

## PSLU Committee

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**From:** Howie Kihune <howie@ainalanipacific.com>  
**Sent:** Tuesday, June 02, 2020 4:24 PM  
**To:** PSLU Committee  
**Subject:** Kilohana Makai Powerpoint  
**Attachments:** Kilohana.Makai.Pres.pdf

Aloha Chair Paltin,  
Attached PowerPoint for tomorrows meeting.  
Mahalo

*Howie Kihune*  
*Aina Lani Pacific LLC*  
*808-665-1122*  
*808-357-0514 cell*

A sense of place, community,  
connection.

Introducing:  
**KILOHANA MAKAI**

28 SINGLE FAMILY

3-bed/2 bath & 4-bed/2.5 bath

WORKFORCE HOUSING RESIDENCES





Workforce Housing located  
near Wailea Resort. Live,  
Work & Play.

Providing housing for  
Firemen, Police, Nurses,  
Hotel Employees, Hotel  
Managers, Lifeguards,  
County Employees,  
Teachers and more.

Working within County of  
Maui Housing AMI Sales  
Guidelines  
80%, 100%, 120%

COUNTY OF MAUI  
DEPARTMENT OF PLANNING  
One Main Plaza Building  
2200 Main Street, Suite 316  
Wailuku, Hawaii 96783



Zoning Administration and  
Enforcement Division (ZAED)  
Telephone: (808) 270-7253  
Facsimile: (808) 270-7534  
E-mail: [planning@mauicounty.gov](mailto:planning@mauicounty.gov)

RECEIVED

1 2019

COUNTY OF MAUI  
DEPARTMENT OF PLANNING

### ZONING AND FLOOD CONFIRMATION FORM

(This section to be completed by the Applicant)

APPLICANT NAME Tara Furukawa TELEPHONE x7520  
PROJECT NAME Kilohana Makai E-MAIL tara.furukawa@mauicounty.gov  
PROPERTY ADDRESS South Kihel Road TAX MAP KEY (2) 3-9-004:141

- ☐ Yes ☒ No Will this Zoning & Flood Confirmation Form be used with a Subdivision Application?  
IF YES, answer questions A and B below and comply with instructions 2 & 3 below:  
A) ☐ Yes ☒ No Will it be processed under a consistency exemption from Section 18.04.030(B), MCC?  
IF YES, which exemption? (No. 1, 2, 3, 4 or 5) \_\_\_\_\_  
B) State the purpose of subdivision and the proposed land uses (ie 1-lot into 2-lots for all land uses allowed by law): \_\_\_\_\_

- INSTRUCTIONS:  
1) Please use a separate Zoning & Flood Confirmation Form for each Tax Map Key (TMK) number.  
2) If this will be used with a subdivision application AND the subject property contains multiple districts/designations or (1) State Land Use Districts, (2) Maui Island Plan Growth Boundaries, (3) Community Plan Designations, or (4) County Zoning Districts; submit a signed and dated Land Use Designations Map, prepared by a licensed surveyor, showing the metes & bounds of the subject parcel and of each district/designation including any subdistricts.  
3) If this will be used with a subdivision application AND the subject property contains multiple State Land Use Districts; submit an approved District Boundary Interpretation from the State Land Use Commission.

(This section to be completed by ZAED)

LAND USE DISTRICTS/DESIGNATIONS (LUD) AND OTHER INFORMATION: <sup>1</sup>		<input checked="" type="checkbox"/> (SMA) Special Management Area
STATE DISTRICT:	<input checked="" type="checkbox"/> Urban <input type="checkbox"/> Rural <input type="checkbox"/> Agriculture <input type="checkbox"/> Conservation	
MAUI ISLAND PLAN:	Growth Boundary: <input checked="" type="checkbox"/> Urban <input type="checkbox"/> Small Town <input type="checkbox"/> Rural <input type="checkbox"/> Planned Growth Area <input type="checkbox"/> Outside Growth Boundaries Protected Area: <input type="checkbox"/> Preservation <input type="checkbox"/> Park <input type="checkbox"/> Greenbelt <input type="checkbox"/> Greenway <input type="checkbox"/> Sensitive Land <input checked="" type="checkbox"/> Outside Protected Areas	
COMMUNITY PLAN: <sup>2</sup>	<u>Single Family</u>	<input type="checkbox"/> (PD) Planned Development
COUNTY ZONING:	<u>Open Zone R-3 Residential</u>	<input type="checkbox"/> (PH) Project District
OTHER COMMENTS:		<input type="checkbox"/> See Additional Comments (Pg.2)
FEMA FLOOD INFORMATION: A Flood Development Permit is required if any portion of a parcel is designated V, VE, A, AO, AE, AH, D, or Floodway, and the project is on that portion.		<input type="checkbox"/> See Attached LUD Map
FLOOD HAZARD AREA ZONES: <sup>3</sup>	<u>Zone X</u>	
& BASE FLOOD ELEVATIONS:		
<input type="checkbox"/> FEMA DESIGNATED FLOODWAY	For Flood Zone AO, FLOOD DEPTH:	

- SUBDIVISION LAND USE CONSISTENCY: ☐ Not Consistent, (LUDs appear to have NO permitted uses in common).  
☐ Not Applicable, (Due to processing under consistency exemption No. ☐ 1, ☐ 2, ☐ 3, ☐ 4, ☐ 5).  
(Signature) ☐ Interim Zoning, (The parcel or portion of the parcel that is zoned Interim shall not be subdivided).  
☐ 4 Consistent, (LUDs appear to have ALL permitted uses in common).  
☐ 4 Consistent, upon obtaining an SMA, PD, or PH subdivision approval from Planning.  
☐ 4 Consistent, upon recording a permissible uses unilateral agreement processed by Public Works (See Pg.2).

#### NOTES:

- The conditions and/or representations made in the approval of a State District Boundary Amendment, Community Plan Amendment, County Change in Zoning, SMA Permit, Planned Development, Project District and/or a previous subdivision may affect building permits, subdivisions, and uses on the land.
- Please review the Maui Island Plan and the Community Plan document for any goals, objectives, policies or actions that may affect this parcel.
- Flood development permits might be required in zones X and XS for any work done in streams, gulches, low-lying areas, or any type of drainage way. Flood development permits are required for work in all other zones. Subdivisions that include ditches, streams, gulches, low-lying areas, or any type of drainage way might require the following designations to be shown on the subdivision map: 100-year flood inundation limits; base flood elevations; drainage reserves.
- Subdivisions will be further reviewed during the subdivision application process to verify consistency, unilateral agreement requirements, and the conditions associated with the unilateral agreement (Section 18.04.030 D, Maui County Code)

REVIEWED & CONFIRMED BY:

