

kōkua hawai'i foundation



Kōkua Learning Farm

Conceptual Site Plan Report

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Prepared by:



TOWNSCAPE, INC.
Environmental & Community Planning

A special **MAHALO** to the community partners who provided mana'o in the development of this
Kōkua Learning Farm Conceptual Site Plan & Report:

Ecology Beach
Farm Link Hawai'i
GoFarm Hawai'i
Growing Together, LLC
Hawai'i County Research & Development
Hawai'i Farmers Union United
Hoa 'Āina O Mākaha
Ho'okua'āina
Hui Kū Maoli Ola/Papahana Kuaola
Kahuku Farms
Ke Nui Kitchen
Kualoa Ranch
MA'O Organic Farms
Mālama Lo'i Hale'iwa
Mālama Loko Ea
Mālama Pūpūkea-Waimea
McNulty Civil Engineering
Mohala Farms
Nā Mea Kūpono
O'ahu Resource Conservation & Development Council
Pacific American Foundation
RevoluSun
Roth Ecological Design
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Town Restaurant Group
Trust for Public Land
UH West O'ahu, Sustainable Food Systems Program
WATG
WORKSHOP-HI

Kōkua Hawai'i Foundation (KHF) is a 501(c)3 non-profit organization founded in 2003 that supports environmental education in the schools and communities of Hawai'i. KHF's mission is to provide students of all ages with exciting and interactive encounters that will enhance their appreciation for, and understanding of, their environment so that they will be lifelong stewards of the earth. In 2019, KHF found a permanent home to bring students, educators, community members, partners, and volunteers together. KHF acquired 7.7 acres in the heart of Hale'iwa town on the North Shore of O'ahu, Hawai'i, consisting of 6.9 acres of agricultural lands bordering Achiu Lane (TMKs 6-6-009: 002 and 6-6-010: 003) and an adjacent 32,888 square foot parcel of land with two historic commercial buildings (TMK 6-6-009: 001; referred to as the "Commercial Property") bordering Kamehameha Highway.

KHF's vision for the Property is to establish educational, agricultural, and retail activities that will benefit the community and promote local food, waste reduction, and environmental stewardship. The Commercial Property will house both the Kōkua Community Center and Backyard Garden which will host a wide variety of programs, workshops, classes and small demonstration gardens, as well as three mission-aligned businesses: the 'ĀINA Farm Stand, the Kōkua General Store and Kōkua Vintage. The agricultural parcels will transform into the Kōkua Learning Farm which will facilitate educational programming, community engagement and events, and agricultural production. Educational programming will include activities that support KHF school programs for Grades Pre-K to 12 and hands-on trainings for educators on the 'ĀINA In Schools Curriculum, waste reduction, and other KHF school programs. Community engagement activities will consist of community events (e.g., volunteer appreciation, fundraisers, farm to table dinners, etc.), instructor/cultural practitioner-led workshops, and community workdays to assist with clearing, planting, harvesting and site maintenance. Agricultural production will consist of harvesting produce, flowers, seeds, compost, and other items to sell via the 'ĀINA Farm Stand to generate revenue in support of KHF programs. Agricultural production will also focus on the propagation of seeds, trees, and native plants for use on the farm and in 'ĀINA In Schools gardens at partner schools.

In early 2020, KHF initiated a conceptual site planning process for the Kōkua Learning Farm with the assistance of Townscape, Inc., a local environmental and community-based planning firm. KHF convened a group of 30 community partners (which included 'āina-based educators, cultural practitioners, farm managers, farmers, landscape designers, and native plant specialists) through a Design Charrette to help conceptualize facilities, layout, and details of implementing the vision for the Property. During the Design Charrette, KHF staff walked the site with participants, shared the history and vision for the Property, and gained insight and knowledge from the vast experience of its community partners. Townscape, Inc. assisted in facilitating and recording the Design Charrette and digitized the Kōkua Learning Farm Conceptual Site Plan based on direction from KHF. Many of the suggestions and recommendations provided by community partners during the Design Charrette have been incorporated into the Conceptual Site Plan. This report describes the proposed land uses and facilities, structures, and infrastructure for the Kōkua Learning Farm as shown in the Conceptual Site Plan.

