

STATE OF HAWAII
DEPARTMENT OF EDUCATION
KA 'OIHANA HO'ONA'AUAO
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HONOLULU, HAWAII 96804

OFFICE OF FACILITIES AND OPERATIONS

November 14, 2025

TO: Mary Alice Evans
Director, Office of Planning and Sustainable Development

FROM: Jadine Urasaki
Public Works Administrator, Facilities Development Branch 
Jadine Urasaki (Nov 13, 2025 19:10:03 HST)

SUBJECT: Draft Environmental Assessment - Anticipated Finding of No Significant Impact
for Major General William R. Shafter Elementary School Campus Relocation
Job No. Q74204-17
Tax Map Key: (1) 1-1-008:005 (por.)
Fort Shafter Military Reservation, Oahu, Hawaii

The Hawaii State Department of Education hereby transmits the subject Draft Environmental Assessment (DEA), for which an Anticipated Finding of No Significant Impact (AFNSI) is expected. The DEA-AFNSI has been prepared in accordance with the Hawaii Revised Statutes Chapter 343, and Hawaii Administrative Rules Chapter 11-200.1. Please publish notice of this DEA-AFNSI in the upcoming issue of *The Environmental Notice*.

A copy of the DEA-AFNSI along with the online submission requirements have been submitted via your agency's online submission platform.

If you have any questions, please contact Jonathan Weintraub, Project Coordinator of the Facilities Development Branch, at (808) 784-5050 or via email at jonathan.weintraub@k12.hi.us or the Project Consultant of HHF Planners, Gail Renard, at (808) 457-3167 or via email grenard@hhf.com.

JU:jw
Enclosure: DEA-AFONSI

From: dbedt.opsd.erp@hawaii.gov
To: [DBEDT OPSD Environmental Review Program](#)
Subject: New online submission for The Environmental Notice
Date: Monday, November 17, 2025 1:10:19 PM

Action Name

Shafter Elementary School Campus Relocation

Type of Document/Determination

Draft environmental assessment and anticipated finding of no significant impact (DEA-AFNSI)

HRS §343-5(a) Trigger(s)

- (1) Propose the use of state or county lands or the use of state or county funds

Judicial district

Honolulu, O'ahu

Tax Map Key(s) (TMK(s))

(1) 1-1-008:005 (por.)

Action type

Agency

Other required permits and approvals

Various; see DEA-AFONSI Project Summary

Proposing/determining agency

State of Hawaii Department of Education

Agency jurisdiction

State of Hawai'i

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Is there a consultant for this action?

Yes

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HHF Planners

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Honolulu, Hawaii 96813
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Action summary

The proposed action will relocate the existing Shafter Elementary School to a new site also within Fort Shafter Military Reservation. The project will construct approximately 80,000 gross square feet of new facilities, including classroom, cafeteria, administrative/library buildings, and a covered playcourt. The project also includes a play field, surface parking, a service/fire lane, and associated utility infrastructure.

Reasons supporting determination

Please see Significance Criteria discussion in Chapter 6 of the DEA-AFONSI.

Attached documents (signed agency letter & EA/EIS)

- [Shafter-ES-HRS-343-DEA-AFONSI-Nov-2025-OCR.pdf](#)
- [2025.11-14_FDB-DEA-AFNSI-Shafter-ES-Campus-Relocation-Job-No.-Q74204-171.pdf](#)

ADA Compliance certification (HRS §368-1.5):

The authorized individual listed below acknowledges that they retain the responsibility for ADA compliance and are knowingly submitting documents that are unlocked, searchable, and may not be in an ADA compliant format for publication. Audio files do not include transcripts, captions, or alternative descriptions. The project files will be published without further ADA compliance changes from ERP, with the following statement included below the project summary in The Environmental Notice: "If you are experiencing any ADA compliance issues with the above project, please contact (authorized individual submitting the project at email)."

Action location map

- [Shafter-ES-EA-Project-Boundary-Shapefile1.zip](#)

Authorized individual

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Authorization

- The above named authorized individual hereby certifies that he/she has the authority to make this submission.



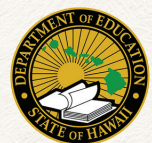
Shafter Elementary School Campus Relocation

Fort Shafter Military Reservation, O‘ahu, Hawai‘i

Draft Environmental Assessment – Anticipated Finding of No Significant Impact

NOVEMBER 2025

PREPARED FOR



State of Hawai‘i
Department of Education

PREPARED BY



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places for people

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Shafter Elementary School Campus Relocation

Fort Shafter Military Reservation, O‘ahu, Hawai‘i

Draft Environmental Assessment – Anticipated Finding of No Significant Impact

NOVEMBER 2025

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PROJECT SUMMARY

PROJECT NAME	Shafter Elementary School Campus Relocation
PROPOSED ACTION	Relocate the existing Shafter Elementary School to a new site at Fort Shafter Military Reservation. Construct approximately 80,000 gross square feet (gsf) of new facilities, including classroom, cafeteria, administrative/library buildings, and a covered playcourt. The project also includes a play field, surface parking, a service/fire lane, and associated utility infrastructure.
LOCATION	Rice Street, Fort Shafter Military Reservation, O'ahu, Hawai'i
TAX MAP KEY (TMK) PARCEL	(1) 1-1-008:005 (por.)
PROJECT AREA	Approximately 8.3 acres
LANDOWNER	United States of America
PROPOSING AGENCY/DETERMINING AGENCY	State of Hawai'i, Department of Education
STATE LAND USE DISTRICT	Urban
COUNTY DEVELOPMENT PLAN (DP) DESIGNATION	Military
ZONING	F-1 Federal and Military Preservation District
SPECIAL MANAGEMENT AREA (SMA)	Not within the SMA
FLOOD ZONE DESIGNATION	Zone X
EXISTING USE	Former military family housing units (some used as temporary office space); dog park; and open space
ANTICIPATED PERMITS AND APPROVALS REQUIRED	National Historic Preservation Act compliance Endangered Species Act compliance National Pollutant Discharge Elimination System permit Coastal Zone Management Act compliance U.S. Army Corps of Engineers Clean Water Act Section 404 permit Hawai'i Environmental Policy Act compliance Americans with Disabilities Act compliance Certificate of Occupancy Building and Construction permits Community Noise Permit and/or Noise Variance Construction Plans approval Grading, Grubbing, and Stockpiling permits
CHAPTER 343 HRS ANTICIPATED DETERMINATION	Finding of No Significant Impact (FONSI)
CONSULTANT CONTACT	Gail Renard, LEED AP, Associate Principal HHF Planners 733 Bishop Street, Suite 2590 Honolulu, Hawai'i 96813, shafter.elem.ea@hhf.com , 808.457.3167

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Abbreviations and Acronyms

Acronym	Definition	Acronym	Definition
AADT	Annual Average Daily Traffic	FEA	Final Environmental Assessment
AAQS	Ambient Air Quality Standards	FEMA	Federal Emergency Management Agency
ACM	asbestos containing materials	FIRM	Flood Insurance Rate Map
ADA	Americans with Disabilities Act	FNSI/FONSI	Finding of No Significant Impact
AFONSI	Anticipated Finding of No Significant Impact	Fort Shafter	Fort Shafter Military Reservation
ALISH	Agricultural Lands of Importance in the State of Hawai'i	GHGs	greenhouse gases
ALR	archaeological literature review	gsf	gross square feet
APE	Area of Potential Effect	GWP	global warming potential
bgs	below ground surface	H ₂ S	hydrogen sulfide
BLS	Bureau of Labor Statistics	HAR	Hawai'i Administrative Rules
BMPs	Best Management Practices	HDOH	Hawai'i Department of Health
		HDOT	Hawai'i Department of Transportation
CAA	Clean Air Act		
CATV	cable television	HFD	Honolulu Fire Department
CCR	Consumer Confidence Report	HIDOE	State of Hawai'i Department of Education
CEQ	Council on Environmental Quality	HNL	Daniel K. Inouye International Airport
CFR	Code of Federal Regulations	HOLIS	Honolulu Land Information System
CMP	Construction Management Plan	HPD	Honolulu Police Department
CO	carbon monoxide	HRS	Hawai'i Revised Statute
CO ₂	carbon dioxide	HVAC	heating, ventilation, and air conditioning
CRB	coconut rhinoceros beetle		
CWA	Clean Water Act	IMHW-PWE	Directorate of Public Works, Environmental Division
CZM	Coastal Zone Management	IPaC	Information for Planning and Consultation
CZMA	Coastal Zone Management Act	LBP	lead based paint
DEA	Draft Environmental Assessment	LCA	Land Commission Award
DNL	day-night average sound level	Ldn	day-night average sound level
DLNR	Department of Land and Natural Resources	LFA	Little Fire Ants
DoD	Department of Defense	LID	Low Impact Development
DoDEA	Department of Defense Education Activity	LOS	level of service
DOFAW	Division of Forestry and Wildlife	LSB	Land Study Bureau
DP	Development Plan	LUO	Land Use Ordinance
DPP	Department of Planning and Permitting	MIA	Makiki stony clay loam, 0 to 3 percent slopes
DPW	Directorate of Public Works	mph	miles per hour
EA	Environmental Assessment	MSL	mean sea level
EDSPECS	Educational Specifications for Elementary Schools	NAAQS	national ambient air quality standards
EIS	Environmental Impact Statement		
EISA	Energy Independence and Security Act	NAGPRA	Native American Graves Protection and Repatriation Act
EO	Executive Order	NDPES	National Pollutant Discharge Elimination System
ESA	Endangered Species Act	NEPA	National Environmental Policy Act
ESCP	Erosion and Sediment Control Plan		
FAA	Federal Aviation Administration		

Acronym	Definition
NHPA	National Historic Preservation Act
NO ₂	nitrogen dioxide
NO _x	nitrogen oxide
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Services
NRHP	National Register of Historic Places
NWI	National Wetland Inventory
OCI	organochlorine
OEQC	Office of Environmental Quality Control
OHWM	ordinary high water mark
OLDCC	Office of Local Defense Community Cooperation
OPSD	State of Hawaii's Office of Planning and Sustainable Development
Pb	lead
PM ₁₀	suspended particulate matter less than or equal to 10 microns in diameter
PM _{2.5}	fine particulate matter less than or equal to 2.5 microns in diameter
POVs	privately-owned vehicles
PSMI	Public Schools on Military Installations
PUC	Primary Urban Center
PV	photovoltaic
RFI	Radio Frequency Interference
ROI	region of influence
SCP	Sustainable Communities Plan
SDWA	Safe Drinking Water Act
Shafter ES	Shafter Elementary School
SHPD	State Historic Preservation Division
SHPO	State Historic Preservation Officer
SIHP	State Inventory of Historic Properties
SLR	sea level rise
SMA	Special Management Area
SO ₂	sulfur dioxide
sq ft	square foot
SWPPP	stormwater pollution prevention plan
TAM	Technical Assistance Memorandum
TMDL	Total Maximum Daily Load
TMK	Tax Map Key
U.S.C.	United States Code
USACE	U.S. Army Corps of Engineers

Acronym	Definition
USAEC	U.S. Army Environmental Command
USAG Hawaii	United States Army Garrison Hawaii
USDA	U.S. Department of Agriculture
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
WWII	World War II

1 Purpose of and Need for the Proposed Action

1.1 Introduction

The State of Hawai'i Department of Education (HIDOE) proposes to relocate the Major General William R. Shafter Elementary School (Shafter ES) to a new site at Fort Shafter Military Reservation (Fort Shafter), O'ahu, Hawai'i. The action is anticipated to begin construction in early 2027, with the new school facilities operational in August 2029.

The environmental laws for the State of Hawai'i are promulgated by Chapter 343, Hawai'i Revised Statutes (HRS) entitled Environmental Impact Statements and Chapter 11-200.1, Hawai'i Administrative Rules (HAR) entitled Environmental Impact Statement Rules. Section 343-5, HRS identifies nine categories of action that trigger the preparation of an environmental assessment (EA), including the use of state or county funds. Because the proposed action includes the use of state funds, this Draft Environmental Assessment (DEA) has been prepared in accordance with Chapter 343, HRS and Chapter 11-200.1, HAR.

1.2 Background and Location

Shafter ES is in HIDOE's Leeward O'ahu District and is located on Fort Shafter, a Command of the United States Army Garrison-Hawaii (USAG Hawaii). Shafter ES was established in 1951 at a different location and relocated to its current site in 1966 (see Figure 1-1). The existing campus encompasses 5.5 acres in the south-central area of Fort Shafter, bordered by Kaua Street/Moanalua Freeway (H-201) on the southwest, Kahauiki Stream to the north, and Army operational and support facilities to the southeast. The southeastern edge of the triangular-shaped campus consists of a steep slope supported by a masonry retaining wall.

The existing school includes five primary buildings and one portable classroom building; together they total about 38,000 square feet (sq ft). The majority of the campus property (3.97 acres) is owned by the State of Hawai'i (Tax Map Key [TMK] 1-1-008:008; see Figure 1-1). The remaining 1.52 acres are owned by the Department of Defense (DoD) and leased by HIDOE (TMK 1-1-008:005 portion; see Figure 1-1); outdoor play areas and the portable classroom buildings are located in this area. The school primarily serves dependents of the U.S. military and eligible personnel living on Fort Shafter and nearby U.S. Navy housing areas.

Originally designed in the 1960s for 200 students, Shafter ES facilities no longer meet current HIDOE and Department of Defense Education Activity (DoDEA) educational specifications for elementary schools (EDSPECS) and its learning spaces are undersized with minimal flexibility. Enrollment in the 2023-2024 school year was 390 students, although it was as high as 471 students in the 2017-2018 school year.

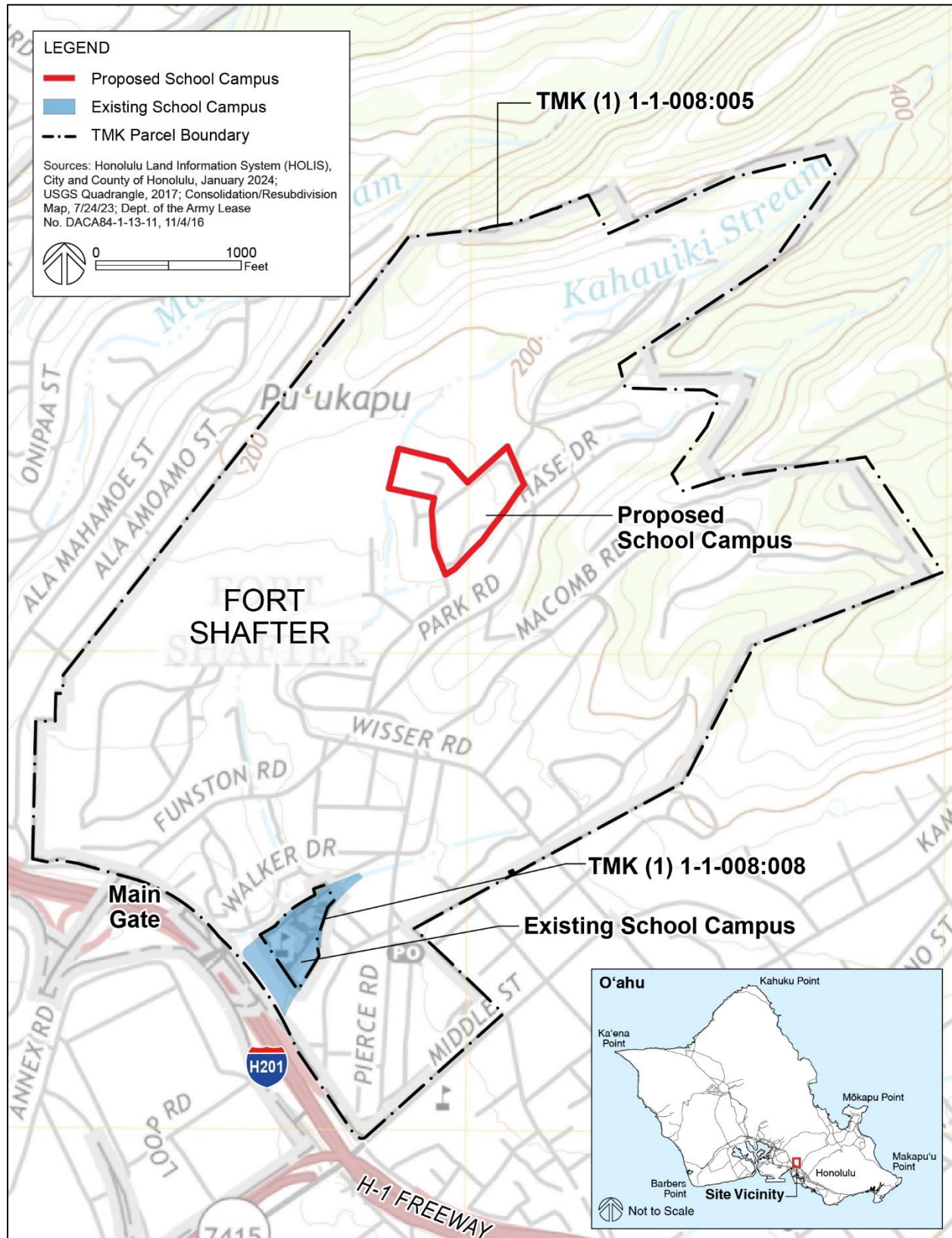


Figure 1-1 Location Map

USAG Hawaii designated the former Rice Manor Housing Area at Fort Shafter as the campus relocation site (see Figure 1-1). The 8.3-acre site is located within an area in the northeastern sector of the installation known as Shafter Ridge—which comprises family housing and community support facilities (e.g., Child Development Center, School Age Center, Chapel, Walter J. Nagorski Golf Course).

The project would be funded by a grant from the DoD Office of Local Defense Community Cooperation (OLDCC) under the Public Schools on Military Installations (PSMI) Program. OLDCC provides technical and financial assistance to communities surrounding military installations to maximize investment in the defense mission. The PSMI Program seeks to assist local education agencies in constructing, renovating, repairing, or expanding elementary and secondary public schools on military installations to address capacity or facility condition deficiencies. The OLDCC grant would fund 80% of project costs, with the balance funded by the State of Hawai'i. (Note: Because the action would take place on land leased by the federal government to HIDOE and because federal funding will be used for project implementation, the requirements of the National Environmental Policy Act (NEPA) (42 United States Code [U.S.C.] sections 4321–4370h) must also be met. NEPA requires the preparation of an environmental analysis for major federal actions that have the potential to significantly impact the quality of the human environment. USAG Hawaii and OLDCC will comply with their respective NEPA requirements under separate documentation.)

1.3 Purpose of and Need for the Proposed Action

The purpose of the Proposed Action is to provide public school facilities that meet current and projected functional and space requirements and offer a supportive learning environment for pre-kindergarten through sixth grade students served by Shafter ES, as determined by HIDOE.

The Proposed Action is needed to remedy existing over-capacity conditions and facility deficiencies at Shafter ES and provide infrastructure capacity to meet a design enrollment of 500 students. Although the school currently provides a good learning environment, a 2018 DoDEA evaluation of the condition of the school facilities cited deficiencies in capacity, spatial adequacy, and technology readiness (2018 Facility Condition Assessment Update). In addition, multiple building systems were found to be beyond their useful service life (e.g., lighting, doors, windows, plumbing, electrical distribution, heating, ventilation, and air conditioning (HVAC) systems, and wall, ceiling and floor finishes (2018 Facility Condition Assessment Report).

In general, the school struggles to find available spaces to support its current and projected enrollment, program, and curriculum. The existing two-story buildings lack elevators and do not provide Americans with Disabilities Act (ADA) access. The existing learning spaces were designed as typical 900-sq ft instructional classrooms and do not offer flexibility to accommodate current instructional formats. The majority of the support spaces are undersized and do not provide capacity for breakout group and individual learning. The cafeteria is undersized and, due to the limited cafeteria space, four 30-minute lunch periods are required to serve the students (the earliest lunch period starts at 10:30 AM). There are no common shared or large gathering spaces to support current student enrollment. The library and computer lab are in converted classroom spaces and do not provide optimum functionality as an Information/Media Center. Many of the administrative and other support programs are in converted spaces that are undersized and inadequate for the intended purpose.

Numerous renovations and repairs have been undertaken since the school's original construction, resulting in an existing calculated capacity of 418 students in the permanent structures. However, the

500-student design enrollment is intended to accommodate fluctuations in DoD personnel loading within the school's service zone (determined by HIDEOE), including within the school year as DoD personnel transfer to and from other posts. For example, as noted earlier, the 2017-2018 school year enrollment was 471 students. Table 1-1 compares facility sizes at the existing Shafter ES with what is required for the design enrollment of 500 students. The existing facilities fall short of the required program area for the design enrollment by over 32,000 sq ft (including a shortfall of 11 classrooms).

Table 1-1 Existing vs. Required Floor Area

Program	Existing Area (sq ft)/ [quantity]	Program Area Required (sq ft)/[qty]	Difference (sq ft)/[qty]
General Classrooms	15,757/ [17 classrooms]	22,540/ [23 classrooms]	(6,783)/ [-6 classrooms]
Special Education Classrooms	1,902/[2 classrooms]	9,980/[7 classrooms]	(8,078)/ [-5 classrooms]
Administrative Center	2,569	7,820	(5,251)
Library/Media Center	2,043	6,220	(4,177)
Cafetorium/Multi-Purpose	3,412	8,810	(5,398)
Food Service Kitchen	1,218	2,370	(1,152)
Custodial Service Center	295	500	(205)
Faculty Center	295	980	(685)
Computer Resource Center	909	1,200	(291)
Itinerant Services	--	330	(330)
TOTAL	28,400	60,750	(32,350)

In addition, the school's current location and access limitations pose traffic congestion issues during student drop off and pick up, before and after school. Due to the lack of queuing and circulation space within campus grounds, vehicles queue along Ponciano Drive. There is limited staging area, and there are occasions when queued vehicles back up onto Funston Road before and after school hours, obstructing through traffic on one of the installation's primary thoroughfares. See Figure 1-2 for existing campus vicinity map.

Without the project, Shafter ES would continue to operate in facilities that constrain instructional approaches, remain unable to fully accommodate the school's programs, and contribute to traffic congestion along one of the main Fort Shafter roadways.

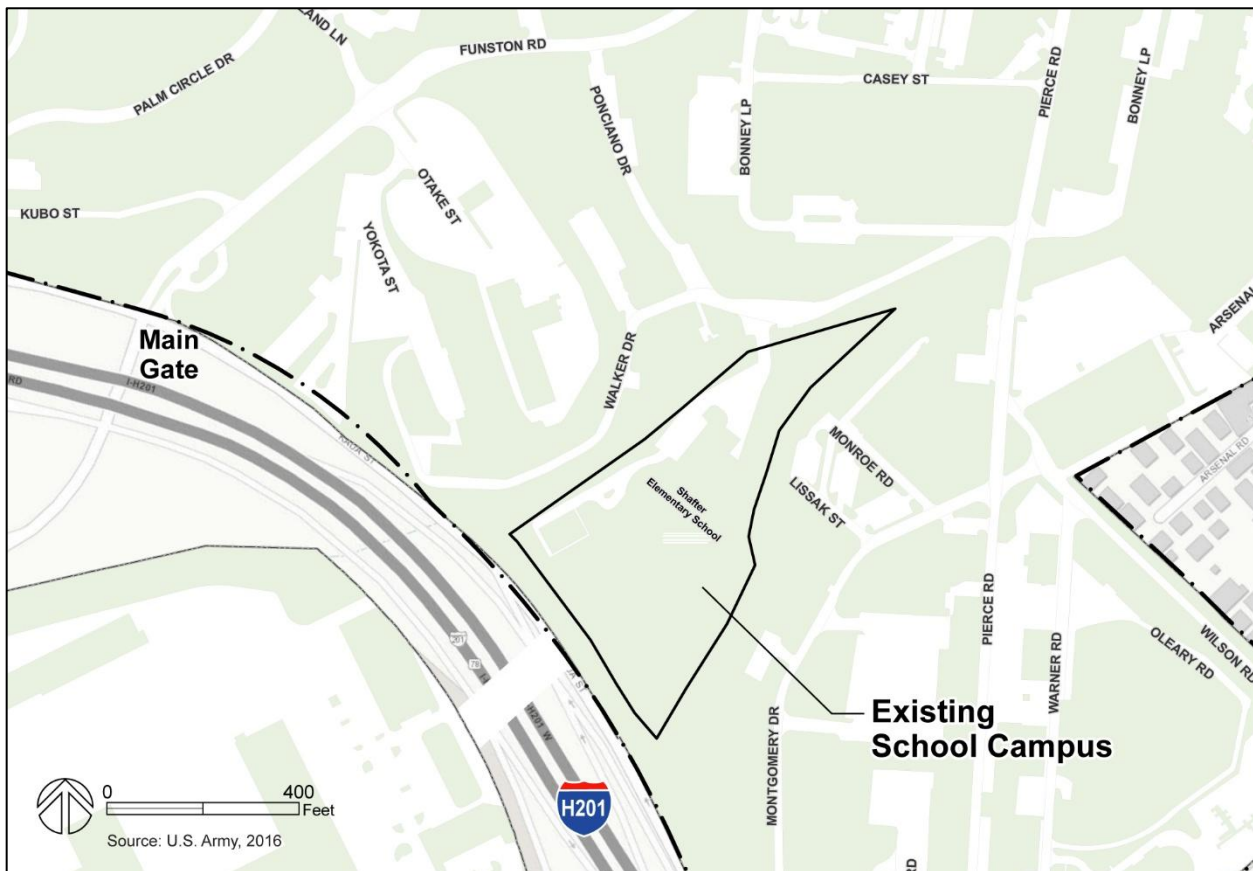


Figure 1-2 Vicinity Map—Existing Campus

1.3.1 Scope of Environmental Analysis

This EA includes an analysis of potential environmental impacts associated with the Proposed Action and the No Action Alternative. The environmental resource areas analyzed in this EA include air quality, geological resources, water resources, biological resources, cultural resources, transportation, natural hazards, climate change, and hazardous materials and wastes.

1.4 Public and Agency Participation and Intergovernmental Coordination

In accordance with HAR 11-200.1, HDOE conducted early consultation on the Proposed Action with several federal, state and county government agencies, and community organizations prior to the preparation of the DEA. These parties are listed in Chapter 9 and their comments are included in Appendix A.

This DEA/Anticipated Finding of No Significant Impact (AFONSI) has been prepared to inform the public of the Proposed Action and to allow the opportunity for public review and comment. A 30-day DEA/AFONSI public review period begins with a public notice published in The Environmental Notice (a semi-monthly publication of the State of Hawai'i's Office of Planning and Sustainable Development [OPSD]), indicating the availability of the DEA/AFONSI. The DEA/AFONSI is available via the OPSD's website (<https://planning.hawaii.gov/erp/>). Printed copies of the DEA/AFONSI will be available at the Hawai'i State Library and the Kalihi-Palama Library.

USAG Hawaii consulted with the U.S. Fish and Wildlife Service and is in the process of coordinating with the State of Hawai'i Office of Planning, Coastal Zone Management Program regarding the Proposed Action. USAG Hawaii consulted with the State Historic Preservation Officer (SHPO) under Section 106 regarding the proposed undertaking. HDOE will consult with the State of Hawai'i Department of Land and Natural Resources State Historic Preservation Division (SHPD) under HRS 6E prior to project implementation.

This EA was prepared based upon federal and state laws, statutes, regulations, and policies pertinent to the implementation of the Proposed Action, as listed in Table 1-2.

Table 1-2 Relevant Laws, Regulations, and Policies

<i>Law, Regulation, or Policy</i>
• National Environmental Policy Act (42 United States Code [U.S.C.] sections 4321–4370h) • Council on Environmental Quality Regulations for Implementing the Procedural Provisions of NEPA (40 Code of Federal Regulations parts 1500–1508) • 32 CFR Part 651 Environmental Analysis of Army Actions • Clean Air Act (42 U.S.C. section 7401 et seq.) • Clean Water Act (33 U.S.C. section 1251 et seq.) • Coastal Zone Management Act (16 U.S.C. section 1451 et seq.) • National Historic Preservation Act (NHPA) (54 U.S.C. section 306108 et seq.) • Native American Graves Protection and Repatriation Act (NAGPRA) • Endangered Species Act (16 U.S.C. section 1531 et seq.) • Migratory Bird Treaty Act (16 U.S.C. section 703–712) • Stormwater Runoff Requirements for Federal Projects under Section 438 of the Energy Independence and Security Act • Executive Order (EO) 14173 Ending Illegal Discrimination and Restoring Merit-Based Opportunity • EO 13045, Protection of Children from Environmental Health Risks and Safety Risks • Policy Memorandum Directorate of Public Works (DPW)-HI-02, Tree Cutting Moratorium • Policy Memorandum DPW-HI-03, Landscaping with Native Plants • Policy Memorandum USAG-HI-13, Animal Control Policy • Policy Memorandum USAG-HI-35, Wildlife Friendly Lighting and Dark Skies • Policy Memorandum USAG-HI-50, Green Waste Policy • Policy Memorandum DPW-HI-01, Avoidance of Little Fire Ant Introduction • Environmental Impact Statements (Chapter 343, HRS) • Coastal Zone Management (Chapter 205A, HRS)

A description of the Proposed Action's consistency with relevant state and county laws, policies and regulations is presented in Chapter 5.

2 Proposed Action and Alternatives

2.1 Proposed Action

HIDOE proposes to relocate Shafter ES to a new site at Fort Shafter, O‘ahu, Hawai‘i. The action involves new construction of approximately 80,000 gross square feet (gsf) of floor area in one-, two-, and three-story buildings, and outdoor play areas. The action also includes provision of parking areas, access roads, and required utilities and infrastructure. Construction is anticipated to begin in early 2027 with occupancy beginning in August 2029.

2.2 Screening Factors

The project proponent considered various alternatives when identifying its Proposed Action and Preferred Alternative using screening factors listed in Table 2-1. Only those alternatives determined to be reasonable and to meet the purpose and need require detailed analysis in this EA.

Potential alternatives that meet the purpose and need were evaluated against the screening factors in Table 2-1.

Table 2-1 Reasonable Alternative Screening Factors

Screening Factor	Description
A	Meets the purpose and need of the Proposed Action
B	Meets the physical siting, functional relationship, and space requirements established by HIDOE (including number of stories, building orientation, outdoor play area, parking, etc.) to serve a design enrollment population of 500 students
C	Avoids or minimizes disruption to school operations, Shafter ES students and their families, and the learning environment (i.e., maintains school operations during construction)
D	Safe and efficient motor vehicle, bicycle, and pedestrian traffic flow to and from campus
E	Compatible with surrounding community
F	Minimize costs and construction complexity (including required approvals)
G	Consistent with USAG Hawaii land use plans
H	Sited on property owned or controlled by HIDOE and/or USAG Hawaii
I	Minimizes risks and impacts of natural hazards, including flooding
J	Does not adversely impact other operations or facilities at other HIDOE schools
K	Is technically and economically feasible

Various alternatives were evaluated against the screening factors. The alternatives considered include:

1. No Action
2. New construction at former Rice Manor family housing area (Preferred Alternative)
3. Renovation and reuse of the existing school facilities
4. Construction at alternate site

5. Revise school service area

2.3 Alternatives Carried Forward for Analysis

Based on the reasonable alternative screening factors and meeting the purpose and need for the Proposed Action, only the Preferred Alternative (New Construction at former Rice Manor site) and the No Action Alternative are analyzed in this EA.

2.3.1 New Construction at Former Rice Manor Site (Preferred Alternative)

2.3.1.1 Project Components

This alternative would replace the existing Shafter ES with approximately 80,000 gsf of floor area at the former Rice Manor family housing area¹. Table 2-2 summarizes the main project components.

**Table 2-2 New Construction Alternative (Preferred Alternative) Components
(preliminary, subject to change)**

<i>Main Structure/Use</i>	<i>Notes</i>	<i>Floors</i>
Pre-Kindergarten/Kindergarten	2 Pre-Kindergarten classrooms 4 Kindergarten classrooms	1
Administrative/Library	Library/Media Center Administrative Center Computer Resource Center Miscellaneous Spaces	2
Cafeteria	Food preparation and service Ancillary and utility spaces	1
Classroom	24 classrooms Computer Resource Center Faculty Center Elevator	3
Covered Playcourt	Physical education/multipurpose area	1
Surface Parking	124 stalls (approximate)	n/a
Outdoor Play Areas	Playfield Dedicated Pre-K and Kindergarten play areas	n/a

Source: Design Partners, Inc.

Construction would include one- and three-story classroom buildings, two-story administrative/library building, one-story cafeteria building, covered playcourt, and on- and off-site infrastructure improvements and utility connections. Other improvements include a playfield, dedicated, separate play areas for pre-kindergarten and kindergarten students, a Native Hawaiian garden, approximately 124 parking stalls, and separate bus and student drop-off areas within the campus. Perimeter fencing would be erected to secure the school property, and a protection net would shield the campus from errant golf

¹ The existing 15 former family housing buildings (12 duplexes and 3 single-family homes) and above-ground utility infrastructure at the site are planned for demolition under an unrelated USAG Hawaii action, as they have been vacant since 2010 when USAG Hawaii confirmed the presence of hazardous materials (e.g., lead-based paint and asbestos). A few of the structures are currently used for temporary administrative space and would relocate to other facilities as directed by USAG Hawaii.

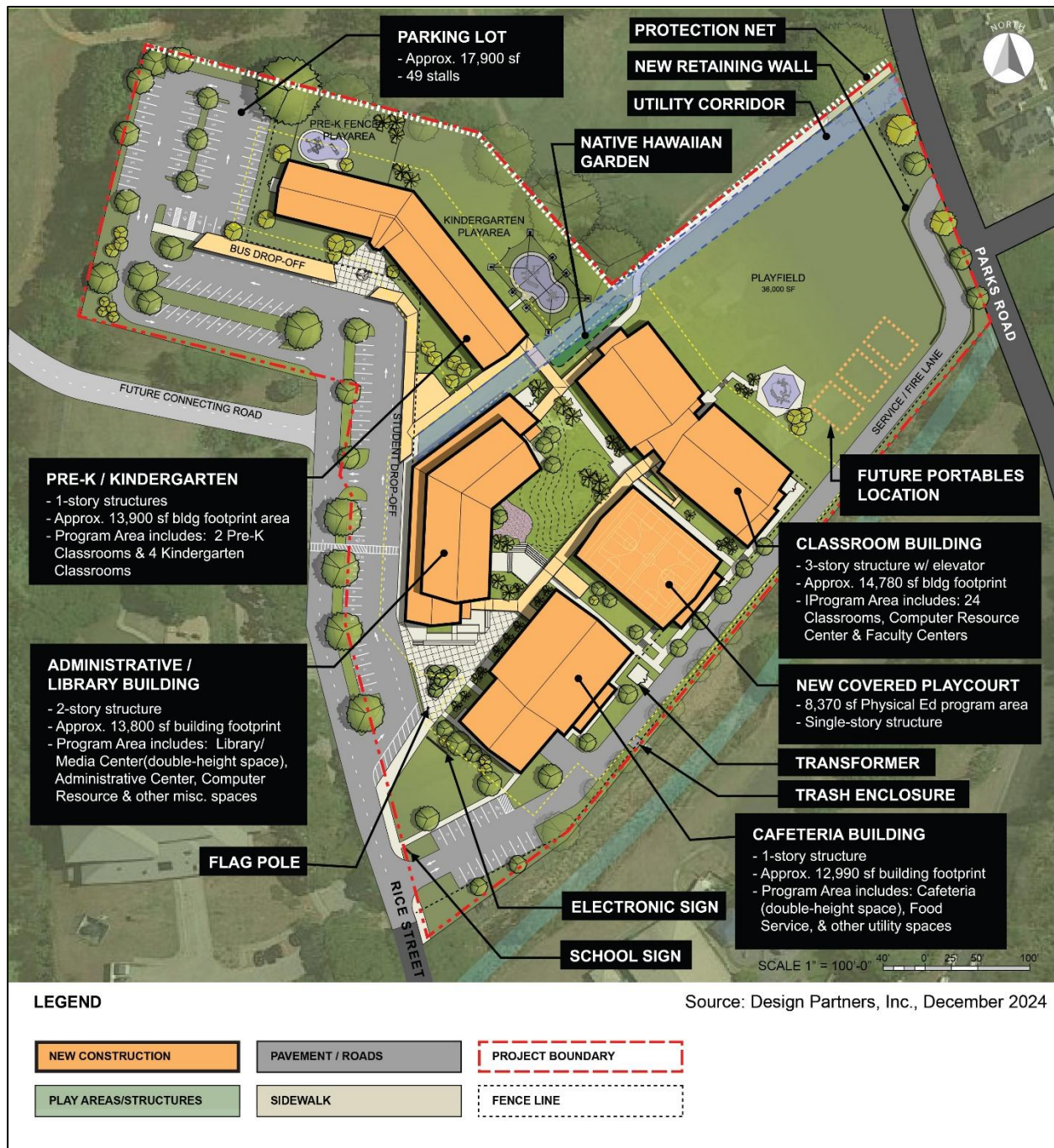


Figure 2-1 Preliminary Site Plan

balls from the adjacent golf course. Space for future portable buildings (if needed) is reserved south of the playfield. See Figure 2-1 for a preliminary site plan (subject to change).

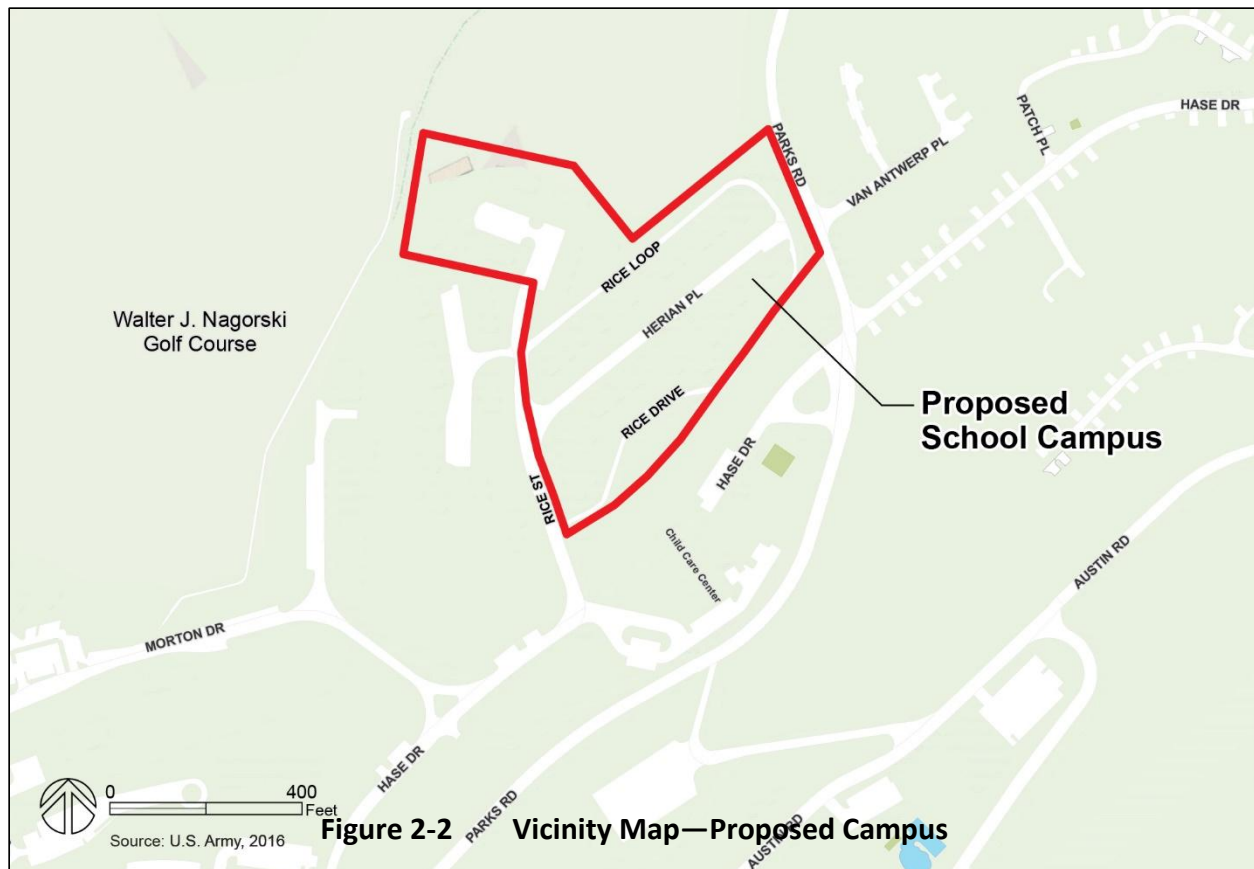
2.3.1.2 Design Concept

The school is being designed to integrate with the adjacent family housing community while, together with the adjacent child-serving facilities, serving as a community hub. School facilities are concentrated in the lower half of the roughly "V"-shaped site, with the Cafeteria building and Administrative/Library

building nearest the main campus entrance. A three-story Classroom building is located north of the Cafeteria, separated from it by single-story covered Playcourt. The Administrative/Library building, Playcourt, and Classroom building frame a central lawn area that may also serve as an outdoor stage or performance area. Playfields are proposed for the northeast end of the site. A one-story Pre-Kindergarten and Kindergarten building is located in the northwest sector, along with dedicated play areas.

2.3.1.3 Access, Circulation, and Parking

The main access to the new school would be from the south, via Rice Street², which turns north from Hase Drive and crosses an unnamed stream drainage channel via a two-lane bridge (see Figure 2-2). On campus, primary vehicular circulation would be along the western boundary of the site, providing about 300 feet of vehicle queuing and stacking for student drop-off and pick-up. A school bus drop-off area is located north of the student drop-off zone. A second access for a service/fire lane would be provided from Parks Road on the northeast end of campus. The service/fire lane may be utilized during emergencies and for occasional special events. Approximately 124 parking stalls (including six ADA-accessible stalls) would be provided near the campus entrance and along the west boundary.



² Figure 2-1 shows a “Future Connecting Road” extending from the school’s parking access lane toward the west. This potential roadway would provide a connection to other community support and/or family housing that may be constructed at Fort Shafter in the future. It is not part of the Proposed Action and its probability and timing are unknown; as such it is not considered in this EA.

2.3.1.4 Landscaping

The proposed landscape scheme retains existing trees where possible, including along the north and southwest boundaries of and at the entry to the campus. Approximately 56 existing ornamental trees (predominantly monkeypod [*Samanea saman*]) would be removed to accommodate site grading, new building footprints, playgrounds, parking, driveways, and open lawn areas. Most of the trees that would be removed line both sides of Herian Place and the east side of Rice Street (48 trees). The Proposed Action would install at least the same number of new trees on campus as be removed (i.e., ≥ 56 trees), although they would comprise different species and sizes of trees. The proposed landscape plan and species mix are guided by HDOE Arborist goals. New canopy trees are proposed in parking lots and at the campus peripheries, including along the Rice Street and Parks Road frontages. Six new monkeypod trees are proposed along Rice Street, replacing five mature monkeypod trees that would be removed from the same area to retain the dominant theme of monkeypod trees along this street. Clusters of new native and other ornamental trees and shrubs would be installed at gathering nodes within the campus to provide shade and visual texture to the campus (e.g., plumeria, wiliwili, and multi-trunk palms). A cultural garden with surrounding benches would be located near the center of campus. New plantings of canopy and native trees and hedges (e.g., lonomea, kou, rainbow shower, and white hibiscus) are proposed on the southeastern boundary of the site, along the top of the drainageway bank. Vegetated stormwater swales and bio-retention areas would be included as space, topography, and utility allow in order to reduce potential water quality impacts to downstream receiving waters (e.g., in medians, parking areas, upslope lawn areas).

2.3.1.5 Utilities and Infrastructure

The Preferred Alternative includes construction of new on-site potable water, electrical, wastewater, mechanical, storm drainage, and telecommunications systems. These systems would connect to existing on-base systems at Fort Shafter.

Potable water and fire protection. A private contractor operates and maintains the Fort Shafter water system that services the project area. The potable and fire protection water system will be designed to meet the requirements of the latest edition of the City and County of Honolulu, Water System Standards. The project would include water efficient plumbing fixtures. The required fire flow for fire protection will be supplied from Fort Shafter's private/public combined potable and fire protection water system in accordance with applicable standards and regulations. As part of a separate, unrelated USAG Hawaii action that will demolish the former Rice Manor housing, existing below ground waterlines will be cut, capped, and abandoned in place. The Proposed Action would subsequently remove the abandoned below ground infrastructure prior to site preparation and school construction. The removed materials would be recycled or disposed of in an acceptable construction waste disposal facility.

Wastewater. The new wastewater system will be designed to meet the requirements of the latest edition of the City and County of Honolulu, Wastewater System Design Standards and applicable USAG Hawaii requirements (as operated and maintained by its third-party contractor). Similar to existing potable waterlines, existing below ground waterlines will be cut, capped, and abandoned in place as part of USAG Hawaii's separate Rice Manor former housing demolition action. The abandoned below ground infrastructure would be removed prior to site preparation and school construction. The removed materials would be recycled or disposed of in an acceptable construction waste disposal facility.

Electrical power and telecommunications. The site contains overhead primary power and telecommunications distribution systems that served the former family housing units; these overhead systems will be removed when the existing buildings are demolished under the separate, unrelated USAG Hawaii project to demolish the former Rice Manor housing. Underground power and telecommunication distribution systems were installed in 2015 to serve the adjacent Child Development Center. Electrical power and telecommunication services for the new campus will be served from this underground distribution system, routed to a new on-site pad mounted transformer and main distribution frame, respectively.

Stormwater drainage. The Proposed Action would include two new storm drain outfalls—one discharging into Kahauiki Stream on the western border of the project area and one discharging into the drainage channel on the southeastern border of the project area that connects to Kahauiki Stream. Two catch basins along Rice Street would be removed prior to construction of the Proposed Action. The removed materials would be recycled or disposed of in an acceptable construction waste disposal facility. During early consultation, the U.S. Army Corps of Engineers (USACE) noted that "jurisdictional waters may be present within the proposed project boundaries, but there is insufficient information regarding the proposed plans for a determination of the requirement for a USACE permit to be made." The storm drain outfalls are expected to be below the ordinary high-water mark. The project is anticipating that a USACE Clean Water Act Section 404 Permit would be required for the stormwater outfalls. After plans for the outfall structure are available, the design team will consult USACE regarding the proposed outfall and required permit. The Proposed Action would not affect two existing storm drain catch basins adjacent to the bridge over Kahauiki Stream.

An erosion and sediment control plan³ (ESCP) required for a National Pollutant Discharge Elimination System (NDPES) permit would be prepared and would include construction best management practices (BMPs) to manage the sediment and erosion generated from construction activities. A double layer of silt fence and/or filter socks would be installed at the perimeter of the project site where the streams are adjacent to the project site. Sediment basins or traps with a capacity to capture 2-year, 24-hour rainstorm volumes would be used to capture any sediments generated from the construction site before overflow can enter the streams. All construction activities would be done in compliance with applicable federal, state, and city regulations and rules for strict erosion control measures, including State Water Quality Standards as specified in HAR, Chapter 11-54 Water Quality Standards and Chapter 11-55 Water Pollution control, Department of Health.

The operational period stormwater drainage infrastructure would meet City and County of Honolulu requirements for capacity and water quality and Stormwater Runoff Requirements for Federal Projects under Section 438 of the Energy Independence and Security Act (EISA).

³ An ESCP is a component of a stormwater pollution prevention plan (SWPPP). An ESCP focuses on specific BMPs that reduce erosion and sediment from leaving the site. A SWPPP is an overall stormwater management plan that describes all the contractor's activities to prevent stormwater contamination, control sedimentation and erosion, and comply with the requirements of the Clean Water Act. It includes descriptions of the site, phasing, roles and responsibilities of contractors and subcontractors, and can include other documentation such as maintenance logs, training certifications and other items required by the project owner, or certified representative.

2.3.1.6 Construction Process

Actual construction methodology would be established by the contractor. However, the construction process would generally be as described below.

Site preparation for this alternative would include grading to provide level areas for building pads, parking areas, playfields, and ADA-accessible walkways, and a retaining wall constructed at the north end of the service/fire lane to accommodate grade changes from Parks Road to the school site. This would require removal of most of the existing vegetation, including about 56 ornamental trees throughout the project area. Of the 56 total trees, up to 48 mature monkeypod (*Samanea saman*) trees line Herian Place and Rice Street. Construction period BMPs would be established at the site, including erosion, dust, and sediment controls to prevent offsite effects. Construction equipment and vehicles would be mobilized to the site. Construction staging and contractor parking areas may be established on site or at an alternate area(s) at a site approved by USAG Hawaii. HIDOE would secure the appropriate approvals from USAG Hawaii (e.g., real estate license or lease, authorizations, etc.) prior to project implementation.

Construction vehicles would access the project site from Rice Street using the existing bridge (capacity during construction of 40 tons for one-way restricted access).

2.3.1.7 Operations

After completion and relocation of existing school functions into the new facilities, school operations would transfer from the existing school site to the new campus, retaining the same school hours. School buses (currently three buses) transporting students from off base residences would travel through the installation to the new site. Student drop-off and pick up via privately-owned vehicles (POVs) would shift from the existing school site to the new campus.

The existing campus facilities would be retained by HIDOE for the foreseeable future. Any future changes (including transfer of the State of Hawai'i-owned parcel to USAG Hawaii) would be undertaken as separate projects, unrelated to the Proposed Action.

The Proposed Action meets the screening factors listed in Table 2-1 and is therefore carried through the EA analysis.

2.3.2 No Action Alternative

Under the No Action Alternative, the Proposed Action would not occur. Shafter ES would continue to operate in facilities that do not meet current and projected HIDOE functional and space requirements—i.e., would not meet the project purpose. The No Action Alternative would cause HIDOE to forego available federal grant funding to support a 21st century learning environment for the children of active duty DoD personnel. Classrooms would remain undersized and instruction would continue to utilize temporary (portable) structures that do not provide an optimal environment for student achievement. Under this alternative, Shafter ES facilities would continue to fall short of HIDOE's facility standards. The No Action Alternative would not meet the purpose and need for the Proposed Action; however, it is carried forward for analysis in this EA to serve to establish a comparative baseline for analysis.

2.4 Alternatives Considered but not Carried Forward for Detailed Analysis

The following alternatives were considered but not carried forward for detailed analysis in this EA as they did not meet the purpose and need for the project and satisfy the reasonable alternative screening factors presented in Section 2.2.

2.4.1 Renovation and Reuse of Existing Shafter ES

HIDOE studied the feasibility of renovating and reusing buildings at the existing school campus to meet its current facility standards. Under this alternative, two existing buildings would be renovated and modernized primarily for classroom use, and two new buildings constructed at the existing Shafter ES campus. The new buildings would include a two-story administrative, cafeteria, and library building and a three-story classroom building. Three existing buildings and three existing portables would be demolished or removed to accommodate the new buildings and facility layout. Because of the limited site area, constructing extensions to existing buildings is not feasible. This alternative includes a new playfield, covered playcourt, reconfigured student drop-off areas, and new parking areas.

Because the existing school would need to remain operational during construction, this alternative would require six construction phases and a substantially longer construction duration than the Preferred Alternative. The extended duration and associated congestion, noise, dust, and vibration would have a significant detrimental effect on student achievement levels. The single access point to the campus at its northwest corner (from Ponciano Drive) and limited available open space severely constrains construction phasing, requiring the construction of a new bridge on the west side of campus over Kahauiki Stream. The new bridge would accommodate construction contractor access and avoid conflicts with student travel routes on or to/from campus and is crucial to feasibility of this alternative. Approval of the new bridge would require additional engineering and traffic studies, coordination with other USAG Hawaii infrastructure projects, and potentially USACE permits. As a result, it would substantially increase project costs, and increase the construction complexity and risk, failing to meet Screening Factor F.

Although this alternative would meet HIDOE's required facility program for indoor spaces, due to site constraints, it would only provide 25% of the required play area (0.72 acres), failing to meet Screening Factor B.

The southwest corner of the existing school site is located in a flood hazard area: Zone AE with Base Flood Elevation of approximately 14 feet. Floodplain development should be avoided to the extent practicable or be designed according to applicable federal and local requirements. Therefore, this alternative fails to meet Screening Factor I.

Adopted USAG Hawaii land use plans indicate relocation of the existing Shafter ES from its current site to the Shafter Ridge area (where the Preferred Alternative is located). The existing Shafter ES site is planned in the long term for operational support; therefore, recapitalizing the school in its current location fails to meet Screening Factor G.

Because this alternative fails to meet key screening factors, it is not considered a reasonable alternative and is not addressed in detail in this EA.

2.4.2 Construction at Alternate Site

Under this alternative, a new Shafter ES campus would be constructed at another site, on- or off-installation. There are no developable sites in areas at Fort Shafter that are not subject to operational,

environmental, and/or safety constraints or planned for other uses, and no appropriate sites to construct a new Shafter ES campus were identified; therefore, this alternative would not meet Screening Factor H. HIDOE does not own or control other property or facilities meeting physical siting requirements (e.g., of adequate size within the school's service area) that could be used, failing to meet Screening Factor B. Therefore, this alternative was determined to be not reasonable, and is not being carried forward for detailed analysis in the EA.

2.4.3 Revise School Service Area

Under this alternative, HIDOE would reconfigure the geographical service area of Shafter ES and reduce the total enrollment to match the physical capacity of the existing school. This alternative is not feasible because other HIDOE elementary schools in the region do not have the capacity to accommodate additional students now served by Shafter ES. Furthermore, as noted in Section 1.3, the school's current physical deficiencies include lack of elevators, undersized instructional classrooms with limited flexibility, lack of common gathering places, and suboptimal functionality of the library and computer lab spaces. This alternative would not meet Screening Factors A, B, and J and is not carried forward for detailed analysis in this EA.

2.5 Best Management Practices Included in Proposed Action

BMPs are existing policies, practices, and measures that HIDOE would adopt to reduce the environmental impacts of designated activities, functions, or processes. BMPs proposed to be incorporated in the Proposed Action are listed in Table 2-3; they may be modified during the detailed design and permitting process. Mitigation measures (that would reduce adverse impacts to less than significant levels), if any are warranted, are discussed separately in Chapter 3.

Table 2-3 Best Management Practices

BMP No.	Category/Issue	Description
1	Air quality (construction period)	Install industry-standard erosion and dust control measures (e.g., dust screens, frequent watering of exposed soils, landscaping of bare earth).
2	Air Quality (construction period)	Preparation and implementation of a dust control management plan that includes reasonable measures to control airborne, visible fugitive dust from the road areas. Construction equipment would utilize technology and standards that meet state and federal air quality requirements.
3	Air Quality (construction period)	All construction activities will comply with all applicable provisions of HAR Title 11, Chapter 59, related to Ambient Air Quality Standards and HAR 11-60.1-33, related to Fugitive Dust. A dust control management plan will be developed and implemented to include reasonable measures to control airborne, visible fugitive dust from the road areas.
4	Noise (construction period)	Use of properly muffled construction equipment, adherence to all applicable noise regulations, including but not limited to HAR 11-46.
5	Water Quality (construction and operational periods)	Temporary BMPs (e.g., silt fences, storm drain inlet protection, sediment traps, and soil stabilization) and permanent BMPs (e.g., berms, cut-off ditch, and vegetative ground cover) for erosion and sediment control purposes shall conform to the Erosion and Sediment Control Plans.
6	Water Quality (construction period)	All construction activities will be done in compliance with applicable federal, state, and city regulations and rules for strict erosion control measures, including State Water Quality Standards as specified in HAR, Chapter 11-54 Water Quality Standards and Chapter 11-55 Water Pollution control, Department of Health.

BMP No.	Category/Issue	Description
7	Water Quality (construction period)	An erosion and sediment control plan and Stormwater Pollution Prevention Plan (SWPPP) required for an NDPES permit will be prepared and include construction BMPs to manage the sediment and erosion generated from construction activities.
8	Water Quality (construction period)	A double layer of silt fence and/or filter socks would be installed at the perimeter of the project site where the streams are adjacent to the project site. Sediment basins or traps with a capacity to capture 2-year 24-hour rainstorm would be used to capture any sediments generated from the construction site, before overflow can enter the streams.
9	Water Quality (operational period)	Low Impact Development (LID) design would be implemented to reduce the volume and rate of stormwater runoff leaving the project area to match or reduce the volume and rate of the existing condition (e.g., underground infiltration basins, landscaped areas, or vegetated buffer strips to treat the required water quality volume).
10	Traffic (construction period)	Preparation and implementation of a Traffic Control Plan, including plans for detouring, flagging operations, and construction scheduling to minimize temporary traffic inconveniences
11	Construction Impacts	Preparation and execution of a Construction Management Plan (CMP) to avoid and minimize potential impacts of multi-year, on-site construction activities and ensure construction activities do not degrade the learning environment, base readiness, or quality of life
12	Hazardous Materials and Waste	Adherence to all applicable regulations during removal and transport of any hazardous materials or waste during school construction and operations
13	Solid Waste	Adherence to all applicable regulations during removal and transport of solid waste during school construction and operations
14	Hazardous Materials and Waste	Employment of personnel qualified to identify and handle hazardous materials if unexpectedly encountered
15	Public Health and Safety (construction period)	Secure and monitor the construction site to prevent unauthorized entry and potential exposure to injury or hazardous materials
16	Biological Resources	Avoid clearance of woody vegetation taller than 15 feet between June 1 and September 15 (Hawaiian hoary bat pupping season)
17	Biological Resources	Avoid use of barbed wire
18	Biological Resources	Avoid nightwork during seabird fledging season (September 15 through December 15); if nightwork is needed for unforeseen reasons, all efforts shall be made to avoid nightwork during the seabird fledging season except under emergency conditions. If nightwork does occur, lights will be fully shielded so the bulb can only be seen from below and automatic motion sensor switches and controls on all outdoor lights will be installed or lights will be turned off when human activity is not occurring in the lighted area.
19	Biological Resources	Installation of permanent exterior lighting that minimizes risks to protected species and other wildlife. Specific features will be determined during project design (e.g., fixtures compliant with International Dark-Sky Association standards) and comply with Army policies regarding outdoor lighting, as specified in Policy Memorandum USAG-HI-35, Wildlife Friendly Lighting and Dark Skies and HRS 201-8.5 (Night sky protection strategy).

