



Contents

3.2	Agriculture and Farming	3.2-1
3.2.1	REGULATORY CONTEXT	3.2-1
3.2.1	METHODOLOGY	3.2-1
3.2.2	AFFECTED ENVIRONMENT	3.2-1
3.2.3	ENVIRONMENTAL CONSEQUENCES	3.2-2
3.2.4	CONSTRUCTION EFFECTS	3.2-6
3.2.5	INDIRECT EFFECTS	3.2-6
3.2.6	MITIGATION	3.2-6
3.2.7	BUILD ALTERNATIVES COMPARATIVE ASSESSMENT	3.2-7

TABLES

TABLE 3.2-1.	No Build Alternative and Build Alternatives Comparison	3.2-7
--------------	--	-------

FIGURES

FIGURE 3.2-1.	Project Area Agricultural Lands of Importance to the State of Hawaiʻi Classifications: Olowalu	3.2-4
FIGURE 3.2-2.	Project Area Agricultural Lands of Importance to the State of Hawaiʻi Classifications: Ukumehame	3.2-5



3.2 AGRICULTURE AND FARMING

This section evaluates the potential effects of the Honoapi'ilani Highway Improvements Project (the Project) on agriculture and farmland resources in the project area.

3.2.1 Regulatory Context

The State of Hawai'i and the U.S. Department of Agriculture (USDA) have designated protected farmlands to curtail the unnecessary and irreversible conversion of productive farmland to nonagricultural uses. Federal agencies must comply with the Farmland Protection Policy Act (FPPA) (7 United States Code 4201 et seq.), which intends to “minimize the impact Federal programs have on the unnecessary and irreversible conversion of farmland to nonagricultural uses.”

The FPPA covers any federal activity that may irreversibly (directly or indirectly) convert farmland to a nonagricultural use. Transportation infrastructure is considered nonagricultural. The State of Hawai'i developed and compiled the Agricultural Lands of Importance to the State of Hawai'i (ALISH) Classification System in coordination with the federal FPPA.

3.2.1 Methodology

In addition to reviewing the Project's ALISH Classification System and identifying active agriculture in the project area, the evaluation of the broader potential effects on agricultural resources in Maui and Hawai'i overall is based on completing the Farmland Conversion Impact Rating For Corridor Type Projects (Form NRCS-CPA-106). The USDA's Natural Resource Conservation Service (NRCS) reviews this analysis, which scores and ranks affected farmlands by attributes, including geographic context such as existing farming concentration, sizes of existing facilities, and availability of farm support services.

3.2.2 Affected Environment

The ALISH Classification System identifies three categories of agricultural land that are equivalent to the FPPA/NRCS categories (the federal classification is shown in parentheses):

- Prime Agricultural Lands (Prime Farmlands)
- Unique Agricultural Lands (Unique Farmlands)
- Other Important Lands (Additional Farmland of Statewide and Local Importance)

As set forth in 7 Code of Federal Regulations (CFR) Section 658.2(a), FPPA-protected farmland does not include land that is within or committed to urban development or water storage, which includes lands identified as “urbanized area” on U.S. Census Bureau maps. Lands not considered for ALISH classification also include forest reserves, public parks and historic sites, lands with slopes that are more than 35 degrees, and military installations (with exceptions).



The ALISH/FPPA classifications of Prime Agricultural Lands and Other Important Lands comprise much of the project area (FIGURE 3.2-1 and FIGURE 3.2-2 for Olowalu and Ukumehame, respectively). Prime Agricultural Lands in the area generally form smaller bands at the north end of Olowalu, along the coastline and to the south in Olowalu toward Ukumehame, and then south of Ukumehame Stream. The areas encompassing Ukumehame Firing Range are not designated Prime Agricultural Lands. Overall, Maui has about 120,500 acres in active commercial agriculture. The industry is located more in central Maui and into the uplands area of eastern Maui.¹

In Olowalu, there are active agricultural uses in the northern portion of the project area, most notably the Living Earth Systems farm. The farm focuses on sustainable and local food production and provides educational outreach on about 17 acres of actively farmed land. There are also smaller cultural-agricultural activities on the Olowalu Cultural Reserve mauka of the project area.

In Ukumehame, two small commercial sod farms are on properties off Ekehene Street. Ukumehame Sod is on a roughly 15-acre farm while Maui Sod is on a roughly 8-acre parcel. Smaller cultural-agricultural practices also occur on properties located mauka of the project area, along with one area closer to the existing highway next to Ukumehame Stream.

3.2.3 Environmental Consequences

3.2.3.1 No Build Alternative

The No Build Alternative would maintain the highway in its existing configuration with ongoing maintenance and repairs. No changes are anticipated to the farmland classifications in the project area. With no change in the alignment of the existing highway, there would be no effect on existing policies and no impacts to existing agricultural activities.

