## A Study of Tsunami Inundation Levels and Possible Damage Estimates For Ali'i Drive in Kailua-Kona, Hawai'i

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Advisors: Dr Michael L. Parsons Dr. Walter C. Dudley A Study of Tsunami Inundation Levels and Possible Damage Estimates for Ali'i Drive In Kailua-Kona, Hawaii

The eastern side of the Big Island and the Hilo area has suffered several devastating tsunamis in the past. The Kailua-Kona area, however, has not. The possibility of a large-scale tsunami to affect Ali'i Drive is great, and needs to be addressed. The study looked at properties and buildings in the study area to determine an estimate of the damage that could be inflicted by such an event. Estimates over \$45 million were reached for an area that stretched for only a few blocks, from the King Kamehameha Hotel to the Royal Kona Resort.

### Introduction and Background

What will happen when the next tsunami hits the Big Island? This important question has yet to be answered. The last large tsunami on the island of Hawai'i was in 1965 (Walker 1994). And, with history as our teacher, we have learned that the aftermath of a tsunami can be devastating.

The tsunami of 1960 brought waves over 10.7 meters in height on the northeastern coasts of the Big Island of Hawai'i (Loomis 1976). There have been other episodes of potentially damaging and catastrophic tsunami waves. Another example is the 1946 tsunami in Hilo, one of the most powerful and destructive in history. Waves with heights of over 8.1 meters caused more than 150 people to be injured, 150 lives to be lost, and property valued in excess of \$25 million to be destroyed (Shepard et. al 1950). On other shores of the island, waves with heights of up to 12 meters came to shore, destroying anything and everything in their paths (Walker 1994). A tsunami warning siren system was set up on the islands after this tragic event, but even this warning system gave people only minutes to move to safety (Shepard et al 1950). Currently there are buoy systems in place, but there still would be only hours of warning time. With a population ranging from 10-12,000 people just in the Kailua-Kona area, much more time is needed to get everyone evacuated and out of harm's way.

There are many factors to be considered in determining the effects a tsunami will have on the Big Island. These include not only the source of the tsunami, but the submarine topography, the presence or lack of reefs, and the

configurations of the coastline (Shepard et al 1950). The main question to be addressed by this study is how the arrival of a large-scale tsunami will affect areas that have recently become densely populated. An example of one such area is the western side of the island, specifically the Kailua-Kona area.

The last large tsunami that impacted the island of Hawai'i was in 1960. A large Chilean earthquake triggered a tsunami with waves that were reported to be over 2.4 meters in height on the eastern coasts of the island (Loomis 1976). Hilo and the surrounding areas were devastated by the tsunami, but the western side of the island remained largely unaffected. In fact, the majority of tsunamis that have affected the island of Hawai'i have not adversely impacted the western side, largely due to the source-earthquake locations that set off the tsunamis. Earthquakes in the Aleutian Islands caused the tsunamis of 1946 and 1957, with the largest wave heights recorded in Hilo at 8.1 meters and 3.9 meters in height, respectively. During these tsunamis, the wave heights were only recorded at 3.1 and 1.5 meters, respectively, on the Kona coasts (Walker 1994).

Other tsunamis that have caused significant damage to the island have originated in Kamchatka, Russia (1952) and Chile (1960). Both of these source areas have caused much larger waves and, therefore, much more damage to the Hilo side of the island (Walker 1994). This does not mean that the potential for a serious tsunami on the western side of the island does not exist. The risk is very real. An earthquake in Japan, parts of the Aleutian Islands, or even locally, could generate a tsunami that would devastate the western side of the island (Walker 1994).

The purpose of this research was to determine what the effects of a large tsunami on the west side of the Big Island would be. The goal of the research was to determine how homes, businesses, hotels, and other buildings would be affected by a tsunami. The area of study was Ali'i Drive in Kailua-Kona, specifically the few blocks between the King Kamehameha hotel and the Royal Kona Resort. This area of study was ideal because it has experienced a growth boom since the tsunami of 1960. Homes, hotels and shops now line both sides of the street. The effects on Ali'i Drive have not as yet been explored. When a tsunami occurs, it will affect not only thousands of Big Island residents, but visitors to the island as well.

Other valuable information to the project was to examine evacuation plans for the hotels along Ali'i Drive. One of the largest problems the island would be faced with if there were a tsunami is how to evacuate thousands of people out of harm's way to safety in a relatively short amount of time.

In speaking with Craig Duncan, the director of Sales at the Royal Kona resort, he said that all of the hotels are required to have specific and detailed evacuation plans in the event of a natural disaster like a hurricane, earthquake or tsunami. While he couldn't discuss the plans of other hotels specifically, he did mention that all of the resorts' evacuation plans for their guests and staff are very similar to that of the Royal Kona Resort. At the Royal Kona, the head of each department has very specific responsibilities for shutting down the hotel. When the warning is issued, there are steps that each person must follow to shut down and secure the hotel, as well as lead the guests to safety. The resort also has a

contract with the Robert's of Hawaii Tour Company to provide buses to move guests and staff uphill to Kealakehe Elementary School, the designated emergency shelter for the Kailua-Kona area. In practice drills, the buses arrive at the hotel within 10-20 minutes. When the plan is carried out under typical conditions, it takes them slightly less than an hour to evacuate the entire resort. Nevertheless, being prepared with an evacuation plan does not necessarily mean that it will be enough.

The general hypothesis of this project is that the Big Island, specifically the west side of the island, as well as Hawai'i as a whole, is not sufficiently prepared for the next tsunami. Tsunamis are a constant threat in Hawai'i, with twenty-two occurring since 1812 that have had run-up heights of 1 meter or more (Walker 1994). These tsunamis have had source earthquakes in South America, the Aleutian Islands, Japan, Tonga, California and Kamchatka, Russia, among others (Walker 1994). The question is not if, but when will a tsunami come. The areas that will be the most affected need to become more aware and informed of the threat and, in turn, learn how to be better prepared. This research, upon completion, will send a wake-up call to the residents and guests of Hawai'i. Ideas as to how to be better prepared for an event that could happen at any moment, without significant warning time, will be made in this study. It is also hoped that, when the danger becomes more concrete in the minds of the island's residents, there will be more push for new buildings to be built to tsunami building standards, and more existing buildings to become updated.

#### **Materials and Methods**

The steps for researching this project were relatively simple. Previous tsunami inundation levels were examined, and the areas that would have the greatest susceptibility were determined (Loomis 1976). The location of Ali'i Drive in Kailua-Kona was chosen because of its proximity to the water, and because of the large-scale development it has recently undergone. With Loomis' 1976 study, *Tsunami Wave Run-up Heights in Hawai'i*, and a topographical map of the area, it was determined that the elevation of the study site was well within the known inundation zone.

After the specific study site was determined, a walk-through survey of the street was conducted addresses were written down to identify the buildings on the study section of Ali'i Drive. Those addresses were then confirmed by using maps and records from the Hilo Real Property Tax Office, a division of the county taxation department. Maps from the tax office were used to identify the zones, sections, plats and parcels that comprised the study site (Appendix 1). Once the buildings and properties were identified, their values were determined using the most recent tax records available, for the year 2000. The land and building values for each location were then used as a key piece of information to arrive at a damage estimate.

One of the most important steps in this research was to make a reasonable estimate of the potential damage to the study area. To do this, both property values and building values were determined using records from the tax

office. Another important piece of information was to superficially observe building structures and try to determine which buildings, if any, utilize established tsunami building codes. Finally, a general estimate of the damage that a potential tsunami could inflict was determined.