BMP No.	Category/Issue	Description
20	Biological Resources	If any waterbirds are present during construction, all activities within 100 feet should cease and the bird or birds should not be approached. If a nest is discovered at any point, the contractor will contact Department of Land and Natural Resources Division of Forestry and Wildlife (DLNR DOFAW) and establish a buffer zone around the nest.
21	Biological Resources	Survey large trees proposed for removal or trimming during the construction phase for any white tern nests immediately prior to trimming or removal, especially the large monkeypod trees that line Herian Place and Rice Street. Any trees with tern eggs or chicks should be marked with blue flagging and not trimmed until the chicks have fledged.
22	Biological Resources	The feeding of feral animals (who could prey on vulnerable native or protected birds) would be prohibited during the construction and operational periods in compliance with Army Policy Memorandum USAG-HI-13 Animal Control Policy.
23	Biological Resources	Compliance with Army policies addressing invasive species and pests (e.g., Policy Memorandum USAG-HI-50, Green Waste Policy and Policy Memorandum DPW-HI-01 Avoidance of Little Fire Ant Introduction).
24	Biological Resources	All equipment, materials, and personnel would be cleaned of excess soil and debris to minimize the risk of spreading invasive species.
25	Biological Resources	New landscape vegetation would include native trees, hedges, and shrubs would be planted to the extent practical in accordance with Policy Memorandum DPW-HI-03, Landscaping with Native Plants.
26	Biological Resources	Retain a certified Project Arborist to direct tree protection measures during construction; pre-construction tree protection training for contractor; protect trees from damage from construction equipment, chemicals, and activities; protect tree roots during excavation (e.g., use root barriers, mulch, follow root pruning protocols established by the Project Arborist); avoid pruning roots within the tree protection zone that will be established for the project; apply supplemental watering during construction; monitor tree health; conduct crown pruning under Project Arborist supervision).
27	Cultural Resources	If cultural resources or potential historic properties are encountered during project activities, the project will follow applicable laws and regulations, including but not limited to HAR 13-280, HAR 13-300-40, and 36 CFR 800.13.

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3 Affected Environment and Environmental Consequences

3.1 Introduction

This chapter presents a description of the environmental resources and baseline conditions that could be affected by implementing the alternatives and an analysis of the potential direct and indirect effects of each alternative.

According to HRS 343-2, "significant effect" means "the sum of effects on the quality of the environment, including actions that irrevocably commit a natural resource, curtail the range of beneficial uses of the environment, are contrary to the State's environmental policies or long-term environmental goals as established by law, or adversely affect the economic welfare, social welfare, or cultural practices of the community and State." In most cases, an agency determines that an action may have a significant impact on the environment if it meets certain criteria (see Chapter 6 Anticipated Determination for list of criteria and analyses).

A "region of influence" (ROI)—the geographic area where most of the direct and indirect effects of the project are likely to occur—is defined for each resource area evaluated. The ROIs for the resources studied may differ depending on how the Proposed Action interacts with or impacts the resource. For example, the ROI for geology may only include the construction footprint of a building whereas the noise ROI expands out to include areas that may be impacted by operational or construction noise.

Potential impacts are defined by the following levels of significance:

- Significant impact
- Significant impact but mitigable to less than significant
- Less than significant impact
- No impact

All potentially relevant environmental resource areas were initially considered for analysis in this EA. However, the analysis focuses only on those resource areas potentially subject to impacts from the Proposed Action: ***air quality, geological resources, water resources, biological resources, cultural resources, transportation, natural hazards, climate change, and hazardous materials and wastes***. The level of detail used in describing a resource is commensurate with the anticipated level of potential environmental impact.

The potential impacts to several resource areas are considered to be non-existent, negligible, or minor and were not analyzed in detail in this EA. Table 3-1 presents these resource areas and the rationale for their dismissal from detailed environmental analysis.

Table 3-1 Environmental Resource Areas Dismissed from Detailed Analysis

<i>Environmental Resource Area</i>	<i>Rationale for Dismissal</i>
Airspace	Construction and operation of the Proposed Action would not involve impacts to military or civilian airspace or facilities. The proposed school facilities would not extend into the approach or departure surfaces of any civilian or military airport or airfield or involve changes in the use of airspace. The project will be designed to comply with Hawai'i Department of Transportation's (HDOT) Technical Assistance Memorandum (TAM-2016-1, issued August 1, 2016). The project will comply with the Federal Aviation Administration (FAA) regulation requiring the submittal of FAA Form 7460-1 Notice of Proposed Construction or Alteration pursuant to the Code of Federal Regulations, Title 14, Part 77.9 if the construction or alteration is within 20,000 feet of a public use or military airport, which exceeds a 100:1 surface from any point on the runway of each airport with its longest runway more than 3,200 feet. Construction equipment and staging area heights, including heights of temporary construction cranes, shall be included in the submittal. A solar energy photovoltaic (PV) system is not currently planned for the project. If a solar PV system is constructed for the school, it would be designed in accordance with HDOT/FAA requirements to limit solar glint and glare on aircraft and a glint/glare analysis would be prepared, meeting the requirements of FAA Form 7460-1. If the solar PV system is found to emit radio frequency interference (RFI) to aviation-dedicated radio signals, HIDOE would immediately mitigate the RFI hazard upon notification by HDOT and/or FAA. The Proposed Action would not introduce land use practices that potentially attract wildlife that may be hazards to aircraft operations (e.g., waste disposal operations, water management facilities, wetlands, dredge spoil containment areas, agricultural activities, aquaculture, and golf courses). The proposed landscaping would reduce the overall tree canopy due to the removal of existing mature trees to provide developable area. No ponds or water features are proposed that could attract wildlife hazardous to aircraft operations. If the development creates a wildlife attractant, the project owner would mitigate the hazard immediately upon notification by HDOT or FAA. Therefore, no additional analysis is required with respect to airspace impacts.
Infrastructure	The Proposed Action would require replacing and upgrading connections to existing site infrastructure for electrical power, telecommunications, potable and fire protection water, storm drainage, and wastewater infrastructure to serve the new campus. Infrastructure construction and installation activities related to the Proposed Action may result in temporary interruptions in service; however, the contractor would coordinate the activities with the USAG Hawaii and HIDOE to minimize any inconvenience to surrounding users. Notice of the proposed EA was provided to various public utility providers (e.g., Honolulu Board of Water Supply, Honolulu Department of Facility Maintenance, Hawaiian Electric Company, Hawaiian Telcom, Spectrum Hawai'i); no objections or concerns were raised (see Appendix A for correspondence). The project is being designed to provide adequate utilities service to the relocated school and its operations are unlikely to result in adverse impacts to on- or off-base utilities and infrastructure systems. Because the impacts to infrastructure are not likely to cause an unacceptable impairment of utility services to Fort Shafter or the surrounding civilian communities, detailed environmental analysis is not warranted in this EA.
Land Use	Under the Proposed Action, land use of the project area would change from a vacant family housing area to primary school educational facilities. Both uses are considered community support land uses. Relocating Shafter ES from its current location near Fort Shafter administrative, operational, and industrial facilities would generally improve land use compatibility at the installation. The current campus facilities are assumed to remain and be converted to administrative or other mission support functions that would be more compatible with surrounding uses. Therefore, land use requires no additional analysis in this EA.
Noise	Construction of the Proposed Action would result in short term, intermittent noise impacts from the operation of construction equipment and vehicles throughout the project area. However, these

Environmental Resource Area	Rationale for Dismissal
	impacts are not anticipated to be significant as they would be short term and temporary in nature and construction activities would be conducted in accordance with HAR Chapter 11-46 Community Noise Control. Upon completion, school activities would intermittently elevate ambient noise levels during recess, lunch periods, and special events held outdoors. Because these activities would be limited in duration and held during daylight hours during weekdays, they are not expected to adversely affect neighboring noise-sensitive uses. In addition, the school classrooms will be air conditioned and enclosed, limiting classroom noise that can be perceived by neighbors during instructional hours. The nearest home is over 100 feet from the outdoor play area, a distance that is common for public schools in Hawai'i. Most school gatherings would be held in the covered playcourt, which will be partially enclosed and over 400 feet from the nearest home. Neighboring homes are air conditioned, further reducing noise school-related noise impacts to surrounding residents. In its letter dated June 17, 2024, HDOT noted that, due to its proximity to the Daniel K. Inouye International Airport (HNL), there is a potential for the relocated school to be affected by noise from aircraft operations. However, the new school site's entire project area is outside the 65 day-night average sound level (DNL or Ldn) contour of HNL. Per 14 CFR Part 150, all land uses are considered to be compatible with noise levels less than DNL 65 db. The entire project area is almost one mile outside the 65 DNL contour of HNL, and, in fact, is over 600 feet outside the 55 DNL contour. See https://www.arcgis.com/apps/mapviewer/index.html?layers=2ffc93af65a748e6adcc4fe497b5ea9d. The new campus would be farther from the airport than the existing campus and any airport-related noise is unlikely to be substantially different than at the existing school site. Therefore, detailed analysis of noise impacts is not warranted in this EA.
Public Health and Safety	Safety protocols, standard operating procedures, and BMPs would be implemented during the construction period (e.g., signage, temporary barricades and safety fencing at the construction site; access control; compliance with federal, state, and county health and safety regulations, including for the removal, handling, remediation, transport, storage, and disposal of any hazardous materials; adherence to USAG Hawaii traffic controls). The new facilities would be designed to meet current building standards and codes, and school operations would comply with all applicable laws, regulations, and standards. The Proposed Action would not increase the likelihood that children would come in contact with or ingest products or substances that present environmental health and safety risks during the construction or operational periods. A protective net installed along the north boundary of the campus would shield school students and staff from errant golf balls from the adjacent golf course. Therefore, no further analysis of public health and safety impacts is warranted in this EA.
Public Services and Facilities	Public services such as police and fire protection would remain unchanged from existing conditions. The Proposed Action would not substantially change demand for these services from existing levels, as school operations would be relocated, but school population and demographics would be similar with or without the project. The Proposed Action would be designed to meet all applicable USAG Hawaii and Honolulu Fire Department (HFD) requirements for access, water supply, and building design (see HFD letter dated May 23, 2024 in Appendix A). In its letter dated June 5, 2024, the Honolulu Police Department (HPD) had no comments and offered no objections to the Proposed Action (see Appendix A). The Proposed Action would have no impact on public facilities such as libraries, hospitals, and meeting facilities. Therefore, they are not evaluated in detail in this EA.
Recreational Resources	Construction and operation of the Proposed Action would not impact access to existing on- or off-base recreational facilities. There would be temporary noise and air quality impacts to the adjacent Nagorski Golf Course, but they would be short-term and intermittent, depending on the phase of construction. In the operational period, children playing on the playfield, play court, and pre-kindergarten and kindergarten play areas would elevate ambient noise levels. However, these

<i>Environmental Resource Area</i>	<i>Rationale for Dismissal</i>
	outdoor activities would be of short duration. Outdoor recreation, such as a golf course, is not generally considered a noise sensitive land use. Therefore, detailed analysis of recreational impacts is not warranted.
Socioeconomics	Construction and operation of the Proposed Action would not impact population; long-term employment/industry characteristics; demand for schools, housing, recreational facilities; or demographic, economic, or fiscal conditions of the City and County of Honolulu or State of Hawai'i. Economic benefits of construction job creation would be temporary and associated with project construction. After its completion, the new school facilities would serve a student population that would occur at Fort Shafter with or without the project. Therefore, the project would not result in secondary impacts related to increasing development capacity or population growth.
Visual Resources	Under the Proposed Action, new one-, two-, and three-story buildings would be constructed, which would alter views into the campus from adjacent roadways and golf course. However, the introduction of multiple story buildings at the project area would not have a substantial adverse effect on scenic vistas and view planes—during day or night—that are identified in county or state plans or studies. Therefore, no additional analysis of visual resources is provided in this EA.

3.2 Air Quality

3.2.1 Regulatory Framework

3.2.1.1 Criteria Pollutants and National Ambient Air Quality Standards

The principal pollutants defining the air quality, called “criteria pollutants,” include carbon monoxide (CO), sulfur dioxide (SO₂), nitrogen dioxide (NO₂), ozone, suspended particulate matter less than or equal to 10 microns in diameter (PM₁₀), fine particulate matter less than or equal to 2.5 microns in diameter (PM_{2.5}), and lead (Pb). CO, SO₂, Pb, NO₂, and some particulates are emitted directly into the atmosphere from emissions sources. Ozone, NO₂, and some particulates are formed through atmospheric chemical reactions that are influenced by weather, ultraviolet light, and other atmospheric processes.

Ambient air pollution concentrations are regulated under federal Clean Air Act (CAA) regulations found in 40 CFR Part 50, and under the State of Hawai'i Ambient Air Quality Standards (AAQS) found in HAR Chapter 11-59. National AAQS are divided into primary and secondary standards. The primary standards are intended to protect public health with an adequate margin of safety, while secondary standards are intended to protect public welfare through the prevention of damage to soils, water, vegetation, animals, wildlife, man-made materials, visibility climate and economic values. State of Hawai'i AAQS are equal to or more stringent than National Ambient Air Quality Standards (NAAQS). State standards have been established for particulate matter, SO₂, NO₂, CO, ozone and Pb, and intended to “protect public health and welfare and to prevent the significant deterioration of air quality.” The state has also set a standard for hydrogen sulfide (H₂S).

3.2.1.2 General Conformity

Areas that are and have historically been in compliance with the (NAAQS) are designated as “attainment areas.” Areas that violate a federal air quality standard are designated as “nonattainment areas.” Areas that have transitioned from nonattainment to attainment are designated as maintenance areas and are required to adhere to maintenance plans to ensure continued attainment.

The U.S. Environmental Protection Agency (USEPA) General Conformity Rule applies to federal actions occurring in nonattainment or maintenance areas when the total direct and indirect emissions of nonattainment pollutants (or their precursors) exceed specified thresholds. This rule is not applicable for this project as there are no nonattainment or maintenance areas in Hawai'i.

3.2.2 Affected Environment

3.2.2.1 Region of Influence

The ROI for air quality impacts is generally limited to the area that may be directly or indirectly impacted by construction-related emissions. In this analysis, the ROI is limited to the main Fort Shafter installation.

3.2.2.2 Existing Conditions

The State of Hawai'i Department of Health (HDOH) operates a network of five air quality monitoring stations on O'ahu. None are located in the immediate vicinity of Fort Shafter, with the nearest being located on Sand Island, about three miles to the southeast. Data from these monitoring stations indicate that the air quality on O'ahu is generally good, which is primarily due to the prevailing trade winds that provide constant air circulation. In 2022, Hawai'i was in attainment of all NAAQS and criteria pollutant levels remain below state and federal ambient air quality standards at all state and local air monitoring stations (HDOH, 2023). (Note: Volcanic activity on Hawai'i Island resulted in occasional exceedances of national AAQS for SO₂ and PM_{2.5} at some monitoring stations on that island; however, the volcanic eruptions are considered natural events and USEPA may exclude these exceedances of the national AAQS from its attainment determinations.)

Emissions sources at Fort Shafter are minimal and include stationary sources such as emergency generators, liquefied propane gas-fired boilers and heaters, welding booths, and kilns (USACE, 2004). Vehicle transportation routes such as H-201 Freeway and on-base roadways are also sources of air emissions in or near the ROI.

3.2.3 Environmental Consequences

3.2.3.1 No Action Alternative

The No Action Alternative would result in no air quality impacts, as no changes to existing conditions would occur.

3.2.3.2 Preferred Alternative

During the construction period, the Proposed Action would have direct short-term impacts on localized air quality within the ROI resulting from construction activities such as earth-moving, the transit of construction and crew vehicles, and the operation of construction equipment. Emissions associated with equipment used during construction are not anticipated to violate any state or federal air quality standards. Long-term negative impacts related to air quality are not anticipated as construction equipment will utilize technology and standards that meet state and federal air quality requirements. Implementation of dust control measures would minimize the transport of fugitive dust into neighboring land uses, such as the adjacent School Age Center, Child Development Center, and residential communities.

In the operational period, the Proposed Action would have less than significant air quality impacts, as the new school facilities would not introduce additional pollutant sources. Differences in traffic patterns,

congestion, and volumes would be negligible (see Section 3.7 for a discussion of the project's potential impacts on traffic). In its pre-assessment consultation comments, HDOT noted that, due to its proximity to the Daniel K. Inouye International Airport (approximately two miles to the southwest), the Proposed Action would potentially be subjected to fumes, smoke, vibrations, and odors resulting from occasional aircraft flight operations over or near the project area, depending on airport operations (see Appendix A for HDOT comments). Because of the distance to the airport runway, standard approach and departure flight paths that generally follow the coastline or over ocean rather than inland routes, prevailing trade wind direction towards the airport and away from the project area, and the likely altitudes of any overflying aircraft, it is very unlikely that the cited potential air quality impacts would result in greater impacts to school operations.

Therefore, the Proposed Action would have less than significant impacts on air quality.

3.3 Geological Resources

3.3.1 Regulatory Framework

The primary applicable law or regulation for geological resources (including soils) are the Farmland Protection Policy Act (7 CFR Part 658), which was enacted to minimize the loss of prime and unique farmlands as a result of federal actions.

3.3.2 Affected Environment

3.3.2.1 Region of Influence

The ROI for analyzing potential impacts related to geological resources (including soils) is limited to the project site where ground disturbing and construction activities would occur.

3.3.2.2 Existing Conditions

O'ahu was formed from two eruptive centers, the Ko'olau and Waianae volcanoes. Throughout the period of mountain building and erosion, eroded sediments have been deposited on the margins of the islands. At the same time, coral reefs have formed in shallow waters fringing the islands. The rise and fall of sea levels over thousands of years have alternately inundated and exposed these sediments, and in some areas a thick cap of calcareous deposits or "caprock" has developed on coastal margins that serve to confine groundwater as it flows toward the sea through the underlying aquifers (Tetra Tech, Inc., 2006).

The project area ranges in elevation from about 128 feet above mean sea level (MSL) at the south corner to 170 feet above MSL at the eastern portion of the site. The site generally slopes from northeast to southwest, with an average slope of four to five percent.

According to U.S. Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS) soils classifications, the majority of the project area consists of Makiki stony clay loam, 0 to 3 percent slopes (MIA), which are characterized as well drained with low runoff (Figure 3-1). Smaller areas of the project site consist of Kawaihapai stony clay loam, 2 to 6 percent slopes along the northwestern and southeastern sections of the site. These soils are found on drainageways on mountain slopes and alluvial fans are well drained, with very low runoff properties.

The Land Study Bureau (LSB) of the University of Hawai'i prepared an inventory and evaluation of the State's land resources during the 1960s and 1970s. The LSB evaluated the quality or productive capacity

of certain lands for selected crops and overall suitability for agricultural use. A five-class productivity rating system was established with “A” representing the class of highest productivity and “E” the lowest. The project area is not classified by LSB.

The Agricultural Lands of Importance in the State of Hawai‘i (ALISH) land classification system was developed by the State Department of Agriculture in 1977. The project area is located in urbanized lands that are not classified under the ALISH system.

Soils present at the site are not considered prime or unique farmland.

3.3.3 Environmental Consequences

3.3.3.1 No Action Alternative

Under the No Action Alternative, the Proposed Action would not occur and there would be no change to baseline geology, topography, or soils. Therefore, the No Action Alternative would not impact geological resources.

3.3.3.2 Preferred Alternative

The Preferred Alternative would result in ground disturbance and changes in site topography due to grading of the project area to provide level areas for building pads, parking areas, playfields, and ADA-accessible walkways throughout the campus. Retaining walls would be needed in the northeast corner of the site to accommodate the proposed fire/service lane (see Figure 2-1). These site improvements or operation of the new school would not alter significant geological features (e.g., notable natural formations created by geological processes) as the site was previously graded and altered during development of the former family housing area. Site grading would comply with City and County of Honolulu requirements. During construction, in addition to construction period BMPs (see Section 2.5), an ESCP would be prepared and submitted by a certified ESCP preparer to the City and County of Honolulu, Department of Planning and Permitting for review and approval prior to issuance of a building, grading, grubbing, stockpiling, or trenching permit. During the

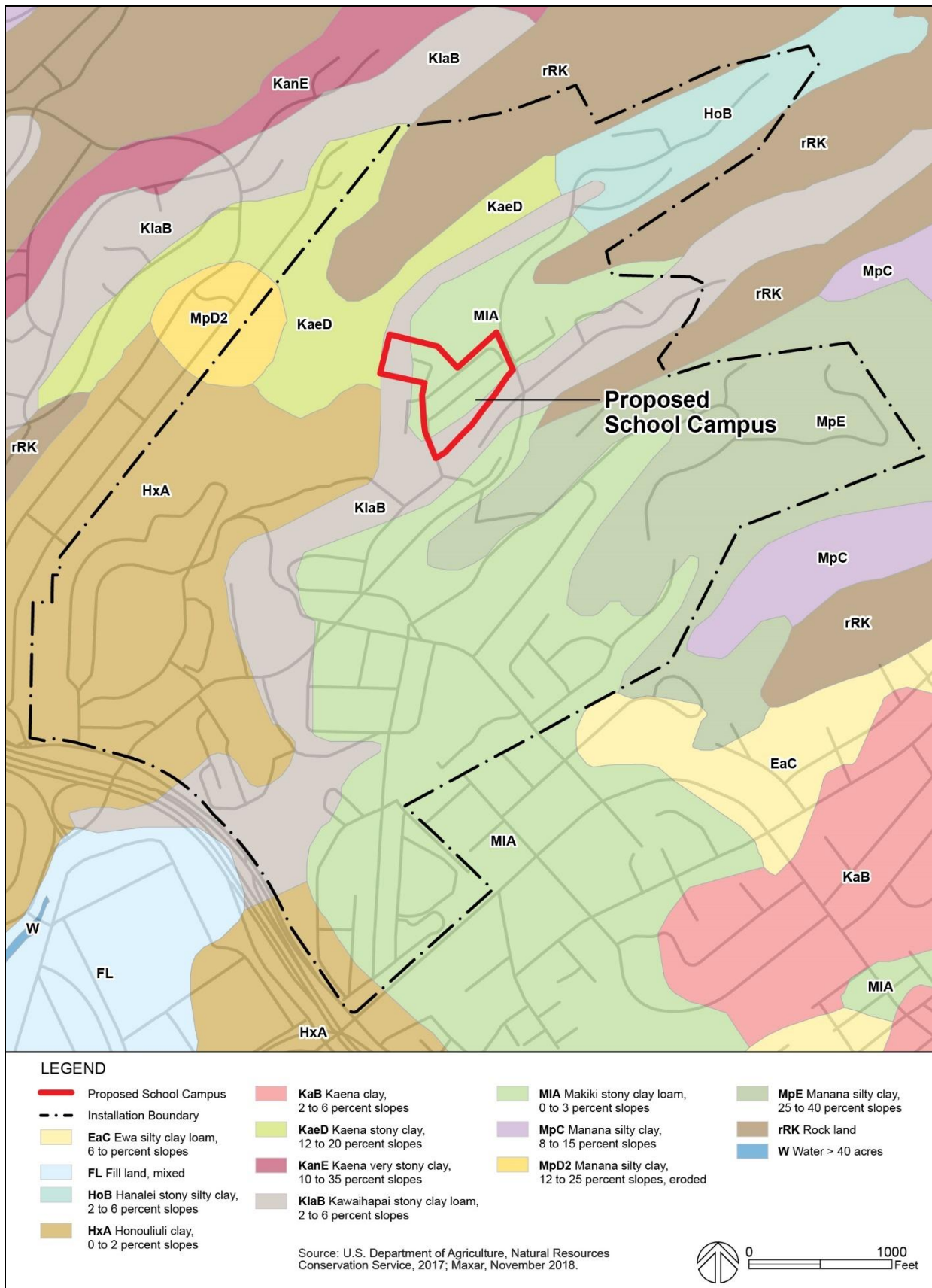


Figure 3-1 NRCS Soil Classifications

operational period, no changes to geological features, topography, or soils are anticipated. No prime or unique farmland is present at the project area and none would be impacted by this alternative.

Therefore, implementation of the Preferred Alternative would have less than significant impacts on geological resources.

3.4 Water Resources

3.4.1 Regulatory Framework

The primary applicable laws and regulations for water resources are the federal Coastal Zone Management Act of 1972 (CZMA), Safe Drinking Water Act (SDWA), Clean Water Act (CWA), National Flood Insurance Act, Section 10 of the Rivers and Harbors Act, and Executive Order 11988, *Floodplain Management*.

3.4.2 Affected Environment

3.4.2.1 Region of Influence

The ROI for water quality impacts includes surface water resources in the immediate vicinity of the project area as well as downstream receiving waters.

3.4.2.2 Existing Conditions

Surface Waters and Wetlands. Fort Shafter is within the Moanalua watershed. Kahauiki Stream flows southwest from its headwaters in the Ko'olau Range through the installation until its confluence with Moanalua Stream outside and south of the installation borders. It is classified as an Inland Class 2 stream. Moanalua Stream borders the southwestern edge of the installation close to the Shafter Flats area; it discharges into Ke'ehi Lagoon approximately 1.5 miles to the south, which has a Total Maximum Daily Load (TMDL) Priority Code of H (High). The receiving body of water is Mamala Bay (Marine Class A classification). Kahauiki Stream receives stormwater runoff within the installation, where much of it is channelized. A segment of Kahauiki Stream runs along the northwest boundary of the project area (see Figure 1-1), separating it from the adjacent Walter J. Nagorski Golf Course (see Figure 2-2). The site generally slopes from northeast to southwest with an average slope of 4-5%, and stormwater runoff from the project area enters Kahauiki Stream by sheet flow or drainage pipe.

During a biological survey conducted in September 2023, no wetland indicators were observed in the sections of Kahauiki Stream and the drainageway adjacent to the southeast that border the project area. However, in the absence of wetlands, the ordinary high water mark (OHWM) defines the lateral limits of federal jurisdiction in non-tidal waters of the U.S., which include Kahauiki Stream and the adjacent drainageway that would be impacted by proposed storm drain outfalls that would discharge into these surface waters.

Stormwater from the north and south sectors of the project area currently discharge into Kahauiki Stream and the drainageway bordering the site to the southeast. Storm runoff from the site's central sector discharges into off-site drain inlets.

Groundwater. The Moanalua aquifer is the main groundwater source providing water-bearing layers at 120 to 250 feet below Fort Shafter (U.S. Army Environmental Command [USAEC], 2008 in USAEC, 2014). Recharge is provided by infiltration and stormwater runoff. In addition, an alluvial caprock aquifer is

located above the Moanalua aquifer and is several to 25 feet below the surface (USAEC, 2014). Recharge is provided by infiltration, stormwater runoff, and seepage from the main aquifer (USAEC, 2014).

Two water supply wells are located at Fort Shafter (USAEC, 2008, in USAEC, 2014). Groundwater is pumped out of the wells and treated with chlorine and fluoride prior to distribution for use at Fort Shafter. USAG Hawaii samples the drinking water for a robust range of contaminants in compliance with the SDWA and publishes an annual Consumer Confidence Report (CCR) to its water customers. The CCR provides drinking water quality information, including the origin of the drinking water and any detected contaminants. According to the 2025 CCR for Fort Shafter, all the substances tested for were below contaminant levels set by the USEPA. The installation's water supply system is also interconnected with the City and County of Honolulu's municipal water system for emergency water situations.

3.4.3 Environmental Consequences

3.4.3.1 No Action Alternative

Under the No Action Alternative, there would be no change to existing surface or groundwater resources, as no new uses or inputs to receiving waters would occur. Therefore, this alternative would not impact water resources.

3.4.3.2 Preferred Alternative

Under the Preferred Alternative, there may be minor adverse impacts to water resources due to construction grading and earth moving that could result in sediments and any pollutants they contain entering the surrounding surface waters via stormwater runoff. Stormwater Runoff Requirements for Federal Projects under Section 438 of the Energy Independence and Security Act will be followed. Best management practices to contain offsite transport of sediments and pollutants would avoid or minimize this impact (see Section 2.5). All construction activities would be done in compliance with applicable federal, state, and city regulations and rules for strict erosion control measures, including State Water Quality Standards as specified in HAR, Chapter 11-54 Water Quality Standards and Chapter 11-55 Water Pollution control, Department of Health. An erosion and sediment control plan required for a NDPES permit would be prepared and include construction BMPs to manage the sediment and erosion generated from construction activities (see Section 2.5).

During the operational period, stormwater would be collected via a new on-site drainage system and conveyed to discharge outfalls in Kahauiki Stream and the adjacent drainageway. This would be similar to the existing practice described in Section 3.4.2; however, stormwater would first be detained in underground detention ponds equipped with water quality units to remove sediments and pollutants prior to discharge into the receiving stream and drainageway. This is expected to improve the quality of stormwater discharged into the receiving stream and drainageway, and subsequently to downstream receiving waters. Permanent BMPs and LID design measures would be implemented to reduce the volume and rate of stormwater runoff leaving the project area to match or reduce the volume and rate of the existing condition. The increase in impervious area will be mitigated through LID BMPs such as underground infiltration basins, landscaped areas, or vegetated buffer strips to treat the required water quality volume as required by federal, state, and county regulations and rules. Appropriate measures would be taken to adhere to any requirements for preserving water quality in the project area.

Because the new stormwater outfalls would be installed below the OHWM, a USACE (CWA) Section 404 permit is anticipated to be required. HIDOE and/or USAG Hawaii would coordinate with USACE to

confirm whether jurisdictional waters of the U.S. would be affected by the Proposed Action. If required, the Proposed Action would comply with all CWA Section 404 permit conditions to avoid or minimize potential adverse impacts to jurisdictional waters of the U.S. Therefore, the Preferred Alternative would have less than significant impacts to water resources.

3.5 Biological Resources

3.5.1 Regulatory Framework

The primary applicable laws and regulations for biological resources are the Endangered Species Act (ESA), the Marine Mammal Protection Act, the Migratory Bird Treaty Act, the Bald and Golden Eagle Protection Act, and the Magnuson-Stevens Fishery Conservation and Management Act.

3.5.2 Affected Environment

3.5.2.1 Region of Influence

The ROI for analyzing potential impacts to biological resources is limited to the project area and adjacent segments of Kahauiki Stream (north and west of the project area) and the unnamed stream drainage channel along the south perimeter of the project site. The unnamed stream drainage channel eventually connects to Kahauiki Stream approximately 400 feet to the southwest of the project area.

The approximately 8.3-acre project area encompasses the former Rice Manor family housing area. USAG Hawaii will demolish 15 abandoned residential structures under a separate and unrelated action before the new school construction begins. About two acres in the northwest sector of the site (north of Rice Loop) consists of an open grassy field, in which a ¼-acre fenced dog park has been established. Military family housing units previously occupied this area; these units were removed in circa 2015. LeGrande Biological Surveys Inc. conducted a biological survey in September 2023 to document the plant and animal species observed within the project area, survey the stream and drainage channel for signs of wetland potential, and to provide conclusions of impact and means to avoid or minimize adverse impacts (see Appendix B for the report, including methods and detailed results).

3.5.2.2 Existing Conditions

Flora

The project area includes large monkeypod (*Samanea saman*) trees along Rice Street and Herian Place, with scattered plumeria (*Plumeria rubra*), Cook pine (*Auracaria columnaris*), mango (*Mangifera indica*), kiawe (*Prosopis pallida*), and 'opiuma (*Pithecellobium dulce*) trees. The interior and periphery host plants like octopus tree (*Heptapleurum actinophylla*), Chinese banyan (*Ficus macrocarpa*), koa haole (*Leucaena leucocephala*), and Guinea grass (*Megathyrsus maximus*). The southern drainage channel, which was dry during the survey, is overgrown with Guinea grass and African tulip (*Spathodea campanulata*). The northern section, near the golf course, features large trees such as monkeypod and Moreton Bay fig (*Ficus macrophylla*), along with shower tree (*Cassia* sp.) and satin leaf (*Chrysophyllum oliviforme*). A small cluster of native shrubs used as landscaping, including 'a'ali'i (*Dodonaea viscosa*) and 'ūlei (*Osteomeles anthyllidifolia*), are in the northwest corner.

A certified arborist prepared a tree assessment in December 2024 to evaluate the condition of the existing trees, identify project impacts, and recommend mitigation measures for the remaining trees. No High Value Trees (i.e., endangered, historically, or culturally significant) were identified during the

assessment. The assessment found that the trees in the project area were in reasonably good health, and those that may remain in place appeared to be in good condition with no significant decay, crown, damage, insect damage, or root damage observed.

Fauna

Avian Fauna

A total of 15 species, representing 12 separate families were observed during the survey. Three species—Zebra Dove (*Geopelia striata*), Common Myna (*Acridotheris tristis*) and red-vented bulbul (*Pycnonotus coronata*)—were the most frequently observed. The indigenous migratory kōlea or Pacific golden plover (*Pluvialis fulva*) were abundant in the grassy lawn areas and an adjacent golf course (see Table 1 in Appendix B).

The manu-o-kū or white tern (*Gygis alba*) is listed as threatened by the State of Hawai‘i and is only found on O‘ahu. The nearest nests are 1.5 miles to the south at Bishop Museum and 4.5 miles west at Joint Base Pearl Harbor-Hickam (WhiteTerns.org, 2023).

No other seabird or suitable seabird habitat was found within the project area. However, protected night-flying Hawaiian seabirds may overfly or otherwise use the area. They include Hawaiian Petrel, Band-rumped Storm-Petrel, and the threatened Newell’s Shearwater.

Mammalian Fauna

Two cats (*Felis catus*) were observed near Rice Drive, while several Small Indian mongooses (*Urva auropunctata*) were noted throughout the project area. Feral pig (*Sus scrofa*) signs were found just outside the survey area along Parks Road, where a leaking sprinkler created a rooted wet spot. The U.S. Fish and Wildlife Service (USFWS)’s Informal Information for Planning and Consultation (IPaC) online tool was used in April 2023 to generate a list of federally protected flora and fauna species whose range includes the project area. (Note: Species on the IPaC list are not necessarily found within the specific study area, although their ranges may overlap the project area.) The IPaC list outlined that ‘ōpe‘ape‘a or Hawaiian hoary bat (*Lasiurus cinereus semotus*) could potentially occur or transit through the vicinity of the proposed project areas.

Invasive Species and Pests

The coconut rhinoceros beetle (CRB) or *Oryctes rhinoceros*, an invasive species from Southeast Asia, threatens coconut and native palm trees in Hawai‘i, but none were observed at the project area during the survey. Little fire ants (LFA) are a new, invasive stinging ant that is spreading across the Hawaiian islands, but none were observed at the project area during the survey.

Threatened and Endangered Species

The IPaC list created for the Proposed Action identified 11 endangered plant species: ‘aiea (*Nothocestrum latifolium*), ‘akoko (*Euphorbia celastroides* var. *kaenana* and *E. kuwaleana*), ‘ena‘ena (*Pseudognaphalium sandwicense* var. *molokaiense*), and Carter’s panicgrass (*Panicum fauriei* var. *carteri*), ihi (*Portulaca villosa*), kamanomano (*Cenchrus agrimonoides*), ‘ohai (*Sesbania tomentosa*), *Spermolepis hawaiiensis*, *Vigna o-wahuensis*, and *Microlepis strigosa* var. *mauiensis* (USFWS, 2023 in LeGrande Biological Surveys, 2023). None of the eleven species from the IPaC report and no plant species listed as endangered or threatened under federal or state statutes were found during the biological survey.

The informal IPaC list created for the Proposed Action included nine faunal species that have the potential to occur or transit through the vicinity of the project area: one mammalian species Hawaiian hoary bat (*Lasiurus cinereus semotus*) and eight avian species: Hawai'i Akepa (*Ioxops coccineus*), Hawaiian Petrel (*Pterodroma sandwichensis*), Band-rumped Storm-Petrel (*Hydrobates castro*), Newell's Shearwater (*Puffinus newelli*), Hawaiian Duck (*Anas wyvilliana*), Hawaiian Common Gallinule (*Gallinula galeata sandvicensis*), Hawaiian Coot (*Fulica americana alai*), and the Hawaiian Stilt (*Himantopus mexicanus knudseni*). The 2023 biological survey found that, of the eight federally-protected avian species on the IPaC list, three may over-fly the general area between April and the middle of December each year in small numbers. There is no suitable nesting habitat within or close to the project area, although suitable habitat may exist in the upper elevations of the Ko'olau Mountains.

It is probable that the endemic Hawaiian hoary bat or 'ōpe'ape'a (*Lasiurus cinereus semotus*) overfly the project area on a seasonal basis. This species will forage and roost in a wide range of habitats including forest canopies, edges of forests, and open pastures (Bonaccorso et al., 2015 in LeGrande Biological Surveys, 2024).

In addition, State-listed pueo or Hawaiian short-eared owl (*Asio flammeus sandwichensis*) and nēnē or Hawaiian goose (*Branta sandvicensis*) could potentially occur in the project vicinity. However, it is highly unlikely that either species would be present at the site as there are no nēnē on O'ahu and there is limited foraging for pueo at or near the project area.

Critical Habitat

The project area contains no federally delineated Critical Habitat (USFWS, nd-b and USFWS, 2023 in LeGrande Biological Surveys, Inc., 2024).

Wetlands/Riparian Habitat

While the National Wetland Inventory (NWI) maps the streams in close proximity to the survey area, no wetland indicators were observed in the adjacent drainageway or stream during the project's biological survey. As noted in Section 2.3.1.5, the construction of new drainage outfalls at the stream may require a permit from the USACE; this will be confirmed with USACE when plans for the stormwater outfalls are available.

3.5.3 Environmental Consequences

3.5.3.1 No Action Alternative

Under the No Action Alternative, the Proposed Action would not occur and there would be no change to biological resources. Therefore, no impacts to biological resources would occur with the No Action Alternative.

3.5.3.2 Preferred Alternative

Flora

Although the Preferred Alternative would remove most if not all the existing vegetation within the project area, it would result in insignificant impacts to plant species for the following reasons. There are no High Value Trees at the site (i.e., endangered, historically, or culturally significant). Human activities have extensively modified the native plant habitat in the project area through agriculture, road construction, and landscaping. The removal of approximately 56 mature trees (mostly monkeypod trees; none of which are state- or federally-protected) would impact the general area by decreasing shade.

However, at least 56 new trees are proposed for the new campus, representing a more diverse slate of species than the current tree inventory. For example, native plant species are proposed, focusing on those that are well-suited to the area's climate conditions and have historically existed in the region.

Due to the age, size, and logistical challenges, relocation of the monkeypod trees is not recommended. Two monkeypod trees along the east side of Rice Street may be a possible exception to this general recommendation. They may be of a size practical to shift to accommodate the proposed project paving. Six new monkeypod trees are proposed to be installed along the east side of Rice Street and within the north-south segment of the school access drive to maintain the existing theme of a monkeypod tree canopy along Rice Street; they would replace five existing monkeypod trees that would be removed within the same corridor. Elsewhere on campus, alternative canopy trees are proposed to diversify the plantings for resilience and to reduce maintenance from tree litter.

To avoid or minimize potential damage to existing trees that would remain, the following general mitigation measures would be employed: retain a certified Project Arborist to direct tree protection measures during construction; pre-construction tree protection training for contractor; protect trees from damage from construction equipment, chemicals, and activities; protect tree roots during excavation (e.g., use root barriers, mulch, follow root pruning protocols established by the Project Arborist); avoid pruning roots within the tree protection zone that will be established for the project; apply supplemental watering during construction; monitor tree health; conduct crown pruning under Project Arborist supervision).

Fauna

The Preferred Alternative would have insignificant impacts on fauna species as almost all the species observed on the project site are alien species (introduced by humans, naturalized). No waterbirds were observed and no habitat for any of the four native protected waterbirds found on O'ahu is present on the site. None of the protected seabirds are expected to nest within the project area. The removal of up to 48 mature monkeypod trees that line Herian Place and Rice Street would impact the general area by potentially disrupting roosting and/or nesting habitat for the native white tern and Hawaiian hoary bat. BMPs such as pre-removal or pre-trimming surveys for the native white tern and the avoidance of clearing woody vegetation taller than 15 feet between June 1 and September 15 would avoid or minimize adverse impacts to these species (see Section 2.5). No white terns or hoary bats were observed during the biological survey and there is other suitable tree habitat for these species in areas surrounding the project site. In addition, as noted in the preceding section (Flora), at least 56 new trees are proposed for the new campus, including six new monkeypod trees along Rice Street.

Threatened and Endangered Species

None of the plant species observed at the project area are listed as endangered or threatened under federal or state statutes. Additionally, none of the eleven endangered species identified in the IPaC list for the area were found during the 2023 survey. Therefore, the Preferred Alternative is not expected to adversely affect protected flora species.

USAG Hawaii completed informal consultation with the USFWS Pacific Islands Fish and Wildlife Office under Section 7 of the ESA on four ESA-listed species that may potentially be affected by the Proposed Action: Hawaiian hoary bat or 'ōpe'ape'a (*Lasiurus cinereus semotus*), band-rumped storm-petrel or 'akē'akē (*Hydrobates castro*), Hawaiian petrel or 'ua'u (*Pterodroma sandwichensis*), and Newell's shearwater or 'a'o (*Puffinus newelli*). Due to the very low likelihood that the listed animals occur within the project area, and with the implementation of conservation measures summarized in Table 3-2, the

project's effects on the four listed animals would be discountable. USAG Hawaii determined that the Proposed Action may affect, but is not likely to adversely affect, the four listed species. By letter dated June 6, 2024, USFWS concluded that the project's impacts on the listed species are discountable and concurred with USAG Hawaii's determination (see Appendix C for ESA Section 7 correspondence).

Table 3-2 Federally-Protected Species Conservation Measures

<i>Species</i>	<i>Conservation Measure</i>
Hawaiian hoary bat or 'ōpe'ape'a (<i>Lasiurus cinereus semotus</i>)	- Woody plants greater than 15 feet tall will not be disturbed, removed, or trimmed during the 'ōpe'ape'a birthing and pup rearing season (June 1 through September 15) - Barbed wire fencing will not be used
Hawaiian Seabirds - Band-rumped storm-petrel or 'akē'akē (<i>Hydrobates castro</i>) - Hawaiian petrel or 'ua'u (<i>Pterodroma sandwichensis</i>) - Newell's shearwater or 'a'o (<i>Puffinus newelli</i>)	- Nightwork is not planned for this project. However, if nighttime construction activity or equipment maintenance is necessary during any construction phases of the project, all associated lights will be shielded, and when large flood/work lights are used, they will be placed on poles that are high enough to allow the lights to be pointed directly at the ground. All efforts will be made to avoid nighttime construction during the seabird fledging period, September 15 through December 15, except under emergency conditions and with prior notification to USAG Hawaii. - Automatic motion sensor switches and controls on all outdoor lighting will be installed and/or lights will be turned off when human activity is not occurring in the area.

Nighttime construction would be minimized and any exterior construction lighting would be shielded and dark-sky compliant, in accordance with HRS 201-8.5 (Night sky protection strategy) to avoid or minimize risks to protected night-flying seabirds that may traverse the project area. In addition, the Proposed Action would comply with Army policies regarding outdoor lighting, as specified in Policy Memorandum USAG-HI-35, Wildlife Friendly Lighting and Dark Skies.

There were no waterbirds observed during the survey, but if any waterbirds are present during construction, all activities within 100 feet should cease and the bird(s) should not be approached. If a nest is discovered at any point, the contractor will contact DLNR DOFAW and establish a buffer zone around the nest. Army Policy Memorandum USAG-HI-13 Animal Control Policy prohibits the feeding of feral animals (who could prey on vulnerable native or protected birds).

Invasive Species and Pests

No CRB (*Oryctes rhinoceros*) or LFA were observed at the project area during the 2023 survey. The Proposed Action would comply with Army policies addressing these invasive species and pests (e.g., Policy Memorandum USAG-HI-50, Green Waste Policy and Policy Memorandum DPW-HI-01 Avoidance of Little Fire Ant Introduction). Activities within the project area would minimize the movement of plant or soil material between worksites as soil and plant material, also known as green waste, may contain detrimental fungal pathogens, vertebrate and invertebrate pests (e.g., CRB, LFA, etc.), or invasive plant

parts that could harm the native species and ecosystems. All equipment, materials, and personnel should be cleaned of excess soil and debris to minimize the risk of spreading invasive species.

3.5.3.3 Critical Habitat

The Proposed Action would have no impact on Critical Habitat as none has been delineated at the project site.

3.5.3.4 Wetlands/Riparian Habitat

No wetland indicators were observed in the drainageways or streams adjacent to the project area; therefore, the Proposed Action is not expected to adversely impact wetlands or riparian habitat.

Therefore, the Preferred Alternative is not expected to significantly impact biological species.

3.6 Cultural Resources and Practices

3.6.1 Regulatory Framework

Historic properties are governed by federal laws and regulations, including the NHPA, Archeological and Historic Preservation Act, American Indian Religious Freedom Act, Archaeological Resources Protection Act of 1979, the Native American Graves Protection and Repatriation Act of 1990, and Department of Defense Instruction 4715.16. The responsibility of federal agencies for protecting historic properties is defined primarily by sections 106 and 110 of the NHPA. Section 106 requires federal agencies to consider the effects of their undertakings on historic properties. Section 110 of the NHPA requires federal agencies to establish—in conjunction with the Secretary of the Interior—historic preservation programs for the identification, evaluation, and protection of historic properties. HRS Chapter 6E-8 places similar responsibilities on Hawai'i state agencies to evaluate its projects.

To qualify as eligible for listing on the National Register of Historic Places (NRHP), a historic property must meet at least one of the following four NRHP criteria:

(A) associated with events that have made a significant contribution to the broad patterns of our history; or

(B) associated with the lives of persons significant in our past; or

(C) embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

(D) have yielded, or may be likely to yield, information important in prehistory or history.

The Hawaii Register of Historic Places provides an additional criterion: (E) Has an important value to the native Hawaiian people or to another ethnic group.

A property must also generally be at least 50 years old and retain its historic integrity of location, design, setting, materials, workmanship, feeling, and association to be eligible for the NRHP. Integrity ensures that the property conveys its significance through its physical features.

Articles IX and XII of the State Constitution require government agencies to promote and preserve cultural beliefs, practices, and resources of native Hawaiians and other ethnic groups. HRS Chapter 343 also requires environmental assessment of cultural resources, in determining the significance of a

proposed project. HAR §11-200.1-13 notes that, in most instances, an action shall be determined to have a significant effect on the environment if it may have a substantial adverse effect on the economic welfare, social welfare, or cultural practices of the community and State. Cultural practices may be defined as activities imbued with cultural or spiritual meaning, which can be traditional or modern. Cultural practices may include traditional Hawaiian practices in addition to the cultural practices of other communities and ethnic groups.

3.6.2 Affected Environment

3.6.2.1 Region of Influence

The ROI for analyzing potential impacts to archaeological and architectural resources is limited to the project's area of ground disturbance (i.e., approximately 8.3-acre project area), which also serves as the Area of Potential Effects (APE) for the project's NHPA Section 106 consultation. The ROI for impacts to cultural practices impacts is the ahupua'a⁴ (a traditional Hawaiian land division that stretches from the mountains to the sea) of Kahauiki.

3.6.2.2 Existing Conditions

An archaeological literature review (ALR) was prepared for the Proposed Action to determine if any historic properties are located in or near the project area (Appendix D). The ALR describes the parcel's land-use history in the context of both its traditional Hawaiian character as well as its historic-period changes; identifies any previously identified archaeological historic properties or component features in or immediately adjacent to the project area; and provides information relevant to the likelihood of encountering historically-significant cultural deposits (i.e., archaeological historic properties and/or component features) in subsurface context during future construction.

Cultural and Historical Context

Hawaiian Cultural Landscape. Through the analysis of historical documents, maps, aerial images, and secondary sources, the ALR provides a project area-specific picture of land use and modification over time. Kahauiki Ahupua'a, in which the project area is located, includes the stream valley of the same name, which supported a moderately-sized lo'i kalo (irrigated taro) system in its lower reaches (Uyeoka et al., 2018, in Honua, 2025). Kahauiki shared close cultural and spiritual ties with both of the neighboring lands of Moanalua and Kalihi. The now-infilled portion of Kahauiki Kai (i.e., its shoreline area) was once home to loko i'a (fishponds) and lo'i kalo (wetland taro fields) that extended mauka (inland) up to the lower portions of the Fort Shafter boundary just above Moanalua Freeway. Kahauiki was closely associated with the Moanalua Ahupua'a, which is known for its rich cultural heritage, including heiau (temples) and other sacred places that were integral to religious and cultural practices (Maly and Maly, 2012 in Honua, 2025).

While much of the lower portion of Kahauiki Ahupua'a has been heavily modified by the urbanization of Honolulu, including Fort Shafter, its golf course, the H-1 and H-201 Moanalua freeways, and Nimitz highway, the upper half of this ahupua'a is largely undeveloped with a single main stream (Kahauiki).

⁴ The overall shape and configuration of Kahauiki Ahupua'a, compared with most others on O'ahu, is somewhat atypical in that its uppermost portion does not reach the Ko'olau ridge line; its uppermost reaches taper to a narrow point at the top and are "cut off" from the Ko'olau summit region by Moanalua on the west and Kalihi on the east. Kahauiki Ahupua'a includes the stream valley of the same name, which supported a moderately-sized lo'i kalo (irrigated taro) system in its lower reaches (Uyeoka et al., 2018, in Honua, 2025).

Like other ahupua'a with forested uplands, Kahauiki's uplands were a reliable source of native, endemic and Polynesian-introduced plants including kukui, koa, 'ōhia, 'iliahi (sandalwood), hau, kī (ti leaf), bananas and many others. These resources provided not only food but also medicinal plants, wa'a (canoe) trees and other culturally-significant items (e.g., for religious practices, hula, and so on) (Uyeoka, et al. 2018 in Honua, 2025).

Cultural resources identified within the Army-controlled lands at Fort Shafter reflect Hawai'i's traditional history. For example, archaeological sites and features tied to the traditional Hawaiian history, such as rock shelters and the remnants of Hawaiian fishponds are now buried under fill within the installation. These resources are linked to the traditional practices of Native Hawaiians, including fishing and agriculture, and highlight the historical importance of the land prior to military development (USAG Hawaii, 2018 in Honua, 2025). As is consistent with traditional burial practices and sites in neighboring ahupua'a, burials have been identified in caves along the mountainous lands in Fort Shafter and Hawaiian language newspapers identify the Fort Shafter area as a burial ground. No burials have been identified within the project area; however, the military reservation contains a reburial crypt for human remains recovered from rock shelters that is restricted from public knowledge out of respect for potential cultural sensitivities (USAG Hawaii, 2018 in Honua, 2025).

Mo'olelo (oral-historical and legendary accounts) of Kahauiki include references to the Kona Moku (Honolulu District), Haumea (Hawaiian goddess of fertility and feminine aspects of humans), Kulauka (birdman), the Chief Kalaikoa, battles, the stone of Kapapaikawaluna, the dog-like creature Poki, and hau trees (Uyeoka et al., 2018 in Honua, 2025). Kahauiki is renowned for a series of battles fought by Puakea and Pinao, men from Waialua, O'ahu, who were being pursued by warriors of Maui. It is also associated with other Hawaiian legends, legendary places, and mythology.

Land Use Changes in Mid-19th Century. Beginning in the 1840s, the concept of private property was introduced to Hawai'i through formation of the Board of Commissioners to Quiet Land Titles, and the adoption of the Māhele (division of Hawaiian lands), or Māhele 'Āina. In 1845, King Kamehameha III waived his right to full authority over the land, portioning out land for his personal use (Crown lands) and dividing the rest into government land, land for the ali'i and konohiki (land overseers usually of high rank or connection to high ranking individuals), and land for commoners (kuleana land) (Alexander 1891; Board of Commissioners 1929; Moffat and Fitzpatrick 1995 in Honua, 2025).⁵ Kahauiki was retained by Kamehameha III as Crown lands in the initial māhele (division) of Hawaiians lands starting in 1848; later, in 1899, the ahupua'a was designated for U.S. military purposes (Pantaleo et al. 1997:4 in Honua, 2025).

Fort Shafter. The annexation of Hawai'i by the United States in 1898 and subsequent establishment of military bases, including Fort Shafter, marked a significant shift in land use within Kahauiki. The once predominantly agricultural land was repurposed for military activities. The construction of Fort Shafter brought about the development of military housing and infrastructure, which further transformed the ahupua'a. Prior to the Army taking possession of it, the land that became Fort Shafter had been used for a dairy, with grazing land at the upper portions, and feed grown at lower areas, with part of the Shafter Flats section of the base made up of the Damon (Kalikikapu) and Weli fishponds. Construction started in 1905 at what was first called Kahauiki Military Reservation. Fort Shafter was Hawai'i's first permanent United States military installation. It was given the name Fort Shafter in 1907, in honor of Major General

⁵ Following thereafter, Land Commission Awards (LCAs) were awarded to commoners as kuleana parcels for fee ownership. LCAs therefore record who resided on the land and how the land was used. For the most part, however, LCAs awarded to ali'i did not systematically record information about traditional land use.

William R. Shafter (1835-1906). General Shafter had distinguished himself in the Civil War and in Cuba during the Spanish-American War, and was commanding general of the headquarters for Hawai'i, then in California, until 1901 (Meeken, 1974: 3, in Slocumb, 2011).

Archaeological Resources

No archaeological historic properties have been identified in the subject project area, which was developed as a residential neighborhood by the military in the 1940s. Although no subsurface testing (archaeological excavation) is known to have been conducted in the subject project area, a reconnaissance-level survey of Fort Shafter was completed in 1977 and additional archaeological work that included the subject project area was also completed in 2000. As part of its NHPA Section 106 consultation, USAG Hawaii determined that no historic properties exist within the APE (see Appendix E for consultation correspondence).

Outside the project area, an archaeological survey was conducted in 1986 (Watanabe, 1986 in Honua, 2025), including subsurface testing, at a purported traditional Hawaiian site complex interpreted as multiple agricultural terraces approximately 250 feet south of the subject project area. This site, separated from the project area by a drainageway and Hase Drive, was designated State Inventory of Historic Properties (SIHP) # 50-80-14-05362. Subsequent archaeological data recovery work at this site by Pantaleo et al. (1997) confirmed its purported functional interpretation. Subsequent work by Tomonari-Tuggle et al. (2000) at this site, including subsurface testing, concluded the terraces were built using historic-period fill solely for construction of military housing once located at the location (the housing was originally built in 1914 and demolished in 1961). Two other archaeological historic properties have been identified south of the subject project area. SIHP # 50-80-14-05341, a rock shelter interpreted as dating from pre-Contact times is located approximately 850 feet south-southwest of the project area, south of Parks Road. SIHP # 50-80-14-05361, a historic-period rock wall, is approximately 650 feet to the south-southeast of the project area, south of Parks Road.

Architectural Resources

The Proposed Action would be constructed at the former Rice Manor housing area, a neighborhood of 15 homes and associated landscape features constructed between 1941 and 1943. The 12 duplexes and three single-family homes at Rice Manor have been vacant since 2010 due to the presence of lead-based paint and asbestos hazards and no longer comply with the Army or DoD standards for family housing. This residential neighborhood was part of the U.S. Army's buildup of troops and expansion of facilities in Hawai'i prior to and in the early years of World War II (WWII). It also retains significance based on its association with the importance of Fort Shafter as a historical installation. Fort Shafter is significant as Hawai'i's first U.S. military post and as a U.S. Army headquarters in Hawai'i. The post was established just after Hawai'i became a territory of the U.S. in 1900. In 1921, Fort Shafter became the headquarters of the Hawaiian Department, and since then it has served as the Senior Army headquarters in Hawai'i. During WWII, Fort Shafter was the site of logistical planning for many significant U.S. military battles and operations in the Pacific (Slocumb, 2011).

The former Rice Manor housing structures, above-ground foundations, and associated above-ground features (excluding trees) will be demolished in 2026 under a separate USAG Hawaii action. Compliance with NEPA and NHPA Section 106 has been concluded for the proposed demolition. After completion of the demolition project, there will be no architectural historic properties within the project area.

Cultural Practices

This section identifies and assesses the existing cultural resources and the history of cultural practices within the Kahauiki ahupua'a (ROI for cultural practices), in which the school's proposed location is located. It explores both the cultural history of the area, emphasizing the significance of the traditional land division system and its impact on cultural practices. Assessment of the proposed project's impacts on cultural practices consider effects on cultural practitioners' ability to access the locations and resources needed to undertake cultural practices.

Fort Shafter is located within the ahupua'a of Kahauiki, a traditional Hawaiian land division that stretches from the mountains to the sea. The ahupua'a system was a sustainable method of managing natural resources, with each section of the land supporting different aspects of life, from agriculture in the uplands to fishing along the coast. Kahauiki was no exception, offering fertile lands for farming and access to fresh water from the nearby Kahauiki Stream (Handy and Handy, 1972 in Honua, 2025).

In pre-contact times, Kahauiki was part of a broader network of ahupua'a that provided for the needs of its inhabitants. The people of Kahauiki were experts in traditional Hawaiian agricultural methods, particularly in cultivating kalo (taro) in lo'i, irrigated terraces that relied on a sophisticated water management system. This practice was central to the Hawaiian diet, and the fertile lands of Kahauiki made it an ideal location for taro farming. In addition to taro, 'uala (sweet potatoes) and other crops were grown in the lower elevations closer to the shore.

Kahauiki was also home to extensive fishing practices, which were crucial to the sustenance of the community. The proximity to Ke'ehi Lagoon and other coastal areas provided access to rich fishing grounds. Fishing was not only an economic necessity but also a spiritual and cultural practice. Families and communities had specific fishing rights, and traditional knowledge of tides, moon phases, and fish behavior was passed down through generations. These practices exemplified the balance between land and sea resources in the ahupua'a system.

The ahupua'a of Kahauiki was integral to the livelihood and cultural practices of Native Hawaiians, providing the resources necessary for food, shelter, and spiritual practices. This system of land management ensured that resources were used efficiently and that communities were self-sustaining, with each ahupua'a operating as a microcosm of the larger island economy.

Kahauiki was not only a place of agriculture and fishing but also a site of spiritual significance. The land and its features were imbued with sacredness, and many places within Kahauiki were considered wahi pana, or storied places. Oral traditions recount the stories of gods and legendary figures who walked the land, interacted with the people, and left their mark on the landscape. These stories were passed down through generations, and even today, the names and locations of sacred places are remembered and respected by Native Hawaiians.

As noted in Section 3.6.2.2, the proximity of Kahauiki to sacred sites within the larger district of Moanalua and 'Ewa meant that it was part of the spiritual landscape. Moanalua is known for its rich cultural heritage, including heiau (temples) and other sacred places that were integral to religious and cultural practices. These connections extended into Kahauiki, where the relationship between people and the land was not only one of sustenance but also one of deep spiritual reverence (Maly and Maly, 2012 in Honua, 2025).

As noted in Section 3.6.2.2, cultural resources identified within the Army-controlled lands at Fort Shafter are linked to the traditional practices of Native Hawaiians such fishing, agriculture, and burial practices.

Traditional and customary practices in the project area were likely once extensive but have decreased over time due to industrial agriculture use, then ranching, now military use. Access to the area is restricted. The Army manages activities associated with access to the reburial crypt.

Other cultural practices occurring within Kahauiki ahupua'a include access from within Fort Shafter to an upland trail (Bowman Trail) for hiking and hunting, and military ceremonies and events within the installation (primarily at Palm Circle; e.g., change of command ceremonies and other installation or Army-related events), while canoe paddling training and races take place in the marine waters offshore of the ahupua'a. There are no known cultural practices occurring on the 8.3-acre project area.