3.2.3.2 Build Alternatives

Olowalu

FIGURE 3.2-1 shows the location of agricultural uses, agricultural lands of importance to the State of Hawaiʻi, and the Build Alternatives. All Build Alternatives would affect the agricultural uses in the northern portion of Olowalu and could require acquisition of a portion of the active agricultural use areas including the Living Earth Systems farm and an area of smaller agricultural tenants. Acquisition of these lands could require relocation of these agricultural uses in conformance with the Uniform Relocation Act (Section 3.4, Land Acquisition, Displacement, and Relocation), which would mitigate potential adverse effects associated with the acquisition.

While all Build Alternatives have an impact on these resources, there is variation by alternative:

- Build Alternative 1 is the most makai and in the area of these agricultural uses, running parallel to and just makai of the existing highway. This alternative would eliminate and displace a portion of the cane haul road as well as the makai agricultural uses comprised of smaller tenant parcels.

¹ <https://hdoa.hawaii.gov/blog/main/agbaselineupdate/>.



While a new access point would need to be provided, Build Alternative 1 would not displace the Living Earth Systems farm.

- Build Alternative 2 crosses these agricultural use parcels just mauka of Build Alternative 1. The alternative would not be expected to displace the makai agricultural uses and would not displace the Living Earth Systems farm. Access for the makai farm tenants would be along the existing cane haul road, but a new access point to the Living Earth Systems farm would be required.
- Build Alternatives 3 and 4 would cross this parcel farther mauka and would bisect and displace a portion of the Living Earth Systems farm.

Ukumehame

FIGURE 3.2-2 shows the location of the two sod farms in Ukumehame. Build Alternative 4 would require acquisition of all or a portion of these two agricultural uses. The other Build Alternatives would not affect these agricultural uses.

In addition, agricultural uses are present mauka of the project along the Ukumehame Stream and on the kuleana parcel located mauka of the existing highway. The Build Alternatives would not displace these uses.



FIGURE 3.2-1. Project Area Agricultural Lands of Importance to the State of Hawaiʻi Classifications: Olowalu

