Appendix L

Market Analysis Report

PREPARED FOR: **WAIKO INDUSTRIAL INVESTMENT, LLC**

C/O MR. CHARLES JENCKS
Pacific Rim Land, Inc.
P.O Box 220
Kihei, Hawaii 96753

EFFECTIVE DATE: **March 15, 2011**

A MARKET STUDY OF THE PROPOSED WAIKO INDUSTRIAL PARK, WAILUKU, ISLAND OF MAUI, HAWAII

ACM CONSULTANTS, INC.

March 29, 2011 11-9028

Waiko Industrial Investment, LLC
c/o Mr. Charles Jencks
Pacific Rim Land, Inc.
P.O. Box 220
Kihei, Hawaii 96753

Re: Market Analysis for the proposed Waiko Industrial Park in Wailuku, Island and County of Maui

Dear Mr. Jencks:

In accordance with your request, we have inspected the above-referenced property in order to provide a defined scope market study for the proposed Waiko Industrial Park in Wailuku, Island and County of Maui. This *counseling report*, and the conclusions herein, is based on the on-site inspection of the property, a study of current political and economic conditions, and a historical review of the real estate market in Central Maui and on Maui overall. The effective date of this report is March 15, 2011.

The subject consists of approximately 31.222 acres of land and is currently zoned Agricultural District. Its Community Plan classification is Agricultural (AG). The project, which is still in its preliminary planning stage, will consist of 38 light industrial lots off Waiko Road, in an area that currently contains other industrial and agricultural uses. A portion of the subject site is presently utilized as an industrial baseyard authorized by a Conditional Permit which expires on March 1, 2014.

The assignment will include the following:

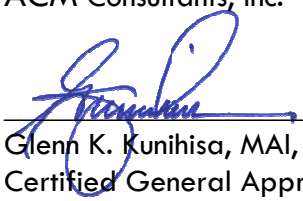
Market Analysis – The Consultant agrees to provide a market analysis for this proposed project by (1) defining and delineating the market area; (2) identifying and analyzing the current supply and demand conditions that comprise the specific real estate market segment; and (3) identifying, measuring and forecasting the effect of anticipated developments or other changes on future supply of each market segment; and (4) to the extent possible, forecasting the effect of anticipated economic or other changes on future demand.

Economic Impact – The Consultant agrees to provide a basic economic impact report estimating the general and specific economic effects arising from the development of the proposed subdivision. This report would likely address estimated construction costs for the land, the sale of individual lots, and costs for building construction, employment creation, and ongoing business operation. It will also briefly address fiscal benefits such as state income tax, general excise tax, and real property tax.

The following report presents a narrative review of the study and our analysis of data along with other pertinent materials on which this report is predicated. It contains data and exhibits gathered in our investigations, and will include a description of the analytical process and our conclusions, as of March 15, 2011.

Thank you for allowing us the opportunity to work on this interesting assignment.

Respectfully submitted,
ACM Consultants, Inc.



Glenn K. Kunihisa, MAI, CRE
Certified General Appraiser,
State of Hawaii, CGA-039
Expiration: December 31, 2011

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PART I – INTRODUCTION

A. EXECUTIVE SUMMARY

Background

The Waiko Industrial Park is a proposed 38-lot, light industrial subdivision situated on Waiko Road between Kuihelani and Honoapiilani Highways, in Waikapu, District of Wailuku, Island and County of Maui.

The subject consists of approximately 31.222 acres of agricultural-zoned land. The Wailuku-Kahului Community Plan designates this site as Agricultural (AG). It is anticipated that the project, which is still in its preliminary planning stage, will have industrial lots ranging from 9,536 square feet to 8.43 acres in size. The majority of the inventory, approximately 28 lots, will be less than 15,000 square feet in size; another 7 lots will range from about 20,000 to 35,000 square feet; and 3 lots will be between 1 and 2 acres in size. There will also be one, 8.43 acre lot, which will be situated at the eastern portion of the site near the Waiko Road and Kuihelani Highway intersection.

In seeking the change to Urban and Light Industrial classifications, the applicant is attempting to seek conformity with the present utilization of the site, as well as with a few of the surrounding uses.

Study Objectives

ACM Consultants, Inc. has been retained by Waiko Industrial Investment, LLC to analyze the Central Maui industrial market as it relates to this proposed project. In particular, we studied economic trends and demographics, and supply and demand factors for industrial property. In the process, we have gathered as much information as possible on industrial real estate sales on Maui and, more specifically, in the Wailuku-Kahului region. Specific attention has been paid to industrial land ownership, the availability of vacant parcels, and the future supply of additional industrial land.

The objectives of our study were as follows: (1) to define and delineate the market area; (2) to identify and analyze the current supply and demand conditions specific to the subject's market; (3) identify, measure and forecast the effect of anticipated developments or other factors on future supply; and (4) forecast the effect of anticipated economic or other factors on future demand.

Key Supply Factors

The following points summarize the supply of industrial land in the Central Maui region at this time.

- The majority of the industrial land in Central Maui is provided by five subdivisions in Wailuku and six other subdivisions in Kahului. There is a total of about 549 gross acres of land in these projects.

- In interviewing Realtors and property owners, there is a distinction made among them between vacant land and available land. In other words, although the land is vacant, it may not be available for purchase by the market because the property owner has near-term development plans. Therefore, although there appears to be numerous vacant lots in the Consolidated Baseyards Subdivision and Waiko Baseyard Subdivision, most of them have development plans and are not available to the market.

- There are approximately 48.18 acres of industrial land available in the Central Maui subdivisions. Another 8.85 acres are available in other free-standing parcels.

- There are 69 industrial parcels totaling 34.99 acres currently listed for sale; the majority, or 32.77 acres, is situated within the Maui Lani Village Center.

- Including the subject, approximately 235 acres of light industrial land are proposed for Central Maui. Proposed industrial developments in the Central Maui region, aside from the subject, include the Maui Business Park, Phase II (179 acres), Waikapu Light Industrial (9 acres), and the light industrial segment of Waiale Master Plan Development (16.3 acres).

- The most imminent of the proposed developments is the Maui Business Park Phase II. With construction expected to begin in mid-2011, build-out of the entire project is expected to expand over the next 10 to 15 years.

Key Demand Factors

The following points summarize the demand of real estate in the Central Maui region at this time.

- Population in Maui County between 2000 and 2010 grew by 20.12 percent to 154,834. The Central Maui region has the largest populace with approximately 32 percent of the total population. Increasing population must be followed with the availability of commercial and industrial establishments to support the growth.

- Central Maui is the hub of commerce, transportation and employment on Maui. It currently has approximately 83 percent of all industrial land on Maui.

- Central Maui has the highest number of employees of all regions on Maui and the combined payroll dollars of Wailuku-

Kahului surpass all other regions of Maui County.

- Although Central Maui has the lowest ratio of population to acres of finished commercial and industrial land area, unit prices remain comparable to commercial and industrial parks in South Maui and West Maui. This would indicate the continued demand for commercial and industrial land in Central Maui.

- Although the deficient sales activity in Central Maui can partially be attributed to softened market conditions, there is also a lack of suitable vacant land available for purchase. Vacant land prices in Central Maui have decreased, similar to all commercial and industrial areas on Maui. Upon economic recovery, prices are expected to rebound significantly, due to resurgence in demand.

- Rental rates for commercial and industrial space have declined since their peaks in 2007. Based on historical performance in this region, it can be assumed that this trend will reverse course as the economy gains traction.

- Since 1991, there has been a total of about 174.74 acres of new industrial land in Central Maui absorbed in the Central Maui subdivisions. This equates to about 8.74 acres per year.

B. PURPOSE OF THE REPORT

The purpose of this report, as of March 15, 2011, is to generate a market analysis and economic impact report with respect to the proposed Waiko Industrial Park.

C. INTENDED USE OF THE REPORT

The intended use or function of this report is to provide real property information and real estate market data in support of an Environmental Impact Statement, a State Land Use District Boundary Amendment, a change in County of Maui Zoning, and a Wailuku-Kahului Community Plan Amendment.

D. INTENDED USER OF THE REPORT

The intended users of this report are Waiko Industrial Investment, LLC and the appropriate State and County agencies involved in the proposed land use changes.

E. SCOPE OF THE REPORT

The Consultant has agreed to provide a current Market Analysis of this project by (1) defining and delineating the market area; (2) identifying and analyzing the current supply and demand conditions that make up the specific real estate market; and (3) identifying, measuring and forecasting the effect of anticipated developments or other changes on future supply; and (4) to the extent possible, forecasting the effect of anticipated economic or other changes on future demand. The market analysis will be developed and prepared in conformity with, and subject to, the requirements of the Code of Professional Ethics and the Standards of Appraisal Practice of the Appraisal Institute, and the Uniform Standards of Professional Appraisal Practice.

Furthermore, the Consultant also agreed to provide a basic Economic Impact Report estimating the general and specific economic effects arising from the development of the proposed subdivision.

F. STATEMENT OF COMPETENCY

ACM Consultants, Inc. has been actively involved in the real estate appraisal research and consulting business since 1982. Our business emphasis has focused mainly on the counseling and valuation of residential and commercial properties located within the State of Hawaii. The company considers itself competent to conduct a market

study for a proposed industrial project in Wailuku, Island and County of Maui.

G. EXTRAORDINARY ASSUMPTIONS AND HYPOTHETICAL CONDITIONS

1. As of March 2011, the subject was still in the preliminary stages of planning. A Conceptual Plan prepared by Otomo Engineering, dated February 25, 2011, provided a visual indication of the proposed layout of the development. The consultant is not liable for any changes in the project plan past this date, nor for information that has not been developed, released or communicated to the Consultant.

2. The Consultant has no control over economic conditions and other international events that could have an affect upon Hawaii's economy and the Maui real estate market. As a result, this report has not made any assumptions regarding potential conflicts with other nations, or external factors affecting economic conditions here.

3. The counseling report is also subject to standard "Limiting and Contingent Conditions" located in the Addenda.

H. CONFIDENTIALITY PROVISION

The contents of this market study are confidential. Release of this counseling report by ACM Consultants, Inc. is limited to you for the intended uses stated above. Any further release of this report, or portions herein, is strictly prohibited and you shall accept the risk and liability for any such release without the previous written consent of **ACM** Consultants, Inc. Further, you shall indemnify and defend **ACM** Consultants, Inc., and its individual consultants/appraisers, from any claims arising out of any such unauthorized disclosure.

I. CERTIFICATION

The undersigned does hereby certify that except as other-wise noted in this consulting report:

1. The Consultant's compensation is not contingent upon the reporting of a predetermined value or direction in value that favors the cause of the client, the amount of the value estimate, the attainment of a stipulated result, or the occurrence of a subsequent event.