A general estimate must be used for two reasons, 1) the land will largely remain intact after the tsunami, with most damage to it being minimal, and 2) the damage to most buildings in the study site will not suffer total destruction. There will be many areas and parts of buildings that will be damaged, but not completely destroyed, so this must be taken into account when estimating the total cost. It must be noted that different types of structures, for example, wooden buildings versus those made of cement, will withstand the pressures of a tsunami differently, which will also affect the total damage.

Materials included tsunami building codes, building and tax records from the tax office and topographical maps of the Big Island, including the Kailua and Keahole Point areas.

#### Results

The study area of Ali'i Drive between the King Kamehameha Hotel and the Royal Kona Resort was analyzed for both the mauka (mountain) and makai (ocean) sides of the street. The entire study site is found in zone 7, section 5 of the tax maps that were used. The makai side of the study area encompassed three different plats, consisting of seventeen parcels. The mauka side of the street consisted of four plats and a total of thirty parcels. Several different

damage estimates were reached for the study site. Both land and building totals were used to determine a total cost, as well as determining a building only total (Table 1).

TABLE 1—Damage estimates for Ali'l Drive

	Mauka side of street	Makai side of street	Mauka and makai totals combined
Total estimated cost	\$50,759,200	\$27,094,400	\$77,753,600
Building only total	\$32,675,000	\$15,305,100	\$47,980,100

Both the land and building totals were used to estimate potential overall damage, but the more relevant of the two to look at for this study is the building values, which when combined for both sides of the street, total close to \$48 million. If there were to be a large tsunami, the buildings would be the most impacted and would suffer the largest amount of damage. The land, in contrast, would probably experience little or no damage and would remain largely intact.

Therefore, the bulk of the damage estimate should come from this building value total.

#### **Discussion**

The damage estimate that was reached for Ali'i Drive based on only the assessment of the buildings is near \$48 million. Of course, even in the event of a catastrophic tsunami, the damage would not be total. Many structures would

remain standing, with only some areas sustaining damage. However, without the advise of a professional appraiser, it is difficult to determine what the actual damage inflicted would be. Another reason that it is difficult to reach more specific damage estimates is that the most important factor in determining the destruction that would occur is the size of the tsunami. Until this event actually happens, only hypothetical scenarios can be examined. There are many factors in the event of a real tsunami, which are hard to account for until they actually happen. Still, these numbers are important to look at because they help to give a general idea of what is really at stake.

In 1980, the Dames and Moore consulting company compiled a set of suggested structural guidelines for residential buildings in tsunami-prone areas of Hawaii. Factors including Buoyant force, Surge force, Drag, Impact and Hydrostatic forces are all to be considered during construction of elevated structures in these areas. The tsunami building code amendments state that allowable stresses for materials used in construction should be similar to those in established earthquake codes. It also states that the main building must be "adequately connected to the support structures" (Dames and Moore 1980). Each of the buildings in the study was observed to see if they seemed to meet these guidelines. The suggested internal structural considerations apply to residential buildings in areas like Ali'i Drive. The building code does not discuss design guidelines for commercial buildings, furthermore, it is not a set of rules, but merely suggestions that many builders can chose whether or not to abide.

This means that it is also important to further examine the internal structures of the buildings within the study site. Without this information, it is hard to say which buildings would sustain the greatest amount of damage.

According to the Dames & Moore (1980) tsunami building codes for residential areas, a building in a tsunami prone area should have the first floor of living area above the potential wave height. This is a requirement that, based on previous observations, most of the buildings within the study site do not meet. However, building plans which were not made available for this study would have to be obtained to determine whether or not the internal construction standards set by the tsunami building codes are met.

This study also only looked at distant tsunamis and not local tsunamis. In the case of a local tsunami, there is significantly less warning time, if there is any at all. Meaning that there would be little or no time to get residents and visitors to safety. This is an area of tsunami preparedness that needs to be examined further. There have been 6 documented local tsunamis on the Big Island, and three of them have had runups of 3 meters or more (Walker 1994). It is thought that the cause of these local tsunamis may have been submarine landslides of volcanic debris. The travel time for a local tsunami to reach the Kailua-Kona coast is 5-10 minutes (Walker 1994), hardly enough time to warn anyone, let alone move anyone to safety. And, unfortunately, as the Kilauea volcano continues to flow, the unstable volcanic debris that is this source of these local tsunamis will continue to build up and present problems. In situations such as

these, there is little to do to prepare, which means that such an event will usually spell disaster.

#### Conclusion

In conclusion, there is still much to be studied in the area of tsunami preparedness. The island of Hawai'i as a whole, but especially the Kailua-Kona coast, is not sufficiently prepared for the next tsunami that will almost surely come to the Big Island. Unfortunately, there does not seem to be much more that can be done to increase the island's preparedness. Building structures that meet tsunami building codes and better informing island residents and visitors of the danger are two important steps that can be taken in order to be at least be somewhat better prepared. More important than the \$48 million dollars that is at stake for a study site that is only a few blocks long is the potential human loss. Homes, hotels and businesses can be rebuilt and replaced, but human life cannot. This study area of Ali'i Drive is one of the most concentrated populous areas of our island, with any number of tourists and residents present at any time.

Based on the research completed to this point, the danger and potential for loss is much greater than most people realize. And this island is not, as a whole, prepared for what almost certainly will have to be faced in the future.

More people need to be educated, because awareness can lead to better preparedness for the residents and guests of the island of Hawai'i, and that is the best defense that can be hoped for.

## APPENDIX ONE

## Makai Side Of Street--Fee Owners/Lessees and Values MAKAI SIDE OF STREET

MAKAI SIDE OF STREET			
ZONE-SECTION-PLAT-PARCEL 7-05-007-020	FEE OWNER/LESSEE state of Hawai'i (F) daughters of Hawai'i (L)	VALUES Building Land Total	268500 978800 1247300
7-05-007-021	Kailua Kona Village dev grp (F)	B. L. T.	1912200 3551900 5464100
7-05-008-009	Watumull Properties Corp (F)	B. L. T.	2705100 842300 3547400
7-05-008-010	state of Hawai'i (F)	B. · L. T.	249900 1995100 2245000
7-05-008-019	Watumull Properties Corp. (F)	B. L. T.	0 7200 7200
7-05-009-007	Slayter Craig K. Trustee (F) Slayter Clark A. Trustee (F) Pleasant Travel Service (L)	B. L. T.	0 1902700 1902700
7-05-009-013	Dye, Tessa Gay (F) Pleasant Travel Service (L)	B. L. T.	5000000 302200 5302200
7-05-009-014	Bishop Trust Estate (F) Olu Kai, Ltd. (L)	B. L. T.	134100 245700 379800
7-05-009-016	Olu Kai, Ltd. (F))	B. L. T.	35300 106400 141700
7-05-009-019	Dye, Tessa Gay (F) Hilton-Burns Kona Partnership (L	B. L) L. T.	0 141100 141100
7-05-009-026	state of Hawai'i (F)	B. L. T.	0 347400 347400

7-05-009-037	county of Hawai'i (F)	B. L. T.	0 100 100
7-05-009-042	Kona Seas, Ltd. Partnership (F) Williams, Robert T. Jr (F)	B. L. T.	5000000 629000 5629000
7-05-009-046	Florence V. Hind Hilton TR (F) Theone V Hilton Prop TR (F) Pleasant Travel Service (L)	B. L. T.	0 245600 245600
7-05-009-063	Bishop Trüst Estate (F) Pleasant Travel Service (L)	B. L. T.	0 487900 487900
7-05-009-064	state of Hawai'i (F) Von Platen Luder, Hugo (L) Von Platen Luder, Shirley (L)	B. L. T.	0 5800 5800
7-05-009-065	Lrg. Real Estate	B. L. T.	0 100 100