Since the Design Charette, KHF has already started implementing their vision by reaching out to partners, starting to clear and remove overgrown vegetation from the Property, opening up and planting out production fields, and building a small tool shed and nursery. KHF is looking forward to fully achieving their vision with the continued support from the community, volunteers, partners, and KHF Staff and Board.

KŌKUA LEARNING FARM LAND USES

Hawaiian Garden

Located closest to the Commercial Property, this 1-acre Hawaiian Garden will provide a sense of place featuring both native and Polynesian-introduced plants (e.g., niu, 'ulu, mai'a, and 'uala). A beautiful pedestrian walkway will guide visitors from the Commercial Property through the Hawaiian Garden. This area will primarily be used for educational programs, but will also grow plants, flowers and produce for retail sales, landscaping, and lei-making workshops. In addition to the Hawaiian Garden, native and lā'au lapa'au plants will be grown throughout the farm to serve as windbreaks and for use in cultural practices. These plantings will include trees (e.g., alahe'e, 'ōhi'a, 'ōhi'a 'ai, loulou, niu, kou, hau, kukui, 'ulu, noni), shrubs (e.g., 'a'ali'i, akiohala, akia, 'ilima, 'ohai, koki'o 'ula'ula, koki'o ke'oke'o, kulu'i, na'u, pōhinahina, ulei), ferns and groundcover (e.g., akulikuli, kupukupu, laua'e, nanea, palapalai), and food and lapa'au crops (e.g., 'ape, 'awa, 'awapuhi, kalo, ko'oko'olau, mai'a, 'ōlena, 'uala, 'uhi, 'ulu, 'uhaloa) and more.

Lo'i

The walkway through the Hawaiian Garden will lead to an approximately 0.5 acre Lo'i in the northern portion of the Kōkua Learning Farm where existing site conditions are favorable for planting, cultivating, and harvesting wetland kalo. The Lo'i will be utilized primarily for educational programs, but the kalo grown there will also be sold at the 'ĀINA Farm Stand.

'ĀINA Demonstration Gardens

Located in close proximity to the hale and open field, this 0.3-acre area will feature a variety of themed-learning gardens that will support school farm field trips. The 'ĀINA Demonstration Gardens are strategically placed within the Kōkua Learning Farm away from the main entrance/Commercial Property to allow students to transition from the urban setting through the Hawaiian Garden before entering into the 'ĀINA Demonstration Gardens.

Constructed Native Wetlands

Two areas will consist of constructed native wetlands - each measuring approximately 8,000 square feet (sf). One constructed native wetland, also functioning as a biofiltration area, will be located on the northeastern corner of the Kōkua Learning Farm between the neighboring residential homes and the proposed Lo'i. The other constructed native wetland, situated on the southeast corner of the Kōkua Learning Farm abutting Achiu Lane & Kilioe Place, will include two small viewing platforms to allow students to observe native wetland plants and wildlife.

Open Field

Approximately 0.5 acres of multi-purpose open green space will be used for various activities including school field trips, trainings, community events, and fundraisers. The Open Field will be located between the Hawaiian Garden and the 'ĀINA Demonstration Gardens to serve as a buffer separating the general public (accessing the Hawaiian Garden) from students for safety concerns.

Production Fields

Approximately 1.5 acres of farm production fields will support the 'ĀINA Farm Stand. This area is generally level and was previously cultivated with kalo, sugarcane, corn and other market crops. It is situated further away from where higher levels of pedestrian activity are anticipated. Plantings

will include multiple varieties of kalo, 'uala, carrots, beans, salad greens, radishes, tomatoes, basil, corn, squash, broccoli, turnips, cilantro, herbs, edamame, and a multitude of cut flowers.