2. The Consultant has no present or prospective interest in the property that is the subject of this report, and no personal interest or bias with respect to the parties involved. Any "Estimate(s) of Market Value" in the consulting report is not based in whole or in part upon the race, color, or national origin of the prospective owners or occupants of the properties in the vicinity of the property appraised.

3. The Consultant has personally inspected the property, and is a signatory of this Certification.

4. To the best of the Consultants' knowledge and belief, all statements of fact and information in this report are true and correct, and the Consultant(s) have not knowingly withheld any significant information.

5. Ashley Haleakala, an appraiser assistant and employee of ACM Consultants, Inc., provided significant professional assistance to the person(s) signing this report.

6. The reported analyses, opinions and conclusions are limited only by the reported assumptions and limiting conditions, and are my personal unbiased professional analyses, opinions and conclusions.

7. All analyses, opinions and conclusions were developed, and this report has been prepared, in conformity with the Uniform Standards of Appraisal Practice.

8. This counseling report is subject to and in conformance with the Code of Professional Ethics and Standards of Professional Conduct of the Appraisal Institute. The analyses, opinions and conclusions of this counseling report have been made in conformity with, and are subject to, the requirements of Title XI of the Federal Financial Institutions Reform, Recovery, and Enforcement Act of 1989.

9. This counseling report is to be used only in its entirety and no part is to be used without the whole report. All conclusions and

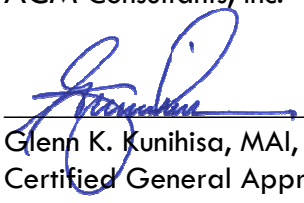
opinions concerning the real estate are set forth in the counseling report were prepared by the Consultant(s) whose signature(s) appears on the counseling report. No change of any item in the counseling report shall be made by anyone other than the Consultant, and the Consultant shall have no responsibility for any such unauthorized change.

10. The Appraisal Institute, of which this Consultant is a member, has a legal right to review this report.

11. The qualifications of this Consultant, including completed educational requirements of his/her candidacy are located in the Addendum to this report. Any member signing the report has completed the requirements of the Appraisal Institute's continuing education program.

12. The Consultant has performed a previous appraisal of the subject property within the three years prior to this assignment.

ACM Consultants, Inc.



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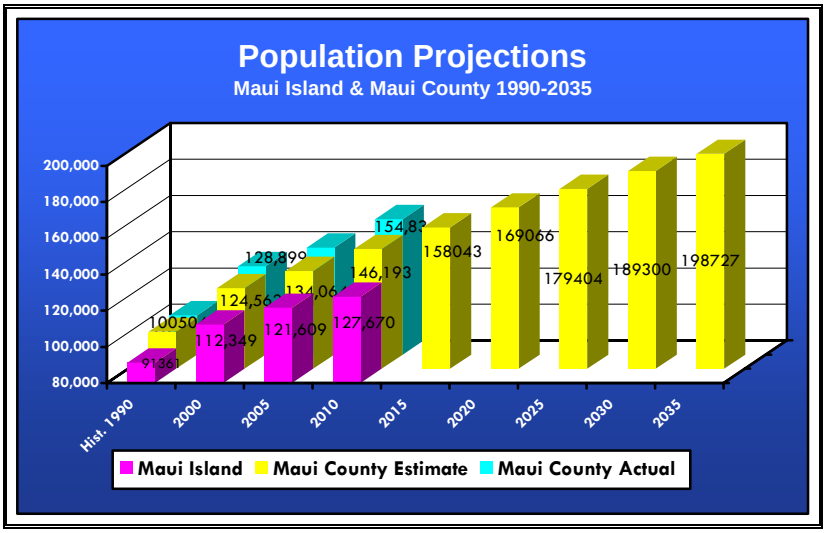
Expiration: December 31, 2011

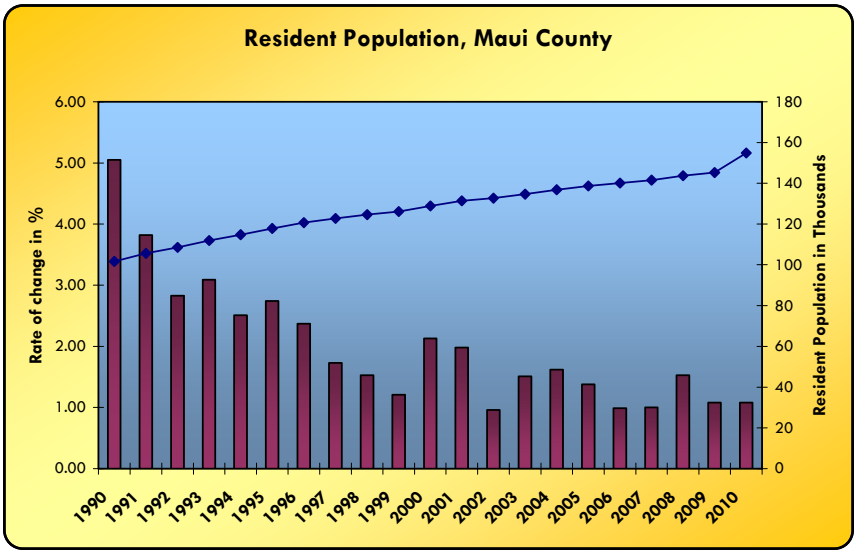
PART II – FACTUAL DATA

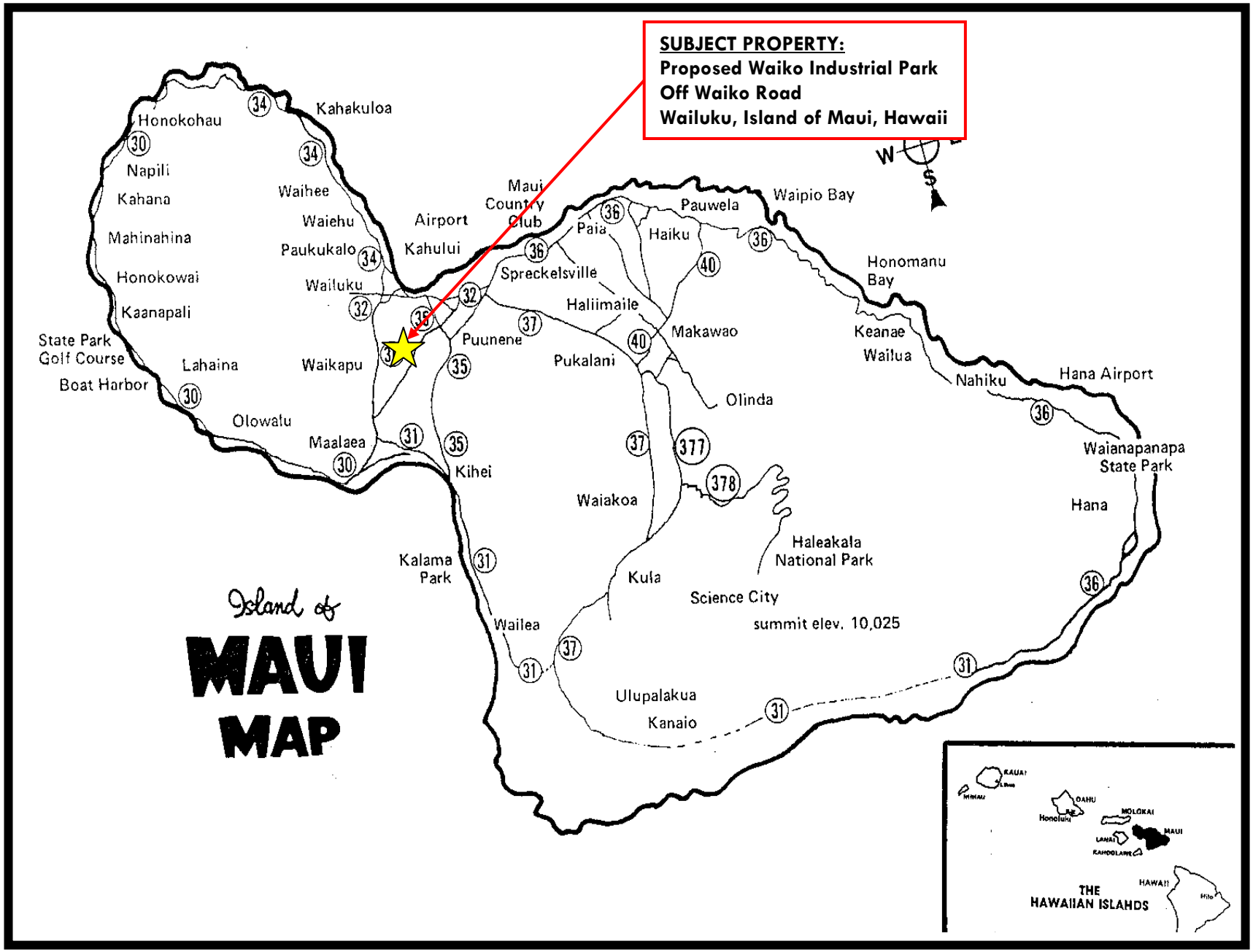
A. REGIONAL DATA - MAUI COUNTY

Maui County is the third most populous of the four counties of Hawaii, with a total resident population of 154,834 (2010 Census); a change of 20.12 percent from 2000 and 52.23 percent since 1990. Maui County consists of the islands of Maui, Molokai, Lanai, and Kahoolawe. Ninety percent (90%) of County residents live on Maui Island; The Island of Maui consists of a total of 734.5 square miles, or 470,080 acres. Population Projections for Maui County and the Island Maui are illustrated on the table below.



The following graph illustrates the resident population change in Maui County from 1990 through 2010. The graph indicates that although Maui's population has been steadily growing, it now appears to be rising at a decreasing rate.




SUBJECT PROPERTY:
Proposed Waiko Industrial Park
Off Waiko Road
Wailuku, Island of Maui, Hawaii
Island of
MAUI
MAP
Honokohau
Napili
Kahana
Mahinahina
Honokowai
Kaanapali
State Park
Golf Course
Boat Harbor
Lahaina
Olowalu
Kahakuloa
Waihee
Waiehu
Paukukalo
Wailuku
Waikapu
Maalaea
Kihei
Airport
Kahului
Maui
Country
Club
Spreckelsville
Puunene
Paia
Haliimaile
Pukalani
Pauwela
Haiku
Waipio Bay
Honomanu
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State Park
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Haleakala
National Park
Science City
summit elev. 10,025
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Kula
Kalama
Park
Wailea
Ulupalakua
Kanaio
W
S
THE
HAWAIIAN ISLANDS

Like all the Hawaiian Islands, Maui, Molokai and Lanai are blessed by warm air temperatures year-round, and ocean waters that range from 72-77°F in winter to 77-81°F in summer. The islands' distance from other continents, the moderating effects of the surrounding water and the tropical location combine to create this pleasant climate. Hawaii's topography, particularly the mountains and valleys and location of each island, contributes to the great variety of microclimates within very small areas. On Maui, the West Maui Mountains and Haleakala are the primary geological features affecting the weather. Due in part to the above geographical factors, Maui, for sixteen out of the last seventeen years, was selected "Best Island in the World" by readers of Condé Nast Traveler magazine.