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# Makai Side Of Street--Total Values (land and building) King Kamehameha--Royal Kona Resort

## Makai (ocean) side of street properties:

zone-section-plat-parcel		total value (land and building)
7-05-007-020	Huli Hee Palace	1247300
7-05-007-021	Huli Hee Palace	5464100
7-05-008-010	Kona Inn Shopping	2245000
7-05-008-009	Kona Inn Shopping	3547400
7-05-008-019		7200
7-05-009-065	•20	100
7-05-009-026		347400
7-05-009-016	Waterfront Row	141700
7-05-009-037		100
7-05-009-014		379800
7-05-009-064		5800 -
7-05-009-019		141100
7-05-009-063		487900
7-05-009-013		5302200
7-05-009-046		245600
7-05-009-007	Royal Kona Resort	1902700
7-05-009-042	Royal Kona Resort	5629000
	total for makai side	27,094,400
		• •

Makai Side Of Street--Building Values

Makai side of street		
zone-section-plat-parcel	•	
	building value	
7-05-007-020	268500	
7-05-007-021	1912200	
7-05-008-010	249900	
7-05-008-009	2705100	
7-05-008-019	0	
7-05-009-065	0	
7-05-009-026	0	
7-05-009-016	35300	• * *
7-05-009-037	0	
7-05-009-014	134100	
7-05-009-064	0	
7-05-009-019	0	
7-05-009-063	0	
7-05-009-013	5000000	
7-05-009-046	0	
7-05-009-007	0	
7-05-009-042	5000000	
total	15,305,100	

## Mauka Side Of Street--Fee Owners/Lessees and Values

MAUKA SIDE OF STREET	ood and value		
ZONE-SECTION-PLAT-PARCEL 7-05-006-020	FEE OWNER/LESSEE HKK Inc (F)	VALUES Building Land Total	16726500 4260700 20987200
7-05-006-017	Anamizu, Cynthia N. (F) Anamizu, Carole (F) Ho, Louise S. (F) Abe, Jayne H. (F) Anamizu, Clyde T. (F) Borgerding, Fevondalei Y. (F) Kona Seaside Inc. (L)	B. L. T.	459100 511200 970300
7-05-006-025	Sarah L. Akona Partnership (F) Kona Tei Inc (L)	B. L. T	589600 386000 975600
7-05-006-019	Watt, Helen E. Trust (F)	B. L. T.	134100 278900 413000
7-05-006-014	Lee, Rose Y. (F) Lee, Earl V. (F) Booth, Edwina N (F) Kam, Kenneth N. (F) Kuwada, Jeanette N. (F) Kam, Thomas N. (F) Ryl Corp. (L)	B. L. T.	91400 266500 357900
7-05-006-013	Yoneji, Donald M./Vivian K. (F) Foo, Betsy F. (F) Foo, Hardy A. (F) Kimi, Richard W. (L) Kimi, Kenneth P. (L) Kimi, Matilda W. (L) Anderson, Mildred H. (L) Naleimaile, Matilda E. (L) Kimi, William J. Jr. (L)	B. L. T.	735300 510900 1246200
7-05-006-012	Burgess, Inc (F)	B. L. T.	0 169800 169800
	Burgess, Inc. (F)	B. L. T.	0 169800 169800

Burgess, Inc (F)

B.

0

	L.	169800
	T.	169800
Burgess, Inc (F)	B.	0
	L.	169800
	T.	169800
Burgess, Inc (F)	B.	0
<b>G</b> , ( ,	L.	169800
	T.	169800
Burgess, Inc (F)	В.	0
3-1-1, (. )	L.	169800
	T.	169800
Burgess, Inc (F)	В.	0
burgess, me (i )	L.	169800
(seven different addressees)	C.	109800
Burgess, Amelia (F)	В.	253100
Burgess, Manuel (F)	L.	178500
Burgess, Margaret F. (F)	T.	431600
William S K Burgess Est. (F)		431000
Kalikookalani B. Chun (F)		
Charlotte Hao Trust (F)		
` ,		
Burgess, Inc (L)	Б	050400
Burgess, Amelia (F)	В.	253100
Burgess, Manuel (F)	L.	178500
Burgess, Margaret F. (F)	T.	431600
William S K Burgess Est. (F)		
Kalikookalani B. Chun (F)		
Charlotte Hao Trust (F)		
Burgess, Inc (L)	_	
Burgess, Amelia (F)	B.	253100
Burgess, Manuel (F)	L.	178500
Burgess, Margaret F. (F)	T.	431600
William S K Burgess Est. (F)		
Kalikookalani B. Chun (F)		
Charlotte Hao Trust (F)		
Burgess, Inc (L)		
Burgess, Amelia (F)	B.	253100
Burgess, Manuel (F)	L.	178500
Burgess, Margaret F. (F)	T.	431600
William S K Burgess Est. (F)		
Kalikookalani B. Chun (F)		
Charlotte Hao Trust (F)		
Burgess, Inc (L)		
Burgess, Amelia (F)	B.	253100
Burgess, Manuel (F)	L.	178500
Burgess, Margaret F. (F)	T.	431600
William S K Burgess Est. (F)		
Kalikookalani B. Chun (F)		
Charlotte Hao Trust (F)		

7-05-006-011

	Burgess, Inc (L) Burgess, Amelia (F) Burgess, Manuel (F) Burgess, Margaret F. (F) William S K Burgess Est. (F) Kalikookalani B. Chun (F) Charlotte Hao Trust (F)	B. L. T.	253100 178500 431600
	Burgess, Inc (L) Burgess, Amelia (F) Burgess, Manuel (F) Burgess, Margaret F. (F) William S K Burgess Est. (F) Kalikookalani B. Chun (F) Charlotte Hao Trust (F) Burgess, Inc (L)	B. L. T.	253100 178500 431600
	Burgess, Amelia (F) Burgess, Manuel (F) Burgess, Margaret F. (F) William S K Burgess Est. (F) Kalikookalani B. Chun (F) Charlotte Hao Trust (F) Burgess, Inc (L) (eight different addressees)	B. L. T.	253100 178500 431600
7-05-006-010	Edmund S P/B Wong Trust (F)	B. L. T.	185700 204900 390600
7-05-006-009	Akona, Sarah L. (F) Kuwada, Ward K./Emma M. (L)	B. L. T.	175700 233700 409400
7-05-007-019	Edmund Wong Trust (F) Barbara A C Wong Trust (F) Nakea, Joseph K. (L)	B. L. T.	312800 216900 529700
7-05-007-018	Mokuaikaua Church	B. L. T.	164700 599800 764500
7-05-007-016	NF Inc (F) NF Inc (L)	B. L. T.	457000 157600 614600
7-05-007-023	NF Inc (F)	B. L. T.	739700 259700 999400
7-05-007-005	Crellin, Louise S. (F)	В.	584400