[Signature] Shirley Nakagawa

8/2/19

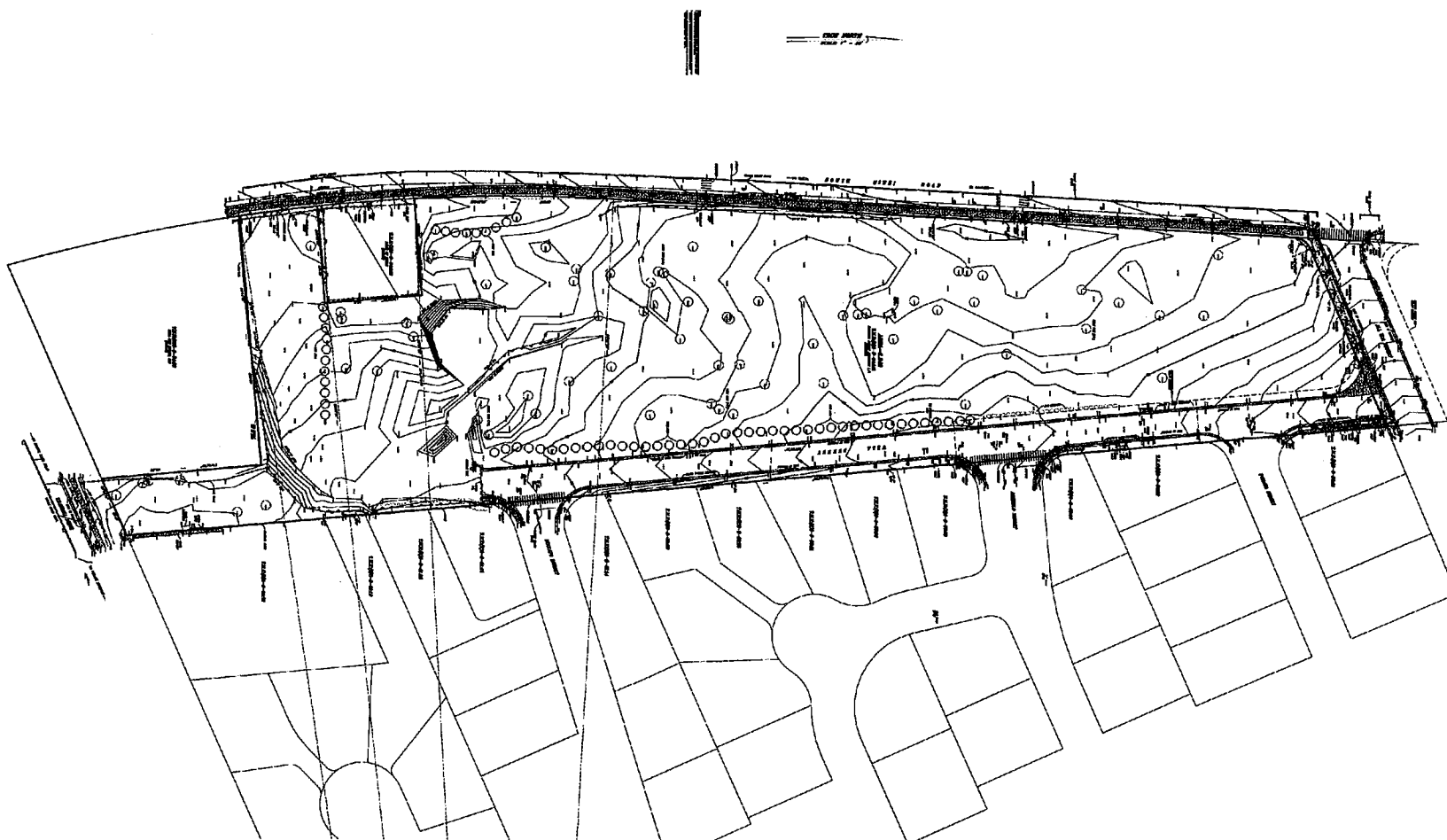
For:

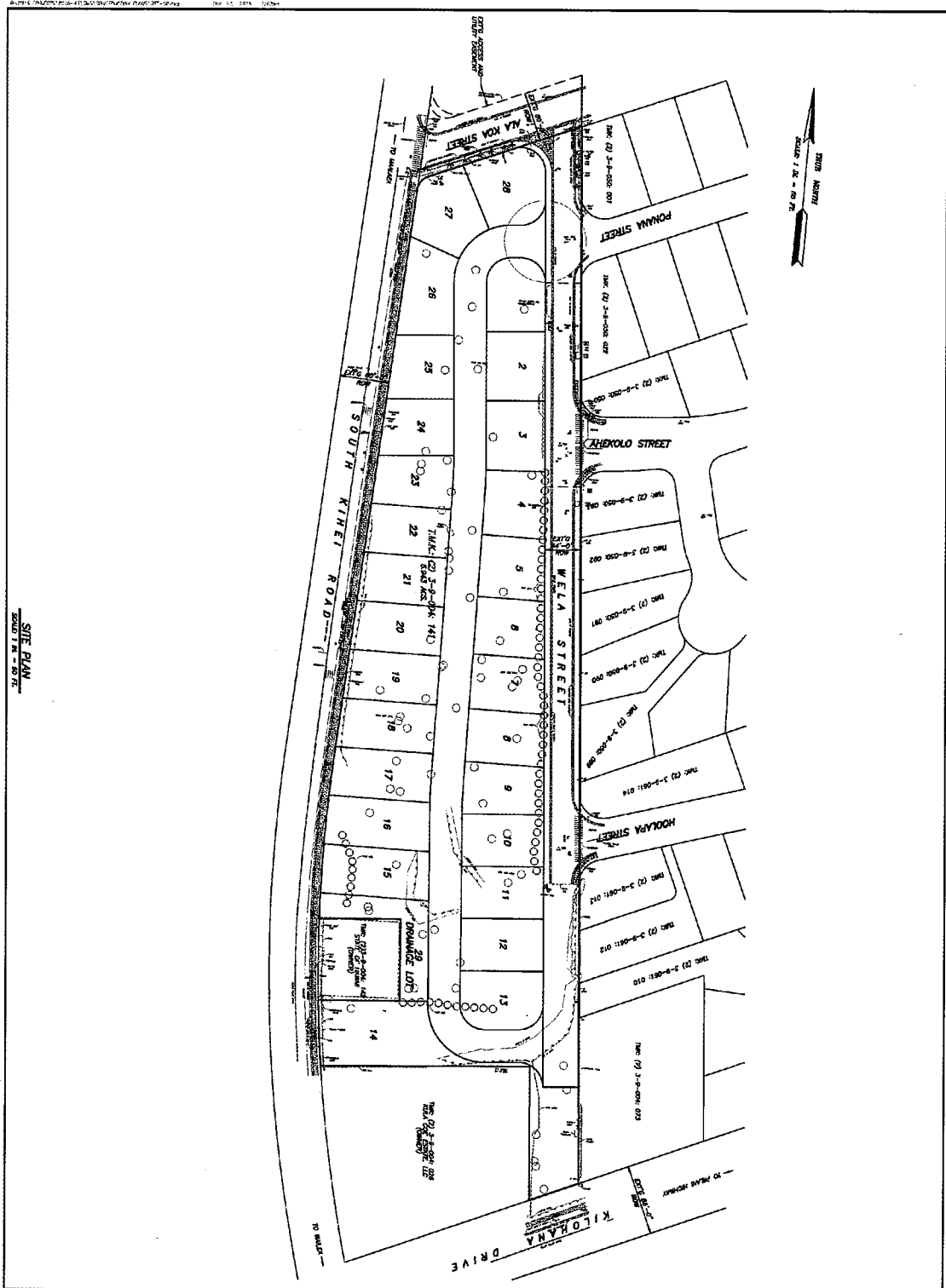
Zoning Administration and Enforcement Division

