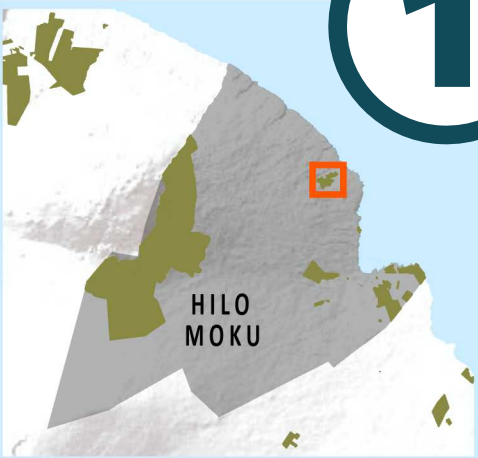


Site Assessment Highlights

- Existing Roadways
- County Water Main
- Annual Rainfall > 60 Inches
- Streams
 - Perennial
 - Non-Perennial
- Slope Range
 - < 10% (Preferred)
 - 10 - 20% (Feasible)
 - > 20% (Too steep for some land uses)

Notes

- The priority for these lands is homestead uses. Community Agriculture (pasture) could be included on non-homestead use designations in coordination with the homestead associations.
- Special District lands that are protecting cultural resources or mitigating natural hazards are also restricted from being designated for other land uses.
- The 14-ac Special District is reserved for a stormwater detention and not available for other land uses.
- Slope less than 10% is preferred for Residential, Pastoral (grazing), Community Use, Commercial, and Industrial.
- Slope less than 15% is preferred for Subsistence, Supplemental and Community Agriculture.
- Slope up to 20% is feasible for all land uses above. Pastoral (ag uses) can go up to 30%.
- Slope greater than the above is too steep.



Island Plan Update

Land Use Designations

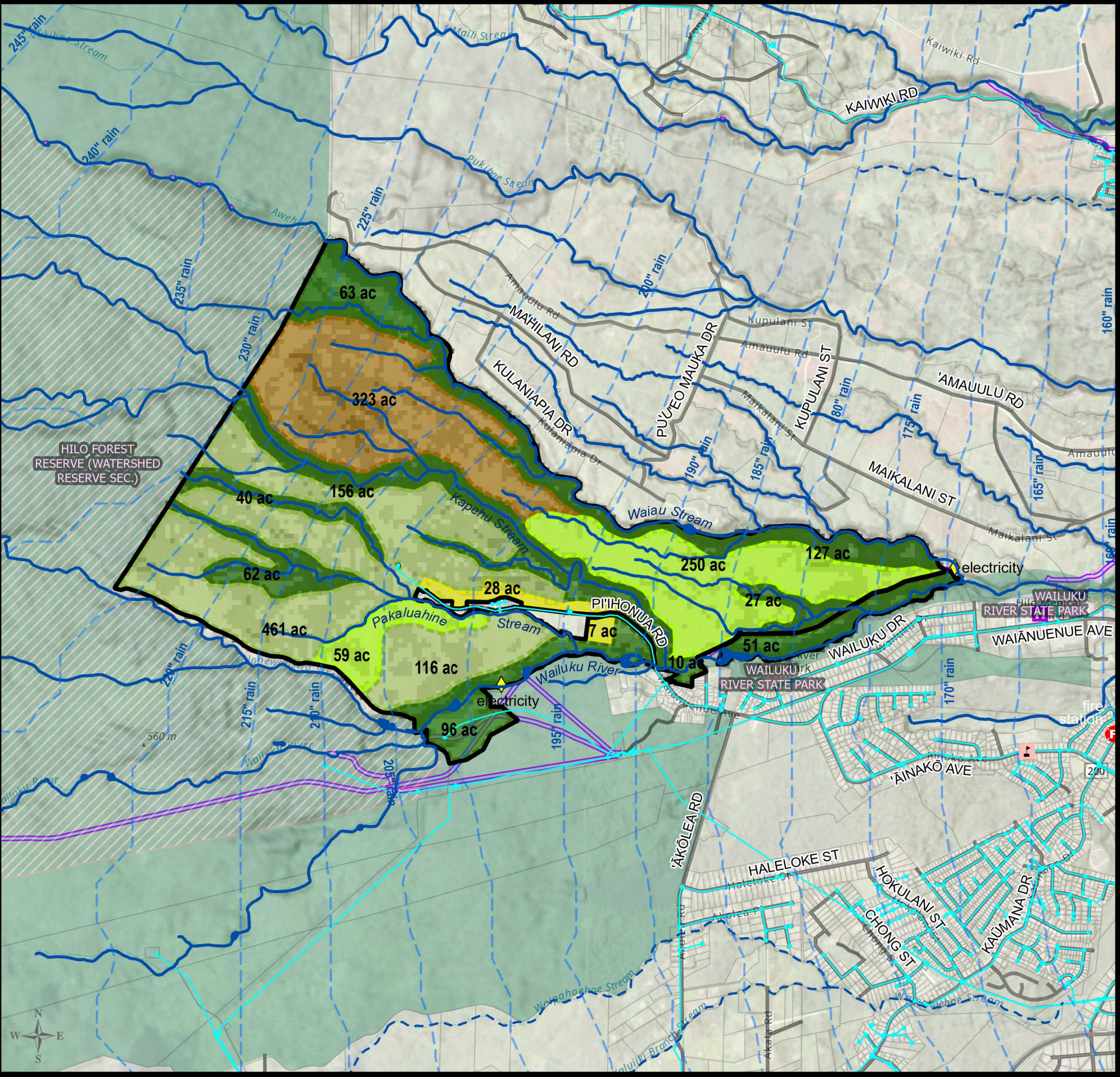
Homestead Uses

Residential	0.0
Subsistence Agriculture	424.8
Supplemental Agriculture	46.6
Pastoral	0.0
DHHL Kuleana	0.0

Non-Homestead Uses

Community Use	9.1
Community Agriculture	0.0
Commercial	2.5
Industrial	0.0
Renewable Energy	0.0
Stewardship	0.0
Conservation	243.6
Special District	46.8

Approximate Total Acres
± 773.4

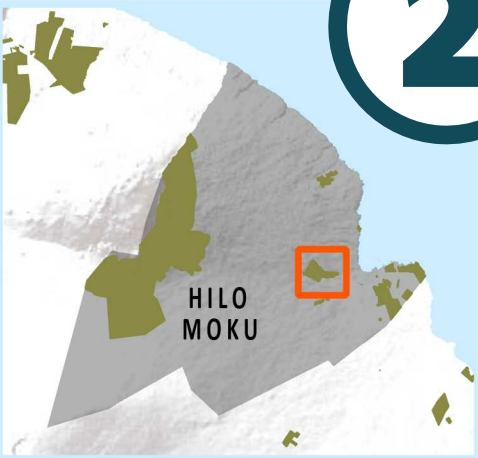


Site Assessment Highlights

- Existing Roadways
- County Water Main
- Ditches
- Annual Rainfall > 60 Inches
- State & County Conservation
- Reservoirs
- Streams
 - Perennial
 - Non-Perennial
- Slope Range
 - < 10% (Preferred)
 - 10 - 20% (Feasible)
 - > 20% (Too steep for some land uses)

Notes

- Many streams traverse the site in various directions, which presents a challenge in creating access points from the existing road.
- The Residential areas along Pi'ihonua Rd and the 59-ac Subsistence Ag land along Pakaluahine Stream were configured based on the latest aerial imagery, carved around dense tree areas.
- The priority for these lands is homestead uses. Community Agriculture (pasture) could be included on non-homestead use designations in coordination with the homestead associations.
- The location of 15-acre tropical forestry near Pakaluahine Stream needs to be determined.
- Within the Conservation areas, there are opportunities for revenue generation through forestry.
- Slope less than 10% is preferred for Residential, Pastoral (grazing), Community Use, Commercial, and Industrial.
- Slope less than 15% is preferred for Subsistence, Supplemental and Community Agriculture.