3.6.3 Environmental Consequences

3.6.3.1 No Action Alternative

Under the No Action Alternative, the Proposed Action would not occur and there would be no change to cultural resources. Therefore, the No Action Alternative would have no impact on cultural resources.

3.6.3.2 Preferred Alternative

Archaeological Resources

Construction of the Preferred Alternative would have no impacts to any above-ground archaeological or historic resources since none were identified at the project site. USAG Hawaii determined that no historic properties exist within the APE and proposed a finding of no historic properties affected. There is the possibility of encountering subsurface historically-significant archaeological material in the area from its past use. However, according to the Building Disposition Report for Inter-War Era Historic Houses at Rice Manor on Fort Shafter Military Reservation (USAG Hawaii, 2023), there was significant prior ground disturbance in the housing area resulting from its construction (including grading; housing, road, and sidewalk construction; installation of above and below-ground utilities, and landscaping). Such areas of extensive ground disturbance associated with housing tract development are generally considered to have a low probability for the presence of archaeological properties eligible for the NRHP (USAG Hawaii, 2023). In the unlikely event of an unanticipated discovery of archaeological resources or human remains during ground disturbing activities, discovery procedures will be implemented according to USAG Hawaii and SHPD requirements, including the stipulations set forth in 36 CFR 800.13.

Architectural Resources

Under the Preferred Alternative, there will be no extant architectural historic properties remaining at the project area prior to construction because the NRHP-eligible housing and associated landscape features will have been previously removed under a separate USAG Hawaii action. Therefore, no impacts to architectural resources are expected from the Preferred Alternative.

Cultural Practices

The Preferred Alternative is not anticipated to have impacts on current cultural practices as there are no known cultural practices occurring on the project area. USAG Hawaii controls access to the site and also manages access to the reburial crypt. Project construction and operation would not affect access to on-base areas used for cultural practices and protocols such as those associated with the reburial crypt or impede cultural practices occurring on- or off-base within the ahupua'a. Standard construction BMPs, such as those included in the project's SWPPP, would be employed to avoid adverse impacts from the

construction and operation of the school on nearby area cultural resources, especially those downslope from the project.

Federal and State Historic Preservation Consultations

USAG Hawaii consulted with the Hawai'i SHPO in compliance with NHPA Section 106 and determined that the proposed lease to HIDOE, and the construction and operation of the new school would result in *no historic properties affected* for the undertaking because no historic properties are present. In its letter dated October 21, 2025, the Hawai'i SHPO concurred with this determination (see Appendix E for correspondence).

As the state agency proposing the project, HIDOE is responsible for complying with the consultation requirements of HRS 6E and the rules governing historic preservation review. HIDOE will also conduct consultation with SHPD under HRS Chapter 6E Historic Preservation prior to construction, as appropriate, and anticipates a determination that the Proposed Action would have a finding of no historic properties affected.

Therefore, the Preferred Alternative is expected to have less than significant impacts on cultural resources or practices.

3.7 Transportation

3.7.1 Regulatory Framework

The primary applicable policies and procedures related to roadway design and operation include the Transportation Research Board's *Highway Capacity Manual*, a nationally-accepted reference for concepts, performance measures, and analysis techniques for evaluating the multimodal operation of streets, highways, freeways, and off-street pathways.

3.7.2 Affected Environment

3.7.2.1 Region of Influence

The ROI for analyzing potential impacts to transportation is limited to key intersections and roadway segments within Fort Shafter likely to be impacted by the Proposed Action and public roadways that provide access to the installation's main entry gate (i.e., Kaua Street and Middle Street).

3.7.2.2 Existing Conditions

Access and Roadways. Roadways providing access to/from Fort Shafter are described in Table 3-3 and shown in Figure 3-2. Table 3-3 also lists the Fort Shafter entry gates and roadways involved in the intersections studied for project impacts, which are also shown in Figure 3-2.

Table 3-3 Roadways and Entry Gates

<i>Roadway</i>	<i>Description</i>	<i>Jurisdiction/Ownership</i>
Route H-201 Freeway	Principal arterial providing the primary access between Fort Shafter and the rest of O'ahu. In the vicinity of Fort Shafter, H-201 has three thru-lanes in each direction; a posted speed limit of 50 miles per hour (mph); and, prior to the Covid-19 pandemic, an Annual Average Daily Traffic (AADT) of 113,100 vehicles.	HDOT

Roadway	Description	Jurisdiction/Ownership
Kaua Street	Frontage road providing access to H-201 on-ramps and from H-201 off-ramps (AADT not available for Kaua Street).	HDOT
Middle Street (North School Street)	Minor arterial with two lanes in each direction and a posted speed limit of 25 mph. Middle Street forms a cross intersection with School Street, Notley Street, and Haumana Street. It provides access to and from the neighboring community in Kalihi. HDOT data indicates the 2021 AADT on Middle Street/North School Street, between Notley Street and Kaua Street, is 13,666 vehicles.	City and County of Honolulu
Funston Road	Main internal road leading into the base via Kaua Street Buckner Gate (Main Gate). On-base, it is one lane in each direction with a posted speed limit of 25 mph, lowered to 10 mph “when passing troops.”	USAG Hawaii
Wisser Road	Main internal road leading into the base via Notley Street, Middle Street, and North School Street through Patch Gate and providing internal traffic circulation. One lane in each direction with a posted speed limit of 15 mph.	USAG Hawaii
7 th Street	Minor road providing internal traffic circulation to administrative, family housing, and community support facilities. One lane in each direction with a posted speed limit of 15 mph.	USAG Hawaii
Buckner Gate	Main gate providing access to Fort Shafter on the mountain side of H-201. It is located along Funston Road, has one entering and two exiting lanes, and is normally open (24 hours per day; 7 days a week).	USAG Hawaii
Patch Gate	Located along Wisser Road, with one inbound and one outbound lane. Normally open between 5:00 AM and 9:00 PM Monday through Friday; closed on Saturday and Sunday.	USAG Hawaii
Johnson Gate	Located along Kaua Street near the intersection of Kaua Street and Middle Street. Provides access for oversized vehicles by appointment (normally closed).	USAG Hawaii

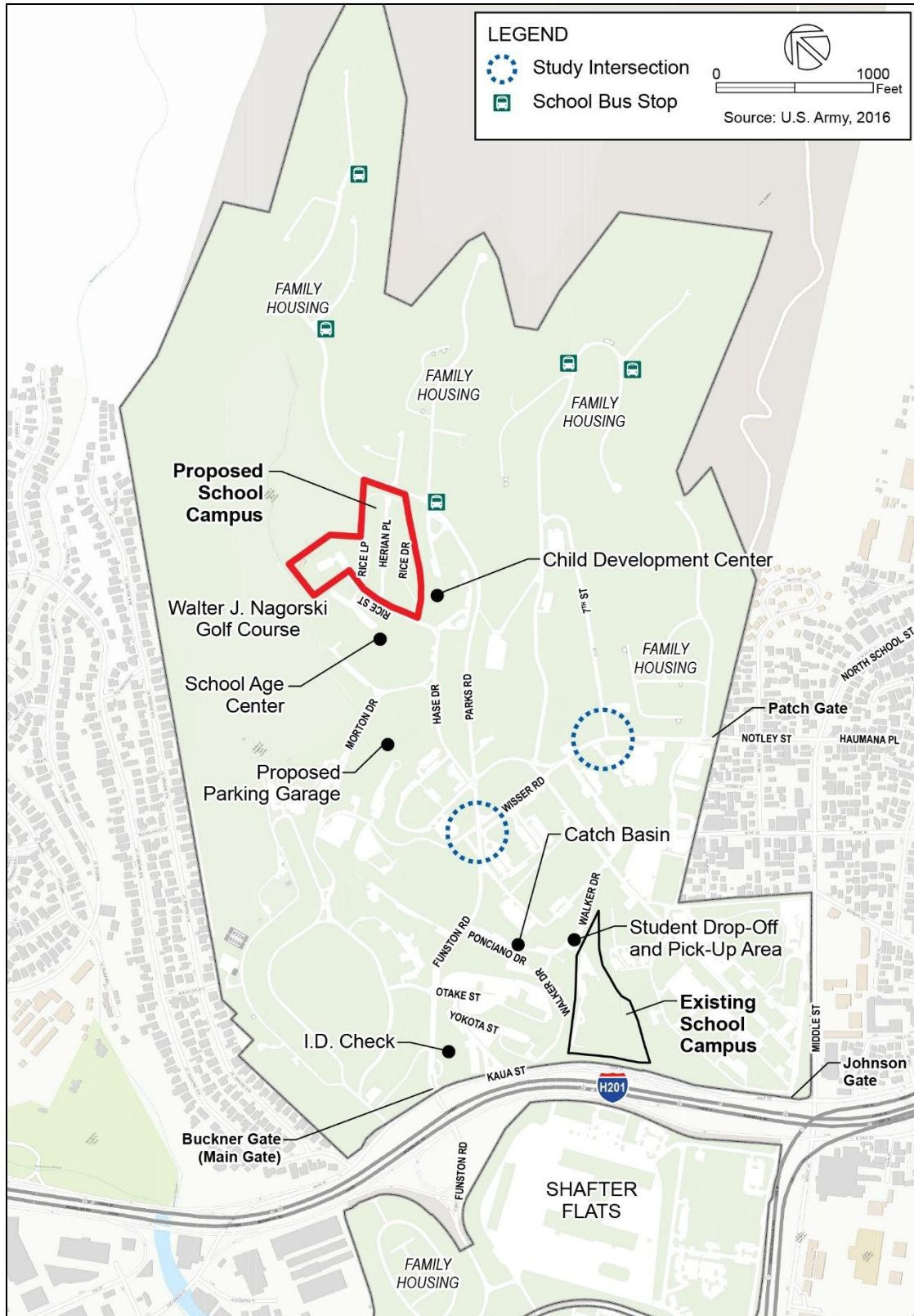


Figure 3-2 Transportation Map

Vehicle Access. Primary vehicular access to the existing Shafter ES, shown in Figure 3-2, is generally from Ponciano Drive, a one-lane, one-way road with parking stalls on both sides until the pavement width narrows near a catch basin. From the catch basin, Ponciano Drive widens to two lanes prior to intersecting Walker Drive. There are parking spaces along Walker Drive opposite the school driveway.

The school can also be accessed via Funston Road, Otake Street, through the main identification check point, Yokota Street, and Walker Drive (see Figure 3-2). During observations of student drop-off and pick-up, vehicle traffic to Shafter ES on the second route was not observed.

The loading area for parents to drop-off and pick-up students is located just past the school driveway along Walker Drive (see Figure 3-2); it can accommodate four cars. School staff assist students during the morning drop-off period and during the student early afternoon pick-up periods.

Prior to the start of the school day and dismissal, vehicles queue along Ponciano Drive and Walker Drive while parents wait to drop-off or pick up students. Due to the limited area within the school campus, drop-off and pick-up of students within the school campus are limited to school buses, special education buses, and kindergarten students.

Observations of the number of vehicles in the queue were taken on several weekdays during the 2023-2024 school year (in September and November 2023, and in January and May 2024). Vehicles were observed queueing well before the start of school in the morning and prior to student dismissal in the afternoon.

The longest vehicle queue was observed during the afternoon on September 14, 2023. The start of the vehicle queue was measured from the crosswalk prior to the school driveway. The queue extended to but did not block Funston Road.

Observations of the number of vehicles in the queue were not taken on days with heavy rainfall, which reportedly create more congestion and queuing. According to anecdotal information from the school administration, queuing has extended into Funston Road on occasion, blocking through traffic on that roadway.

Traffic counts at Shafter ES were taken in November 2023 and in May 2024 and used to determine school-related peak traffic hours and volumes for the traffic analysis. Specific peak hour times and vehicle counts are not being published for security purposes. The counts indicated that more vehicles entered and exited the campus during the school's morning peak period than during its afternoon peak period.

The service area for Shafter ES includes the main installation, Shafter Flats (located south of Fort Shafter main installation across H-201 Freeway), and Radford Terrace, a Navy-owned family housing community located about one mile to the southwest of Buckner Gate. Shafter ES enrollment has varied between 2017 to 2022, from 338 students to 487 students. Enrollment in the 2023-2024 school year was 457 students. The majority of the students resided outside of Fort Shafter in Navy housing, with the balance residing within Fort Shafter or were Geographical Exceptions for school staff. Shafter ES staff and those employed at Fort Shafter may enroll their children as Geographical Exceptions.

Bus Routes. There is no public bus service on-base; therefore, the discussion of bus routes in this EA is limited to school bus service. For the 2023-2024 school year, three school buses provided students with transportation to and from Shafter ES in the morning and afternoon. Two buses serviced Radford Terrace. The third school bus serviced Army family housing areas in Shafter Flats and main installation (see Figure 3-2 for main installation school bus stops).

Pedestrian and Bicycle Facilities. Pedestrian sidewalks to Shafter ES exist along one side of Ponciano Drive and Walker Drive. There are no bicycle facilities within Fort Shafter. In 2023, about 15 students (<1% of the 457 enrollment) walked to school and no students biked to school.

Proposed Shafter ES Site (Former Rice Manor Housing Area). From Buckner Gate, the proposed new campus site is accessed by Funston Road, Hase Drive, and Rice Street, which turns north over Hase Drive and over a drainage channel via an existing two-lane bridge, including a narrow sidewalk on the upland side. A pedestrian sidewalk is located on Rice Street fronting the School Age Center. There are no bicycle facilities serving the site.

3.7.3 Environmental Consequences

Impacts on traffic and transportation are analyzed by considering the possible changes to existing traffic conditions and the capacity of area roadways and other transportation facilities due to project-related changes in commuter and construction traffic.

3.7.3.1 No Action Alternative

Under the No Action Alternative, the Proposed Action would not occur and there would be no change to transportation facilities. Therefore, no impacts would occur with implementation of the No Action Alternative.

3.7.3.2 Preferred Alternative

Under the Preferred Alternative, a new campus with a design enrollment of 500 students would be constructed at the former Rice Manor housing area. Construction is projected to begin in early 2027, with the new school opening by the beginning of the 2029-2030 school year (August 2029). The main vehicle, bicycle, and pedestrian entrance to the new campus would be via Hase Drive to Rice Street (see Figures 2-2 and 3-2). A secondary access serving as a service vehicle/fire lane/special event route would be accessible from Parks Road on the campus's east perimeter. This access would not be used for daily student drop-off and pick-up due to its slope and width but could be used during special school events.

Construction Period Impacts

Construction work for the new Shafter ES would generate construction related traffic, which would generally enter and exit the base through Buckner Gate. Normal contractor hours for construction work on base are between 7:00 am to 4:30 pm, Monday through Friday. The construction contractor is expected to work a standard eight-hour shift within the contract's regular working hours. Oversize trucks would enter and exit the base through Johnson Gate by appointment. The study area for construction traffic is the intersection of Kaua Street with Funston Road at the main Buckner Gate.

Construction traffic was estimated based on the number of construction workers on-site at the new Shafter ES campus. Construction period impacts were evaluated for 2028 (midpoint of construction). The number of construction workers on-site was estimated based on studies published in the "Monthly Labor Review," December 1981, by the Bureau of Labor Statistics (BLS) in an article titled, "Employment created by construction expenditures," by Robert Ball. Based on this methodology, on-site employee hours were estimated to be 5.6 hours per \$1,000 for 2026 (an earlier projected construction start date). The new Shafter ES construction cost is estimated at \$96 million, and construction is estimated to take 2.5 years to complete. Assuming an average of \$38,400,000 of construction expenditure per year and 5.6 on-site hours per \$1,000 of contract expenditure, this equates to 215,000 total on-site hours per

year. Therefore, an estimated 104 construction workers would be on-site (104 full time equivalent on-site jobs per year $\approx$ 215,000 hours per year $\div$ 2,080 full time hours per person per year).

The number of construction vehicle trips was estimated based on data from the Trip Generation Handbook (9th Edition, Institute of Transportation Engineers, 2012) for General Light Industrial employees, summarized in Table 3-4. (Note: “General Light Industrial” was selected for the deemed to be the best match for they employee work hours expected in the Proposed Action.)

Table 3-4 Trip Generation for Construction
(source: ITE Trip Generation Handbook for General Light Industrial)

<i>Category</i>	<i>Estimated Employees</i>	<i>Weekday Trip Factor</i>	<i>Total Trips</i>	<i>AM Peak Factor</i>	<i>AM Peak Total</i>	<i>AM % Enter</i>	<i>AM % Exit</i>	<i>AM Enter</i>	<i>AM Exit</i>
Construction	104	3.02	315	0.44	46	83%	17%	39	8
				<i>PM Peak Factor</i>	<i>PM Peak Total</i>	<i>PM % Enter</i>	<i>PM % Exit</i>	<i>PM Enter</i>	<i>PM Exit</i>
				0.42	44	21%	79%	10	35

According to 2017 HDOT traffic count data, the weekday commuter peak hour along Kaua Street near Buckner Gate occurs between 6:45 AM and 7:45 AM (morning peak hour) and 4:30 PM and 5:30 PM (afternoon peak hour). The majority of construction related traffic would be expected to arrive prior to 7:00 AM (start of construction work hours) and leave after 4:30 PM (end of construction work hours) though Buckner Gate. As shown in Table 3-4, the directional distribution of vehicles is projected to be 83% entering and 17% exiting trips during the morning peak hour (i.e., 39 entering and 8 exiting trips); and 21% entering and 79% exiting trips during the afternoon peak hour (i.e., 10 entering and 35 exiting trips). During construction, there would be no change to school-related traffic volumes or operations on roadways serving the existing campus. The analysis of the intersection of Funston Road with Kaua Street near Fort Shafter shows a slight decrease in overall intersection level-of-service, but that the existing intersection would have sufficient capacity to accommodate the temporary increase in construction traffic.

Operational Period Impacts

Because the school design enrollment would occur with or without the project (i.e., the school’s service area is determined by HIDEOE), future traffic conditions and patterns on off-base public roadways are expected to be the same or similar with or without the project. Students would continue to be transported from off-base residences via school bus or parents/guardians.

Within Fort Shafter, school-related traffic patterns would change as the student drop-off and pick-up destination moves from the existing school site to the new site, approximately one-half mile inland. Changes in the internal school-related traffic routes would potentially have the greatest effect on conditions at the Funston Road-Wisser Road all-way STOP intersection and the Wisser Road-7th Street intersection (7th Street is STOP-controlled). See Figure 3-2 for locations. Therefore, the Preferred Alternative’s impacts on these two intersections were analyzed.

Future conditions without and with the Proposed Action at the study intersections at the time of the new school opening (2028 per earlier estimate) was forecasted by adding: 1) existing traffic volumes

(based on May 2024 traffic counts), 2) the increase in traffic due to a 16% increase⁶ in Fort Shafter population (i.e., service members, dependents, employees, etc.), and 3) the increase in school traffic if enrollment reached the design enrollment of 500 students (10% increase). In addition, a portion of the traffic volumes at study intersections were re-routed to account for: 1) a proposed 542-stall parking structure at the corner of Morton Drive and Hase Drive, 2) the new Shafter ES, and 3) removal of the old school. The projected school-related peak traffic hours are expected to correspond with the existing school hours.

Application of the Highway Capacity Manual stop-controlled intersection analysis procedures at the intersection of Funston Road with Wisser Road indicate that there would be minor declines in Level of Service (LOS) for specific vehicle movements during the AM peak 15-minute period for school-related traffic (LOS B to LOS C). However, the intersection would continue to operate within an acceptable LOS in the AM and PM school traffic peak hours. The analysis also indicated that there would be no decline in LOS at the Wisser Road-7th Street intersection during the AM or PM school traffic peak hours.

Therefore, the Proposed Action would not have significant impacts on transportation.

3.8 Natural Hazards

3.8.1 Regulatory Framework

The primary applicable laws and regulations for natural hazards include National Flood Insurance Act (42 U.S.C. Section 4001 *et seq.*), EO 11988, *Floodplain Management*, the Hawai'i State Building Code (wind loads, seismic design, tsunami loads), and Act 17, Session Laws of Hawai'i 2018 (requires EAs and Environmental Impact Statements (EISs) to consider sea level rise).

3.8.2 Affected Environment

3.8.2.1 Region of Influence

The ROI for natural hazards is the extent of the project area.

3.8.2.2 Existing Conditions

Floodplains. According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) Panel 15003C0351G (effective January 19, 2011), the entirety of the project site is within Zone X, an area with minimal flood hazard, determined to be outside the 0.2% annual chance floodplain (see Figure 3-4).

Earthquake and Tsunami Risk. The Hawaiian Islands are seismically active, though the majority of that activity is concentrated on Hawai'i Island and Maui. Moderate-to-large earthquakes can still occur across the island chain, however, and the hazard decreases with increasing distance from Hawai'i Island. Seismic risks to O'ahu and urban Honolulu are considered significant, due to the region's high

⁶ The annual Base population rate of increase was calculated based on input from USAG Hawaii Plans, Analysis & Integration Office for 2023 base population (including dependents) and projected 2028 base population (including dependents), which indicated a 20% increase between 2023 and 2028. Because traffic counts were conducted in May 2024, the rate of increase was adjusted for a four-year, rather than five-year period, resulting in a projected 16% increase from 2024 to 2028.

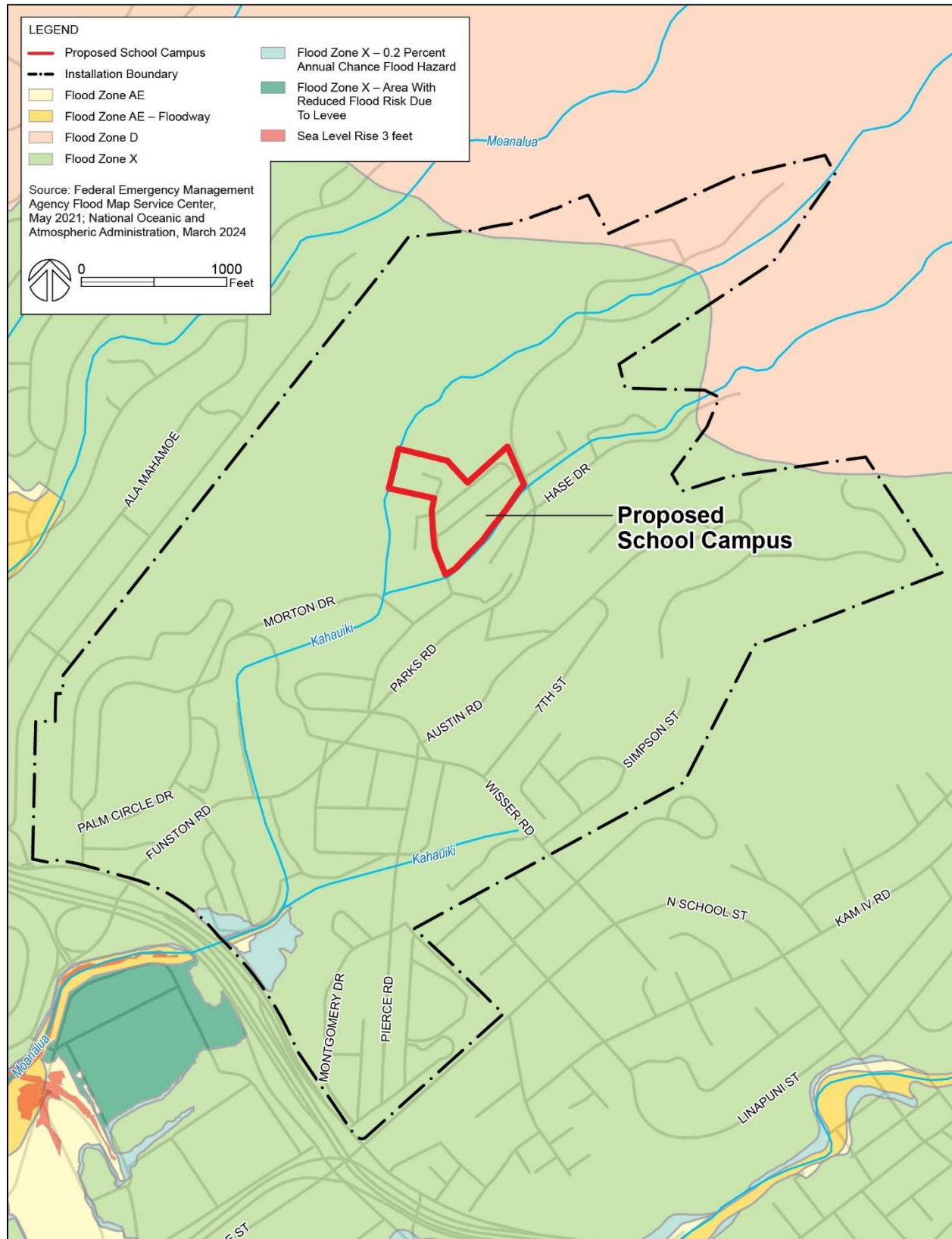


Figure 3-4 Flood Zones and Sea Level Rise

population density and infrastructure exposure. The 2021 U.S. National Seismic Hazard Model for the State of Hawai'i indicates that Urban Honolulu has a 50-75% chance of experiencing an earthquake which results in minor damage due to shaking within the next 100 years (Petersen, et al., 2021). Earthquakes on O'ahu may result in destruction of or damage to critical infrastructure, slope failures, or a locally sourced tsunami. All of O'ahu, including the project area, is within International Building Code Seismic Design Category D.

Tsunami are sea waves that result from large-scale seafloor displacements, commonly caused by earthquakes or landslides adjacent to or under the ocean. The project site is not vulnerable to tsunami inundation and lies outside evacuation zones for both tsunami events and extreme tsunami events, as mapped by the City and County of Honolulu. However, the evacuation mapping only considers distantly generated tsunami. A locally generated tsunami may result in inundation of portions of areas outside identified evacuation zones. Earthquakes may result in large segments of land to collapse, displacing an equally large volume of water. The displaced water will travel outward in a series of waves, each of which extends from the surface of the ocean to the seafloor where the earthquake originated.

Tropical Cyclones. Passing tropical cyclones (hurricanes, tropical storms, and tropical depressions) are associated with damaging winds on O'ahu. The greatest impact of these storms depends on their approach to the islands, as their counterclockwise spin has different effects when approaching from the south than from the north. Localized microbursts and downdrafts may also cause higher wind speeds by their downslope acceleration as they descend over ridges (Fletcher, et al., 2004). Climate change may cause a greater frequency or intensity of tropical cyclones in the Central Pacific region with long-term increases in sea surface temperatures.

Sea Level Rise. The 2022 Hawai'i Sea Level Rise Vulnerability and Adaptation Report by the Hawai'i Climate Change Commission highlights the risks of rising sea levels due to global warming and melting glaciers. This rise threatens Hawai'i's low-lying coastal areas, endangering infrastructure, properties, natural resources, ecosystems, and land use. The report recommends preparing for up to 3.2 feet of sea level rise (SLR) by mid-century and up to 6 feet by the century's end. The Hawai'i Sea Level Rise Viewer, an online interactive atlas, supports the report. Mandated by Acts 83 and 32 SLH 2014 and 2017, respectively, the Viewer provides map data on future hazard exposure and vulnerabilities due to rising sea levels including passive flooding, annual high wave flooding, and coastal erosion. The SLR modeling indicates that the project area would not be exposed to passive flooding, annual high wave flooding or coastal erosion in the 3.2 feet SLR scenario (see Figure 3-4).

3.8.3 Environmental Consequences

3.8.3.1 No Action Alternative

Under the No Action Alternative, there would be no change to existing risks from natural hazards. The southwest corner of the existing school site is located in a flood hazard area (Zone AE with Base Flood Elevation of approximately 14 feet) and the tsunami evacuation zone. The Proposed Action will not alter the risk to human health or property damage due to tsunami or earthquake hazards from existing conditions. Therefore, the No Action Alternative would have no impact on natural hazards.

3.8.3.2 Preferred Alternative

Under the Preferred Alternative, Shafter ES would be relocated to a higher elevation (128 feet to 170 feet above MSL), which is outside of flood hazard and tsunami evacuation zones, thereby reducing

potential risk from these events. The project site is not on or near the shoreline and is not anticipated to be subject to coastal inundation resulting from storm surge. To mitigate potential damage from tropical cyclones, the Proposed Action would be designed and constructed to meet applicable state and county standards and building codes, including for seismic and hurricane protection standards (e.g., Enhanced Hurricane Protection for Multi-Purpose/Cafeteria Building, antiterrorism standards, and resistance to progressive collapse [i.e., the ability to sustain local damage while remaining stable as a whole]). Therefore, the Preferred Alternative would result in beneficial impacts for natural hazards because the new campus would be fully outside existing flood hazard and tsunami evacuation zones, while portions of the existing school campus are within both zones.

3.9 Climate Change

3.9.1 Affected Environment

3.9.1.1 Region of Influence

The ROI for climate change is the project area.

3.9.1.2 Existing Conditions

Climate change is an environmental trend with wide ranging implications for the assessment of potential future environmental impacts. Climate change is a global issue occurring as a result of collective emissions of greenhouse gases (GHG).

GHGs trap heat in the atmosphere and originate from both natural processes and human activities. Over the past century, global temperatures have risen primarily due to increased GHG emissions from human activities, leading to potential adverse economic and social impacts worldwide.

GHGs include carbon dioxide (CO₂), methane, nitrogen oxide (NO_x), hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, and other fluorinated gases. Each GHG has a global warming potential (GWP), which measures its capacity to trap heat in the atmosphere, standardized to CO₂ (GWP of 1). Emissions are calculated by multiplying the emissions of each GHG by their GWP and summing them up to produce a combined emissions rate.

Examples of environmental trends associated with climate change that have regional consequences are summarized in Table 3-5.

Table 3-5 Environmental Trends Associated with Climate Change

<i>Environmental Trend</i>	<i>Description</i>
Flooding	Changes in climate patterns could alter the frequency and intensity of storm events, potentially leading to unexpected flooding scenarios. This could impact infrastructure, operations, and accessibility. (Note: Flooding is also discussed in Section 3.8 Natural Hazards.)
Sea Level Rise (SLR)	Rising sea levels can lead to higher groundwater tables, increased salinity in nearby water bodies, and changes in drainage patterns. (Note: SLR is also discussed in Section 3.8 Natural Hazards.)
Increased Storm Intensity	Climate change is projected to increase the intensity of storms, including hurricanes and tropical storms. These events could lead to more severe weather conditions, resulting in potential

<i>Environmental Trend</i>	<i>Description</i>
	damage to infrastructure and natural resources, as well as increased erosion and sedimentation issues. (Note: Tropical storms are also discussed in Section 3.8 Natural Hazards.)
Heatwaves and Temperature Changes	Rising global temperatures can lead to more frequent and severe heatwaves. This can impact the health and safety of workers, increase cooling costs, and place additional stress on energy and water resources.
Changes in Ecosystems	Climate change can alter local ecosystems, affecting plant and animal species. Changes in temperature, precipitation patterns, and the frequency of extreme weather events can lead to shifts in species distribution, potentially impacting biodiversity and ecosystem services.
Tsunami Risks	Changes in sea levels and seismic activity patterns could alter these zones in the future, necessitating ongoing monitoring and potential adjustments to evacuation plans. (Note: Tsunami risk is also discussed in Section 3.8 Natural Hazards.)

3.9.2 Environmental Consequences

3.9.2.1 No Action Alternative

The No Action Alternative would have no effects on GHG emissions or climate change because there would be no changes to Shafter ES's current operations.

3.9.2.2 Preferred Alternative

This alternative would result in temporary increases in GHG generation, primarily through the operation of construction vehicles and equipment, and the manufacture and transport of materials and supplies to the project site. The limited amount and temporary duration of additional emissions would not likely contribute to climate change to any discernible extent, including to flooding hazard, SLR, increased storm intensity, heatwaves and temperature changes, and changes in ecosystems. The new Shafter ES operations would not significantly differ from existing practice and significant differences in fossil fuel-generated electrical power is unlikely due to its energy efficient design (e.g., use of energy efficient electrical transformers, HVAC systems, natural ventilation, ceiling fans). The state is also making progress toward local, clean, renewable energy sources and its target to “sequester more atmospheric carbon and greenhouse gases than emitted within the State as quickly as practicable, but no later than 2045,” which effectively establishes a net-negative emissions target (HRS §225P-5).

The Proposed Action site will comply with local building codes and development standards, considering natural hazards such as flooding, tsunamis, and SLR. The site is not within the 3.2 ft SLR, even when considering passive flooding, annual high wave flooding, and coastal erosion (i.e., “combined sea level rise exposure area [SLR-XA] (Hawai’i Climate Change Mitigation and Adaptation Commission, 2021).

Therefore, the Proposed Action would have less than significant impacts to climate change.

3.10 Hazardous Materials and Wastes

3.10.1 Regulatory Framework

The primary applicable laws and regulations for hazardous materials and wastes are the Resource Conservation and Recovery Act, the Toxic Substances Control Act, 49 CFR Section 171.8 (hazardous materials definitions), and 40 CFR Part 273 (Universal Waste Management Standards).

3.10.2 Affected Environment

3.10.2.1 Region of Influence

The ROI for hazardous materials and wastes is limited to the areas where construction activities would occur.

3.10.2.2 Existing Conditions

Because existing on-site buildings (e.g., former family housing buildings), pavement, and above-ground electrical and communications infrastructure will be removed under a separate and unrelated USAG Hawaii action prior to initiation of the Proposed Action, this EA assumes that any hazardous waste or materials associated with the materials removed (e.g., lead based paint [LBP], asbestos containing materials [ACM]) would be handled, stored, and disposed of by others according to applicable federal, state, and county requirements.

Organochlorine (OCI) pesticides, commonly used in Hawaii as a termiticide, are assumed to have been applied beneath and around the building foundations of Fort Shafter housing areas, including Rice Manor. Previous pesticide investigations at or near the project area (e.g., Child Development Center and open field in the northwest corner of the project area) indicate that pesticide concentrations in the soil around and beneath the abandoned Rice Manor buildings are likely to exceed HDOH Tier 1 Environmental Action Levels for unrestricted land use. A pesticide soil burial area (below a 12-inch soil cap) is present at the site from remediation associated with demolition activities in the open field portion of the Rice Manor housing area (where some Rice Manor family housing units were demolished in circa 2015).

Although there is no data on lead-contaminated soil at the project area, LBP and ACM are reportedly present in the vacant buildings and may be present in the soil surrounding the perimeters of the structures. Asbestos cement water lines are present at the site. Other previous land uses and activities that may be sources of lead- or asbestos-contaminated soils include WWII-era family housing development, abandoned underground utilities, and fill of unknown sources.

3.10.3 Environmental Consequences

3.10.3.1 No Action Alternative

Under the No Action Alternative, there would be no additional soil disturbance that may cause human exposure to contaminants such as lead, OCI, asbestos, or other hazardous materials or wastes. Therefore, no impacts to hazardous materials or wastes would occur under the No Action Alternative.

3.10.3.2 Preferred Alternative

Under this alternative, all existing housing foundations (above-ground concrete footings supporting concrete block walls), pavements, and above-ground utility infrastructure would be removed by

separate USAG Hawaii action. Appropriate handling, storage, transport, and disposal of hazardous materials associated with the demolition and removal would be carried out by USAG Hawaii. Conservatively, perimeter soils up to five feet from existing/demolished buildings to a depth of two feet below ground surface (bgs) are considered to be lead and/or pesticide-impacted and would require management during demolition and construction activities. Soils within existing/former building footprints to a depth of two feet beneath the sub-slab (or assumed sub-slab) are considered to be pesticide-impacted and would require management during demolition and construction activities. Additional environmental investigative work is ongoing to evaluate the nature and extent of all potential soil contamination at the site and would be used to confirm remediation and management actions. All handling, transport, and disposal of hazardous materials and wastes would comply with applicable federal, state, and county regulations.

During the operational period, Shafter ES would not regularly generate substantial levels of hazardous waste. If and when any hazardous waste is generated from school operations, it would be stored, handled, and disposed of in accordance with applicable federal, state, and local requirements.

Therefore, implementation of the Preferred Alternative would not result in significant impacts with hazardous materials and wastes.

4 Secondary and Cumulative Impacts

4.1 Secondary Impacts

Secondary impacts are defined as “effects which are caused by the action and are later in time or farther removed in distance but are still reasonably foreseeable. Indirect effects may include growth-inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rates, and related effects on air and water and other natural systems, including ecosystems” (HAR Section 11-200-2). For example, a new housing development would have a secondary impact on nearby schools by increasing student enrollments.

The Proposed Action would change the land use at the project site from abandoned family housing to a new elementary school. An elementary school at the proposed site is consistent with USAG Hawaii’s development plans, as the site is adjacent to community support facilities (i.e., family housing and childcare facilities). The Proposed Action would not result in changes in the intensity of activities installation-wide, as the projected student enrollment and staffing fluctuations would occur with or without the project. The project is intended to address the physical inadequacies and modern infrastructure requirements and teaching modalities of the school and is not expected to be growth-inducing. The Proposed Action would have short-term, temporary beneficial economic and fiscal impacts as construction spending flows through the State’s economy in the form of wages and General Excise Taxes. The project does not include any residential or commercial development that could increase population on-base or in the civilian community, which could subsequently increase the demand for public facilities and services. BMPs, adherence to environmental permit conditions, and design features intended to reduce off-site transport of stormwater-related pollutants would avoid or minimize downstream water quality effects to receiving waters. The current Shafter ES facilities and site are currently undefined but assumed to be reused for administrative purposes to meet existing USAG Hawaii space requirements.

Because there are no growth-inducing effects and no increases in population density and growth associated with the Proposed Action, no adverse secondary impacts are expected.

4.2 Cumulative Impacts

"Cumulative impacts" are impacts on the environment that result from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency or person undertakes the other actions (40 CFR section 1508.7). Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time (HAR 11-200.1-2).

The scope of the cumulative impacts analysis involves both the geographic extent of the effects, the time frame in which the effects could be expected to occur, and other past, present, and reasonably foreseeable future projects at or near the Proposed Action locale that have impacts to affected resource areas that may interact with those of the Proposed Action. The projects listed in Table 4-1, which are located within the main Fort Shafter installation, were considered in the cumulative impact analysis.

Table 4-1 Actions Evaluated for Cumulative Impacts with the Proposed Action

Action	Description (Resource Areas with Impacts Potentially Overlapping with Proposed Action)	Status
Past and Present Actions		
Consolidated Administration Facility	Approximately 225,000-sf consolidated administrative facility housing multiple Army command and control functions, including U.S. Army Pacific headquarters in support of modular restructuring at Fort Shafter. The project includes supporting facilities (e.g., barracks and utility upgrades). (Transportation)	Completed and operational
Reasonably Foreseeable Future Actions		
Rice Manor housing demolition	Demolition and removal of 15 existing buildings at the former Rice Manor family housing area. Project includes removal of existing housing structures and foundations, and above-ground electrical and communications infrastructure. (Water Resources, Cultural Resources)	Planning phase; 2025 implementation
Parking Garage	New 4-level parking structure located near the intersection of Morton Drive and Parks Road. Project may be expanded to 6 total levels. (Air Quality, Water Resources, Transportation)	Design phase; estimated construction start 2025

The following analysis of cumulative impacts is organized by resource area in the same order presented in Chapter 3. Only the resource areas that have the potential to have cumulative impacts resulting from the incremental effects of the Preferred Alternative are addressed.

4.2.1 Air Quality

The ROI for cumulative air quality impacts is the Fort Shafter main installation. The threshold of significance for air quality are expected violations of federal or state AAQS attributable to the Preferred Alternative's incremental impacts that cannot be mitigated to less than significant levels when considered collectively with impacts of past, present, and reasonably foreseeable project, and that would not occur under the No Action Alternative.

Construction of the new parking garage is likely to overlap temporally with the Proposed Action. Operation of construction equipment and vehicles associated with the parking garage construction may interact with the Proposed Action's air quality impacts. However, cumulative air quality impacts within the ROI would be less than significant because construction period impacts would be avoided and/or minimized through implementation of BMPs for both projects. Significant cumulative air quality impacts during the operational period are unlikely because the parking garage and new school campus would accommodate vehicles and activities that would occur at Fort Shafter with or without either project, at similar levels, although at different locations within the installation (e.g., vehicles would be parked in the central parking structure rather than dispersed throughout the installation; school enrollment is determined by school service area). Therefore, implementation of the Proposed Action, combined with the past, present, and reasonably foreseeable future projects, would not result in significant cumulative air quality impacts within the ROI.

4.2.2 Water Resources

The ROI for cumulative impacts to water resources includes surface water resources in the immediate vicinity of the project area as well as downstream receiving waters. The threshold of significance for water resources is persistent violations of water quality standards and applicable permit conditions attributable to the Preferred Alternative's incremental impacts that cannot be mitigated to less than significant levels when considered collectively with impacts of past, present, and reasonably foreseeable projects and that would not occur under the No Action Alternative.

Although the Rice Manor housing demolition (reasonably foreseeable future action) would occur prior to any work associated with the Proposed Action, cumulative impacts to adjacent surface waters and downstream receiving waters may occur if adequate BMPs and mitigation measures are not implemented during its on-site activities, as sediments or pollutants entrained in soils may be transported offsite by stormwater runoff. Cumulative effects on water resources may also result when combined with water quality impacts of the proposed parking garage construction. However, each project would be required to implement water quality BMPs and mitigation measures to avoid or minimize adverse impacts. During the operational period, stormwater runoff from the Shafter ES project area would be detained and pre-treated prior discharge into adjacent surface waters, potentially improving runoff quality from existing conditions. The proposed parking garage project will also implement water quality BMPs and mitigation measures to avoid or minimize adverse water quality impacts during and post-construction. Therefore, implementation of the Proposed Action, combined with the past, present, and reasonably foreseeable future projects, would not result in significant cumulative impacts to water resources within the ROI.

4.2.3 Cultural Resources

The ROI for cultural resources is the Fort Shafter main installation. The threshold of significance for cultural resources are adverse impacts to cultural resources attributable to the Preferred Alternative that cannot be mitigated to less than significant levels when considered collectively with impacts of past, present, and reasonably foreseeable project, and that would not occur under the No Action Alternative.

The Rice Manor housing demolition (reasonably foreseeable future action) would result in the removal of properties eligible for the NRHP. Compliance with NHPA for the demolition action was achieved via the Army's Program Comment for Inter-War Era Historic Housing, Associated Buildings and Structures, and Landscape Features (1919-1940)⁷ ("Program Comment"). In accordance with 36 CFR § 800.14(e), the Program Comment provides an alternate procedure allowed for compliance with NHPA Section 106 and enables the Army to meet its NHPA requirements while facilitating the management of its Inter-War Era housing, such as the vacant Rice Manor homes. USAG Hawaii completed the Program Comment process for Rice Manor housing demolition in March 2024. This action is independent of the Preferred Alternative (i.e., would occur with or without the Proposed Action), and would be completed prior to construction of the new Shafter ES campus. No historic properties are slated for removal or demolition by the Preferred Alternative.

Because the project area has undergone extensive ground disturbance in the past for housing, road, and sidewalk construction, along with the installation of above and below-ground utilities, it is considered to

⁷ Adopted by the Advisory Council on Historic Preservation on September 4, 2020. Available at <https://www.denix.osd.mil/army-pchh/denix-files/sites/24/2020/09/Overview-and-Text-of-the-Program-Comment-for-Army-Inter-War-Era-Housing.pdf>.

have a low probability for the presence of NRHP-eligible archaeological properties. No archaeological material has been documented in or around the area during previous cultural resources surveys, which suggest that intact buried archaeological material is unlikely to be present. In the unlikely event of an unanticipated discovery of archaeological resources or human remains during project-related ground disturbing activities, the discovery procedures listed in Program Comment Section 4.2 would be implemented. Therefore, implementation of the Proposed Action, combined with the past, present, and reasonably foreseeable future projects, would not result in significant cumulative impacts to cultural resources within the ROI. USAG Hawaii consulted with the Hawai'i SHPO in compliance with NHPA Section 106 and determined that the proposed lease to HDOE, and the construction and operation of the new school would result in *no historic properties affected* for the undertaking because no historic properties are present. In its letter dated October 21, 2025, the Hawai'i SHPO concurred with this determination (see Appendix E for correspondence).

4.2.4 Transportation

The ROI for transportation includes key intersections within Fort Shafter and one key intersection outside Fort Shafter (under state jurisdiction) providing access to the installation's main entry gate. The threshold of significance for transportation is adverse levels of service for vehicle movements at key intersections attributable to the Preferred Alternative's incremental impacts that cannot be mitigated to less than significant levels when considered collectively with impacts of past, present, and reasonably foreseeable projects, and are unlikely to occur under the No Action Alternative.

The consolidated administration facility (past project) and new parking garage (reasonably foreseeable action) would overlap temporally and spatially with the Preferred Alternative's ROI and timing. However, traffic impact analysis conducted for the Preferred Alternative included traffic volumes associated with these projects during both the construction and operational periods. The analysis indicated that, considered cumulatively, there would be less than significant impacts on transportation during the construction or operational periods. Therefore, implementation of the Proposed Action, combined with the past, present, and reasonably foreseeable future projects, would not result in significant cumulative transportation impacts within the ROI.

4.2.5 Conclusions

The analyses show that, when considered with relevant past, present and reasonably foreseeable projects, the incremental effects of the Preferred Alternative would not contribute to significant cumulative impacts on pertinent resource areas within their respective ROIs.

5 Relationship to Land Use Plans, Policies, and Controls

This chapter discusses the project's conformance with the State Land Use District regulations, the State Environmental Policy (Chapter 344, HRS) the State Plan (Chapter 266, HRS), the Hawai'i Coastal Zone Management Program, and the relevant plans and policies of the City and County of Honolulu, including the City's General Plan, Primary Urban Center Development Plan, Special Management Area (Chapter 205A, HRS), and zoning.

5.1 State of Hawai'i

5.1.1 State Land Use Law (Chapter 205, HRS)

Pursuant to Chapter 205, HRS, all lands in the State of Hawai'i are classified into one of four major land use districts by the State Land Use Commission. The four land use districts are the Urban, Rural, Agricultural and Conservation Districts. Permitted uses within the State Land Use Districts are prescribed under Chapter 205, HRS and the State LUC's Administrative Rules (Title 13, Chapter 13, HAR).

Discussion: The project area is located within the State Land Use Urban District, which by definition generally includes "lands characterized by 'city-like' concentrations of people, structures, streets, urban level of services and other related land uses" (Chapter 15-15-18 (1), HAR) (see Figure 5-1). Permitted uses or activities within the Urban District are regulated by the ordinances and land use controls of the county within which the land is situated. On O'ahu, the Urban District is regulated by the City and County of Honolulu.

5.1.2 State Environmental Policy (Chapter 344, HRS)

Chapter 344, HRS establishes the State of Hawai'i Environmental Policy. The purpose of Chapter 344 is to "establish a State policy to encourage productive and enjoyable harmony between people and their environment, promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of humanity, and enrich the understanding of the ecological systems and natural resources important to the people of Hawai'i" (Chapter 344-1, HRS). The following discussion addresses the proposed project's conformance and consistency with the policies and guidelines prescribed in Chapter 344, HRS.

Section 344-3(1). Conserve the natural resources, so that land, water, mineral, visual, air and other natural resources are protected by controlling pollution, by preserving or augmenting natural resources, and by safeguarding the State's unique natural environmental characteristics in a manner which will foster and promote the general welfare, create and maintain conditions under which humanity and nature can exist in productive harmony, and fulfill the social, economic, and other requirements of the people of Hawaii.

Discussion: Project activities are not expected to have significant adverse impacts on natural resources or natural environmental characteristics. The project site is currently developed and has been previously disturbed and is not associated with any significant natural habitats or resources. Construction period BMPs, project design features such as stormwater quality units and LID, adherence to NPDES permit and other entitlement conditions, and compliance with applicable federal, state, and local regulations would avoid or minimize impacts to downstream surface and marine water resources.



Figure 5-1 State Land Use Districts

Section 344-3(2). Enhance the quality of life by:

- A) *Setting population limits so that the interaction between the natural and artificial environments and the population is mutually beneficial;*
- B) *Creating opportunities for the residents of Hawai'i to improve their quality of life through diverse economic activities which are stable and in balance with the physical and social environments;*
- C) *Establishing communities which provide a sense of identity, wise use of land, efficient transportation, and aesthetic and social satisfaction in harmony with the natural environment which is uniquely Hawaiian; and*
- D) *Establishing a commitment on the part of each person to protect and enhance Hawai'i's environment and reduce the drain on nonrenewable resources.*

Discussion: The Proposed Action would have no impact on the state's population and would continue an existing elementary school use within Fort Shafter. It would improve the delivery of educational services to residents of Hawai'i through the provision of school facilities that meet current standards and technological needs.

9) *Education and culture*

- A) *Foster culture and the arts and promote their linkage to the enhancement of the environment;*
- B) *Encourage both formal and informal environmental education to all age groups.*

Discussion: The Proposed Action would continue to support and enhance elementary education for pre-Kindergarten through sixth grade students who are primarily DoD dependents. Shafter ES includes Nā Hopena A'o ("HĀ") in its curriculum. Nā Hopena A'o is a HIDOE-wide framework of outcomes to develop the skills, behaviors and dispositions that are reminiscent of Hawai'i's unique context and to honor the qualities and values of the indigenous language and culture of Hawai'i.

10) *Citizen participation*

- A) *Encourage all individuals in the State to adopt a moral ethic to respect the natural environment; to reduce waste and excessive consumption; and to fulfill the responsibility as trustees of the environment for the present and succeeding generations; and*
- B) *Provide for expanding citizen participation in the decision making process so it continually embraces more citizens and more issues.*

Discussion: The EA review process provides an opportunity for public input at various stages, including the pre-assessment consultation process and a DEA 30-day public comment period during which the public has an opportunity to provide their input on the project. Forty-eight agencies and organizations were consulted as part of the pre-assessment consultation, of which 12 agencies and organizations submitted written comments (see Chapter 9). Copies of the DEA will be distributed to various agencies and organizations and notice of the DEA's availability will be published in an issue of OPSD's The Environmental Notice. Comment letters received from parties consulted during the pre-assessment consultation are included in Appendix A.

5.1.3 Hawai'i State Plan (Chapter 226, HRS)

The Hawai'i State Plan, codified under Chapter 226, HRS (as amended), serves as a guide for the future long-range development of the state. The Hawai'i State Plan provides a basis for determining priorities,

allocating limited resources, and improving coordination of state and county plans, policies, programs, projects, and regulatory activities.

The Hawai'i State Plan is divided into three parts:

- *Part I, Overall Theme, Goals, Objectives, and Policies. This part identifies objectives and focuses on general topic areas including population, economy, physical environment, facility systems, and socio-cultural advancement.*
- *Part II, Planning Coordination and Implementation. This part establishes a statewide planning system to coordinate major State and City activities and to implement the overall theme, goals, objectives, policies, and priority guidelines. These are implemented through State Functional Plans.*
- *Part III, Priority Guidelines. This part establishes overall priority guidelines to address areas of statewide concern.*

State Plan objectives and policies focus on the general topic areas of population, economy, physical environment, facility systems, and socio-cultural advancement. The Proposed Action was reviewed in relation to the State Plan and the following sections were found to be relevant to the Proposed Action. A discussion of the project's consistency with the relevant State Plan goals, objectives, policies, and priority guidelines is provided below. (Note: Because the proposed action involves replacing existing facilities for a public elementary school with new facilities serving the same school, most of the State Plan objectives and policies that do not specifically involve land use are not applicable or relevant to it.)

HRS § 226-4: State Goals

In order to guarantee, for the present and future generations, those elements of choice and mobility that insure that individuals and groups may approach their desired levels of self-reliance and self-determination, it shall be the goal of the State to achieve:

- (1) A strong, viable economy, characterized by stability, diversity and growth that enables fulfillment of the needs and expectations of Hawai'i's present and future generations.*
- (2) A desired physical environment, characterized by beauty, cleanliness, quiet, stable natural systems, and uniqueness, that enhances the mental and physical well-being of the people.*
- (3) Physical, social and economic well-being, for individuals and families in Hawai'i, that nourishes a sense of community responsibility, of caring and of participation in community life.*

Discussion: The Proposed Action supports the State's goal of achieving a strong, viable economy as it will support Shafter ES operations benefiting students and faculty that would support the long-term stability of the resident and military population in O'ahu. Construction of the project would generate direct and indirect economic benefits to construction workers, manufacturers and other businesses supporting construction. Portions of the additional income provided to workers would be spent within the community benefiting local businesses along with generating increased tax revenues. Supporting Shafter ES operations with the project promotes the State's goal of supporting residents' social and economic well-being, particularly for HIDOE staff and students.

HRS § 226-6: Objectives and policies for the economy in general

Policy (9) Strive to achieve a level of construction activity responsive to, and consistent with, state growth objectives.

Policy (15) Maintain acceptable working conditions and standards for Hawai'i's workers.

Policy (16) Provide equal employment opportunities for all segments of Hawai'i's population through affirmative action and nondiscrimination measures.

Discussion: The new construction would support short-term construction activities on O'ahu supporting the island's economic activity and growth. The new Shafter ES would provide modern facilities to better support students, teachers, and administrative staff. The Proposed Action would benefit faculty and students with from improved facilities and greater space available for classroom use that would support educational programs benefiting the County and future workforce. The Proposed Action would also benefit the State's economy by leveraging significant federal funding (80% of construction costs to be federally-funded; 20% to be State-funded).

HRS § 226-9: Objective and policies for the economy—federal expenditures

(a) Objective: Planning for the State's economy with regard to federal expenditures shall be directed towards achievement of the objective of a stable federal investment base as an integral component of Hawai'i's economy.

Policy (3) Promote the development of federally supported activities in Hawai'i that respect state-wide economic concerns, are sensitive to community needs, and minimize adverse impacts on Hawai'i's environment.

Policy (4) Increase opportunities for entry and advancement of Hawai'i's people into federal government service.

Policy (5)) Promote federal use of local commodities, services, and facilities available in Hawai'i.

Discussion: The Proposed Action would allow the State of Hawai'i to benefit from the availability of federal grant funding to redevelop an existing State of Hawai'i public school and bring it up to modern standards for instruction, technology, and sustainability. The provision of quality educational services in highly functional spaces would support national defense by increasing quality of life for the military members whose children attend Shafter ES.

HRS §226-11: Objectives and policies for the physical environment—land-based, shoreline, and marine resources

(a) Objectives: Planning for the State's physical environment with regard to land-based, shoreline, and marine resources shall be directed towards achievement of the following objectives:

(1) Prudent use of Hawai'i's land-based, shoreline, and marine resources.

(2) Effective protection of Hawai'i's unique and fragile environmental resources.

Policy (3) Take into account the physical attributes of areas when planning and designing activities and facilities.

Policy (4) Manage natural resources and environs to encourage their beneficial and multiple use without generating costly or irreparable environmental damage.

Policy (6) Encourage the protection of rare or endangered plant and animal species and habitats native to Hawai'i.

Policy (8) Pursue compatible relationships among activities, facilities, and natural resources.

Policy (9) Promote increased accessibility and prudent use of inland and shoreline areas for public recreational, educational, and scientific purposes.

Discussion: There are no natural or sensitive habitats on the project area. The Proposed Action may have temporary, short-term insignificant impacts to water quality and air quality during the construction period. However, BMPs and adherence to NPDES permit conditions would avoid or minimize these impacts to less than significant levels. The project's informal ESA Section 7 consultation found that the Proposed Action may affect, but is not likely to adversely affect ESA-protected fauna species. Adverse impacts to natural resources would be avoided or minimized through project BMPs (see Section 2.5) and the analysis in Chapters 3 and 4 concluded that the Proposed Action would have less than significant direct, indirect, and cumulative environmental impacts.

HRS §226-12: Objective and policies for the physical environment—scenic, natural beauty, and historic resources

Objective: Planning for the State's physical environment shall be directed towards achievement of the objective of enhancement of Hawai'i's scenic assets, natural beauty, and multi-cultural/historical resources.

Policy (1) Promote the preservation and restoration of significant natural and historic resources.

Policy (2) Provide incentives to maintain and enhance historic, cultural, and scenic amenities.

Policy (3) Promote the preservation of views and vistas to enhance the visual and aesthetic enjoyment of mountains, ocean, scenic landscapes, and other natural features.

Policy (4) Protect those special areas, structures, and elements that are an integral and functional part of Hawai'i's ethnic and cultural heritage.

Discussion: The Proposed Action would be located on a previously-developed site and would not displace any sensitive resources. It would not impede any important views or vistas identified in state or county plans. The former family housing buildings at Rice Manor are planned for demolition under a separate and independent Army action. Because the buildings are NRHP-eligible, the Army followed a Program Comment process allowable under NHPA Section 106 in order to carry out the demolition. The Proposed Action does not include alteration or demolition of any historic properties. The Proposed Action would have no effect on above-ground archaeological historic properties. Impacts to subsurface archaeological resources are unlikely due to the site's prior ground disturbance for housing and underground utility infrastructure construction. USAG Hawaii consulted with the Hawai'i SHPO in compliance with NHPA Section 106 and determined that the proposed lease to HIDO, and the construction and operation of the new school would result in no historic properties affected for the undertaking because no historic properties are present. In its letter dated October 21, 2025, the Hawai'i SHPO concurred with this determination (see Appendix E for correspondence). If cultural resources or potential historic properties are encountered during project activities, the project will follow applicable laws and regulations, including but not limited to HAR 13-280, HAR 13-300-40, and 36 CFR 800.13.

HRS § 226-13: Objectives and policies for the physical environment—land, air, and water quality

Objectives: Planning for the State's physical environment with regard to land, air, and water quality shall be directed towards achievement of the following objectives:

(1) Maintenance and pursuit of improved quality in Hawai'i's land, air, and water resources.

Policy (2) Promote the proper management of Hawai'i's land and water resources.

Policy (3) Promote effective measures to achieve desired quality in Hawai'i's surface, ground, and coastal waters.

Policy (4) Encourage actions to maintain or improve aural and air quality levels to enhance the health and well-being of Hawai'i's people.

Policy (5) Reduce the threat to life and property from erosion, flooding, tsunamis, hurricanes, earthquakes, volcanic eruptions, and other natural or man-induced hazards and disasters.

Policy (6) Encourage design and construction practices that enhance the physical qualities of Hawai'i's communities.

Policy (7) Encourage urban developments in close proximity to existing services and facilities.

Discussion: The Proposed Action has the potential to have short-term, temporary construction impacts to air quality and water quality. However, construction BMPs and adherence to NPDES and Clean Water Act Section 404 permit conditions would avoid or minimize these impacts. The project area is not located in an area prone to erosion, floodplain, or tsunami evacuation zone. It is not more vulnerable to other natural disasters such as hurricanes, earthquakes, or volcanic eruptions.