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Page 1







**SITE PLAN**  
SCALE: 1" = 40'

PROJECT NO. 1

DATE: 12/1/13

BY: [Signature]

CHECKED BY: [Signature]

DESIGNED BY: [Signature]

DRAWN BY: [Signature]

PROJECT NO. 2013-03

PROJECT NAME: [Name]

DATE: 12/1/13

### CONCEPTUAL SUBDIVISION PLAN

T.M.K.: (2) 3-9-004: 141

KIHEI, MAUI, HAWAII

SITE PLAN

**OTOMO**

OTOMO ENGINEERING, LLC

1000 KAHULUKE AVENUE, SUITE 200

KAHULUKE, HI 96731

PHONE: (808) 241-1111

WWW.OTOMOENGINEERING.COM

**Parcel Information**

Parcel Number 390041410000  
 Location Address 3 KIHEI RD  
 KIHEI HI 96753  
 Neighborhood Code 3925 B  
 Legal Information PARCEL 7 LP GRANT 5-15,636.6 943 AC DFS  
 Land Area 6.943 Acres  
 Parcel Note

[View Map](#)
**Owner Information**

Owner Names  
 FERREIRA FAMILY PARTNERS L.P. - Fee Owner

Mailing Address  
 FERREIRA FAMILY PARTNERS L.P.  
 317 MOI PL  
 KIHEI HI 96753

**Assessment Information**

Year	Tax Class	Market Land Value	Hide Historical Assessments			Total Assessed Value	Total Exemption Value	Total Net Taxable Value
			Agricultural Land Value	Assessed Land	Building Value			
2019	RESIDENTIAL	\$1,280,700	\$0	\$1,280,700	\$0	\$1,280,700	\$0	\$1,280,700
2010	RESIDENTIAL	\$1,280,700	\$0	\$1,280,700	\$0	\$1,280,700	\$0	\$1,280,700
2017	RESIDENTIAL	\$1,267,000	\$0	\$1,267,000	\$0	\$1,267,000	\$0	\$1,267,000
2016	RESIDENTIAL	\$747,300	\$0	\$747,300	\$0	\$747,300	\$0	\$747,300
2015	RESIDENTIAL	\$796,000	\$0	\$796,000	\$0	\$796,000	\$0	\$796,000
2014	RESIDENTIAL	\$747,300	\$0	\$747,300	\$0	\$747,300	\$0	\$747,300
2013	RESIDENTIAL	\$668,600	\$0	\$668,600	\$0	\$668,600	\$0	\$668,600
2012	RESIDENTIAL	\$660,500	\$0	\$660,500	\$0	\$660,500	\$0	\$660,500
2011	RESIDENTIAL	\$622,900	\$0	\$622,900	\$0	\$622,900	\$0	\$622,900
2010	UNIMPROVED RESIDENTIAL	\$714,800	\$0	\$714,800	\$0	\$714,800	\$0	\$714,800

**Current Tax Bill Information**

Tax Period	Description	Original Due Date	Taxes Assessment	Tax Credits	Net Tax	Penalty	Interest	Other	Amount Due
2019-2	Real Property Tax	02/20/2020	\$3,585.96	\$0.00	\$3,585.96	\$0.00	\$0.00	\$0.00	\$3,585.96
	Tax Bill with Interest computed through 12/31/2019								
			\$3,585.96	\$0.00	\$3,585.96	\$0.00	\$0.00	\$0.00	\$3,585.96

**Historical Tax Information**

Year	Tax	Payments and Credits	Penalty	Interest	Other	Amount Due
2019	\$7,171.99	(\$3,585.96)	\$0.00	\$0.00	\$0.00	\$3,585.96
2018	\$7,069.46	(\$7,069.46)	\$0.00	\$0.00	\$0.00	\$0.00
2017	\$7,019.18	(\$7,019.18)	\$0.00	\$0.00	\$0.00	\$0.00
2016	\$3,960.69	(\$3,960.69)	\$0.00	\$0.00	\$0.00	\$0.00
2015	\$4,298.40	(\$4,298.40)	\$0.00	\$0.00	\$0.00	\$0.00
2014	\$4,162.46	(\$4,162.46)	\$0.00	\$0.00	\$0.00	\$0.00
2013	\$3,269.45	(\$3,269.45)	\$0.00	\$0.00	\$0.00	\$0.00
2012	\$3,222.88	(\$3,222.88)	\$0.00	\$0.00	\$0.00	\$0.00
2011	\$3,457.10	(\$3,457.10)	\$0.00	\$0.00	\$0.00	\$0.00
2010	\$4,467.50	(\$4,467.50)	\$0.00	\$0.00	\$0.00	\$0.00
2009	\$5,735.74	(\$5,735.74)	\$0.00	\$0.00	\$0.00	\$0.00
2008	\$5,559.38	(\$5,559.38)	\$0.00	\$0.00	\$0.00	\$0.00
2007	\$6,083.49	(\$6,083.49)	\$0.00	\$0.00	\$0.00	\$0.00
2006	\$6,663.41	(\$6,663.41)	\$0.00	\$0.00	\$0.00	\$0.00
2005	\$5,804.99	(\$5,804.99)	\$0.00	\$0.00	\$0.00	\$0.00
2004	\$9,118.75	(\$9,118.75)	\$0.00	\$0.00	\$0.00	\$0.00
2003	\$7,462.71	(\$7,462.71)	\$0.00	\$0.00	\$0.00	\$0.00
2002	\$4,312.27	(\$4,312.27)	\$0.00	\$0.00	\$0.00	\$0.00
2001	\$4,312.27	(\$4,312.27)	\$0.00	\$0.00	\$0.00	\$0.00

[Click a year to see tax payment information for the year.](#)