Orchard

Approximately 0.5 acres of orchard area will be located along the southwestern portion of the property near the Production Fields to support the 'ĀINA Farm Stand. Potential orchard crops include cacao, coconut, citrus, banana, 'ulu, avocado, mulberry, mango, moringa, lychee, jackfruit, soursop, and papaya. Intercropping options include hau, 'ōhi'a 'ai, kou, puakenikeni, pigeon pea, katuk, na'u, and mahogany.

Stockpile Area

Approximately 1,500 sf of land located in the western corner of the Kōkua Learning Farm, adjacent to the Production Fields, will be designated as a stockpile area for gravel, mulch, logs, and other materials.

KŌKUA LEARNING FARM FACILITIES AND STRUCTURES

Outdoor Learning Area

The main educational facility will be a 600 sf, gable-style structure that serves as an outdoor classroom and central gathering space. The pedestrian walkway from the Commercial Property will guide visitors through the Hawaiian Garden and near this outdoor learning area, situated in the piko of the Kōkua Learning Farm, with picturesque views of Mount Ka'ala. Both the Outdoor Learning Area and Hale can be used for various programming, including school field trips, trainings, community events, and fundraisers.

Hale

A small hale will be located near the northern boundary of the Kōkua Learning Farm with a lookout over the wetlands to the North and used as a satellite learning structure and event space.

Tool Shed

A 120 sf tool shed will support general site maintenance and agricultural work. This structure will be located near the farm production fields to allow for easy access and storage of maintenance equipment and tools, and in close proximity to the Farm Office for security purposes. Smaller remote tool sheds and storage areas will be placed near the Nursery, Outdoor Learning Area, Hale, and other highly used areas for needed supplies.

Nursery

A 400 sf nursery will allow for the propagation of plants to support field production and school programs. The nursery will be located near the production fields adjacent to the Farm Office on the eastern side of the Kōkua Learning Farm near Kilioe Place for ease of access and security purposes.

Barn

A 2000 sf barn will provide space for tool storage, covered farm equipment parking, cold storage, and a wash station. This structure will support field production and will be easily accessible for

vehicles from the production fields for incoming produce and also near the Commercial Property for proximity to the 'ĀINA Farm Stand.

Toilets

Portable toilets will be located along the walkway within the Hawaiian Garden and near the Outdoor Learning Area, Open Field, and 'ĀINA Demonstration Gardens for easy access for school field trips, workshops, and events.

Portable Kitchen

An approximately 160 sf kitchen will support educational and community programs, such as school field trips, educator trainings, and community events. This kitchen will be portable to allow it to be easily relocated to other sections of the site, if needed.

Farm Office

A 240 sf farm office will be located adjacent to the nursery, providing a view of the production fields, guarding against theft.

Compost Area

The compost area consists of an In-Vessel Compost Unit (approximately 160 sf) adjacent to feedstock storage and curing piles. It is located near Achiu Lane, in close proximity to the production fields, downwind to minimize odors on the site and to nearby neighbors, and in a higher elevation area that is less prone to flooding during large rain events.

KŌKUA LEARNING FARM INFRASTRUCTURE

Roadways

Primary vehicular access will be through a gravel roadway that provides two-directional traffic from the Commercial Property through the Kōkua Learning Farm to Achiu Lane. It will also provide vehicular and machinery access to the Barn. Smaller farm roads are envisioned as gravel roads providing machinery access within the Production Fields and will vary between 15 and 25 feet in width.

Walking Path

A beautiful pedestrian (gravel or mulch) walkway from the Commercial Property to the Kōkua Learning Farm will create a special space guiding visitors through the Hawaiian Garden to the piko of the site. The walking path will provide access to various gathering areas, including the Lo'i, Outdoor Learning Area, and Open Field. It will also provide transition time for students from an urban setting into the 'ĀINA Demonstration Gardens.

Parking

A gravel Staff Parking area will be located adjacent to the Commercial Property. It will provide staff and visitor parking for up to 23 vehicles, which includes 13 single vehicle stalls and 5 tandem stalls. Overflow parking and school bus parking will be located in the grass area near Achiu Lane. Bike parking and electric charging stations will also be available on the Commercial Property.