HRS § 226-14: Objective and policies for facility systems—in general

Objective: Planning for the State's facility systems in general shall be directed towards achievement of the objective of water, transportation, waste disposal, and energy and telecommunication systems that support statewide social, economic, and physical objectives.

Policy (1) Accommodate the needs of Hawai'i's people through coordination of facility systems and capital improvement priorities in consonance with state and county plans.

Policy (3) Ensure that required facility systems can be supported within resource capacities and at reasonable cost to the user.

Policy (4) Pursue alternative methods of financing programs and projects and cost-saving techniques in the planning, construction, and maintenance of facility systems.

Policy (5) Identify existing and planned state facilities that are vulnerable to sea level rise, flooding impacts, and natural hazards.

Discussion: There would be short-term construction related impacts to air and water quality, but these will be avoided or minimized through BMPs. The Proposed Action will accommodate the needs of Shafter ES faculty and students by improving school facilities, and is appropriately funded and consistent with state and county plans as discussed in this section. HDOE has coordinated with Shafter ES and its facility planning staff to plan the new facilities to best meet space and functionality requirements. The design will promote prudent use of resources and budgeting priorities while accommodating the needs of Shafter ES administrative staff. The new buildings would be supported by existing infrastructure and utilities serving the campus without exceeding capacity. The location and design of the new buildings would not be vulnerable to nor contribute to sea level rise, flooding, and natural hazards. Project costs would largely be borne by federal grants, with the State funding only 20% of the cost.

HRS § 226-16: Objective and policies for facility systems—water

Objectives: Planning for the State’s facility systems with regard to water shall be directed towards achievement of the objective of the provision of water to adequately accommodate domestic, agricultural, commercial, industrial, recreational, and other needs within resource capacities.

Policy (6) Promote water conservation programs and practices in government, private industry, and the general public to help ensure adequate water to meet long-term needs.

Discussion: The project is currently under design, but would incorporate water conservation practices such as water efficient plumbing fixtures.

HRS § 226-21: Objective and policies for socio-cultural advancement—education

Objectives: Planning for the State’s socio-cultural advancement with regard to education shall be directed towards achievement of the objective of the provision of a variety of educational opportunities to enable individuals to fulfill their needs, responsibilities, and aspirations.

Policy (1) Support educational programs and activities that enhance personal development, physical fitness, recreation, and cultural pursuits of all groups.

(2) Ensure the provision of adequate and accessible educational services and facilities that are designed to meet individual and community needs.

(3) Provide appropriate educational opportunities for groups with special needs.

(4) Promote educational programs which enhance understanding of Hawai’i’s cultural heritage.

(7) Promote programs and activities that facilitate the acquisition of basic skills, such as reading, writing, computing, listening, speaking, and reasoning.

(8) Emphasize quality educational programs in Hawai’i’s institutions to promote academic excellence.

Discussion: The Proposed Action would support many of these policies related to education. The Proposed Action would replace existing inadequate school facilities with new facilities designed to meet 21st century educational requirements and needs of students at Shafter ES, including those with disabilities or special needs. Shafter ES curriculum includes a HIDOE-wide framework of outcomes (“Nā Hopena A’o”) to develop the skills, behaviors and dispositions that are reminiscent of Hawai’i’s unique context and to honor the qualities and values of the indigenous language and culture of Hawai’i.

HRS § 226-25: Objective and policies for socio-cultural advancement—culture

Objective: Planning for the State’s socio-cultural advancement with regard to culture shall be directed toward the achievement of the objective of enhancement of cultural identities, traditions, values, customs, and arts of Hawai’i’s people.

Policy (2) Support activities and conditions that promote cultural values, customs, and arts that enrich the lifestyles of Hawai’i’s people and which are sensitive and responsive to family and community needs.

Policy (4) Encourage the essence of the aloha spirit in people’s daily activities to promote harmonious relationships among Hawai’i’s people and visitors.

Discussion: Shafter ES curriculum includes a HIDOE-wide framework of outcomes (“Nā Hopena A’o”), described above. This includes developing the competencies that strengthen a sense of belonging, responsibility, excellence, aloha, total-well-being and Hawai’i throughout the HIDOE organization, from students through departmental leadership.

HRS § 226-27: Objectives and policies for socio-cultural advancement—government

Objectives: Planning the State’s socio-cultural advancement with regard to government shall be directed towards the achievement of the following objectives:

(1) Efficient, effective, and responsive government services at all levels in the State.

Policy (1) Provide for necessary public goods and services not assumed by the private sector.

Discussion: The Proposed Action would support the staff and faculty in providing efficient and effective educational programs for students at Shafter ES. The Proposed Action would provide improved facilities to support government services (i.e., public education).

5.1.4 Hawai’i Coastal Zone Management Program

The federal Coastal Zone Management Act (CZMA) of 1972 was enacted to protect, preserve, develop, restore, and enhance the resources of the nation’s coastal zone for current and future generations. The CZMA was adopted in response to competing development and preservation interests in U.S. coastal areas.

Hawai’i’s Coastal Zone Management (CZM) program was adopted as Chapter 205A, HRS, and provides a basis for protecting, restoring, and responsibly developing coastal communities and resources. The State’s CZM area includes all lands of the State and the area extending seaward of the shoreline. Each county is required to establish special management areas (SMA) and shoreline setbacks within which permits are required for development. The Proposed Action is not located within the SMA and is thus not subject to the County’s SMA regulations. However, the Proposed Action’s compliance with CZM program objectives and policies is discussed in Table 5-1.

Table 5-1 Consistency with Hawai’i Coastal Zone Management Program

Coastal Zone Management Program, Chapter 205A-2, HRS
(1) Recreational Resources
<i>Objective: Provide coastal recreational opportunities accessible to the public.</i>
<i>Policies:</i>
(A) Improve coordination and funding of coastal recreational planning and management; and
(B) Provide adequate, accessible, and diverse recreational opportunities in the coastal zone management area by:
i. Protecting coastal resources uniquely suited for recreational activities that cannot be provided in other areas;
ii. Requiring replacement of coastal resources having significant recreational value, including but not limited to surfing sites, fishponds, and sand beaches, when such resources will be unavoidably damaged by development; or requiring reasonable monetary compensation to the state for recreation when replacement is not feasible or desirable;
iii. Providing and managing adequate public access, consistent with conservation of natural resources, to and along shorelines with recreational value;
iv. Providing an adequate supply of shoreline parks and other recreational facilities suitable for public recreation;
v. Ensuring public recreational use of county, state, and federally owned or controlled shoreline lands and waters having recreational value consistent with public safety standards and conservation of natural resources;
vi. Adopting water quality standards and regulating point and non-point sources of pollution to protect, and where feasible, restore the recreational value of coastal waters;

vii. viii.	Developing new shoreline recreational opportunities, where appropriate, such as artificial lagoons, artificial beaches, and artificial reefs for surfing and fishing; and Encouraging reasonable dedication of shoreline areas with recreational value for public use as part of discretionary approvals or permits by the land use commission, board of land and natural resources, and county authorities; and crediting such dedication against the requirements of Section 6-6, HRS.
Discussion: The Proposed Action would not adversely affect existing coastal recreational resources or public access to shoreline areas. The potential for construction or operational period transport of sediments or pollutants to be carried by stormwater runoff to reach recreational resources in the coastal zone is low and would be avoided or minimized through construction period BMPs and operational period design features such as the installation of stormwater quality units and sustainable design features.	
(2) Historic Resources	
<i>Objective: Protect, preserve and, where desirable, restore those natural and manmade historic and prehistoric resources in the coastal zone management area that are significant in Hawaiian and American history and culture.</i>	
<i>Policies:</i> (A) Identify and analyze significant archaeological resources; (B) Maximize information retention through preservation of remains and artifacts or salvage operations; and (C) Support state goals for protection, restoration, interpretation, and display of historic resources.	
Discussion: There are no Native Hawaiian or other ethnic group's cultural customs and traditions exercised for subsistence, cultural or religious purposes known to be practiced within the project area at this time and none would be affected by the Proposed Action. The Proposed Action does not involve alteration or removal of any known NRHP-eligible property. Standard construction BMPs, such as those included in a SWPPP, would be employed to avoid adverse impacts from the construction and operation of the school on nearby area resources, especially those downslope from the project.	
(3) Scenic and Open Space Resources	
<i>Objective: Protect, preserve, and, where desirable, restore or improve the quality of coastal scenic and open space resources.</i>	
<i>Policies:</i> (A) Identify valued scenic resources in the coastal zone management area; (B) Ensure that new developments are compatible with their visual environment by designing and locating such developments to minimize the alteration of natural landforms and existing public views to and along the shoreline; (C) Preserve, maintain, and, where desirable, improve and restore shoreline open space and scenic resources; and (D) Encourage those developments that are not coastal dependent to locate in inland areas.	
Discussion: The Proposed Action would not affect existing public views along the shoreline and would have no effect on shoreline open space or scenic resources as it would be located 1.5 miles from the nearest coastline.	
(4) Coastal Ecosystems	
<i>Objective: Protect valuable coastal ecosystems, including reefs, from disruption and minimize adverse impacts on all coastal ecosystems.</i>	
<i>Policies:</i> (A) Exercise an overall conservation ethic, and practice stewardship in the protection, use, and development of marine and coastal resources; (B) Improve the technical basis for natural resource management; (C) Preserve valuable coastal ecosystems, including reefs, of significant biological or economic importance; (D) Minimize disruption or degradation of coastal water ecosystems by effective regulation of stream diversions, channelization, and similar land and water uses, recognizing competing water needs; and	

(E) Promote water quantity and quality planning and management practices that reflect the tolerance of fresh water and marine ecosystems and maintain and enhance water quality through the development and implementation of point and nonpoint source water pollution control measures.
Discussion: The Proposed Action would not degrade coastal ecosystems or surface waters that flow into marine waters. During construction, BMPs would be implemented to avoid or minimize sediment flows into stormwater drains or surface waters during both the construction and operational periods. Project construction would require an NPDES permit; conditions of the permit would further reduce potential impacts to coastal water ecosystems.
(5) Economic Uses
<i>Objective: Provide public or private facilities and improvements important to the State's economy in suitable locations.</i>
<i>Policies:</i> (A) Concentrate coastal dependent development in appropriate areas; (B) Ensure that coastal dependent developments such as harbors and ports, and coastal related development such as visitor industry facilities and energy generating facilities, are located, designed, and constructed to minimize adverse social, visual, and environmental impacts in the coastal zone management area; and (C) Direct the location and expansion of coastal dependent developments to areas presently designated and used for such developments and permit reasonable long-term growth at such areas, and permit coastal dependent development outside of presently designated areas i. Use of presently designated locations is not feasible; ii. Adverse environmental effects are minimized; and iii. The development is important to the State's economy.
Discussion: The Proposed Action is not a coastal dependent use. The project is valuable to the state's economy in that it obviates the need for the state to fully fund construction of the new campus facilities, as HDOE will obtain 80% percent federal grant funding from OLDCC.
(6) Coastal Hazards
<i>Objective: Reduce hazard to life and property from tsunami, storm waves, stream flooding, erosion, subsidence, and pollution.</i>
<i>Policies:</i> (A) Develop and communicate adequate information about storm wave, tsunami, flood, erosion, subsidence, and point and nonpoint source pollution hazards; (B) Control development in areas subject to storm wave, tsunami, flood, erosion, hurricane, wind, subsidence, and point and nonpoint pollution hazards; (C) Ensure that developments comply with requirements of the Federal Flood Insurance Program; and (D) Prevent coastal flooding from inland projects.
Discussion: The Proposed Action is not located within a tsunami evacuation zone or floodplain.
(7) Managing Development
<i>Objective: Improve the development review process, communication, and public participation in the management of coastal resource and hazards.</i>
<i>Policies:</i> (A) Use, implement, and enforce existing law effectively to the maximum extent possible in managing present and future coastal zone development; (B) Facilitate timely processing of applications for development permits and resolve overlapping of conflicting permit requirements; and (C) Communicate the potential short and long-term impacts of proposed significant coastal developments early in their life-cycle and in terms understandable to the public to facilitate public participation in the planning and review process.

Discussion: The Proposed Action is undergoing public review through the HRS 343 environmental review processes. This EA communicates the potential short and long-term impacts of the Proposed Action to facilitate public participation in the environmental review process.
(8) Public Participation
<i>Objective: Stimulate public awareness, education, and participation in coastal management.</i>
<i>Policies:</i> (A) Promote public involvement in coastal zone management processes; (B) Disseminate information on coastal management issues by means of educational materials, published reports, staff contact, and public workshops for persons and organizations concerned with coastal issues, developments, and government activities; and (C) Organize workshops, policy dialogues, and site-specific mediations to respond to coastal issues and conflicts.
Discussion: Pre-assessment consultation for the project's HRS 343 EA was conducted in May 2024, in which 48 agencies, organizations and individuals were contacted for input on the scope of the EA. The DEA will also undergo a 30-day public review period under HRS 343.
(9) Beach Protection
<i>Objective: Protect beaches for public use and recreation.</i>
<i>Policies:</i> (A) Locate new structures inland from the shoreline setback to conserve open space, minimize interference with natural shoreline processes, and minimize loss of improvements due to erosion; (B) Prohibit construction of private erosion-protection structures seaward of the shoreline, except when they result in improved aesthetic and engineering solutions to erosion at the sites and do not interfere with existing recreational and waterline activities; and (C) Minimize the construction of public erosion-protection structures seaward of the shoreline. (D) Prohibit private property owners from creating a public nuisance by inducing or cultivating the private property owner's vegetation in a beach transit corridor;
Discussion: The Proposed Action is not located near any public beach or shoreline; it does not include any above ground structures near any shoreline setback. It would not introduce any vegetation or erosion-control structures in any shoreline area, nor would it affect any beach transit corridor.
(10) Marine Resources
<i>Objective: Promote the protection, use, and development of marine and coastal resources to assure their sustainability.</i>
<i>Policies:</i> (A) Ensure that the use and development of marine and coastal resources are ecologically and environmentally sound and economically beneficial; (B) Coordinate the management of marine and coastal resources and activities to improve effectiveness and efficiency; (C) Assert and articulate the interests of the State as a partner with federal agencies in the sound management of ocean resources within the United States exclusive economic zone; (D) Promote research, study, and understanding of ocean processes, marine life, and other ocean resources to acquire and inventory information necessary to understand how ocean development activities relate to and impact upon ocean and coastal resources; and (E) Encourage research and development of new, innovative technologies for exploring, using, or protecting marine and coastal resources.
Discussion: The Proposed Action would not involve the use or development of marine or coastal resources. Because it would be located in an upland area and employ BMPs and design features to avoid or minimize downstream water quality impacts, it is not likely to affect marine resources (including marine life) through sediment or pollutant transport.

5.2 City and County of Honolulu

5.2.1 General Plan

The General Plan for the City and County of Honolulu, adopted in 1977 and last amended in 2021, identifies long term objectives and policies along with the strategies and actions to achieve them. The Plan is a statement of the long-range social, economic, environmental, and design objectives for the general welfare and prosperity of the people of O‘ahu. The identified objectives contain statements of desirable conditions to be achieved in the long run, within an approximate 20-year timeframe. The broad policies are intended to facilitate the attainment of the objectives of the Plan. The Plan includes eleven subject areas that provide a framework of the city’s expression of public policy concerning the needs of the people and the functions of government. The eleven areas of concern include: population; economic activity; the natural environment; housing; transportation and utilities; energy; physical development and urban design; public safety; health and education; cultural and recreation; and government operations and fiscal management.

The most current General Plan (2021) focuses on critical issues such as growth, development, economic health, tourism, affordable housing, agriculture, and sustainability. The objectives and policies of the General Plan that are relevant to the proposed project are summarized in Table 5-2.

Table 5-2 Consistency with O‘ahu General Plan Objectives and Policies

O‘ahu General Plan (2021)
II. Balanced Economy
<i>Objective F: To maintain federal programs and economic activity on O‘ahu consistent with the City’s infrastructure and environmental goals.</i>
<i>Policy 1: Take full advantage of federal programs and grants that contribute to the economic, social, cultural, and environmental well-being of O‘ahu’s residents.</i>
Discussion: As noted in Section 1.2, the Proposed Action would be primarily funded through a grant from OLDCC (80%), with the state funding a small percentage of the school’s construction cost (20%). The improved school facilities would contribute to the social well-being of families of U.S. military service members residing on O‘ahu.
VII. Physical Development and Urban Design
<i>Objective A: To coordinate changes in the physical environment of O‘ahu to ensure that all new developments are timely, well-designed, and appropriate for the areas in which they will be located.</i>
<i>Policy 2: Coordinate the location and timing of new development with the availability of adequate water supply, sewage treatment, drainage, transportation, and other public facilities and services.</i>
<i>Policy 9: Locate community facilities on sites that will be convenient to the people they are intended to serve.</i>
Discussion: The Proposed Action will coordinate with other public facilities and services to ensure the new buildings have access to adequate water, sewer, and drainage systems. The Shafter ES relocation site is in closer proximity to Fort Shafter family housing areas than the existing campus and would be more convenient for students and parents to walk or bicycle to school.
IX. Health and Education
<i>Objective B: To provide a wide range of educational opportunities for the people of O‘ahu.</i>
<i>Policy 4: Encourage the construction of school facilities that are designed for flexibility and high levels of use.</i>
Discussion: The new school facilities are being designed to support a 21 st century learning environment, which provides exciting, engaging and flexible learning spaces that support a range of collaboration, informal breakout spaces that extend learning outside the classroom, common areas that support a range of activities; opportunities for outdoor learning activities, and specialty spaces such as a media center and computer resource center.

5.2.2 Primary Urban Center Development Plan

The City prepares and updates eight Development Plans (DP) and Sustainable Communities plans (SCPs) for the island of O‘ahu. Each plan corresponds to a geographic area and serves as a guide for projected growth and future development. The DP’s/SCPs are required by City Charter and are adopted by City Council Ordinance. The purpose of the DPs is to implement the comprehensive vision of the General Plan through policies and guidelines reflecting the unique conditions, geography and concerns of each geographic area.

The Shafter ES is located in the Primary Urban Center (PUC) DP area, which extends from Kāhala to Pearl City. The County General Plan calls for the PUC to absorb the majority of projected population growth for O‘ahu. DPs are reviewed by the Department of Planning and Permitting (DPP) five years after adoption to revalidate the findings and conclusions. The current PUC DP was adopted in April 2025 and incorporates updated demographic information and other recent planning initiatives.

The PUC DP Land Use/Place Types Map designates the Shafter ES project area as a Military District (Figure 5-2), which are areas controlled by the military for military uses and operations, including bases, housing, infrastructure and other. The proposed school is consistent with the 2025 PUC DP.

5.2.3 City and County of Honolulu Land Use Ordinance

The Land Use Ordinance (LUO) of the City and County of Honolulu regulates land use in accordance with adopted land use policies from the General Plan and Development Plans. The provisions, also referred to as the Zoning Ordinance, of the LUO are intended to provide reasonable development and design standards. Under current LUO zoning, Shafter ES is located within the F-1 Federal and Military Preservation District (see City and County Zoning and Special Management Area Map, Figure 5-3).

Within an F-1 district, all federal and military uses and structures shall be permitted under the LUO; therefore, the proposed new school facilities are consistent with the LUO.

5.2.4 City and County of Honolulu Special Management Area and Shoreline Setback

Established in 1975 with the enactment of Act 176, the Special Management Area (SMA) permit is also known as the Shoreline Protection Act. The SMA, conferred by HRS Chapter 205A, is designed to preserve, protect, and restore the natural resources of Hawai‘i’s coastal zone. Along the shoreline, special controls on development are necessary in order to avoid the permanent loss of valuable resources and ensure adequate access to beaches, recreation areas, and natural reserves. Permissible land uses, allowed by various land use policies such as county general plans, are regulated through the SMA permit. The SMA permit ensures that uses, activities, or operations on land, in water, or underwater within the SMA comply with SMA guidelines, as well as the CZM objectives and policies.

SMA Use Permits on O‘ahu are typically administered by the City and County of Honolulu Department of Planning and Permitting pursuant to Chapter 25, Revised Ordinances of Honolulu, as amended. The Proposed Action is not located within the SMA and is thus not subject to the County’s SMA regulations. (see City and County Zoning and Special Management Area (Figure 5-3).

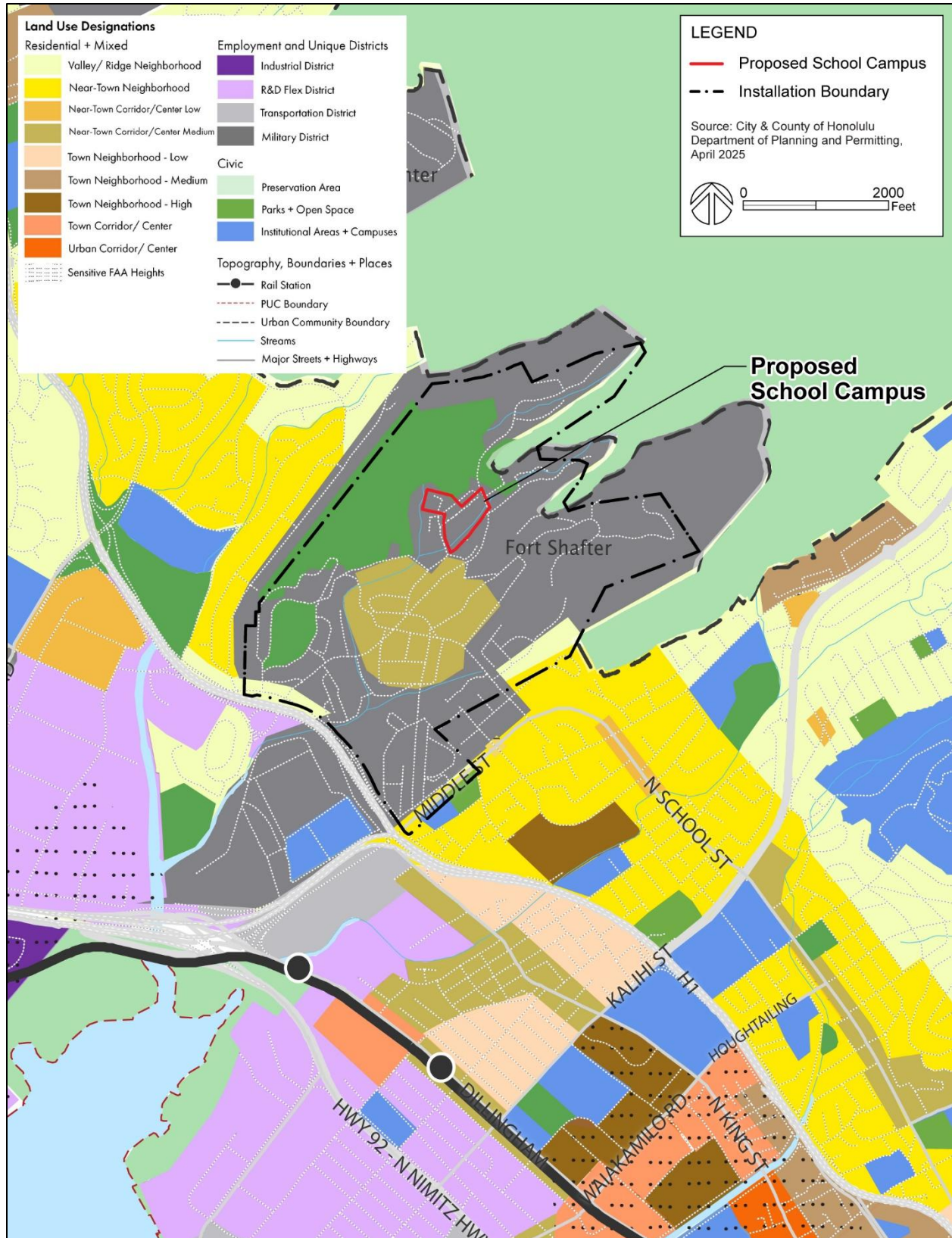


Figure 5-2 Land Use/Place Types Map, Central PUC (2025)



6 Anticipated Determination

To determine whether a proposed action may have a significant impact on the environment, the approving agency needs to consider all phases of the action, the expected impacts and the proposed mitigation measures. The agency's review and evaluation of the action would result in a determination that either: 1) the action may have a significant effect on the environment, and issuance of an Environmental Impact Statement Preparation Notice is required; or 2) the action is not likely to have a significant effect and notice of a FONSI should be issued.

Based on the findings presented in this document, the Proposed Action is not expected to result in a significant impact on the environment. In accordance with Chapter 343, HRS and Chapter 11-200.1, HAR, it is anticipated that HDOE (the approving agency) will determine that the proposed project will not have a significant environmental impact and an EIS will not be required. A FONSI is anticipated for the Preferred Alternative.

The anticipated determination was based on review and analysis of the significance criteria specified in Section 11-200.1-13, HAR. Table 6-1 provides a summary comparing the Proposed Action's probable impacts with the significance criteria.

Table 6-1 Significance Criteria Discussion

<i>Significance Criteria (Section 11-200.1-13, HAR)</i>	<i>Discussion</i>
1. Irrevocably commit a natural, cultural, or historic resource	The project would not irrevocably commit natural, cultural or historic resources. The project site encompasses lands that have been previously disturbed and have long been used for urban development. USAG Hawaii determined that the Proposed Action may affect but is not likely to adversely affect ESA-protected species. There is no protected vegetation or critical habitat at the project site. The Proposed Action is not likely to impact archaeological resources as none are expected to be encountered during construction. Native Hawaiian or other ethnic groups' cultural practices would not be impacted. The Proposed Action would occur after the former Rice Manor family housing units are removed under a separate, unrelated action to be implemented by USAG Hawaii and no removal or alteration of historic properties is included in the Proposed Action. As part of its NHPA Section 106 consultation, USAG Hawaii determined that no historic properties exist within the APE and that the Proposed Action would result in no historic properties affected. The Hawai'i SHPO concurred with this determination (see Appendix E for consultation correspondence). See Section 3.6 of the EA for further discussion of historic, archaeological, and cultural resources.
2. Curtail the range of beneficial uses of the environment	The proposed redevelopment allows for the continuation of community support use on a previously developed site that was determined to be no longer needed for family housing. Relocating the school from a predominantly operational area would result in positive long-term social benefits associated with this

<i>Significance Criteria (Section 11-200.1-13, HAR)</i>	<i>Discussion</i>
	community support use. No significant adverse impacts to the natural environment would result from the proposed development. Construction and operation of the new facilities would be performed in accordance with applicable federal, state, and county requirements, thereby minimizing potential adverse environmental impacts.
3. Conflict with the state's environmental policies or long-term environmental goals established by law	The proposed project would be designed and constructed in conformance with appropriate environmental considerations and is consistent with the state's long-term environmental policies established in Chapter 344, HRS. Consistency with the policies and guidelines specified in Chapter 344, HRS is demonstrated in Section 5.1.2.
4. Have a substantial adverse effect on the economic welfare, social welfare, or cultural practices of the community and state	Constructing and operating new Shafter ES facilities at the proposed site Fort Shafter would not adversely affect economic, social welfare, or cultural practices. Short-term direct and indirect economic benefits to the state and county would result from the generation of construction-related jobs and the induced effects of spending on the economy. Long-term benefits include modernized school facilities sized to meet current standards, along with locating the elementary school closer to family housing and other community facilities. This would reinforce the continued success and viability of Shafter ES, which would support the social welfare of the military families who have children served by the school. Because the use of the site and projected enrollment levels would be the same with or without the project, adverse economic and social impacts are not anticipated. There are currently no cultural practices by Native Hawaiian or other ethnic groups' taking place at the project area and there is low potential for the Proposed Action to newly affect or impair those occurring at other locations.
5. Have a substantial adverse effect on public health	The proposed project would not substantially affect public health. There would be some typical short-term construction-related impacts (noise, air quality, and traffic) in the area, but these would be temporary. Construction BMPs would be employed to minimize the temporary impacts. No activities associated with increased public health risks would take place on the property. Compliance with applicable federal, state, and county regulations would avoid or minimize adverse effects on public health.
6. Involve adverse secondary impacts, such as population changes or effects on public facilities	There would be no changes in current employment levels, island-wide population or population density as a result of the Proposed Action. Because the school enrollment and operations would be generally the same with or without the project, the project is not expected to induce growth in the region or state. No

<i>Significance Criteria (Section 11-200.1-13, HAR)</i>	<i>Discussion</i>
	foreseeable changes in the use and intensity of use, employment levels or school schedules are anticipated. Internal Fort Shafter traffic patterns would change to reach the new campus, but levels of service at the affected intersections would remain at acceptable levels. Since the project site is currently served by government-owned and commercial utilities and infrastructure, no significant impacts to public facilities are expected.
7. Involve a substantial degradation of environmental quality	The Proposed Action would not substantially degrade environmental quality. Construction and operation of the new school facilities would be conducted in accordance with applicable development regulations. Long-term impacts on air and water quality, noise levels, and natural resources would be minimal or non-existent. The use of construction and erosion control BMPs would minimize anticipated construction-related short-term impacts (i.e., noise, air quality, water quality, solid waste generation and traffic). Proposed improvements, such as drainage improvements to manage stormwater runoff and the addition of native plants or those appropriate to the site, would enhance environmental quality at the site.
8. Be individually limited but cumulatively have substantial adverse effect upon the environment or involves a commitment for larger actions	The proposed project would not have a significant cumulative impact on the environment when considered collectively with future private and government actions planned in the area. The type of use and level of activity associated with the current school facilities would be similar with or without the project. The proposed project does not involve a commitment for larger actions.
9. Have a substantial adverse effect on a rare, threatened, or endangered species, or its habitat	The project site is an existing urbanized area that has been previously disturbed for development. There is no critical habitat at the project site. In its consultation with USFWS under Section 7 of the ESA, USAG Hawaii determined that the Proposed Action may affect, but is not likely to adversely affect ESA-protected fauna species. By letter dated June 6, 2024, USFWS concluded that the project's impacts to the listed species are discountable and concurred with USAG Hawaii's determination (see Appendix C for correspondence).
10. Have a substantial adverse effect on air or water quality or ambient noise levels	The proposed project would not substantially affect air or water quality or ambient noise levels, as the uses associated with the school are not a significant source of air or noise pollutants. Temporary, short-term construction period increases in noise and dust would be expected during construction. Contractors would employ construction period BMPs to minimize construction-related impacts on air or water quality, and the project would comply with applicable federal, state, and county requirements. Drainage

<i>Significance Criteria (Section 11-200.1-13, HAR)</i>	<i>Discussion</i>
	improvements would maintain the amount and rate of stormwater runoff from the site at or below current levels and include storm water quality units to reduce runoff-related pollutants from reaching receiving waters.
11. Have a substantial adverse effect on or be likely to suffer damage by being located in an environmentally sensitive area such as a floodplain, tsunami zone, sea level rise exposure area, beach, erosion-prone area, geologically hazardous land, estuary, fresh water, or coastal waters	The Project Area is not in a floodplain, tsunami zone, sea level rise exposure, or erosion prone area.
12. Have a substantial adverse effect on scenic vistas and view planes, during day or night, identified in county or state plans or studies	The Proposed Action would not introduce any elements that would impede scenic or important vistas or view planes identified in any county or state plans or studies.
13. Require substantial energy consumption or emit substantial greenhouse gases	Modernized, upgraded utility systems and fixtures would promote the efficient use of energy. The Proposed Action would be designed and operated to incorporate sustainable features such as energy conservation.

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8 List of Preparers

<i>Name</i>	<i>Education and Years of Experience</i>	<i>Responsible for:</i>
Contractors		
Thomas A. Fee, AICP, LEED AP	B.A., Economics and Master of Urban and Regional Planning; 41 years	Principal in charge; overall quality assurance/quality control
Gail Renard, LEED AP	B.A., International Relations; 31 years	Primary author; purpose and need; proposed action and alternatives; air quality; geological resources; water resources; biological resources; transportation; natural hazards; climate change; hazardous materials and wastes; secondary and cumulative impacts; findings and anticipated determination
Dayea Shim, AICP	B.A., Public Health, Psychology and Master of Urban and Regional Planning; 3 years	Land use plans, policies, and controls; climate change; biological resources
Tina Bushnell	B.A. Anthropology-Geology; 20 years	Cultural resources
HHF Subcontractors		
Conrad Higashionna, P.E. (H. Conrad Engineering, LLC)	B.S. Civil Engineering; 37 years	Transportation
Maya LeGrande (LeGrande Biological Surveys, Inc.)	B.S. Botanical Sciences; M.S. Botanical Sciences; 24 years	Biological resources
Trisha Kehaulani Watson, (Honua Consulting)	J.D., Law/Environmental Law Certificate; Ph.D., American Studies; 20 years	Cultural resources

9 Parties Consulted in the Preparation of the EA

9.1 Pre-Assessment Consultation

Pre-assessment consultation, as required under HRS Chapter 343, was conducted prior to the initiation of the Environmental Assessment. A pre-assessment consultation letter was sent via email on May 16, 2024 to the government agencies and stakeholders listed below. The letter included a map of the project area, background information about the Shafter Elementary School relocation, a description of the need for the project, and a description of the proposed action. Comments were requested by June 17, 2024.

9.2 Parties Consulted

Agencies and stakeholders consulted during the preparation of the DEA are listed in Table 9-1. The parties that provided formal responses during the pre-assessment consultation period are identified in the table with a check mark (✓). A total of 52 parties were consulted and substantive comments were received from 14 parties; parties that submitted substantive comments are noted with double check marks (✓✓). Substantive written comments and responses are summarized in Table 9-2. The comments are included in Appendix A.

Table 9-1 Summary of Pre-Assessment Comments Received

Agency/Stakeholder	Comments Received ✓ = comment received ✓✓ = substantive comment
Federal	
U.S. Army Corps of Engineers	✓✓
U.S. Environmental Protection Agency	
U.S. Fish and Wildlife Service	
State	
Department of Business, Economic Development and Tourism	
Department of Accounting and General Services	✓
Department of Defense - Office of the Adjutant General	
Department of Education	
Department of Health (DOH) - Environmental Health Administration	
DOH - Clean Air Branch	✓✓
DOH - Wastewater Branch	✓✓
Department of Land and Natural Resources (DLNR) - Land Division	
DLNR - Commission on Water Resource Management	✓✓
DLNR - Engineering Division	✓✓
DLNR - Division of Aquatic Resources	✓✓
DLNR - Division of Forestry and Wildlife	✓✓
DLNR - State Historic Preservation Division	
Department of Transportation, Statewide Transportation Planning	✓✓
Office of Hawaiian Affairs	
Office of Planning and Sustainable Development	✓✓
University of Hawai'i - Water Resources Research Center	

County	
Honolulu Board of Water Supply	✓✓
Department of Design and Construction	✓
Department of Environmental Services	
Department of Facility Maintenance	✓
Department of Land Management	
Department of Parks and Recreation	
Department of Planning and Permitting	
Department of Transportation Services	
Honolulu Fire Department	✓✓
Honolulu Police Department	✓
Utilities	
Charter Communications	✓✓
Hawaiian Electric Company, Inc.	✓✓
Hawaiian Telcom	✓✓
Elected Officials	
U.S. Senator, Brian Schatz	
U.S. Senator, Mazie Hirono	
U.S. Representative, Ed Case	
Senator Donna Mercado Kim, 14th Senatorial District	
Micah P.K. Aiu, 32nd Representative District	
Radiant Cordero, District 7, Honolulu City Council	
Community Organizations and Individuals	
Neighborhood Board Commission	
Neighborhood Board No. 15 Kalihi-Pālana	
Neighborhood Board No. 16 Kalihi Valley	
Neighborhood Board No. 18 Āliamanu-Salt Lake	
Association of Hawaiian Civic Clubs	
Historic Hawai'i Foundation	
Kalihi Pālana Hawaiian Civic Club	
Moanalua Valley Community Association	
Shafter Elementary School Community Council & Parent Teacher Organization	
The Outdoor Circle	
News Media	
Hawaii Public Radio	
Honolulu Civil Beat	
Honolulu Star Advertiser	

Table 9-2 Summary of Substantive Pre-Assessment Comments and Responses

<i>Agency/ Organization</i>	<i>Comment Date</i>	<i>Comments</i>	<i>Response</i>
Federal			
U.S. Army Corps of Engineers Honolulu District	June 13, 2024	1. Jurisdictional waters may be present within your proposed project boundaries, but there is insufficient information regarding your proposed plans for a determination of the requirement for a Corps permit to be made. 2. Based on your proposed plans, it appears that there is potential for work in Kahauiki Stream along the western edge of your project area as well as an unnamed tributary to Kahauiki Stream along the southeastern edge of your project area. Work in either one of these streams would require a permit from the Corps.	1. DEA states that jurisdictional waters may be present in the project area. 2. DEA states that stormwater discharge outfalls are included in the Proposed Action and would require Clean Water Act Section 404 permits for implementation.
State			
Department of Health Clean Air Branch	May 16, 2024	For construction and other activities associated with the project, the applicable provisions of Hawaii Administrative Rules §11-60.1-33 shall be followed to mitigate fugitive dust impacts.	Acknowledged and will comply
Department of Health Wastewater Branch	July 1, 2024	1. Property apparently is sewered by Fort Shafter Military Base and the domestic wastewater will be handled by sewer connection to the City and County of Honolulu sanitary sewer service system; no objections to the relocation of the Fort Shafter Elementary School Campus. 2. Please be informed that the design plans should address any effects associated with the construction of and/or discharges from the wastewater systems to any public trust, Native Hawaiian resources, or the exercise of traditional cultural practices.	1. Acknowledged 2. Acknowledged; see DEA Section 3.6 for discussion of cultural resources
DLNR Commission on Water Resource Management	May 17, 2024	1. We recommend coordination with the county to incorporate this project into the county's Water Use and Development Plan. Please contact the respective Planning Department and/or Department of Water Supply for further information. 2. We recommend coordination with the Engineering Division of the State Department of Land and Natural Resources to incorporate this project into the State Water Projects Plan.	1. Acknowledged and will comply. 2. Acknowledged and will comply.

Agency/ Organization	Comment Date	Comments	Response
		3. We recommend that water efficient fixtures be installed and water efficient practices implemented throughout the development to reduce the increased demand on the area's freshwater resources. 4. We recommend the use of best management practices (BMP) for stormwater management to minimize the impact of the project to the existing area's hydrology while maintaining on-site infiltration and preventing polluted runoff from storm events. 5. We recommend the use of alternative water sources, wherever practicable. 6. There may be the potential for ground or surface water degradation/contamination and recommend that approvals for this project be conditioned upon a review by the State Department of Health and the developer's acceptance of any resulting requirements related to water quality. 7. The planned source of water for this project has not been identified in this report. Therefore, we cannot determine what permits or petitions are required from our office, or whether there are potential impacts to water resources. 8. Planning - The document should note that water conservation measures will be incorporated into the project design and that LEED sustainable design principles will be integrated. The Commission strongly encourages the implementation of water conservation measures, best management practices to mitigate stormwater runoff, and the reuse of stormwater and other alternative non-potable sources, where practicable.	3. Acknowledged; detailed design is ongoing. 4. Acknowledged; stormwater management BMPs will be implemented. Detailed design is ongoing. 5. Acknowledged. 6. Acknowledged. 7. Acknowledged. 8. Acknowledged; the DEA includes discussion of the suggested water conservation measures where applicable.
DLNR Division of Forestry and Wildlife	May 16, 2024	1. The State listed 'ōpe'ape'a or Hawaiian Hoary Bat (<i>Lasiurus cinereus semotus</i>) could potentially occur at or in the vicinity of the project and may roost in nearby trees. Any required site clearing should be timed to avoid disturbance to bats during their birthing and pup rearing season (June 1 through September 15). 2. For nighttime work that might be required, DOFAW recommends that all lights used be fully shielded to minimize the attraction of seabirds. Nighttime work that requires outdoor lighting should be avoided during the seabird fledging season, from September 15 through December 15, when young seabirds make their maiden voyage to sea.	1. Acknowledged; see DEA Section 2.5. 2. Acknowledged; see DEA Section 2.5.

Agency/ Organization	Comment Date	Comments	Response
		3. If nighttime construction is required during the seabird fledgling season (September 15 to December 15), we recommend that a qualified biologist be present at the project site to monitor and assess the risk of seabirds being attracted or grounded due to the lighting. 4. Permanent lighting also poses a risk of seabird attraction, and as such should be minimized or eliminated to protect seabird flyways and preserve the night sky. 5. State-listed waterbirds such as ae'o or Hawaiian stilt (<i>Himantopus mexicanus knudseni</i>), 'alae ke'oke'o or Hawaiian coot (<i>Fulica alai</i>), 'alae 'ula or Hawaiian gallinule (<i>Gallinula chloropus sandvicensis</i>), koloa maoli or Hawaiian Duck (<i>Anas wyvilliana</i>), and nēnē or Hawaiian Goose (<i>Branta sandvicensis</i>) could potentially occur at or in the vicinity of the proposed project site. It is against State law to harm or harass these species. If any of these species are present during construction, all activities within 100 feet (30 meters) should cease and the bird or birds should not be approached. 6. The State endangered pueo or Hawaiian Short-eared owl (<i>Asio flammeus sandwichensis</i>) could potentially occur in the project vicinity. 7. The State threatened Manu-o-Kū, or White Tern (<i>Gygis alba</i>) is known to nest in the vicinity of the proposed project. If tree trimming or removal is planned, DOFAW strongly recommends a qualified biologist survey for the presence of White Terns prior to any action that could disturb the trees. 8. DOFAW recommends using native plant species for landscaping that are appropriate for the area; i.e., plants for which climate conditions are suitable for them to thrive, plants that historically occurred there, etc. Do not plant invasive species. DOFAW also recommends referring to www.plantpono.org for guidance on the selection and evaluation of landscaping plants and to determine the potential invasiveness of plants proposed for use in the project. 9. DOFAW recommends minimizing the movement of plant or soil material between worksites. Soil and plant material may contain detrimental fungal pathogens vertebrate and invertebrate pests, or invasive plant parts that could harm our native species and	3. Acknowledged; project owner notified. 4. Acknowledged; see DEA Section 2.5. 5. Acknowledged; see DEA Section 3.5. Informal ESA Section 7 consultation with USFWS completed. 6. Acknowledged; see DEA Section 3.5. 7. Acknowledged; see DEA Sections 2.5 and 3.5. 8. Acknowledged; information provided to design team. 9. Acknowledged; see DEA Section 2.5.

Agency/ Organization	Comment Date	Comments	Response
		ecosystems. We recommend consulting the O‘ahu Invasive Species Committee (OISC) at (808) 266-7994 to help plan, design, and construct the project, learn of any high-risk invasive species in the area, and ways to mitigate their spread. All equipment, materials, and personnel should be cleaned of excess soil and debris to minimize the risk of spreading invasive species. 10. The invasive Coconut Rhinoceros Beetle (CRB) or <i>Oryctes rhinoceros</i> is found on the islands of O‘ahu, Hawai‘i Island, Maui and Kaua‘i. On July 1, 2022, the Hawai‘i Department of Agriculture (HDOA) approved Plant Quarantine Interim Rule 22-1. This rule restricts the movement of CRB-host material within or to and from the island of O‘ahu, which is defined as the Quarantine Area. 11. DOFAW is concerned about impacts to vulnerable birds from nonnative predators such as cats, rodents, and mongooses. We recommend taking action to minimize predator presence; remove cats, place bait stations for rodents and mongoose, and provide covered trash receptacles. 12. Due to the arid climate and risks of wildfire to listed species, we recommend coordinating with the Hawai‘i Wildfire Management Organization at (808) 850-0900 or admin@hawaiiwildfire.org, on how wildfire prevention can be addressed in the project area. 13. We recommend that Best Management Practices are employed during and after construction to contain any soils and sediment with the purpose of preventing damage to near-shore waters and marine ecosystems.	10. Acknowledged; see DEA Sections 2.5 and 3.5. 11. Acknowledged; see DEA Sections 2.5 and 3.5. 12. Acknowledged. 13. Acknowledged; see DEA Section 2.5.
DLNR Engineering Division	May 16, 2024	The rules and regulations of the National Flood Insurance Program (NFIP), Title 44 of the Code of Federal Regulations (44CFR), are in effect when development falls within a Special Flood Hazard Area (high-risk areas). Be advised that 44CFR, Chapter 1, Subchapter B, Part 60 reflects the minimum standards as set forth by the NFIP. Local community flood ordinances may stipulate higher standards that can be more restrictive and would take precedence over the minimum NFIP standards.	Acknowledged; flood hazards discussed in DEA Section 3.8.
DLNR Division of Aquatic Resources	May 16, 2024	1. DAR recommends that best management practices for mitigation of erosion and Land Based Source Pollution (LBSP) be followed. The close proximity to aquatic resources should be considered during	1. Acknowledged; erosion control and stormwater management BMPs will be implemented.

Agency/ Organization	Comment Date	Comments	Response
		design and construction. The Kahauiki stream flows through the proposed project area so caution should be exercised. Landscape design and leveling should be such that long term erosion and LBSP are minimized. 2. During construction, these measures would include any type of barrier (e.g. sediment barriers/bags, petroleum absorption diapers, etc.) that limits the amount of sediment or LBSP (e.g. petroleum products, chemicals, debris, etc.). to the maximum extent practicable. DAR recommends that all construction materials be composed of environmentally inert materials to the extent practicable. The Contractor shall consider the weather while performing construction. Some work may be performed during low rain conditions, but all construction would be halted during storm conditions or when storm conditions threaten the watershed. 3. DAR would like to request notification photo documentation, and GPS coordinates for any occurrence where above-average amounts of sediment or pollution have entered the water, to assess the impact, if any. 4. DAR recommends that the applicant take steps to plant native vegetation, that actively acts to retain surface storm-water run-off and sediment during precipitation events. Short grass will be likely ineffective at retaining surface storm-water run-off and sediment. Planting an effective vegetated buffer, down the slope of the construction site will help to capture soil and pollutants and absorb excess surface runoff from precipitation before they reach the shoreline. 5. DAR recommends planting native species to stabilize soil and retain water and sediments.	2. Acknowledged; erosion control and stormwater management BMPs will be implemented. 3. Acknowledged; project owner and design team informed of request. 4. Acknowledged; vegetated buffers and other appropriate landscape features would be included as appropriate to the site topography and uses. 5. Acknowledged; design team notified.
Department of Transportation, Statewide Transportation Planning	June 17, 2024	1. The proposed site is approximately 0.93 miles from the property boundary of Daniel K. Inouye International Airport. All projects within 5 miles from Hawaii State airports are advised to read the Technical Assistance Memorandum (TAM) for guidance with development and activities that may require further review and permits. The TAM can be viewed at this link: http://files.hawaii.gov/dbedt/op/docs/TAM-FAA-DOT-Airports_08-01-2016.pdf.	1. Acknowledged and will comply.

Agency/ Organization	Comment Date	Comments	Response
		2. Federal Aviation Administration (FAA) regulation requires the submittal of FAA Form 7460-1 Notice of Proposed Construction or Alteration pursuant to the Code of Federal Regulations, Title 14, Part 77.9, if the construction or alteration is within 20,000 feet of a public use or military airport which exceeds a 100:1 surface from any point on the runway of each airport with its longest runway more than 3,200 feet. Construction equipment and staging area heights, including heights of temporary construction cranes, shall be included in the submittal. Please provide a copy of the FAA response to the Part 77 analysis to the HDOT Airport Planning Section. 3. Due to the proximity to the airport, there is potential noise from aircraft operations. There is also a potential for fumes, smoke, vibrations, odors, etc., resulting from occasional aircraft flight operations over or near the project location. These impacts may increase or decrease over time and are dependent on airport operations. 4. The HDOT requires that the proposed development does not provide landscape and vegetation that will create a wildlife attractant, which can potentially become a hazard to aircraft operations. Please review the FAA Advisory Circular 150/5200-33C, Hazardous Wildlife Attractants On Or Near Airports for guidance. If the development creates a wildlife attractant, the developer shall immediately mitigate the hazard upon notification by the HDOT and/or FAA. 5. Solar energy photovoltaic (PV) systems located in or near the approach path of aircrafts can create a hazardous condition for pilots due to possible glint and glare reflected from the PV panel array. If glint or glare from the PV array creates a hazardous condition for pilots, the owner of the PV system shall be prepared to immediately mitigate the hazard upon notification by the HDOT and/or FAA. The FAA requires a glint and glare analysis for all solar energy PV systems near airports. Solar energy PV systems have also been known to emit radio frequency interference (RFI) to aviation-dedicated radio signals, thereby disrupting the reliability of air-to-ground communications. Again, the owner of the solar energy PV	2. Acknowledged and will comply. 3. Acknowledged and discussed in DEA Table 3-1 and Section 3.2. 4. Acknowledged and will comply; discussed in DEA Table 3-1. 5. Acknowledged and will comply; discussed in DEA Table 3-1.

Agency/ Organization	Comment Date	Comments	Response
		system shall be prepared to immediately mitigate the RFI hazard upon notification by the HDOT and/or FAA.	
Office of Planning & Sustainable Development	June 10, 2024	<u>Hawai'i Coastal Zone Management (CZM) Program</u> 1. The Draft Environmental Assessment (Draft EA) should include a discussion on the project's consistency with the policies of the Hawai'i CZM Program, HRS § 205A-2, as amended. 2. Furthermore, as listed in HRS § 205A-2, the objectives and supporting policies of the Hawai'i CZM Program serve as the foundation of the enforceable policies of the State of Hawai'i. Disclosure of impacts on CZM objectives and supporting policies as it relates to HRS Chapter 343 requirements, will aid the State in determining impacts to the resources of the coastal zone. <u>Stormwater Runoff, Erosion, and Water Resources</u> 3. Pursuant to Hawaii Administrative Rules (HAR) § 11-200.1-18(d)(7) – identification and analysis of impacts and alternatives considered, the negative effects of stormwater inundation and sediment loading surrounding the proposed project site, ensuing from construction activity, as well as the operational use of SES should be evaluated. 4. Issues that would benefit the Draft EA's examination of stormwater management and the goal of maintaining water quality ensuing from land-based activities should include, but are not limited to, project site characteristics in relation to flood and erosion prone areas, quantifying permeable surfaces in close proximity of the nearshore environment, and any anticipated increase in volume or rate of stormwater runoff that may flow to the downslope marine environment. Of note, is the proposed project site's proximity to Kahauiki stream, which flows into Ke'ehi lagoon, a body of water with an impaired designation by the Department of Health. Pursuant to HAR § 11-200.1-18(d)(8), the Draft EA should detail and take into account the mitigation measures for the protection for surface water resources and the coastal ecosystem.	1. Acknowledged; see DEA Section 5.1.4. 2. Acknowledged; see DEA Section 5.1.4. 3. Acknowledged; see DEA Sections 3.4 and 3.8. 4. Acknowledged; detailed engineering and design is ongoing. DEA discusses stormwater management (including BMPs) and water quality commensurate with the project data available to date.
County			
Honolulu Board of Water Supply	May 31, 2024	The Board of Water Supply does not have a water system serving Fort Shafter. All potable, nonpotable, and fire protection water services shall be provided by the private water system serving the area.	Acknowledged.

<i>Agency/ Organization</i>	<i>Comment Date</i>	<i>Comments</i>	<i>Response</i>
Honolulu Fire Department	May 23, 2024	1. Fire department access roads shall be provided such that any portion of the facility or any portion of an exterior wall of the first story of the building is located not more than 150 feet (46 meters) from fire department access roads as measured by an approved route around the exterior of the building or facility. A fire department access road shall extend to within 50 feet (15 meters) of at least one exterior door that can be opened from the outside and that provides access to the interior of the building. 2. Fire department access roads shall be in accordance with National Fire Protection Association (NFPA) 1; 2018 Edition, Section 18.2.3. 3. An approved water supply capable of supplying the required fire flow for fire protection shall be provided to all premises upon which facilities, buildings, or portions of buildings are hereafter constructed or moved into the jurisdiction. The approved water supply shall be in accordance with NFPA 1; 2018 Edition, Sections 18.3 and 18.4.	1. Acknowledged; will comply. 2. Acknowledged; will comply. 3. Acknowledged; will comply.
Utilities			
Charter Communications	May 28, 2024	The exact locations, and routing of all cable television (CATV) facilities must be verified in the field due to construction variances. The location of the proposed project may have an effect on Spectrum's existing CATV plant in your work area.	Acknowledged; will comply.
Hawaiian Electric Company	June 6, 2024	Hawaiian Electric Company has no objection to the project. Should Hawaiian Electric have existing easements and facilities on the subject property, we will need continued access for maintenance of our facilities.	Acknowledged.
Hawaiian Telcom	June 11, 2024	No conflicts or facilities in the project area.	Acknowledged.

1
2

Appendix A
PUBLIC AND AGENCY COMMENTS

From: [Moffi, Joshua H CIV USARMY CEPOA \(USA\)](#)
To: [Shafter Elem EA](#)
Subject: Shafter Elementary School Relocation EA Pre-Assessment Consultation, O'ahu
Date: Thursday, June 13, 2024 4:28:35 PM
Attachments: [image002.png](#)
[image005.png](#)
[image006.png](#)
[Eng_Form_4345_2019Feb_1-1.pdf](#)

[This message was sent from an outside source.]

Aloha HHF Planners,

The US Army Corps of Engineers (Corps) received your request for comments on the Shafter Elementary School Campus Relocation Environmental Assessment Pre-Assessment Consultation. After review of the provided information, it appears that jurisdictional waters may be present within your proposed project boundaries, but there is insufficient information regarding your proposed plans for a determination of the requirement for a Corps permit to be made.

Based on your proposed plans, it appears that there is potential for work in Kahauiki Stream along the western edge of your project area as well as an unnamed tributary to Kahauiki Stream along the southeastern edge of your project area. Work in either one of these streams would require a permit from the Corps. If a permit is needed from the Corps, then we would require an application (attached) to be provided. We must also evaluate the project for any impacts to resources such as threatened or endangered species, historic properties, and/or essential fish habitat, and consult if necessary. If applying for a permit, include detailed plans/drawings of the proposed project where streams or wetlands are present. Include a clear line indicating the ordinary high water mark (OHWM) in your plans and also include the amount and type of fill that would be placed below the OHWM.

A permit is not required if all work being done is located in uplands.

Please visit <https://www.poh.usace.army.mil/Missions/Regulatory/Permits/Nationwide-Permits/> to find more information about our program and to apply for a permit. Email permit applications to CEPOH-RO@usace.army.mil, as we have gone paperless. Feel free to contact me with any further questions.

Mahalo,
Josh



Josh Moffi
Biologist/Project Manager
U.S. Army Corps of Engineers | Honolulu District
Phone: Desk: 808.835.4309
Email: Joshua.H.Moffi@usace.army.mil

**U.S. ARMY CORPS OF ENGINEERS
APPLICATION FOR DEPARTMENT OF THE ARMY PERMIT
(33 CFR 325)**

OMB APPROVAL NO. 0710-0003
EXPIRES: 31 AUGUST 2012

Public reporting for this collection of information is estimated to average 11 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of the collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters, Executive Services and Communications Directorate, Information Management Division and to the Office of Management and Budget, Paperwork Reduction Project (0710-0003). Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. Please DO NOT RETURN your form to either of those addresses. Completed applications must be submitted to the District Engineer having jurisdiction over the location of the proposed activity.

PRIVACY ACT STATEMENT

Authorities: Rivers and Harbors Act, Section 10, 33 USC 403; Clean Water Act, Section 404, 33 USC 1344; Marine Protection, Research, and Sanctuaries Act, Section 103, 33 USC 1413; Regulatory Programs of the Corps of Engineers; Final Rule 33 CFR 320-332. Principal Purpose: Information provided on this form will be used in evaluating the application for a permit. Routine Uses: This information may be shared with the Department of Justice and other federal, state, and local government agencies, and the public and may be made available as part of a public notice as required by Federal law. Submission of requested information is voluntary, however, if information is not provided the permit application cannot be evaluated nor can a permit be issued. One set of original drawings or good reproducible copies which show the location and character of the proposed activity must be attached to this application (see sample drawings and/or instructions) and be submitted to the District Engineer having jurisdiction over the location of the proposed activity. An application that is not completed in full will be returned.

(ITEMS 1 THRU 4 TO BE FILLED BY THE CORPS)

1. APPLICATION NO.	2. FIELD OFFICE CODE	3. DATE RECEIVED	4. DATE APPLICATION COMPLETE
--------------------	----------------------	------------------	------------------------------

(ITEMS BELOW TO BE FILLED BY APPLICANT)

5. APPLICANT'S NAME First - Middle - Last - Company - E-mail Address -		8. AUTHORIZED AGENT'S NAME AND TITLE (agent is not required) First - Middle - Last - Company - E-mail Address -	
6. APPLICANT'S ADDRESS: Address- City - State - Zip - Country -		9. AGENT'S ADDRESS: Address- City - State - Zip - Country -	
7. APPLICANT'S PHONE NOS. w/AREA CODE a. Residence b. Business c. Fax		10. AGENTS PHONE NOS. w/AREA CODE a. Residence b. Business c. Fax	

STATEMENT OF AUTHORIZATION

11. I hereby authorize, _____ to act in my behalf as my agent in the processing of this application and to furnish, upon request, supplemental information in support of this permit application.

SIGNATURE OF APPLICANT

DATE

NAME, LOCATION, AND DESCRIPTION OF PROJECT OR ACTIVITY

12. PROJECT NAME OR TITLE (see instructions)			
13. NAME OF WATERBODY, IF KNOWN (if applicable)		14. PROJECT STREET ADDRESS (if applicable) Address	
15. LOCATION OF PROJECT Latitude: °N Longitude: °W		City -	State- Zip-
16. OTHER LOCATION DESCRIPTIONS, IF KNOWN (see instructions) State Tax Parcel ID Municipality Section - Township - Range -			

17. DIRECTIONS TO THE SITE

18. Nature of Activity (Description of project, include all features)

19. Project Purpose (Describe the reason or purpose of the project, see instructions)

USE BLOCKS 20-23 IF DREDGED AND/OR FILL MATERIAL IS TO BE DISCHARGED

20. Reason(s) for Discharge

21. Type(s) of Material Being Discharged and the Amount of Each Type in Cubic Yards:

Type	Type	Type
Amount in Cubic Yards	Amount in Cubic Yards	Amount in Cubic Yards

22. Surface Area in Acres of Wetlands or Other Waters Filled (see instructions)

Acres
or
Linear Feet

23. Description of Avoidance, Minimization, and Compensation (see instructions)

24. Is Any Portion of the Work Already Complete? ☐ Yes ☐ No IF YES, DESCRIBE THE COMPLETED WORK

25. Addresses of Adjoining Property Owners, Lessees, Etc., Whose Property Adjoins the Waterbody (if more than can be entered here, please attach a supplemental list).

a. Address-

City -

State -

Zip -

b. Address-

City -

State -

Zip -

c. Address-

City -

State -

Zip -

d. Address-

City -

State -

Zip -

e. Address-

City -

State -

Zip -

26. List of Other Certificates or Approvals/Denials received from other Federal, State, or Local Agencies for Work Described in This Application.