## Kihei-Makena Community Plan

Matrix No.	Acres	Location Notes/Comments	Kihei-Makena CAC Recommendation 1992	Planning Commission Recommendation 1993	Planning Department Recommendation 1997	Land Use Proposal For County Council Decision-Making 1997	COUNTY COUNCIL VOTE 1998
22B Fire Station Public Quasi Public	2.0	TMK 2-1-8: 46, 113 Intersection of Pili Highway and Kilohana Road	Not reviewed	Not reviewed	Not reviewed	Public/Quasi Public for Future Fire Station	PUBLIC/ QUASI PUBLIC
23 Wailea Resort Single Family	16.1	TMK 3-9-38:28 Mahie Place & Hoohale Place	Redesignate to Multi-Family	Retain as Single Family	Retain as Single Family	Single Family to Multi-Family	SINGLE FAMILY
24A Aina Lea	17.6	TMKs 3-9-4: 76, 77, 78 Just north of Kilohana Road	Not reviewed	Retain as Multi-Family	Redesignate to Single Family	Multi-Family to Single Family	SINGLE FAMILY
24B Aina Lea Area	28.4	TMKs 3-9-50: 1 to 44, 47 3-9-4: 73, 75, 129 Wailea side of 24A above	Not reviewed	Redesignate to Single Family	Redesignate to Single Family	Multi-Family to Single Family	SINGLE FAMILY
25 Brewster Property	30	TMK 2-2-2: 24 Just north of Maui Meadows	Not reviewed	Retain as Agriculture	Retain as Agriculture	Retain as Agriculture	AGRICULTURE
26 Kawamoto Property	148	TMK 2-2-2: 2 Just north of Maui Meadows	Not reviewed	Not reviewed	Redesignate to Agriculture	Project District 7 to Agriculture	AGRICULTURE
27 Ferreira Property	1.0	TMK 3-9-4: 141 Just north of S. Kihei Road & Kilohana Road intersection	Redesignate to Business/Commercial, 5 acres of 6.9 acres	Redesignate to Business/Commercial, 1 acre	Redesignate to Business/Commercial, 5 acres of 6.9 acres	Park to Business/Commercial, 5 acres of 6.9 acres	SINGLE FAMILY
28 GATRI Property	1.9	TMKs 3-9-5: 3 & 4 Between Kamaole Parks 2 & 3	Redesignate to Park	Commission advised no action because of contested case	Single Family to Business/Commercial	Single Family to Park or Business/Commercial	PARK
29 Kamalii School	12	TMK 3-9-19: 9 Existing school	Not reviewed	Retain as Single Family	Redesignate to Public/Quasi-Public	Single Family to Public/Quasi Public	PUBLIC/ QUASI PUBLIC




## KILOHANA MAKAI

28 Single Family Residential Homes

### Legend

 KILOHANA MAKAI

 KILOHANA MAKAI

Google Earth

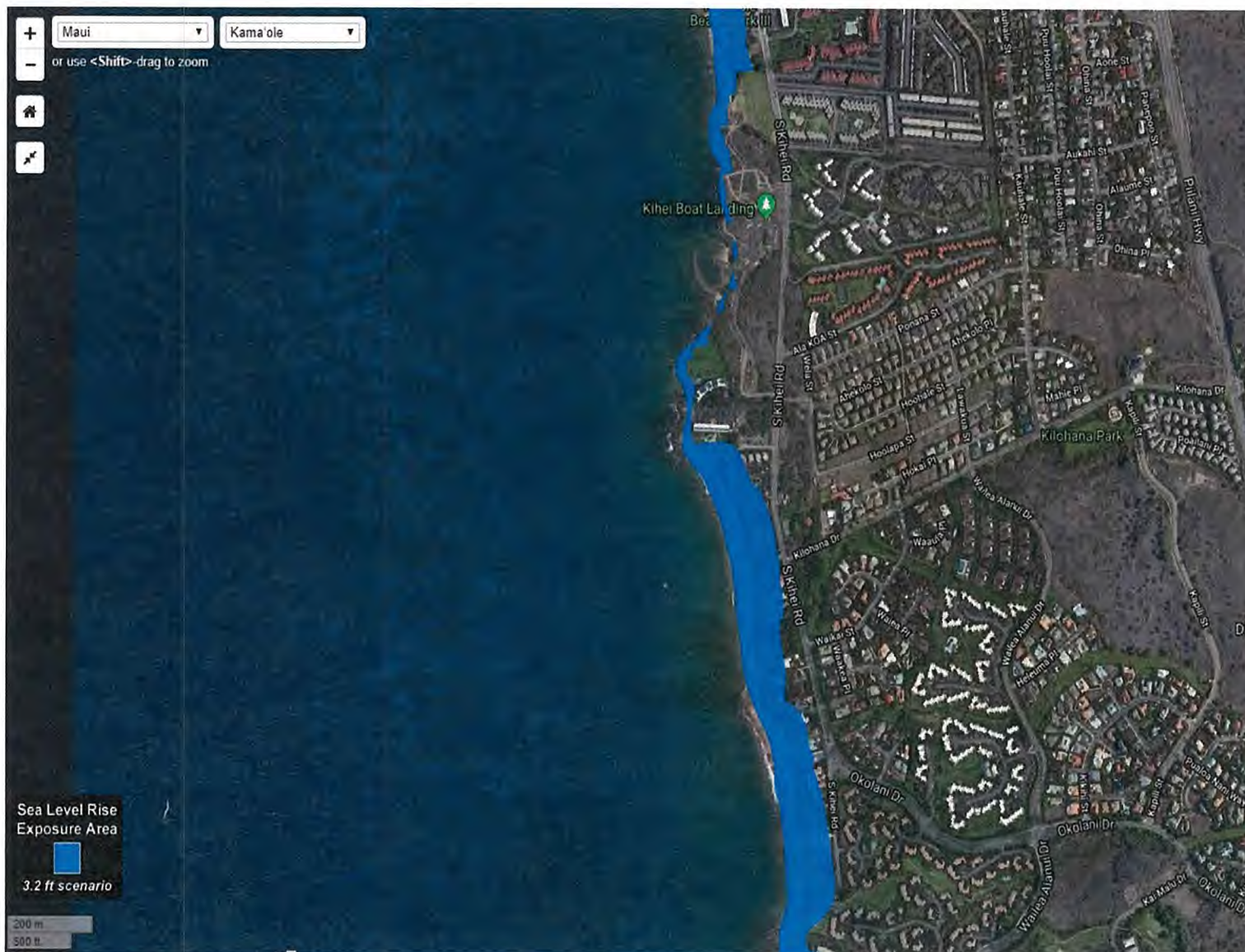
© 2018 Google

500 ft

N









## Flood Hazard Assessment Report

www.hawaiiifip.org

### Property Information

COUNTY: MAUI  
TMK NO: (2) 3-9-004:141  
WATERSHED: WAILUA  
PARCEL ADDRESS: ADDRESS NOT DETERMINED  
EHEI, HI 96753

### Notes:

### Flood Hazard Information

FIRM INDEX DATE: NOVEMBER 04, 2015  
LETTER OF MAP CHANGE(S): NONE  
FEMA FIRM PANEL: 1500030676F  
PANEL EFFECTIVE DATE: SEPTEMBER 15, 2012

THIS PROPERTY IS WITHIN A TSUNAMI EVACUATION ZONE: YES (EXTREME)  
FOR MORE INFO, VISIT: <http://www.scd.hawaii.gov/>

THIS PROPERTY IS WITHIN A DAM EVACUATION ZONE: NO  
FOR MORE INFO, VISIT: <http://dhr.hawaii.gov/dem/>



**Disclaimer:** The Hawaii Department of Land and Natural Resources (DLNR) assumes no responsibility arising from the use, accuracy, completeness, and timeliness of any information contained in this report. Viewers/Users are responsible for verifying the accuracy of the information and agree to indemnify the DLNR, its officers, and employees from any liability which may arise from its use of its data or information.

