANY EXISTING BARE EARTH
 SLOPED AREAS AND AREAS WITH EROSION CONDITIONS,
 THE FOLLOWING NATIVE GROUNDCOVERS MAY BE USED
 WITH OR WITHOUT BIODEGRADABLE EROSION CONTROL
 MATTING, LIKE COCONUT FIBER MATTING:
 BAHOFA
 PAUOHUKA
 NEHE
 NAO PAPA
 KUPUKURU
 ULIMA PAPA
 POHINAHINA
 AKA

LEGEND

Service path (for small, low impact utility vehicle) and Entry Drive (for passenger vehicles)

Existing Footpath

Proposed Plantings, Trees & Shrubs

Existing Plantings, Trees & Shrubs

PLANT MATERIAL LEGEND

- Specimen Large Canopy Tree Monkeypod
- Large Canopy Tree Gold Tree Jacaranda Rainbow Shower Tree Royal Pohukana Hala
- Accent Tree Breadfruit Tree (Ulu) Willow Munrodamon Hala Medium Accent Tree Oahai All Kou Calabash Tree Lignum Vitae Ohia Milo Reforestation Tree Kos Kou Willow Alahae Teak Milo Medium Accent Tree Oahai All Kou Pua Kanikani Ohia Munrodamon Racomose Singapore Plumeria Lei Plumeria Soapberry Mango Sapote Avocado Breadfruit (Ulu) Nutmeg Clove Medium Fruit Tree Lychee Starfruit Coffee Brown Turkey Fig Mangosteen Macadamia Nut Mountain Apple Cacao Small Fruit Tree Papaya Lemon Orange Tangerine Pomelo Surinam Cherry Banana Pomegranate Screen Planting Koko Neo Keo Koko Ula Mock Orange Nalo Alahae

PLAN SYMBOLS

- Veggie Herb Garden
- Existing Vegetation
- Hose Bib (Ir. Control)
- Waterline

Figure 6
 Overview of the Proposed Landscaping in Kokokahi Valley

Based on
 Umemoto Cassando Design Corporation
 Landscape Master Plan



REFER TO DRIVEWAY PLANTING AREA, FIGURE 5, (PREVIOUSLY APPROVED)

LEGEND

- Service path (for small, low impact utility vehicle)
- and Entry Drive (for passenger vehicles)
- Existing Footpath

Proposed Plantings, Trees & Shrubs

Existing Plantings, Trees & Shrubs

Figure 7
Overview of the Proposed Landscaping in Moakaka Valley

Based on
 Umemoto Cassarotto Design Corporation
 Landscape Master Plan



PLANT MATERIAL LEGEND

- Specimen Large Canopy Tree: Monkeypod
- Large Canopy Tree: Gold Tree, Jacaranda, Rainbow Shower Tree, Royal Poinciana, Hala
- Accent Tree: Breadfruit Tree (Ulu), Wilivili, Murokidennon, Hala
- Medium Accent Tree: Oahai/Alli, Kou
- Reforestation Tree: Cababash Tree, Uppum Vilao, Ohia, Milo
- Medium Accent Tree: Oahai/Alli, Kou, Pua Kenikeni, Ohia, Murokidennon, Racemosa, Singapore Plumelia, Lei Plumelia, Soapberry
- Large Fruit Tree: Mango, Sapote, Avocado
- Breadfruit (Ulu), Nutmeg, Clove, Lychee
- Medium Fruit Tree: Starfruit, Coffee, Brown Turkey Fig, Mangosteen, Macadamia Nut, Mountain Apple, Cacao
- Small Fruit Tree: Papaya, Lemon, Tangerine, Orange, Pineapple, Sulfuram Cherry, Banana
- Screen Planting: Koko Koo Kao, Koko Ula, Mock Orange, Natio, Auhue

PLAN SYMBOLS

- Veggie/ Herb Garden
- Existing Vegetation
- Hose Bib (Irr. Control)
- Waterline



EXHIBIT 3
4(4)