Island Plan Update

Land Use Designations

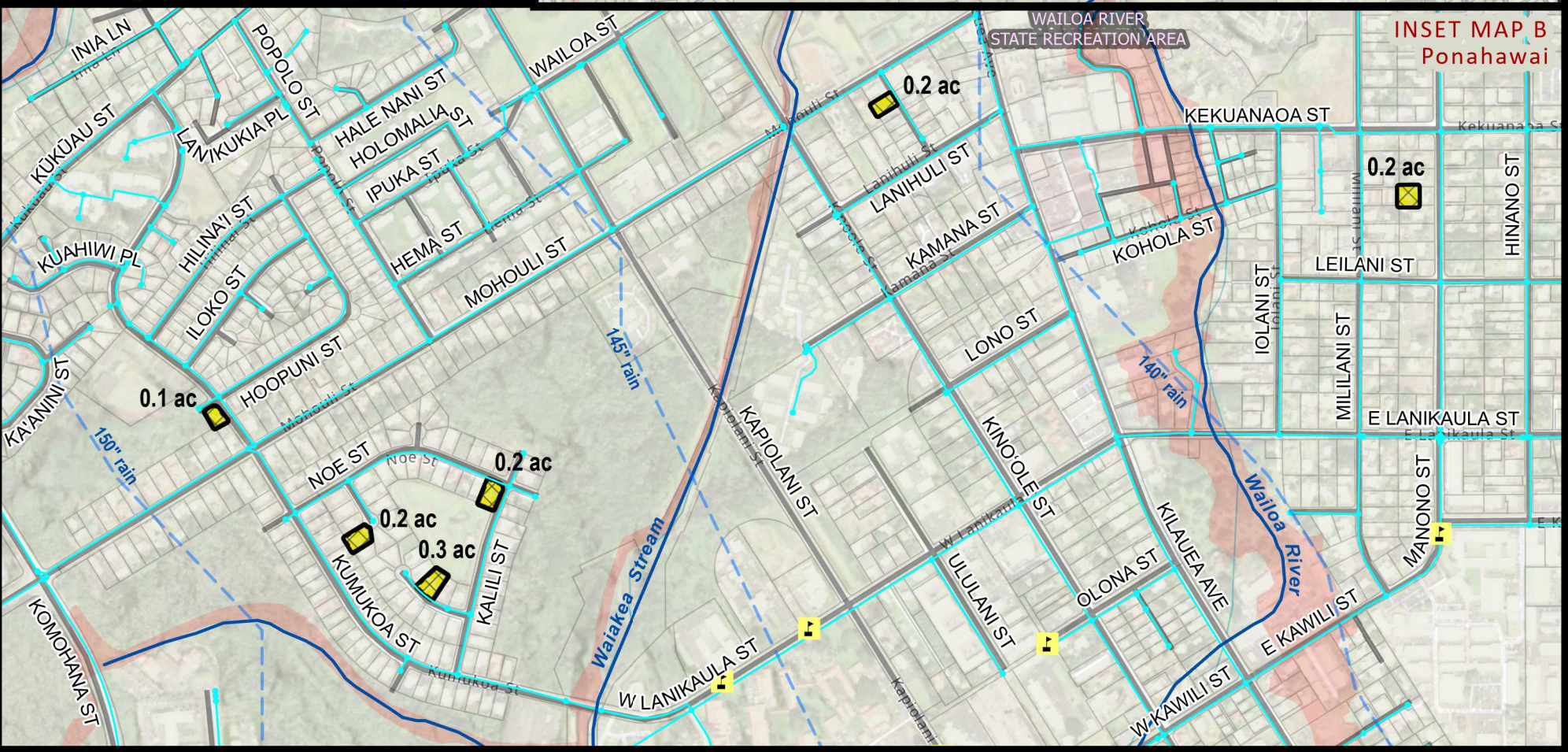
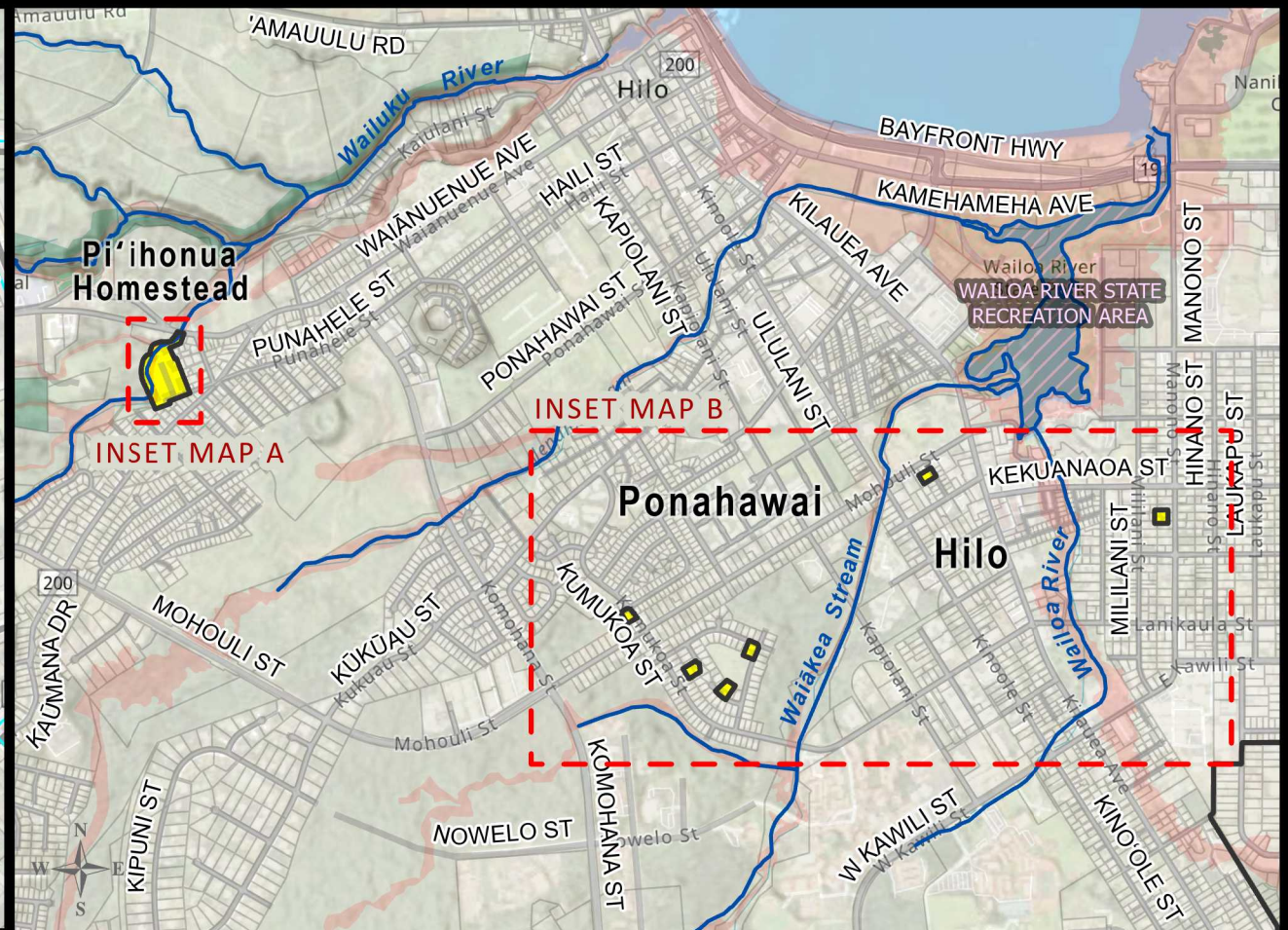
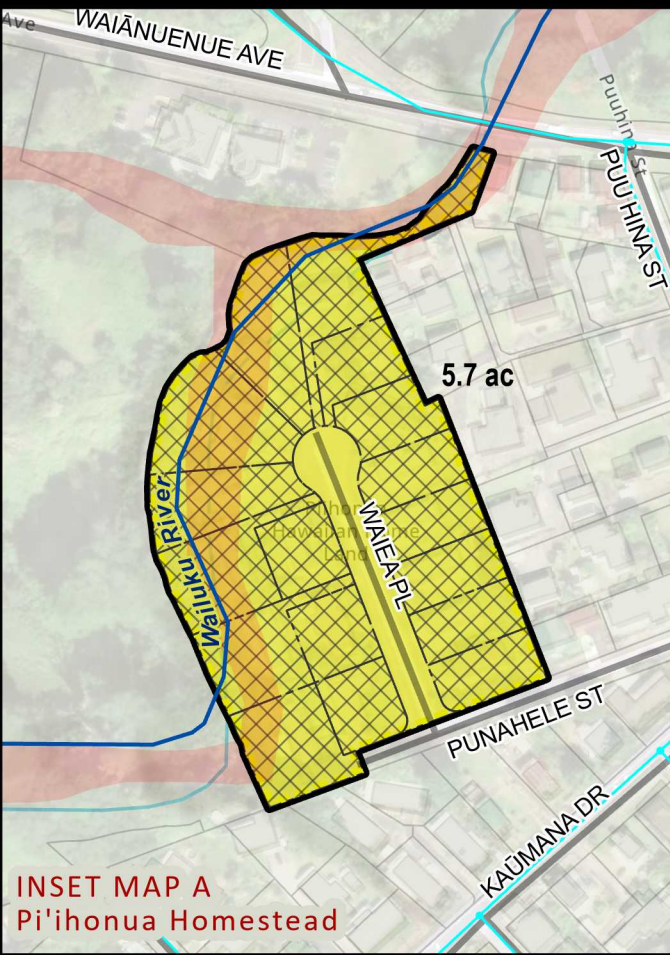
Homestead Uses

Residential	35.2
Subsistence Agriculture	308.7
Supplemental Agriculture	0.0
Pastoral	577.4
DHHL Kuleana	0.0