**If this map has been identified as "PRELIMINARY", please note that it is being provided for informational purposes and is not to be used for flood insurance rating. Contact your county floodplain manager for flood zone determinations to be used for compliance with local floodplain management regulations.**

### FLOOD HAZARD ASSESSMENT ZONE (FIRM) BASEMAP

**SPECIAL FLOOD HAZARD AREAS (SFHA) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD** - The 1% annual chance flood (100-year), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. SFHAs include Zone A, AE, AH, AO, V, and VE. The Base Flood Elevation (BFE) is the water surface elevation of the 1% annual chance flood. Mandatory flood insurance purchase applies in these zones:

- Zone A: No BFE determined.
- Zone AE: BFE determined.
- Zone AH: Flood depths of 1 to 3 feet (usually areas of ponding); BFE determined.
- Zone AO: Flood depths of 1 to 3 feet; usually sheet flow on sloping terrain; average depths determined.
- Zone V: Coastal flood zone with velocity hazard (wave action); no BFE determined.
- Zone VE: Coastal flood zone with velocity hazard (wave action); BFE determined.
- Zone AEF: Floodway areas in Zone AE. The floodway is the channel of stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without increasing the BFE.

**NON-SPECIAL FLOOD HAZARD AREA** - An area in a low-to-moderate risk flood zone. No mandatory flood insurance purchase requirements apply, but coverage is available in participating communities.

- Zone X5 (X shaded): Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot; or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.
- Zone X: Areas determined to be outside the 0.2% annual chance floodplain.

### OTHER FLOOD AREAS

- Zone D: Unstudied areas where flood hazards are undetermined, but flooding is possible. No mandatory flood insurance purchase applies, but coverage is available in participating communities.

MICHAEL P. VICTORINO  
Mayor  
MICHELE CHOUTEAU MCLEAN, AICP  
Director  
JORDAN E. HART  
Deputy Director



**DEPARTMENT OF PLANNING**  
COUNTY OF MAUI  
ONE MAIN PLAZA  
2200 MAIN STREET, SUITE 315  
WAILUKU, MAUI, HAWAII 96793

December 4, 2019

CERTIFIED MAIL - # 7018 2290 000107240241

Mr. Howie Kihune, Aina Lani Pacific LLC  
Ms. Sandra Duvauchelle, Lehua Builders  
360 Papa Place, Unit 203  
Kahului, Hawaii 96732

Dear Mr. Kihune and Ms. Duvauchelle:

**SUBJECT: RECOMMENDATION OF APPROVAL OF A CHANGE OF ZONING FROM OPEN ZONE AND R-3 RESIDENTIAL DISTRICT TO R-1 RESIDENTIAL DISTRICT FOR THE PROPOSED KILOHANA MAKAI WORKFORCE HOUSING PROJECT ON APPROXIMATELY 6.943 ACRES OF LAND, LOCATED IN KIHU, MAUI, HAWAII; TMK: (2) 3-9-004:141 (CIZ2019/0001)**

At its regular meeting on November 26, 2019, the Maui Planning Commission (Commission) took public testimony, reviewed the above requests, and after due deliberation, the Commission voted to recommend approval of the Change of Zoning (CIZ 2019/0001) to the Maui County Council (Council).

The Change of Zoning recommendation of approval is subject to the following condition:

1. In accordance with the Workforce Housing Agreement executed with the Department of Housing and Human Concerns, the property shall not be developed for any purpose other than residential workforce housing units pursuant to the income distribution requirements of Second. 2.96.040.C, Maui County Code.

The Commission also adopted the Report and Recommendation prepared by the Department for the November 26, 2019 meeting as its Findings of Fact and Conclusions of Law, and authorized the Planning Director to transmit the Commission's recommendation to the Council on its behalf.

Mr. Howie Kihune and Ms. Sandra Duvauchelle  
December 4, 2019  
Page 2

Thank you for your cooperation. If additional clarification is required, please contact  
Staff Planner Tara Furukawa at [tara.furukawa@hawaii.gov](mailto:tara.furukawa@hawaii.gov) or at (808) 270-7520.

Sincerely,



MICHELE MCLEAN, AICP  
Planning Director

xc: Clayton I. Yoshida, AICP, Planning Program Administrator (PDF)  
John S. Rapacz, Planning Program Administrator (PDF)  
Pam Eaton, Planning Program Administrator (PDF)  
Kathleen Aoki, Planning Program Administrator (PDF)  
Tara K. Furukawa, Staff Planner (PDF)  
Department of Housing and Human Concerns  
Real Property Assessment Division  
Department of Public Works  
Department of Environmental Management  
Department of Water Supply  
Department of Fire and Public Safety  
Police Department  
Project File  
MCM:TKF:lak  
K:\WP\_DOCS\Planning\CIZ\2019\0001\_6.943 Acres S. Kihel\Staff\ReportToDecision\MPC\_Approval.doc





AUSTIN, TSUTSUMI & ASSOCIATES, INC.

CIVIL ENGINEERS • SURVEYORS

CONTINUING THE ENGINEERING PRACTICE FOUNDED BY H. A. R. AUSTIN IN 1934

TERRANCE S. ARASHIRO, P.E.  
ADRIENNE W.L.H. WONG, P.E., LEED AP  
DEANNA M.R. HAYASHI, P.E.  
PAUL K. ARITA, P.E.  
ERIK S. KANESHIRO, L.P.L.S., LEED AP  
MATT K. NAKAMOTO, P.E.  
GARRETT K. TOKUOKA, P.E.

#19-507

April 11, 2019

Mr. Howard Kihune Jr.  
Aina Lani Pacific LLC  
2173 Auina Place  
Kihei, Hawaii 96753

Dear Mr. Kihune:

**Subject: Traffic Assessment Report  
For the Proposed Kilohana Makai Project  
Kihei, Maui, Hawaii  
TMK: (2) 3-9-004:141**

Austin, Tsutsumi & Associates, Inc. (ATA) has conducted this traffic assessment report for the proposed Kilohana Makai Project (hereinafter referred to as the "Project").

### **Project Description**

The Kilohana Makai Project is an affordable housing project with 28 proposed single-family units. Ohana units will not be permitted. The Project will be located upon approximately 6.9 acres of land south of Ala Koa Street, west of Wela Street and east of South Kihei Road. Direct access to the site will be provided via Wela Street. Figure 1 shows the Project site plan.

### **Existing Roadways**

Ala Koa Street is a two-way, two-lane, undivided roadway which extends easterly from its T-intersection with South Kihei Road until its terminus in a cul-de-sac. Ala Koa Street currently serves the Aston Maui Hill Resort Kilohana Ridge residential development. Wela Street is a north-south local street within Kilohana Ridge. The posted speed limit along South Kihei Road is 30 miles per hour (mph) in the vicinity of the study area.



# KILOHANA MAKAI TRAFFIC ASSESSMENT



FIGURE 1

PROJECT SITE PLAN



Mr. Howard Kihune Jr.  
Aina Lani Pacific LLC

April 11, 2019

## Summary of Findings

### Existing Traffic Conditions

Manual turning movement counts were recorded on April 4, 2018 at the South Kihei Road and Ala Koa Street intersection during the AM and PM peak hours, which occurred from 7:45 AM – 8:45 AM and 3:30 PM – 4:30 PM, respectively.

During both peak hours, minimal queueing was observed due to low volumes of southbound left turn movements and westbound left turn movements, and adequate gaps in the South Kihei Road traffic. All movements operated at LOS C or higher during both peak hours. A summary of volumes and LOS for Existing conditions can be found in Figure 2.