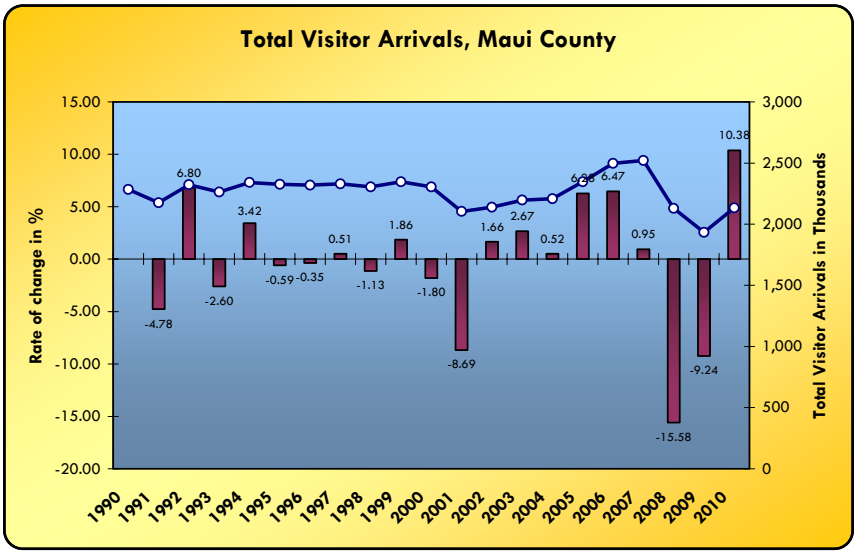
Visitor Industry

Historically, Maui hotel occupancies typically exceeded any area in the state with the exception of Waikiki. Its high rating is due to a number of factors. First, Maui receives the good fortune of location and climate. Second, Maui has the infrastructure in place to move tourists to a diverse variety of activities with a minimum of inconvenience and down time. The accommodations on Maui are another reason. Maui resort hotels have consistently ranked above other Hawaii resort destinations. In the Condé Nast Traveler magazine, nine of the "Top 20 Hawaii Resorts" for 2010 were Maui County resorts. The Four Seasons Resort Maui at Wailea topped the list, while other Maui County resorts garnering honors included: Hotel Hana Maui and Honua Spa (2nd); Four Seasons Resort Lanai at Manele Bay (4th); Four Seasons Resort Lanai, The Lodge at Koele (5th); Fairmont Kea Lani (9th); Grand Wailea (11th); Ritz-Carlton Kapalua (tied 15th); Hyatt Regency Maui Resort & Spa (tied 15th); and Westin Maui Resort & Spa (tied 20th).

With the possible exception of Kauai, Maui is more dependent on tourism than any of Hawaii's four counties. That sector is not treating Maui very well today. For years, Maui has worked very hard at cultivating a worldwide image as a premier, upscale tropical island destination. In fact, it is the only county government in Hawaii that spends money to support tourism. In the wake of the current financial crisis, Maui's tourism counts and hotel occupancy have fallen significantly. Even the upscale and affluent markets, it appears, have curtailed their spending on trips to the Valley Isle.

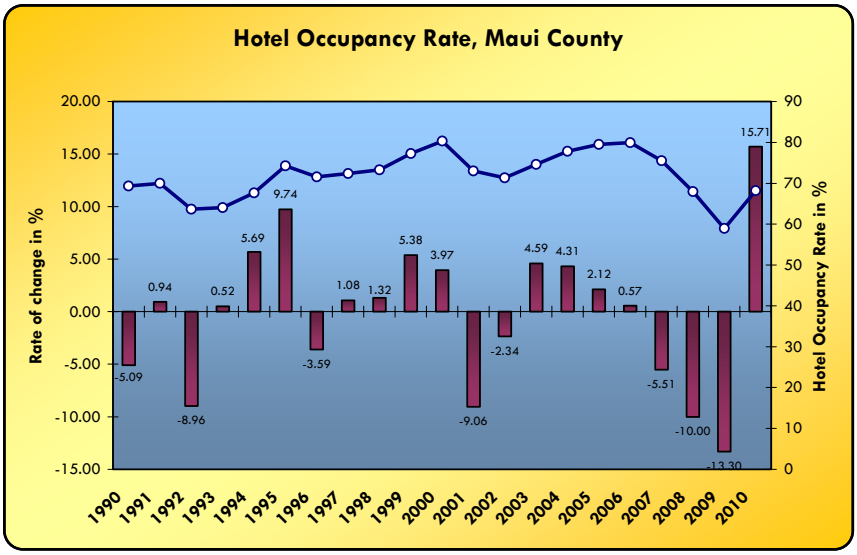
Tracking the tourism counts during this decade begins with the effects of the September 11, 2001 terrorist attacks on this country which had a drastic impact on the tourism industry. The final Maui visitor count for 2001 was 2,104,480. In 2002, the visitor count rebounded slightly to 2,139,427 as the visitors slowly returned during the mid to latter part of the year. Visitor totals from 2003 to 2007 indicate positive increases. As a result of the dismal economic conditions ub 2008 and 2009, total visitor arrivals declined by 15.58 percent (2,129,040) and 9.24 percent (1,932,360), respectively, in those

years. The lowest visitor arrival in Hawaii and many other visitor destinations worldwide were severely impacted by the national and global economic recession. However, in 2010 the visitor count rebounded with a 10.38 percent jump to 2,132,860, as the economic conditions began to show signs of stability.



Source: UHERO Economic Information Service

In 2010, Maui County had the second highest occupancy rate of all the Hawaii counties at just 68.2 percent, behind Oahu at 78.25 percent. Meanwhile, Kauai showed occupancy of 59.11 percent and Big Island at 56.44 percent. Maui's occupancy rate increased by 15.71 percent in 2010 over 2009; the first increase in several years. The hotel occupancy rate generally follows the trend of total visitor arrivals.



Source: UHERO Economic Information Service

Visitor shopping opportunities have increased in recent years with the opening of The Maui Marketplace, a 275,000 square foot shopping complex, modeled after Oahu's successful Waikele Center. The Maui Marketplace is now home to such retail superstores like Lowe's Hardware, Pier One Imports, Borders Books and Music, Sports Authority, Starbucks Coffee, and Office Max, as well as many small local retailers and restaurants. Also opening in the same Kahului area were Home Depot, Wal-Mart, Big K and Costco. In addition, the Shops at Wailea opened in December 2000 and added approximately 150,000 square feet of high-end retail space in the Wailea Resort. At about the same time, the 150,000 square foot Piilani Shopping Center opened in Kihei with Safeway as its anchor tenant. The latest entry into the retail sector is the Lahaina Gateway, which opened in 2007. Dubbed a "lifestyle center", Lahaina Gateway, offers almost 137,000 square feet of gross leasable area. Tenants include Barnes and Noble, Foodland Farms, Office Max, Outback Steakhouse, Melting Pot, Central Pacific Bank and many other smaller retail shops.

Maui offers more than any other Neighbor Island in the way of proven vacation experiences. It has a larger tourism activities industry relative to the size of its economy than any other county. Such activities include ocean recreation, helicopter tours, biking down Haleakala, ziplining, and golfing, among numerous other activities. Maui's well-developed ocean recreation industry ranges from windsurfing to snorkeling, scuba diving and sailing cruises which leave regularly from Lahaina and Ma`alaea Harbors.

Maui also has theme destinations, such as the Maui Tropical Plantation, Maui Nui Botanical Gardens, Alii Kula Lavender Farm, and Surfing Goad Dairy. But the premier theme destination on the island is the Maui Ocean Center. This center, featuring the marine environment of the Hawaiian Islands, is modeled after five other aquarium parks developed elsewhere in the world by Coral World International. This ocean center is located just behind the Maalaea Boat Harbor, and is easily accessible from Kahului/Wailuku, and the resort areas of Lahaina/Kaanapali and Kihei/Wailea. The Maui Ocean Center anchors the 18-acre Maalaea Harbor Village, which also includes a retail strip shopping center, restaurants and other services.

When the United States and the world in general recover from the current economic crisis, it is hoped that Maui will continue to be a strongly favored destination for Mainland tourists. The island has a large share of condominiums available for families and groups on a budget. The California recovery in the early 2000's fueled higher demand for condominium rentals and this may possibly happen again in the next decade.

Hotels have not been adding much in the way of jobs, in fact, many hotel and other tourism-related industries have cut back their work force. Even when tourism numbers were growing steadily, job creation in the visitor industry was not matching that growth. Today, with tourism waning, the work force is noticeably decreasing. While tourism still dominates the labor force, the profitability problems of the large resorts have led managers to refine their operations.

Real Estate

Residential real estate can be divided into three broad categories (single-family homes, condominiums and residential lots) and four important geographic regions. With a variety of property types in each of the regions, the market has proven capable of moving up and down with relatively little correlation amongst regions.

All of the neighborhoods have single-family housing and residential lots. However, several neighborhoods such as such as Kapalua, Kaanapali, and Wailea are virtually comprised solely of luxury housing. Areas such as Kahului have no luxury housing and Wailuku has very little. All other areas have a mix.

With respect to condominium units, Upcountry and East Maui have virtually no condominium properties. All other areas have condominium units. When looking at leasehold versus fee simple projects, South Maui and Central Maui have very few leasehold condominiums. Only West Maui has a mixture of both types.

Areas such as Upcountry and East Maui are made up primarily of agricultural and rural properties. All other areas are limited in this property type.