AGENCY	TYPE APPROVAL*	IDENTIFICATION NUMBER	DATE APPLIED	DATE APPROVED	DATE DENIED

* Would include but is not restricted to zoning, building, and flood plain permits

27. Application is hereby made for permit or permits to authorize the work described in this application. I certify that this information in this application is complete and accurate. I further certify that I possess the authority to undertake the work described herein or am acting as the duly authorized agent of the applicant.

SIGNATURE OF APPLICANT

DATE

SIGNATURE OF AGENT

DATE

The Application must be signed by the person who desires to undertake the proposed activity (applicant) or it may be signed by a duly authorized agent if the statement in block 11 has been filled out and signed.

18 U.S.C. Section 1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of the United States knowingly and willfully falsifies, conceals, or covers up any trick, scheme, or disguises a material fact or makes any false, fictitious or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious or fraudulent statements or entry, shall be fined not more than \$10,000 or imprisoned not more than five years or both.

JOSH GREEN, M.D.
GOVERNOR
KE KIA'ĀINA



KEITH A. REGAN
COMPTROLLER
KA LUNA HO'OMALU HANA LAULĀ

MEOH-LENG SILLIMAN
DEPUTY COMPTROLLER
KA HOPE LUNA HO'OMALU HANA LAULĀ

STATE OF HAWAII | KA MOKU'ĀINA O HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES | KA 'OIHANA LOIHELU A LAWELAWÉ LAULĀ
P.O. BOX 119, HONOLULU, HAWAII 96810-0119

(P)24.110

MAY 20 2024

Gail Renard
HHF Planners
733 Bishop Street, Suite 2590
Honolulu, Hawaii 96813

Dear Gail Renard:

Subject: Environmental Assessment Pre-Assessment Consultation for
Shafter Elementary School Campus Relocation
Fort Shafter Military Reservation, Oahu, Hawaii
TMK: (1)1-0-080:005 (por.)

Thank you for the opportunity to comment on the subject project. We have no comments to offer at this time as the proposed project does not impact any of the Department of Accounting and General Services' projects or existing facilities.

If you have any questions, your staff may call Dora Choy-Johnson of the Planning Branch at (808)586-0488.

Sincerely,

A handwritten signature in blue ink that reads "Scott M. Ojiri".

SCOTT M. OJIRI
Acting, Public Works Administrator

DC:mo



**STATE OF HAWAII
OFFICE OF PLANNING
& SUSTAINABLE DEVELOPMENT**

JOSH GREEN, M.D.
GOVERNOR

SYLVIA LUKE
LT. GOVERNOR

MARY ALICE EVANS
DIRECTOR

235 South Beretania Street, 6th Floor, Honolulu, Hawai'i 96813
Mailing Address: P.O. Box 2359, Honolulu, Hawai'i 96804

Telephone: (808) 587-2846
Fax: (808) 587-2824
Web: <https://planning.hawaii.gov/>

Coastal Zone
Management
Program

DTS 202405170851NA

Environmental Review
Program

June 10, 2024

Land Use Commission

HHF Planners
733 Bishop Street, Suite 2590
Honolulu, Hawai'i 96813
ATTN: Gail Renard

Land Use Division

Special Plans Branch

State Transit-Oriented
Development

Dear Ms. Renard:

Statewide Geographic
Information System

Subject: Shafter Elementary School Campus Relocation
Environmental Assessment Pre-Assessment Consultation
Fort Shafter Military Reservation, O'ahu, Hawai'i Tax Map
Key: (1) 1-0-080:005 (por.)

Statewide
Sustainability Branch

Thank you for the opportunity to provide comments on the relocation of the Major General William R. Shafter Elementary School (SES) proposed by the State of Hawai'i Department of Education (HIDOE). Our office was notified of the pre-assessment consultation request via memo, dated May 16, 2024.

It is our understanding that the primary purpose of the proposed project is to construct a new elementary school that meets current HIDOE and Department of Defense Education Activity (DoDEA) requirements for a design enrollment of 500 students ranging from Pre-Kindergarten through sixth grade. The proposed action would include the construction of one-story Pre-K/Kindergarten Classroom building, Two-story Administrative/Library Building, a one-story cafeteria building, a three-story classroom building, a covered play court, approximately 138 parking stalls, a service/fire land, and a play field.

We also understand that the project will be partially funded by the U.S. Department of Defense (DoD) and located on land owned by the DoD.

The Office of Planning and Sustainable Development (OPSD) has reviewed the transmitted material, and has the following comments to offer:

1. Hawai'i Coastal Zone Management (CZM) Program

The CZM area is defined as "all lands of the State and the area extending seaward from the shoreline to the limit of the State's police power and management authority, including the U.S. territorial sea" under Hawai'i Revised Statutes (HRS) § 205A-1.

Pursuant to HRS § 205A-4, in implementing the objectives of the CZM program, agencies shall consider ecological, cultural, historic, esthetic, recreational, scenic, open space values, coastal hazards, and economic development. As the proposed action is proposed by the HIDOE, the Draft Environmental Assessment (Draft EA) should include a discussion on the project's consistency with the policies of the Hawai'i CZM Program, HRS § 205A-2, as amended.

Furthermore, as listed in HRS § 205A-2, the objectives and supporting policies of the Hawai'i CZM Program serve as the foundation of the enforceable policies of the State of Hawai'i. Disclosure of impacts on CZM objectives and supporting policies as it relates to HRS Chapter 343 requirements, will aid the State in determining impacts to the resources of the coastal zone.

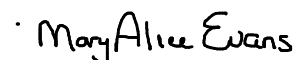
2. Stormwater Runoff, Erosion, and Water Resources

Pursuant to Hawaii Administrative Rules (HAR) § 11-200.1-18(d)(7) – identification and analysis of impacts and alternatives considered, the negative effects of stormwater inundation and sediment loading surrounding the proposed project site, ensuing from construction activity, as well as the operational use of SES should be evaluated.

Issues that would benefit the Draft EA's examination of stormwater management and the goal of maintaining water quality ensuing from land-based activities should include, but are not limited to, project site characteristics in relation to flood and erosion prone areas, quantifying permeable surfaces in close proximity of the nearshore environment, and any anticipated increase in volume or rate of stormwater runoff that may flow to the downslope marine environment. Of note, is the proposed project site's proximity to Kahauiki stream, which flows into Ke'ehi lagoon, a body of water with an impaired designation by the Department of Health. Pursuant to HAR § 11-200.1-18(d)(8), the Draft EA should detail and take into account the mitigation measures for the protection for surface water resources and the coastal ecosystem.

If you have any questions or concerns regarding this comment letter, please contact Sofia Luczak of our CZM Program at (808) 587-2831. Please be sure to refer to the DTS number, identified at the top of this letter, in the subject line of any response communications.

Sincerely,



Mary Alice Evans
Director

From: [DOH.CABPDTSS](#)
To: [Shafter Elem EA](#)
Subject: DOH-CAB Comments on DEA Pre-Assessment Consultation for the Relocation of the Shafter Elementary School Campus
Date: Thursday, May 16, 2024 3:32:51 PM

[This message was sent from an outside source.]

Subject: Pre-Assessment Consultation for a Draft Environmental Assessment for the
Proposed Relocation of the Shafter Elementary School Campus

Consultant: HHF Planners
shafter.elem.ea@hhf.com
733 Bishop Street, Suite 2590
Honolulu, Hawaii 96813

Aloha,

Thank you for the opportunity to provide comments on the subject pre-assessment consultation for a DEA on Shafter Elementary School Relocation Project. The Clean Air Branch would like to make the following comments on the subject DEA:

- For construction and other activities associated with the project, the applicable provisions of Hawaii Administrative Rules §11-60.1-33 shall be followed to mitigate fugitive dust impacts.
- Also, please see our standard comments at:

<https://health.hawaii.gov/cab/files/2022/05/Standard-Comments-for-Land-Use-Reviews-Clean-Air-Branch-2022-1.pdf>

Please let us know if you have any questions or concerns.

Thanks,
Anna

Standard Comments for Land Use Reviews
Clean Air Branch
Hawaii State Department of Health
October 14, 2022

All project activities shall comply with Hawaii Administrative Rules (HAR), Chapter 11-59 and 11-60.1.

If your proposed project:

Requires an Air Pollution Control Permit

- You must obtain an air pollution control permit from the Clean Air Branch and comply with all applicable conditions and requirements. If you do not know if you need an air pollution control permit, please contact the Permitting Section of the Clean Air Branch.
- Permit application forms can be found here: <https://health.hawaii.gov/cab/permit-application-forms/>

Has the potential to generate fugitive dust

- You must reasonably control the generation of all airborne, visible fugitive dust. Note that construction activities that occur near existing residences, businesses, public areas and major thoroughfares exacerbate potential dust concerns. It is recommended that a dust control management plan be developed which identifies and mitigates all activities that may generate airborne, visible fugitive dust. The plan, which does *not* require Department of Health approval, should help you recognize and minimize potential airborne, visible fugitive dust problems.
- Construction activities must comply with the provisions of Hawaii Administrative Rules, §11- 60.1-33 on Fugitive Dust. In addition, for cases involving mixed land use, it is strongly recommended that buffer zones be established, wherever possible, in order to alleviate potential dust concerns.
- You must provide reasonable measures to control airborne, visible fugitive dust from the road areas and during the various phases of construction. These measures include, but are not limited to, the following:
 - Planning the different phases of construction, focusing on minimizing the amount of airborne, visible fugitive dust-generating materials and activities, centralizing on-site vehicular traffic routes, and locating potential dust-generating equipment in areas of the least impact;
 - Providing an adequate water source at the site prior to start-up of construction activities;
 - Landscaping and providing rapid covering of bare areas, including slopes, starting from the initial grading phase;
 - Minimizing airborne, visible fugitive dust from shoulders and access roads;
 - Providing reasonable dust control measures during weekends, after hours, and prior to daily start-up of construction activities; and
 - Controlling airborne, visible fugitive dust from debris being hauled away from the project site.
- If you have questions about fugitive dust, please contact the Enforcement Section of the Clean Air Branch.

Includes construction, demolition, or renovation activities that involve potential asbestos and lead containing materials

- Please contact the Indoor and Radiological Health Branch at (808) 586-4700 or visit: <https://health.hawaii.gov/irhb/>

Increases the population and potential number of vehicles in an area

- The creation of apartment buildings, complexes, and residential communities may increase the overall population in an area. Increasing the population in an area may inadvertently lead to more air pollution via vehicle exhaust. Vehicle exhaust releases pollutants in the air that can negatively impact human health and air quality, including lung irritants, carcinogens, and greenhouse gases.
- Ensure that drivers keep vehicle idling times to three (3) minutes or less.
- Consider and incorporate support for alternative transportation options such as bike racks and/or electric vehicle charging stations where possible.

If you have any questions, please contact the Clean Air Branch at (808) 586-4200 or at cab@doh.hawaii.gov.

JOSH GREEN, M.D.
GOVERNOR OF HAWAII
KE KIA'ĀINA O KA MOKU'ĀINA 'O HAWAII



KENNETH S. FINK, MD, MGA, MPH
DIRECTOR OF HEALTH
KA LUNA HO'ŌKELE

STATE OF HAWAII
DEPARTMENT OF HEALTH
KA 'OIHANA OLAKINO
P. O. BOX 3378
HONOLULU, HI 96801-3378

In reply, please refer to:
File:

July 1, 2024

6760 - 1 1 008 008 EA PreAsmnt Cons
Fort Shafter Relocation wRev.docx

Ms. Gail Renard, Associated Principal
HHF Planners
733 Bishop Street Suite 2590
Honolulu, Hawaii 96813
Email shafter.elem.ea@hhf.com

Dear Ms. Renard:

Subject: Shafter Elementary School Campus Relocation
Environmental Assessment Pre-Assessment Consultation
Fort Shafter Military Reservation, Oahu, Hawaii
TMK (1) 1-1-008: 008
2508 Kaua Street, Honolulu, 96858
(Relocation on Hase Drive / Morton Drive)

Thank you for allowing us the opportunity to provide comments on the above subject project.

As the property apparently is sewered by Fort Shafter Military Base and the domestic wastewater will be handled by sewer connection to the City and County of Honolulu sanitary sewer service system, we have no objections to the relocation of the Fort Shafter Elementary School Campus.

Please be informed that the design plans should address any effects associated with the construction of and/or discharges from the wastewater systems to any public trust, Native Hawaiian resources, or the exercise of traditional cultural practices.

Should you have any questions, please contact Mark Tomomitsu at (808) 586-4294.

Sincerely,

A handwritten signature in blue ink, appearing to read "J. Nagato".

JONATHAN NAGATO, P.E., ACTING CHIEF
Wastewater Branch

LM/MST:ct

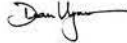


STATE OF HAWAII | KA MOKU'ĀINA 'O HAWAII'
DEPARTMENT OF LAND AND NATURAL RESOURCES | KA 'OIHANA KUMUWAIWAI 'ĀINA
COMMISSION ON WATER RESOURCE MANAGEMENT | KE KAHUWAI PONO
P.O. BOX 621
HONOLULU, HAWAII 96809

May 17, 2024

REF: RFD.6283.3

TO: Gail Renard
HHF Planners

FROM: Dean D. Uyeno, Acting Deputy Director 
Commission on Water Resource Management

SUBJECT: Shafter Elementary School Campus Relocation, Pre-Assessment Consultation

FILE NO.: RFD.6283.3
TMK NO.: (1) 1-0-080:005

Thank you for the opportunity to review the subject document. The Commission on Water Resource Management (CWRM) is the agency responsible for administering the State Water Code (Code). Under the Code, all waters of the State are held in trust for the benefit of the citizens of the State, therefore all water use is subject to legally protected water rights. CWRM strongly promotes the efficient use of Hawaii's water resources through conservation measures and appropriate resource management. For more information, please refer to the State Water Code, Chapter 174C, Hawaii Revised Statutes, and Hawaii Administrative Rules, Chapters 13-167 to 13-171. These documents are available via the Internet at <http://dlnr.hawaii.gov/cwrn>.

Our comments related to water resources are checked off below.

- ☒ 1. We recommend coordination with the county to incorporate this project into the county's Water Use and Development Plan. Please contact the respective Planning Department and/or Department of Water Supply for further information.
- ☒ 2. We recommend coordination with the Engineering Division of the State Department of Land and Natural Resources to incorporate this project into the State Water Projects Plan.
- ☐ 3. We recommend coordination with the Hawaii Department of Agriculture (HDOA) to incorporate the reclassification of agricultural zoned land and the redistribution of agricultural resources into the State's Agricultural Water Use and Development Plan (AWUDP). Please contact the HDOA for more information.
- ☒ 4. We recommend that water efficient fixtures be installed and water efficient practices implemented throughout the development to reduce the increased demand on the area's freshwater resources. Reducing the water usage of a home or building may earn credit towards Leadership in Energy and Environmental Design (LEED) certification. More information on LEED certification is available at <http://www.usgbc.org/leed>. A listing of fixtures certified by the EPA as having high water efficiency can be found at <http://www.epa.gov/watersense>.
- ☒ 5. We recommend the use of best management practices (BMP) for stormwater management to minimize the impact of the project to the existing area's hydrology while maintaining on-site infiltration and preventing polluted runoff from storm events. Stormwater management BMPs may earn credit toward LEED certification. More information on stormwater BMPs can be found at <http://planning.hawaii.gov/czm/initiatives/low-impact-development/>
- ☒ 6. We recommend the use of alternative water sources, wherever practicable.
- ☐ 7. We recommend participating in the Hawaii Green Business Program, that assists and recognizes businesses that strive to operate in an environmentally and socially responsible manner. The program description can be found online at <http://energy.hawaii.gov/green-business-program>.
- ☐ 8. We recommend adopting landscape irrigation conservation best management practices endorsed by the Landscape Industry Council of Hawaii. These practices can be found online at http://www.hawaiiscape.com/wp-content/uploads/2013/04/LICH_Irrigation_Conservation_BMPs.pdf.

- ☒ 9. There may be the potential for ground or surface water degradation/contamination and recommend that approvals for this project be conditioned upon a review by the State Department of Health and the developer's acceptance of any resulting requirements related to water quality.
- ☐ 10. The proposed water supply source for the project is located in a designated water management area, and a Water Use Permit is required prior to use of water. The Water Use Permit may be conditioned on the requirement to use dual line water supply systems for new industrial and commercial developments.
- ☐ 11. The Hawaii Water Plan is directed toward the achievement of the utilization of reclaimed water for uses other than drinking and for potable water needs in one hundred per cent of State and County facilities by December 31, 2045 (§174C-31(g)(6), Hawaii Revised Statutes). We strongly recommend that this project consider using reclaimed water for its non-potable water needs, such as irrigation. Reclaimed water may include, but is not limited to, recycled wastewater, gray water, and captured rainwater/stormwater. Please contact the Hawai'i Department of Health, Wastewater Branch, for more information on their reuse guidelines and the availability of reclaimed water in the project area.
- ☐ 12. A Well Construction Permit(s) is (are) are required before the commencement of any well construction work.
- ☐ 13. A Pump Installation Permit(s) is (are) required before ground water is developed as a source of supply for the project.
- ☐ 14. There is (are) well(s) located on or adjacent to this project. If wells are not planned to be used and will be affected by any new construction, they must be properly abandoned and sealed. A permit for well abandonment must be obtained.
- ☐ 15. Ground-water withdrawals from this project may affect streamflows, which may require an instream flow standard amendment.
- ☐ 16. A Stream Channel Alteration Permit(s) is (are) required before any alteration can be made to the bed and/or banks of a stream channel.
- ☐ 17. A Stream Diversion Works Permit(s) is (are) required before any stream diversion works is constructed or altered.
- ☐ 18. A Petition to Amend the Interim Instream Flow Standard is required for any new or expanded diversion(s) of surface water.
- ☒ 19. The planned source of water for this project has not been identified in this report. Therefore, we cannot determine what permits or petitions are required from our office, or whether there are potential impacts to water resources.

☒ OTHER: Planning -

The document should note that water conservation measures will be incorporated into the project design and that LEED sustainable design principles will be integrated. The Commission strongly encourages the implementation of water conservation measures, best management practices to mitigate stormwater runoff, and the reuse of stormwater and other alternative non-potable sources, where practicable.

If you have any questions, please contact Ryan Imata of the Regulation Branch at (808) 587-0225 or Katie Roth of the Planning Branch (808) 587-0216.

JOSH GREEN, M.D.
GOVERNOR | KE KIA'ĀINA

SYLVIA LUKE
LIEUTENANT GOVERNOR | KA HOPE KIA'ĀINA



DAWN N. S. CHANG
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE
MANAGEMENT

STATE OF HAWAI'I | KA MOKU'ĀINA 'O HAWAI'I
DEPARTMENT OF LAND AND NATURAL RESOURCES
KA 'OIHANA KUMUWAIWAI 'ĀINA
LAND DIVISION

P.O. BOX 621
HONOLULU, HAWAII 96809

June 19, 2024

LD 0554

HHF Planners
733 Bishop Street, Suite 2590
Honolulu, Hawaii 96813

Via email: shafter.elem.ca@hhf.com

SUBJECT: Shafter Elementary School Campus Relocation Environmental Assessment Pre-Assessment Consultation Fort Shafter Military Reservation, O'ahu, Hawai'i, Honolulu District, Island of Oahu, Hawaii, TMK: (1) 1-0-080: 005 (por.)

Thank you for the opportunity to review and comment on the subject project. The Land Division of the Department of Land and Natural Resources (DLNR) distributed copies of your request to DLNR's various divisions for their review and comment.

Enclosed are comments received from our Engineering Division and Division of Aquatic Resources. Should you have any questions, please feel free to contact Timothy Chee via email at timothy.chee@hawaii.gov. Thank you.

Sincerely,

Russell Tsuji

Russell Y. Tsuji
Land Administrator

Attachments
cc: Central Files

JOSH GREEN, M.D.
GOVERNOR | KE KIA'ĀINA

SYLVIA LUKE
LIEUTENANT GOVERNOR | KA HOPE KIA'ĀINA



DAWN N. S. CHANG
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE
MANAGEMENT

STATE OF HAWAI'I | KA MOKU'ĀINA 'O HAWAI'I
DEPARTMENT OF LAND AND NATURAL RESOURCES
KA 'OIHANA KUMUWAIWAI 'ĀINA
LAND DIVISION

P.O. BOX 621
HONOLULU, HAWAII 96809
May 16, 2024

LD 0554

MEMORANDUM

FROM: ~~TO:~~

DLNR Agencies:

- X Div. of Aquatic Resources (via email: kendall.l.tucker@hawaii.gov)
- X Div. of Boating & Ocean Recreation (via email: richard.t.howard@hawaii.gov)
- X **Engineering Division** (via email: DLNR.Engr@hawaii.gov)
- X Div. of Forestry & Wildlife (via email: Rubyrosa.T.Terrago@hawaii.gov)
- X Div. of State Parks (curt.a.cottrell@hawaii.gov)
- X Commission on Water Resource Management (via email: DLNR.CWRM@hawaii.gov)
- X Office of Conservation & Coastal Lands (via email: Sharleen.k.kuba@hawaii.gov)
- X Land Division – Oahu District (via email: barry.w.cheung@hawaii.gov)
- X Aha Moku (via email: leimana.k.damate@hawaii.gov)

TO: ~~FROM:~~

Russell Y. Tsuji, Land Administrator

Russell Tsuji

SUBJECT:

**Shafter Elementary School Campus Relocation Environmental Assessment
Pre-Assessment Consultation Fort Shafter Military Reservation, O'ahu,
Hawai'i**

LOCATION:

Honolulu District, Island of Oahu, Hawaii

TMK: (1) 1-0-080: 005 (por.)

APPLICANT:

HHF PLANNERS

Transmitted for your review and comment is information on the above-referenced project. Please submit any comments to timothy.chee@hawaii.gov at the Land Division by the internal deadline of **June 14, 2024**. If no response is received by this date, we will assume your agency has no comments. If you have any questions, please contact Timothy Chee at the above email address. Thank you.

BRIEF COMMENTS:

- () We have no objections.
- () We have no comments.
- () We have no additional comments.
- (✓) Comments are included/attached.

Signed:

Print Name:

Carty S. Chang, Chief Engineer

Division:

Engineering Division

Date:

06/04/2024

Attachments

Cc: Central Files

**DEPARTMENT OF LAND AND NATURAL RESOURCES
ENGINEERING DIVISION**

LD/Russel Y. Tsuji

**Ref: Shafter Elementary School Campus Relocation Environmental Assessment
Pre-Assessment Consultation Fort Shafter Military Reservation, O'ahu,
Hawai'i**

LOCATION: Honolulu District, Island of Oahu, Hawaii

TMK(s): (1) 1-0-080: 005 (por.)

Applicant: HHF PLANNERS

COMMENTS

The rules and regulations of the National Flood Insurance Program (NFIP), Title 44 of the Code of Federal Regulations (44CFR), are in effect when development falls within a Special Flood Hazard Area (high-risk areas). Be advised that 44CFR, Chapter 1, Subchapter B, Part 60 reflects the minimum standards as set forth by the NFIP. Local community flood ordinances may stipulate higher standards that can be more restrictive and would take precedence over the minimum NFIP standards.

The owner of the project property and/or their representative is responsible to research the Flood Hazard Zone designation for the project. Flood zones subject to NFIP requirements are identified on FEMA's Flood Insurance Rate Maps (FIRM). The official FIRMs can be accessed through FEMA's Map Service Center (msc.fema.gov). Our Flood Hazard Assessment Tool (FHAT) (fhathawaii.gov) could also be used to research flood hazard information.

If there are questions regarding the local flood ordinances, please contact the applicable County NFIP coordinating agency below:

- Oahu: City and County of Honolulu, Department of Planning and Permitting (808) 768-8098.
- Hawaii Island: County of Hawaii, Department of Public Works (808) 961-8327.
- Maui/Molokai/Lanai County of Maui, Department of Planning (808) 270-7139.
- Kauai: County of Kauai, Department of Public Works (808) 241-4849.

Signed: 
CARTY S. CHANG, CHIEF ENGINEER

Date: 06/04/2024

JOSH GREEN, M.D.
GOVERNOR | KE KIA'ĀINA

SYLVIA LUKE
LIEUTENANT GOVERNOR | KA HOPE KIA'ĀINA



DAWN N. S. CHANG
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE
MANAGEMENT

STATE OF HAWAI'I | KA MOKU'ĀINA 'O HAWAI'I
DEPARTMENT OF LAND AND NATURAL RESOURCES
KA 'OIHANA KUMUWAIWAI 'ĀINA
LAND DIVISION

P.O. BOX 621
HONOLULU, HAWAII 96809
May 16, 2024

LD 0554

MEMORANDUM

TO: **DLNR Agencies:**
X Div. of Aquatic Resources (via email: kendall.l.tucker@hawaii.gov)
X Div. of Boating & Ocean Recreation (via email: richard.t.howard@hawaii.gov)
X Engineering Division (via email: DLNR.Engr@hawaii.gov)
X Div. of Forestry & Wildlife (via email: Rubyrosa.T.Terrago@hawaii.gov)
X Div. of State Parks (curt.a.cottrell@hawaii.gov)
X Commission on Water Resource Management (via email: DLNR.CWRM@hawaii.gov)
X Office of Conservation & Coastal Lands (via email: Sharleen.k.kuba@hawaii.gov)
X Land Division – Oahu District (via email: barry.w.cheung@hawaii.gov)
X Aha Moku (via email: leimana.k.damate@hawaii.gov)

FROM: **Russell Y. Tsuji, Land Administrator** *Russell Tsuji*

SUBJECT: **Shafter Elementary School Campus Relocation Environmental Assessment
Pre-Assessment Consultation Fort Shafter Military Reservation, O'ahu,
Hawai'i**

LOCATION: **Honolulu District, Island of Oahu, Hawaii**

APPLICANT: **TMK: (1) 1-0-080: 005 (por.)
HHF PLANNERS**

Transmitted for your review and comment is information on the above-referenced project. Please submit any comments to timothy.chee@hawaii.gov at the Land Division by the internal deadline of **June 14, 2024**. If no response is received by this date, we will assume your agency has no comments. If you have any questions, please contact Timothy Chee at the above email address. Thank you.

BRIEF COMMENTS:

- () We have no objections.
() We have no comments.
() We have no additional comments.
☒ Comments are included/attached.

Signed: *Edward*
Print Name: Edward Kekoa for Brian Neilson-Administrator
Division: Aquatic Resources
Date: Jun 4, 2024

Attachments
Cc: Central Files

JOSH GREEN, M.D.
GOVERNOR | KE KIA'ĀINA

SYLVIA LUKE
LIEUTENANT GOVERNOR | KA HOPE KIA'ĀINA



STATE OF HAWAII | KA MOKU'ĀINA 'O HAWAII
DEPARTMENT OF LAND AND NATURAL
RESOURCES DIVISION OF AQUATIC RESOURCES
1151 PUNCHBOWL STREET, ROOM 330
HONOLULU, HAWAII 96813

Date: 6/3/2024

DAR #AR6672

DAWN N.S. CHANG
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE
MANAGEMENT

RYAN K.P. KANAKA'OLE
FIRST DEPUTY

DEAN D. UYENO
ACTING DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION BUREAU
OF CONVEYANCES
COMMISSION ON WATER RESOURCE
MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES
ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS



MEMORANDUM

TO: Brian J. Neilson
DAR Administrator

FROM: Jake Reichard, Aquatic Biologist

SUBJECT: Shafter Elementary School Campus Relocation
Environmental Assessment Pre-Assessment Consultation

Request Submitted by: HHF Planners on behalf of State of Hawaii Department of Education
Fort Shafter Military Reservation, Oahu, Hawaii

Location of Project:

Brief Description of Project:

Shafter elementary school has been located at its current site since 1966. The school includes five primary building and one portable classroom building; together they total about 38,000 square feet. Originally designed for 200 students the facilities now fail to meet current HIDOE and Department of Defense Education Activity (DoDEA) educational specifications for elementary schools. Its learning spaces are undersized with minimal flexibility. The proposed action would construct a new elementary school that meets current requirements for a design enrollment of 500 students ranging from Pre-K to 6th grade. The proposed relocation site (the former Rice Manor family housing area) was identified as the new school location which is about 8.3 acres in size.

Comments:

☐ No Comments ☒ Comments Attached

Thank you for providing DAR the opportunity to review and comment on the proposed project. Should there be any changes to the project plan, DAR requests the opportunity to review and comment on those changes.

Comments Approved: BJN Date: Jun 4, 2024
for Brian J. Neilson
DAR Administrator

DAR# AR6672

Brief Description of Project

The proposed action would include construction the following facilities at the new site:

- One-story Pre-K/Kindergarten Classroom

Building

- Two-story Administrative/Library Building
- One-story Cafeteria Building
- Three-story classroom building
- Covered play court
- Approximately 138 parking stalls
- Service/fire lane
- Play field

Comments

DAR recommends that best management practices for mitigation of erosion and Land Based Source Pollution (LBSP) be followed. The close proximity to aquatic resources should be considered during design and construction. The Kahauiki stream flows through the proposed project area so caution should be exercised. Landscape design and leveling should be such that long term erosion and LBSP are minimized.

During construction, these measures would include any type of barrier (e.g. sediment barriers/bags, petroleum absorption diapers, etc.) that limits the amount of sediment or LBSP (e.g. petroleum products, chemicals, debris, etc.) to the maximum extent practicable. DAR recommends that all construction materials be composed of environmentally inert materials to the extent practicable. The Contractor shall consider the weather while performing construction. Some work may be performed during low rain conditions, but all construction would be halted during storm conditions or when storm conditions threaten the watershed.

DAR would like to request notification, photo documentation, and GPS coordinates for any occurrence where above-average amounts of sediment or pollution have entered the water, to assess the impact, if any.

DAR recommends that the applicant take steps to plant native vegetation, that actively acts to retain surface storm-water run-off and sediment during precipitation events. Short grass will be likely ineffective at retaining surface storm-water run-off and sediment. Planting an effective vegetated buffer, down the slope of the construction site will help to capture soil and pollutants and absorb excess surface runoff from precipitation before they reach the shoreline.

DAR recommends planting native species. The most effective native soil/sand stabilizer and with water and sediment retention capabilities is Pohinahina (*Vitex rotundifolia*).

Others include

`aki`aki (*Sporobolus virginicus*), Pa`u o Hi`iaka (*Jaquemontia sandwicense*), Pohuehue (*Ipomoea pes-capre*). The former species will act as a barrier much like a gravel berm, whereas the latter species are low-growing and hearty enough for walking on. They can be purchased at Hui Ku Maoli Ola nursery www.hawaiiannativeplants.com

JOSH GREEN, M.D.
GOVERNOR | KE KIA'ĀINA

SYLVIA LUKE
LIEUTENANT GOVERNOR | KA HOPE KIA'ĀINA



DAWN N. S. CHANG
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE
MANAGEMENT

STATE OF HAWAI'I | KA MOKU'ĀINA 'O HAWAI'I
DEPARTMENT OF LAND AND NATURAL RESOURCES
KA 'OIHANA KUMUWAIWAI 'ĀINA
LAND DIVISION

P.O. BOX 621
HONOLULU, HAWAII 96809

June 24, 2024

LD 0554

HHF Planners
733 Bishop Street, Suite 2590
Honolulu, Hawaii 96813

Via email: shafter.elem.ca@hhf.com

SUBJECT: Shafter Elementary School Campus Relocation Environmental Assessment Pre-Assessment Consultation Fort Shafter Military Reservation, O'ahu, Hawai'i, Honolulu District, Island of Oahu, Hawaii, TMK: (1) 1-0-080: 005 (por.)

Thank you for the opportunity to review and comment on the subject. In addition to previous comments sent to you from the Department of Land and Natural Resources (DLNR), enclosed are also comments received from the Division of Forestry and Wildlife.

Should you have any questions, please feel free to contact Timothy Chee at timothy.chee@hawaii.gov. Thank you.

Sincerely,

Russell Tsuji

Russell Y. Tsuji
Land Administrator

Attachments
cc: Central Files

JOSH GREEN, M.D.
GOVERNOR | KE KIA'ĀINA

SYLVIA LUKE
LIEUTENANT GOVERNOR | KA HOPE KIA'ĀINA



DAWN N. S. CHANG
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE
MANAGEMENT

STATE OF HAWAI'I | KA MOKU'ĀINA 'O HAWAI'I
DEPARTMENT OF LAND AND NATURAL RESOURCES
KA 'OIHANA KUMUWAIWAI 'ĀINA
LAND DIVISION

P.O. BOX 621
HONOLULU, HAWAII 96809
May 16, 2024

LD 0554

MEMORANDUM

FROM: **DLNR Agencies:**
X Div. of Aquatic Resources (via email: kendall.l.tucker@hawaii.gov)
X Div. of Boating & Ocean Recreation (via email: richard.t.howard@hawaii.gov)
X Engineering Division (via email: DLNR.Engr@hawaii.gov)
X Div. of Forestry & Wildlife (via email: Rubyrosa.T.Terrago@hawaii.gov)
X Div. of State Parks (curt.a.cottrell@hawaii.gov)
X Commission on Water Resource Management (via email: DLNR.CWRM@hawaii.gov)
X Office of Conservation & Coastal Lands (via email: Sharleen.k.kuba@hawaii.gov)
X Land Division – Oahu District (via email: barry.w.cheung@hawaii.gov)
X Aha Moku (via email: leimana.k.damate@hawaii.gov)

TO: **Russell Y. Tsuji, Land Administrator** *Russell Tsuji*

SUBJECT: **Shafter Elementary School Campus Relocation Environmental Assessment
Pre-Assessment Consultation Fort Shafter Military Reservation, O'ahu,
Hawai'i**

LOCATION: **Honolulu District, Island of Oahu, Hawaii**

APPLICANT: **TMK: (1) 1-0-080: 005 (por.)
HHF PLANNERS**

Transmitted for your review and comment is information on the above-referenced project. Please submit any comments to timothy.chee@hawaii.gov at the Land Division by the internal deadline of **June 14, 2024**. If no response is received by this date, we will assume your agency has no comments. If you have any questions, please contact Timothy Chee at the above email address. Thank you.

BRIEF COMMENTS:

- () We have no objections.
() We have no comments.
() We have no additional comments.
☒ Comments are included/attached.

Signed: Kathryn Stanaway
Print Name: Kathryn E. Stanaway, Acting Wildlife Prog. Mgr.
Division: Forestry and Wildlife
Date: Jun 24, 2024

Attachments
Cc: Central Files

JOSH GREEN, M.D.
GOVERNOR | KE KIA'ĀINA

SYLVIA LUKE
LIEUTENANT GOVERNOR | KA HOPE KIA'ĀINA



STATE OF HAWAII | KA MOKU'ĀINA 'O HAWAI'I
DEPARTMENT OF LAND AND NATURAL RESOURCES
KA 'OIHANA KUMUWAIWAI 'ĀINA

DIVISION OF FORESTRY AND WILDLIFE
1151 PUNCHBOWL STREET, ROOM 325
HONOLULU, HAWAII 96813

DAWN N.S. CHANG
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE
MANAGEMENT

RYAN K.P. KANAKA'OLE
FIRST DEPUTY

DEAN D. UYENO
ACTING DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE
MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES
ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

June 21, 2024

Log no. 4572

MEMORANDUM

TO: RUSSELL Y. TSUJI, Administrator
Land Division

FROM: KATHRYN E. STANAWAY, Acting Wildlife Program Manager
Division of Forestry and Wildlife

SUBJECT: Request for Comment on the Shafter Elementary School Campus
Relocation Environmental Assessment Pre-Assessment
Consultation Fort Shafter Military Reservation, O'ahu

The Department of Land and Natural Resources, Division of Forestry and Wildlife (DOFAW) has received your request for comment regarding the Shafter Elementary School Campus Relocation Project Environmental Assessment (EA) Pre-Assessment, located at the Fort Shafter Military Reservation on the island of O'ahu; TMK: (1) 1-0-080:005 (por.). The proposed project would be to construct a new elementary school as the current school does not meet the requirements for the Department of Defense Education Activity educational specifications for elementary schools. As State funds are being used, an EA is being prepared in compliance with Hawaii Revised Statutes 343. The current building comprises 38,000 square feet and can accommodate 200 students. The new school is being built to accommodate enrollment of 500 students. The proposed site will encompass 8.3 acres and will be located 0.6 miles northeast of the Fort Shafter main gate. Work will include the construction of a one-story Pre-K/kindergarten classroom building, two-story administrative/library building, one-story cafeteria building, three-story classroom building, covered play court, approximately 138 parking stalls, service/fire lane, and a play field.

The State listed 'ōpe'ape'a or Hawaiian Hoary Bat (*Lasiurus cinereus semotus*) could potentially occur at or in the vicinity of the project and may roost in nearby trees. Any required site clearing should be timed to avoid disturbance to bats during their birthing and pup rearing season (June 1 through September 15). During this period woody plants greater than 15 feet (4.6 meters) tall should not be disturbed, removed, or

trimmed. Barbed wire should also be avoided in any construction as bats can become ensnared and killed by such fencing material during flight.

Artificial lighting can adversely impact seabirds that may pass through the area at night by causing them to become disoriented. This disorientation can result in their collision with manmade structures or the grounding of birds. For nighttime work that might be required, DOFAW recommends that all lights used be fully shielded to minimize the attraction of seabirds. Nighttime work that requires outdoor lighting should be avoided during the seabird fledging season, from September 15 through December 15, when young seabirds make their maiden voyage to sea.

If nighttime construction is required during the seabird fledgling season (September 15 to December 15), we recommend that a qualified biologist be present at the project site to monitor and assess the risk of seabirds being attracted or grounded due to the lighting. If seabirds are seen circling around the area, lights should then be turned off. If a downed seabird is detected, please follow DOFAW's recommended response protocol by visiting <https://dlnr.hawaii.gov/wildlife/seabird-fallout-season/>

Permanent lighting also poses a risk of seabird attraction, and as such should be minimized or eliminated to protect seabird flyways and preserve the night sky. For illustrations and guidance related to seabird-friendly light styles that also protect seabirds and the dark starry skies of Hawai'i please visit <https://dlnr.hawaii.gov/wildlife/files/2016/03/DOC439.pdf>.

State-listed waterbirds such as ae'o or Hawaiian stilt (*Himantopus mexicanus knudseni*), 'alae ke'oke'o or Hawaiian coot (*Fulica alai*), 'alae 'ula or Hawaiian gallinule (*Gallinula chloropus sandvicensis*), koloa maoli or Hawaiian Duck (*Anas wyvilliana*), and nēnē or Hawaiian Goose (*Branta sandvicensis*) could potentially occur at or in the vicinity of the proposed project site. It is against State law to harm or harass these species. If any of these species are present during construction, all activities within 100 feet (30 meters) should cease and the bird or birds should not be approached. Work may continue after the bird or birds leave the area of their own accord. If a nest is discovered at any point, please contact the O'ahu Branch DOFAW Office at (808) 973-9778 and establish a buffer zone around the nest.

The State endangered pueo or Hawaiian Short-eared owl (*Asio flammeus sandwichensis*) could potentially occur in the project vicinity. Pueo are most active during dawn and dusk twilights. Remove and exclude non-native mammals such as mongoose, cats, dogs, and ungulates from the nesting area. Minimize habitat alterations and disturbance during pueo breeding season. Pueo nest on the ground and active nests have been found year-round. Before any potentially disturbing activity like clearing vegetation, especially ground-based disturbance, DOFAW recommends a qualified biologist conduct surveys during crepuscular hours and walk line transects through the area to detect any active pueo nests. If a pueo nest is discovered, notify DOFAW staff, minimize time spent at the nest, and establish a minimum buffer distance of 100 meters from the nest until chicks are capable of flight.

The State threatened manu-o-Kū or White Tern (*Gygis alba*) is known to nest in the vicinity of the proposed project. If tree trimming or removal is planned, DOFAW strongly recommends a qualified biologist survey for the presence of White Terns prior to any action that could disturb the trees. White Tern pairs typically lay their single egg on a tree branch with no nest. Eggs and chicks can be dislodged by construction equipment or workers that contact trees in which White Terns are nesting. As such, a tree protection program should be in place for any mature trees with nesting or roosting White Terns. For more information regarding detailed Best Management Practices when conducting tree care activities with manu-o-Kū present, please visit

https://www.whiteterns.org/uploads/8/6/3/2/86323044/mok_tree_care_guidelines_19062_2.pdf

If a nest is discovered, please notify DOFAW staff for assistance.

DOFAW recommends using native plant species for landscaping that are appropriate for the area; i.e., plants for which climate conditions are suitable for them to thrive, plants that historically occurred there, etc. Please do not plant invasive species. DOFAW also recommends referring to www.plantpono.org for guidance on the selection and evaluation of landscaping plants and to determine the potential invasiveness of plants proposed for use in the project.

DOFAW recommends minimizing the movement of plant or soil material between worksites. Soil and plant material may contain detrimental fungal pathogens (e.g., Rapid 'Ōhi'a Death), vertebrate and invertebrate pests (e.g., Little Fire Ants, Coconut Rhinoceros Beetles, etc.), or invasive plant parts (e.g., Miconia, Pampas Grass, etc.) that could harm our native species and ecosystems. We recommend consulting the O'ahu Invasive Species Committee (OISC) at (808) 266-7994 to help plan, design, and construct the project, learn of any high-risk invasive species in the area, and ways to mitigate their spread. All equipment, materials, and personnel should be cleaned of excess soil and debris to minimize the risk of spreading invasive species.

The invasive Coconut Rhinoceros Beetle (CRB) or *Oryctes rhinoceros* is found on the islands of O'ahu, Hawai'i Island, Maui and Kaua'i. On July 1, 2022, the Hawai'i Department of Agriculture (HDOA) approved Plant Quarantine Interim Rule 22-1. This rule restricts the movement of CRB-host material within or to and from the island of O'ahu, which is defined as the Quarantine Area. Regulated material (host material or host plants) is considered a risk for potential CRB infestation. Host material for the beetle specifically includes a) entire dead trees, b) mulch, compost, trimmings, fruit and vegetative scraps, and c) decaying stumps. CRB host plants include the live palm plants in the following genera: *Washingtonia*, *Livistona*, and *Pritchardia* (all commonly known as fan palms), *Cocos* (coconut palms), *Phoenix* (date palms), and *Roystonea* (royal palms). When such material or these specific plants are moved there is a risk of spreading CRB because they may contain CRB in any life stage. For more information regarding CRB, please visit <https://dlnr.hawaii.gov/hisc/info/invasive-species-profiles/coconut-rhinoceros-beetle/>.

DOFAW is concerned about impacts to vulnerable birds from nonnative predators such as cats, rodents, and mongooses. We recommend taking action to minimize predator presence; remove cats, place bait stations for rodents and mongoose, and provide covered trash receptacles.

Due to the arid climate and risks of wildfire to listed species, we recommend coordinating with the Hawai'i Wildfire Management Organization at (808) 850-0900 or admin@hawaiiwildfire.org, on how wildfire prevention can be addressed in the project area. When engaging in activities that have a high risk of starting a wildfire (i.e. welding in grass), it is recommended that you:

- Wet down the area before starting your task,
- Continuously wet down the area as needed,
- Have a fire extinguisher on hand, and
- In the event that your vision is impaired, (i.e. welding goggles) have a spotter to watch for fire starts.

We recommend that Best Management Practices are employed during and after construction to contain any soils and sediment with the purpose of preventing damage to near-shore waters and marine ecosystems.

We appreciate your efforts to work with our office for the conservation of our native species. These comments are general guidelines and should not be considered comprehensive for this site or project. It is the responsibility of the applicant to do their own due diligence to avoid any negative environmental impacts. Should the scope of the project change significantly, or should it become apparent that threatened or endangered species may be impacted, please contact our staff as soon as possible. If you have any questions, please contact Kate Cullison, Protected Species Habitat Conservation Planning Coordinator via email at katherine.cullison@hawaii.gov.

Sincerely,

Kathryn Stanaway

KATHRYN E. STANAWAY
Acting Wildlife Program Manager



STATE OF HAWAII | KA MOKU'ĀINA 'O HAWAII'
DEPARTMENT OF TRANSPORTATION | KA 'OIHANA ALAKAU
869 PUNCHBOWL STREET
HONOLULU, HAWAII 96813-5097

June 17, 2024

VIA EMAIL: shafter.elem.ea@hhf.com

Ms. Gail Renard
Associate Principal
HHF Planners
733 Bishop Street, Suite 2590
Honolulu, Hawaii 96813

Dear Ms. Renard:

Subject: Pre-Assessment Consultation for Environmental Assessment
Shafter Elementary School Campus Relocation
Fort Shafter Military Reservation, Oahu, Hawaii
Tax Map Key: (1) 1-0 080: 005 (portion)

Thank you for your letter, dated May 16, 2024, requesting the Hawaii Department of Transportation's (HDOT) review and comments on the pre-assessment consultation for the subject project. HDOT understands the State of Hawaii Department of Education is proposing to relocate the Major General William R. Shafter Elementary School to a new site at Fort Shafter Military Reservation.

HDOT has the following comments:

1. The proposed site is approximately 0.93 miles from the property boundary of Daniel K. Inouye International Airport. All projects within 5 miles from Hawaii State airports are advised to read the Technical Assistance Memorandum (TAM) for guidance with development and activities that may require further review and permits. The TAM can be viewed at this link: http://files.hawaii.gov/dbedt/op/docs/TAM-FAA-DOT-Airports_08-01-2016.pdf.
2. Federal Aviation Administration (FAA) regulation requires the submittal of FAA Form 7460-1 Notice of Proposed Construction or Alteration pursuant to the Code of Federal Regulations, Title 14, Part 77.9, if the construction or alteration is within 20,000 feet of a public use or military airport which exceeds a 100:1 surface from any point on the

runway of each airport with its longest runway more than 3,200 feet. Construction equipment and staging area heights, including heights of temporary construction cranes, shall be included in the submittal. The form and criteria for submittal can be found at the following website: <https://oeaaa.faa.gov/oeaaa/external/portal.jsp>. Please provide a copy of the FAA response to the Part 77 analysis to the HDOT Airport Planning Section.

3. Due to the proximity to the airport, the developer should be aware of potential noise from aircraft operations. There is also a potential for fumes, smoke, vibrations, odors, etc., resulting from occasional aircraft flight operations over or near the project location. These impacts may increase or decrease over time and are dependent on airport operations.
4. The HDOT requires that the proposed development does not provide landscape and vegetation that will create a wildlife attractant, which can potentially become a hazard to aircraft operations. Please review the FAA Advisory Circular 150/5200-33C, Hazardous Wildlife Attractants On Or Near Airports for guidance. If the development creates a wildlife attractant, the developer shall immediately mitigate the hazard upon notification by the HDOT and/or FAA.
5. If a solar energy photovoltaic (PV) system is going to be installed, be aware that PV systems located in or near the approach path of aircrafts can create a hazardous condition for pilots due to possible glint and glare reflected from the PV panel array. If glint or glare from the PV array creates a hazardous condition for pilots, the owner of the PV system shall be prepared to immediately mitigate the hazard upon notification by the HDOT and/or FAA.

The FAA requires a glint and glare analysis for all solar energy PV systems near airports. The www.sandia.gov/glare website has information and guidance with the preparation of a glint and glare analysis. A separate FAA Form 7460-1 will be necessary for the solar energy PV system. After the FAA determination of the Form 7460-1 glint and glare analysis, a copy shall be provided to the HDOT Airport Planning Section by the owner of the solar energy PV system.

Solar energy PV systems have also been known to emit radio frequency interference (RFI) to aviation-dedicated radio signals, thereby disrupting the reliability of air-to-ground communications. Again, the owner of the solar energy PV system shall be prepared to immediately mitigate the RFI hazard upon notification by the HDOT and/or FAA.

Please submit any subsequent land use entitlement related requests for review or correspondence to the HDOT Land Use Intake email address at DOT.LandUse@hawaii.gov.

Ms. Gail Renard
June 17, 2024
Page 3

STP 8.3769

If there are any questions, please contact Mr. Blayne Nikaido, Planner, Land Use Section of the HDOT Statewide Transportation Planning Office at (808) 831-7979 or via email at blayne.h.nikaido@hawaii.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Ed Sniffen", with a stylized flourish at the end.

EDWIN H. SNIFFEN
Director of Transportation

**BOARD OF WATER SUPPLY
KA 'OIHANA WAI
CITY AND COUNTY OF HONOLULU**

630 SOUTH BERETANIA STREET • HONOLULU, HAWAII 96843
Phone: (808) 748-5000 • www.boardofwatersupply.com

RICK BLANGIARDI
MAYOR
MEIA

ERNEST Y. W. LAU, P.E.
MANAGER AND CHIEF ENGINEER
MANAKIA A ME KAHU WILIKI

ERWIN KAWATA
DEPUTY MANAGER
HOPE MANAKIA



NĀ'ĀLEHU ANTHONY, Chair
KAPUA SPROAT, Vice Chair
BRYAN P. ANDAYA
JONATHAN KANESHIRO
EDWIN H. SNIFFEN, Ex-Officio
GENE C. ALBANO, P.E., Ex-Officio

May 31, 2024

Ms. Gail Renard
HHF Planners
733 Bishop Street, Suite 2590
Honolulu, Hawai'i 96813

Dear Ms. Renard:

Subject: Your Letter Dated May 16, 2024, Requesting Comments on the
Environmental Assessment Pre-Consultation for the Shafter Elementary
School Campus Relocation Project at 2 Fort Shafter, Tax Map Key: 1-1-008:
001 & 005

Thank you for your letter regarding the proposed elementary school relocation project.

The Board of Water Supply does not have a water system serving Fort Shafter. All potable, nonpotable, and fire protection water services shall be provided by the private water system serving the area.

If you have any questions, please contact Daniel Koge, Project Review Branch of our Water Resources Division at (808) 748-5444.

Very truly yours,

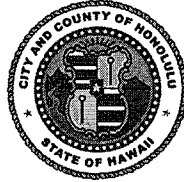
ERNEST Y. W. LAU, P.E.
Manager and Chief Engineer



DEPARTMENT OF DESIGN AND CONSTRUCTION
KA 'OIHANA HAKULAU A ME KE KĀPILI
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET, 11TH FLOOR • HONOLULU, HAWAII 96813
PHONE: (808) 768-8480 • FAX: (808) 768-4567 • WEBSITE: honolulu.gov

RICK BLANGIARDI
MAYOR
MEIA



HAKU MILLES, P.E.
DIRECTOR
PO'O
BRYAN GALLAGHER, P.E.
DEPUTY DIRECTOR
HOPE PO'O

May 30, 2024

SENT VIA EMAIL

HHF Planners
shafter.elem.ea@hhf.com

Dear HHF Planners:

Subject: Shafter Elementary School Campus Relocation
Environmental Assessment Pre-Assessment Consultation
Fort Shafter Military Reservation, O'ahu, Hawai'i
Tax Map Key: (1) 1-0-080: 005 (por.)

Thank you for the opportunity to review and comment. The Department of Design and Construction has no comments to offer at this time.

Should you have any questions, please contact me at (808) 768-8480.

Sincerely,

A handwritten signature in black ink, appearing to read "Haku Milles".

~~for~~ Haku Milles, P.E., LEED AP
Director

HM:cf (922144)

From: [Oyasato, Kyle Y](#)
To: [Shafter Elem EA](#)
Subject: RE: Shafter Elementary School Relocation EA Pre-Assessment Consultation, O'ahu
Date: Wednesday, May 29, 2024 12:34:46 PM

[This message was sent from an outside source.]

Aloha Gail,

Thank you for the opportunity to review and to give our input regarding the subject EA.
We have no comments at this time, as we do not have any facilities or easements on the subject property.

Let me know if you have any questions.

Mahalo.

Kyle

From: Shafter Elem EA [mailto:shafter.elem.ea@hhf.com]
Sent: Thursday, May 16, 2024 1:15 PM
To: Shafter Elem EA <shafter.elem.ea@hhf.com>
Subject: Shafter Elementary School Relocation EA Pre-Assessment Consultation, O'ahu

CAUTION: Email received from an **EXTERNAL** sender. Please confirm the content is safe prior to opening attachments or links.

Dear Participant:

On behalf of the State of Hawai'i Department of Education, HHF Planners is preparing an environmental assessment (EA) to relocate the Major General William R. Shafter Elementary School to a new site within the Fort Shafter Military Reservation on the island of O'ahu, in compliance with Hawai'i Revised Statutes Chapter 343. We are currently conducting pre-assessment consultation to solicit input for the upcoming EA. Your feedback will help to inform and direct the EA analysis. Please see the attached Pre-Assessment Consultation Packet, which includes a brief description of the project, a location map, and a list of the parties consulted. Should you have any questions or concerns, or if you would like to be removed from the list of parties to receive the Draft Environmental Assessment, please contact Gail Renard, whose contact information is provided in the packet.

Thank you for your attention to this important project.

Mahalo,
HHF Planners

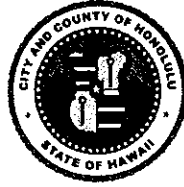
Gail Renard LEED AP
Associate Principal

w 808.457.3167
733 Bishop St. Ste. 2590 | Honolulu, HI 96813
www.hhf.com

**HONOLULU FIRE DEPARTMENT
KA 'OIHANA KINAI AHI O HONOLULU
CITY AND COUNTY OF HONOLULU**

636 SOUTH STREET • HONOLULU, HAWAII 96813
PHONE: (808) 723-7139 • FAX: (808) 723-7111 • WEBSITE: honolulu.gov

RICK BLANGIARDI
MAYOR
MEIA



SHELDON K. HAO
FIRE CHIEF
LUNA NUI KINAI AHI

JASON SAMALA
DEPUTY FIRE CHIEF
HOPE LUNA NUI KINAI AHI

May 23, 2024

Ms. Gail Renard
Associate Principal
HHF Planners
Pacific Guardian Center
733 Bishop Street, Suite 2590
Honolulu, Hawai'i 96813

Dear Ms. Renard:

Subject: Draft Environmental Assessment Preassessment Consultation
Shafter Elementary School Campus Relocation
Fort Shafter Military Reservation
O'ahu, Hawai'i
Tax Map Key: 1-0-080: 005 (Portion)

In response to your letter dated May 16, 2024, regarding the abovementioned subject, the Honolulu Fire Department (HFD) reviewed the submitted information and requires that the following be complied with:

1. Fire department access roads shall be provided such that any portion of the facility or any portion of an exterior wall of the first story of the building is located not more than 150 feet (46 meters) from fire department access roads as measured by an approved route around the exterior of the building or facility. (National Fire Protection Association [NFPA] 1; 2018 Edition, Sections 18.2.3.2.2 and 18.2.3.2.2.1, as amended.)

A fire department access road shall extend to within 50 feet (15 meters) of at least one exterior door that can be opened from the outside and that provides access to the interior of the building. (NFPA 1; 2018 Edition, Section 18.2.3.2.1.)

Ms. Gail Renard

Page 2

May 23, 2024

2. Fire department access roads shall be in accordance with NFPA 1; 2018 Edition, Section 18.2.3.
3. An approved water supply capable of supplying the required fire flow for fire protection shall be provided to all premises upon which facilities, buildings, or portions of buildings are hereafter constructed or moved into the jurisdiction. The approved water supply shall be in accordance with NFPA 1; 2018 Edition, Sections 18.3 and 18.4.
4. Submit civil drawings to the City and County of Honolulu's Department of Planning and Permitting (DPP). They will be routed to the Honolulu Fire Department as needed by the DPP.

The abovementioned provisions are required by the HFD. This project may necessitate that additional requirements be met as determined by other agencies.

Should you have questions, please contact Battalion Chief Jean-Claude Bisch of our Fire Prevention Bureau at 808-723-7151 or jbisch@honolulu.gov.

Sincerely,



CRAIG UCHIMURA
Assistant Chief

CU/MD:bh

HONOLULU POLICE DEPARTMENT
KA 'OIHANA MĀKA'I O HONOLULU
CITY AND COUNTY OF HONOLULU

801 SOUTH BERETANIA STREET • HONOLULU, HAWAII 96813
TELEPHONE: (808) 529-3111 • WEBSITE: www.honoluluupd.org

RICK BLANGIARDI
MAYOR
MEI'A



ARTHUR J. LOGAN
CHIEF
KAHU MĀKA'I

KEITH K. HORIKAWA
RAOE K. VANIC
DEPUTY CHIEFS
HOPE LUNA NUI MĀKA'I

OUR REFERENCE **EO-SH**

June 5, 2024

SENT VIA EMAIL

Ms. Gail Renard
shafter.elem.ea@hhf.com

Dear Mr. Renard:

This is in response to your correspondence of May 16, 2024, requesting input for the Draft Environmental Assessment for the proposed relocation of the Major General William R. Shafter Elementary School to a new site at Fort Shafter Military Reservation.

Based on the information provided, the Honolulu Police Department does not have any comments at this time.

If there are any questions, please call Acting Major Kurt Ng of District 5 (Kalihi) at (808) 723-8208.

Sincerely,

A handwritten signature in black ink, appearing to read "Glenn Hayashi".

GLENN HAYASHI
Assistant Chief of Police
Support Services Bureau

From: [Liu, Rouen](#)
To: [Shafter Elem EA](#)
Cc: [Kuwaye, Kristen](#); [Nagata, Sarah](#)
Subject: Shafter Elementary School Campus Relocation - EA Pre-Assessment Consultation
Date: Thursday, June 6, 2024 4:37:30 PM

[This message was sent from an outside source.]

Dear Ms. Renard,

Thank you for the opportunity to comment on the subject project. Hawaiian Electric Company has no objection to the project. Should Hawaiian Electric have existing easements and facilities on the subject property, we will need continued access for maintenance of our facilities. We appreciate your efforts to keep us apprised of the subject project in the planning process. As the proposed Shafter Elementary School Campus Relocation project comes to fruition, please continue to keep us informed.

Please contact me at 808-772-2135 should there be any questions.

Rouen Liu (WA3 – PTA)
Permits Engineer
Hawaiian Electric Company
PO Box 2750
Honolulu Hawaii 96840-0001

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From: [HT-Plan Reviews](#)
To: [Shafter Elem EA](#); [HT-Plan Reviews](#); [Kolvin Kekua](#)
Subject: RE: Shafter Elementary School Relocation EA Pre-Assessment Consultation, O'ahu
Date: Tuesday, June 11, 2024 10:43:13 PM
Attachments: [image001.png](#)

[This message was sent from an outside source.]

Aloha Gail,

Thank you for your email. HT confirming we do not have any conflicts or facilities in your project area.

Greg Kawachi

Manager II – Network OSP

O: 808.546.7666

C: 808.779.8324



NOTICE: This message is intended only for the person or entity to which it is addressed and may contain confidential and/or privileged information. If you are not the intended recipient, any review, retransmission, dissemination, copying or other use of this message is strictly prohibited. If you received this message in error, please contact the sender immediately by reply email, delete this message from all computers, and destroy any printed copies.