Non-Homestead Uses

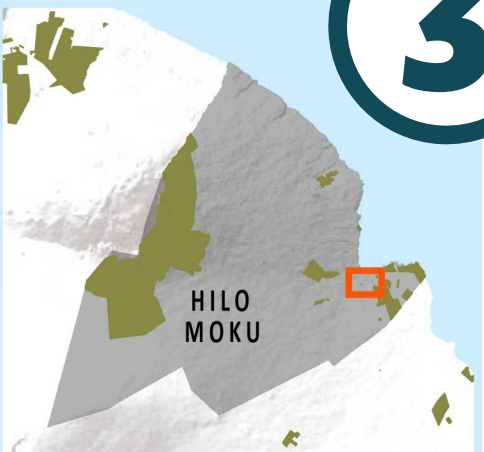
Community Use	0.0
Community Agriculture	0.0
Commercial	0.0
Industrial	0.0
Renewable Energy	0.0
Stewardship	323.0
Conservation	630.1
Special District	0.0

Approximate Total Acres
± 1,874.4



Site Assessment Highlights

- Long Term Leases
- Existing Roadways
- County Water Main
- Annual Rainfall > 60 Inches
- Flood Prone Areas
- Streams
 - Perennial
 - Non-Perennial



Island Plan Update

Land Use Designations

Homestead Uses		
Residential	7.0	
Subsistence Agriculture	0.0	
Supplemental Agriculture	0.0	
Pastoral	0.0	
DHHL Kuleana	0.0	

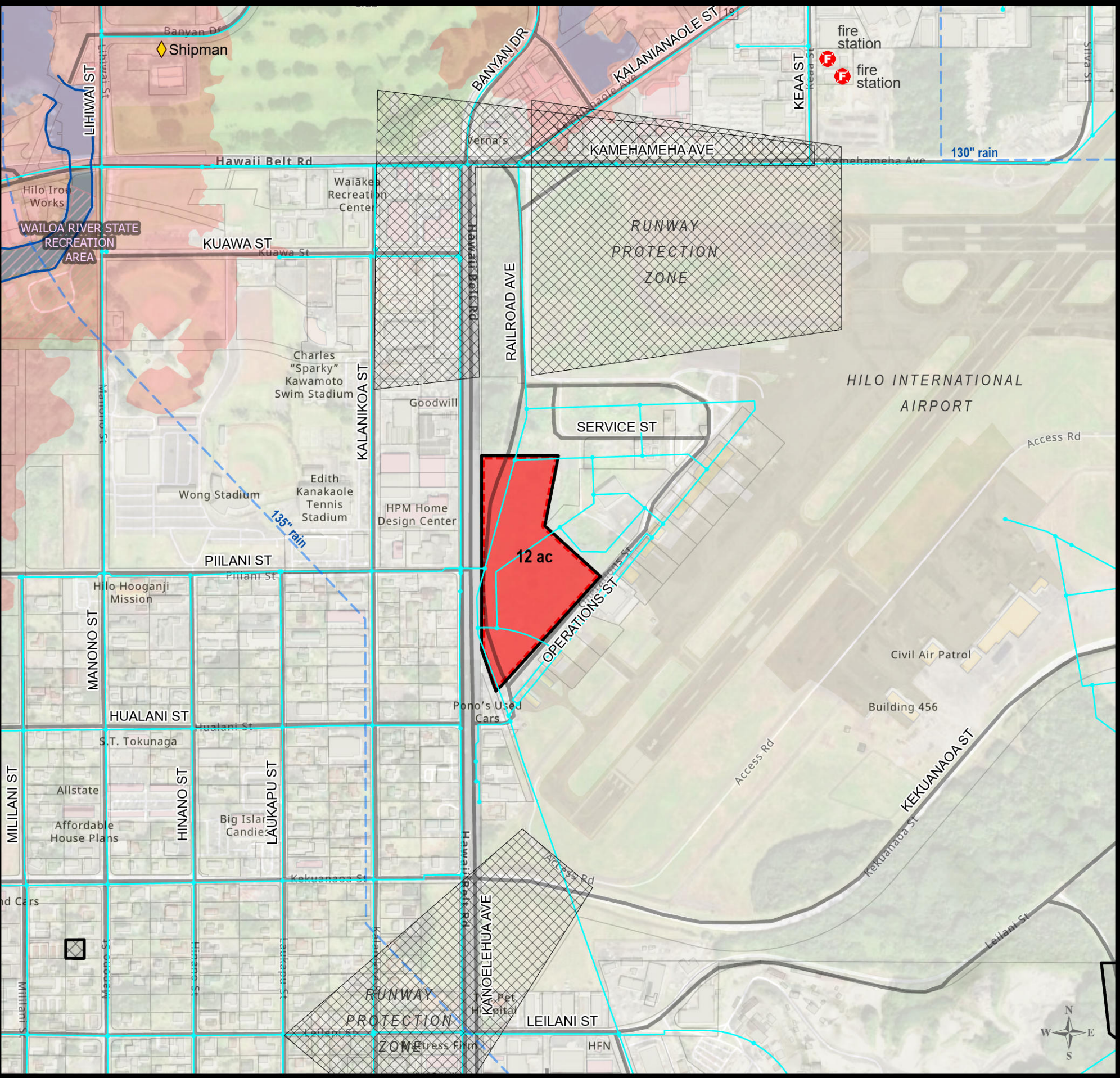
Non-Homestead Uses

Community Use	0.0
Community Agriculture	0.0
Commercial	0.0
Industrial	0.0
Renewable Energy	0.0
Stewardship	0.0
Conservation	0.0
Special District	0.0

Notes

- Portions of the existing residential lots near Wailuku River in Inset Map A are identified as prone to flooding when it rains. FEMA designates the land in Flood Zone AE. AE is a high-risk flood zone near floodplains and bodies of water, such as streams and lakes.
- Homeowners of properties in Flood Zone AE with mortgages from federally regulated lenders are required to purchase flood insurance.
- All sites are generally less than 10% of slope and suitable for Residential, Pastoral (grazing), Community Use, Commercial, and Industrial.

Approximate Total Acres
± 7.0



Site Assessment Highlights

- Long Term Leases/ Preferred Land Uses
- Existing Roadways
- County Water Main
- Annual Rainfall > 60 Inches
- Flood Prone Areas
- Streams
 - Perennial
 - Non-Perennial
- Slope Range
 - < 10% (Preferred)
 - 10 - 20% (Feasible)
 - > 20% (Too steep for some land uses)

Notes

- Slope less than 10% is preferred for Residential, Pastoral (grazing), Community Use, Commercial, and Industrial, which applies to this site.
- Slope less than 15% is preferred for Subsistence, Supplemental and Community Agriculture.
- Slope up to 20% is feasible for all land uses above. Pastoral (ag uses) can go up to 30%.
- Slope greater than the above is too steep.