	Von Platen Luder, Hugo (F) Von Platen Luder, Shirley (F) NF Inc (L)	L. T.	259700 844100
7-05-007-066	State of Hawai'i (F)	B. L. T.	0 100 100
7-05-007-058	State of Hawai'i (F)	B. L. T.	0 100 100
7-05-007-004	Oka and Oka Hawaii	B. L. T.	2002000 1523000 3525000
7-05-008-011	Deseret Title Holding Corp (F) Watumull Properties Corp (L)	B. L. T.	0 248300 248300
7-05-008-022		B. L. T.	
7-05-008-006	Roman Catholic Church (F)	B. L. T.	47300 2369700 2417000
7-05-008-005	Kealaokamalamalama Church (F	) B. L. T.	354600 588700 943300
7-05-008-003 (145 addressees)	1 Ichthus Land Company (F) Ashikawa, Gilbert M. (L)	B. L. T.	25300 5800 31100
	2 Ichthus Land Company (F) Diliberto, Faye (NMI) (L)	B. L. T.	25300 5800 31100
	3 Ichthus Land Company (F) Maynard, Donald J.	B. L. T.	25300 5800 31100
	4 Ichthus Land Company (F) Giltner, Rollin V. Jr (L) Giltner, Antoinette R. (L)	B. L. T.	25300 5800 31100
	5 Ichthus Land Company (F) Hawai'l Resort Mgt Inc (L) 6 Ichthus Land Company (F)	B. L. T. B.	41000 10500 51500 19400
	o ionino Lana Company (i )		10700

Metcalf, James A./Karen (L)	L. T.	1700 21100
7 Ichthus Land Company (F)	B.	25300
Machado, Louis R./Loudrie (L)	L.	5800
,	Ť.	31100
8 Ichthus Land Compnay (F)	B.	25300
Titov, Konstantin V./Diane L. (L)	L.	5800
2. (2)	T.	31100
9 Ichthus Land Company (F)	B.	25300
Puccioni, Jennifer L. (L)	L.	5800
(-)	T.	31100
10 Ichthus Land Company (F)	B.	26100
Hotel Corp. of the Pacific	L.	5800
• *	T.	31900
11 Ichthus Land Company (F)	B.	29100
Giltner, Rollin V. Jr (L)	L.	5800
Giltner, Antoinette R. (L)	T.	34900
12 Ichthus Land Company (F)	B.	29100
Giltner, Rollin V. Jr (L)	L	5800
Giltner, Antoinette R. (L)	T.	34900
13 Ichthus Land Company (F)	B.	29100
Jarvis, Ralph E. (L)	L.	5800
, , ,	T.	34900
14 Ichthus Land Company (F)	B.	29100
Stephens, Darrell A. (L)	L.	5800
Stephens, Kathleen R. (L)	T.	34900
15 Ichthus Land Company (F)	B.	29100
Bockhorn, Steven C. (L)	L.	5800
. , ,	T.	34900
16 Icthus Land Company (F)	B.	29100
Cabral, Melvin F. (L)	L.	5800
• •	T.	34900
17 Ichthus Land Company (F)	B.	29100
Consolidated Kona, Inc (L)	L.	5800
	T.	34900
18 Ichthus Land Company (F)	B.	41700
Dobson, Ralph W. (L)	L.	9300
	T.	51000
19 Ichthus Land Company (F)	B.	29100
Kona Ten (a partnership) (L)	L.	5800
	T.	34900
20 Ichthus Land Company (F)	B.	29100
Metcalf, Karen A. (L)	L.	5800
	T.	34900
21 Ichthus Land Company (F)	B.	29100
Baseman, Grant R./Linda V. (L)	L.	5800
	T.	34900
22 Ichthus Land Company (F)	B.	29100
Baseman, Grant R./Linda V. (L)	L.	5800

	T.	34900
23 Ichthus Land Company (F)	B.	29100
Baseman, Grant R./Linda V. (L)	L.	5800
	T.	34900
24 Ichthus Land Company (F)	B.	29100
Fujitani, Bert H./Karen N.(L)	L.	5800
Okano, Glen K. (L)	T.	34900
25 Ichthus Land Company (F)	B.	29400
Bailey, Shirley A. (L)	L.	5800
- ao,, oo, / (=)	T.	35200
26 Ichthus Land Company (F)	н. В.	29400
Coskie, Jay T. (L)	L.	5800
Fisher, Phyllis (L)	T.	35200
27 Ichthus Land Company (F)	В.	41900
Consolidated Kona Inc (L)	L.	9300
Consolidated Rolla IIIC (E)	T.	51200
29 Johthus Land Company (E)		
28 Ichthus Land Company (F)	В.	29400
Hendrickson, Mercedes K. (L)	L.	5800
00 lebthered and 0	T.:	35200
29 Ichthus Land Company (F)	В.	25300
Honour, Clinton W. (L)	L.	5800
Honour, Jennifer A. (L)	T.	35200
Toule, Judith A. (L)		
Toulze, John A. (L)		
30 Ichthus Land Company (F)	B.	25300
Patrick, Tracy M. III/Cathy A. (L)		5800
Maichen, Jeffrey W./Marianne (L	_) T.	31100
Coulson, Thomas W. (L)		
Ling, Patricia M. (L)		
31 Ichthus Land Company (F)	B.	25300
Green, Norman B. (L)	L.	5800
	T.	31100
32 Ichthus Land Company (F)	B.	25300
Green, Norman B. (L)	L.	5800
	T.	31100
33 Ichthus Land Company (F)	B.	25300
Froncek, Matthew W. (L)	L.	5800
	T.	31100
34 Ichthus Land Company (F)	B.	25300
Cronauer, Heinz R. (L)	L.	5800
Cronauer, Michel W. (L)	T.	31100
35 Ichthus Land Company (F)	B.	25300
Halvorson, Avis W. (L)	L.	5800
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	T.	31100
36 Ichthus Land Company (F)	В.	25300
Halvorson, Avis W. (L)	L.	5800
	T.	31100
37 Ichthus Land Company (F)	В.	29100
Wallway, Douglas G./Cheri A (L)		5800
Trainfray, Douglas O. Onoll A (L)	,	5555

Norton, Timothy W./Kathryn (L)	T.	34900
38 Ichthus Land Company (F)	B.	29100
Aoyama, Yasutaka B. (L)	L.	5800
, ,	T.	34900
39 Ichthus Land Company (F)	B.	29100
Paulick, Gundela (L)	L.	5800
,	T.	34900
40 Ichthus Land Company (F)	B.	29100
Spalding, Michael J. (L)	L.	5800
,	T.	34900
41 Ichthus Land Company (F)	B.	29100
Strahan, Wade C. (L)	L.	5800
Strahan, Sharon K. (L)	T.	34900
42 Ichthus Land Company (F)	B.	29100
Nawrocki, Daniel F./Dorothy (L)	L.	5800
, , , , , , , , , , , , , , , , , , , ,	T.	34900
43 Ichthus Land Company (F)	B.	29100
Bennett, Murray, E. (L)	L.	5800
(	T.	34900
44 Ichthus Land Company (F)	B.	29100
Bennett, Murray, E. (L)	L.	5800
,, <u>,</u> . ( <u>_</u> ,	T.	34900
45 Ichthus Land Company (F)	В.	29400
Brodbeck, Linda L. (L)	L.	5800
, , , , , , , , , , , , , , , , , , , ,	T.	35200
46 Ichthus Land Company (F)	B.	29400
Lizza, Karl P. (L)	L.	5800
, , ,	T.	35200
47 Ichthus Land Company (F)	B.	29400
McKowen, Patricia A. Trust (L)	L.	5800
,	T.	35200
48 Ichthus Land Company (F)	B.	29400
Suttle, Rodney, D./Beryl H. (L)	L.	5800
	T.	35200
49 Ichthus Land Company (F)	B.	29400
Crosswhite, Bert (NMN) (L)	L.	5800
Crosswhite, Virginia I. (L)	T.	35200
50 Ichthus Land Company (F)	B.	29400
Anthony, Edward/Marcella (L)	L.	5800
	T.	29400
51 Ichthus Land Company (F)	B.	29400
Juniper, Jay M. (L)	L.	5800
Juniper, Melinda B. (L)	T.	35200
Brent, John T. Jr. (L)		
52 Ichthus Land Company (F)	B.	29400
Wallway, Douglas G./Cheri (L)	L.	5800
Norton, Timothy W./Kathryn (L)	T.	35200
53 Ichthus Land Company (F)	B.	25300
Higashida, Nathan S. (L)	L.	5800