Figure 8A. Proposed Structures

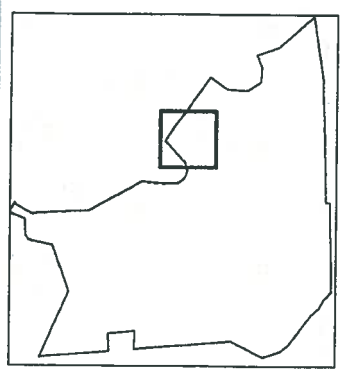
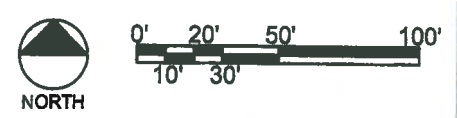


EXHIBIT 4
 OA-3636



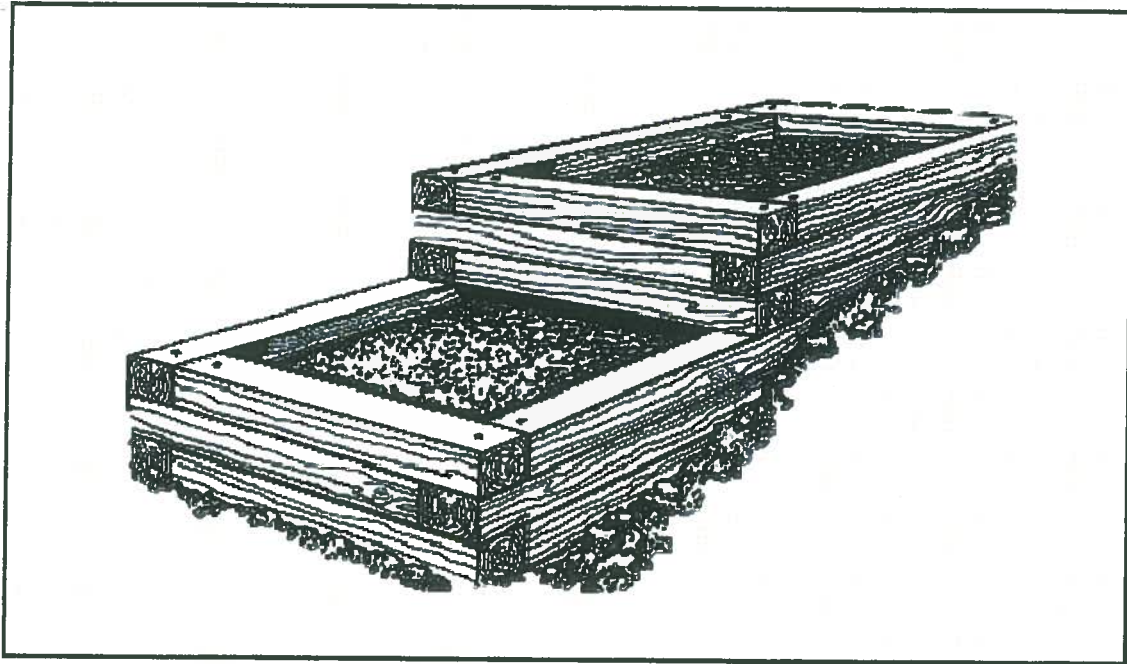


Figure 6. Schematic of Proposed Terraced Planter Boxes
(Image Source: Backyard Conservation, 1998)