Island Plan Update

Land Use Designations

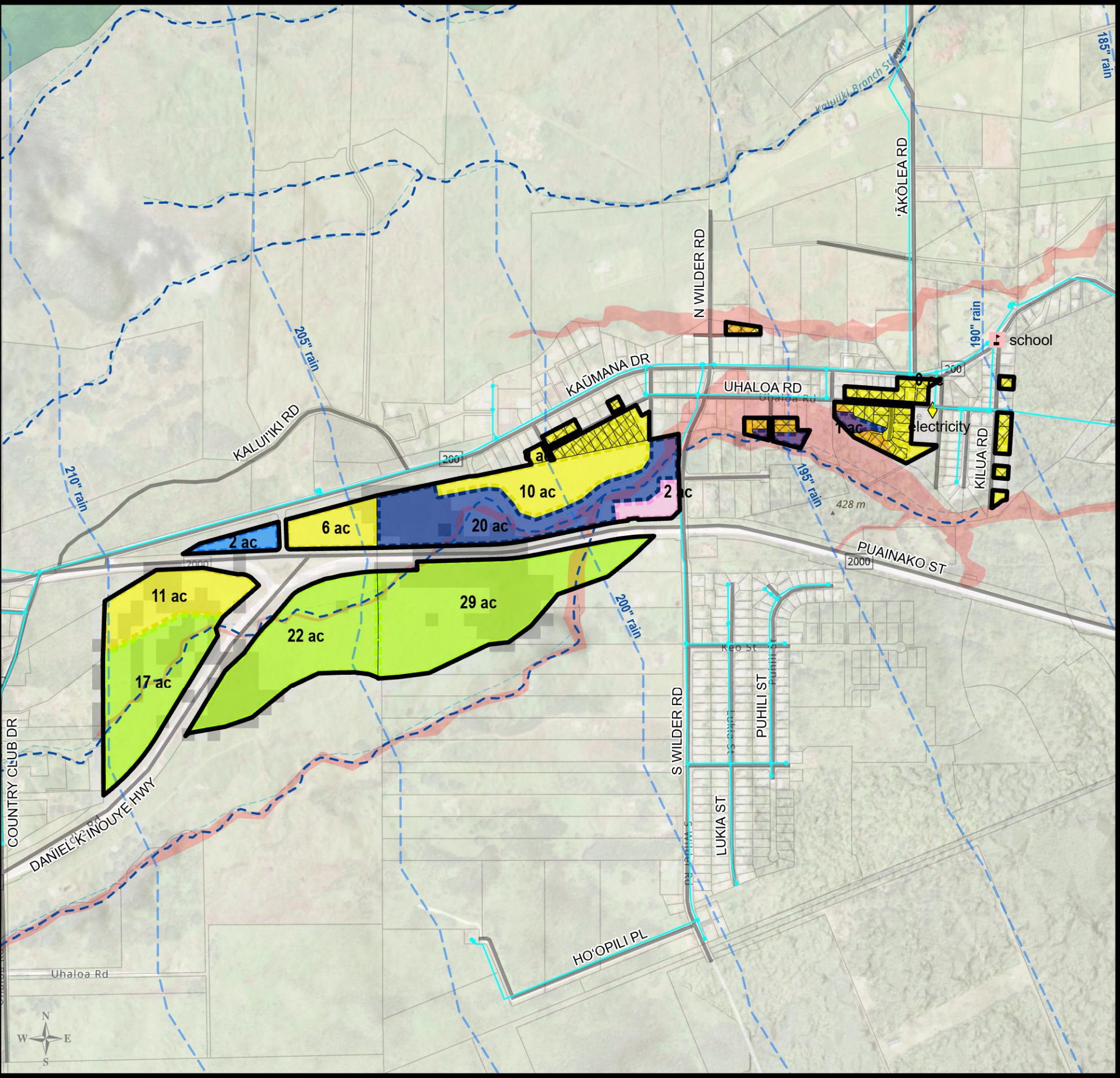
Homestead Uses

Residential	0.0
Subsistence Agriculture	0.0
Supplemental Agriculture	0.0
Pastoral	0.0
DHHL Kuleana	0.0

Non-Homestead Uses

Community Use	0.0
Community Agriculture	0.0
Commercial	11.7
Industrial	0.0
Renewable Energy	0.0
Stewardship	0.0
Conservation	0.0
Special District	0.0

Approximate Total Acres
± 11.7



Site Assessment Highlights

- Long Term Leases
- Existing Roadways
- County Water Main
- Annual Rainfall > 60 Inches
- Flood Prone Areas
- Streams
 - Perennial
 - Non-Perennial
- Slope Range
 - < 10% (Preferred)
 - 10 - 20% (Feasible)
 - > 20% (Too steep for some land uses)

Notes

- A lava tube runs beneath the site. The exact location is uncertain but said to be near Kaumana Caves Park. More research is required to determine whether it poses a hazard.
- The land along the stream is identified as prone to flooding. FEMA designates the land in Flood Zone AE. AE is a high-risk flood zone near floodplains and bodies of water, such as streams and lakes. Homeowners of properties in Flood Zone AE with mortgages from federally regulated lenders are required to purchase flood insurance.
- Slope less than 10% is preferred for Residential, Pastoral (grazing), Community Use, Commercial, and Industrial.
- Slope less than 15% is preferred for Subsistence, Supplemental and Community Agriculture.
- Slope up to 20% is feasible for all land uses above. Pastoral (ag uses) can go up to 30%.
- Slope greater than the above is too steep (but almost none at the site.)

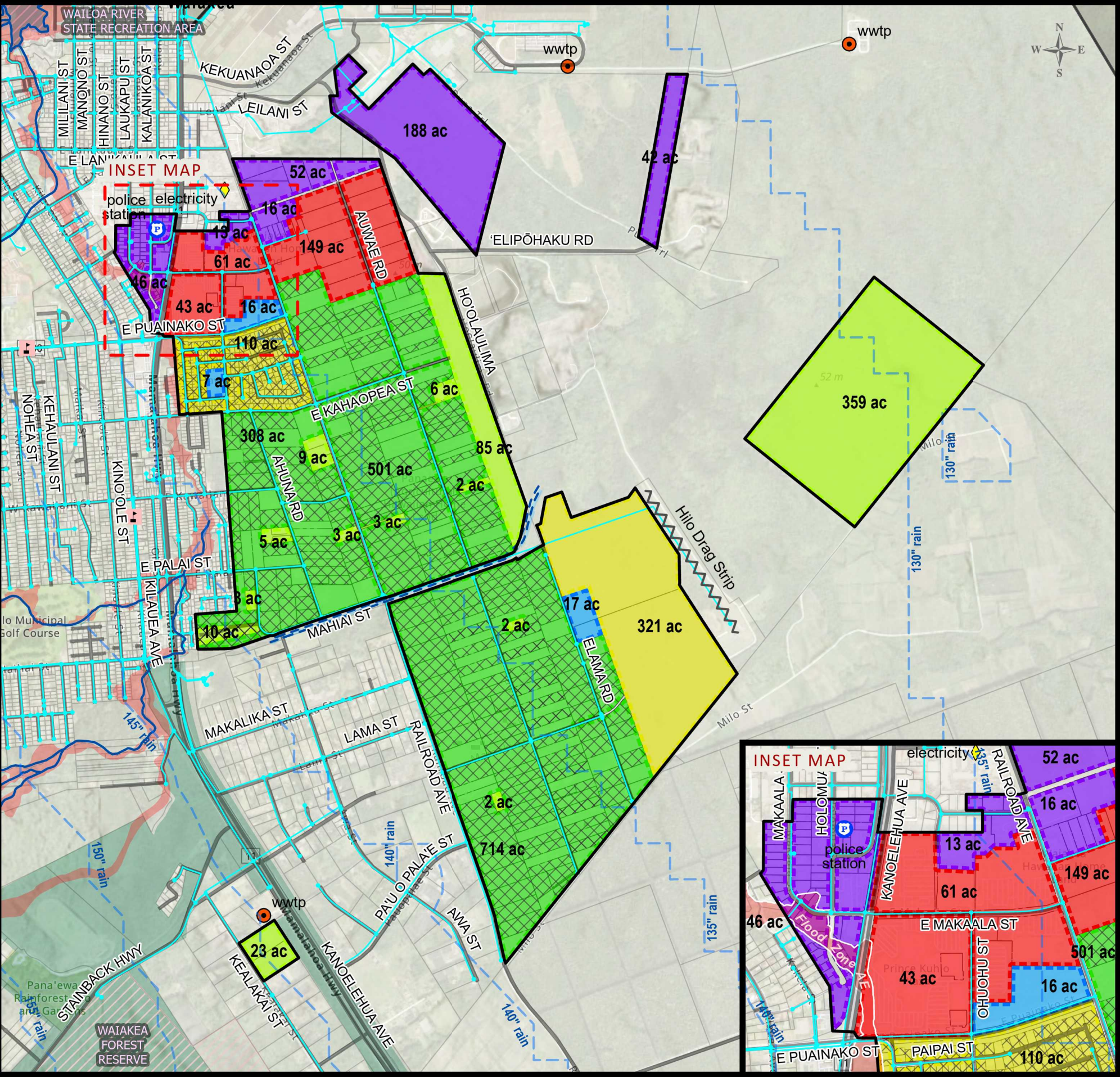


Island Plan Update

Land Use Designations

Homestead Uses		
Residential	41.2	
Subsistence Agriculture	68.3	
Supplemental Agriculture	0.0	
Pastoral	0.0	
DHHL Kuleana	0.0	
Non-Homestead Uses		
Community Use	2.4	
Community Agriculture	2.4	
Commercial	0.0	
Industrial	0.0	
Renewable Energy	0.0	
Stewardship	0.0	
Conservation	0.0	
Special District	21.8	

Approximate Total Acres
± 136.1

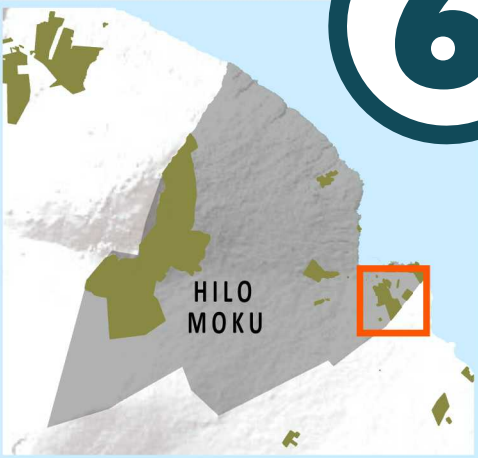


Site Assessment Highlights

- Long Term Leases
- Existing Roadways
- County Water Main
- Annual Rainfall > 60 Inches
- Noise
- Flood Prone Areas
- Streams
 - Perennial
 - Non-Perennial
- Slope Range
 - < 10% (Preferred)
 - 10 - 20% (Feasible)
 - > 20% (Too steep for some land uses)

Notes

- The master planning will include a noise assessment for the Hilo Drag Strip and determine the appropriate buffer distance and noise abatement.
- The priority for these lands is homestead uses. Community Agriculture (pasture) could be included on non-homestead use designations in coordination with the homestead associations.
- Portions of the existing industrial, commercial, and residential properties to the west, shown in Inset Map, are identified as prone to flooding. FEMA designates the land in Flood Zone AE. AE is a high-risk flood zone near floodplains and bodies of water, such as streams and lakes. Homeowners of properties in Flood Zone AE with mortgages from federally regulated lenders are required to purchase flood insurance.