		T.	31100
	54 Ichthus Land Company (F)	B.	25300
•	Templar, Brian (L)	L.	5800
		T.	31100
	55 Ichthus Land Company (F)	B.	25300
	Hendrickson, Harland (L)	L.	5800
		T.	31100
	56 Ichthus Land Company (F)	B.	25300
	Hall, Dean G. (L)	L.	5800
		T.	31100
	57 Ichthus Land Company (F)	B.	25300
	Tremaine, John K. Jr/Magdalena	L.	5800
	(L)	T.	31100
	58 Ichthus Land Company (F)	B.	25300
	Consolidated Kona, Inc. (L)	L.	5800
		T.	31100
	59 Ichthus Land Company (F)	B.	25300
	Prinslow, Michael W. (L)	L.	5800
	Prinslow, Janis G. (L)	T. `	31100
	Everton, Velma J. (L)		
	60 Ichthus Land Company (F)	B.	29100
	King, Catherine Trust (L)	L.	5800
	<b>.</b>	T.	34900
	61 Ichthus Land Company (F)	B.	29100
	Cheung, Francis/Ruth (L)	L.	5800
	Staniszkis, Jan J./Kazuko Y. (L)	T.	34900
	Lum, Joseph Kwai Tim (L)		
	62 Ichthus Land Company (F)	B.	29100
	NG Allen Y. P. (L)	L.	5800
	` ,	T.	34900
	63 Ichthus Land Company (F)	B.	29100
	Matlewsky, Ronald R. (L)	L.	5800
	Matlewsky, Darlene A. (L)	T.	34900
	64 Ichthus Land Company (F)	B.	29100
	Sahara Hawn Ltd Partnership (L)	L.	5800
		T.	34900
	65 Ichthus Land Company (F)	B.	29100
	Rocheleau, Clark C. (L)	L.	5800
	Lorence, Carol A.(L)	T.	34900
	66 Ichthus Land Company (F)	B.	29100
	Metcalf, Karen A. (L)	L.	5800
	, ,	T.	34900
	67 Ichthus Land Company (F)	B.	29400
	Moody, Joseph Dean/Linda (L)	L.	5800
	, ,	T.	35200
	68 Ichthus Land Company (F)	B.	29400
	Bailey, Shirley A. (L)	L.	5800
		T.	35200
	69 Ichthus Land Company (F)	B.	29400

	Carlston, Daniel H. (L)	L.	5800
	Carlston, Christine (L)	T.	35200
. 70	Ichthus Land Company (F)	B.	29400
	Scherer, Ernest F. Jr (L)	L.	5800
	(=)	T.	35200
71	Ichthus Land Company (F)	B.	29400
	James, Alan W. (L)	L.	5800
	(2)	T.	35200
72	Ichthus Land Company (F)	В.	29400
	Delaunay, Daniel E./Jacque (L)	L.	5800
	(-)	T.	35200
73	Ichthus Land Company (F)	B.	29400
	Barnard, Timothy K. (L)	L.	5800
	Giltner, Heather P. (L)	T.	35200
74	Ichthus Land Company (F)	В.	25300
. ,	Plantinum Group LLC (L)	L.	5800
		T.	31100
75	Ichthus Land Company (F)	В.	25300
, 0	Callju, Donald R. (L)	L.*	5800
	DeLeon-Callju, Roseanne (L)	Τ.	31100
76	Ichthus Land Company (F)	В.	25300
, ,	Spalding, Michael J. (L)	L.	5800
	Opalaring, Michael J. (E)	T.	31100
77	Ichthus Land Company (F)	В.	25300
,,	Lorenz, Margaret R. (L)	L.	5800
	Eoronz, Margarot N. (E)	T.	31100
78	Ichthus Land Company (F)	В.	29100
, 0	Davis-Nave Angeline (L)	L.	5800
	David Hava / trigotime (E)	T.	34900
79	Ichthus Land Company (F)	В.	29100
	Clark, Lisa R. (L)	L.	5800
	orani, Liou II. (L)	T.	34900
80	Ichthus Land Company (F)	В.	29100
	Yamada, Hideki (L)	L.	5800
		T.	34900
81	Ichthus Land Company (F)	В.	29100
•	Schmidt, Raymond A. (L)	L.	5800
	2	T.	34900
82	Ichthus Land Company (F)	В.	29400
	Metcalf, Karen A. (L)	L.	5800
	(2)	T.	35200
83	Ichthus Land Company (F)	B.	29400
	Augustine, John A. (L)	L.	5800
	Augustine, Eleanor A. (L)	T.	35200
84	Ichthus Land Company (F)	В.	29400
	Balicki, William J. (L)	L.	5800
	Balicki, Patricia A. (L)	T.	35200
85	Ichthus Land Company (F)	В.	29400
	Gall, Robert A. (L)	L.	5800

		Durbin Family Trust (L)	T.	35200
		Cantrell, Tonia M. (L)	_	
•	86	Ichthus Land Company (F)	B.	25300
		Schroder, William P. (L)	L.	5800
			T.	31100
	87	Ichthus Land Company (F)	B.	25300
		Colley, Judith A. (L)	L.	5800
			T.	31100
	88	Ichthus Land Company (F)	B.	25300
		Tatibouet, Andre S. Trust (L)	L.	5800
			T.	31100
	89	Ichthus Land Company (F)	B.	25300
		Eccleston, Marc (L)	L.	5800
		Luu, Nancy (L)	T.	31100
	90	Ichthus Land Company (F)	B.	25300
		Haught, Robert C. II (L)	L.	5800
			T.	31100
	91	Ichthus Land Company (F)	B.	25300
		Jones, Kenneth L./Berta R. (L)	L.	5800
		Morgan, William H./Donna R. (L)	Т.	31100
	92	Ichthus Land Company (F)	B.	25300
		Stumpe, Mark A. (L)	L.	5800
		, , , , , ,	Т.	31100
	93	Ichthus Land Company (F)	B.	25300
		Hall Dean G. Tr. (L)	L.	5800
		( )	T.	31100
	94	Ichthus Land Company (F)	B.	29100
		Lee, Mary L. Tr. (L)	L.	5800
		, , , , , , , , , , , , , , , , , , , ,	Τ.	34900
	95	Ichthus Land Company (F)	В.	29100
		Yamashiro, Charlotte M. (L)	L.	5800
		Nishimura, Glen (L)	T.	34900
	96	Ichthus Land Company (F)	В.	29100
	•	Schroder, William P. (L)	L.	5800
		oomodor, rrandiri i (E)	T.	34900
	97	Ichthus Land Company (F)	В.	29100
	01	Cicero, Joseph Salvatore (L)	L.	5800
		Exner, Theodore/Lore (L)	T.	34900
	QΩ	Ichthus Land Company (F)	н. В.	29100
	90	Mayo, Ivan B./Marilynn E. (L)	Đ. L.	
		wayo, ivan b./waniyiii E. (L)	L. T.	5800
	00	Johthus Land Company (E)		34900
		Ichthus Land Company (F)	В.	29100
		Bach, Faith (L)	L.	5800
4	00	labthus Land Comment (E)	T.	34900
		Ichthus Land Company (F)	В.	29100
		Travis, John W./Virginia K. (L)	L.	5800
	04	Inhahara I and On (7)	T.	34900
1		Ichthus Land Company (F)	В.	29100
		Fox, Donna S. (L)	L.	5800