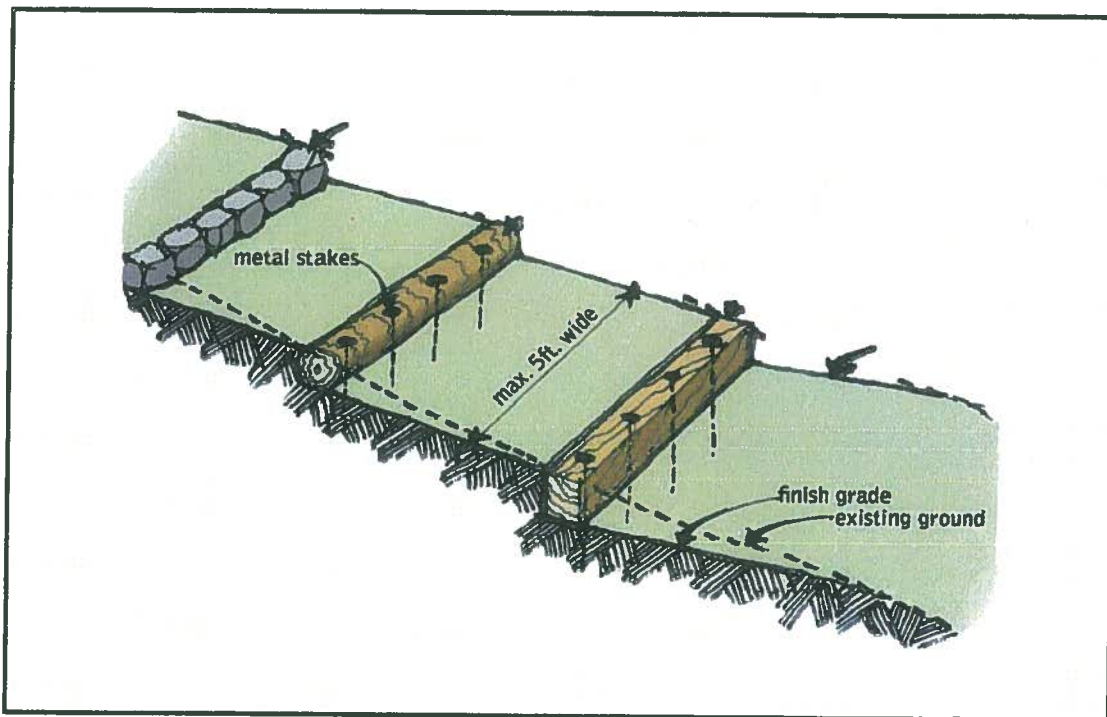
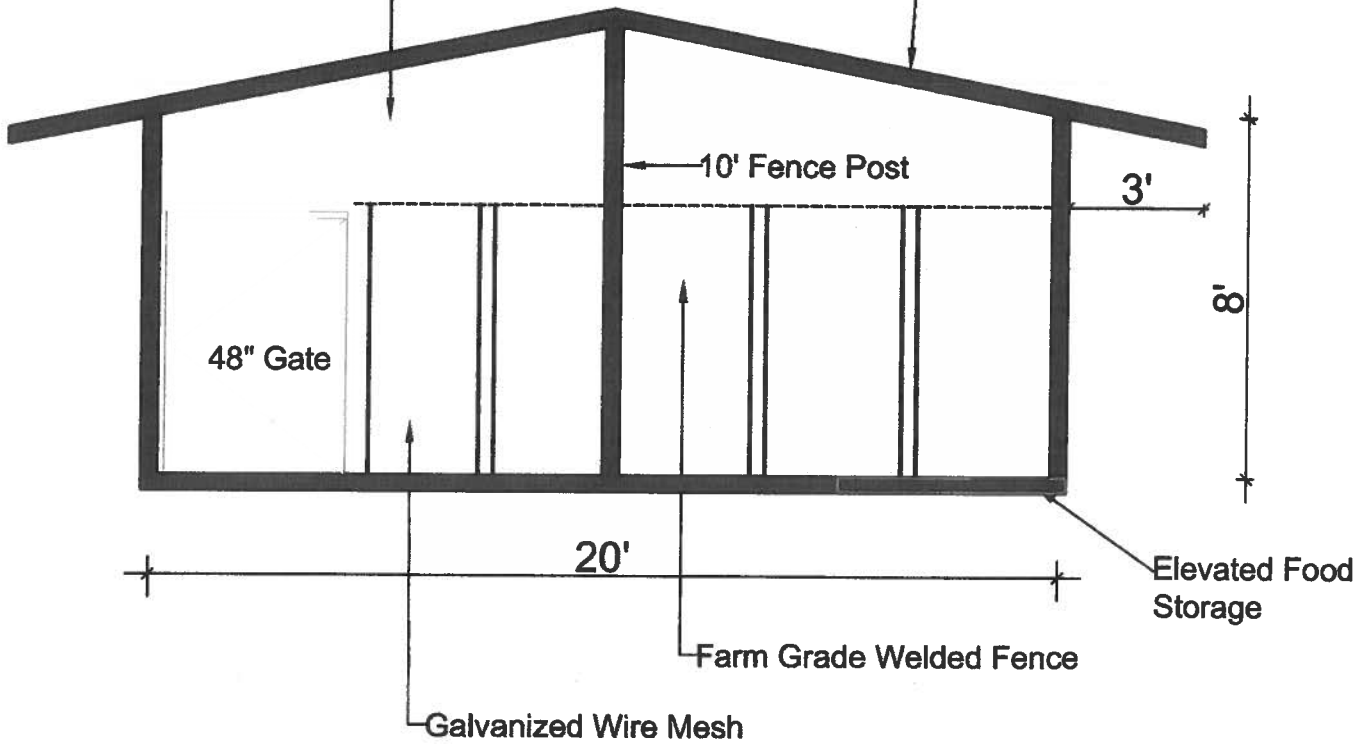