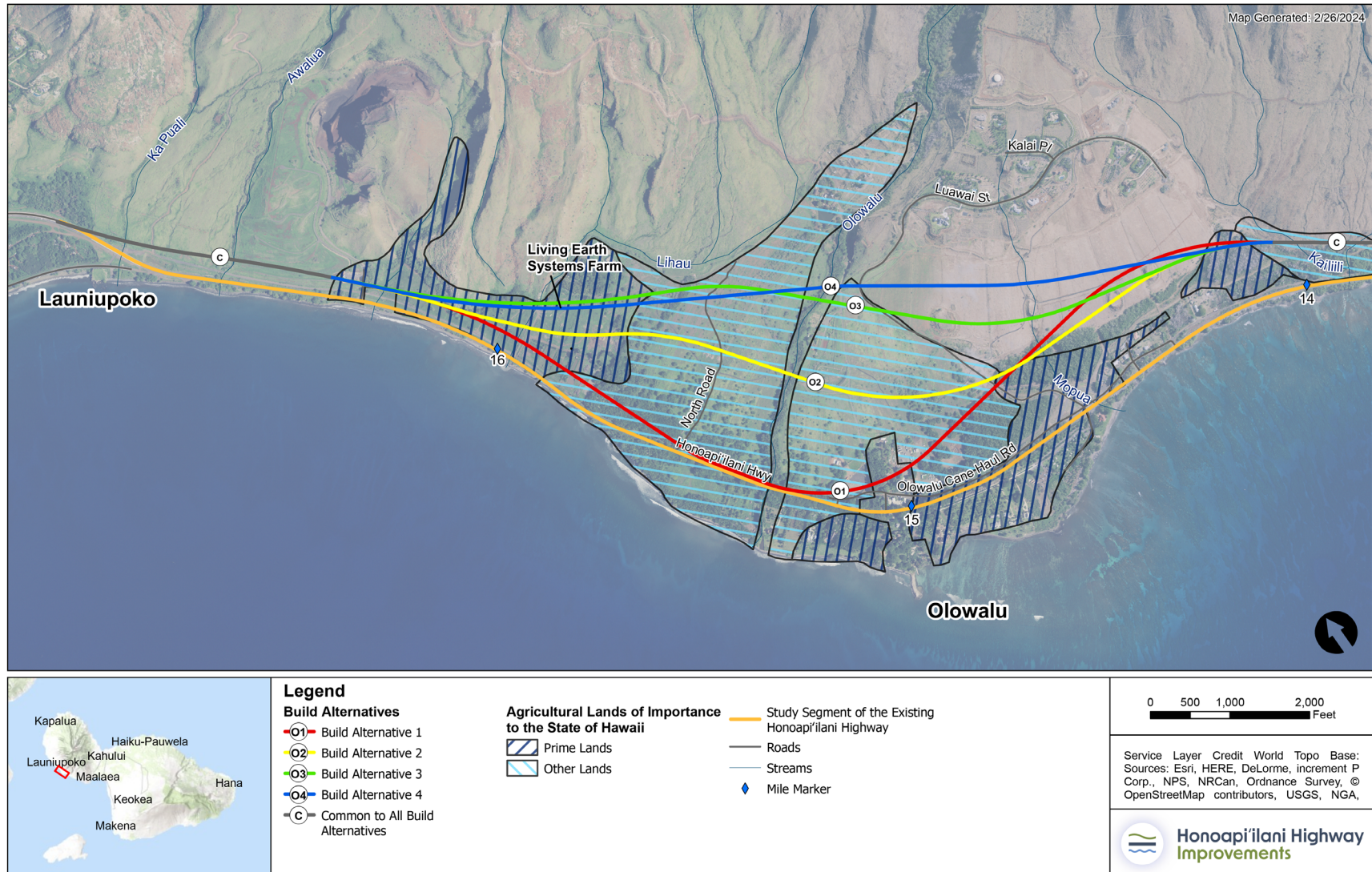
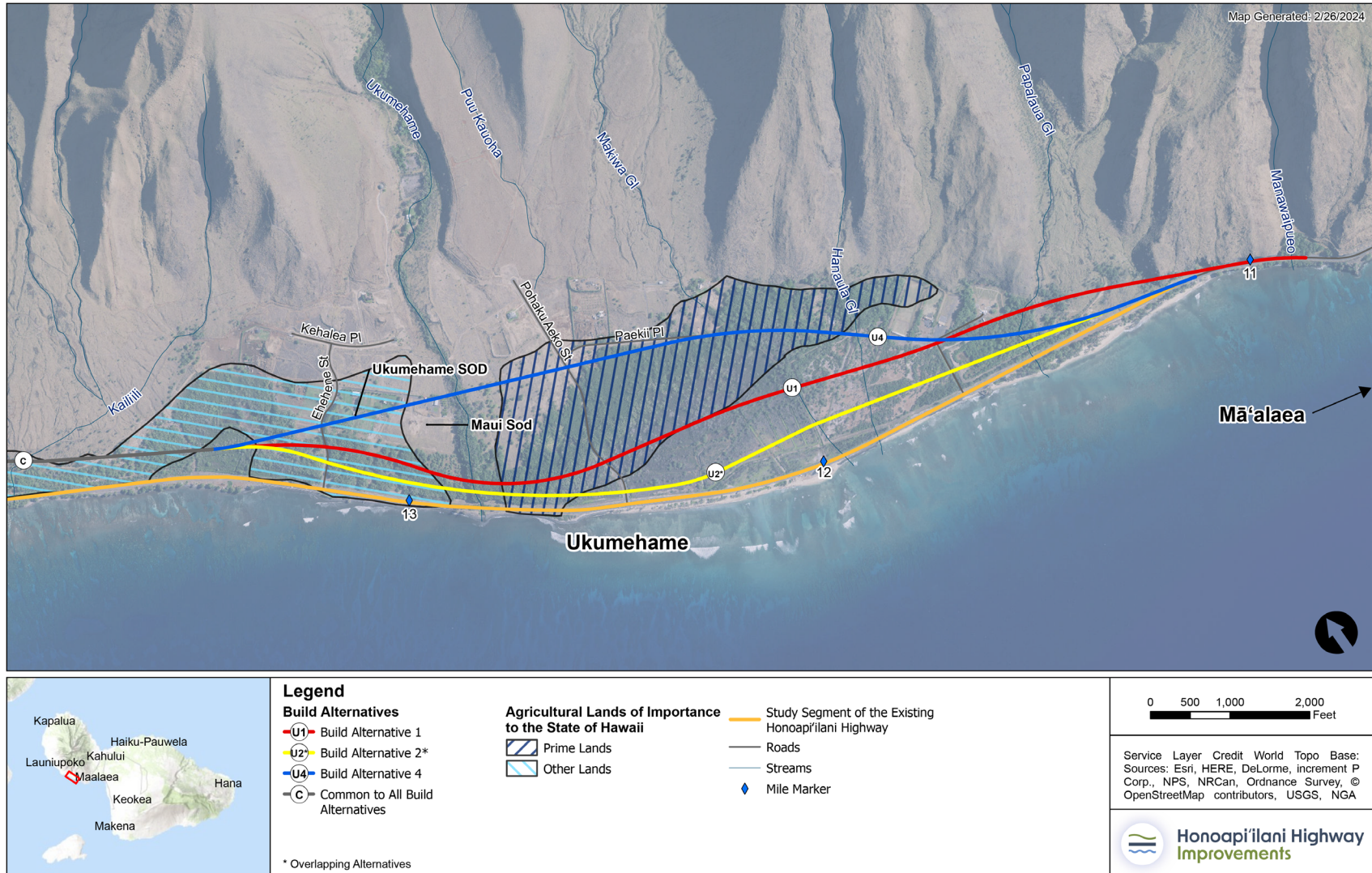