	Hunt, Kerby L. (L)	T.	34900
102	Ichthus Land Company (F)	В.	29400
	Dean, John Reay/Bonnie L. (L)	L.	5800
	Anderson, Kenneth D./Erin R. (L)	Τ.	35200
103	Ichthus Land Company (F)	B.	29400
	Lowney, John F. (L)	L.	5800
		T.	35200
104	Ichthus Land Company (F)	B.	29400
	Daspit, Warren C./Karen T. (L)	L.	5800
		T.	35200
105	Ichthus Land Company (F)	B.	29400
	Morgan, William H./Donna R. (L)	L.	5800
	. ,	T.	35200
106	Ichthus Lańd Company (F)	B.	29400
	Maloney, John P. (L)	L.	5800
	Maloney, Kathleen M. (L)	T.	35200
	Maloney, Aidan (L)		
107	Ichthus Land Company (F)	B.	29400
	McGibney, Michael David (L)	L	5800
	McGibney, Jeanie Lyons (L)	T.	35200
108	Ichthus Land Company (F)	В.	29400
	Nakama, Joyce H. (L)	L.	5800
	(2)	T.	35200
109	Ichthus Land Company (F)	В.	39200
	Braun, Angela M. (L)	L.	5800
	Diddin, / Ligola III. (2)	T.	45000
110	Ichthus Land Company (F)	В.	39200
	Maness, Judith R. (L)	L.	5800
		T.	45000
111	Ichthus Land Company (F)	ь. В.	39200
	Mick, Harold L./Virginia V. (L)	L.	5800
	mon, riaroid Es virginia v. (E)	T.	45000
112	Ichthus Land Company (F)	ь. В.	39200
	Pearson, Christian H. (L)	L.	5800
	Underwood, Lorraine (L)	T.	45000
113	Ichthus Land Company (F)	В.	39200
	Consolidated Kona, Inc. (L)	L.	5800
	Consolidated Norsa, Inc. (L)	T.	45000
11/	Ichthus Land Company (F)	т. В.	39200
117	Consolidated Kona, Inc. (L)	b. L.	5800
	Consolidated Rona, Inc. (L)	T.	
115	Inthus Land Company (E)	1. B.	45000
113	Ichthus Land Company (F) Platinum Group LLC (L)	D. L.	39200
	Flatindin Group LLC (L)	L. T.	5800
116	lebthus Land Company (F)		45000
110	Ichthus Land Company (F) Waldbauer, Eugene C. Tr. (L)	В. ı	39600
	Waldbauer, Eugene C. Tr. (L)	L.	5800 45400
117	Waldbauer, Florence C. Tr. (L)	T.	45400
117	Ichthus Land Company (F)	B.	39600
	Hostetler Family Trust (L)	L.	5800

		T.	45400
118	Ichthus Land Company (F)	B.	39600
	Holaway, Kristine A. (L)	L.	5800
		T.	45400
119	Ichthus Land Company (F)	B.	39600
	Lambert, Valerie E. (L)	L.	5800
		Τ.	45400
120	Ichthus Land Company (F)	B.	39600
	Hoersch, Kay S. Loving Tr. (L)	L.	5800
		T.	45400
121	Ichthus Land Company (F)	B.	39600
	Hall, Dean G. Trust (L)	L.	5800
		T.	45400
122	Ichthus Land Company (F)	B.	40200
	Walsh, Walter W./Shirley B. (L)	L.	5800
	•	T.	46000
123	Ichthus Land Company (F)	B.	40200
	McEwan, Kenneth H. (L)	L.	5800
	McEwan, Evelyn Jane (L)	Т	46000
124	Ichthus Land Company (F)	B.	40200
	Stewart, Lynn T. (L)	L.	5800
	Merritt, Wendy L. (L)	T.	46000
	Merritt, Kent R. (L)		
	Merritt, Kimberly N. (L)		
125	Ichthus Land Company (F)	B.	40200
	Suttle, Rodney D./Beryl H. (L)	L.	5800
		T.	46000
126	Ichthus Land Company (F)	B.	40200
	Dooly, Dennis L./Janet L. (L)	L.	5800
		T.	46000
127	Ichthus Land Company (F)	B.	40200
	Bailey, Shirley Ann (L)	L.	5800
		T.	46000
128	Ichthus Land Company (F)	B.	39200
	Fenimore, Robert C. (L)	L.	5800
	Fenimore, Mary J. (L)	T.	45000
129	Ichthus Land Company (F)	B.	39200
	Baseman, Grant R./Linda V. (L)	L.	5800
	,	T.	45000
130	Ichthus Land Company (F)	B.	39200
	Younglove, Ben Janette Trust (L)	L.	5800
	( )	T.	45000
131	Ichthus Land Company (F)	B.	39200
	Baseman, Grant R./Linda V. (L)	L.	5800
	` ,	T.	45000
132	Ichthus Land Company (F)	B.	39200
	Cornell, Sandra J. (L)	L.	5800
	Kole, Dolores A. (L)	T.	45000
133	Ichthus Land Company (F)	B.	39200
	• • •		

Baseman, Grant R./Linda V. (L)	L.	5800
	T.	45000
. 134 Ichthus Land Company (F)	B.	39600
Consolidated Kona, Inc. (L)	L.	5800
	Τ.	45400
135 Ichthus Land Company (F)	В.	39600
Colley, Judith A. (L)	L.	5800
	Τ.	45400
136 Ichthus Land Company (F)	B.	39600
Robitaille, Andre R. (L)	L.	5800
	T.	45400
137 Ichthus Land Company (F)	B.	39600
Whistler, James D./Claire J. (L)	L.	5800
***	T.	45400
138 Ichthus Land Company (F)	B.	39600
Consolidated Kona, Inc. (L)	L.	5800
	T.	45400
139 Ichthus Land Company (F)	B.	39600
Consolidated Kona, Inc. (L)	L.	5800
	Т.	45400
140 Ichthus Land Company (F)	B.	40200
Consolidated Kona, Inc. (L)	L.	5800
	T.	46000
141 Ichthus Land Company (F)	B.	40200
Arnold, Robert J. (L)	L.	5800
Yee, Mary Jean (L)	T.	46000
142 Ichthus Land Company (F)	B.	40200
McNamara, Thomas E Trs. (L)	L.	5800
	T.	46000
143 Ichthus Land Company (F)	B.	40200
Consolidated Kona, Inc. (L)	L.	5800
	T.	46000
144 Ichthus Land Company (F)	B.	40600
Scott, James M. (L)	L.	5800
	T.	46400
145 Ichthus Land Company (F)	B.	40200
Bhagwandin, Bryon D. (L)	L.	5800
Bhagwandin, Sarah L. (L)	T.	46000
1 Donald, Davis M. Trust (F)	B.	128500
, , , , , , , , , , , , , , , , , , , ,	L.	7500
	T.	136000
2 Tetterington, Christina S. (F)	В.	128500
<b>3</b> , a caracter (c)	L.	7500
	T.	136000
3 Kona Alii Development Co. (F)	B.	128500
Archer, Stephen G./Barbara (L)	L.	7500
. ,		. 220