Figure 7. Schematic of Proposed Stairs

EXHIBIT 5
OA-3636

Area above 6' fence will be covered by mesh fencing material and shade cloth cover

Corrugated Awning Roof



GOATS AND SHEEP SHELTER

0A-3636
EXHIBIT 6
1(4)

3. Goats and Sheep Shelter Section

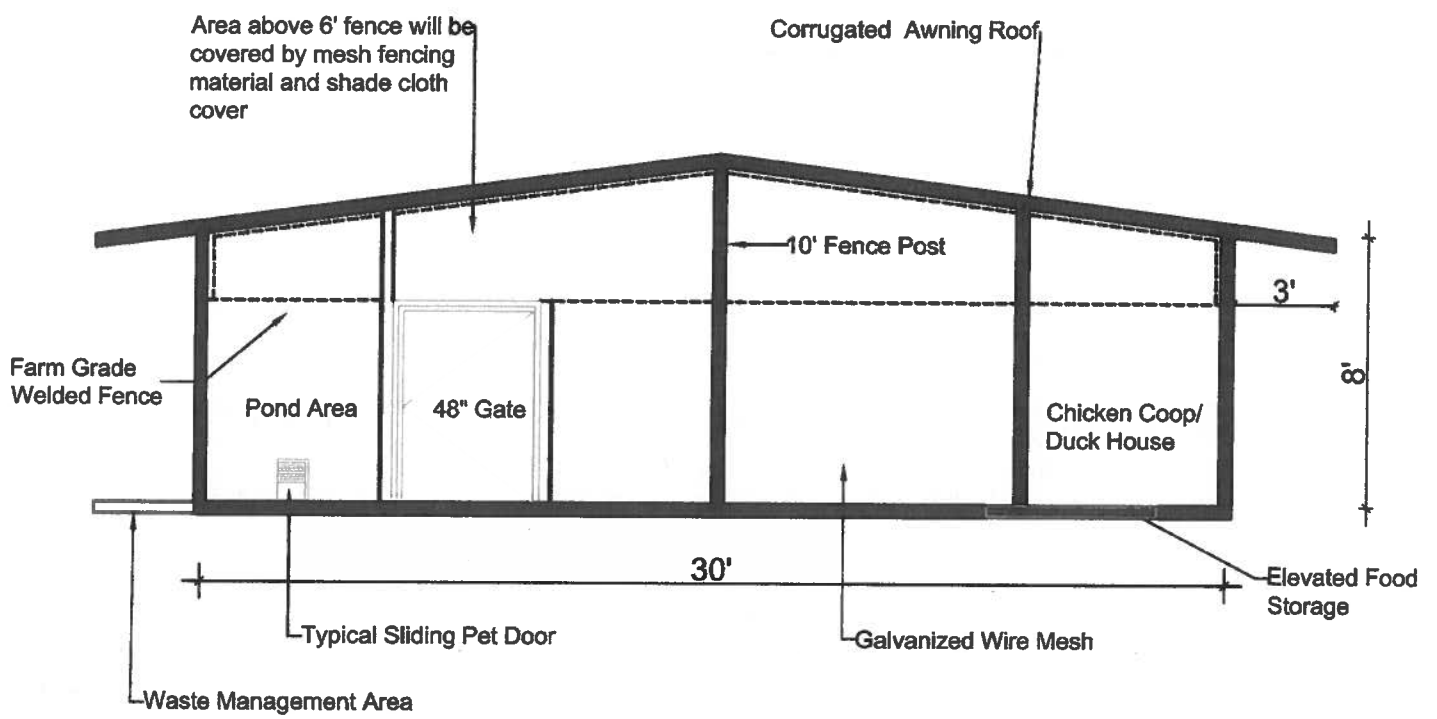


SCALE:



EXHIBIT 6

2(4)

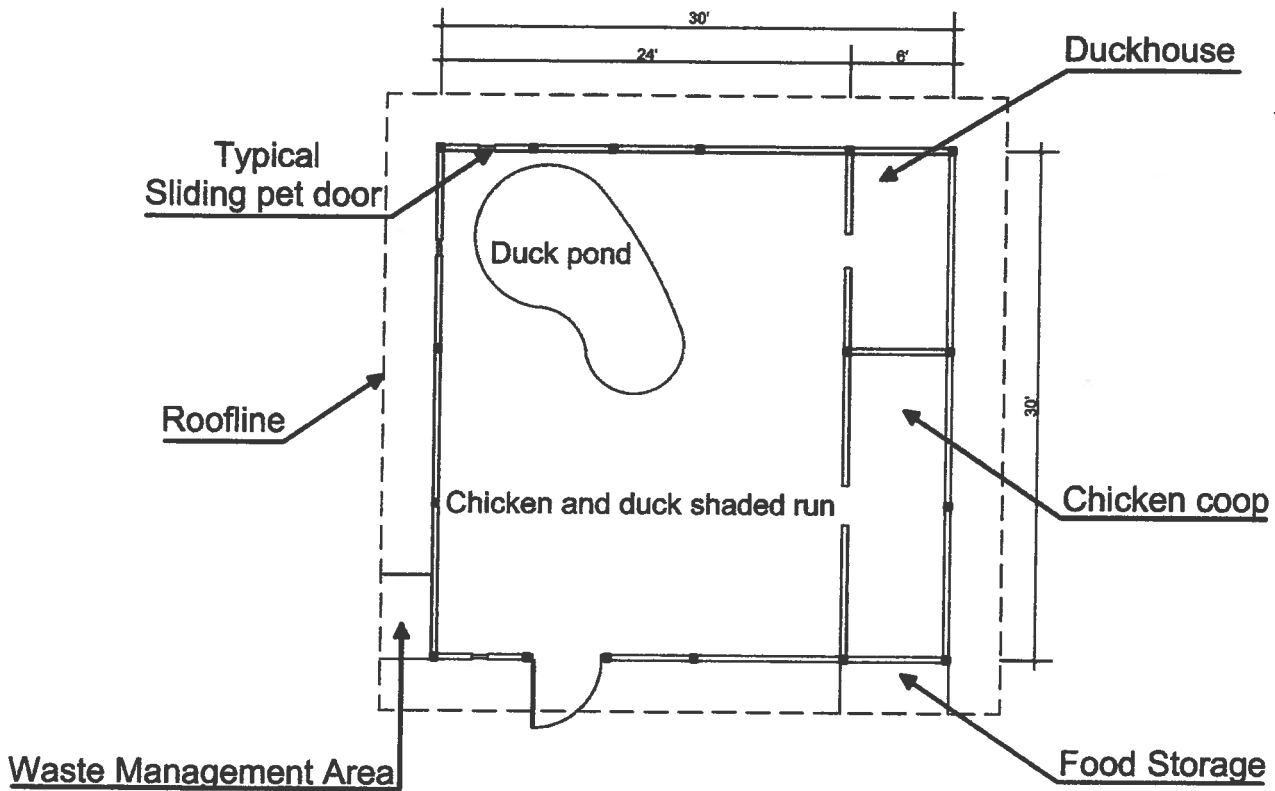


CHICKENS AND DUCKS SHELTER

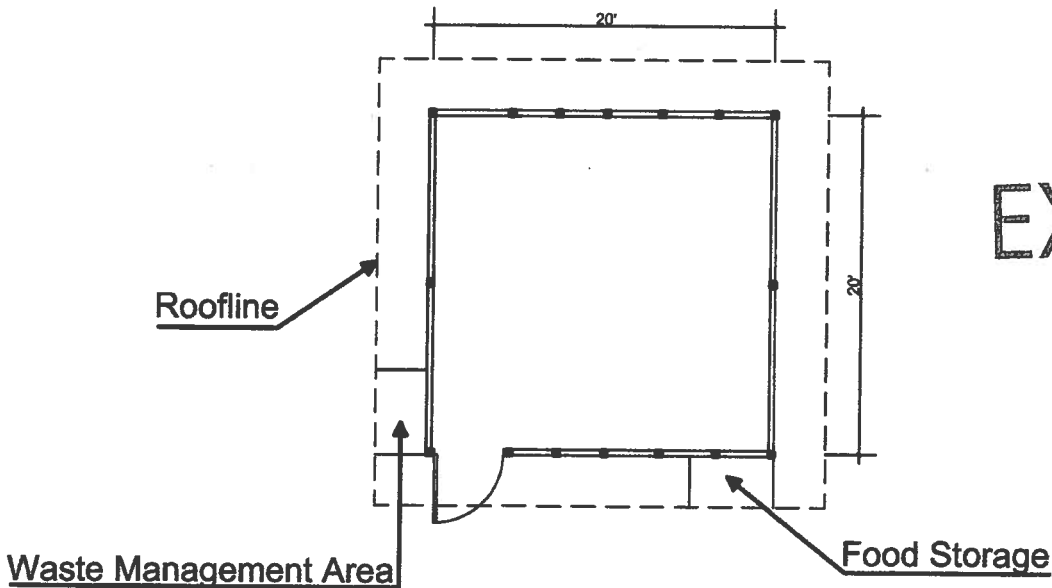
Chicken And Duck Shelter Section



SCALE: 0 1' 2' 5' 10'