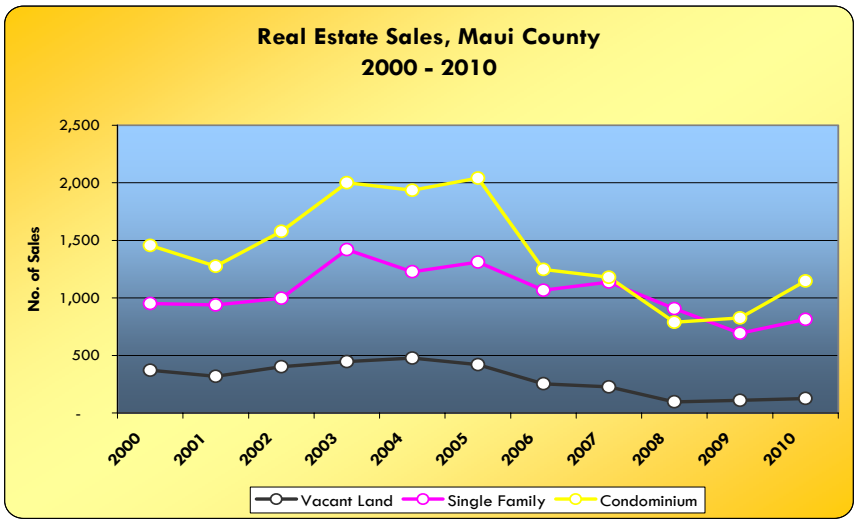
Owner-occupied housing on Maui runs about 56 percent of all occupied housing units. The total housing stock has been growing at a rate of about 1,000 units a year in the 1980's. The total accelerated to 1,500-2,000 new units in the late 1980's, well short of demand. The Maui population has expanded tremendously for the past 10 to 12 years, but housing was not being built at the same pace as the 1980s. As a result, demand for housing during that period outpaced supply and homes prices and rents rose dramatically. The median single-family home price on Maui averaged $462,821 in 2010, which is a drop of 7.2 percent from 2009's average of $498,708. Median sales price for a single family home was $574,760 in 2008, $627,887 in 2007, $697,450 in 2006, and $678,321 in 2005. Years 2005, 2006, and 2007 are considered the height of the real estate market.

Since then, the real estate market has changed direction, with a less stable economy and more stringent lending practices. In 2010, interest rates averaged 4.69 percent, down from the previous year's average of 5.04 percent. Average annual interest rates have been

on a steady decline since 2006 when the average interest rate was 6.41 percent. The 2010 average interest rate represented the lowest annual average since 1971. While interest rates remain relatively stable, the current economic recession and tightened lending continues to stifle Maui real estate.

The following summarizes a sales volume history for Maui County from 1990 to 2010, which includes resales and new project sales.

Year	Vacant Land	Single Family	Condominium
1990	298	560	1,459
1991	116	430	593
1992	120	382	496
1993	121	361	461
1994	148	404	592
1995	118	331	495
1996	126	451	577
1997	182	507	812
1998	276	641	999
1999	408	965	1,348
2000	372	951	1,456
2001	318	938	1,274
2002	402	997	1,578
2003	447	1,420	2,001
2004	477	1,228	1,935
2005	421	1,311	2,041
2006	255	1,066	1,247
2007	226	1,138	1,179
2008	97	907	788
2009	110	693	826
2010	127	814	1,147

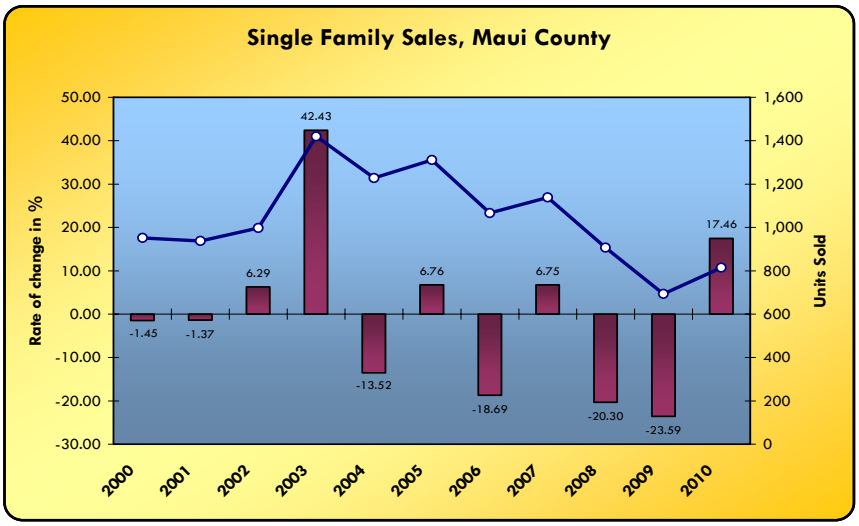


Source: Realtors Association of Maui

The real estate market increased significantly between 2002 and 2006. Single-family sales saw noteworthy increases in 2003, where the number of single-family sales leaped upwards of 42 percent. There was a 13 percent dip in 2004, followed by a rebound of almost 7 percent in 2005. For 2006, there was a decrease of 18 percent, with a subsequent upward bounce of almost 7 percent in 2007. Then, with the eroding economic conditions and financial crisis in 2008 and 2009, Maui County experienced a 20 and 23 percent drop in sales in each of the respective years. This was the biggest decline in sales since 1991, when sales of single-family homes dropped by 25 percent.

In 2010, however, there was a significant increase in the number of single family sales. This is attributed to the low property prices which have attracted market participants. The market for single family homes has experienced a price depreciation of about 30 percent since the peak of the market in 2006 and 2007.

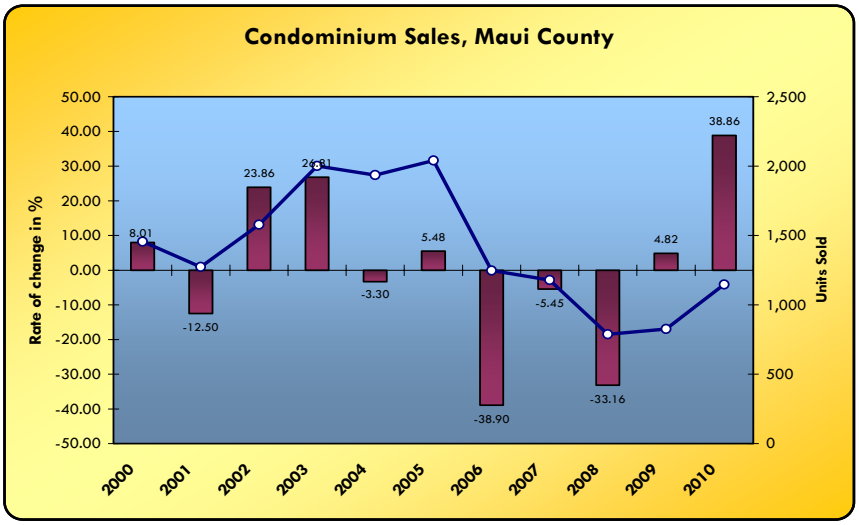
The following graph further illustrates the single-family sales volume history for Maui County from 2000 to 2010.



Source: Realtors Association of Maui

Similarly, condominium sales had experienced significant increases since 1999 in terms of units sold, achieving a new high in 2002 and a slight decrease in 2003. In 1999, 1,348 condominium units were sold, registering a 34 percent increase from the prior year. In 2001, the number of sales fell slightly, but rebounded significantly in 2002. In 2003, however, total condominium sales skyrocketed to 2,001, fell slightly to 1,935 units in 2004 and then jumped to 2,041 units in 2005. It appears that 2006 was the turning point for sales volume, as condominium sales plunged over 38 percent, followed by another 5 percent fall in 2007. For 2008, sales volume dived 33 percent. This was however off set by a 38 percent increase in 2010. Again, this is due to the falling unit prices which have attracted market participants.

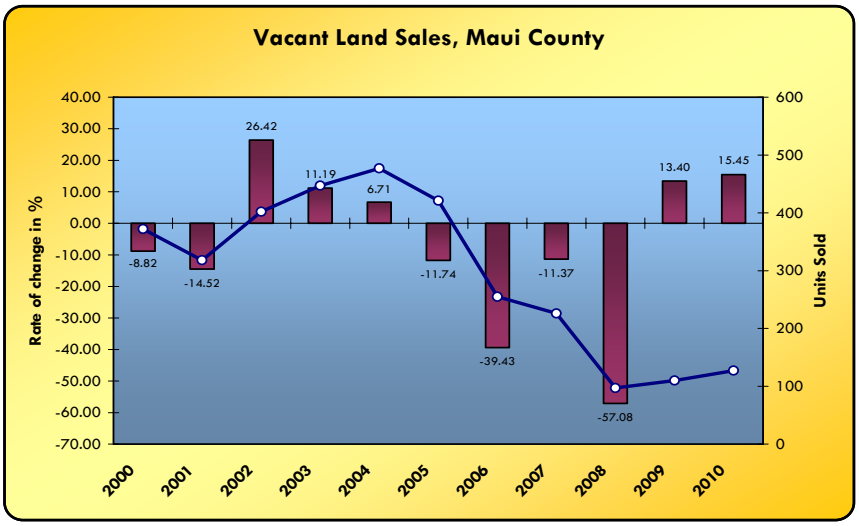
The following graph further illustrates the condominium sales volume history for Maui County from 2000 to 2010.



Source: Realtors Association of Maui

Land sales increased steadily between 2001 and 2004, but dropped 11 percent in 2005 with only 421 sales, then another 39 percent to 255 sales in 2006. This trend continued in 2007, with an 11 percent slide to 226 sales, surpassed by a huge 57 percent plunge in 2008. The first increase in four years was witnessed in 2009, as vacant land sales volume increased by 13 percent and again increased in 2010 by 15 percent. Many developers, realtors and lenders consider the passage of the Workforce Housing Ordinance (December 2006) and the Water Availability Ordinance (December 2007) to have had a significant contribution to the severe decline of sales of vacant land.

The following graph further illustrates the vacant land sales volume history for Maui County from 2000 to 2010.



Source: Realtors Association of Maui

Median prices continued to rise until 2006 for all categories of real estate. The average monthly median prices in 2006, for land parcels, single-family homes and condominium units, increased 29 percent, 2 percent and 33 percent, respectively. In 2007, average monthly median prices for land and single-family property decreased 19 percent and 10 percent, respectively, while the average median price for a condominium increased 6 percent. It should be noted that the average condominium median price were heavily influenced upward by December closings in Honua Kai, a luxury oceanfront property. For 2008, the average monthly median prices for single-family homes retreated by approximately 8 percent. Vacant land saw a gain of about 4 percent over 2007, while condominiums decreased by 6 percent. In 2009, vacant land median price again increased by little over 3 percent. However, single-family and condominium properties decreased by 13 and 12 percent, respectively. As the economic recession continued into 2010, the median sales price for all property types declined. Vacant land showed the largest drop of 33 percent from 2009 levels, and single family and condominium properties decreased by 7 and 16 percent, respectively.

Construction and Development

The construction industry, in the mid part of this decade, benefitted from a robust economy and building climate.