From: Shafter Elem EA <shafter.elem.ea@hhf.com>
Sent: Wednesday, May 29, 2024 8:22 AM
To: HT-Plan Reviews <HT-PlanReviews@hawaiiantel.com>; Kolvin Kekua <Kolvin.Kekua@hawaiiantel.com>
Subject: Shafter Elementary School Relocation EA Pre-Assessment Consultation, O'ahu

Dear Hawaiian Telcom,

On behalf of the State of Hawai'i Department of Education, HHF Planners is preparing an environmental assessment (EA) to relocate the Major General William R. Shafter Elementary School to a new site within the Fort Shafter Military Reservation on the island of O'ahu, in compliance with Hawai'i Revised Statutes Chapter 343. We are currently conducting pre-assessment consultation to solicit input for the upcoming EA. Your feedback will help to inform and direct the EA analysis. Please see the attached Pre-Assessment Consultation Packet, which includes a brief description of the project, a location map, and a list of the parties consulted. Should you have any questions or concerns, or if you would like to be removed from the list of parties to receive the Draft Environmental Assessment, please contact Gail Renard, whose contact information is provided in the packet.

The Consultation Packet indicates that the deadline for comments is June 17, 2024. However, our previous attempt to send a physical letter was unsuccessful due to an undeliverable USPS address, so we are now resubmitting it via email. As a result, the comment period deadline has been extended **to June 27, 2024**. We would appreciate it if you could confirm the receipt of this email.

Thank you for your attention to this important project.



May 28, 2024

HHF Planners
733 Bishop Street, Suite 2590
Honolulu, HI 96813
Attn: Gail Renard

***Subject: Shafter Elementary School Campus Relocation Environmental
Assessment Pre-Assessment Consultation***

Dear Gail Renard,

The locations of existing routes and crossings were shown on the provided plans. The exact locations, and routing of all CATV facilities must be verified in the field due to construction variances. The location of the proposed project may have an effect on Spectrum's existing CATV plant in your work area.

However, if the work or repairs being performed requires special machinery, with a specific height requirements, the contractor performing the work, will be required to notify our office prior to performing any work. Spectrum may need to reattach or move or plant system, in the event that we have to relocate our existing plant system, charges may apply.

At this time, Spectrum utilizes AT&T duct systems to provide our CATV services in the area that passes through your project location. Before any digging toning may be required. Call "One Call Center" at (866)423-7287 to set up toning

This information has been provided to help minimize delays and prevent damage to existing CATV structures within the project area. Should you have any questions or concerns, please feel free to contact me at (808)853-0352, (808)625-9745, or email me via Joshua.Tagawa@charter.com

Sincerely,

Joshua Tagawa

Joshua Tagawa
Construction Coordinator

Appendix B
BIOLOGICAL SURVEY

A Natural Resources Assessment for the New Shafter Elementary School Campus Island of O‘ahu



LeGrande Biological Surveys Inc
4348 Waialae Ave 940
Honolulu HI 96816

Prepared by:
Maya L. LeGrande

Prepared for: Helber, Hastert, & Fee

February 27, 2024

Introduction

A new Shafter Elementary School campus is proposed at the Fort Shafter former Rice Manor housing area with brand new buildings and facilities to support a student population of 500. The project includes demolishing the existing Rice Manor facilities that are mostly vacated. LeGrande Biological Surveys Inc. was tasked with providing a report outlining the current plant and animal species extant within the project area, surveying the stream for signs of wetland potential, and provide conclusions of impact and means to avoid or minimize adverse impacts.

Site Description

The project area for the new Shafter Elementary school and campus is located within Fort Shafter Army Base in the Moanalua area on the south shore of O‘ahu, Hawai‘i. The Walter J Nagorski Golf Course lies to the north of the site. The terrain gently slopes from the mauka or eastern side of the project area at 188 feet elevation towards the makai or western end of the site at 148 feet elevation. The climate is dry to very-dry with a Mean Annual Rainfall of 34.9 inches (Giambelluca et al., 2013). Soils in the project areas are dominated by Makiki Stone Clay [MIA] for the majority of the project area and Kawaihapai Stony Clay Loam [KlaB] for the drainage areas and stream channels. (NRCS 2023).

Figure 1 (following page) shows an aerial of the proposed project area outlined in yellow. For correct street names referenced in this report see Figure 2.

Methods

Plant Survey

Maya LeGrande surveyed the project area on September 11, 2023. Plant species were identified as they were encountered during transects through the survey area and along boundaries. Notes were made on plant associations and distribution, disturbances, topography, substrate type, exposure, and drainage. Species names for plants follow *Manual of the Flowering Plants of Hawai‘i* (Wagner, Herbst, & Sohmer, 1990; Wagner & Herbst, 1999) for native and naturalized flowering plants, *Hawai‘i’s Ferns and Fern Allies* (Palmer, 2003) and *Taxonomic and Nomenclatural Updates to the Fern and Lycophyte Flora of the Hawaiian Islands* (Ranker et al, 2019) for ferns, and *A Tropical Garden Flora* (Staples & Herbst, 2005) for ornamental plants. More recent name changes for naturalized plant species follow Imada (2019).

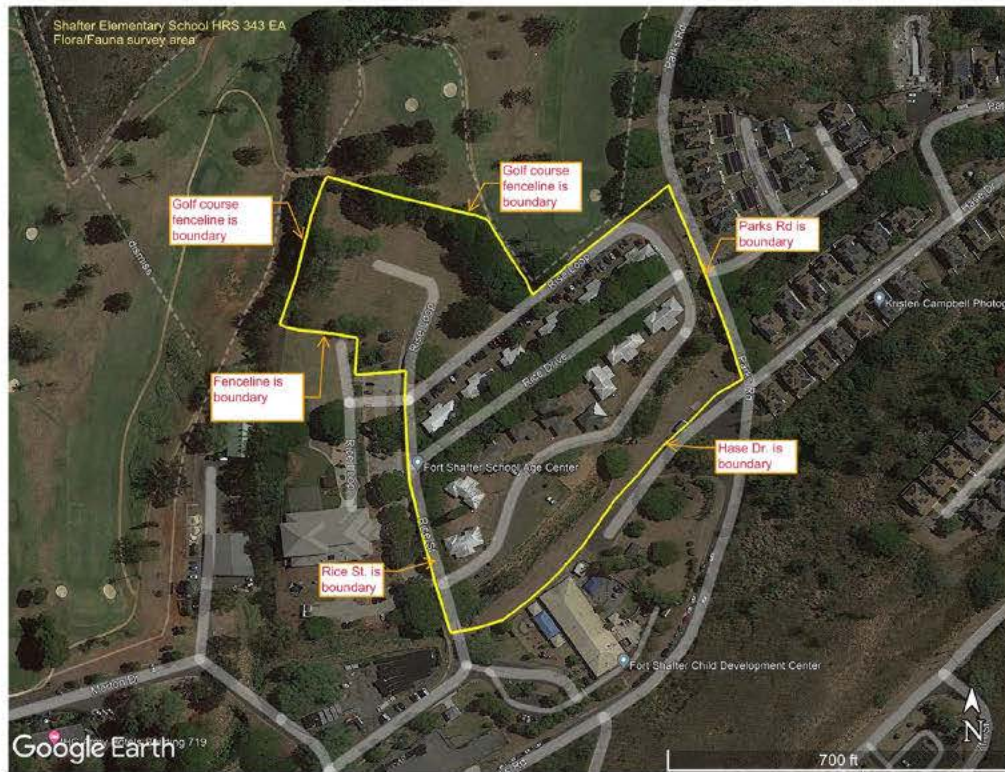


Figure 1. Aerial of Project Area outlined in yellow and location for proposed new Shafter Elementary School.

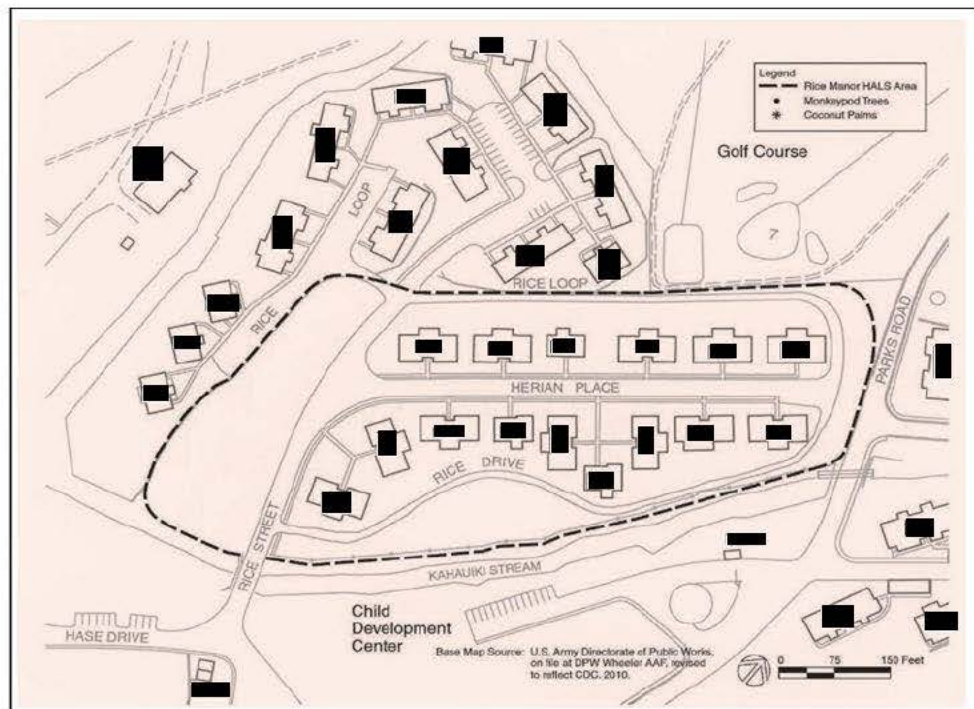


Figure 2. Map of correct street names referenced in this report .

Avian Survey

Bird surveys were conducted in the morning hours, noting species present and estimated abundance. Passive observations were also noted throughout the day. Birds were identified by visual observations aided by Leica 8 X 42 binoculars, and by listening for vocalizations. Weather conditions were ideal with unlimited visibility, no precipitation, and winds at 14 miles per hour. The avian phylogenetic order and nomenclature used in this report follows the AOU *Check-List of North and Middle American Birds* 2021, and the 63rd supplement to the checklist (Chesser et al., 2022, 2023).

Mammalian Survey

A list was made of mammals encountered during the survey. Indicators of mammalian presence, such as tracks, scat, and additional signs were noted. Mammalian phylogenetic order and nomenclature follow *Mammal Species of the World* (Wilson and Reeder, 2005).



Figure 3. View looking west from the eastern boundary of the project area with Rice Drive positioned between the stream channel and buildings.



Figure 4. The intermittent stream channel to the south of the project area was dry during the current survey.

Results

Due to the fact that the project area has been utilized historically by the Shafter Base for housing, offices, and landscaping, a complete plant species list was not incorporated into this report. Therefore, the dominant naturalized vegetation for distinct areas are described in the Flora section below. Fauna results are described in following sections.

Flora

Rice Street, Rice Drive, Rice Loop & Herian Place

Rice Street and Herian Place are both lined with large monkeypod (*Samanea saman*) trees up to 35 feet in height (cover image). Less common trees such as plumeria (*Plumeria rubra*), Cook pine (*Auracaria columnaris*), mango (*Mangifera indica*), kiawe (*Prosopis pallida*), and 'opiuma (*Pithecellobium dulce*) were also observed in the general area. Figure 5 maps and identifies the larger tree species located in the project area. Gutters and rooftops harbored plants including octopus tree (*Heptapleurum actinophylla*), chinese banyan (*Ficus microcarpa*), and autograph tree (*Clusia rosea*). Shrubs and herbs include koa haole (*Leucaena leucocephala*), natal redtop (*Melinis repens*), *Sida ciliaris*, laua'e haole (*Phlebodium aureum*), wedelia (*Sphagneticola trilobata*), and Guinea grass (*Megathyrsus maximus*).

Drainage canal

The stream drainage to the south of the project area eventually connects to Kahauiki Stream below (makai) of the project area. The drainage was dry with no running water at the time of the survey (fig 4) and overgrown with Guinea grass, koa haole, African tulip (*Spathodea campanulata*), 'opiuma, Chinese violet (*Asystasia gangetica*), and *Ipomoea obscura*.

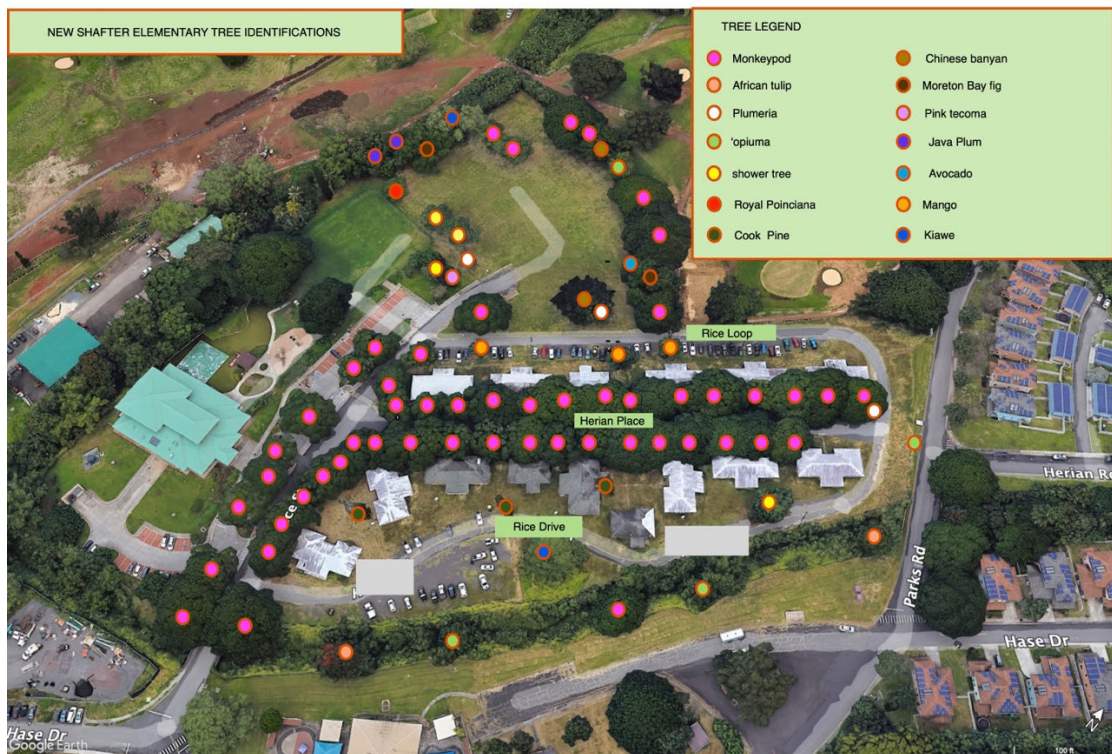


Fig 5. Tree identification map within the survey area.

Open field/dog park

The northern portion of the project area is bordered by the golf course and Kahauiki Stream. Large trees along the boundary of the golf course include monkeypod, Moreton Bay fig (*Ficus macrophylla*), avocado (*Persea americana*), and 'opiuma (fig 6). Trees along the boundary of the stream include those previously mentioned along with shower tree (*Cassia* sp.), satin leaf (*Chrysophyllum oliviforme*), Java plum (*Syzygium cumini*), royal poinciana (*Delonix*), and Pink tecoma (*Tabebuia heterophylla*). The open grassy area, which includes the dog park, is dominated by a grassy field with species such as swollen fingergrass (*Chloris barbata*), sensitive plant (*Mimosa pudica*), garden spurge (*Euphorbia hirta*), Partridge pea (*Chamaecrista nictitans*), and Guinea grass.

An area at the northwestern corner of the open field there is a cluster of trees with a few natives that have been planted in the understory including ‘a‘ali‘i (*Dodonaea viscosa*) and ‘ūlei (*Osteomeles anthyllidifolia*). Several plants of Indian sandalwood (*Santalum album*) are also planted in this area.



Figure 6. Northwestern section of survey area with open grassy lawn and dog park.

Fauna

Avian Fauna

A total of 15 species, representing 12 separate families (Table 1) were observed during the survey. Avian diversity and densities were in keeping with the location, disturbance, and vegetation present within the study site. Three species—Zebra Dove (*Geopelia striata*), Common Myna (*Acridotheris tristis*) and red-vented bulbul (*Pycnonotus coronata*) were the most frequently observed. The indigenous migratory kōlea or Pacific golden plover (*Pluvialis fulva*) were abundant in the grassy lawn areas and adjacent golf course.

Table 1. Avian Species Detected- New Shafter Elementary Project Area- 2023

Common Name	Species	Status
	PHASIANIDAE - Pheasants & Partridges	
Red Junglefowl	<i>Gallus gallus</i>	A
	COLUMBIDAE - Pigeons & Doves	
Spotted Dove	<i>Streptopelia chinensis</i>	A
Zebra Dove	<i>Geopelia striata</i>	A
	ARDEIDAE - Herons, Bitterns & Allies	
Cattle Egret	<i>Bubulcus ibis</i>	A
	Psittaculineae - Indomalayan and Papua-Australasian Parrots	
Rose-ringed Parakeet	<i>Psittacula krameri</i>	A
	ZOSTEROPIDAE - White-eyes	
Warbling White-eye	<i>Zosterops japonicus</i>	A
	STURNIDAE - Starlings	
Common Myna	<i>Acridotheres tristis</i>	A
	MUSICAPIDAE - Old World Flycatchers	
White-rumped Shama	<i>Copsychus malabaricus</i>	A
	ESTRILDIDAE - Estrildid Finches	
Chestnut Munia	<i>Lonchura atricapilla</i>	A
Common Waxbill	<i>Estrilda astrild</i>	A
	FRINGILLIDAE - Fringilline and Carduline Finches & Allies	
House Finch	<i>Haemorhous mexicanus</i>	A
	CARDINALIDAE - Cardinals & Allies	
Northern Cardinal	<i>Cardinalis cardinalis</i>	A
	PYCNONOTIDAE-Bulbuls	
Red-vented bulbul	<i>Pycnonotus coronata</i>	A
Red-whiskered bulbul	<i>Pycnonotus jacosus</i>	A
	CHARADRIIDAE-Plovers, dotterels, lapwings	
Kōlea, Pacific golden plover	<i>Pluvialis fulva</i>	IM

Legend to Table 1

Status

- A Alien – introduced by humans, naturalized
IM Indigenous Migrant- native to Hawai'i and elsewhere, overwinters in Hawai'i.



Figure 7. Feral cats observed near old buildings on Herian Place.

Mammalian Fauna

Two cats (*Felis catus*) were observed near the existing buildings on Rice Drive (fig. 7). and several Small Indian mongoose (*Urva auropunctata*) were noted throughout the survey area. Most likely roof rat (*Rattus rattus*), brown rat (*Rattus norvegicus*), Polynesian rat (*Rattus exulans hawaiiensis*), and European house mouse (*Mus musculus domesticus*) use resources within the general area on a seasonal basis. Signs of Feral pigs (*Sus scrofa*) were observed just outside of the survey area along Parks Road. A leaking sprinkler/water line was creating a wet area in the lawn and rooting was observed in this area.

Discussion and Recommendations

The proposed new Shafter Elementary School is not expected to have adverse effects on native flora and fauna owing to the limited native natural resources found within the project area. The proposed location for the campus has previously been disturbed and/or are already built out. Recommendations are partly based on an Informal Information for Planning and Consultation list (IpaC) created on April 26, 2023 (USFWS, 2023) in regards to the project location. Implementation of the recommendations (provided below as bulleted items) by contractors will minimize potential impacts to listed species to the maximum extent practicable.

Floral Resources

Native plant habitat within the proposed project area has been highly modified by human activities both historically and at present. They include agricultural uses, building of roads and structures, and landscaping. None of the plant species observed are listed as endangered or threatened under either the federal or State of Hawai'i endangered species statutes. (HDLNR, 1998; USFWS, nd-a).

None of the eleven Endangered plant species listed by the informal IPaC list (2023) produced for the survey area were observed during our survey. The IPaC list generates a list of federally protected species whose range included the project area but are not necessarily found within the project area. They are; 'aiea (*Nothocestrum latifolium*), 'akoko (*Euphorbia celastroides* var. *kaenana* and *E. kuwaleana*), 'ena'ena (*Pseudognaphalium sandwicense* var. *molokaiense*), and Carter's panicgrass (*Panicum fauriei* var. *carteri*), ihi (*Portulaca villosa*), kamanomano (*Cenchrus agrimonioides*), 'ohai (*Sesbania tomentosa*), *Spermolepis hawaiiensis*, *Vigna o-wahuensis*, and *Microlepia strigosa* var. *mauiensis*. (USFWS 2023).

Faunal Resources

The informal IpaC list outlined the following 9 species of animals that have the potential to occur or transit through the vicinity of the proposed project areas: one mammalian species Hawaiian hoary bat (*Lasiurus cinereus semotus*), and eight avian species were listed: Hawai'i Akepa (*Loxops coccineus*), Hawaiian Petrel (*Pterodroma sandwichensis*), Band-rumped Storm-Petrel (*Hydrobates castro*), Newell's Shearwater (*Puffinus newelli*), Hawaiian Duck (*Anas wyvilliana*), Hawaiian Common Gallinule (*Gallinula galeata sandvicensis*), Hawaiian Coot (*Fulica americana alai*), and the Hawaiian Stilt (*Himantopus mexicanus knudseni*), (USFWS, 2023).

The following is a discussion regarding faunal species with their potential to occur within the vicinity of the project area or have the potential to be impacted by the project.

Avian Resources

Waterbirds

There were no waterbirds observed during the survey and no habitat for any of the four native protected waterbirds, Hawaiian Duck (*Anas wyvilliana*), Hawaiian Common Gallinule (*Gallinula galeata sandvicensis*), Hawaiian Coot (*Fulica americana alai*), and Hawaiian Stilt (*Himantopus mexicanus knudseni*) found on O'ahu.

Seabirds

White tern/Manu-o-Kū

The white tern or manu-o-kū (*Gygis alba*) are small, entirely white tern and listed as threatened by the State of Hawai'i. Presently, white terns are only found on O'ahu, specifically on the southern shore in urban and suburban areas of Honolulu. White terns forage at sea and feed mostly on juvenile flying fish and goat fish that are pushed to the surface by large predatory fish (DLNR 2015). White terns do not construct nests; they lay a single egg in a depression of a large tree branch, on a rock ledge, or building. Preferred nesting tree species include large kukui (*Aleurites moluccana*), monkeypod (*Samanea saman*), shower tree (*Cassia sp.*), banyan (*Ficus sp.*), mahogany (*Swietenia sp.*), and kiawe (*Prosopis pallida*). Breeding occurs year-round with peaks in March and October (VanderWerf and Downs 2018 & 2022). The O'ahu population of white terns is currently increasing with 250 breeding pairs in 2005 to 700 breeding pairs in 2018. (Liu et al 2019). Threats to white tern include introduced predators, tree trimming, and other disturbance from human activities.

The nearest geographically documented white tern nests are to the south; located at Bishop Museum on Kalihi Street, approximately 1.5 miles away; and to the west at Joint Base Pearl Harbor-Hickam, approximately 4.5 miles away. (WhiteTerns.org 2023). Although there have been no documented nests within Fort Shafter, it is recommended that large trees proposed to be removed or trimmed during the construction phase be surveyed for any white tern nests immediately prior to trimming or removal, especially the large monkeypod trees that line Herian Place and Rice Street. Any trees with tern eggs or chicks should be marked with blue flagging and not trimmed until the chicks have fledged.

Endangered Seabirds

It is possible that the endangered Hawaiian Petrel, Band-rumped Storm-Petrel, and the threatened Newell's Shearwater over-fly the general area between April and the middle of December each year in small numbers. The primary cause of mortality in Hawaiian Petrels, Newell's Shearwaters and Band-rumped Storm-Petrels in Hawai'i is thought to be predation by alien mammalian species at the nesting colonies (USFWS, 1983; Simons and Hodges, 1998). Collision with man-made structures is considered the second most significant cause of mortality of these seabird species in Hawai'i. Nocturnally flying seabirds, especially fledglings on their way to sea in the summer and fall, can become disoriented by exterior lighting. Disoriented seabirds may collide with man-made structures (Rodriguez et al., 2017) and, if not killed outright, become easy targets of opportunity for feral mammals (Ainley et al., 2001, Hue et al., 2001). Although no suitable nesting habitat exists within or close to the project areas for any of these three seabird species, suitable habitat may exist in the upper elevations of the Ko'olau Mountains. Detection of Hawaiian petrels and Newell's shearwaters have been documented in both the Ko'olau and Wai'anae Mountains (Young et al., 2019).

The principal potential impact that current habitat modifications or changes pose to protected seabirds is an increased threat that birds will be downed after becoming disoriented by lights. The two ways outdoor lighting can pose a threat to nocturnally flying seabirds is if: 1) during construction it is deemed expedient or necessary to conduct night-time construction activities; or, 2) following build-out, permanent outdoor lighting is installed.

- If night-time construction activity or equipment maintenance is proposed during any 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 directly at the ground (USFWS, 2023). Deleterious impacts to transiting seabirds can be avoided if construction occurs during daylight hours and all outdoor lighting installed is fully “dark sky compliant” (HDLNR-DOFAW, 2016). DLNR recommends avoiding construction-related night-time lighting between September 15 and December 15 (DLNR, 2016).
- Install automatic motion sensor switches and controls on all outdoor lighting and/or turn off lights when human activity is not occurring in the area.

Mammalian Resources

The findings of the mammalian survey are consistent with the location and habitat present on the property. Although no rodents were recorded it is likely that some of the four established Muridae found on O‘ahu Island—roof rat, brown rat, Polynesian rat, and European house mouse use resources within the general area on a seasonal basis. These introduced rodents are deleterious to native ecosystems and native faunal species.

No mammalian species currently protected or proposed for protection under either the federal or State of Hawai‘i endangered species programs were detected during this survey (DLNR, 2015; USFWS, nd-a).

Hawaiian hoary bat

It is probable that the ‘ōpe‘ape‘a – the endemic Hawaiian hoary bat (*Lasiurus cinereus semotus*), currently recognized as an endemic species *Lasiurus semotus* (Pinzari et al. 2020) overfly the project area on a seasonal basis. This species will forage and roost in a wide range of habitats including forest canopies, edges of forests, and open pastures (Bonaccorso et al., 2015). An updated study by WEST Consultants Inc. (WEST) on O‘ahu between 2017 and 2021 revealed that this species of bat is more abundant than previously thought (WEST, 2022).

The removal of trees could temporarily displace individual bats using the trees for roosting. As bats use multiple roosts within their home territories, the potential disturbance resulting from the removal of the vegetation is likely to be minimal. However, during the pupping season, females carrying their pups may be less able to vacate a roost site if the tree is felled. Further, adult female bats sometimes leave their pups in the roost tree while they forage. Very small pups may be unable to flee a tree that is being felled.

- Potential adverse impacts from such disturbance can be avoided or minimized by not clearing woody vegetation taller than 4.6 m (15 ft) between June 1 and September 15, the period in which bats may have pups.
- Do not use barbed wire fencing.

Other Resources of Potential Concern

Critical Habitat

No federally delineated Critical Habitat for any species occurs within the PA (USFWS, nd-b; USFWS 2023). There is no equivalent designation under State of Hawai'i endangered species statutes.

Wetlands/Riparian Habitat

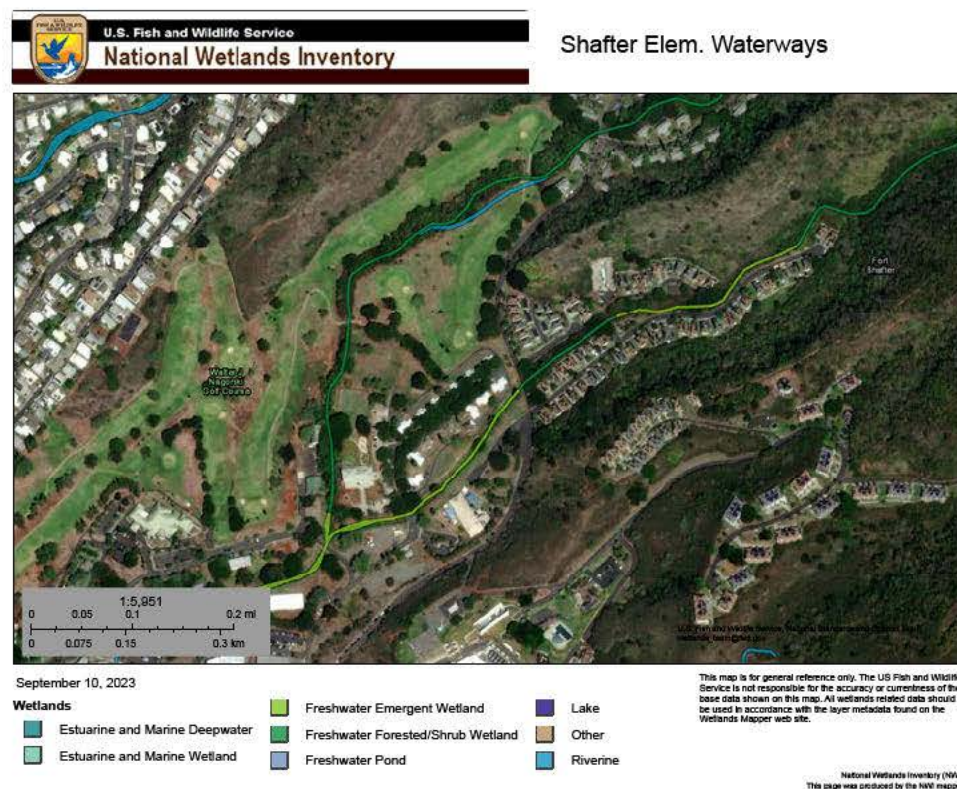


Figure 8. USFWS NWI wetland map showing the southern drainage and northern Kahauiki streams conjoining below the project area.

The National Wetland Inventory (NWI) maps the streams in close proximity to the survey area (fig. 8). Our surveys did not include wetland delineations but we did survey and note if any wetland indicators were present in or near any of the project areas of which there were none. The southern drainage that connects below the project area with Kahauiki Stream is intermittent and does not appear to have water except for heavy precipitation events. No disturbance to the stream channels are expected for the proposed project. Best management practices to limit any disturbance to the stream bank and erosion into any of the the stream channels should be implemented.

Coconut rhinoceros beetle

The Coconut rhinoceros beetle (CRB) *Oryctes rhinoceros* is an invasive beetle species from South East Asia that has become established on O‘ahu and is now spreading to other Islands in Hawai‘i. The beetles feed on palm species and are a threat to our coconut trees as well as native *Pritchardia* species and other ornamentals palms. The Coconut Rhinoceros Beetle Response (crbhawaii.org) recommends best management practices including limiting mulch, compost, and decaying plant material to build up in thick piles or layers as it creates breeding material for the CRB larvae. Spreading mulch 2 inches in depth helps to keep the material dry which is not favorable for the beetle larvae.

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Appendix C

ESA SECTION 7 IINFORMAL CONSULTATION CORRESPONDENCE

From: [REDACTED]
To: [Ryan Pe'a](#)
Cc: [Gail Renard](#); [REDACTED]
Subject: Informal Section 7 Consultation for Ft. Shafter, Rice Manor site new HIDEO elementary School
Date: Tuesday, May 7, 2024 3:00:33 PM
Attachments: [Policy Memo DPW HI 02 Tree Cutting Moritorium 7 Nov 22 \(1\).pdf](#)
[USAG-HI-35 WILDLIFE FRIENDLY LIGHTING AND DARK SKIES.2022.pdf](#)

[This message was sent from an outside source.]

Aloha Ryan,

We would like to consult under Section 7a2 of the Endangered Species Act for this new school development project at Fort Shafter, Hawaii. HHF Environmental Consulting Firm is preparing the compliance documents for the Army including an Environmental Assessment and Biological information to inform this consultation.

PROJECT NEED AND PROPOSED ACTION

Originally designed in the 1960s for 200 students, SES facilities now fail to meet current HIDEO and Department of Defense Education Activity (DoDEA) educational specifications for elementary schools. Its learning spaces are undersized with minimal flexibility. In 2018, DoDEA evaluated the condition of the school's facilities and reported them as under maintained (i.e., in poor condition), citing deficiencies in school capacity, spatial adequacy, and technology readiness (2018 Facility Condition Assessment Update). In general, the school struggles to find available spaces to support current and projected enrollment, program, and curriculum.

The proposed action would construct a new elementary school that meets current requirements for a design enrollment of 500 students ranging from Pre-Kindergarten through sixth grade. The proposed relocation site (the former Rice Manor family housing area) was identified by U.S. Army Garrison Hawaii (see map location included in the ShafterElem_BIO_Final.pdf attached, pg. 3). The proposed 8.3-acre site is located approximately 0.6 miles northeast of the Fort Shafter main gate, close to Army family housing, a child development center, and a before/after school care center.

The proposed action would include construction the following facilities at the new site:

- One-story Pre-K/Kindergarten Classroom Building
- Two-story Administrative/Library Building
- One-story Cafeteria Building
- Three-story classroom building
- Covered playcourt
- Approximately 138 parking stalls
- Service/fire lane
- Play field

There will be tree removal/trimming associated with this project. No barbed wire is involved in

this construction project. New lighting will be installed for the school.

The project would be funded through a grant from the DoD Office of Local Defense Community Cooperation (80%), with the balance funded by the State of Hawai'i.

BIOLOGICAL RESOURCES

The site is largely urban/developed. Please find attached Shafter Elem_BIO_Final.pdf which is the biological survey report prepared for the project. No federally listed taxa were observed during surveys. Informal Information for Planning and Consultation list (IpaC) created on April 26, 2023 (USFWS, 2023) was consulted to determine potential federally listed species potentially affected by this project and only four found possible animals could occur. *Lasiurus cinereus semotus*, *Puffinus newelli*, *Pterodroma sandwichensis* and *Oceandroma castro*. Details are provided for this list review in the Biological survey report provided. There are no designated critical habitats in the project area.

ANALYSIS

The Hawaiian Hoary Bat (HHB), *Lasiurus cinereus semotus*, is known to roost in trees >15 ft in height during the summer months and any trimming/removal of trees in this category could adversely affect roosting HHB pups. New lighting could disorient federally listed seabirds and result in fallout, leaving the birds susceptible to predation by cats or mongoose.

MINIMIZATION/AVOIDANCE (M&A) MEASURES

Please find the attached policies:

USAG-HI-35 Wildlife Friendly lighting and dark skies

DPW-HI-02 Tree Cutting Moratorium

These policies are being built into the scope of work for the elementary school construction project.

DETERMINATION:

With the M&A measures above and the very low likelihood that the listed animals occur within the project area, we expect the effect to the four listed animals will be discountable. Thus, the Army determines that the Ft. Shafter Elementary School Project is not likely to adversely affect any listed species or critical habitats. Please confirm receipt of this email and let me know if you require any further info.

Mahalo,

[REDACTED]

Natural Resource Manager
U.S. Army Garrison, Hawaii



How are we doing at providing you with Environmental Services/Solutions?
Please provide us feedback by using the link below. Thank you in advance.
https://ice.disa.mil/index.cfm?fa=card&sp=83121&s=46&dep=*DoD

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United States Department of the Interior

FISH AND WILDLIFE SERVICE
Pacific Islands Fish and Wildlife Office
300 Ala Moana Boulevard, Room 3-122
Honolulu, Hawai'i 96850



In Reply Refer To: 2024-0088511

June 6, 2024

[REDACTED]
Natural Resources Manager
U.S. Army Garrison, Hawai'i
[REDACTED]
Schofield Barracks, Hawai'i 96857

Subject: Informal Consultation for Construction of a New Hawai'i Department of Education Elementary School at Fort Shafter, Hawai'i

Dear [REDACTED]:

The U.S. Fish and Wildlife Service (Service) received your email on May 7, 2024, requesting the Service's concurrence with the Army's determination that the proposed project to construct a new elementary school on Fort Shafter, O'ahu, Hawai'i "may affect, but is not likely to adversely affect" the following federally listed species:

- Hawaiian hoary bat or 'ōpe'ape'a (*Lasiurus cinereus semotus*)
- Hawaiian seabirds:
 - Band-rumped storm petrel or 'akē'akē (*Hydrobates castro*)
 - Hawaiian petrel or 'ua'u (*Pterodroma sandwichensis*)
 - Newell's shearwater or 'a'o (*Puffinus newelli*)

Project Description

The proposed action would construct a new elementary school that meets current requirements for a design enrollment of 500 students ranging from Pre-Kindergarten through sixth grade. The proposed relocation site (the former Rice Manor family housing area) was identified by U.S. Army Garrison Hawai'i (USAG-HI). The proposed 8.3-acre site is located approximately 0.6 miles northeast of the Fort Shafter main gate, close to Army family housing, a child development center, and a before/after school care center.

PACIFIC REGION 1

IDAHO, OREGON*, WASHINGTON,
AMERICAN SĀMOA, GUAM, HAWAII, NORTHERN MARIANA ISLANDS

*PARTIAL

The proposed action would include construction of the following facilities at the new site:

- One-story Pre-K/Kindergarten Classroom Building
- Two-story Administrative/Library Building
- One-story Cafeteria Building
- Three-story classroom building
- Covered play court
- Approximately 138 parking stalls
- Service/fire lane
- Play field

There will be tree removal/trimming associated with this project. No barbed wire is involved in this construction project. New lighting will be installed for the school.

The project would be funded through a grant from the Department of Defense.

Conservation Measures

The following conservation measures will be implemented as a part of the project to avoid and minimize impacts to listed species and their habitats.

Ōpeʻapeʻa

- Woody plants greater than 15 feet tall will not be disturbed, removed, or trimmed during the Ōpeʻapeʻa birthing and pup rearing season (June 1 through September 15).
- Barbed wire fencing will not be used.

Hawaiian seabirds

- Nightwork is not planned for this project. However, if night-time construction activity or equipment maintenance is necessary during any construction phases of the project, all associated lights will be shielded, and when large flood/work lights are used, they will be placed on poles that are high enough to allow the lights to be pointed directly at the ground. All efforts will be made to avoid nighttime construction during the seabird fledging period, September 15 through December 15, except under emergency conditions and with prior notification to USAG-HI.
- Automatic motion sensor switches and controls on all outdoor lighting will be installed and/or lights will be turned off when human activity is not occurring in the area.

Analysis of Effects on Listed Species

‘Ōpe‘ape‘a

The ‘Ōpe‘ape‘a roosts in both native and non-native woody vegetation across all major Hawaiian Islands and will leave young unattended in trees and shrubs when they forage. Human presence and vegetation removal may cause temporary disruptions to the normal behaviors of ‘Ōpe‘ape‘a near the project area. When trees or shrubs 15 feet or taller are cleared during the pupping season (June 1 through September 15), there is a risk that young bats could inadvertently be harmed or killed since they are too young to move away from their roost tree. Additionally, ‘Ōpe‘ape‘a forage for insects from as low as 3 feet to higher than 500 feet above the ground and can become entangled in barbed wire used for fencing. No vegetation 15 feet or taller will be trimmed during the bat pupping season and no barbed wire will be used for this project, so adverse effects to bats are extremely unlikely to occur. Therefore, effects to ‘Ōpe‘ape‘a from this project are considered discountable.

Hawaiian Seabirds

Hawaiian seabirds may traverse the project area at night during the breeding, nesting, and fledging seasons (March 1 to December 15). Outdoor lighting attracts seabirds and could result in disorientation, fallout, and injury or mortality. After circling the lights, seabirds may become exhausted and collide with nearby wires, buildings, or other structures, or they may land on the ground. Downed seabirds are subject to increased mortality due to collision with automobiles, starvation, and predation by dogs, cats, and other predators. Young birds (fledglings) traversing the project area between September 15 and December 15, in their first flights from their mountain nests to the sea, are particularly vulnerable to light attraction. No nightwork is planned for this project, however, if nightwork is needed for unforeseen reasons, all efforts shall be made to avoid nightwork during the seabird fledging season except under emergency conditions. If nightwork does occur, lights will be fully shielded so the bulb can only be seen from below and automatic motion sensor switches and controls on all outdoor lights will be installed or lights will be turned off when human activity is not occurring in the lighted area. Considering the location of the project, the potential presence of Hawaiian seabirds there, the high amount of existing exterior light sources in the nearby vicinity, and the conservation measures implemented above, impacts associated with this project are anticipated to be improbable. Therefore, adverse effects to Hawaiian seabirds are highly unlikely to occur and are considered discountable.

Summary

We have reviewed our data and conducted an effects analysis of your project. By implementing the conservation measures listed above, effects to listed species are extremely unlikely to occur. Therefore, effects are expected to be discountable. Because impacts from the proposed project are discountable, we concur with your determination that the proposed action may affect, but is not likely to adversely affect the ‘Ōpe‘ape‘a, ‘a‘o, ‘ua‘u, and ‘akē‘akē.

We appreciate your efforts to conserve endangered species. If you have any questions, please contact Deena Gary at deena_gary@fws.gov or by telephone at 808-792-9400. When referring to this project, please include this reference number: 2024-0088511.

Sincerely,

RYAN PE'A

Digitally signed by
RYAN PE'A
Date: 2024.06.06
14:05:41 -10'00'

Ryan Pe'a
Acting Planning and Consultation Team Manager

CC: Gail Renard, HHF Planners

Appendix D
ARCHAEOLOGICAL LITERATURE REVIEW



4348 Waiʻālae Ave #254 • Honolulu Hawaiʻi 96816 • T: (808) 392-1617 • F: (888) 392-4941 • E-Mail: admin@honuaconsulting.com

January 21, 2025

To: Hawaiʻi Department of Education (DOE) (via email)
Re: Archaeological Literature Review in Support of Proposed Major General William R. Shafter Elementary School Relocation Project, Fort Shafter Military Reservation, Kahauiki Ahupuaʻa, Honolulu (Kona) District, Oʻahu Island, Hawaiʻi, TMK (1) 1-1-008:005 (por.)

Aloha DOE,

This letter report describes the methods and results of an archaeological literature review (ALR) that was completed as a due diligence assessment for the Hawaiʻi Department of Education's (DOE) project to relocate the Major General William R. Shafter Elementary School on the Fort Shafter Military Reservation (FSMR), Kahauiki Ahupuaʻa, Honolulu (Kona) District, Oʻahu Island (Figure 1 and Figure 2). The proposed new location is a 10.0-acre portion of TMK (1) 1-1-008:005 (Figure 3). The landowner is the U.S. government.

The main objective of the ALR is to determine if any historic properties are located in or near the project area, and to provide a preliminary assessment of the project's potential impact—if any—on historic properties or any other significant cultural resources.¹

The objectives of this ALR are the following:

1. Documentation and description of the parcel's land-use history in the context of both its traditional Hawaiian character as well as its historic-period changes;
2. Identification of any previously identified archaeological historic properties or component features in or immediately adjacent to the project area; and
3. Providing information relevant to the likelihood of encountering historically-significant cultural deposits (i.e., archaeological historic properties and/or component features) in subsurface context during future construction.

This ALR is not intended for formal review by the State Historic Preservation Division (SHPD). It may be used, however, to support the project proponent's consultation with the SHPD in compliance with Hawaiʻi Revised Statutes (HRS) Chapter 6E and Hawaiʻi Administrative Rules (HAR) Chapter 13-275 and/or Section 106 of the National Historic Preservation Act (NHPA).²

¹ The conclusions and recommendations in this ALR are limited to those arising from DOE's proposed construction and operation of new Shafter Elementary School facilities at the project site. It does not address separate federal agency actions that may predate or occur after DOE's action.

² Since this project is reviewable under both state and federal historic-preservation laws, we use the term direct APE (Area of Potential Effects) and project area interchangeably in this report.

The latest site plan is attached to the end of this report (see Attachment). The proposed project will include significant ground disturbance (i.e., subsurface excavation). Specific details such as depths of excavation for the proposed project are currently not available.

Project Area Description

The project area consists of a small residential neighborhood known as Rice Manor Housing, originally constructed for Non-Commissioned Officers (NCO) during World War II (WW II). As discussed below, these historic structures will be demolished under a separate U.S. Army Garrison Hawai'i (USAG-HI) demolition project; compliance with Section 106 of the National Historic Preservation Act (NHPA) for the demolition was completed in April, 2024. Rice Manor Housing is located in the eastern portion of the FSMR along the eastern side of the military base's golf course. The project area is generally bounded by Rice Street (west), the golf course (northwest and north), Rice Loop and Kahauiki Stream (east) and Kahauiki Stream (south). The H-1 Interstate Highway / Moanalua Freeway (H-201) split is about 0.75 miles south of the project area.

The project area is located at approximately 150 feet (ft.) (45.7 meters [m]) above mean sea level in an artificially leveled piedmont area between the steeper uplands to the northeast and coastal plain to the south-southwest. The main course of Kahauiki Stream flows by the northwest portion of the project area; a smaller tributary flows by the southeast project-area boundary, joining the main stream just below the project area.

Mean annual rainfall in the project-area environs is approximately 39.4 inches (1000 millimeters) (Giambelluca et al. 2013). Soil in the project area are classified as Makiki stony clay loam, 0 to 3 percent (MIA) and Kawaihapai stony clay loam (KlaB) 2 to 6 percent (Figure 4).³ Both of these soil types are described as "prime farmland if irrigated" (Foote et al. 1972). Hard-rock geological data indicate the project area consists of Pleistocene and Pliocene Ko'olau basalt lava flows.⁴ Vegetation consists of introduced and ornamental varieties since the entire project area has been, or is currently, developed as a residential area.

The project area contains a small, WW II-era residential neighborhood, including single-family homes, hardscaping (e.g., concrete driveway and walkways), above- and below-ground utilities and other appurtenances. As noted above, demolition of the Rice Manor housing (including dwelling units and associated above-ground features and infrastructure) is a separate action to be carried out by the USAG-HI, and the requirements of Section 106 of the NHPA have been addressed by the USAG-HI. These facilities are not described in detail in this report.

Methods

The Cultural and Historical Context section below is a synthesis of relevant information on the types of land uses and changes in and around the project area from pre-Contact, traditional Hawaiian times into the historic period. Some of this discussion is based on an ethnohistorical study that included Kahauiki Ahupua'a.⁵ All such material used below from Uyeoka et al. (2018) was written by the lead author (Monahan). The main objective here, primarily through the analysis of historical documents,

³ USDA-NRCS soil survey data at <https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>

⁴ Sherrod, D.R. et al. (2021). *Geological Map of the State of Hawai'i - Island of O'ahu*, U.S. Geological Survey, U.S. Department of the Interior.

⁵ Available on-line at https://www.ksbe.edu/assets/site/special_section/regions/ewa/Halau_o_Puuloa_Full-Ewa-Aina-Inventory_Binder.pdf (see Uyeoka et al. 2018 in References Cited)

maps and aerial images, as well as secondary sources, is to provide a project area-specific picture of land use and modification over time. This is followed by an Archaeological Context section.

In addition to referencing reports provided by the client, we also conducted a records search at the SHPD's library in Kapolei, as well as the on-line database of the Environmental Review Program (ERP), within the Office of Planning and Sustainable Development, which publishes EIS and EA documents; we also reviewed Honua's proprietary database of reports, and utilized the following on-line sources to obtain cultural, historical and archaeological data:

- OHA's Papakilo database (<http://papakilodatabase.com/main/main.php>)
- OHA's Kipuka database (<http://kipukadatabase.com/kipuka/>)
- Bernice P. Bishop Museum archaeological site database (<http://has.bishopmuseum.org/index.asp>)
- Bishop's Hawaii Ethnological Notes (<http://data.bishopmuseum.org/HEN/browse.php?type=3>)
- University of Hawai'i-Mānoa's digital maps (<http://magis.manoa.hawaii.edu/maps/index.html>)
- DAGS' State Land Survey (<http://ags.hawaii.gov/survey/map-search/>)
- Waihona 'Aina website (www.waihona.com)
- Digital newspaper archive "Chronicling America, Historic American Newspapers" (<http://chroniclingamerica.loc.gov/lcn/sn82014681/>)
- Hawai'i State Archives digital collections (<http://archives1.dags.hawaii.gov/>)
- U.S. Library of Congress digital map collections (<https://www.loc.gov/maps/>)
- USGS Information Service, including digital map collections (<https://nationalmap.gov/historical/index.html>)
- AVA Konohiki's website (<http://www.avakonohiki.org/>)

Results

This section includes a discussion of the project area's cultural and historical context followed by a description of its archaeological context.

Cultural and Historical Context

Hawaiian Cultural Landscape

The overall shape and configuration of Kahauiki Ahupua'a, compared with most others on O'ahu, is somewhat atypical in that its uppermost portion does not reach the Ko'olau ridge line; its uppermost reaches taper to a narrow point at the top and are "cut off" from the Ko'olau summit region by Moanalua on the west and Kalihi on the east. Kahauiki Ahupua'a includes the stream valley of the same name, which supported a moderately-sized lo'i kalo (irrigated taro) system in its lower reaches (Uyeoka et al. 2018).

There is some disagreement in different historical documents and maps as to whether Kahauiki is a large 'ili (i.e., a smaller land division within an ahupua'a) rather than a small ahupua'a; also, some sources suggest its overall size as 1344 acres, while larger figures can be found as well. Regardless, it is clear that Kahauiki shared close cultural and spiritual ties with both of the neighboring lands of Moanalua and Kalihi.

According to a somewhat esoteric passage related by the great Hawaiian chronicler of its traditions, Samuel Mānaiakalani Kamakau (1991:30–31), the ahupua'a of Kahauiki was established in ancient times by some type of "dream census":

They counted the people individually all over Oahu, and two lands had a few more than the others, Waolani and Ulehawa in Waianae. Most of the lands from the first to the sixth [referring to several land divisions in Kona Moku] were counted and most of the people were enumerated individually, like this: Kapinao of Kapalama, Kaha'oi of Kalihi, Kahau of Kahauiki, and so forth.

A description of Kahauiki's boundary in relation to current landmarks as well as traditional Hawaiian place names and resources is as follows:

Referring to well-known landmarks such as neighborhoods, roads and other infrastructures, the current (modern) boundaries of Kahauiki Ahupua'a are as follows. Starting from the south (makai) end on the eastern (Diamond Head) side, the boundary starts at Ke'ehi Lagoon, just south (makai) of the intersection of Middle Street, Dillingham Boulevard and Nimitz Highway. From here, the ahupua'a boundary heads northeast through the Hauiki residential neighborhood past Radar Hill Road (which is entirely within Kahauiki Ahupua'a), then roughly parallels the Likelike Highway (which is in Kalihi) until it reaches the uppermost source of Kahauiki Stream at approximately 1,800 ft. elevation. The ahupua'a boundary then follows Kahauiki Stream on the other side back down the valley, heading southwest, until it reaches Fort Shafter (which is within Kahauiki), then crosses the Moanalua Freeway, the H-1 and the Nimitz again before ending at Ke'ehi Lagoon (near the transfer station). Before the seaward portion of Kahauiki was reclaimed (filled in for urban development), the coastline was located well inland of the H-1/Nimitz/Dillingham roadways and infrastructure.

As discussed below, the now-infilled portion of Kahauiki Kai (i.e., its shoreline area) was once home to loko i'a (fishponds) and lo'i kalo (wetland taro fields) that extended mauka (inland) up to the lower portions of the Fort Shafter boundary just above Moanalua Freeway.

Kahauiki was closely associated with Moanalua Ahupua'a, which is known for its rich cultural heritage, including heiau (temples) and other sacred places that were integral to religious and cultural practices (Maly and Maly 2012).

While much of the lower portion of Kahauiki Ahupua'a has been heavily modified by the urbanization of Honolulu, including Fort Shafter, its golf course and the H-1, Nimitz and Moanalua highways, the upper half of this ahupua'a is largely undeveloped with a single main stream (Kahauiki).

Kahauiki can be interpreted literally as "the small hau tree" (Pukui et al. 1974:63). In his well-known study of native planters in Hawai'i, Handy (1940:79) stated that "Kahauiki Stream irrigated a moderate-sized area of terraces for about half a mile." Just makai of these lo'i kalo, Kahauiki also had a loko i'a, Loko Weli, at its shoreline. As stated above, the old (prior to the late historic period) shoreline at Kahauiki was once about halfway between the H-1 highway and Moanalua Freeway. Kahauiki's lo'i kalo referenced by Handy (ibid.) was known as Kapala'alaea, which not only is the name of a male god that was traditionally carried around each island during the annual Makahiki season (Pantaleo et al. 1997:8), but also can be literally translated (ka-pala-alaea) as "the smearing of ocherous earth" with cultural and ritual connections to the harvest season and god Lono (ibid.).

The lo'i kalo of Kapala'alaea flowed into Weli Fishpond, which can generally be categorized as a loko kuapā, or a walled fishpond along the shoreline. Estimates by Pantaleo et al. (1997) of Weli Fishpond's annual productivity of around 750 pounds seem rather modest, but are based on data originally developed by William Kikuchi, whose dissertation of Hawaiian fishponds remains a classic and authoritative study.

The conspicuous absence of documented heiau in Kahauiki is most certainly a reflection of the intensive urban development of the lower reaches of this land; and does not imply temples or shrines

were absent. It is also possible that a heiau once stood at Pu'u Kapu; however, this possibility is ambiguous.

An article written by J.K. Mokumaia in the Hawaiian newspaper, *Kuokoa* (dated August 17, 1922), described a burial ground at Fort Shafter:

The military reservation (Fort Shafter) was a burial ground extending as far as Pohaha and up inland to the home of one of the sons of the Honorable S.M. Damon, that is on Puukapu where the evil chiefs carried on their mischievous work. (Sterling and Summers 1978:327)

It is possible that reference to “the evil chiefs” and their “mischievous” work refers to the narrator’s belief that this heiau was a “po’o kanaka,” or sacrificial, temple, which was generally looked upon with distain by Christianized Hawaiians in the historic period.

Like other ahupua’a with forested uplands, Kahauiki’s uplands were a reliable source of native, endemic and Polynesian-introduced plants including kukui, koa, ‘ōhia, ‘iliahi (sandalwood), hau, kī (ti leaf), bananas and many others. These resources provided not only food but also medicinal plants, wa’a (canoe) trees and other culturally-significant items (e.g., for religious practices, hula, and so on) (Uyeoka et al. 2018).

Associations with the Lands of Fort Shafter

Cultural resources identified within the Army-controlled lands at Fort Shafter reflect Hawai’i’s traditional history. As discussed in more detail in the following section, Fort Shafter includes archaeological sites and features tied to the traditional Hawaiian history, such as rock shelters and the remnants of Hawaiian fishponds, which are now buried under fill. These resources are linked to the traditional practices of Native Hawaiians, including fishing and agriculture, and highlight the historical importance of the land prior to military development (USAG-HI 2018). One of the most significant sites on the base was the Pu’ukapu Heiau. McAllister (1933), referring to Thrum (1906), described the site as:

Puukapu heiau. Listed by Thrum: “Kahauiki, mauka of military quarters. Foundations only traceable. Reports as to class and size as also its kahuna are conflicting.” Puukapu is the name of the hill described in Site 88 (Terrace facings (?), Maunalua) and the surrounding land. It seems doubtful that the same name would have been applied to a heiau in an adjoining land section.

As is consistent with traditional burial practices and sites in neighboring ahupua’a, burials have been identified in caves along the mountainous lands in Fort Shafter. As referenced above, Hawaiian language newspapers identify the Fort Shafter area as a burial ground. No burials have been identified within the project area; however, the military reservation contains a reburial crypt for human remains recovered from rock shelters. These remains were reinterred in a ceremony in 2003, and the crypt’s exact location is restricted from public knowledge out of respect for potential cultural sensitivities (USAG-HI 2018).

Mo’olelo (Oral-historical and Legendary Accounts)

Mo’olelo of Kahauiki include references to the Kona Moku (Honolulu District), Haumea (Hawaiian goddess of fertility and feminine aspects of humans), Kulauka (birdman), the chief Kalaikoa, battles, the stone of Kapapaikawaluna, the dog-like creature Poki, and hau trees (Uyeoka et al. 2018).

Kahauiki is renowned for a series of battles fought by Puakea and Pinao, men from Waialua, O’ahu, who were being pursued by warriors of Maui. The following is a description of these battles (Kamakau 1992:139):

As they came up toward Lapakea and passed the lower side of the house they called out, "Greetings to you all! Kalai-koa's victims are here, but Manono's [victims] return to Ko'olau." The guards, eighty in number, heard them and came outside with their spears. They had scarcely reached Kahauiki when the trouble began. "You are rebels! you are rebels!" shouted the guards, and spears, clubs, and darts began to fall about them. They were surrounded and had a hard time to struggle through. At the stone called Ka-papa-i-kawaluna that stood on the upper road of Kahauiki, Pinao turned and stabbed two men, Pua-kea stabbed two, and the men who obstructed the way scattered. This side of Kahauiki they encountered a host of warriors, and the dead fell about them like water in a bath. Pinao killed five men, and Puakea slew the same number.

An important wahi pana in Kahauiki is the Kapapaikawaluna stone. The following is a description of the origins of this stone originally published (August 12, 1865) in the Hawaiian newspaper Kuokoa (part of the "Legend of Pupu-hulu-ana") (Sterling and Summers 1978:327-8):

When Haumea saw her grandchild was taken (from Lelepua by Kula-uka) she gathered her various flying objects together, but none were capable of distant flight. She therefore leaped and entered the dark-shiny-way of Kane, and nearly overtook them, when the birdman (Kula-uka) released a stone. When Haumea saw the falling of the stone, she mistook it for the grandchild and turned below in search thereof. When about to catch it, the thundering noise from below occurred; it was the Kawa-luna stone.

Kamakau (1991:134) relates another supernatural association between Kapapaikawaluna, here described as a resident prophet of this land, and Kahauiki:

At Nu'umealani is the heiau called Halepapa that Papa entered to transform herself and become a young woman. This strange act was discovered by some prophets of Ka-hau-iki of Moanalua, O'ahu, named Ka-papa-i-kawa-luna and Kona-ka-po'olalua. Papa was embarrassed because her identity had become known, and she went mauka of Kalihi and stopped transforming herself.

Another prominent figure associated with this ahupua'a is the supernatural dog-like creature named Poki. The following is a description of Poki's actions in Kahauiki collected about a century ago by the Bishop Museum's J.F.G. Stokes (Sterling and Summers 1978:328):

Kahauiki ridge is, according to one of my informants, a favorite spot of Poki's. If a person is traveling mauka and Poki is observed in the same direction, all is well. But if Poki is met, or seen lying across the road, one had better take the warning and return home or disaster will be met with.