### Base Year 2021 Conditions

The Base Year 2021 scenario includes a 0.5% annual ambient growth forecast by the Maui Regional Travel Demand Model (MRTDM) and other known developments in the vicinity of the Project anticipated to be completed by the Year 2021. Note that this scenario conservatively assumes completion of the proposed KIRC Kihei Education and Operations Center (forecast Year 2022 build-out) across from Ala Koa Street, which will be converted from an existing T-intersection to a full movement 4-leg intersection. In total, ambient growth and other known developments are anticipated to increase traffic along South Kihei Road by about 50-90 vehicles per direction per peak hour.

Analysis suggests that all movements at the South Kihei Road and Ala Koa Street intersections will continue to operate at LOS C or higher, with the exception of the minor eastbound shared left/through/right movement, which will operate at LOS D during the PM peak hour. A summary of volumes and LOS for Base Year 2021 can be found in Figure 2.

### Project Trip Generation

Trips generated by the proposed Project were estimated using the Trip Generation Manual, 10<sup>th</sup> Edition, which provides trip rates and/or formulae based on correlations between vehicular traffic and independent variables based upon empirical data. Table 1 shows the anticipated trip generation by the Project.

**Table 1: Kilohana Makai Subdivision Generated Trips**

Land Use	ITE Code	Quantity	IV	AM Peak			PM Peak		
				Enter	Exit	Total	Enter	Exit	Total
Single-Family Detached Housing	210	28	DU	6	19	25	19	11	30



Mr. Howard Kihune Jr.  
Aina Lani Pacific LLC

April 11, 2019

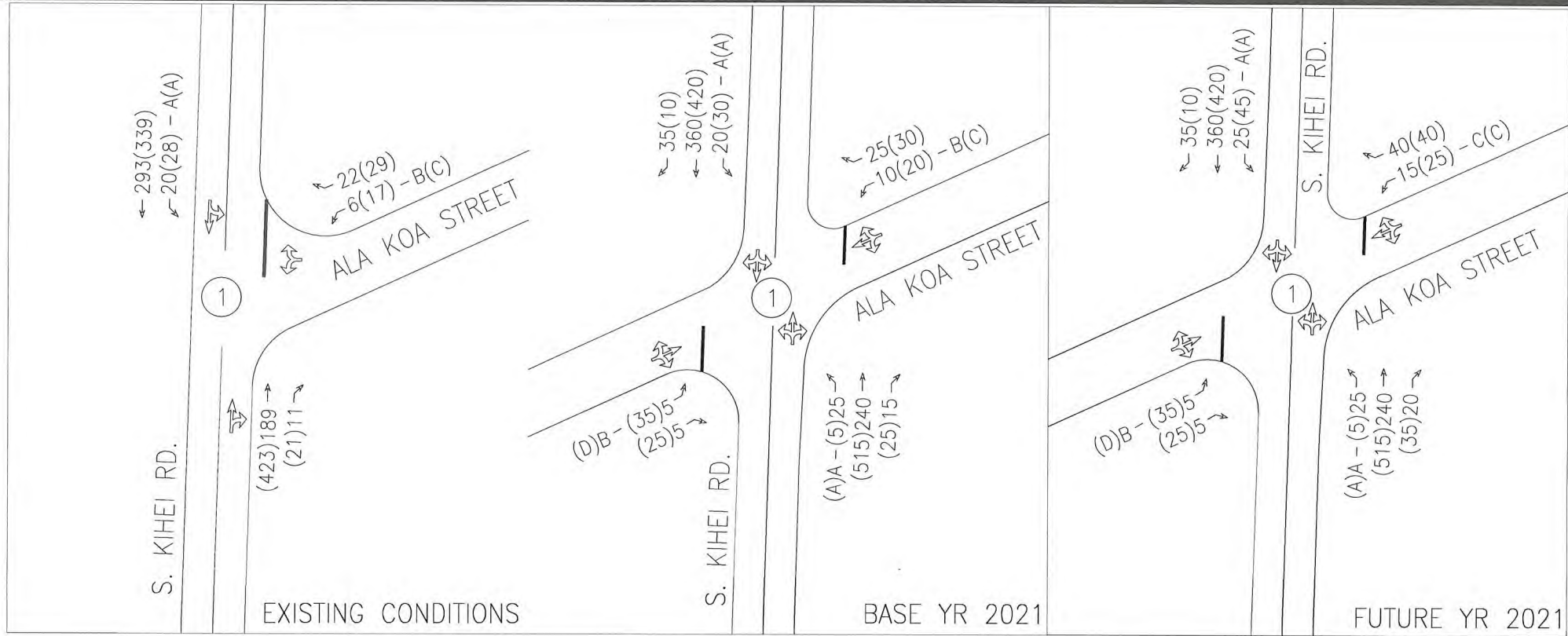
#### Future Year 2021 Conditions

With the 25(30) trips generated by the Project during the AM(PM) peak hours, all movements will continue to operate adequately with LOS D or better. A summary of volumes and LOS for Future Year 2021 can be found in Figure 2.

#### Conclusions

The Project is anticipated to add 25(30) trips to the Study intersection during the AM(PM) peak hours. The addition of the Project traffic is anticipated to have minimal impact to the South Kihei Road/Ala Koa Street intersection, with increases of only 0-3 seconds at each approach. No improvements are recommended as a result of the Project.





Intersection	Existing Conditions					
	AM			PM		
	HCM Delay	v/c Ratio	LOS	HCM Delay	v/c Ratio	LOS
1. South Kihei Rd & Ala Koa Street						
WB LT/RT	11.8	0.06	B	15.1	0.12	C
SB LT	8.3	0.02	A	8.6	0.03	A
Overall	0.9	-	-	1.1	-	-

Intersection	Base Year 2021					
	AM			PM		
	HCM Delay	v/c Ratio	LOS	HCM Delay	v/c Ratio	LOS
1. South Kihei Rd & Ala Koa Street						
NB LT	8.3	0.02	A	8.3	0.01	A
EB LT/TH/RT	14.5	0.03	B	26.3	0.28	D
WB LT/TH/RT	14.7	0.09	B	22.3	0.21	C
SB LT	8.5	0.02	A	9.0	0.04	A
Overall	1.4	-	-	2.7	-	-

Intersection	Future Year 2021					
	AM			PM		
	HCM Delay	v/c Ratio	LOS	HCM Delay	v/c Ratio	LOS
1. South Kihei Rd & Ala Koa Street						
NB LT	8.3	0.02	A	8.3	0.01	A
EB LT/TH/RT	14.9	0.03	B	29.4	0.31	D
WB LT/TH/RT	15.3	0.15	C	24.5	0.28	C
SB LT	8.5	0.03	A	9.1	0.05	A
Overall	1.8	-	-	3.3	-	-

FIGURE 2

EXISTING CONDITIONS, BASE YEAR 2021 AND  
FUTURE YEAR 2021 VOLUME AND LOS SUMMARY



Mr. Howard Kihune Jr.  
Aina Lani Pacific LLC

April 11, 2019

We appreciate the opportunity to have performed the professional traffic engineering services for the Project. Should you require clarification, please call me at (808) 244-8044.