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Archer, Stephen G./Barbara (L)	T.	136000
4 Akana, Akaiko G. Trs (F)	B.	128500
<ul> <li>Engle, Danny G./Jeanette K. (L)</li> </ul>	L.	7500
	T.	136000
5 Aiu, Boniface K. (F)	B.	128500
	L.	7500
	T.	136000
6 Akana, Akaiko G. Trs (F)	B.	128500
Chamberlain, Leo J. Trustee (L)	L.	7500
	T.	136000
7 Akana, Akaiko G. Trs (F)	B.	69500
Assoc of Apt. Owners (L)	L.	7500
•	T.	77000
8 Kennedy, Allen D. (F)	B.	83100
Kennedy, Helen H. (F)	L.	7500
	T.	90600
9 LeMay Family Trust (F)	B.	90100
	L.	7500
	T.:	97600
10 Akana, Akaiko G. Trs. (F)	B.	90100
Hollaway, Ray G. (L)	L.	7500
	T.	97600
11 Fischer, Jacob J./Esther L. (F)	B.	90100
	L.	7500
	T.	97600
12 Fleming, Peter A. (F)	B.	90100
	L.	7500
	T.	97600
13 Lehua Lani Estates Owners (F)	В.	133100
	L.	7500
44.0.131.0	T.	140600
14 Schill, Donna R. Family Trs. (F)	B.	133100
	L.	7500
45 K Al' D	T.	140600
15 Kona Alii Development Co. (F)	B.	133100
Spalding, Michael J. (L)	L.	7500
40 Process Olicia M (5)	T.	140600
16 Brueck, Clarinda M. (F)	B.	133100
	L.	7500
17 Aigner Willia K / Janet K (E)	T.	140600
17 Aigner, Willis K./Janet K. (F)	В.	133100
	L.	7500
18 Puscell George E /Usion L (E)	T.	140600
18 Russell, George F./Helen J. (F)	B.	133100
	L. T.	7500
19 Elliott, William W./L V Trs (F)	т. В.	140600
13 Linou, vyimani vv./L V 115 (F)	L.	72500
	L. T.	7500 80000
	• •	00000

20 Akana, Akaiko G. Trs (F)	В.	86600
Spalding, Michael J. (L)	L.	7500
	T.	94100
21 Akana, Akaiko G. Trs (F)	B.	93600
Souza, Barbara J. Trust (L)	L.	7500
11025, 20.007d 0. 77dot (2)	T.	101100
22 Akana, Akaiko G. Trs (F)	В.	
. ,		93600
Franich Investments (L)	L.	7500
	Τ.	101100
23 Kona Alii Development Co. (F)	B.	93600
Spalding, Michael J. (L)	L.	7500
	T.	101100
24 Akana, Akaiko G. Trs (F)	B.	93600
Threefoot, Henry M. Trs (L)	L.	7500
Threefoot, Marie E. Trs (L)	T.	101100
25 Perry, Janet M. (F)	B.	142100
(, )	L.	7500
	T.	149600
26 Aiu, Boniface K. Trs. (F)	в	142100
Aiu, Boniface K. successor (F)	L.	
Alu, bolliace N. successor (F)		7500
07 Other NA O 1/D : D (E)	T.	149600
27 Gilbert, W. C. Jr/Doris B. (F)	B.	142100
	L.	7500
	T.	149600
28 McClintock Family Trust (F)	B.	142100
	L.	7500
	T.	149600
29 Akana, Akaiko G. Trs (F)	B.	142100
Wesgaard, Juanita (L)	L.	7500
	T.	149600
30 Kona Aliia Devlopment (F)	B.	142100
Friedman, Dennis J. (L)	L.	7500
	T.	149600
31 Kelly, Walter J. (F)	B.	81400
Kelly, Mary S. (F)	L.	7500
Kelly, Kevin O. (F)	T.	88900
32 Akana, Akaiko G. Trs (F)	т. В.	97100
Wilkinson, John C./Patricia (L)		
which son, John C./Patricia (L)	L.	7500
22 Al Al: 3 O T (E)	T.	104600
33 Akana, Akiaiko G. Trs (F)	B.	104200
Dillon, William A. Trust (L)	L.	7500
	T.	111700
34 Kona Alii Development Co. (F)	B.	104200
Brownson, Beatrice O. (L)	L.	7500
	T.	111700
35 Akana, Akaiko G. Trs (F)	B.	104200
Garrett, Linda J. (L)	L.	7500
. ,	T.	111700
36 Kona Alii Development Co. (F)	B.	104200
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	Brownson, Beatrice O. Tr. (L)	L.	7500
		Τ.	111700
•	37 Oneo Bay Estate (F)	B.	151200
		L.	7500
		T.	158700
	38 Boloedorn, Honh H. Jr./Mildred	B.	151200
	(F)	L.	7500
		T.	158700
	39 Forst, Steven (F)	B.	151200
	Forst, Marlena (F)	L.	7500
		T.	158700
	40 Conlay, James W./Karen L. (F)	B.	151200
	, ,	L.	7500
	•*	T.	158700
	41 Kapp, Gary M./Penny R. (L)	B.	151200
	· · · · · · · · · · · · · · · · · · ·	L.	7500
		T.	158700
	42 Johnson, Stephen L. (F)	В.	151200
	Johnson, Sandra F. (F)	L.	7500
	oomion, canara i . (i )	T.	158700
	43 Garrett, Linda J. (F)	и. В.	86300
	Ripken, Richard A./Nancy J. (F)	L.	
	Ripkell, Richard A./Nancy J. (F)		7500
	44 Alti Sidnov B (E)	T.	93800
	44 Alti, Sidney R. (F)	В.	102800
		L.	7500
	AF Alexand Alexand O. T. a. (F)	T.	110300
	45 Akana, Akaiko G. Trs (F)	B.	111100
	Garrett, Linda J. Trs (L)	L.	7500
	40.0	T.	118600
	46 Beeson, Richard D./Janice (F)	В.	111100
		L.	7500
		T.	118600
	47 Russell, George F. (F)	B.	111100
	Russell, Keiko M. (F)	L.	7500
	Russell, Floyd I. (F)	Т.	118600
	Russell, Donald L. (F)		
	48 Froehlich, Peter/Demeksa, Elsa	B.	134900
	(F)	L.	13400
		Т.	148300
	49 Eaton, Robert H. (F)	B.	155900
		L.	7500
		T.	163400
	50 Garrett, Linda J. Trs. (F)	B.	155900
	, ,	L.	7500
		T.	163400
	51 R & AK 1985 Trust (F)	B.	155900
	` '	L.	7500
		T.	163400
	52 Bruner, William/Norma Trs (F)	В.	155900
			.00000