Island Plan Update

Land Use Designations

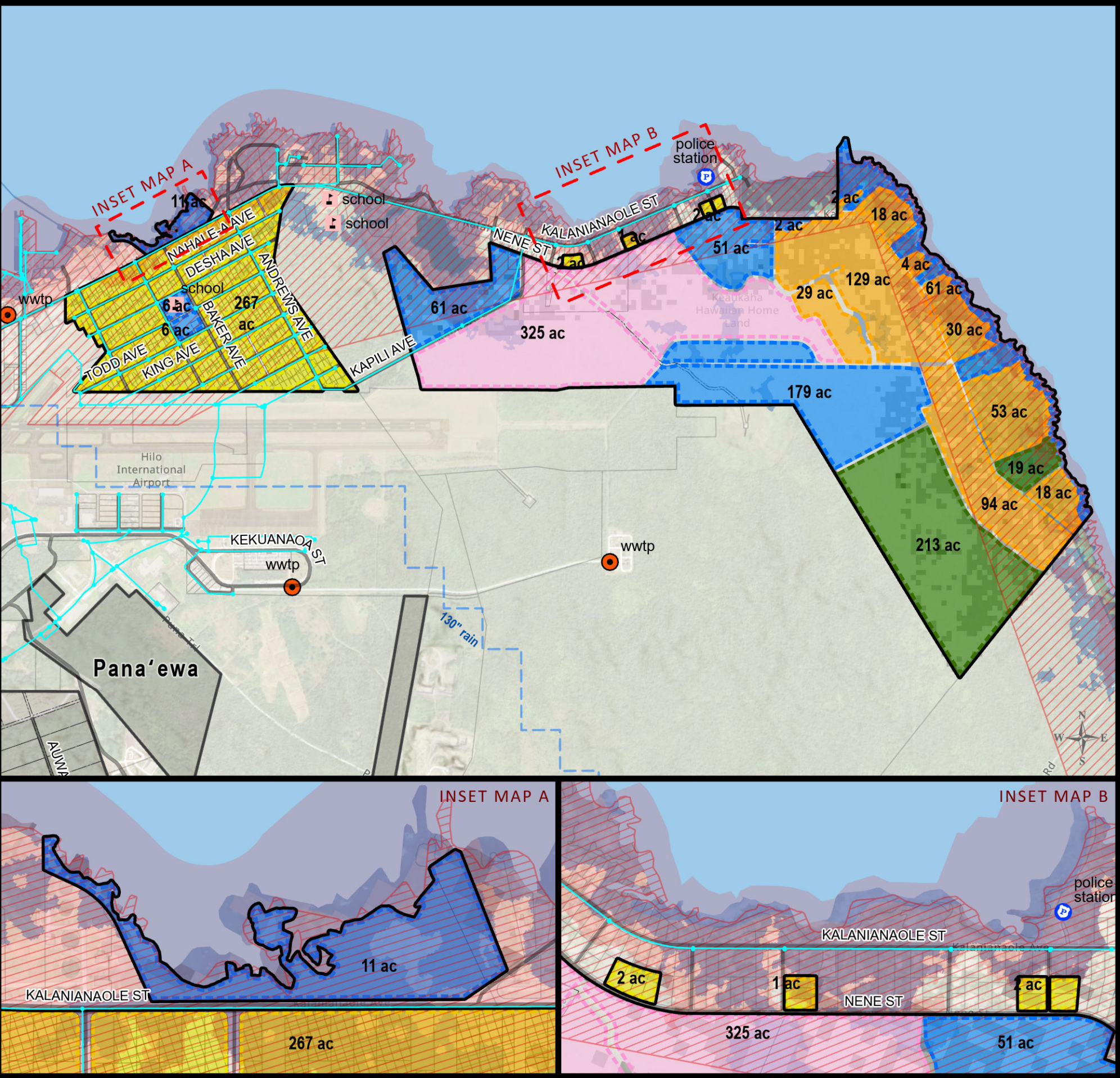
Homestead Uses

Residential	430.3
Subsistence Agriculture	513.4
Supplemental Agriculture	1,522.6
Pastoral	0.0
DHHL Kuleana	0.0

Non-Homestead Uses

Community Use	39.5
Community Agriculture	0.0
Commercial	253.4
Industrial	356.5
Renewable Energy	0.0
Stewardship	0.0
Conservation	0.0
Special District	0.0

Approximate Total Acres
± 3,115.7



Site Assessment Highlights

- Long Term Leases
- Existing Roadways
- County Water Main
- Annual Rainfall > 60 Inches
- Tsunami Evacuation Zone
- Flood Prone Areas
- Sea Level Rise Exposure Areas
- Streams
 - Perennial
 - Non-Perennial
- Slope Range
 - < 10% (Preferred)
 - 10 - 20% (Feasible)
 - > 20% (Too steep for some land uses)

Notes

- Portions of the site close to the coast line are identified as prone to flooding and sea level rise and located within Tsunami Evacuation Zone.
- There is a settlement plan for the Kuleana land. Community Agriculture (pasture) could be included on non-homestead use designations in coordination with the homestead associations.
- The 11-ac land in Inset Map A is Community Use.
- Slope less than 10% is preferred for Residential, Pastoral (grazing), Community Use, Commercial, and Industrial.
- Slope less than 15% is preferred for Subsistence, Supplemental and Community Agriculture.
- Slope up to 20% is feasible for all land uses above. Pastoral (ag uses) can go up to 30%.

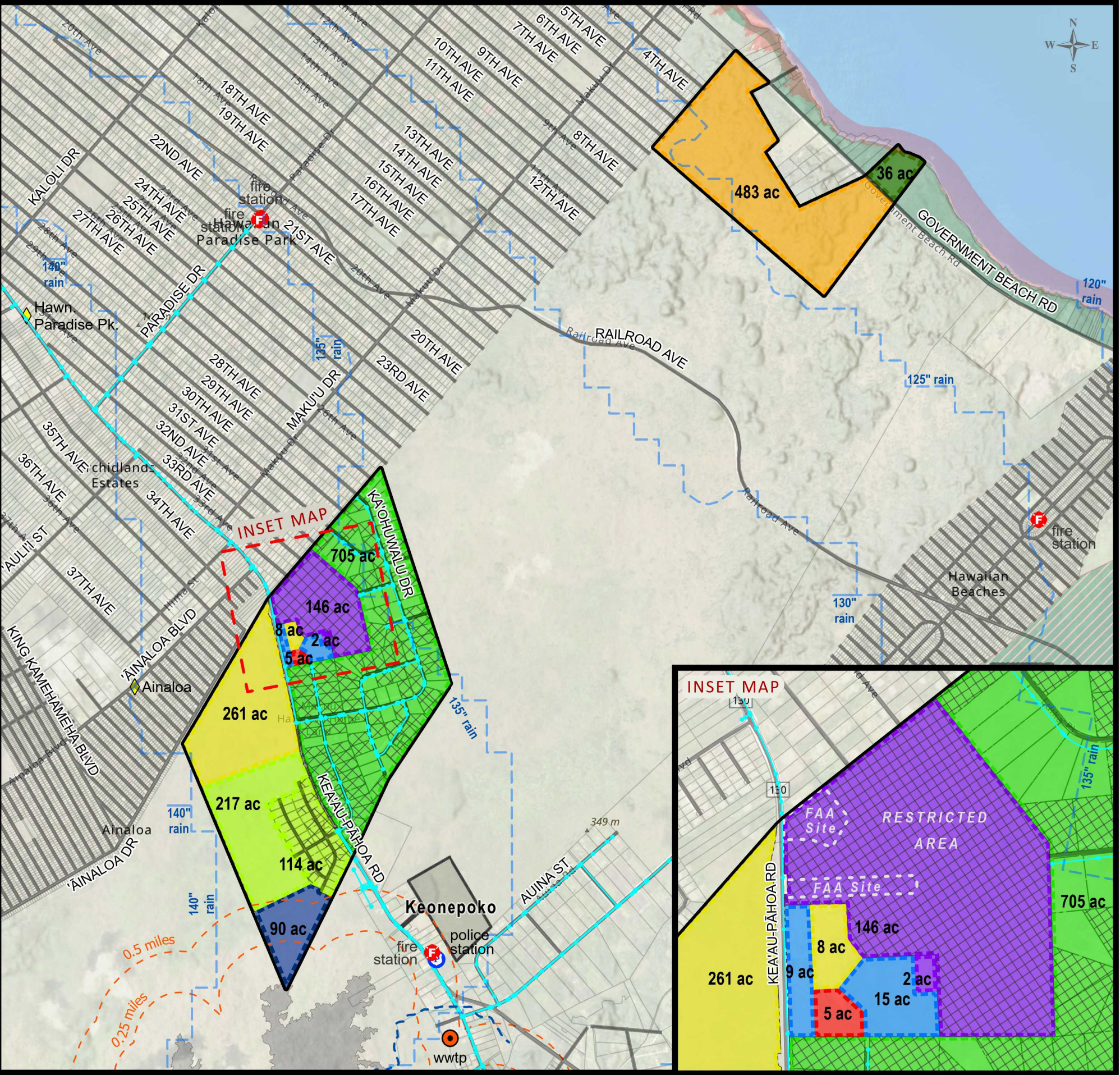


Island Plan Update

Land Use Designations

Homestead Uses		
Residential	271.8	
Subsistence Agriculture	0.0	
Supplemental Agriculture	0.0	
Pastoral	0.0	
DHHL Kuleana	377.5	
Non-Homestead Uses		
Community Use	377.5	
Community Agriculture	325.2	
Commercial	0.0	
Industrial	0.0	
Renewable Energy	0.0	
Stewardship	0.0	
Conservation	232.5	
Special District	0.0	