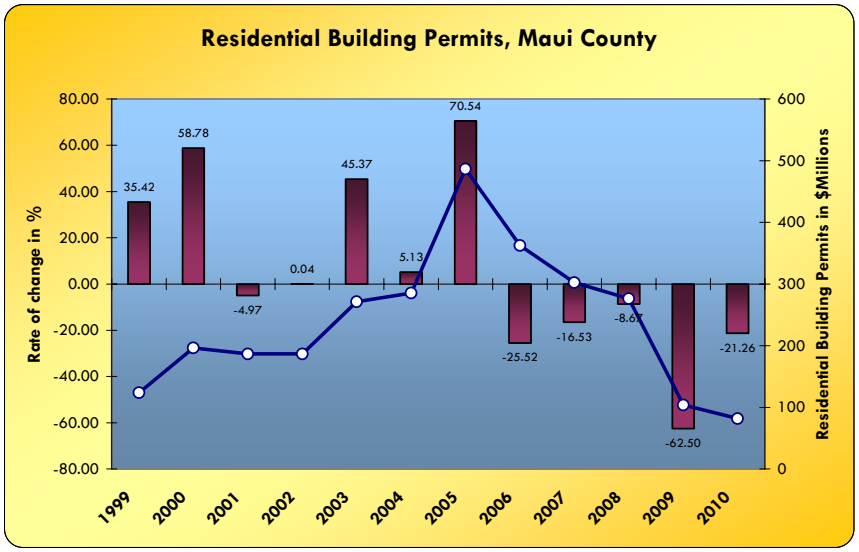
Three new commercial centers were built in 2000. The Wailea Shopping Village had been demolished and was replaced with The Shops at Wailea, which includes 150,000 square feet of upscale retail and restaurant space. Also, the 150,000 square foot Piilani Village shopping center was built at the same time and is anchored by a 55,000 square foot Safeway store, one of the largest Safeway in the state. The Ma`alaea Harbor Village shopping complex, where the premier Maui Ocean Center presently stands, was also built during the same period; however, since then, no other project has been attempted and the majority of the lots in this commercial subdivision sit vacant. As previously discussed, the Lahaina Gateway was completed in 2007 and injected an additional 137,000 square feet of retail space.

The effects of the late-2008 financial crisis and subsequent economic recession are still clearly visible across the island, as many new commercial and industrial projects completed during this period remain empty, or are having difficulty selling off or leasing units.

Construction of single-family and condominium properties has fallen significantly, as developers have curtailed building to meet their anticipated sales levels. As mentioned earlier, the single-family and condominium real estate markets have softened, with median prices decreasing as well as an increase in marketing days. Although the

economic recession has played a big part in the decrease of construction of residential properties; the enactment of two ordinances—the Workforce Housing Ordinance (2006; revised 2010) and the Water Availability Ordinance (2007; revised 2011), which have forced stringent requirements on developers, has also greatly affected construction on Maui.

The following graph illustrates the trend of residential building permits (in dollars) in Maui County from 1999 through 2010. As shown in the following graph, residential permits peaked in 2005 at the height of the real estate market. As previously discussed, many feel that the passage of County ordinances relating to development in 2006 and 2007, coupled with increased construction costs and poor economic conditions, have severely lessened the ability to feasibly create new housing projects.



Source: UHERO Economic Information Service

In Central Maui, the majority of the residential construction is within the Kehalani and Maui Lani project districts, which are being developed with several new subdivisions and condominium projects. Situated in the Kehalani district are Koa, which offers both house lots and single-family homes; Akolea and Cottages, both consisting of house and lot packages; Villas at Kehalani and Milo Court, which are townhouse condominium developments. Presently, there are four ongoing projects at Maui Lani. They include Na Hoku and Traditions (single-family homes), Sand Hills Estates (house lots), and Parkways (both house lots and single-family homes).

The demand for housing in the Central Maui area had been extremely strong up to mid-2006, with projects usually sold out prior to completion of construction. Due to the more recent downward trend of the economy and residential real estate market, developers are now

finding themselves holding inventory and most new construction has ceased.

Meanwhile, Spencer Homes completed construction of a 410-unit affordable project in 2008, called Waikapu Gardens. Approximately half of the houses met County affordable housing pricing requirements. This project was welcomed by the community as "affordable" prices were stated to be below $300,000. This project gained approval by the Maui Nui Affordable Housing Taskforce which was set up in response to the growing need for affordable housing on Maui.

Up to 2006, Kihei had also seen an upswing in residential development brought upon by ongoing residential projects including Ke Ali`i Ocean Villas (townhouse condominiums) and Moana Estates (single-family homes) by Towne Development, Kamali`i Alayna (single-family homes) by Betsill Brothers, Inc., and Signature Homes' Hokulani Golf Villas (residential condominiums). Other current South Maui projects are Kilohana Waena (house lots) and Kai Ani (townhouse condominiums). Similar to Central Maui, the developers of ongoing projects have slowed construction while continuing to market their units; whereas, previous Kihei developments were often sold out prior to construction completion.

In Wailea, the Shops at Wailea and Wailea Town Center are the only established commercial developments. Both centers target the high-end residents of this resort community and Wailea's upscale visitors. Phase I of Wailea Town Center was completed in 2006 while Phase II was completed in 2007. It contains neighborhood services which include retail and office owner-occupants. The second phase included more commercial condominium units and residential units on the second floor. Current condo owners in this project include Coldwell Banker and First Hawaiian Bank. This development was met with high demand as all of the units sold initially and some have even resold. Another commercial retail/office project, Wailea Gateway Center, was completed in 2009.

Retailing

In retail, the most significant addition to Maui is the Lahaina Gateway situated along Honoapiilani Highway across from the Lahaina Cannery Mall. It was dubbed as a "lifestyle center" with specialty retail shops, services and restaurants. Opened in late 2007, this 137,000 square foot center includes anchor tenants such as Office Max, Barnes & Noble, Outback Steakhouse, The Melting Pot, and Lahaina Farms, a supermarket owned by Foodland's Sullivan family.

Prior to Lahaina Gateway, Maui Marketplace on Dairy Road was the last large retail development to be built, at 275,000 square feet. This center contains the likes of Lowe's Hardware, Office Max, Sports

Authority, Old Navy, Petco, Pier One Imports, Burger King and Starbucks Coffee.

Wal-Mart and Home Depot are also located on Dairy Road, immediately west of the Maui Marketplace. These outlets joined earlier arrivals Costco and Kmart, as well as Alexander & Baldwin's neighboring Triangle Square, in carving up the Maui retail pie. However, the local malls are answering the challenge with more food and entertainment, and retailers that can compete in their niche. Maui's largest mall, Queen Kaahumanu Center in Kahului, has been challenged by the presence of these large box retailers and vacancies are very noticeable.

In Kaanapali, Whalers Village has taken a turn toward the luxury market popular with the Japanese. After completing a $3 million renovation and a change in its tenant mix, this oceanfront center now aims for both westbound and eastbound visitors. Japanese visitors are targeted with Duty Free Shoppers, Louis Vuitton, Prada, Loewe and other high-end shops.

The 150,000-square foot Shops at Wailea opened in 2000, offering upscale shopping in its high-end retail shops. Tenants include Louis Vuitton, Coach, Bally, Fendi, Tiffany & Co., Banana Republic, and Georgiou. Restaurants in this mall include Ruth Chris Steak House, Tommy Bahama Café and Emporium, and Longhi's. Other retailers include Crazy Shirts, Hot Topix, Gap, Wolf Camera, and Whalers General Store.

Agriculture

Agriculture on Maui is dominated by larger operations like Hali'imaile Pineapple Company and Alexander & Baldwin's Hawaii Commercial and Sugar (HC&S).

Pineapple now confronts more foreign competition from places like Thailand. In 2007, Maui Land & Pine shut down the canning portion of its operation to rely solely on the more profitable fresh fruit segment. Downsizing of the plantation occurred in 2008, which resulted in a reduction of over 200 employees. In December 2009, Maui Land and Pine announced that it would be shutting down its agricultural arm, citing continued annual losses. However, a new company, Hali'imaile Pineapple Company, was formed the following week and immediately took over pineapple operations.

HC&S survives as Hawaii's only remaining sugar operation due in part to its economies of scale, its land configuration (a relatively compact and contiguous area in the isthmus of the Valley Isle), and its commitment and ability over the years to reinvest and upgrade plant and equipment. But the last active sugar plantation in the state is facing other hardships, namely water. There had been drought conditions on Maui between 2007 and 2009, contributing to low

yields. According to HC&S, future viability is heavily dependent on continued stream diversion; however, there have been opposition to this continued practice. HC&S continues to re-evaluate its operations to remain viable, including consideration of potential biofuels and other energy alternatives.

Another of Maui's sugar operation casualties, Pioneer Mill in West Maui, is missed visibly. For years, proponents of maintaining and sustaining Hawaii's sugar industry argued that growing sugarcane imparted to this economy an important, if underestimated, non-pecuniary benefit; sugar kept the land green and attractive, for tourists and locals alike, an its cultivation contributed to the recharge of groundwater resources. Economists call this situation an "externality," an activity that affects others for better or worse, without those others paying or being compensated for activity.

Anyone who doubts that logic now has only to drive the West Maui coast from Olowalu to Kaanapali and look mauka, at an entire mountain side of dry brush and unused fields. As with many cases where sugar plantations have shut down, most diversified agriculture crops are just not land intensive enough to utilize all the vacant land. Coffee and seed corn operations are possibilities, but they make only a small dent.

In addition to sugar and pineapple cultivation, Maui also offers rich opportunities for agricultural diversification by small farmers and large agribusinesses. Top among new agricultural products are: papaya, cut flowers, coffee, Kula onions and strawberries, and Chinese cabbage from Kula. Molokai offers its sweet potatoes, lettuce and alfalfa, as well as taro.

High-Tech

Maui's contribution to Hawaii's fledgling high-tech industry remains pre-eminent in the state. It also represents genuine diversification of the economy. The Maui Research and Technology Park in Kihei has all of it's infrastructure in place, and has completed three major building projects. Most important, it houses one of the country's most powerful supercomputers. The park now hosts over 30 companies and over 300 employees on 415 acres.

With access to one of the most powerful supercomputers in the world, funded by the U.S. Air Force, the Maui Research and Technology Park is continuing its efforts to diversify the Maui economy into something fundamentally different from what exists in the county or anywhere else in the state.

An office building was developed by the Maui Economic Development Board in 2006, and contains approximately 31,500 square feet of rentable area on a 2.8-acre site. Another completed project is Park Plaza, a 26-unit commercial office condominium building developed

by Goodfellow Brothers and Betsill Brothers. Since its completion in 2008, sales have been very sluggish.

The Park is sticking to its long-run strategic plan to capitalize on its location at the center of the Pacific Basin. Its extensive fiber-optic network to the U.S. Mainland makes it one of the most fiber-rich environments in the world, greater than many facilities actually located on the Mainland.

County Government

Maui County is unique in having several inhabited islands in its jurisdiction: Maui, Molokai, as well as Lanai, and the uninhabited island of Kahoolawe.