FIGURE 3.2-2. Project Area Agricultural Lands of Importance to the State of Hawaiʻi Classifications: Ukumehame





Combined Project Area

The Federal Highway Administration and the Hawai'i Department of Transportation (HDOT) prepared and submitted a completed Farmland Conversion Impact Rating For Corridor Type Projects (NRCS-CPA-106) to the U.S. Department of Agriculture's Natural Resource Conservation Service. The assessment provides a scoring system with a maximum of 260 points, and a resource area with a score over 160 is considered a threshold significance for adverse effect (?). The Build Alternatives scored 116 or less which is below the threshold of an adverse effect. This indicates that while the area has mapped agricultural land classifications, the area is not part of a critical agricultural cluster or supporting regional agriculture. Therefore, no further analysis pursuant to the FPPA (7 CFR Part 658) is required for the Project.

3.2.4 Construction Effects

HDOT anticipates that project construction would take approximately four years and the Project could potentially be complete and operational by 2030. Certain parcels in the project area may need to be acquired for construction staging; however, until the design of the Preferred Alternative is further along all the parcels needed cannot be fully determined. Although construction activities associated with the Project are not fully known at this stage, they would not be anticipated to result in adverse effects to agriculture and farming.

3.2.5 Indirect Effects

Beyond the proposed conversion of existing land uses to highway use (mostly vacant undeveloped land along with specific areas of agricultural uses and commercial uses that vary with the Build Alternatives), the Project results in no land use changes or new development. It is unlikely that the Project would induce growth resulting in changes to land use, population density, or population growth. There would be no anticipated indirect effect on agricultural uses given the limited amount and small, isolated characteristics of agricultural uses that are present in the project area. Overall, because the Project would not result in land use changes or induce growth that would result in land use changes, agricultural lands within the surrounding area would not be indirectly affected by the Project.

3.2.6 Mitigation

In the small area of active agriculture in the northern end of Olowalu, all the Build Alternatives would result in some level of displacement or compromised access to active agricultural uses, including the makai small tenant farms (under Build Alternative 1) and the Living Earth Systems farm (Build Alternatives 3 and 4). Build Alternative 2 would have the smallest area of displacement but would require continued access to the agricultural uses. These changes would require at least a partial acquisition of property and potential mitigations could include the following:

- Retaining access to the usable agricultural portions of the land
- Expanding the farm to adjacent commonly owned parcels (or parcels acquired by HDOT as part of the Project)



- If necessary, relocating the agricultural use pursuant to the Uniform Relocation Act, as applicable, and other provisions (Section 3.4, Land Acquisition, Displacement, and Relocation)

In Ukumehame, Build Alternative 4 would require acquisition of areas containing active agricultural use (Maui/Ukumehame Sod Farm). Mitigation could retain the usable agricultural portions of the land and expand the use to adjacent commonly owned parcels (or parcels acquired by HDOT as part of the Project). If the agricultural uses can no longer operate at these locations, the displacement would be subject to the Uniform Relocation Act and other provisions (Section 3.4).

3.2.7 Build Alternatives Comparative Assessment

TABLE 3.2-1 summarizes key evaluation factors in comparing the No Build Alternative and the Build Alternatives.

TABLE 3.2-1. **No Build Alternative and Build Alternatives Comparison**

ALTERNATIVE	POTENTIAL DISPLACEMENT	CONSISTENCY WITH THE FARMLAND PROTECTION POLICY ACT
LOWALU		
No Build Alternative	0	Yes
Build Alternative 1	2*	Yes
Build Alternative 2	2	Yes
Build Alternative 3	1	Yes
Build Alternative 4	1	Yes
UKUMEHAME		
No Build Alternative	0	Yes
Build Alternative 1	0	Yes
Build Alternative 2	0	Yes
Build Alternative 3	0	Yes
Build Alternative 4	2	Yes

*(1) Living Earth Systems farm; (2) grouping of small tenant farmers