Approximate Total Acres
± 1,584.5

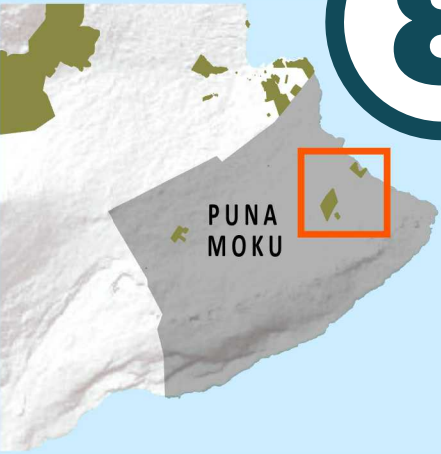


Site Assessment Highlights

- Long Term Leases
- Existing Roadways
- County Water Main
- Annual Rainfall > 60 Inches
- Lava Flows
- Lava Flow Buffers
- Flood Prone Areas
- State & County Conservation

Notes

- The site is generally flat and has soil rated as low for agricultural use.
- The makai Maku'u property doesn't seem to have access to a county water supply.
- The 36-ac land makai of Government Beach Road is in the State's conservation land.
- The 2014-2015 lava flows have reached to the southern tip of the mauka Maku'u property.
- The Inset Map, excluding the restricted area, highlights land uses proposed in the Maku'u Master Plan.
- The restricted area shown on the Inset Map includes the decommissioned former military land and the Federal Aviation Administration's traffic control tower.



Island Plan Update

Land Use Designations

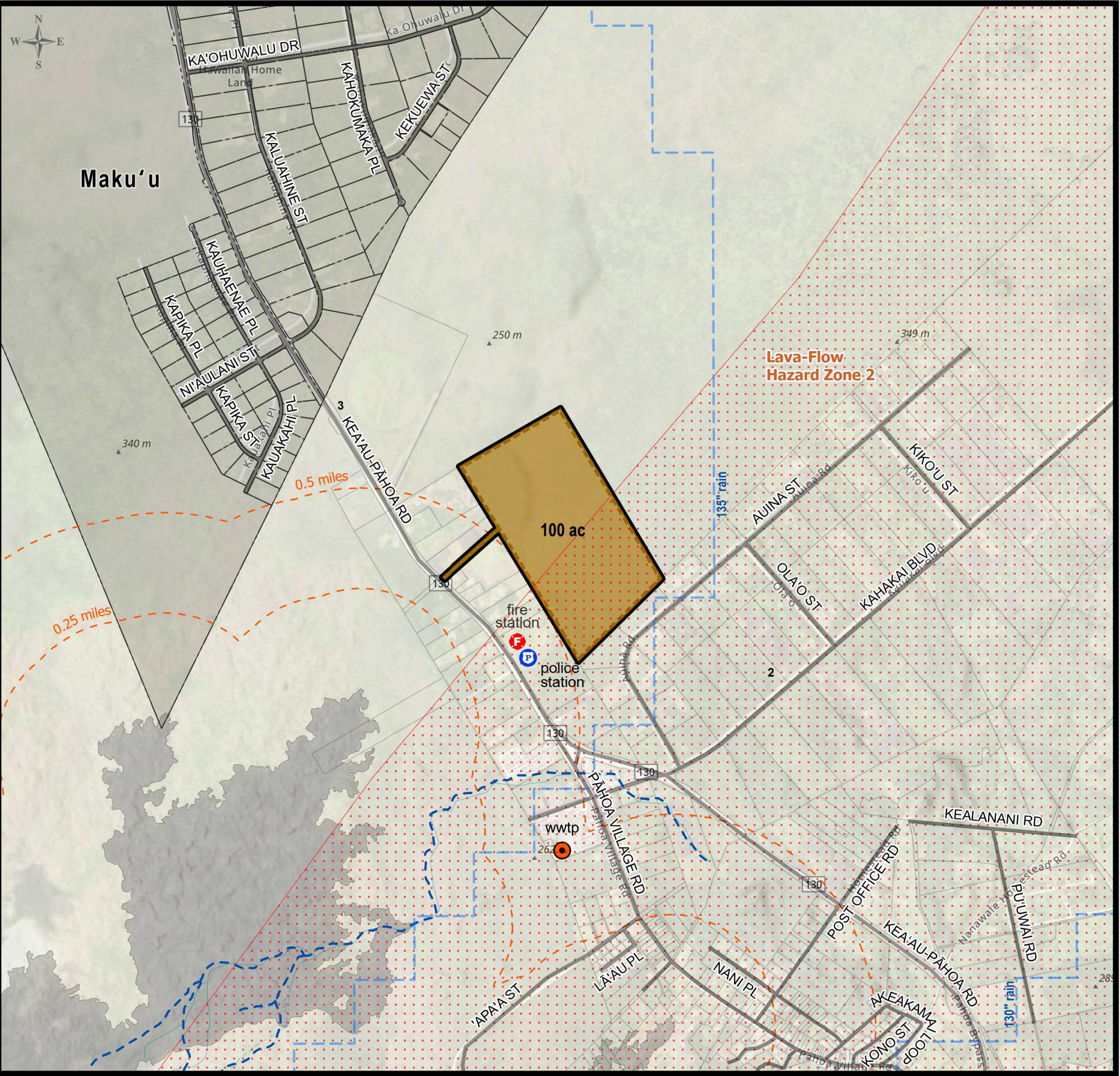
Homestead Uses

Residential	269.7
Subsistence Agriculture	331.1
Supplemental Agriculture	705.3
Pastoral	0.0
DHHL Kuleana	483.0

Non-Homestead Uses

Community Use	23.5
Community Agriculture	0.0
Commercial	5.3
Industrial	148.5
Renewable Energy	0.0
Stewardship	0.0
Conservation	35.8
Special District	90.4

Approximate Total Acres
± 2,092.6



Site Assessment Highlights

- Existing Roadways
- County Water Main
- Annual Rainfall > 60 Inches
- Lava Flows
- Lava Flow Buffers
- High Risk Lava-Flow Areas
- Streams
 - Perennial
 - Non-Perennial

Notes

- The site is largely flat.
- Soil on the site is rated low for ag use.
- The 2015 lava flows are 0.5 miles away from the site.
- The southern portion of the site is within a high risk lava-flow area, Lava-Flow Hazard Zone 2.
- The Lava-Flow Hazard Zone 2 is the second most hazardous area.
- The hazard zones are determined based on the locations of historic eruptions, the frequency of lava flow inundation, the larger topographic features of the volcanoes, and the likely paths of lava flows. The latest hazard zone map was updated in 1992 and not accounting for the recent eruptions after 1992. Although the northern portion of the site is not in the high risk lava-flow area, siting long-term residential uses in the close proximity to the recent lava flows is not recommended.
- Stewardship can serve as an interim use until opportunities for other long-term uses become available.