Martha Beckwith provides a description of Poki in her book Hawaiian Mythology:

As a ghost god resting in the clouds stretched over the mountaintops of the Koolau range on Oahu, Kaupe's spirit body is today confused with the legends of a dog-like creature called Poki, spotted or brindled in color and very long in body, who guards a certain section outside Honolulu, although he may appear at other places. Some say it is the spirit of the old chief Boki who in 1829 filled two ships for the sandalwood trade and sailed away and never came back, but the legend is doubtless much older. (Beckwith 1970:346)

Kamakau (1992) described an incident that took place at Ka'ihikapu along the shores of Ke'ehi in the proto-historic period circa 1794. This was around the time of the transition between Maui's control over O'ahu (led by Kahekili) and Kamehameha's:

After the battle of Kuki'iahu and the death of Ka-eo-ku-lani a quarrel arose with Captain Brown over the payment for the captain's help. Ka-lani-ku-pule offered to pay the four hundred hogs stipulated, but Captain Brown demanded further payment. The chiefs accordingly conspired to kill Captain Brown and his men. Ka-moho-moho advised Ka-lani-ku-pule to pay the whole number of hogs agreed upon, and when the white men asked bow to salt down such a number to tell them that they might get all the salt they wanted from Ka-'ihi-kapu, with the hope that Captain Brown would accompany the boats sent for salt, and the O'ahu men seize the ships and kill the white men. Ka-lani-ku-pule consented and the plan was put into execution. They delivered the whole number of hogs at once, enough to fill the two ships, and when the captain asked for salt they directed him to Ka-'ihi-kapu. The tide was high when the boats came in; but when the boats loaded with salt attempted to return, the tide at Ke'ehi was low, and the boats had to wait. The ships meanwhile lay in the harbor filled with chiefs and their men who killed Captain Brown and some others. Some of the white men who went after salt were killed, those few who remained alive were taken prisoners, and Ka-lani-ku-pule took possession of the two ships well-stocked as they were with weapons and ammunition (Kamakau 1992:170).

Māhele 'Āina – Land Use Changes in Mid-19th Century

Beginning in the 1840s, the concept of private property was introduced to Hawai'i through formation of the Board of Commissioners to Quiet Land Titles, and the adoption of the Māhele (division of Hawaiian lands), or Māhele 'Āina. In 1845, King Kamehameha III waived his right to full authority over the land, portioning out land for his personal use (Crown lands) and dividing the rest into government land, land for the ali'i and konohiki (land overseers usually of high rank or connection to high ranking individuals), and land for commoners (kuleana land) (Alexander 1891; Board of Commissioners 1929; Moffat and Fitzpatrick 1995).

Following thereafter, Land Commission Awards (LCAs) were awarded to commoners as kuleana parcels for fee ownership. LCAs therefore record who resided on the land and how the land was used. For the most part, however, LCAs awarded to ali'i did not systematically record information about traditional land use.

Kahauiki was retained by Kamehameha III as Crown lands in the initial māhele (division) of Hawaiians lands starting in 1848; later, in 1899, the ahupua'a was designated for U.S. military purposes (Pantaleo et al. 1997:4).

Fort Shafter in Specific

The annexation of Hawai'i by the United States in 1898 and subsequent establishment of military bases, including Fort Shafter, marked a significant shift in land use within Kahauiki. The once predominantly agricultural land was repurposed for military activities. The U.S. Army Garrison's (USAG-HI) Integrated Cultural Resources Management Plan (USAG-HI 2018) explains: "Ranching took place on almost all areas now covered by USAG-HI installations. In the late 1800s, James I. Dowsett had ranching interests on lands now occupied by Fort Shafter..." (USAG-HI 2018).

The construction of Fort Shafter in 1907 brought about the development of military housing and infrastructure, which further transformed the ahupua'a. The Palm Circle housing area, with its Colonial Revival-style architecture, represents the military's impact on the landscape (Mason 2003).

Fort Shafter's establishment marked a significant chapter in Hawaii's military history. Situated on the south-central coast of O'ahu, it was strategically positioned to defend Pearl Harbor. The original construction, completed between 1907 and 1909, included officer quarters, barracks and support facilities, designed in the Colonial Revival style. These structures, particularly around Palm Circle, are

notable for their architectural consistency and adaptation to Hawai'i's climate. Note that Palm Circle is outside of the current project area (direct APE) but within the geographic extent of this cultural-historical review.

Military housing at Fort Shafter reflects broader trends in U.S. Army housing development during the early twentieth century. The houses were designed with local climatic conditions in mind, featuring modifications to enhance ventilation. The Palm Circle housing area, with its formal landscaping and royal palm-lined parade ground, exemplifies early military architecture in Hawaii and stands as a symbol of the Army's longstanding presence in the region.

Selected Historical Maps and Aerial Images

Figure 5, a portion of 1817 Kotzebue map, shows the approximate location of the project area in the uplands mauka of the main settlement area along the shoreline and main stream (possibly Kalihi Stream in this image). It is important to note that this and the next (1825) maps were very selective in what they depicted and focused on the shoreline and near-shore areas since that was the original concern and purpose (i.e., maritime navigation) of these early maps.

Figure 6, a portion of 1825 map, shows similar features along the shoreline well makai of the project area, including numerous fishponds; main areas of settlement in this depiction are shown over in Honolulu proper and into Kaka'ako. Salt Lake is depicted due west of the project area.

Figure 7, a portion of 1876 Hawaiian Government map, identified the subject ahupua'a as Crown land named Hauiki and labels it "unsurveyed"; it also lists the acreage as "2200 Acres ?," which seems to be an erroneous figure, given the more accepted 1344 acres listed in other historical records. Numerous fishponds are depicted around Ke'ehi (today referred to as Ke'ehi Lagoon). No specific features of development are depicted in or near the project area.

Figure 8, a portion of undated map from the late 1800s by Lyons and Monsarrat, shows similar features as the previous (1876) map with more detail in some places. A precursor road or carriage road to the current Moanalua Freeway is depicted makai of the project area; along the shoreline just makai of this road are multiple fishponds, areas marked as mud flats and an "old sat pan." Pu'ukapu is depicted just west of the current project area along the west side of the current golf course on the boundary with Moanalua Ahupua'a.

Figure 9, a portion of 1878 map, shows many features and development, both traditional and historic-period, makai of the precursor road or carriage road to the current Moanalua Freeway. The historic town center of Honolulu below Pūowaina (Punchbowl) is depicted as well as some locally famous places and institutions such as Quarantine Island (part of today's Sand Island), and the Leper Asylum due south of the current project area.

Figure 10, a portion of 1881 map, shows similar information as the 1876 map (Figure 7 above).

Figure 11 and Figure 12, portions of 1897 and 1901 maps, respectively, show the project area still undeveloped but the residential neighborhood of Kalihi, labeled Kaluapalena (which is the current name [Kaluaopalena] of a native Hawaiian community garden in the area), extending up Kalihi Valley. Pukui et al. (1974) do not translate this place name, which may be a late historic name and not necessarily a traditional Hawaiian place (as was sometimes common on Monsarrat maps). The word "lua" in Hawaiian can mean many different things, including reference to a pit or hole, as well as the number two. "Palena" is a type of fairly large land division, usually between an 'ili and an ahupua'a. In any case, the origins and meaning of this adjacent name is unclear. The Oahu Land and Railway (OR&L) tracks are shown as early as 1897.

Figure 12, a portion of 1902 map, shows the project area in a “U.S. Military Reservation”; the many extant shoreline ponds at this time are noteworthy.

Figure 13, a portion of 1914 military map, shows the establishment of Fort Shafter, which seems to have commenced construction circa 1907.

Figure 15, a portion of 1928 topographic map, does not show any development in the current project area or Fort Shafter in general.

Figure 16, a portion of 1952 aerial photograph, shows the current Rice Manor residential structures plus several structures west of Rice Loop that have since been removed and are no longer extant.

Figure 17, a portion of 1952 topographic map, shows the historic residential structures in and near the current project area.

Figure 18, a portion of 1968 aerial photograph, shows a similar level and character of development in the current project area as the 1952 aerial. The structures to the west of Rice Loop appear to be different, however, from the 1952 aerial.

Figure 19, a portion of 1978 aerial photograph shows a similar level and character of development in the current project area as the 1968 aerial.

Archaeological Context

In this section, we summarize the results of relevant previous archaeological studies in order to reconstruct human use and modification of the land in and near the project area from pre-Contact times to the historic period. The main purpose of presenting this information is to develop predictive data about the types and distribution of archaeological historic properties and their component features that may be encountered during the proposed project.

It is important to note that previously conducted archaeological research and reports at FSMR designated Confidential Unclassified Information (CUI) were made available to the authors. Due to the CUI markings, we have been advised that depicting the specific geospatial location of previous archaeological studies or results at FSMR is prohibited in this public document. Therefore, our report does not contain typically-included elements such as GIS maps of previous studies and results. Here, we present a brief narrative summary—without graphics—of the project area’s archaeological context. This summary is organized by proximity to the project area (i.e., the closest site is described first).

Project Area

No archaeological historic properties have been identified in the subject project area, which was developed as a residential neighborhood by the military in the 1940s. It is important to note, however, that, to the best of our knowledge, no subsurface testing (archaeological excavation) has been conducted in the subject project area. A reconnaissance-level survey of FSMR was completed by Rosendahl (1977); additional archaeological work that included the subject project area was also completed by Tomonari-Tuggle et al. (2000). The USAG-HI has stated in writing—including a Building Disposition Report for Inter-War Era Historic Houses at Rice Manor at FSMR dated December, 2023, and in a 2024 Program Comment for the Rice Manor homes—that no archaeological material has been documented in or around any portion of Rice Manor, and the extent of previous ground disturbance in the developed areas of Fort Shafter suggest that intact, subsurface archaeological material is not likely to be present in the current project area (direct APE).

Vicinity of Project Area

Watanabe (1986) conducted an archaeological survey, including subsurface testing, at a purported traditional Hawaiian site complex interpreted as multiple agricultural terraces immediately south of the subject project area. This site was designated State Inventory of Historic Properties (SIHP) # 50-80-14-05362. Subsequent archaeological data recovery work at this site by Pantaleo et al. (1997) confirmed its purported functional interpretation. Subsequent work by Tomonari-Tuggle et al. (2000) at this site, including subsurface testing, concluded the terraces were built using historic-period fill solely for construction of military housing once located at the location (the housing was originally built in 1914 and demolished in 1961).

Two other archaeological historic properties have been identified south of the subject project area. SIHP # 50-80-14-05341, a rock shelter interpreted as dating from pre-Contact times is to the south-southwest. SIHP # 50-80-14-05361, a historic-period rock wall, is to the south-southeast.

Conclusion

In conclusion, the proposed DOE project to relocate the Major General William R. Shafter Elementary School on the FSMR will have no effect on above-ground, archaeological historic properties, which—if ever present—were destroyed by World War II-era residential development of the direct APE. Nearby archaeological historic properties (e.g., SIHP #s 05341 and 05361) will not be directly affected by the proposed project. The SHPD should be consulted for future work regarding the possibility of encountering historically-significant archaeological material dating from use of the project area for military housing starting as early as the 1940s because historic material dating from as early as the 1940s use of the housing development may yet be located in subsurface context. This recommendation is particularly germane since no archaeological subsurface testing has been previously conducted in the current project area (direct APE), including Tuggle et al.'s (2000) work.

As always, please let us know if you have any questions or concerns about this letter report.

With aloha,



Christopher M. Monahan, Ph.D.
Principal Investigator, Archaeologist
Honua Consulting

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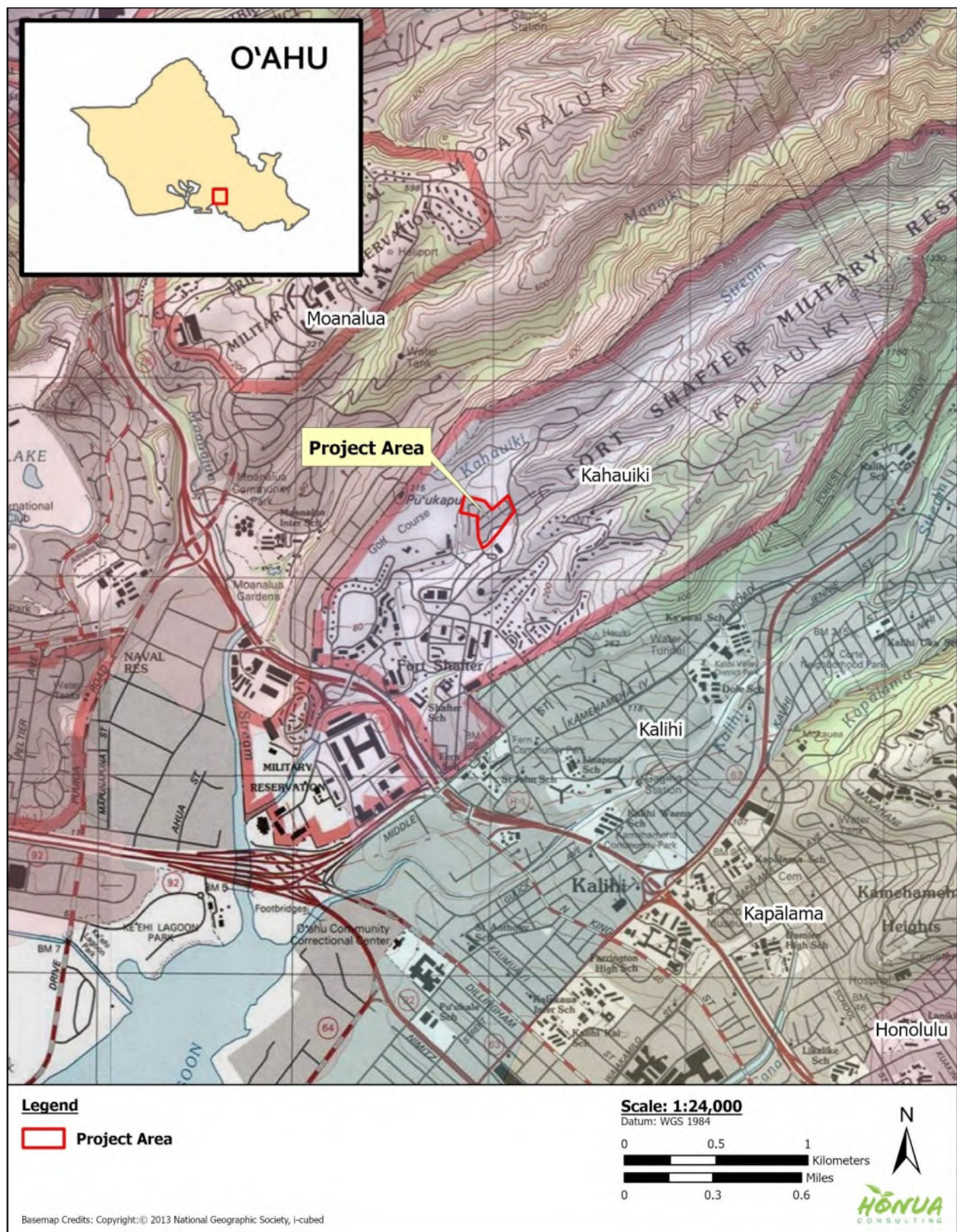


Figure 1. Portion of 1998 USGS topographic map (Honolulu quadrangle) showing project area (base map source: USGS online at <http://ngmdb.usgs.gov/topoview>)



Figure 2. Aerial photograph showing location of project area (base image source: Google Earth accessed October 2024)

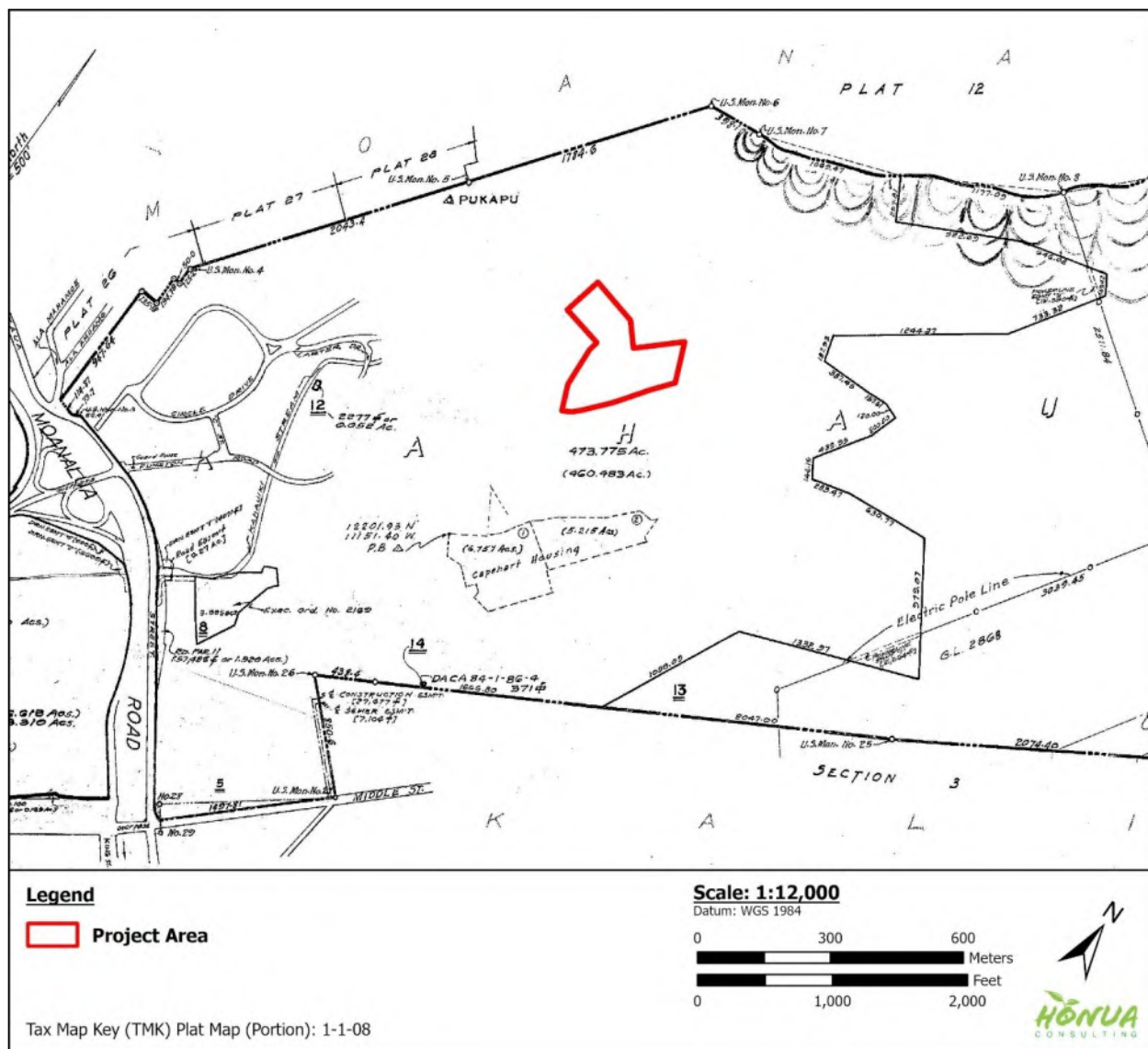


Figure 3. Tax Map Key (TMK) (1) 1-1-008 showing project area (base map source: Hawai'i TMK Service n.d.)

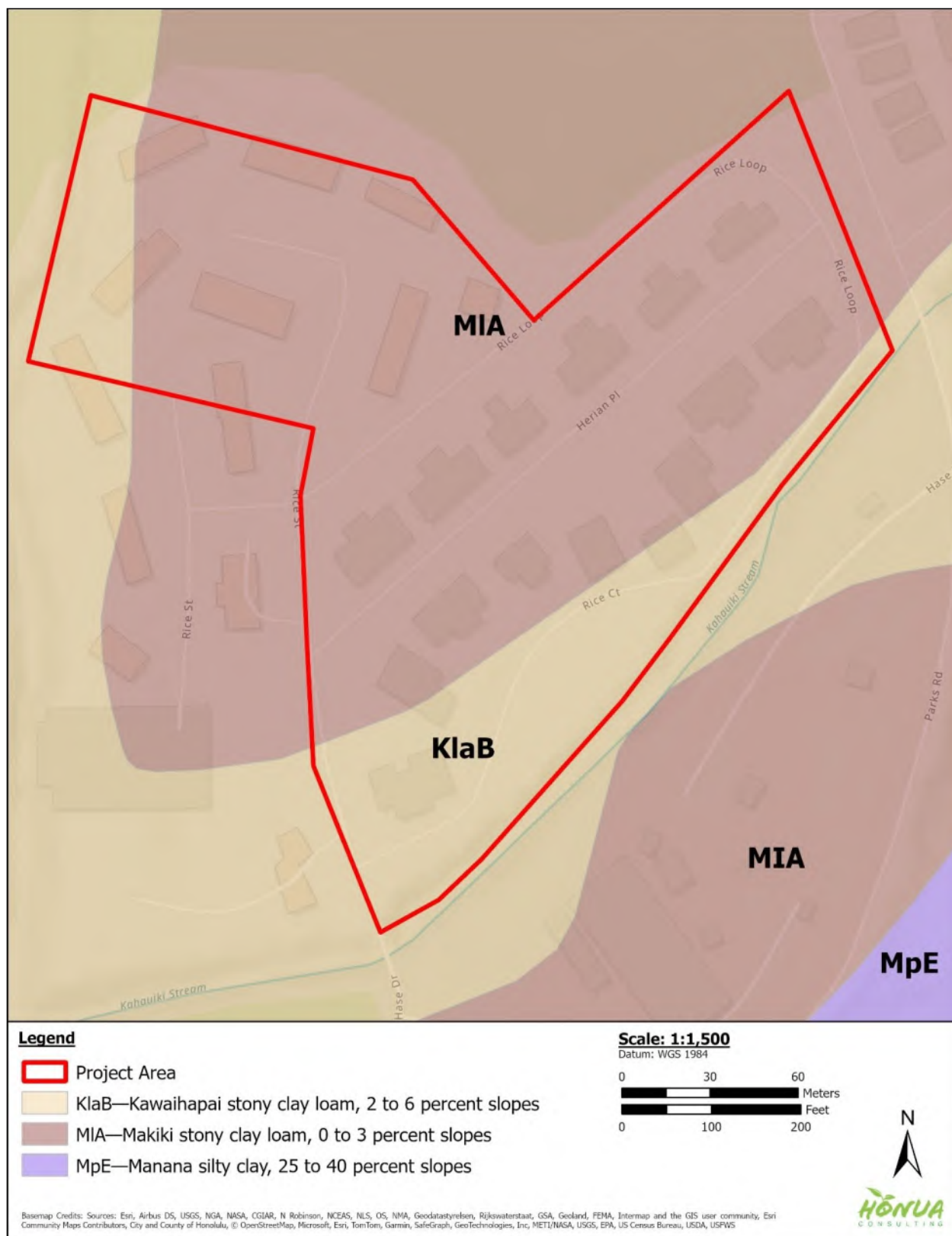


Figure 4. Soil data for the project area (base image from U.S. Department of Agriculture, Natural Resources Conservation Service soil survey at <http://websoilsurvey.sc.egov.usda.gov/>)

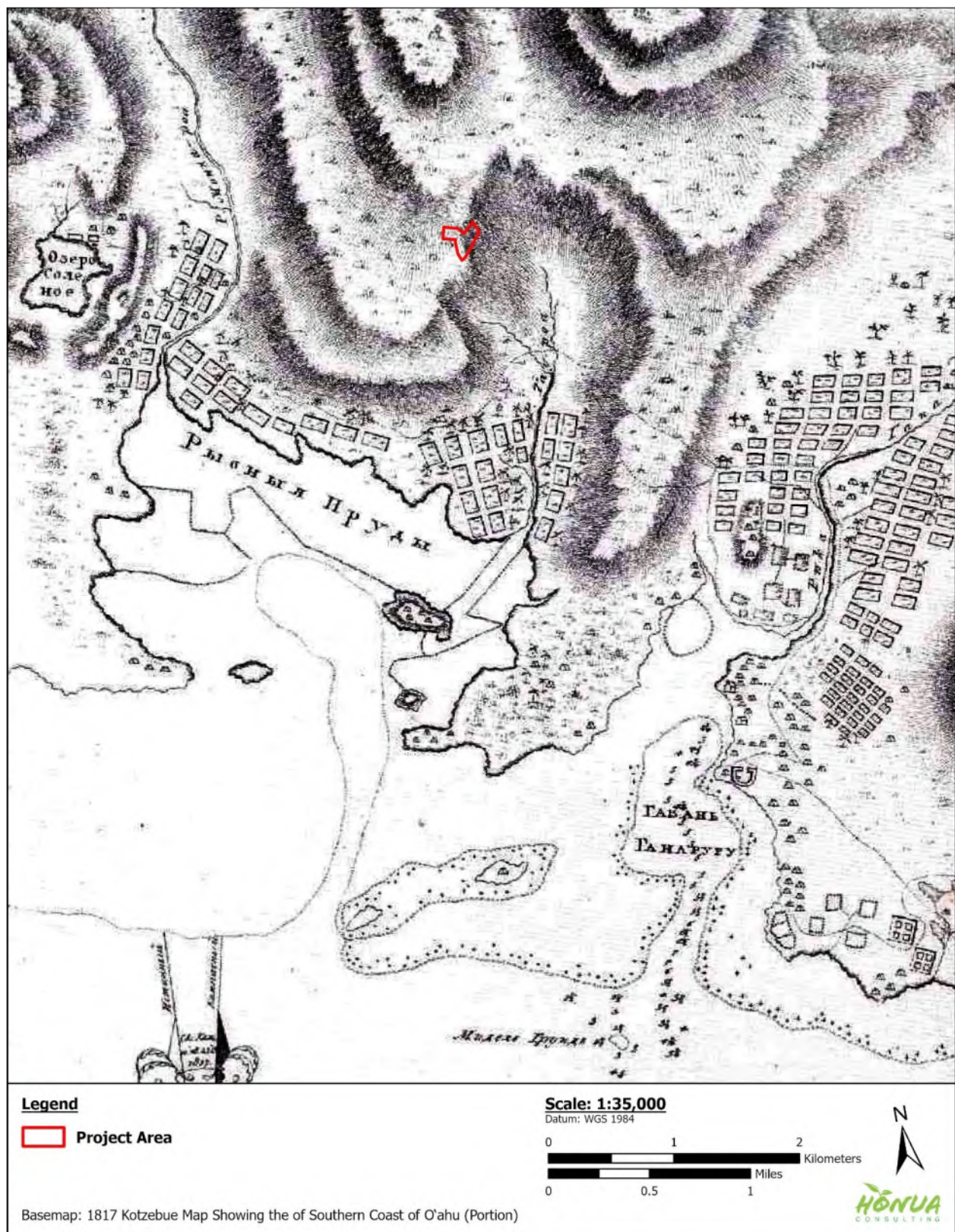
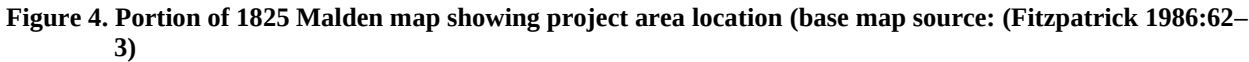


Figure 5. Portion of 1817 Kotzebue map showing project area location (base map source: (Fitzpatrick 1986:48-9)





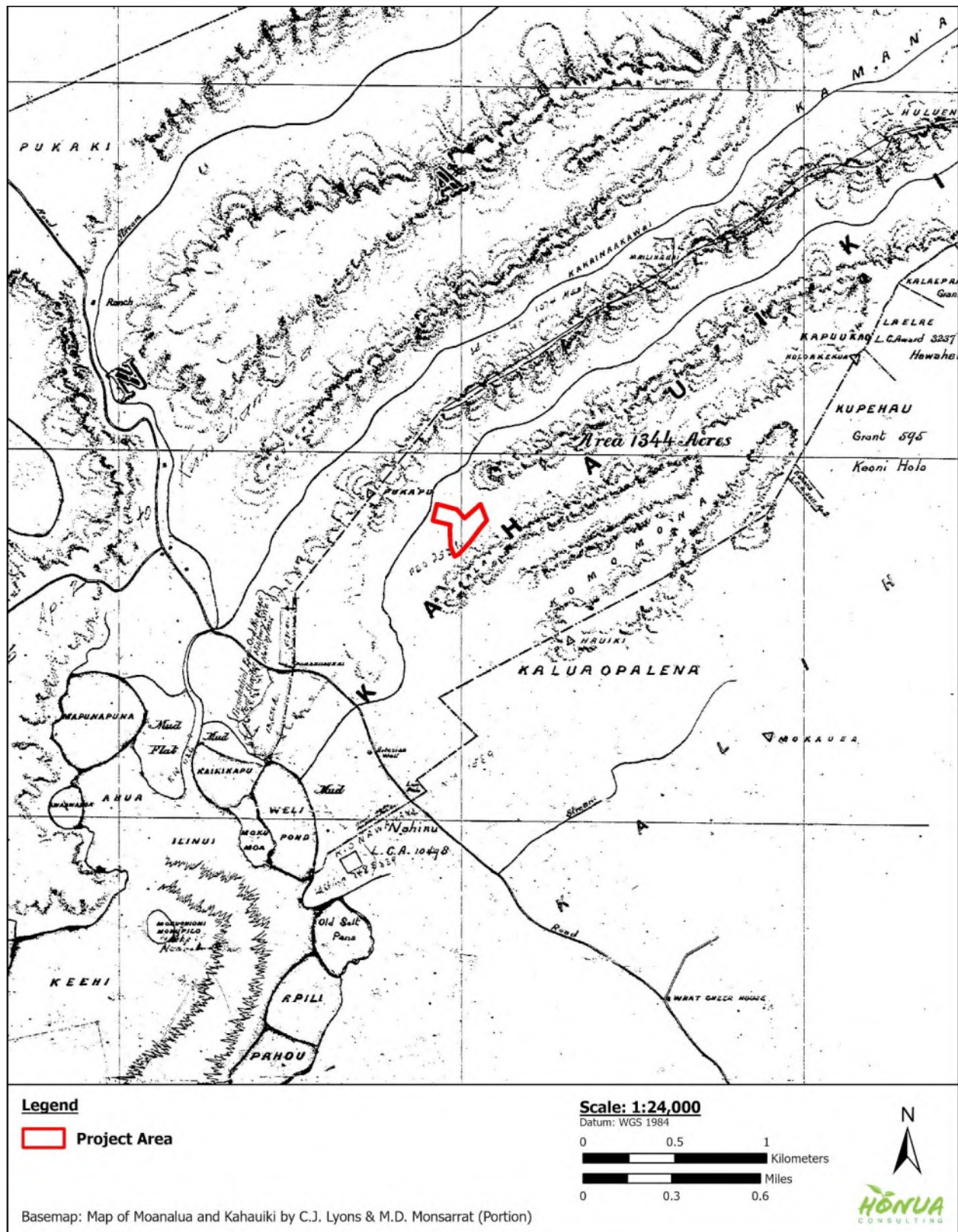


Figure 6. Portion of undated map (circa late 1800s) by Lyons and Monsarrat showing project-area location

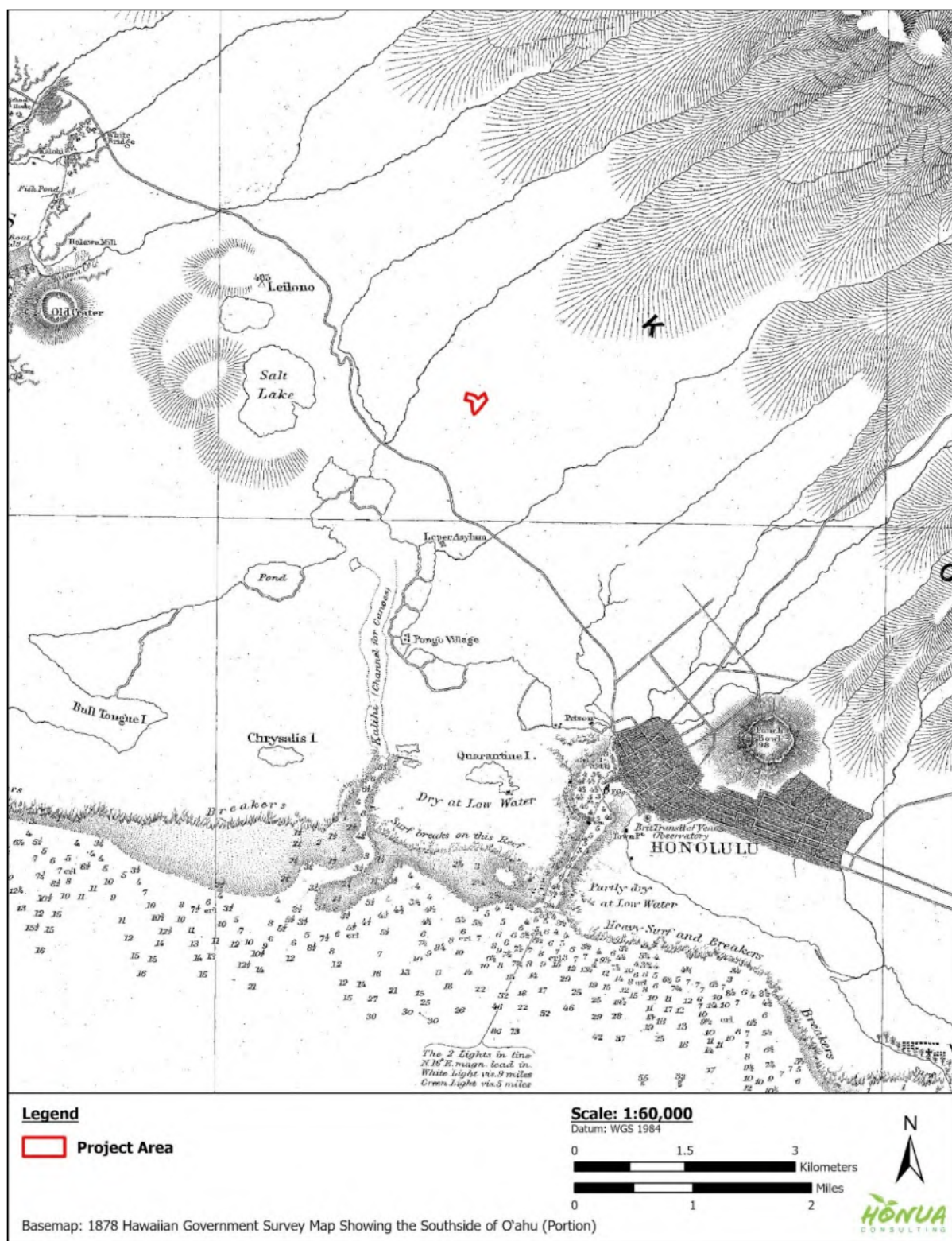


Figure 7. Portion of 1878 Hawaiian Government map showing project area location (base map source: University of Hawai'i-Mānoa's digital maps, <http://magis.manoa.hawaii.edu/maps/index.html>)

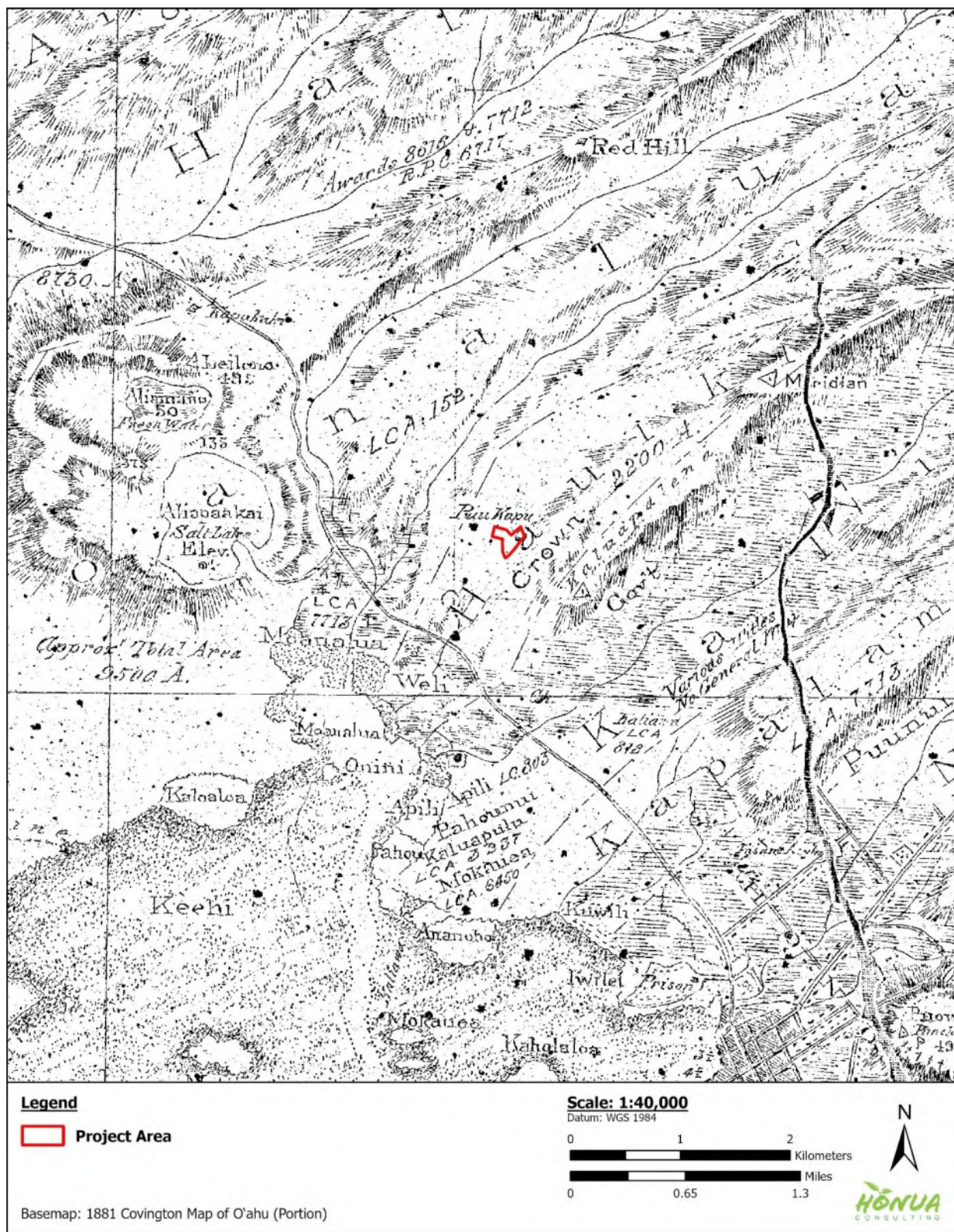


Figure 8. Portion of 1881 Hawaiian Government map showing project area location (base map source: University of Hawai'i-Mānoa's digital maps, <http://magis.manoa.hawaii.edu/maps/index.html>)

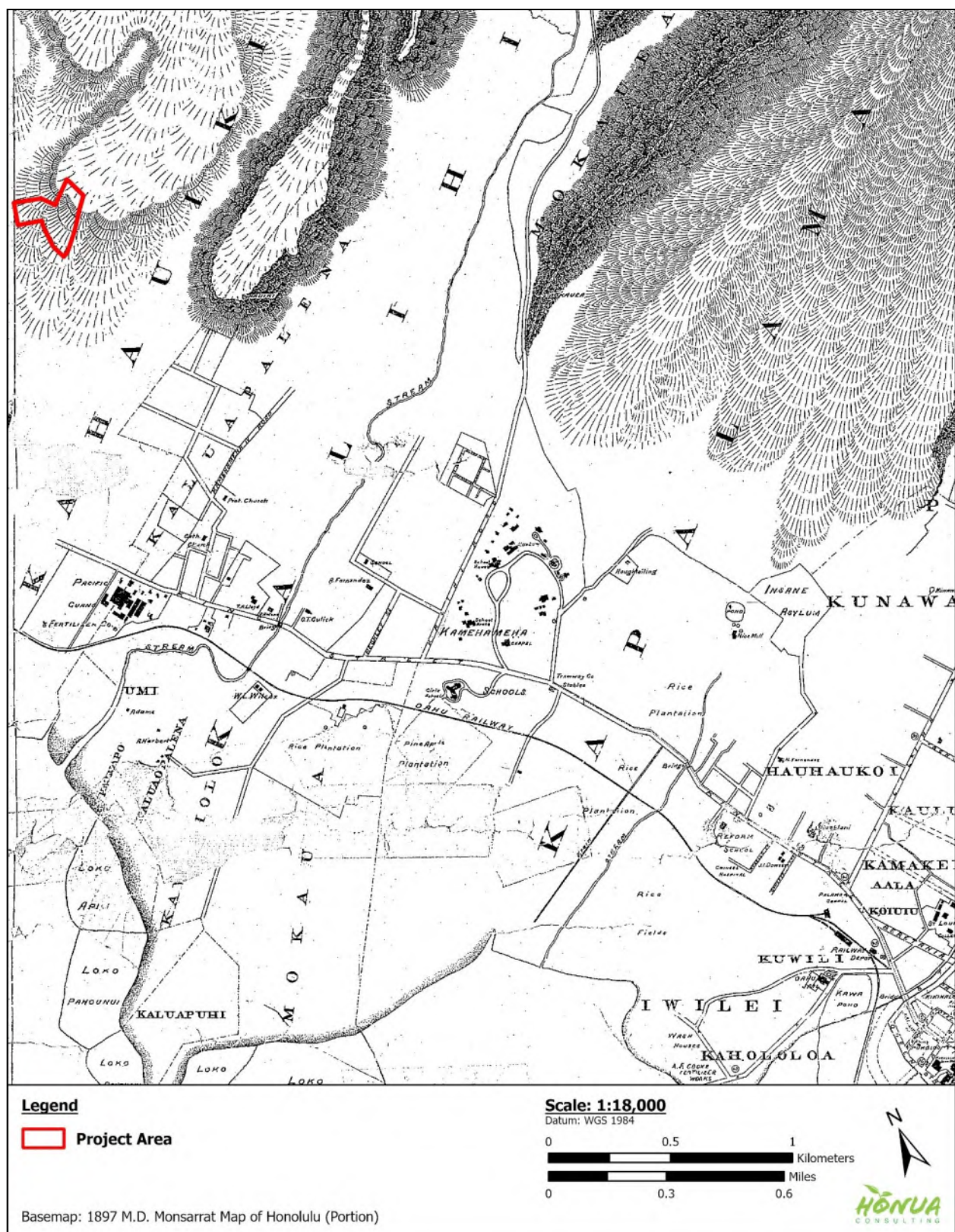






Figure 11. Portion of 1902 Wall map showing project area location (base map source: DAGS Land Survey Map Search, <http://ags.hawaii.gov/survey/map-search/>)

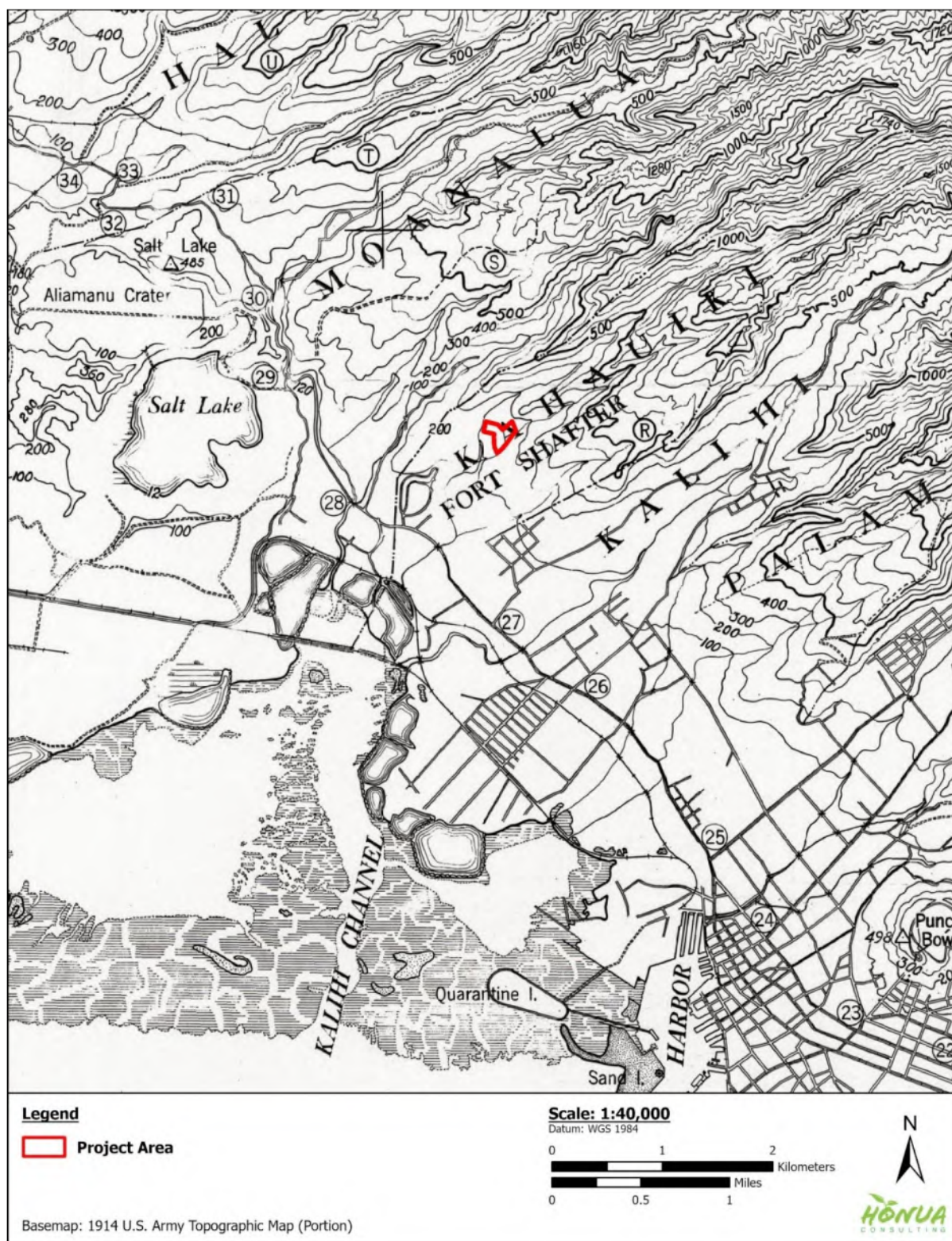
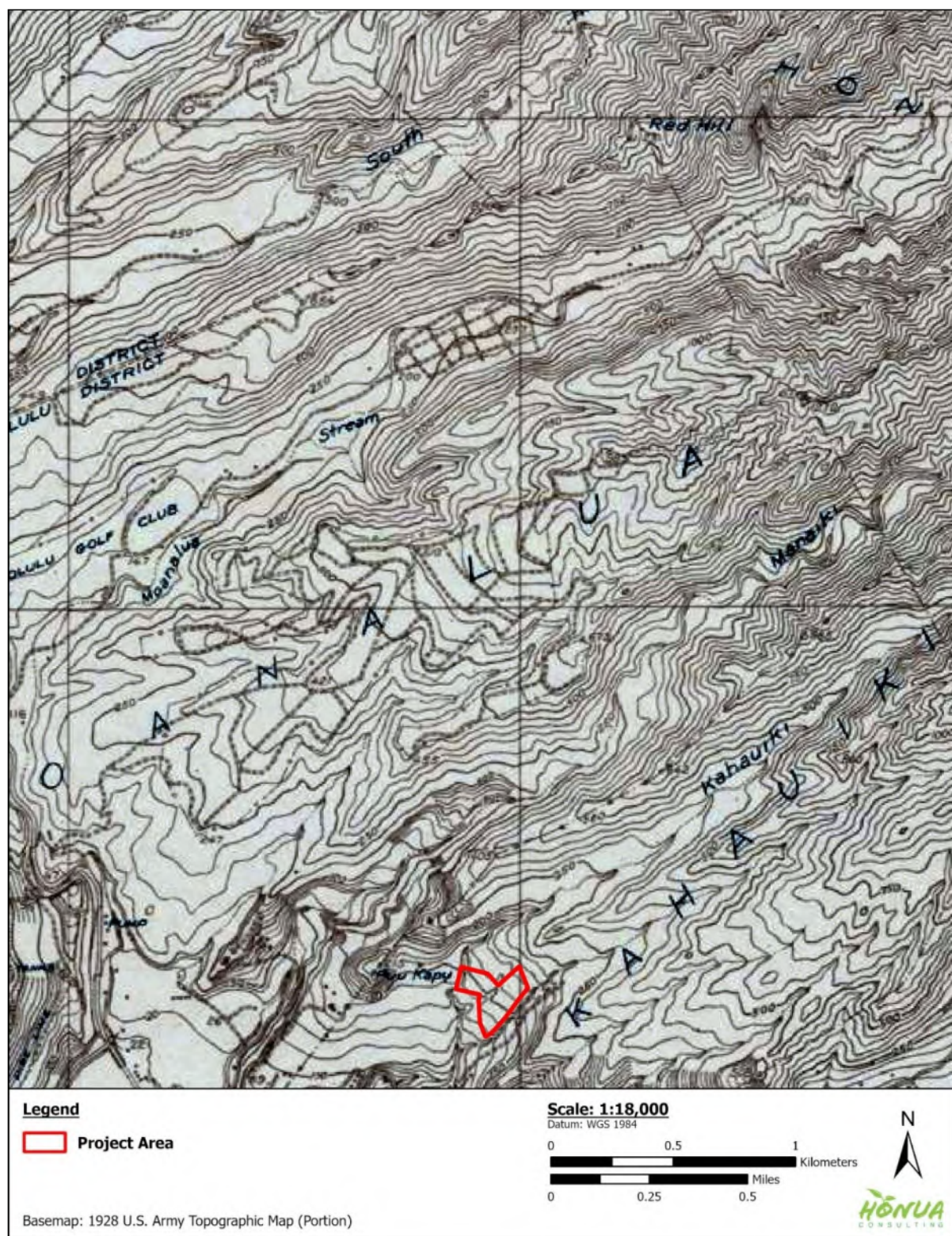


Figure 12. Portion of 1914 U.S. Army map showing project area location 1914 (base map source: University of Hawai'i-Mānoa's digital maps, <http://magis.manoa.hawaii.edu/maps/index.html>)



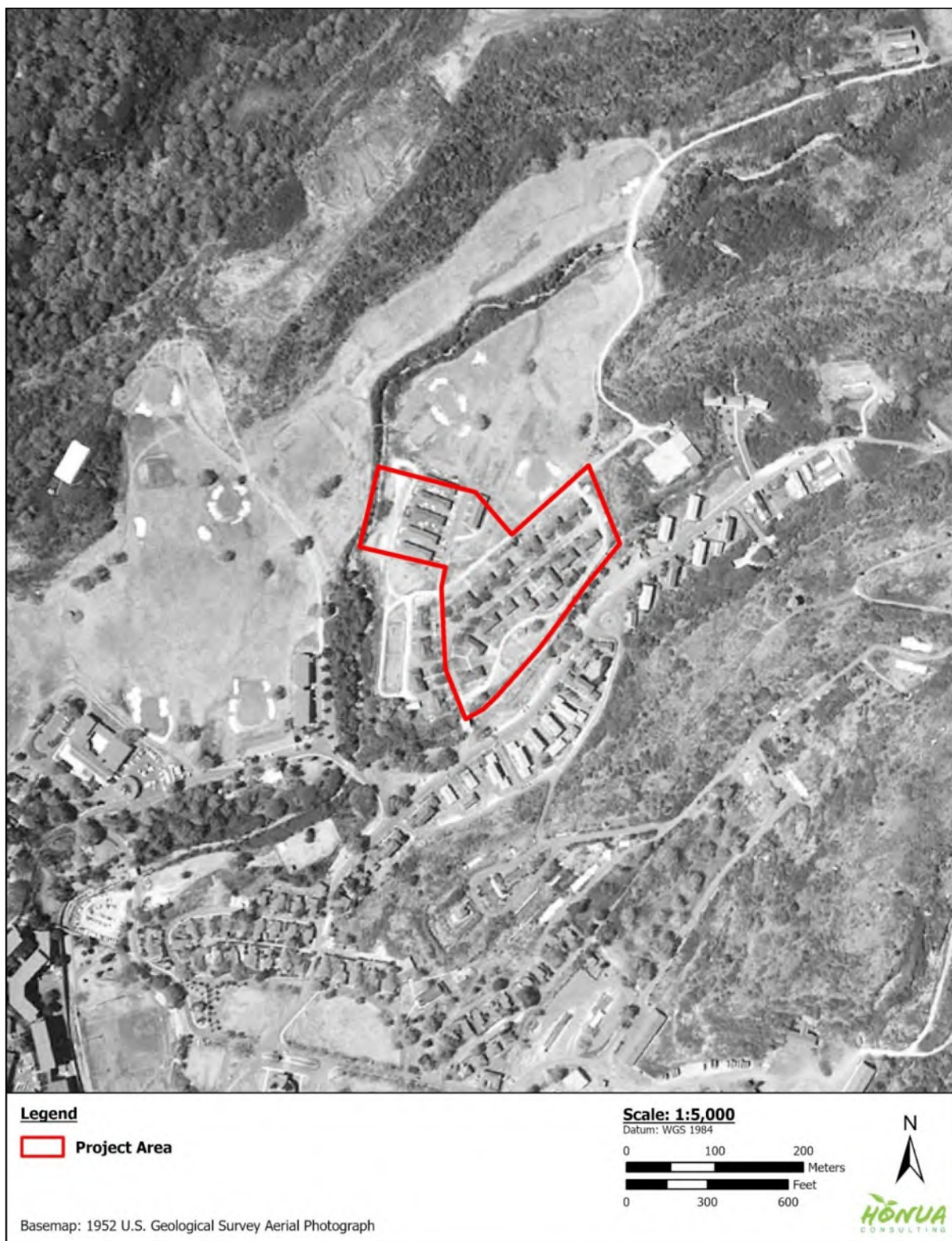


Figure 14. Portion of 1952 USGS aerial photograph showing project area location (base map source: University of Hawai'i-Mānoa's digital maps, <http://magis.manoa.hawaii.edu/maps/index.html>)

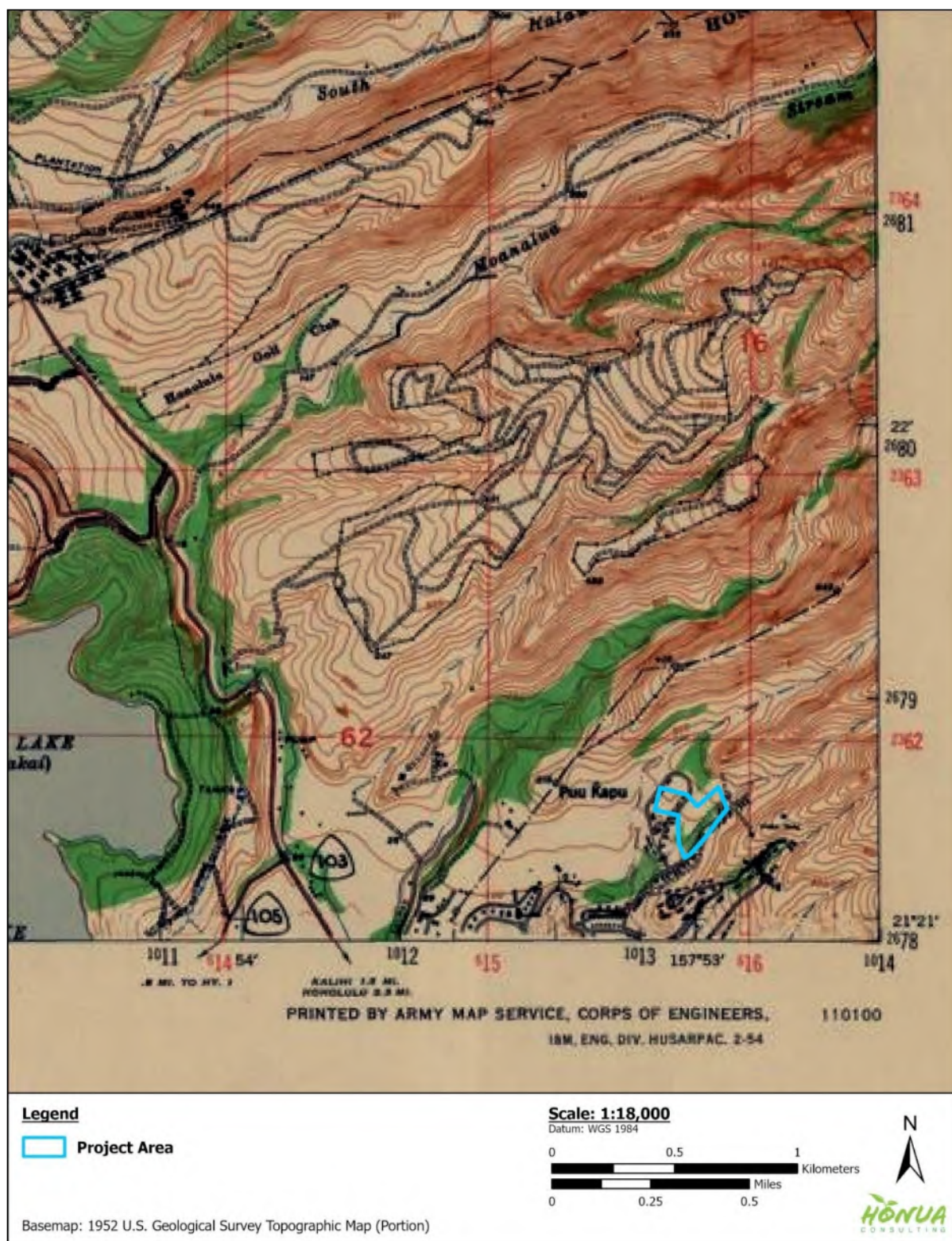


Figure 15. Portion of 1952 USGS topographic map showing project area location (base map source: University of Hawai‘i-Mānoa’s digital maps, <http://magis.manoa.hawaii.edu/maps/index.html>)



Figure 16. Portion of 1968 USGS aerial photograph showing project area location (base map source: University of Hawai'i-Mānoa's digital maps, <http://magis.manoa.hawaii.edu/maps/index.html>)

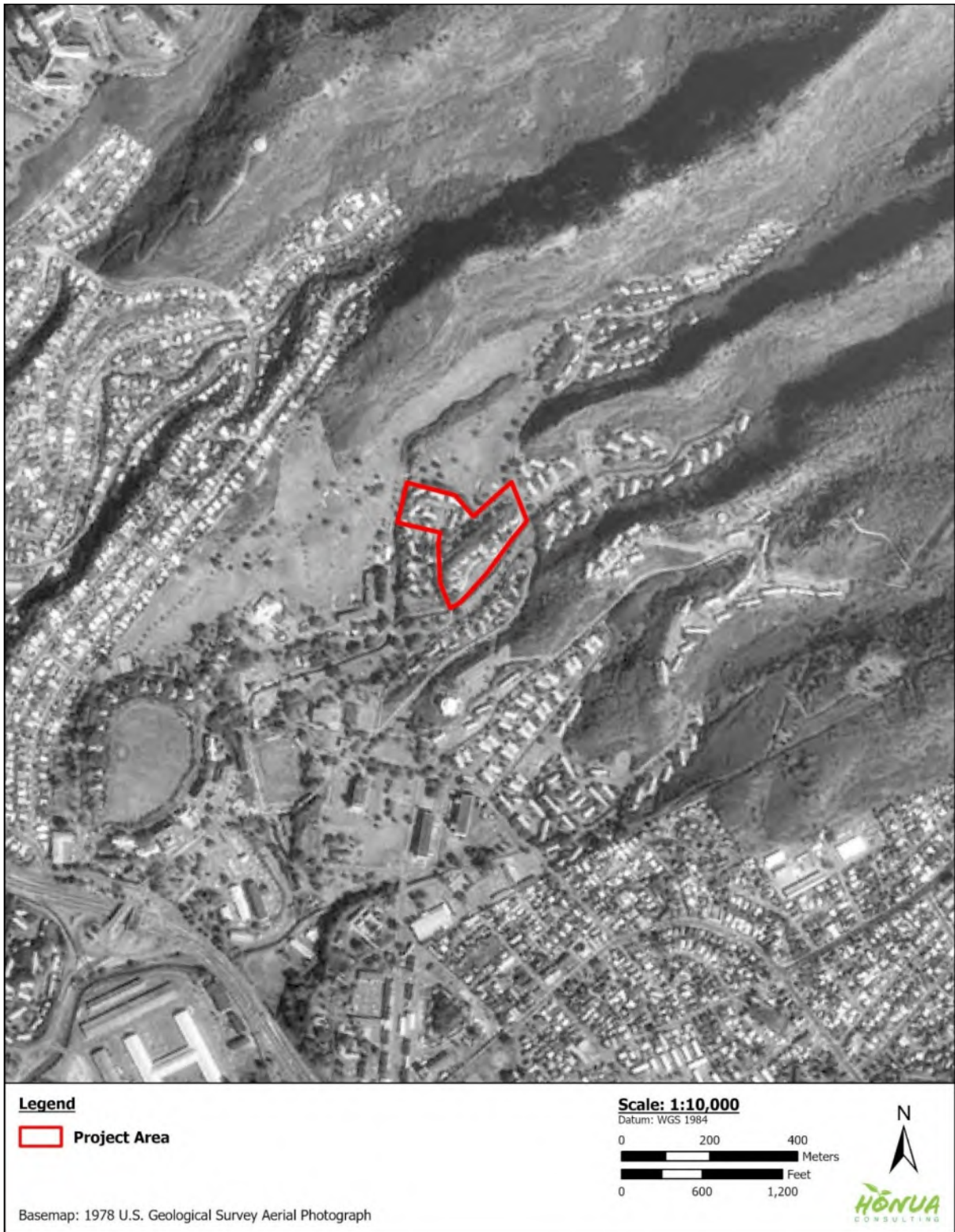


Figure 17. Portion of 1978 USGS aerial photograph showing project area location (base map source: University of Hawai'i-Mānoa's digital maps, <http://magis.manoa.hawaii.edu/maps/index.html>)

ATTACHMENT – LATEST SITE PLAN

[see next page]



SITE PLAN - CURRENT

SCOPE SUMMARY

SITE AREA:	8.27 acres
BUILDING DEMOLITION:	None - (Existing Buildings to be removed by USAG prior to construction)
NEW CONSTRUCTION:	Program Area = 69,190 sf Total Bldg Area = 79,510 gsf
RENOVATION AREA:	None
PLUMBING FIXTURE COUNT:	Water closets + urinals = 63 count Lavatories + sinks = 127 count + 3(3-compartment sink) Service/mop sinks = 9 count Drinking fountains = 16 counts Showers = 6 count
OUTDOOR PLAY AREA:	116,500 sf (approximately 2.67 acres)
TOTAL PARKING STALLS:	124 parking stalls
TOTAL BUS DROP-OFF STALLS:	3 stalls

LEGEND

NEW CONSTRUCTION	PAVEMENT / ROADS	PROJECT BOUNDARY
EXISTING BUILDING TO REMAIN	COVERED AREA	DLNR PROPERTY LINE
FUTURE EXPANSION / BLDG	SIDEWALK	FENCE LINE
PLAY AREAS/STRUCTURES	BUILDING CLEARANCE	



Shafter Elementary School

CAMPUS IMPROVEMENTS OR RELOCATION • FORT SHAFTER, OAHU, HI • DOE Job No: Q74204-17 • DECEMBER 2024

DESIGN PARTNERS
INCORPORATED

Appendix E
NHPA SECTION 106 CONSULTATION CORRESPONDENCE



DEPARTMENT OF THE ARMY
U.S. ARMY INSTALLATION MANAGEMENT COMMAND
HEADQUARTERS, UNITED STATES ARMY GARRISON HAWAII
745 WRIGHT AVENUE, BUILDING 107, WHEELER ARMY AIRFIELD
SCHOFIELD BARRACKS, HAWAII 96857-5013

July 22, 2025

SUBJECT: National Historic Preservation Act (NHPA) Section 106 Consultation for a Proposed Lease to the State of Hawaii Department of Education (HIDOE) for Construction and Operation of a New Elementary School at Fort Shafter, Kahauiki Ahupua'a, Kona District, O'ahu, Hawai'i, TMK (1)1-1-008:005, Army Project #CRS-25-028

Ms. Dawn N. S. Chang
DLNR Chair, State Historic Preservation Officer
Department of Land and Natural Resources
DLNR Main Office, Kalanimoku Building
1151 Punchbowl Street
Honolulu, Hawai'i 96813

Dear Ms. Chang:

As Commander of the U.S. Army Garrison (USAG) Hawaii, I am initiating consultation pursuant to Section 106 of the National Historic Preservation Act (NHPA) of 1966 and its implementing regulations of 36 CFR Part 800 regarding a proposed lease to the HIDOE for construction and operation of a new elementary school. The lease is a federal real estate action, and the construction of the school will be partially funded by a grant to the State of Hawaii from the Department of Defense Office of Local Defense Community Cooperation (OLDCC). As a result, the action qualifies as a federal undertaking as defined in 36 CFR § 800.16(y) and is a type of activity that has the potential to cause effects on historic properties.