Maui County has an elected Mayor and County Council, and the Liquor Control Commission is semi-autonomous with appointed directors. Although all courts are conducted by the State, the County is responsible for prosecution and the Mayor appoints the prosecutor. The council has nine members, each residing in one of nine districts; however, voters cast ballots for all nine seats.

Unlike other states, Hawaii has only two layers of government: State and County. The State is responsible for many functions that elsewhere come under the jurisdiction of municipalities, such as schools, hospitals, and airports. Also, unlike other states, Hawaii has statewide zoning carried out by the State Land Use Commission. The County has zoning authority within the boundaries established by the commission.

In recent years, the County of Maui has passed two ordinances that have greatly affected development—the Workforce Housing Policy and the Water Availability Ordinance. In an effort to provide affordable housing, they passed the Workforce Housing Policy, Ordinance 3418, on December 5, 2006, under which all proposed developments are subject to review if they are to contain five or more residential units or lots. Under this ordinance, if the average sales price is projected to be less than $600,000, 40 percent of the total units must be priced to meet the various affordable categories. If the average sales price in the project is $600,000 or more, then 50 percent of the units must be affordably priced. An alternative to providing the affordable units is to pay an in-lieu fee equal to 30 percent of the average projected sales price of the market rate units multiplied by the number of affordable units required in the development. Or, the owner may elect to provide land which is equal in value to the in-lieu fee. This ordinance has had a profound effect on residential development since its passage. The subsequent reduction in proposed projects had many in the building and real estate industries questioning whether the ordinance created too much of an obstacle for developers.

In an effort to stimulate residential construction, the ordinance was revised by the County Council on February 26, 2010, as Ordinance No. 3719, reducing the amount of required affordable housing units built on site to 25 percent, provided the average sales price of the market units is projected to be less than $600,000. If the average sales price in the project is $600,000 or more, then 50 percent of the units must be affordably priced. The new law also clarified the calculation of required affordable units built off site; based on 50 percent of the total number of on-site market units, regardless of their projected average sales price.

The Water Availability Ordinance is another law that has made an impact on the development community. On December 14, 2007, the County of Maui passed into law Ordinance 3502. As a result, the Department of Water Supply (DWS) is presently restricting the issuance of meters for all uses in the central and south Maui service areas and this bill restricts issuance of any building permits until the DWS can issue a meter consistent with the provisions of the bill. In order to do so, the DWS director needs to provide verifiable, long-term supply of water to the property. Landowners and professionals in the development community have been openly critical of the ordinance, some calling it a de facto moratorium on housing. Not surprisingly, sales of vacant development lands have been very scarce. Recently, the County Council has been reviewing the impact of this ordinance and considering revisions to it.

B. NEIGHBORHOOD DESCRIPTION

Since real estate is fixed in location, its marketability and rentability are strongly influenced by economic and social trends in its immediate environment. The continuing attractiveness of this neighborhood environment to potential users and tenants, and its competitive relation to those of substitute properties, must therefore be evaluated and forecast by the consultant. In particular, perceived neighborhood trends affect both the quality and quantity of the revenues the subject property can reasonably be expected to generate.

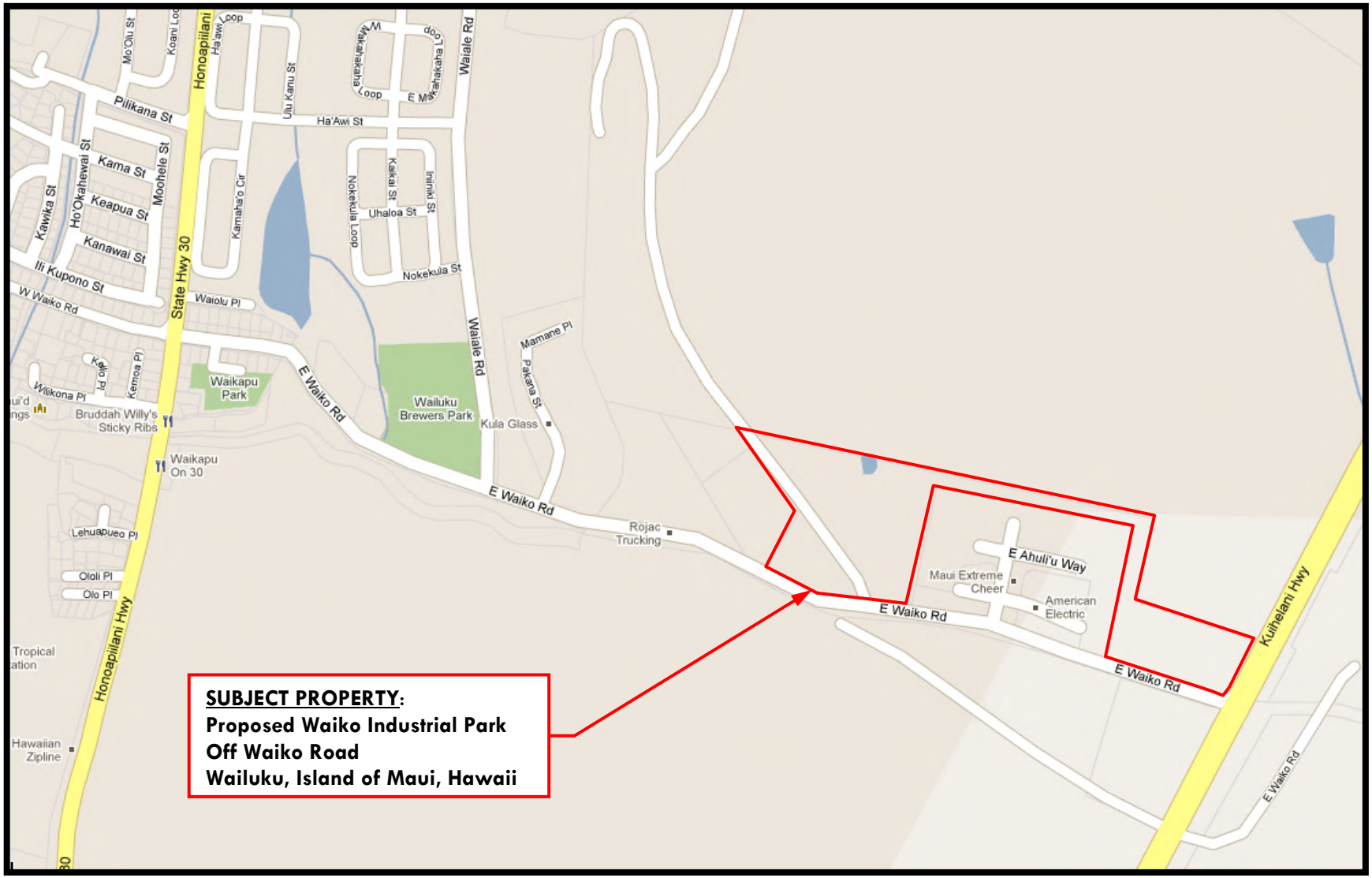
A neighborhood of income-producing properties is a geographic area characterized by similarity of uses and/or users, within which any change has a direct and immediate effect on the subject property and its value.

The geographic area surrounding the subject property is defined by physical and man-made boundaries, and encompasses an area known as Wailuku-Kahului. This region is located on the north shore of the Island of Maui and encompasses the civic and business centers of Wailuku and Kahului. The island's major seaport and primary airport are also contained within the boundaries of this region. The surrounding agricultural land of Central Maui, and the eastern half of the West Maui Mountains, is also within the Wailuku-Kahului neighborhood.

The boundaries of the Wailuku-Kahului region are the northern shoreline from Poelua Bay to Baldwin Park on the north, Kailua Gulch and Lowrie Ditch on the east, Spanish Road to Waikapu Road to Honoapiilani Highway to Pohakea Gulch on the south, and the Wailuku Judicial District boundary on the west.

Population is concentrated in the urban centers of the region. Wailuku has maintained its role as the civic-financial-cultural center while Kahului has strengthened its role in recent years as the business and industrial center.

In addition to the urban centers of Wailuku-Kahului, the region also includes the more rural settlements of Waihee to the north and Waikapu and Puunene to the southeast. Agricultural lands are adjacent on the lower slopes of the West Maui Mountains and in the central plain south and east of Kahului. This green border is a significant part of the settlement pattern because of its open space and economic value. Kahului Harbor and Airport are major land users along the Kahului shoreline. As major ports of entry for people and goods, they serve as an important center of jobs and economic activity.



Not to Scale!

NEIGHBORHOOD MAP

The major thoroughfares through Kahului and Wailuku are Kaahumanu Avenue which begins in Kahului and provides primary access to Wailuku as well as Lahaina and Kihei; Hana Highway, which is actually a continuation of Kaahumanu Avenue, leads from Kahului to the eastern or "upcountry" portions of the island; and Puunene Avenue which provides access to all major areas in Kahului and ultimately leads to the new Kuihelani Highway which provides by-pass access to Lahaina and Kihei. The Kaahumanu Avenue also runs into Main Street, and via secondary access, runs into Waiehu Beach Road and Lower Main Street.

Kahului, adjacent to Wailuku, is situated on the northwest portion of the island of Maui, and is the central commercial, industrial and residential area of Maui. Kahului Town contains Maui's major shopping centers, centralized industrial areas, financial institutions, medical office facilities and business offices. Additionally, the Kahului Airport and Kahului Harbor are located in Kahului proper and houses the majority of firms providing various goods and services throughout the island, as well as to Lanai and Molokai. Consistent with its central location, post office facilities, community library, parks, schools (elementary, intermediate, high school and a community college), churches of various denominations, entertainment facilities, food outlets and a fire station are located in Kahului.

Wailuku, at one time, was the heart of Maui's business activities. Decentralization of business to nearby Kahului and lack of maintenance and modernization of buildings to keep up with the new shopping habits brought about a gradual decline. However, since the creation of the municipal parking area in Wailuku, several new buildings have been built or renovated and a rejuvenation of the Wailuku Town is being experienced. The recently passed Community Plan envisions Wailuku as the "governmental, cultural and professional center of Maui". Located in Wailuku are the various government agencies, courts, hospital, major recreational facilities and police station.

Wailuku's Fire Station sits in the heart of Wailuku Town, and until the opening of the Kahului Fire Station, was the only one in Central Maui. Kahului Fire Station is a 21,300 square foot facility that includes two main buildings and is situated on Dairy Road.

The Maui Memorial Medical Center, which is Maui's primary facility of medical and emergency service, is located between the connecting boundaries of Kahului and Wailuku. In 2006, work was completed on a new wing for the hospital. The Police Station is also conveniently located nearby.

Numerous preschools, elementary, intermediate and high schools are located throughout Kahului and Wailuku, with the University of Hawaii Maui College also located on Kaahumanu Avenue, in Kahului.