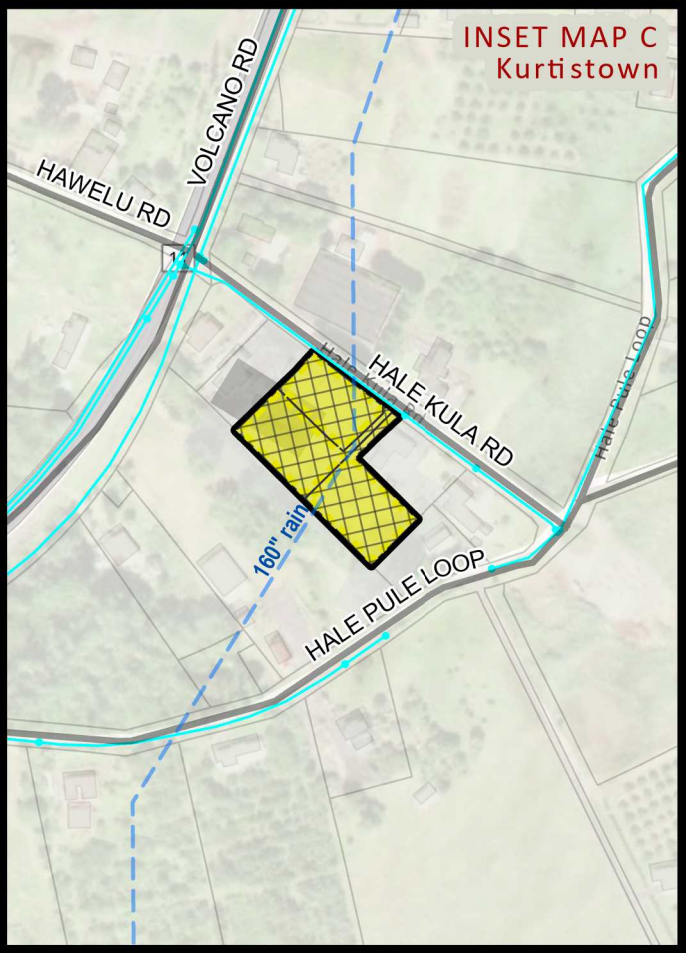
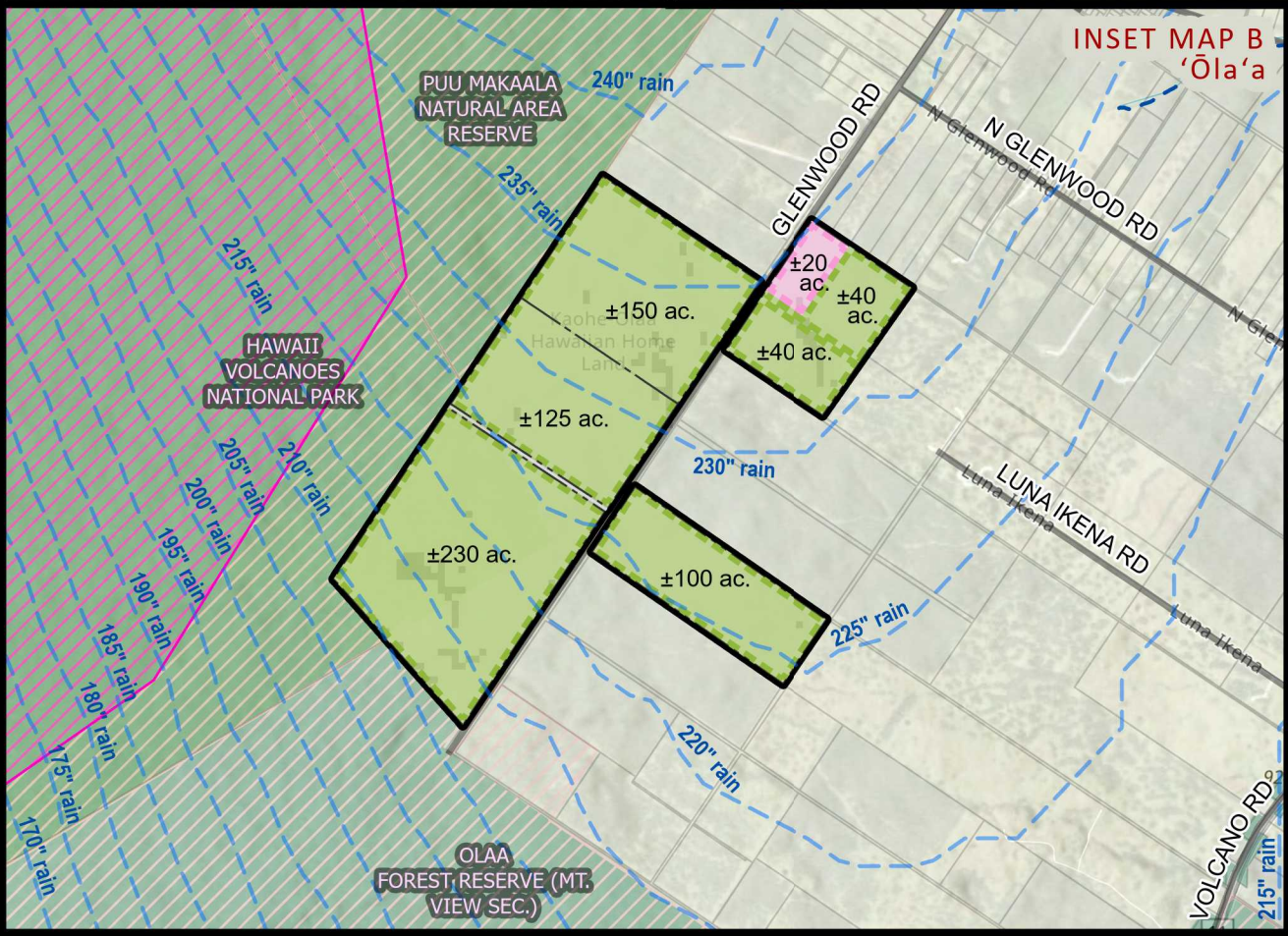
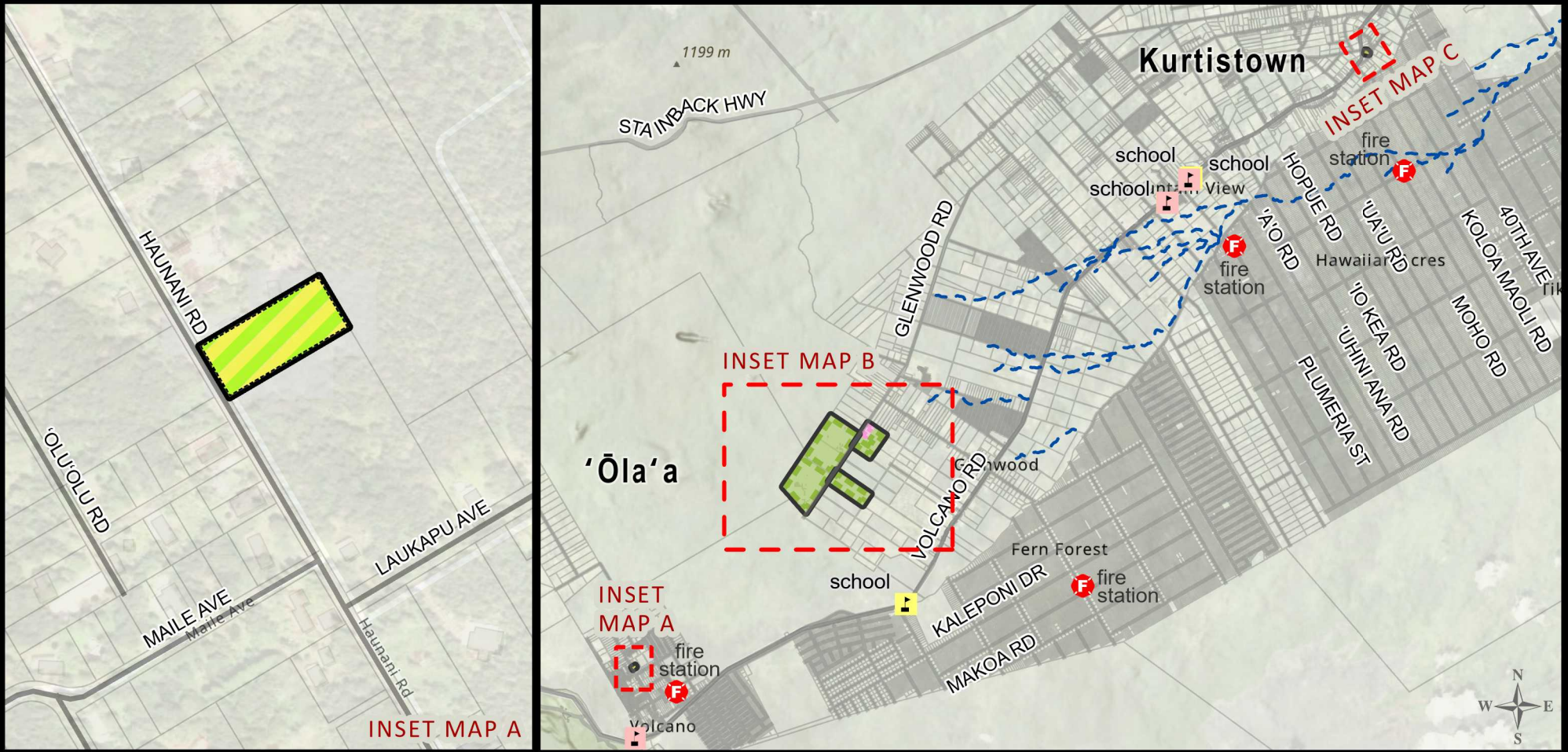