Sincerely,

AUSTIN, TSUTSUMI & ASSOCIATES, INC.

By

TYLER K. FUJIWARA, P.E.  
Chief Transportation Manager - Maui

TF:kf

Enclosures: 1. Traffic Counts

"Y:\2019\19-507 Kihuna Makai\Report\190320 Kihuna Makai TA.docx"

Groups	S KIHEI RD SOUTHBOUND				ALA KOA ST WESTBOUND				S KIHEI RD NORTHBOUND				EASTBOUND				Int.
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Total
06:00	4	26	0	0	1	0	3	12	0	22	0	0	0	0	0	0	68
06:15	2	39	0	0	1	0	0	11	0	18	0	0	0	0	0	0	71
06:30	1	63	0	0	3	0	3	11	0	23	0	0	0	0	0	0	104
06:45	3	57	0	0	2	0	7	12	0	25	5	0	0	0	0	0	111
Total	10	185	0	0	7	0	13	46	0	88	5	0	0	0	0	0	354
07:00	4	51	0	0	3	0	4	27	0	41	2	0	0	0	0	0	132
07:15	4	68	0	0	4	0	5	30	0	29	2	0	0	0	0	0	142
07:30	5	79	0	0	1	0	3	37	0	61	2	0	0	0	0	0	188
07:45	5	72	0	0	1	0	3	43	0	45	5	0	0	0	0	0	174
Total	18	270	0	0	9	0	15	137	0	176	11	0	0	0	0	0	636
08:00	4	60	0	0	2	0	4	30	0	52	3	0	0	0	0	0	155
08:15	6	83	0	0	2	0	6	26	0	50	2	0	0	0	0	0	175
08:30	5	78	0	0	1	0	9	7	0	42	1	0	0	0	0	0	143
08:45	2	89	0	0	2	0	7	11	0	65	3	0	0	0	0	0	179
Total	17	310	0	0	7	0	26	74	0	209	9	0	0	0	0	0	652
Grand Total	45	765	0	0	23	0	54	257	0	473	25	0	0	0	0	0	1642
Apprch %	5.6	94.4	0	0	6.9	0	16.2	76.9	0	95	5	0	0	0	0	0	
Total %	2.7	46.6	0	0	1.4	0	3.3	15.7	0	28.8	1.5	0	0	0	0	0	
Motorcycles	0	8	0	0	0	0	0	0	0	6	0	0	0	0	0	0	14
% Motorcycles	0	1	0	0	0	0	0	0	0	1.3	0	0	0	0	0	0	0.9
Cars	28	505	0	0	17	0	42	0	0	351	16	0	0	0	0	0	959
% Cars	62.2	66	0	0	73.9	0	77.8	0	0	74.2	64	0	0	0	0	0	58.4
Light Goods Vehicles	14	234	0	0	5	0	12	0	0	98	9	0	0	0	0	0	372
% Light Goods Vehicles	31.1	30.6	0	0	21.7	0	22.2	0	0	20.7	36	0	0	0	0	0	22.7
Buses	0	4	0	0	0	0	0	0	0	7	0	0	0	0	0	0	11
% Buses	0	0.5	0	0	0	0	0	0	0	1.5	0	0	0	0	0	0	0.7
Single-Unit Trucks	2	8	0	0	1	0	0	0	0	8	0	0	0	0	0	0	19
% Single-Unit Trucks	4.4	1	0	0	4.3	0	0	0	0	1.7	0	0	0	0	0	0	1.2
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bicycles on Road	1	6	0	0	0	0	0	0	0	3	0	0	0	0	0	0	10
% Bicycles on Road	2.2	0.8	0	0	0	0	0	0	0	0.6	0	0	0	0	0	0	0.6
Bicycles on Crosswalk	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2
% Bicycles on Crosswalk	0	0	0	0	0	0	0	0.8	0	0	0	0	0	0	0	0	0.1
Pedestrians	0	0	0	0	0	0	0	255	0	0	0	0	0	0	0	0	255
% Pedestrians	0	0	0	0	0	0	0	99.2	0	0	0	0	0	0	0	0	15.5