In order to fully understand and appreciate Kahului and Wailuku's potential for expansion, as well as factors that could limit the growth of this region, a brief summary of recent or proposed developments in these Central Maui districts along with a few important issues facing future development are in order.

RESIDENTIAL

The residential districts surrounding these two centers are significantly different in character. Wailuku Town is comprised of older residential areas, intermixed with business uses, varying lot sizes, and a more haphazard street pattern representative of older subdivisions. Surrounding Wailuku Town, are more modern, strictly, residential subdivisions, which feature wide curvilinear streets and varied lot sizes. The newest subdivisions in the area are situated in the Kehalani Project District where most feature tighter roadways and zero lot line developments. The residential areas in Kahului are also varied. The older projects feature with wide curvilinear streets and larger lots; where as the newer subdivisions, primarily within the Maui Lani Project District, features smaller lots, narrow roadways, and zero lot line development. There are also several gated communities with golf-course frontage.

Kahului

In Kahului, the major residential area is represented by Alexander & Baldwin, Inc.'s Kahului Town Development. This subdivision consists of 14 increments that were built between 1951 and 1981. There are a total of 3,400 lots within the 14 increments. Kahului Town is distinguished as the first planned "new town" in Hawaii to provide quality housing at affordable prices.

Today, Kahului Town is a bustling residential community. The ongoing Maui Lani Project District development will include up to 3,000 new residential units, ranging from executive golf homes to affordable units and span 1,000 acres on the south side of Kahului and east side of Wailuku. In addition to single-family and multi-family residential units, the Maui Lani development includes a golf course, churches, school and a recreational center. Already, several phases have been constructed and sold over the past several years including The Greens, The Grand Fairways, The Bluffs, The Islands, Sandhills Estates, Legends Phase I and II and Na Hoku. Upcoming developments in Maui Lani include Traditions, a 153 house-and-lot single-family subdivision and Parkways at Maui Lani, a 210-lot single-family subdivision.

Wailuku

In Wailuku, the older residential homes are mixed with small businesses throughout central Wailuku Town. There are three primary

residential subdivisions on the outskirts of the town including Wailuku Heights, Waiehu Terrace, Waiehu Heights and Leisure Estates.

The older Wailuku Heights area was extended by two exclusive and prestigious phases. The first extension offers 270 lots while the second phase offers an additional 130 lots to the subdivision. Once verdant pastureland, Wailuku Heights is nestled in the West Maui Mountains and offers underground utilities, scenic views and a landscaped park.

Directly below the Wailuku Heights neighborhood is the Kehalani Project District. Single-family residential developments in this area include the Ohia and Maunaleo subdivisions. These projects, by Towne Development and Stanford Carr Development, were sold strictly as house-and-lot packages. Kehalani Gardens and Iliahi at Kehalani, both condominium projects, were also built by the same developers and were completed shortly after in 2005.

Two other single-family projects were then constructed in Kehalani 2006 and 2007. These included the Koa at Kehalani (72 residential lots) and Akolea at Kehalani (97-unit house and lot subdivision), developed by Towne Development. In 2008, Stanford Carr Development developed the Cottages at Kehalani (114-unit house and lot subdivision).

More recent construction in the Kehalani Project District included Milo Court, a 97-unit duplex-style condominium developed by Towne Development, and the Villas at Kehalani a 103-unit townhouse condominium developed by Stanford Carr Development.

In addition to construction in the Kehalani Project District, residential development spread southerly to the Waikapu a small community in Wailuku proper. Jesse Spencer completed the last home in Waikapu Gardens at the end of 2008, a 410-unit affordable housing project. In 2007, two house lot subdivisions also came to market in Waikapu, Waiolani Pikake (37 lots) by KSD Hawaii and Waiolani Mauka (105 lots) by Scott Nunokawa.

Another unique subdivision that was constructed in the Wailuku area is the Wailuku Country Estates Subdivision, which consisted of 184 agriculture lots located near the Puuohala Camp neighborhood just north of Wailuku Town.

COMMERCIAL

Commercial development in Kahului is concentrated along the major thoroughfares in strip fashion, while Wailuku's main commercial activity is concentrated in the central core of the town. Due to the central location of these communities, there has historically been strong

demand for commercial space in Central Maui, and vacancies within established projects in this region tended to be very low. However, the recent downturn has resulted in less demand for commercial spaces and higher vacancies, as well as reduced rental rates.

Kahului

There are four major shopping centers in Kahului. Maui Mall, opened in late 1971 contains a gross leasable area of 181,500 square feet on a 25-acre site. It is anchored by tenants such as Longs Drug Store, and the Maui Mall Megaplex, by Wallace Theater Corporation. Star Market closed its doors in March 2008, but was replaced by a Whole Foods supermarket. The largest center, Queen Kaahumanu Center, opened in 1973 and had 300,000 square feet of gross leasable area. Extensive renovations were completed in 1995, which included a two-level shopping wing, a six-screen movie theater, expanding the major stores, renovating the existing mall and adding a parking structure and access road. The project expanded the center to 500,000 square feet. It is currently anchored by Macy's and Sears. The Maui Marketplace on Dairy Road is home to a number of big-box retailers including Lowes Hardware, Sports Authority, Office Max, Petco, Pier One Imports, Starbucks Coffee, Jamba Juice, Bank of Hawaii and Burger King. Lastly, Kahului Shopping Center, the oldest major shopping center which opened in 1951, was partially destroyed by fire in 2005 and plans are underway to redevelop the entire block into the Kahului Town Center. This development will consist of retail, office and condominium living.

In addition to these centers, Kahului is home to other large retailers including Costco, Kmart, Home Depot, and Wal-Mart. All of the major financial institutions and the large automobile dealerships are also located in Kahului. The Maui Arts and Cultural Center (MACC) was built here in 1993 and includes a 1,200-seat theater, a 250-seat studio theater, an art gallery, meeting rooms, dance studios, courtyard, administrative offices, an amphitheater able to accommodate about 5,000 people, and an event lawn. The MACC is constructed on 12-acres at Maui Central Park, which is located between the Maui Community College and the Maui Botanical Gardens.

Wailuku

The hub of commercial activity in Wailuku is concentrated in an area along Market Street and Main Street. Known as Old Wailuku Town, this neighborhood is characterized by older, low-rise buildings consisting of small, individual shops and offices. Civic uses surrounding this area of Wailuku include the State office building, the County office buildings, and the judicial building.

The town is home to numerous professionals in the fields of architecture, engineering, law, financial management, real estate and banking. All of the major financial institutions have branches in

Wailuku Town. Notable office buildings in Wailuku include One Main Plaza, Wailuku Executive Center, Maui Realty Suites, the Trask Building, and Wells Professional Plaza. Wailuku's office market is also feeling the affects of the economic slowdown with evidence of higher vacancies and decreasing rents.

INDUSTRIAL

Vacant industrial has typically been difficult to acquire, due to the lack of inventory in the market. Much of the vacant land in Central Maui's industrial parks is being held by business owners, some of whom are waiting for more ideal conditions to build new facilities. Others may be looking for a turn around in the real estate market before putting their property up for sale. However, the same economic downturn that has significantly impacted demand for commercial space in Central Maui has taken its toll on industrial space. Vacancies have increased, while at the same time warehouse rents and land prices appear to have decreased.

Kahului

There are several industrial parks in Kahului, but the largest and most established of them all is the Maui (Kahului) Industrial Park, which is bordered by Hana Highway, Puunene Avenue, Dairy Road and Kamehameha Avenue. It includes low-rise warehouse and commercial uses and is occupied with a mixture of industrial, retail and office tenants.

Maui Business Park, Phase I-A and I-B (76 acres) has also attracted commercial, office and industrial users along Dairy Road and Hookele Street. Phase II of Maui Business Park is currently in design and will ultimately add approximately 179 acres of light industrial land surrounding the first phase.

Other existing industrial subdivisions include the Airport Triangle on about 13 acres, the 40-lot Kamehameha Parkway No. 2, and the Central Maui Baseyard on Mokulele Highway.

Wailuku

Existing industrial subdivisions in Wailuku include Wailuku Industrial Park, The Millyard, Waiko Baseyard and Consolidated Baseyard. The oldest of which is the Wailuku Industrial Park, an improved light industrial subdivision with 74, fee simple lots off of Lower Main Street in Wailuku. Lots range from 10,106 square feet to a parcel 3.089 acres in size. This subdivision is approximately 95 percent developed and includes the Wailuku Town Center anchored by Sack 'n Save.

The Millyard was developed in 1985 as an improved light industrial subdivision located at the old Wailuku Sugar Mill site. This industrial subdivision contains 57 lots, and is home to the Wailuku Post Office which opened there during the late-1990s. Approximately 84 percent of this subdivision has been developed with a mixture of

commercial and light industrial uses. The Millyard Plaza is one of the largest complexes in this subdivision. Also, several dentists and veterinarians have seen fit to build their own free-standing facilities in The Millyard, which has developed into more of an office park than an industrial center.

Completed in 2006, the Waiko Baseyard in Waikapu consists of 19 lots on approximately 15 acres of land. This subdivision was immediately sold prior to subdivision completion. The Consolidated Baseyard, also in Waikapu followed shortly after and was completed in 2007. Built on about 23 acres of land, the 35 lots in this light industrial park saw very strong interest and were sold quickly. The majority of purchasers within both subdivisions were local business owners whom intended to relocate their operations. These subdivisions were geared toward true industrial users.

The most recent development in the Wailuku area is the Maui Lani Village Center. This project completed construction in 2009 and features 78 lots zoned Village-Mixed Use Commercial/Residential. This zoning allows for a mixture of commercial, industrial, and residential use on each property. Businesses that intend to occupy this subdivision include Paradise Beverage, Ace Hardware, Menehune Water, 76 Gas Station, Oceanic Time Warner Cable, Times Supermarket, Walgreens, etc. However, only a handful of transactions have actually closed to date. Absorption in this project is moving at a slow pace, which is directly attributed to the economic recession.

CONCLUSION

All public utilities including electricity, water, telephone, and sewer service are available in Kahului and Wailuku, as is police, fire and ambulance services. Propane gas is not a public utility, however, is available. All charges for public services are standardized for the Island of Maui.

With the increase of public transportation now available on Maui, Kahului and Wailuku are easily accessible from most parts of the island. This and the fact that it is central to airport and harbor facilities, commercial and industrial establishments, properties located in this area are ideal.

Due to this region being the center of County, State and Federal offices, as well as community services, properties in these areas are anticipated to be in greater demand in the years ahead. Based on the desirability of this area and forecasted demand here, property values are expected to continue their appreciation in the long-term.