Island Plan Update

Land Use Designations

Homestead Uses		
Residential	0.0	
Subsistence Agriculture	0.0	
Supplemental Agriculture	0.0	
Pastoral	0.0	
DHHL Kuleana	0.0	
Non-Homestead Uses		
Community Use	0.0	
Community Agriculture	0.0	
Commercial	0.0	
Industrial	0.0	
Renewable Energy	0.0	
Stewardship	100.0	
Conservation	0.0	
Special District	0.0	

Approximate Total Acres
± 100.0

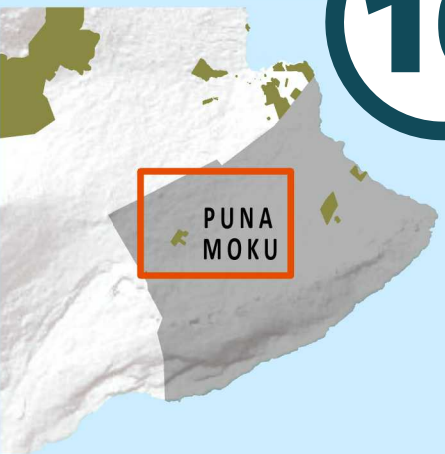


Site Assessment Highlights

- Long Term Leases
- Existing Roadways
- County Water Main
- Annual Rainfall > 60 Inches
- Critical Habitats
- State & County Conservation
- Streams
 - Perennial
 - Non-Perennial
- Slope Range
 - < 10% (Preferred)
 - 10 - 20% (Feasible)
 - > 20% (Too steep for some land uses)

Notes

- All sites are generally flat and rated low for ag use.
- The land in Inset Map B is very dense with thick trees.
- Community Agriculture (pasture) could be included on non-homestead use designations in coordination with the homestead associations.
- Slope less than 10% is preferred for Residential, Pastoral (grazing), Community Use, Commercial, and Industrial.
- Slope less than 15% is preferred for Subsistence, Supplemental and Community Agriculture.
- Slope up to 20% is feasible for all land uses above. Pastoral (ag uses) can go up to 30%.
- Slope greater than the above is too steep.



Island Plan Update

Land Use Designations

Homestead Uses

Residential	1.7
Subsistence Agriculture	0.0
Supplemental Agriculture	0.0
Pastoral	676.0
DHHL Kuleana	0.0

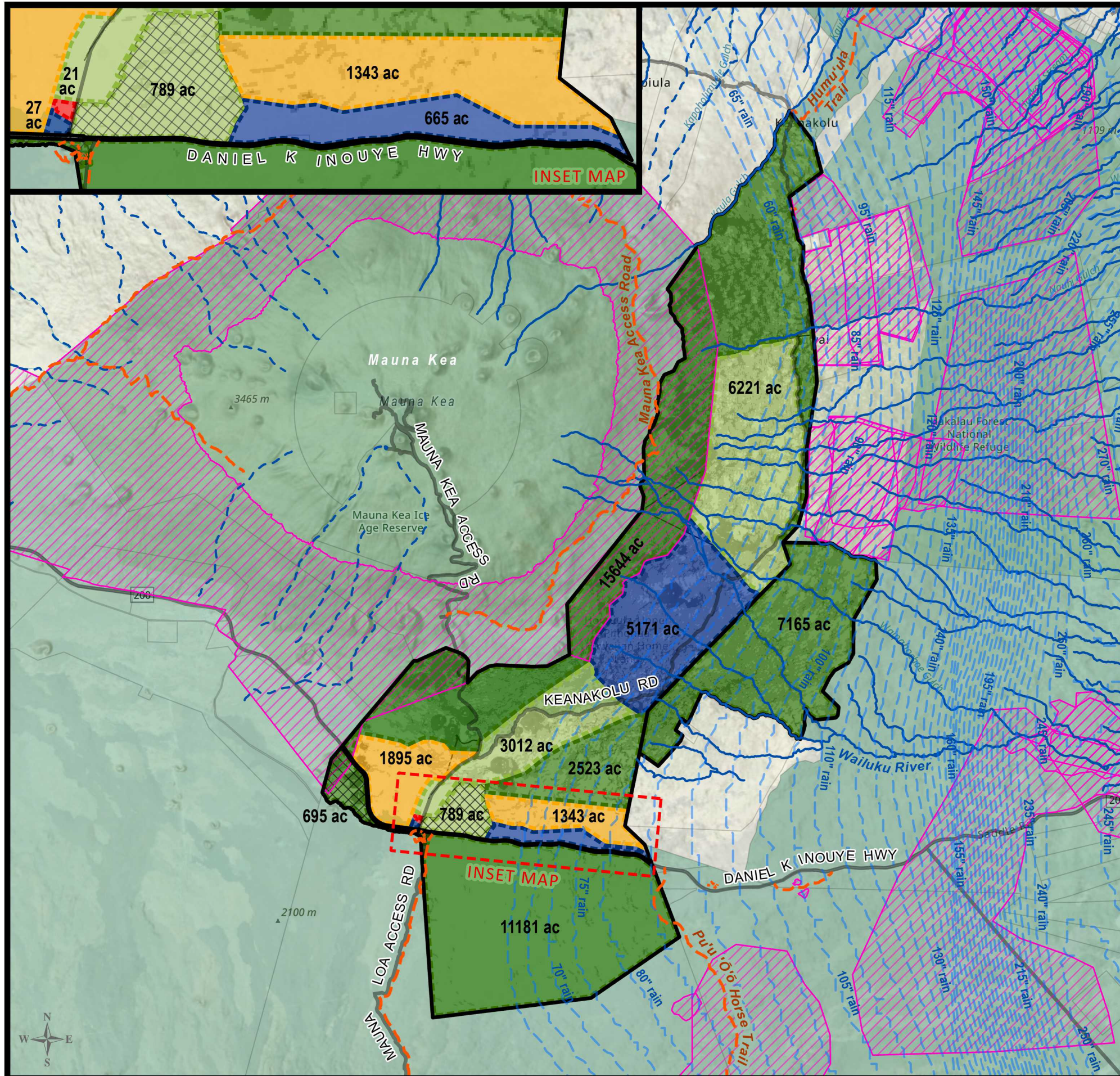
Non-Homestead Uses

Community Use	0.0
Community Agriculture	20.0
Commercial	0.0
Industrial	0.0
Renewable Energy	0.0
Stewardship	0.0
Conservation	0.0
Special District	0.0

Land Use Options

Residential/Subsistence Agriculture	1.1
-------------------------------------	-----

Approximate Total Acres
± 698.8

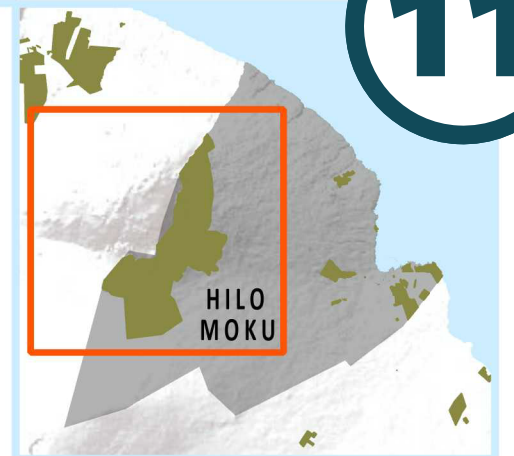


Site Assessment Highlights

- Long Term Leases
- Existing Roadways
- Nā Ala Hele Trails & Access
- Annual Rainfall > 60 Inches
- State & County Conservation
- Critical Habitats
- Streams
 - Perennial
 - Non-Perennial
- Slope Range
 - < 10% (Preferred)
 - 10 - 20% (Feasible)
 - > 20% (Too steep for some land uses)

Notes

- This map was drafted based on the 'Āina Mauna Legacy Program land use map. The program sees opportunities of self-sustainable rural-development homesteads along Daniel K Inouye Hwy (former Saddle Rd), including land for 100 to 200 homestead sites, land for alternative energy, and land for subsistence farming. Roads would remain unpaved and water would be catchment. Basic electrical and telecommunication infrastructure would be available.
- The site is partially within the State and County's conservation lands and also in the critical habitat areas for endangered Hawaiian honeycreepers.
- A few trails are near the site. Nā Ala Hele is the name of the State of Hawai'i's trail and access program. The program manages and maintains important public trails and access.
- Two existing leases are on the site: the 789-ac pastoral lease and the 695-ac military lease.
- The existing gorse shrub area (5,171 acres) and hard lava surfaces along Daniel K Inouye Hwy are identified as Special District.



Island Plan Update

Land Use Designations

Homestead Uses

Residential	0.0
Subsistence Agriculture	0.0
Supplemental Agriculture	0.0
Pastoral	10,021.2
DHHL Kuleana	3,238.1

Non-Homestead Uses

Community Use	0.0
Community Agriculture	0.0
Commercial	21.1
Industrial	0.0
Renewable Energy	0.0
Stewardship	0.0
Conservation	37,206.9
Special District	5,863.2

Approximate Total Acres
± 56,350.5