HIDOE proposes to build and operate a new elementary school that would consist of one-, two-, and three-story buildings and outdoor play areas, comprising about 80,000 square feet. The proposal also includes associated parking areas, access roads, infrastructure, and utility connections. The area of potential effects (APE) for the undertaking is 8.3 acres.

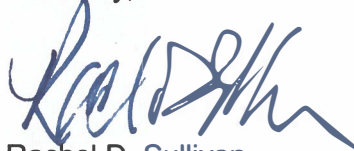
The APE has been previously surveyed for all types of historic properties and subject to NHPA Section 106 consultation for previous undertaking to demolish an inter-war era housing tract. The results of the previous consultation confirmed that there are no historic properties within the current APE, or in the vicinity, that could potentially be affected by the demolition or subsequent redevelopment of the area. Further, there has been extensive ground disturbance in the area resulting from the housing development, including overall grading of the entire development site, housing construction, road and sidewalk construction, installation of above and below-ground utilities, and landscaping. Such areas of extensive ground disturbance associated with housing tract development are generally considered to have a low probability for the presence of archaeological properties eligible for the National Register of Historic Places. The APE is not visible from the Palm Circle National Historic Landmark.

USAG Hawaii is seeking information from consulting parties regarding knowledge of, or concerns with, historic properties in the area and any issues relating to the undertaking's potential effects on those properties. Detailed information about the undertakings is provided in Enclosure 1, including the description of the undertakings, maps of the APE, and the steps taken to identify historic properties. Enclosure 2 is a list of all consulting parties who are being notified of these undertakings and invited to participate in consultation.

I respectfully request that you review the enclosed documents and provide your views or information about the project area within 30 days of receipt of this letter. After this initial 30-day information gathering and comment period, I will consider any input received from consulting parties and the public, propose a finding of effect, and provide documentation of the finding to consulting parties for another 30-day review period.

Please direct all responses and questions regarding these undertakings to Dr. Jesse J. Otto, USAG Hawaii Historian at jesse.j.otto.civ@army.mil or Mr. David Crowley, USAG Hawaii Cultural Resources Manager at david.m.crowley22.civ@army.mil and 808-864-0876.

Sincerely,



Rachel D. Sullivan
Colonel, U.S. Army
Commanding

Enclosures

SUBJECT: National Historic Preservation Act (NHPA) Section 106 Consultation for a Proposed Lease to the State of Hawaii Department of Education (HIDOE) for Construction and Operation of a New Elementary School at Fort Shafter, Kahauiki Ahupua'a, Kona District, O'ahu, Hawai'i, TMK (1)1-1-008:005, Army Project #CRS-25-028

Description of the Undertaking

The Hawaii Department of Education (HIDOE) is proposing to lease federal land at Fort Shafter Military Reservation, O'ahu (Figures 1 & 2), for the purpose of constructing and operating a new elementary school. The proposed lease will be a federal real estate action and the school construction will be partially funded by a grant from the Department of Defense Office of Local Defense Community Cooperation (OLDCC). As a result, the action qualifies as a federal undertaking as defined in 36 CFR § 800.16(y) and is a type of activity that has the potential to cause effects on historic properties.

The area of potential effects for the undertaking is 8.3 acres and is based on the footprint of the proposed lease (Figure 3). The APE is situated between the Child Development Center that offers day care and pre-kindergarten programs, the School-Age Center that offers before- and after-school programs, a family housing area, and the Fort Shafter Nagorski golf course. A portion of the proposed lease overlaps the former Rice Manor inter-war era neighborhood.

The HIDOE proposal for the new school complex consists of one-, two-, and three-story buildings, outdoor play areas, a garden, and parking lots. The proposal includes four total buildings and a covered play court, ranging in height from eighteen to thirty-eight feet. The action also includes related access roads, utilities, and other infrastructure (Figure 4).

Description of Steps Taken to identify Historic Properties

USAG Hawaii Cultural Resources specialists reviewed existing information and found there are no known historic properties within the APE or in the immediate surrounding area. The subject area is more than a quarter mile away from the historic districts at Fort Shafter. The APE is not visible from the Palm Circle National Historic Landmark or the Hawaii Ordnance Depot Historic District.

The APE has been previously surveyed for all types of historic properties and subject to NHPA Section 106 consultation for a previous undertaking to demolish the Rice Manor Inter-War Era neighborhood pursuant to the Advisory Council on Historic Preservation (ACHP) Program Comment for Army Inter-War Era Housing. The results of that consultation confirmed that there are no historic buildings, structures, districts, sites, landscape features, or archaeological resources within the current APE, or in the vicinity, that could potentially be affected by the demolition or subsequent redevelopment of the area (ACHP 2024, USAG Hawaii 2024).

Enclosure 1

SUBJECT: National Historic Preservation Act (NHPA) Section 106 Consultation for a Proposed Lease to the State of Hawaii Department of Education (HIDOE) for Construction and Operation of a New Elementary School at Fort Shafter, Kahauiki Ahupua'a, Kona District, O'ahu, Hawai'i, TMK (1)1-1-008:005, Army Project #CRS-25-028

In the Program Comment, the Advisory Council on Historic Preservation (ACHP) considers the Army's Inter-War Era housing areas as the equivalent of urban/suburban housing development tracts in the civilian sector and the development of the housing tracts resulted in significant prior ground disturbance, including overall grading of the entire development site, housing construction, road and sidewalk construction, installation of above and below-ground utilities, and landscaping. The ACHP acknowledge that such areas of extensive ground disturbance associated with the housing tract development have a low probability for the presence of archaeological properties eligible for the National Register of Historic Places.

Between 1995 and 1996, International Archaeological Research Institute, Inc. conducted a comprehensive cultural resources survey for historic properties at Fort Shafter (Figure 5) (Tomonari-Tuggle et al. 2000). No archaeological material or other historic properties have been documented within or nearby the Rice Manor APE.

USAG Hawaii will send this project description to consulting parties and request information or concerns about historic properties in the area and issues related to the undertaking's potential effects on such properties. Additionally, USAG Hawaii will notify the public and seek public input about the undertaking through our Cultural Resources website: <https://home.army.mil/hawaii/garrison/dpw/cultural-resources>.

References

2024 ACHP

Letter to U.S. Army Garrison Hawaii, February 28, 2024. *Ref: Demolition of Rice Manor, Department of the Army Inter-War Program Comment Fort Shafter, Oahu, USAG Hawaii. ACHP Project Number: 02051.* On file at USAG Hawaii Cultural Resources Office, Project # CRS-20-139, Schofield Barracks, Hawaii.

2024 USAG Hawaii

Letter to Advisory Council on Historic Preservation, January 17, 2024. *Subject: National Historic Preservation Act (NHPA) Section 106 Compliance for Demolition of Rice Manor at Fort Shafter, Kahauiki Ahupua.a, Kona Moku, Oahu;* Directorate of Public Works, Environmental Division, Cultural Resources Section. On file at U.S. Army Garrison Hawaii Cultural Resources Office, Project # CRS-20-139 Schofield Barracks, Hawaii.

Enclosure 1

SUBJECT: National Historic Preservation Act (NHPA) Section 106 Consultation for a Proposed Lease to the State of Hawaii Department of Education (HIDOE) for Construction and Operation of a New Elementary School at Fort Shafter, Kahauiki Ahupua'a, Kona District, O'ahu, Hawai'i, TMK (1)1-1-008:005, Army Project #CRS-25-028

2000 Tomonari-Tuggle, M.J., Stephen Hamilton, and Katharine Slocumb

Fort Shafter: Cultural Resource Investigations at Hawaii's First U.S. Military Post.

Prepared for U.S. Army Corps of Engineers Pacific Division by International Archaeological Research Institute, Inc., Honolulu. On file at the U.S. Army Garrison Hawaii Cultural Resources Office, Library # 1358, Schofield Barracks, Hawaii

Enclosure 1

SUBJECT: National Historic Preservation Act (NHPA) Section 106 Consultation for a Proposed Lease to the State of Hawaii Department of Education (HIDOE) for Construction and Operation of a New Elementary School at Fort Shafter, Kahauiki Ahupua'a, Kona District, O'ahu, Hawai'i, TMK (1)1-1-008:005, Army Project #CRS-25-028



Figure 1. Project Vicinity Map

Enclosure 1

SUBJECT: National Historic Preservation Act (NHPA) Section 106 Consultation for a Proposed Lease to the State of Hawaii Department of Education (HIDOE) for Construction and Operation of a New Elementary School at Fort Shafter, Kahauiki Ahupua'a, Kona District, O'ahu, Hawai'i, TMK (1)1-1-008:005, Army Project #CRS-25-028

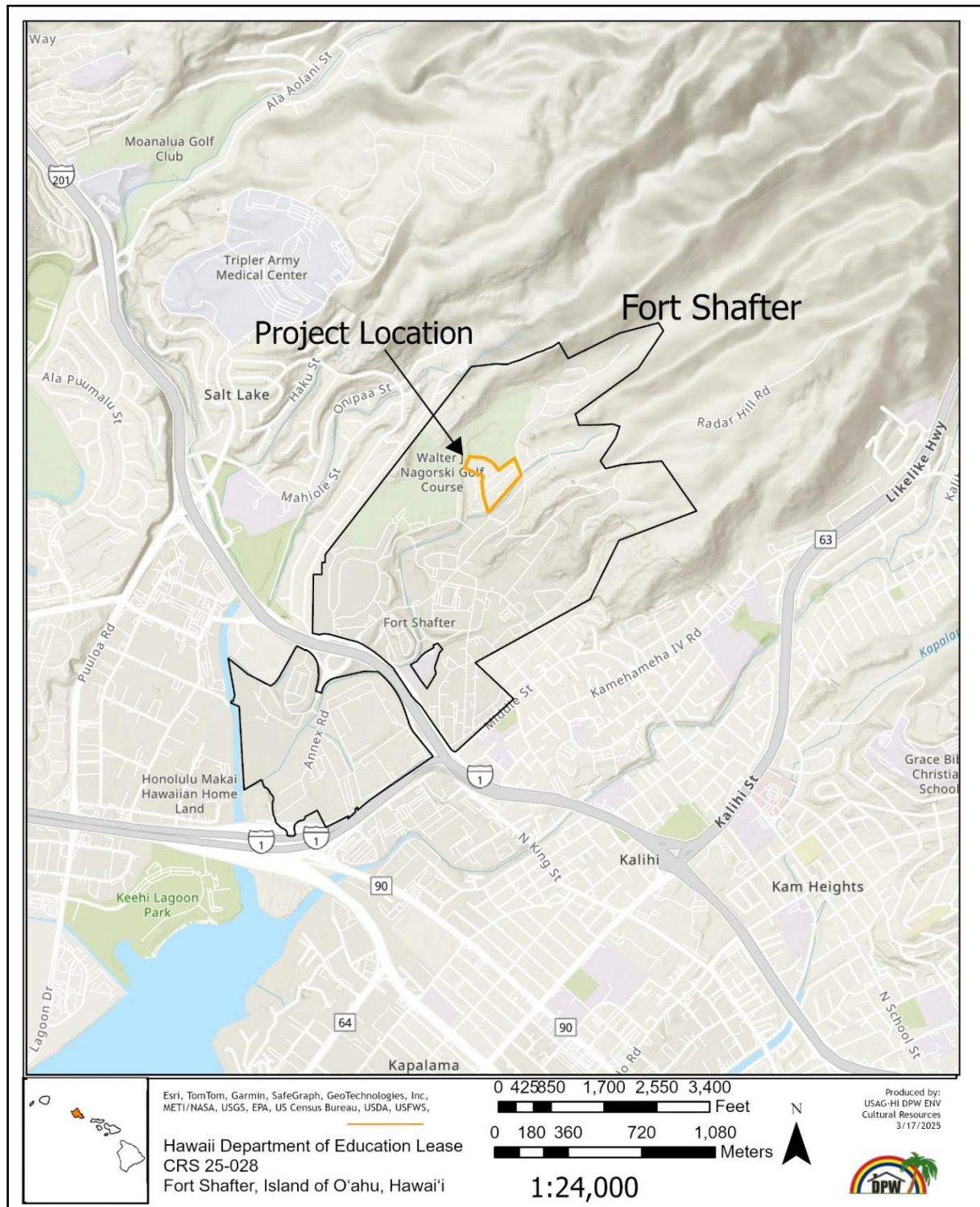


Figure 2. Project Location Map

Enclosure 1

SUBJECT: National Historic Preservation Act (NHPA) Section 106 Consultation for a Proposed Lease to the State of Hawaii Department of Education (HIDOE) for Construction and Operation of a New Elementary School at Fort Shafter, Kahauiki Ahupua'a, Kona District, O'ahu, Hawai'i, TMK (1)1-1-008:005, Army Project #CRS-25-028



Figure 3. Area of Potential Effects

Enclosure 1

SUBJECT: National Historic Preservation Act (NHPA) Section 106 Consultation for a Proposed Lease to the State of Hawaii Department of Education (HIDOE) for Construction and Operation of a New Elementary School at Fort Shafter, Kahauiki Ahupua'a, Kona District, O'ahu, Hawai'i, TMK (1)1-1-008:005, Army Project #CRS-25-028

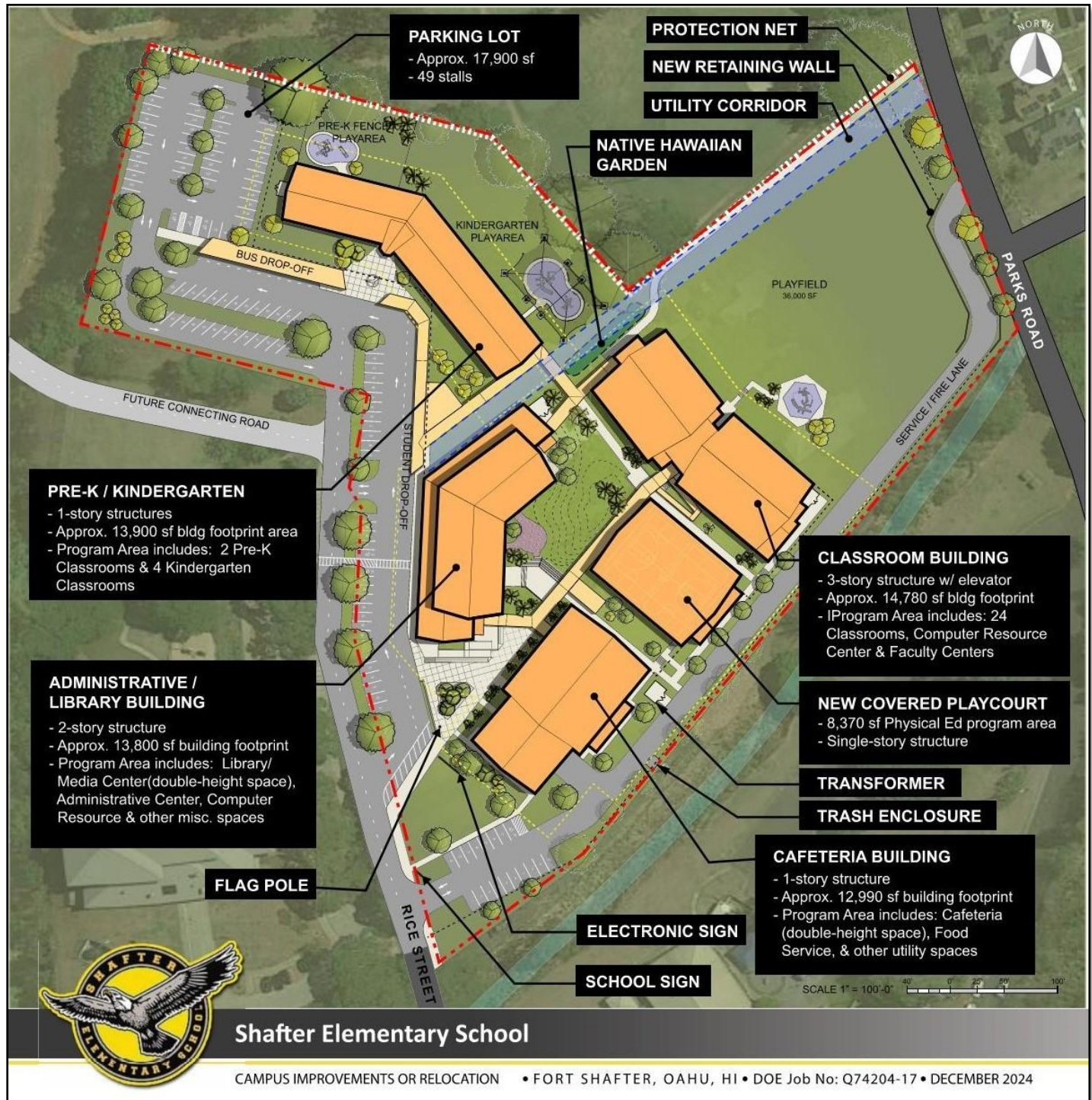


Figure 4. Proposed new school complex.

Enclosure 1

SUBJECT: National Historic Preservation Act (NHPA) Section 106 Consultation for a Proposed Lease to the State of Hawaii Department of Education (HIDOE) for Construction and Operation of a New Elementary School at Fort Shafter, Kahauiki Ahupua'a, Kona District, O'ahu, Hawai'i, TMK (1)1-1-008:005, Army Project #CRS-25-028

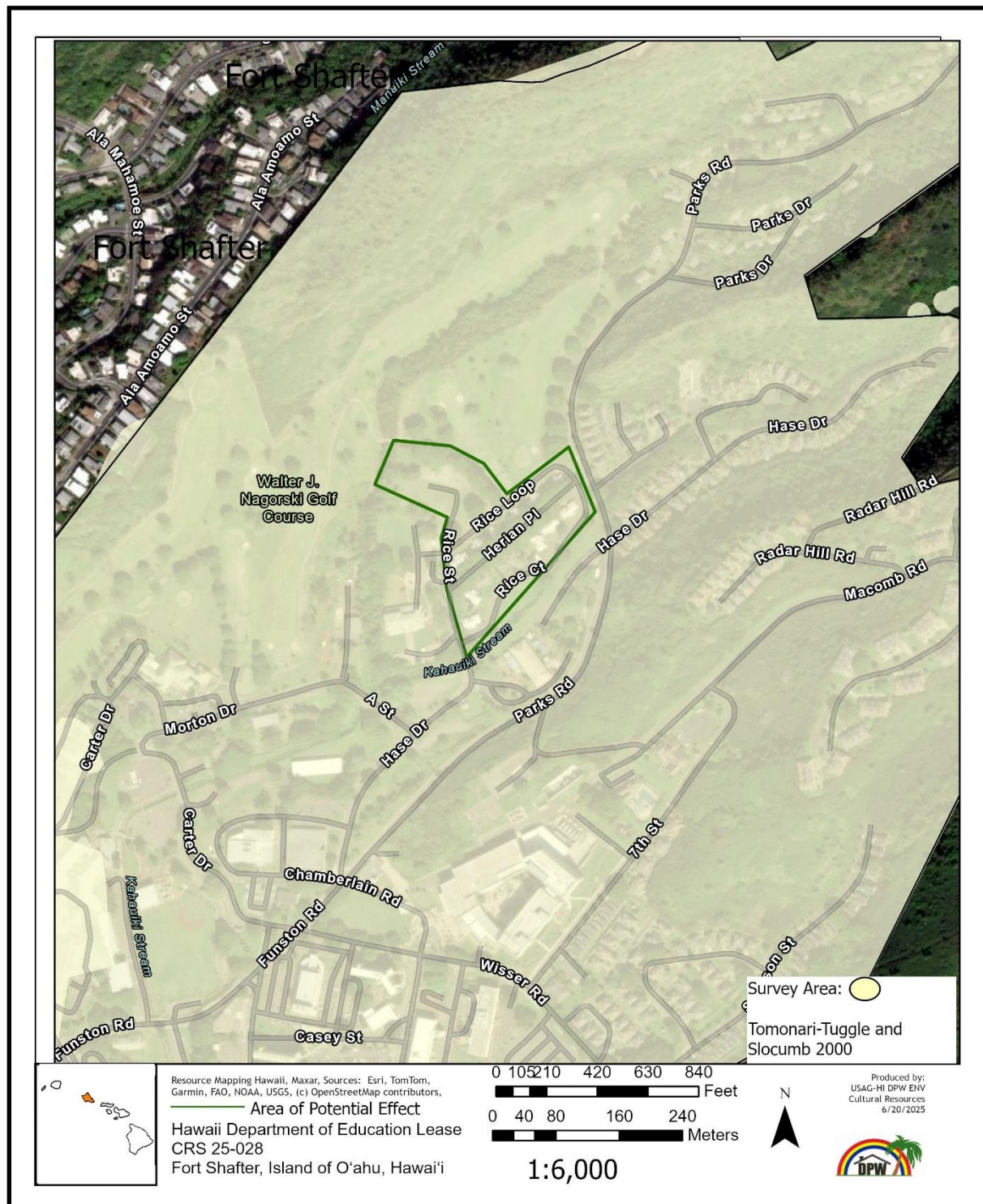


Figure 5. Previous historic property surveys

ENCLOSURE 2

SUBJECT: National Historic Preservation Act (NHPA) Section 106 Consultation for a Proposed Lease to the State of Hawaii Department of Education (HIDOE) for Construction and Operation of a New Elementary School at Fort Shafter, Kahauiki Ahupua'a, Kona District, O'ahu, Hawai'i, TMK (1)1-1-008:005, Army Project #CRS-25-028

Distribution List

Mr. William J. Aila, Jr. and Mrs. Melva N. Aila Hui Mālama O Mākua	Ms. Dawn N. S. Chang Department of Land and Natural Resources
Ms. Kiersten Faulkner Historic Hawaii Foundation	Ms. Stacy Kealohalani Ferreira Office of Hawaiian Affairs Attn: OHA Compliance Enforcement
Ms. Olinda (Nina) Fisher Ka 'Ohana O Ho'ohuli	Ali'i Sir Nathan Keola Grace Royal Order of Kamehameha I , Moku 'o Kōhala
Dr. Ha'aheo Guanson Pacific Justice and Reconciliation Center Native Hawaiian Church	Mr. Josiah L. (Black) Ho'ohuli Ka 'Ohana O Ho'ohuli
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Mr. Kyle Kajihira and Ms. Terrilee Keko'olani Hawai'i Peace and Justice	Ms. Dre Kalili Association of Hawaiian Civic Clubs
Ms. Lani Ma'a Lapilio Ma'a 'Ohana, Aukahi	Mr. Tom Lenchanko 'Aha Kūkaniloko Ko'a Mana Mea Ola Kanaka Maui Hoalii Iku Pau
Mr. James Medeiros Sr. 'Ohana Medeiros Protect Keopuka Ohana	Ms. Nalani Olds
Lopaka Oliveira Heir of Kuihelani/Kaapuiki	Mr. Christophor Oliveira Marae Ha'akoa
Ms. Kaleo Paik Hoi Mai Ka Lei I Mamo Aha Wahine	Dr. Benton Kealii Pang O'ahu Council of Hawaiian Civic Clubs
Dr. Kahu Kaleo Patterson Pacific Justice and Reconciliation Center	Mr. Joseph K. Simpliciano Jr. Kingdom Pathways
Ms. Healani Sonoda-Pale Pu'uhonua o Wailupe	Ms. Kēhaulani Souza

ENCLOSURE 2

SUBJECT: National Historic Preservation Act (NHPA) Section 106 Consultation for a Proposed Lease to the State of Hawaii Department of Education (HIDOE) for Construction and Operation of a New Elementary School at Fort Shafter, Kahauiki Ahupua'a, Kona District, O'ahu, Hawai'i, TMK (1)1-1-008:005, Army Project #CRS-25-028

Ms. Milillani B. Trask Na Koa Ikaika Ka Lahui Hawaii	Mr. Harry Wasson Hui Malama 'Aina 'O La'ie , Mahi'ai, Ki'ai
Mr. William Young House of Nobles	

JOSH GREEN, M.D.
GOVERNOR | KE KIA'ĀINA

SYLVIA LUKE
LIEUTENANT GOVERNOR | KA HOPE KIA'ĀINA



**STATE OF HAWAII | KA MOKU'ĀINA 'O HAWAII'
DEPARTMENT OF LAND AND NATURAL RESOURCES
KA 'OIHANA KUMUWAIWAI 'ĀINA**

STATE HISTORIC PRESERVATION DIVISION
KAKUHIHEWA BUILDING
601 KAMOKILA BLVD, STE 555
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KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

August 26, 2025

Colonel Rachel D. Sullivan, Commanding
United States Army Installation Management Command
Headquarters, United States Army Garrison Hawaii
United States Department of the Army
745 Wright Avenue, Building 107, Wheeler Army Airfield
Schofield Barracks, Hawai'i 96857-5013
Email Reply to: usarmy.hawaii.crmf@army.mil
Electronic Transmittal Only, No Hard Copy to Follow

IN REPLY REFER TO:
Project No.: 2025PR00860
Doc No.: 2508SH08
Archaeology
Architecture

Dear Colonel Rachel Sullivan:

**SUBJECT: National Historic Preservation Act (NHPA) Section 106 Review –
Initiation of Consultation
Proposed Lease to the State of Hawai'i Department of Education to Construct and Operate
a New Elementary School at Fort Shafter
USAG Project No. #CRS-25-028
Kahauiki Ahupua'a, Kona District, Island of O'ahu
TMK: (1) 1-1-008:005**

The State Historic Preservation Division (SHPD) received a letter dated July 22, 2025 from the United States Department of the Army, U.S. Army Garrison (USAG) Hawaii to initiate the Section 106 historic preservation process with the State Historic Preservation Officer (SHPO) for the Proposed Lease to the State of Hawai'i Department of Education (HIDOE) to Construct and Operate a New Elementary School at Fort Shafter on the island of O'ahu. The SHPD received this submittal on July 25, 2025 (HICRIS Submission No. 2025PR00860.001).

According to the letter received, the HIDOE proposes to build and operate a new elementary school that would consist of one-, two-, and three-story buildings and outdoor play areas (four total buildings and a covered play court, ranging in height from eighteen to thirty-eight feet), comprising about 80,000 square feet. The proposal also includes associated parking areas, access roads, infrastructure, and utility connections.

The lease is a federal real estate action, and the construction of the school will be partially funded by a grant to the State of Hawaii from the Department of Defense Office of Local Defense Community Cooperation (OLDCC). The proposed project is a federal undertaking as defined in 36 CFR 800.16(y) and is subject to compliance with Section 106 of the NHPA.

The USAG has defined the area of potential effects (APE) for the undertaking as 8.3 acres. The APE is situated between the Child Development Center that offers day care and pre-kindergarten programs, the School-Age Center that offers before- and after-school programs, a family housing area, and the Fort Shafter Nagorski golf course. A portion of the proposed lease overlaps the former Rice Manor inter-war era neighborhood.

The USAG identified no historic properties within the APE and states that the subject area is more than a quarter mile away from the historic districts at Fort Shafter and that the APE is not visible from the Palm Circle National Historic Landmark or the Hawaii Ordnance Depot Historic District.

Colonel Rachel Sullivan

August 26, 2025

Page 2

The SHPO looks forward to receiving from the USAG documentation of any comments received from the public or parties. **Please provide** to HICRIS copies of the reports used to support this undertaking from previous archaeological or historic preservation identification efforts and a map showing where the previous studies occurred in proximity to the APE for this undertaking. If adequate subsurface testing has not occurred within the APE, archaeological testing may be warranted.

Please submit all forthcoming information and correspondence related to the subject project to SHPD via HICRIS under Project No. 2025PR00860 in response to our request. If additional individuals, such as personnel from the HIDOE, need to be added as contributors to this HICRIS project number, please contact SHPD to have them designated as project contacts. This will grant them the ability to submit documents associated with the project.

The SHPD looks forward to continuing the Section 106 process for the proposed project.

The USAG and the HIDOE are the offices of record for this undertaking. Please maintain a copy of this letter with your environmental review record for this undertaking.

Please contact Mary Kodama, Architecture Branch Chief at Mary.Kodama@hawaii.gov, for any matters regarding architectural resources, and please contact Stephanie Hacker, Historic Preservation Archaeologist IV, at Stephanie.Hacker@hawaii.gov or at (808) 692-8046, for matters regarding archaeological resources or this letter.

Aloha,



Dawn N. S. Chang, Esq.

DLNR Chairperson

State Historic Preservation Officer

cc: David M. Crowley, David.M.Crowley22.civ@army.mil



DEPARTMENT OF THE ARMY
U.S. ARMY INSTALLATION MANAGEMENT COMMAND
HEADQUARTERS, UNITED STATES ARMY GARRISON HAWAII
745 WRIGHT AVENUE, BUILDING 107, WHEELER ARMY AIRFIELD
SCHOFIELD BARRACKS, HAWAII 96857-5013

19 Sept 2025

SUBJECT: National Historic Preservation Act (NHPA) Section 106 Consultation for a Proposed Lease to the State of Hawaii Department of Education (HIDOE) for Construction and Operation of a New Elementary School at Fort Shafter, Kahauiki Ahupua'a, Kona District, O'ahu, Hawai'i, TMK (1)1-1-008:005, Army Project #CRS-25-028

Ms. Dawn N. S. Chang
DLNR Chair, State Historic Preservation Officer
Department of Land and Natural Resources
DLNR Main Office, Kalanimoku Building
1151 Punchbowl Street
Honolulu, Hawaii 96813

Dear Ms. Chang:

I am writing to continue consultation in accordance with the NHPA Section 106 regulations at 36 CFR Part 800 regarding a proposed lease to the HIDOE for construction and operation of a new elementary school at Fort Shafter.

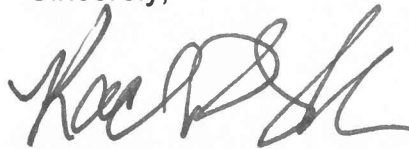
The U.S. Army Garrison (USAG) Hawaii initiated consultation with you and all consulting parties on July 25, 2025. The initial consultation correspondence provided a comprehensive assessment of the undertaking and a determination that no historic properties exist within the Area of Potential Effects (APE) along with a list of the 27 parties invited to consult. In the initial correspondence, we provided a description of the undertaking and requested views, advice, and information from consulting parties about the identification of historic properties, and any issues related to potential effects of the undertaking to gather information prior to proposing a finding of effect. No consulting parties provided information relating to the presence of historic properties or the potential effects of the undertaking with the APE.

Based on the results of the information-gathering phase of the consultation and the information provided in Enclosure 1, I propose a finding of *no historic properties affected* for this undertaking because no historic properties are present. Enclosure 1 provides all documentation required by 36 CFR § 800.11(d), including a description of the undertaking, the efforts to identify historic properties, and the basis for the determination that no historic properties are present. Enclosure 2 is the list of all parties who were invited to participate in NHPA Section 106 consultation for this undertaking.

I respectfully request your review of this finding within 30 days of receipt of this letter. If you have any questions or need clarification, please don't hesitate to contact my team listed below to resolve any concerns as quickly as possible.

Please direct all responses and questions regarding this undertaking to Dr. Jesse J. Otto, USAG Hawaii Historian at jesse.j.otto.civ@army.mil or Mr. David Crowley, USAG Hawaii Cultural Resources Manager at david.m.crowley22.civ@army.mil and 808-864-0876.

Sincerely,

A handwritten signature in black ink, appearing to read 'Rachel D. Sullivan', with a stylized flourish at the end.

Rachel D. Sullivan
Colonel, U.S. Army
Commanding

Enclosures

SUBJECT: National Historic Preservation Act (NHPA) Section 106 Consultation for a Proposed Lease to the State of Hawaii Department of Education (HIDOE) for Construction and Operation of a New Elementary School at Fort Shafter, Kahauiki Ahupua'a, Kona District, O'ahu, Hawai'i, TMK (1)1-1-008:005, Army Project #CRS-25-028

Description of the Undertaking per 36 CFR § 800.11(d)(1)

The Hawaii Department of Education (HIDOE) is proposing to lease federal land at Fort Shafter Military Reservation, O'ahu (Figures 1 & 2), for the purpose of constructing and operating a new elementary school. The proposed lease will be a federal real estate action and the school construction will be partially funded by a grant from the Department of Defense Office of Local Defense Community Cooperation (OLDCC). As a result, the action qualifies as a federal undertaking as defined in 36 CFR § 800.16(y) and is a type of activity that has the potential to cause effects on historic properties.

The area of potential effects for the undertaking is 8.3 acres and is based on the footprint of the proposed lease (Figure 3). The APE is situated between the Child Development Center that offers day care and pre-kindergarten programs, the School-Age Center that offers before- and after-school programs, a family housing area, and the Fort Shafter Nagorski golf course. A portion of the proposed lease overlaps the former Rice Manor inter-war era neighborhood.

The HIDOE proposal for the new school complex consists of one-, two-, and three-story buildings, outdoor play areas, a garden, and parking lots. The proposal includes four total buildings and a covered play court, ranging in height from eighteen to thirty-eight feet. The action also includes related access roads, utilities, and other infrastructure (Figure 4).

Identification of Historic Properties per 36 CFR § 800.11(d)(2)

USAG Hawaii Cultural Resources specialists reviewed existing information and found there are no known historic properties within the APE or in the immediate surrounding area. The subject area is more than a quarter mile away from the historic districts at Fort Shafter. The APE is not visible from the Palm Circle National Historic Landmark or the Hawaii Ordnance Depot Historic District.

The APE has been previously surveyed for all types of historic properties and subject to NHPA Section 106 consultation for a previous undertaking to demolish the Rice Manor Inter-War Era neighborhood pursuant to the Advisory Council on Historic Preservation (ACHP) Program Comment for Army Inter-War Era Housing. The results of that consultation confirmed that there are no historic buildings, structures, districts, sites, landscape features, or archaeological resources within the current APE, or in the vicinity, that could potentially be affected by the demolition or subsequent redevelopment of the area (ACHP 2024, USAG Hawaii 2024).

Enclosure 1

SUBJECT: National Historic Preservation Act (NHPA) Section 106 Consultation for a Proposed Lease to the State of Hawaii Department of Education (HIDOE) for Construction and Operation of a New Elementary School at Fort Shafter, Kahauiki Ahupua'a, Kona District, O'ahu, Hawai'i, TMK (1)1-1-008:005, Army Project #CRS-25-028

In the Program Comment, the Advisory Council on Historic Preservation (ACHP) considers the Army's Inter-War Era housing areas as the equivalent of urban/suburban housing development tracts in the civilian sector and the development of the housing tracts resulted in significant prior ground disturbance, including overall grading of the entire development site, housing construction, road and sidewalk construction, installation of above and below-ground utilities, and landscaping. The ACHP acknowledge that such areas of extensive ground disturbance associated with the housing tract development have a low probability for the presence of archaeological properties eligible for the National Register of Historic Places.

Between 1995 and 1996, International Archaeological Research Institute, Inc. conducted a comprehensive cultural resources survey for historic properties at Fort Shafter (Figure 5) (Tomonari-Tuggle et al. 2000). No archaeological material or other historic properties have been documented within or nearby the APE.

Basis for Determining that No Historic Properties are Present or Affected per 36 CFR § 800.11(d)(3)

No historic properties are present within the APE, the area has a low probability of intact buried archaeological historic properties, and consulting parties provided no additional information about historic properties or potential effects of the undertaking. Therefore, the appropriate finding is no historic properties affected because no historic properties are present.

References

2024 ACHP

Letter to U.S. Army Garrison Hawaii, February 28, 2024. *Ref: Demolition of Rice Manor, Department of the Army Inter-War Program Comment Fort Shafter, Oahu, USAG Hawaii. ACHP Project Number: 02051.* On file at USAG Hawaii Cultural Resources Office, Project # CRS-20-139, Schofield Barracks, Hawaii.

2024 USAG Hawaii

Letter to Advisory Council on Historic Preservation, January 17, 2024. *Subject: National Historic Preservation Act (NHPA) Section 106 Compliance for Demolition of Rice Manor at Fort Shafter, Kahauiki Ahupua'a, Kona Moku, Oahu;* Directorate of Public Works, Environmental Division, Cultural Resources Section. On file at U.S. Army Garrison Hawaii Cultural Resources Office, Project # CRS-20-139 Schofield Barracks, Hawaii.

Enclosure 1

SUBJECT: National Historic Preservation Act (NHPA) Section 106 Consultation for a Proposed Lease to the State of Hawaii Department of Education (HIDOE) for Construction and Operation of a New Elementary School at Fort Shafter, Kahauiki Ahupua'a, Kona District, O'ahu, Hawai'i, TMK (1)1-1-008:005, Army Project #CRS-25-028

2000 Tomonari-Tuggle, M.J., Stephen Hamilton, and Katharine Slocumb

Fort Shafter: Cultural Resource Investigations at Hawaii's First U.S. Military Post.

Prepared for U.S. Army Corps of Engineers Pacific Division by International Archaeological Research Institute, Inc., Honolulu. On file at the U.S. Army Garrison Hawaii Cultural Resources Office, Library # 1358, Schofield Barracks, Hawaii

Enclosure 1

SUBJECT: National Historic Preservation Act (NHPA) Section 106 Consultation for a Proposed Lease to the State of Hawaii Department of Education (HIDOE) for Construction and Operation of a New Elementary School at Fort Shafter, Kahauiki Ahupua'a, Kona District, O'ahu, Hawai'i, TMK (1)1-1-008:005, Army Project #CRS-25-028



Figure 1. Project Vicinity Map

Enclosure 1

SUBJECT: National Historic Preservation Act (NHPA) Section 106 Consultation for a Proposed Lease to the State of Hawaii Department of Education (HIDOE) for Construction and Operation of a New Elementary School at Fort Shafter, Kahauiki Ahupua'a, Kona District, O'ahu, Hawai'i, TMK (1)1-1-008:005, Army Project #CRS-25-028



Figure 2. Project Location Map

Enclosure 1

SUBJECT: National Historic Preservation Act (NHPA) Section 106 Consultation for a Proposed Lease to the State of Hawaii Department of Education (HIDOE) for Construction and Operation of a New Elementary School at Fort Shafter, Kahauiki Ahupua'a, Kona District, O'ahu, Hawai'i, TMK (1)1-1-008:005, Army Project #CRS-25-028



Figure 3. Area of Potential Effects

Enclosure 1

SUBJECT: National Historic Preservation Act (NHPA) Section 106 Consultation for a Proposed Lease to the State of Hawaii Department of Education (HIDOE) for Construction and Operation of a New Elementary School at Fort Shafter, Kahauiki Ahupua'a, Kona District, O'ahu, Hawai'i, TMK (1)1-1-008:005, Army Project #CRS-25-028

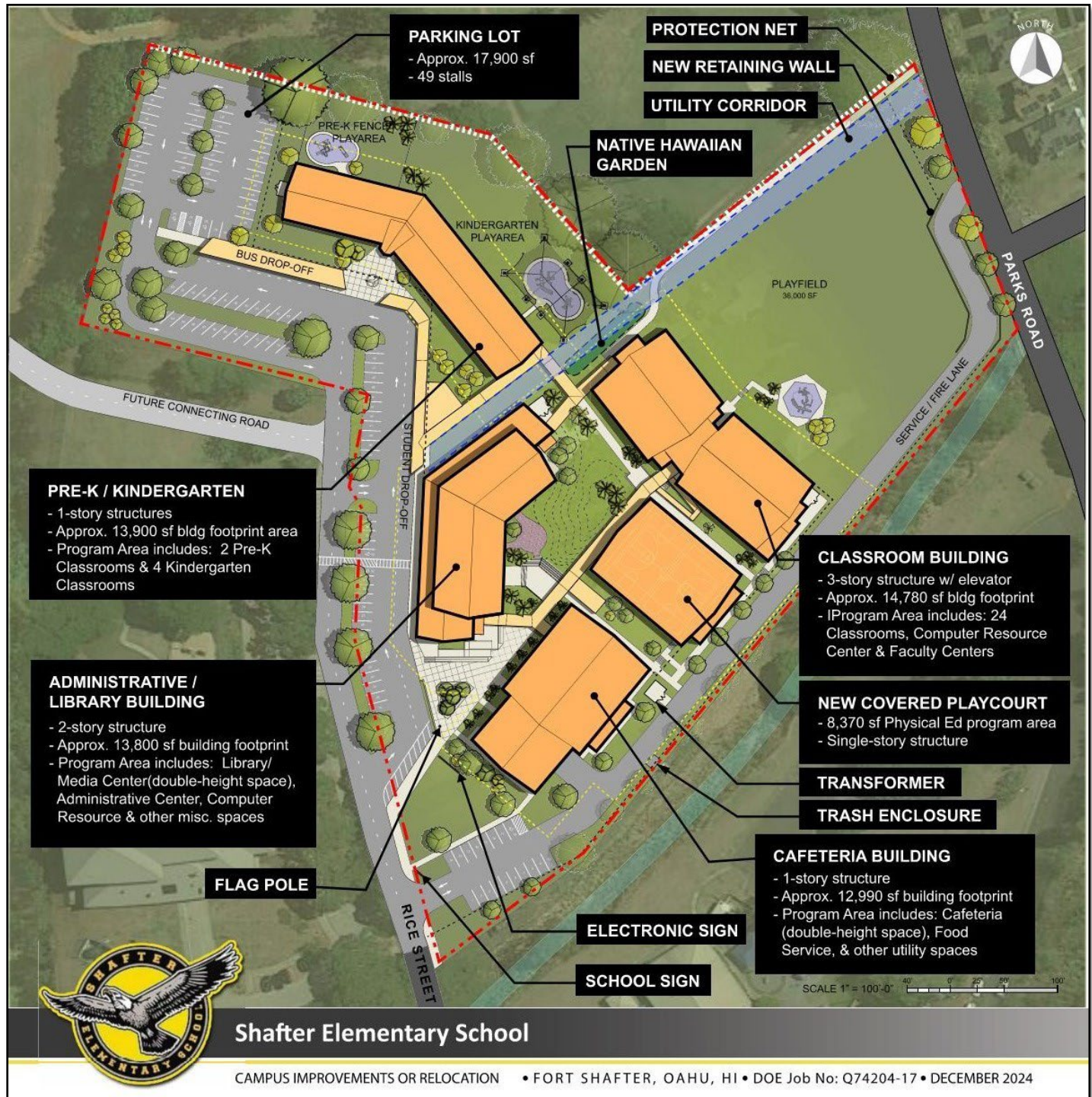


Figure 4. Proposed new school complex.

Enclosure 1

SUBJECT: National Historic Preservation Act (NHPA) Section 106 Consultation for a Proposed Lease to the State of Hawaii Department of Education (HIDOE) for Construction and Operation of a New Elementary School at Fort Shafter, Kahauiki Ahupua'a, Kona District, O'ahu, Hawai'i, TMK (1)1-1-008:005, Army Project #CRS-25-028

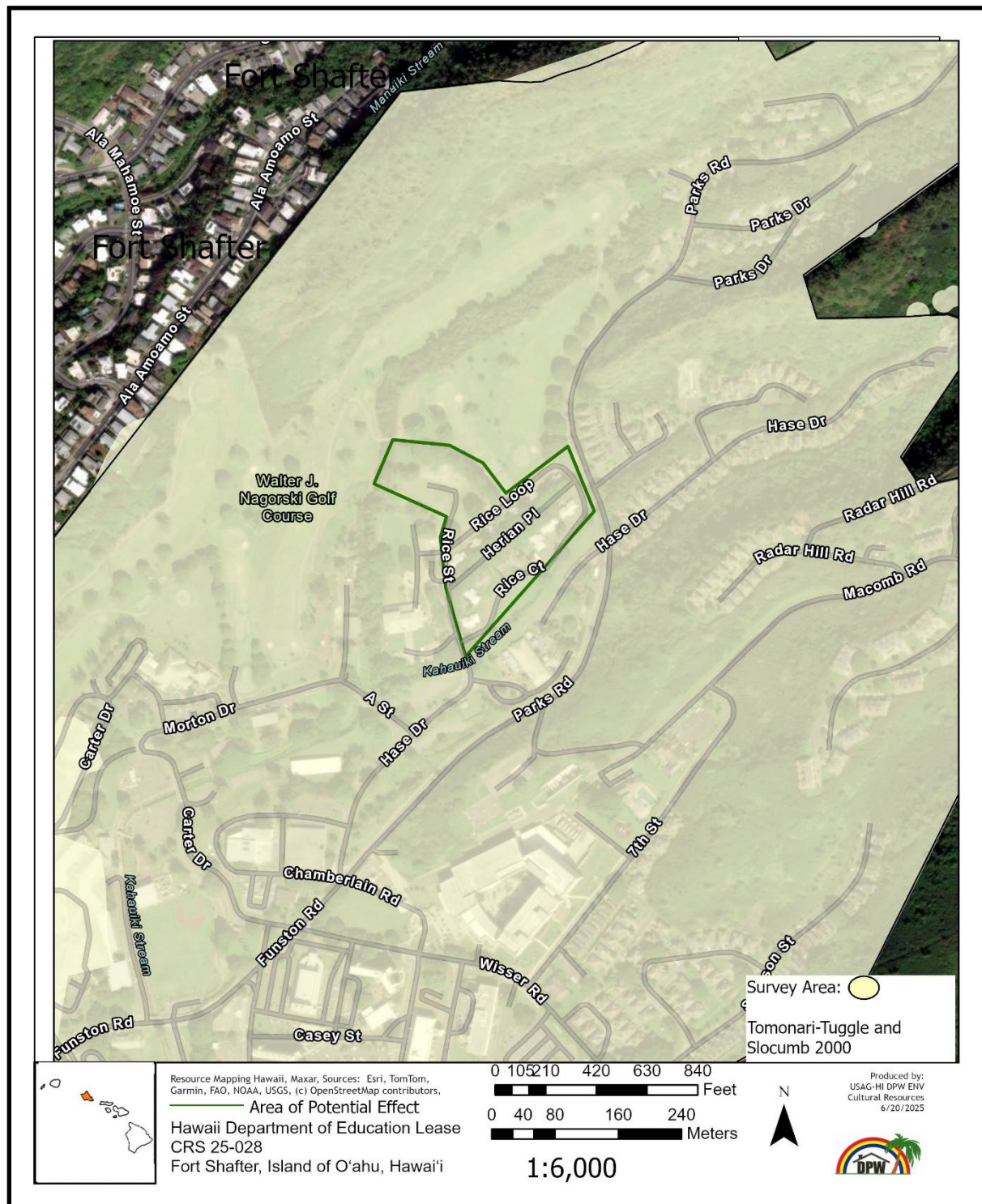


Figure 5. Previous historic property surveys

ENCLOSURE 2

SUBJECT: National Historic Preservation Act (NHPA) Section 106 Consultation for a Proposed Lease to the State of Hawaii Department of Education (HIDOE) for Construction and Operation of a New Elementary School at Fort Shafter, Kahauiki Ahupua'a, Kona District, O'ahu, Hawai'i, TMK (1)1-1-008:005, Army Project #CRS-25-028.

Distribution List

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Mr. Joseph K. Simpliciano Jr. Kingdom Pathways	Ms. Healani Sonoda-Pale Pu'uhonua o Wailupe
Ms. Kēhaulani Souza	Ms. Mililani B. Trask Na Koa Ikaika Ka Lahui Hawaii

ENCLOSURE 2

SUBJECT: National Historic Preservation Act (NHPA) Section 106 Consultation for a Proposed Lease to the State of Hawaii Department of Education (HIDOE) for Construction and Operation of a New Elementary School at Fort Shafter, Kahauiki Ahupua'a, Kona District, O'ahu, Hawai'i, TMK (1)1-1-008:005, Army Project #CRS-25-028.

Mr. Harry Wasson Hui Malama 'Aina 'O La'ie Mahi'ai, Ki'ai	Mr. William Young House of Nobles
---	--------------------------------------

JOSH GREEN, M.D.
GOVERNOR | KE KIA'ĀINA

SYLVIA LUKE
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**STATE OF HAWAII | KA MOKU'ĀINA 'O HAWAII'
DEPARTMENT OF LAND AND NATURAL RESOURCES
KA 'OIHANA KUMUWAIWAI 'ĀINA**

**STATE HISTORIC PRESERVATION DIVISION
KAKUHIHEWA BUILDING
601 KAMOKILA BLVD, STE 555
KAPOLEI, HAWAII 96707**

October 21, 2025

Colonel Rachel D. Sullivan
Commanding
United States Army Installation Management Command
Department of the Army
Headquarters, United States Army Garrison Hawaii
745 Wright Avenue, Building 107, Wheeler Army Airfield
Email Reply to: usarmy.hawaii.crmf@army.mil
Electronic Transmittal Only, No Hard Copy to Follow

IN REPLY REFER TO:
Project No.: 2025PR00860
Doc No.: 2510SH04
Archaeology
Architecture

Dear Colonel Sullivan:

**SUBJECT: National Historic Preservation Act (NHPA) Section 106 Review –
Continued Consultation and Request for Concurrence with the Effect Determination
Fort Shafter Lease to the State of Hawai'i Department of Education and Construction and
Operation of a New Elementary School
Army Project #CRS-25-028
Kahauiki Ahupua'a, Kona District, Island of O'ahu
TMK: (1) 1-1-008:005**

The State Historic Preservation Division (SHPD) received a letter dated September 19, 2025 from the United States Army Garrison (USAG) Hawaii to continue the Section 106 historic preservation process and to request the State Historic Preservation Officer's (SHPO's) concurrence with the effect determination for the construction and operation of a new elementary school at Fort Shafter on the island of O'ahu. The SHPD received this submittal on September 26, 2025 (HICRIS Submission No. 2025PR00860.003).

According to the letter received, the State of Hawaii Department of Education (HIDOE) is proposing to lease federal land at Fort Shafter Military Reservation to construct and operate a new elementary school. The proposed lease will be a federal real estate action and the school construction will be partially funded by a grant from the Department of Defense Office of Local Defense Community Cooperation (OLDCC). The proposed project is a federal undertaking as defined in 36 CFR 800.16(y) and is subject to compliance with Section 106 of the NHPA. The project is also subject to compliance with Hawaii Revised Statutes Section 6E.

The *area of potential effects* (APE) for the undertaking is 8.3 acres and is based on the footprint of the proposed lease. The APE is situated between the Child Development Center, the School Age Center, a family housing area, and the Fort Shafter Nagorski golf course. A portion of the proposed lease overlaps the former Rice Manor inter-war era neighborhood. The HIDOE proposal for the new school complex consists of one-, two-, and three-story buildings, outdoor play areas, a garden, and parking lots. The construction will include four total buildings and a covered play court, ranging in height from eighteen to thirty-eight feet. The action also includes related access roads, utilities, and other infrastructure.

The USAG states USAG Hawaii Cultural Resources specialists reviewed existing information and found there are no known historic properties within the APE or in the immediate surrounding area. The APE is more than a quarter mile away from the historic districts at Fort Shafter; the APE is not visible from the Palm Circle National Historic

Landmark or the Hawaii Ordnance Depot Historic District. The USAG states the area has a low probability of intact buried archaeological historic properties and that such areas have undergone extensive ground disturbance associated with the housing tract development.

The USAG Hawaii has determined the proposed undertaking will result in *no historic properties affected*. **The SHPO concurs.** The SHPO's concurrence is based on the APE defined and the written scope of work received from the USAG-HI. Any deviations from the scope of work or the APE requires the Section 106 consultation process is re-opened prior to the project moving forward, to consider the potential for effects to historic properties resulting in project scope or APE revisions.

Should any potential historic properties be encountered please immediately halt work in the vicinity of the find and follow the stipulations set forth in 36 CFR 800.13.

Please submit all forthcoming information and correspondence related to the subject project, including the HIDEOE's initiation of the Chapter 6E review process, to SHPD via HICRIS Project No. 2025PR00860 using the Project Supplement option. If additional individuals need to be added as contributors to this HICRIS Project No., please contact SHPD to have them designated as project contacts. This will grant them the ability to submit documents associated with the project.

The USAG and the HIDEOE are the offices of record for this undertaking. Please maintain a copy of this letter with your environmental review record for this undertaking.

Please contact Brianna Schmidt at Brianna.Schmidt@hawaii.gov, for matters regarding architectural resources. Please contact Stephanie Hacker, Historic Preservation Archaeologist IV, at Stephanie.Hacker@hawaii.gov or at (808) 692-8046, for matters regarding archaeological resources or this letter.

Aloha,



Dawn N. S. Chang, Esq.
DLNR Chairperson
State Historic Preservation Officer

cc: Jesse Otto, USAG Hawaii (Jesse.J.Otto.civ@army.mil)
David Crowley, USAG Hawaii (David.M.Crowley22.civ@army.mil)
Jadine Urasaki, HIDEOE (doeprojectmanagement@k12.hi.us)