# Austin Tsutsumi & Associates

501 Sumner Street, Suite 521

Honolulu, HI 96817-5031

Phone: 533-3646 Fax: 526-1267

File Name : S Kihei Rd - Ala Koa St

Site Code : 18-510 Kihei Information Center & Admin Bldg

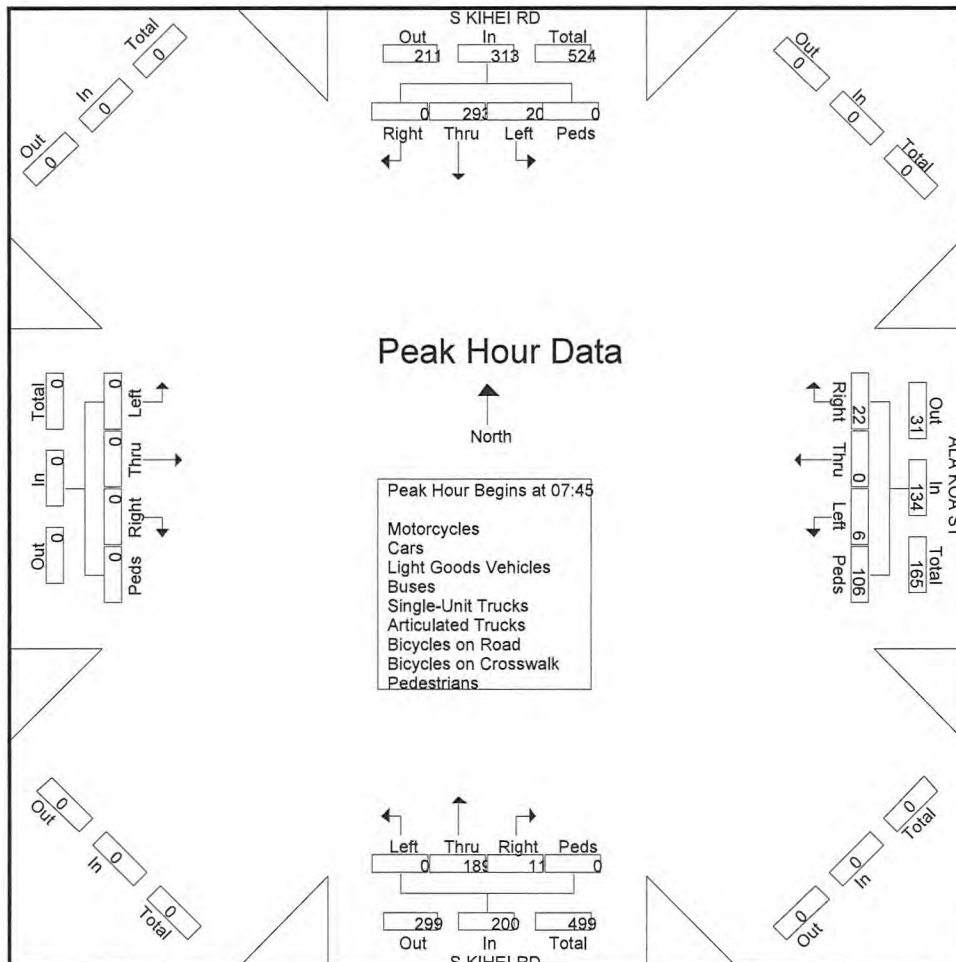
Start Date : 4/4/2018

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Start Time	S KIHEI RD SOUTHBOUND					ALA KOA ST WESTBOUND					S KIHEI RD NORTHBOUND					EASTBOUND					Int. Total
	Left	Thru	Right	Peds	App.	Left	Thru	Right	Peds	App.	Left	Thru	Right	Peds	App.	Left	Thru	Right	Peds	App.	
07:45	5	72	0	0	77	1	0	3	43	47	0	45	5	0	50	0	0	0	0	0	174
08:00	4	60	0	0	64	2	0	4	30	36	0	52	3	0	55	0	0	0	0	0	155
08:15	6	83	0	0	89	2	0	6	26	34	0	50	2	0	52	0	0	0	0	0	175
08:30	5	78	0	0	83	1	0	9	7	17	0	42	1	0	43	0	0	0	0	0	143
Total	20	293	0	0	313	6	0	22	106	134	0	189	11	0	200	0	0	0	0	0	647
% App.	6.4	93.6	0	0		4.5	0	16.4	79.1		0	94.5	5.5	0		0	0	0	0		
PHF	.833	.883	.000	.000	.879	.750	.000	.611	.616	.713	.000	.909	.550	.000	.909	.000	.000	.000	.000	.000	.924

Peak Hour Analysis From 07:45 to 08:30 - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 07:45



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Start Date : 4/4/2018

Page No : 1

Groups Printed- Motorcycles - Cars - Light Goods Vehicles - Buses - Unit Trucks - Articulated Trucks - Bicycles on Road - Bicycles on Crosswalk - Pedestrians

Start Time	S KIHEI RD SOUTHBOUND				ALA KOA ST WESTBOUND				S KIHEI RD NORTHBOUND				EASTBOUND				Int. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	
15:00	8	77	0	0	3	0	5	8	0	95	7	0	0	0	0	0	203
15:15	3	99	0	0	2	0	8	6	0	91	3	0	0	0	0	0	212
15:30	5	96	0	0	2	0	3	6	0	98	5	0	0	0	0	0	215
15:45	7	73	0	0	2	0	4	8	0	110	4	0	0	0	0	0	208
Total	23	345	0	0	9	0	20	28	0	394	19	0	0	0	0	0	838
16:00	6	80	0	2	7	0	10	7	0	89	4	0	0	0	0	0	205
16:15	10	90	0	0	6	0	12	6	0	126	8	0	0	0	0	0	258
16:30	1	70	0	0	3	0	2	7	0	80	3	0	0	0	0	0	166
16:45	6	68	0	0	3	0	8	2	0	100	4	0	0	0	0	0	191
Total	23	308	0	2	19	0	32	22	0	395	19	0	0	0	0	0	820
17:00	8	90	0	0	9	0	6	17	0	83	7	0	0	0	0	0	220
17:15	5	77	0	0	1	0	12	8	0	110	5	0	0	0	0	0	218
17:30	3	80	0	0	7	0	7	6	0	106	4	1	0	0	0	0	214
17:45	6	66	0	0	1	0	5	6	0	78	1	0	0	0	0	0	163
Total	22	313	0	0	18	0	30	37	0	377	17	1	0	0	0	0	815
Grand Total	68	966	0	2	46	0	82	87	0	1166	55	1	0	0	0	0	2473
Apprch %	6.6	93.2	0	0.2	21.4	0	38.1	40.5	0	95.4	4.5	0.1	0	0	0	0	
Total %	2.7	39.1	0	0.1	1.9	0	3.3	3.5	0	47.1	2.2	0	0	0	0	0	
Motorcycles	0	19	0	0	0	0	0	0	0	18	0	0	0	0	0	0	37
% Motorcycles	0	2	0	0	0	0	0	0	0	1.5	0	0	0	0	0	0	1.5
Cars	58	797	0	0	42	0	61	0	0	944	51	0	0	0	0	0	1953
% Cars	85.3	82.5	0	0	91.3	0	74.4	0	0	81	92.7	0	0	0	0	0	79
Light Goods Vehicles	9	126	0	0	4	0	20	0	0	182	3	0	0	0	0	0	344
% Light Goods Vehicles	13.2	13	0	0	8.7	0	24.4	0	0	15.6	5.5	0	0	0	0	0	13.9
Buses	0	7	0	0	0	0	1	0	0	4	1	0	0	0	0	0	13
% Buses	0	0.7	0	0	0	0	1.2	0	0	0.3	1.8	0	0	0	0	0	0.5
Single-Unit Trucks	0	4	0	0	0	0	0	0	0	7	0	0	0	0	0	0	11
% Single-Unit Trucks	0	0.4	0	0	0	0	0	0	0	0.6	0	0	0	0	0	0	0.4
Articulated Trucks	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
% Articulated Trucks	0	0	0	0	0	0	0	0	0	0.2	0	0	0	0	0	0	0.1
Bicycles on Road	1	13	0	0	0	0	0	0	0	9	0	0	0	0	0	0	23
% Bicycles on Road	1.5	1.3	0	0	0	0	0	0	0	0.8	0	0	0	0	0	0	0.9
Bicycles on Crosswalk	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
% Bicycles on Crosswalk	0	0	0	0	0	0	0	1.1	0	0	0	0	0	0	0	0	0
Pedestrians	0	0	0	2	0	0	0	86	0	0	0	1	0	0	0	0	89
% Pedestrians	0	0	0	100	0	0	0	98.9	0	0	0	100	0	0	0	0	3.6

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Start Time	S KIHEI RD SOUTHBOUND					ALA KOA ST WESTBOUND					S KIHEI RD NORTHBOUND					EASTBOUND					Int. Total
	Left	Thru	Right	Peds	App.	Left	Thru	Right	Peds	App.	Left	Thru	Right	Peds	App.	Left	Thru	Right	Peds	App.	
15:30	5	96	0	0	101	2	0	3	6	11	0	98	5	0	103	0	0	0	0	0	215
15:45	7	73	0	0	80	2	0	4	8	14	0	110	4	0	114	0	0	0	0	0	208
16:00	6	80	0	2	88	7	0	10	7	24	0	89	4	0	93	0	0	0	0	0	205
16:15	10	90	0	0	100	6	0	12	6	24	0	126	8	0	134	0	0	0	0	0	258
Total	28	339	0	2	369	17	0	29	27	73	0	423	21	0	444	0	0	0	0	0	886
% App.	7.6	91.9	0	0.5		23.3	0	39.7	37		0	95.3	4.7	0		0	0	0	0		
PHF	.700	.883	.000	.250	.913	.607	.000	.604	.844	.760	.000	.839	.656	.000	.828	.000	.000	.000	.000	.000	.859

Peak Hour Analysis From 15:00 to 17:45 - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 15:30