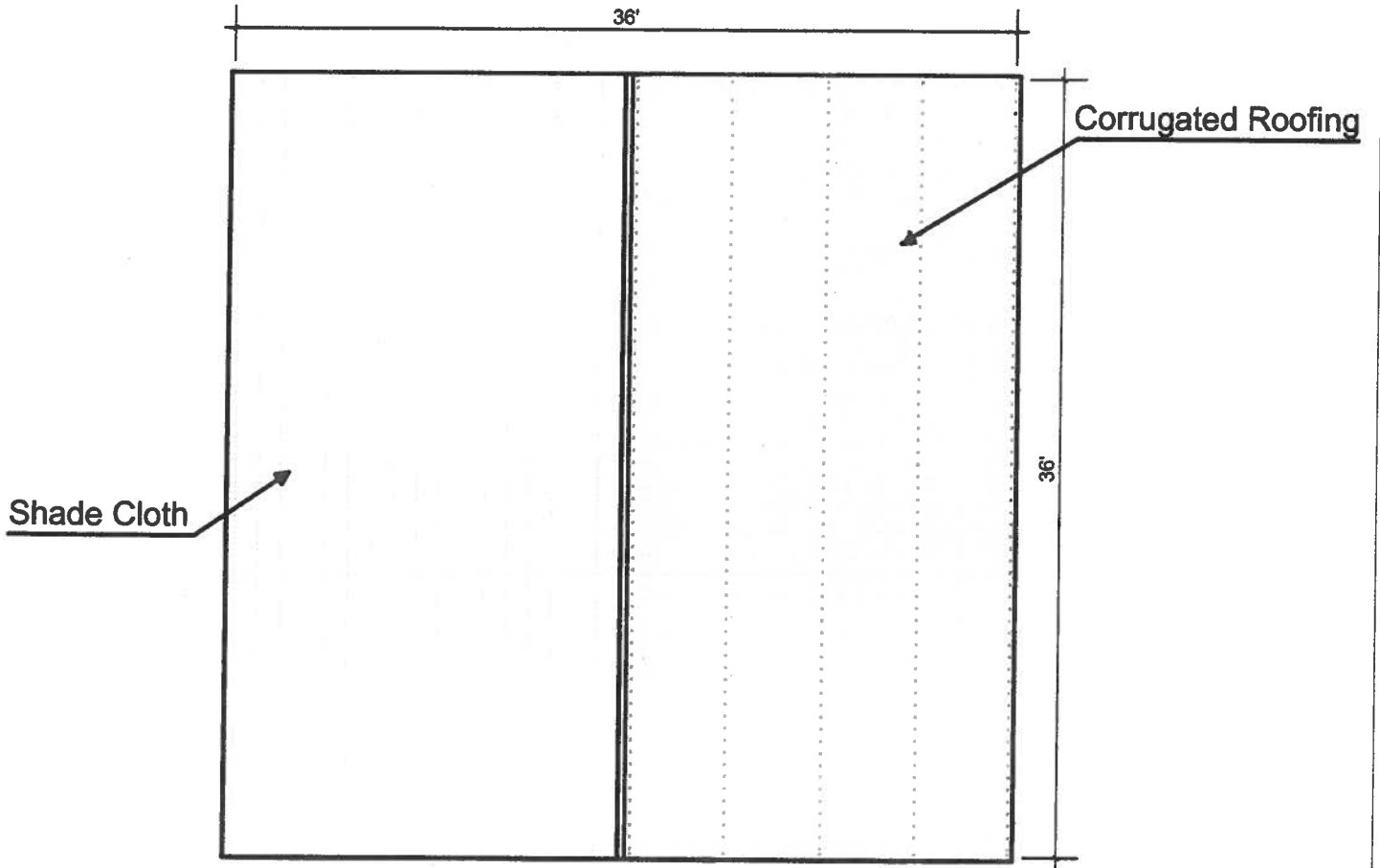


SHELTER FOR CHICKENS AND DUCKS

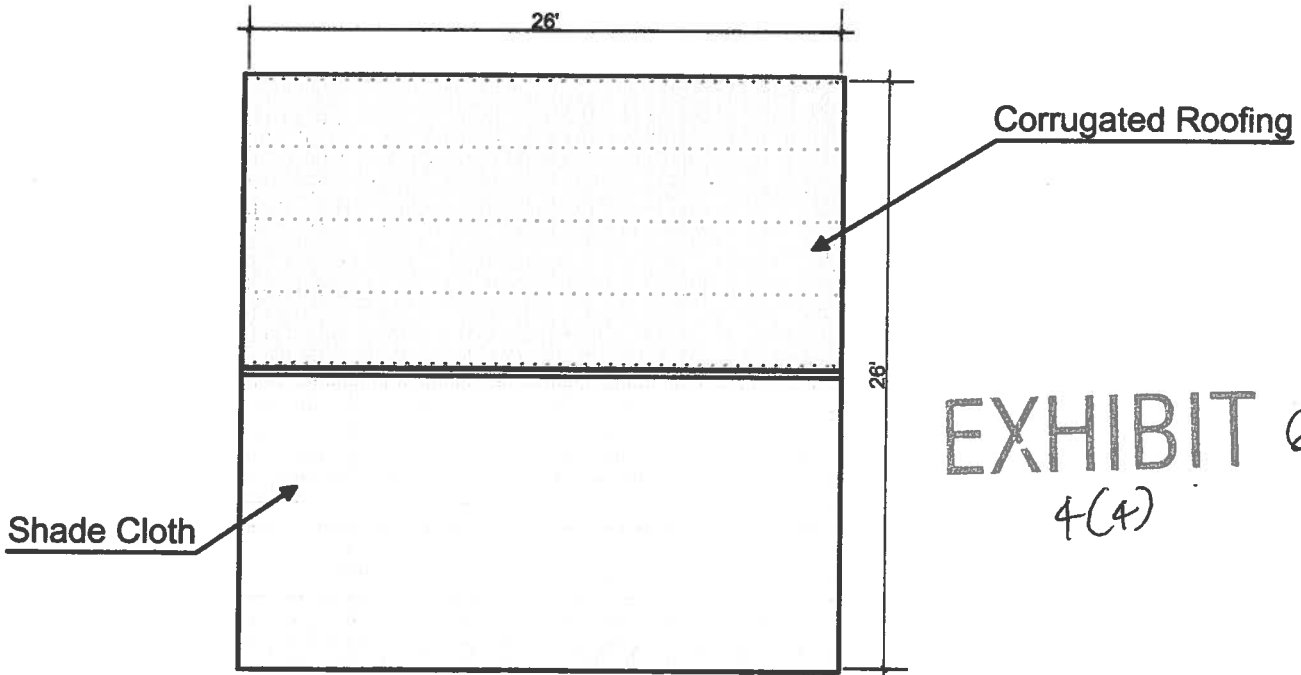


SHELTER FOR GOATS AND SHEEP

EXHIBIT 6
3(4.)



SHELTER FOR CHICKENS AND DUCKS ROOF PLAN



SHELTER FOR GOATS AND SHEEP ROOF PLAN

EXHIBIT 6
4(4)