	L.	7500
	T.	163400
53 Bell, Lynette R. (F)	B.	155900
Russell, Glen C. III (F)	L.	7500
Russell, Gary C. (F)	T.	163400
Roethler, Candice C. (F)		
54 Higgins Family Trust (F)	B.	155900
, , , ,	L.	7500
	Т.	163400
55 Kona Alii Development Co. (F)	B.	90300
Wilkinson, John C./Patricia (L)	L.	7500
. ,	T.	97800
56 Black, Doris H. Family Trust (F)	B.	107600
, , , , , , , , , , , , , , , , , , , ,	L.	7500
	T.	115100
57 Kona Alii Development Co. (F)	B.	114600
Zaremba, Joseph E./Pennie (L)	L.	7500
	T.	122100
58 McCahon, Dorothea M. (F)	B.	114600
(, )	L.	7500
	T.	122100
59 McKenzie, Allan L./E. Janet (F)	н. В.	114600
	L.	7500
	T.	122100
60 Vivatson, William M. trust (F)	В.	182000
Vivatson, Jeanne C. trust (F)	L.	13400
	T.	195400
61 Tetterington, Christina (F)	B.	182000
3 ( )	L.	13400
	T.	195400
62 Sells, Charles H./Myrna M. (F)	B.	182000
, , , , , , , , , , , , , , , , , , , ,	L.	13400
	T.	195400
63 Johnson, Marilyn A. Tr. (F)	B.	182000
	L.	13400
	T.	195400
64 Henderson, Philip G./Suzane	B.	182000
(F)	L.	13400
•	T.	195400
65 Kona Alii Development Co. (F)	B.	182000
Burch, William L. (L)	L.	13400
•	T.	195400
66 Akana, Akaiko G. Trs. (F)	B.	105400
Nagy, Frank (L)	L.	13400
. ,	T.	118800
67 Warne, Robert W. (F)	B.	126400
` '	L.	13400
	T.	139800
68 Akana, Akaiko G. Trs. (F)	B.	133500
` '		· · · · <del>·</del>

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	Spalding, Michael J.	L.	13400
		T.	146900
. 69	Burgess, Robert S. (F)	B.	133500
		L.	13400
		Т.	146900
70	Miller, Robert L./Doherty M. (F)	B.	133500
		L.	13400
		T.	146900
/1	Kona Alii Development Co. (F)	B.	121000
		L.	3100
70	16 A11 5 1 10 (5)	T.	24100
12	Kona Alii Development Co.(F)	B.	263500
	•*	L.	15900
	14 AII D 1 10 (E)	T.	279400
/3	Kona Alii Development Co. (F)	В.	143000
		L.	12000
74	Kara Alii Davalaraa at Oa (E)	T.	155000
74	Kona Alii Development Co. (F)	В.	15400
		L.	700
		T.	16100
7-05-009-032	State of Hawai'l (F)	B.	200
		L.	317000
		T.	317200
7-05-009-031	Kona View Plaza (F)	B.	1844500
7 00 000 001	riona view riaza (r)	L.	859500
		T.	2704000
			2,0,000
7-05-009-030	Hawaii Estate Ventures, Ltd. (F)	B.	0
	Kona View Plaza (L)	L.	574300
	` ,	T.	574300
7-05-009-025	LRG Real Estate LP (F)	В.	2073900
	Anderson, Brian A./Joan G. (L)	L.	1744800
		T.	3818700
7-05-009-043	State of Hawai'l (F)	B.	0
	Greenwell, Patricia G. Tr. (L)	L.	198800
		T.	198800
7-05-009-027	Gregory, Eugene K. (F)	В.	499800
	Anderson, Brian (L)	L.	396300
	Anderson, Brian/Joan G. (L)	T.	896100
7-05-009-023	Equity Housing Fund XXI (F)	В.	0
7 00 000-020	Equity Flousing Fund AAT (F)	L.	0 587100
		T.	587100
		••	507 100

	L.	7500
	T.	163400
53 Bell, Lynette R. (F)	B.	155900
Russell, Glen C. III (F)	L.	7500
Russell, Gary C. (F)	T.	163400
Roethler, Candice C. (F)		
54 Higgins Family Trust (F)	B.	155900
	L.	7500
	T.	163400
55 Kona Alii Development Co. (F)	B.	90300
Wilkinson, John C./Patricia (L)	L.	7500
	T.	97800
56 Black, Doris H. Family Trust (F)	B.	107600
	L.	7500
	T.	115100
57 Kona Alii Development Co. (F)	B.	114600
Zaremba, Joseph E./Pennie (L)	L.	7500
	T.	122100
58 McCahon, Dorothea M. (F)	B.	114600
	L.	7500
	T.	122100
59 McKenzie, Allan L./E. Janet (F)	B.	114600
	L.	7500
	T.	122100
60 Vivatson, William M. trust (F)	B.	182000
Vivatson, Jeanne C. trust (F)	L.	13400
	T.	195400
61 Tetterington, Christina (F)	B.	182000
	L.	13400
	T.	195400
62 Sells, Charles H./Myrna M. (F)	В.	182000
	L.	13400
00.11	T.	195400
63 Johnson, Marilyn A. Tr. (F)	B.	182000
	L.	13400
CA Handanan District O /O	T.	195400
64 Henderson, Philip G./Suzane	B.	182000
(F)	L.	13400
GE Kons Alii Dovelenment Co. (E)	T.	195400
65 Kona Alii Development Co. (F)	B.	182000
Burch, William L. (L)	L.	13400
66 Akana, Akaiko G. Trs. (F)	T.	195400
Nagy, Frank (L)	В.	105400
ragy, Frank (L)	L. T.	13400
67 Warne, Robert W. (F)	т <i>.</i> В.	118800 126400
or viamo, noboli iv. (i )	b. L.	13400
	T.	139800
68 Akana, Akaiko G. Trs. (F)	г. В.	133500
55 / mana, / mano O. 115. (1 )	٠.	100000

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## Mauka Side Of Street--Total Values (land and building) King Kamehameha--Royal Kona Resort

## Mauka (mountain) side of street properties:

zone-section-plat-parcel	total value (land and building)
7-05-006-020	20987200
7-05-006-017	970300
7-05-006-025	975600
7-05-006-019	413000
7-05-006-014	357900
7-05-006-013	1246200
7-05-006-012	169800
7-05-006-011	431600
7-05-006-010	390600
7-05-006-009	409400
7-05-007-019	529700 -
7-05-007-018	764500
7-05-007-016	614600
7-05-007-023	999400
7-05-007-005	844100
7-05-007-066	100
7-05-007-058	100
7-05-007-004	3525000
7-05-008-011	248300
7-05-008-006	2417000
7-05-008-005	943300
7-05-008-003	31100
	51500
	21100
	31900
	34900
	51000
	35200
	45000
	45400
7.05.000.004	46000
7-05-008-001	136000
	77000
	906000
	97600
	140600
	80000 94100
	101100
	149600
	149000

88900
104600
111700
158700
93800
110300
118600
148300
163400
97800
115100
122100
195400
146900
24100
279400
155000
16100

7-05-009-032
7-05-009-031
7-05-009-030
7-05-009-025
7-05-009-043
7-05-009-027
7-05-009-023

total for mauka side

50,759,200

## Mauka Side Of Street--Building Only Values

Mauka side of street zone-section-plat-parcel

	building value
7-05-006-020	16726500
7-05-006-017	459100
7-05-006-025	589600
7-05-006-019	134100
7-05-006-014	91400
7-05-006-013	735300
7-05-006-012	0
7-05-006-011	253100
7-05-006-010	390600
7-05-006-009	175700
7-05-007-019	3121800
7-05-007-018	164700
7-05-007-016	457000
7-05-007-023	739700
7-05-007-005	584400
7-05-007-066	0
7-05-007-058	0
7-05-007-004	2002000
7-05-008-011	0
7-05-008-006	47300
7-05-008-005	354600
7-05-008-003	25300
	41000
	19400
	26100
	29100
	41700
	25300
	39200
	39600
	40200
7-05-008-001	128500
	69500
	83100
	90100
	133100
	72500
	86600
	93600
	142100
	81400
	97100

104200
151200
86300
111100
134900
155900
90300
107600
114600
182000
133500
121000
263500
143000
200
1844500
0
0
0
499800
0

32,675,000

7-05-009-032 7-05-009-031 7-05-009-030 7-05-009-025 7-05-009-043 7-05-009-027 7-05-009-023

total

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