C. PROJECT DATA

ENVIRONS

The Waiko Industrial Park is a proposed 38-lot, light industrial subdivision situated on Waiko Road between Kuihelani and Honoapiilani Highways, in Waikapu, District of Wailuku, Island and County of Maui.

The town of Waikapu is a small community located approximately 1.5 miles from Wailuku Town. Much of the community is situated along Honoapiilani Highway, which extends in a north-south direction and Waiko Road which runs in an east-west direction.

Established residential subdivisions in the area include Waikapu Village, Waikapu Homesites, and Waiolani Elua. The neighborhood has enjoyed a spurt of growth in recent years. The two newest subdivisions in the area are Waiolani Mauka, a 105-lot subdivision on the mauka side of Honoapiilani Highway; and Waikapu Gardens, a 411-house and lot subdivision constructed on the makai side of Honoapiilani Highway.

Commercial establishments situated along Honoapiilani Highway include Waikapu On 30, a local eatery and snack shop; The Maui Tropical Plantation, a 60-acre working plantation and tourist attraction; and two golf courses, the Kahili and The King Kamehameha Golf Club.

Industrial and agricultural uses are situated makai of Honoapiilani Highway along Waiko Road, which extends easterly toward Kahului. There are two industrial subdivisions in the immediate area. West of the subject is the Waiko Baseyard. Constructed in 2006, this subdivision consists of 19 lots, some of which have been combined. Businesses in this subdivision include Rojac Trucking and Rojac Construction, Brewer Environmental Services Hawaii, Kula Glass, and Miyake Concrete. The Consolidated Baseyards Subdivision abuts the subject property. This subdivision was constructed in 2007, and contains 38 lots. Businesses here include Island Tile Inc., American Electric, Kiwi Car Care, Pacific Source, DHX, Tri Isle, Lanes Carpet and Service and the Maui County Fire Department. Other surrounding properties include fallow agricultural land, a cattle feed lot, a compost processing area, and an orchid farm.

As mentioned above, the subject will have easy access to two major highways which will help to facilitate trips to other parts of the island. Honoapiilani Highway (Highway 30) provides access to the west end of Maui which includes the Lahaina, Kaanapali and Kapalua destinations. On the way to these communities, Honoapiilani Highway connects to Highway 31 which furnishes roadway access to the Kihei-Wailea-Makena region.

Kuihelani Highway (Highway 380) will take care of travel to Kahului and other communities to the north and east. It also connects with Highway 350 (Puunene Avenue) which also travels to Kihei via Mokulele Highway.

DESCRIPTION OF THE REAL ESTATE:

***Property Data*:**

Legal Description: A title report was not available for review by the Consultant. The State of Hawaii Tax Map identifies the subject as Division 2, Zone 3, Section 8, Plat 07, Parcel 102.

Census Tract: The subject is identified as being within Census Tract No. 311.01.

Owner of Record: The owner of record, as identified by County of Maui public records, is Waiko Industrial Investment, LLC.

Transaction History: Public records indicate that the subject was conveyed from Roderick Fong to Waiko Industrial Investment, LLC for a purchase price of $1,700,000. This transaction was recorded in the Bureau of Conveyances on July 30, 2010 as Document No. 10-108418. Prior to this transaction, the property was conveyed from A&B Hawaii, Inc. to Roderick Fong for $1,690,000. This sale was recorded in the Bureau of Conveyances on July 21, 2009 as Document No. 09-111117. There were no other conveyance of the subject within three (3) years prior to the effective date of this report.

Subject Offering Information: A search of Maui Multiple Listing Service did not reveal any listing of the subject within three (3) years prior to the effective date of this report.

Real Property Tax Assessments and Taxes: Research at the Maui County Real Property Assessment Division revealed the following assessments and taxes for the subject during the tax periods between 2008 and 2010.

Table 1 – REAL PROPERTY TAX AND ASSESSMENTS

	2010	2009	2008
Land (Agricultural):	$400,300	$400,300	$400,300
Land (Industrial):	$2,106,600	$2,106,600	$1,728,500
Building (Industrial):	$100,700	$97,700	$91,100
Total:	$2,607,600	$2,604,600	$2,219,900
Rate per $1,000 (Ag):	$5.00	$4.50	$4.50
Rate per $1,000 (Ind):	$6.50	$6.50	$6.50
R. P. Taxes:	$16,348.95	$16,129.30	$13,628.75

Zoning: The site is designated Agriculture District under the State of Hawaii Land Use, County of Maui Zoning, and the Wailuku-Kahului Community Plan.

***Site Description*:**

Size and Shape: The subject has a land area of 31.222 acres, which included a 1.230 acre roadway easement. The parcel is highly irregular in shape, surrounding the Consolidated Baseyards property on its north, east and west sides.

Topography and Soil Condition: A physical inspection of the property confirmed that topography is generally level to gently sloping. The Consultant has not been provided with soil, subsoil or other engineering studies to determine the load-bearing capacity of the subject; however, based on typical construction in the neighborhood and our knowledge of other properties in the immediate vicinity, the site is presumed to have stable soil conditions and any drainage problems are assumed to be correctable.

Access: Vehicular access to the subject is via Waiko Road.

Easements and Restrictions: According to the State of Hawaii Tax Maps, the subject is encumbered by "Easement C" a 1.230 acre roadway easement on the western side of the property. In addition, a 25-foot wide power line easement runs along the southern side of the parcel. Along Waiko Road (southern side), there is a 20-foot wide building setback. A 30-foot wide building setback exists along Kuihelani Highway (eastern side). Furthermore, vehicular access is prohibited from Kuihelani Highway.

Flood Status: Flood Hazard Districts are delineated on Flood Boundary and Floodway Maps and the Federal Insurance Rate Maps prepared by the Federal Insurance Administration and Federal Emergency Management Agency. The parcel is situated on Map Numbers 1500030393E and 1500030394E, by the Federal Emergency Management Agency; of which there is currently no printed map. As confirmed by County of Maui public records, the subject lies in Flood Zone X. Zone X within Maui County indicates areas determined to be outside of the 0.2 percent annual chance flood plain. Flood insurance is not required for properties within this flood zone.

Utilities: The subject has adequate availability to electricity, with power lines actually running through the property, via an overhead utility easement. Water and sewer service are not currently available to the property.

Current Uses: On the day of inspection, it was noted that a portion of the site was being utilized for the repair and storage of heavy

equipment, vehicles and scrap. These uses are allowed, as the property has a Conditional Permit for industrial use. Other areas were fenced off and being used for grazing and keeping livestock. The roadway easement on the western side of the property was in-use, providing access for heavy machinery and tractor trailers working in the Maui Lani Project District.

Description of the Proposed Project

Land & Improvements: The subject consists of approximately 31.222 acres of land. The land is presently designated Agricultural District under the State of Hawaii Land Use, County of Maui Zoning, and Wailuku-Kahului Community Plan.

The project proposed is a 38-lot light industrial subdivision. It is anticipated that the project, which is still in its preliminary planning stage, will have industrial lots ranging from 9,536 square feet to 8.43 acres in size. The majority of the inventory, approximately 28 lots; will be less than 15,000 square feet in size; another 7 lots will range from about 20,000 to 35,000 square feet; and, 3 lots will be between 1 and 2 acres in size. There will also be one, 8.43 acre lot, which will be situated at the eastern portion of the site near the Waiko Road and Kuihelani Highway intersection. The lots are expected to be fully-serviced and building-ready. Access will be via Waiko Road which runs between Honoapiilani and Kuihelani Highways.

Likely Purchasers or Tenants: In light of its unique location, away from the central business districts, the harbor and the airport, this proposed subdivision is expected to attract pure-industrial users. This is meant to include businesses that are looking primarily for warehouse space and fenced yards. Tenants like these have been displaced from the central areas of Kahului and Wailuku by higher rents which were being driven upward by retail and service users competing for space. Typical industrial tenants may include plumbers, electricians, contractors, building suppliers, wholesalers, fabrication companies, auto repair companies, warehousing companies, trucking companies, and similar type businesses. From a market perspective, the subject is well-suited for a light industrial development of this type. The neighboring Consolidated Baseyards Subdivision and Waiko Baseyard have been successful in attracting these pure-industrial users.

The developer does, however, envision the larger 8.43-acre lot to be utilized for commercial use. This lot's location at the corner of Kuihelani Highway and Waiko Road allows for visibility and exposure to traffic that would support a variety of commercial uses. A traffic signal recently installed at this intersection allows for convenient access to Waiko Road off this busy highway.

Commercial uses such as retail businesses, professional offices, and service companies are not expected to occupy the northerly portion of the subdivision unless the complexion of Waikapu and Waiko Road changes immensely.

Present Use: The subject site is present zoned and community planned for agricultural use; however, the site is currently utilized as an industrial baseyard in accordance with a Land Use Commission Special Use Permit and a Conditional Use Permit. The Conditional Permit is set to expire on March 1, 2014.

Most Appropriate Use: The proposed industrial subdivision is the most appropriate use of this site from a market perspective. Under its agricultural zoning, the subject has poor to fair agricultural potential. Industrial utilization of the site is reasonable given the complementary businesses situated in the neighboring Consolidated Baseyards and Waiko Baseyard subdivisions.

In addition, the subject has easy access to two major highways, Kuihelani Highway and Honoapiilani Highway. The subject borders Kuihelani Highway to the south. This highway provides convenient access directly to Kahului, as well as to the Upcountry and East Maui regions, or to Lahaina and Kihei in the opposite direction. Honoapiilani Highway, 0.9 miles north of the subject, provides vehicular access to Wailuku and travels in the opposite direction toward Lahaina and Kihei. The subject has a desirable location in terms of accessibility to all areas of the island.


LOT 12-A
TMK: (2) 3-8-07: 101
TRUE NORTH
SCALE 1 IN. = 100 FT.
CONSOLIDATED BASEYARD
WAIKO ROAD
TO HONOAPIILANI HWY.
KUIHELANI HIGHWAY
TO KIHEI
WAIKO INDUSTRIAL PARK
CONCEPTUAL PLAN
SCALE: 1 IN. = 100 FT.
FEBRUARY 25, 2011
OTOMO
ENGINEERING, INC.
CONSULTING CIVIL ENGINEERS

SITE MAP

PART III – ANALYSIS AND CONCLUSION

A. MARKET STUDY

For the purpose of estimating the market response to this project, a market study was conducted to determine how current supply and demand for industrial properties might be affected by the development of the subject's 38 industrial lots. The extent of our survey encompassed existing, ongoing (in sales process), and proposed industrial developments on Maui, specifically in the Central Maui region of Wailuku-Kahului.

Overview

One of the more difficult factors in determining the success of a proposed project is estimating future supply and demand. There are several components to this, including the design and pricing of the proposed project. This, of course, is well within the developer's control but has not yet been determined for the subject. Second, is the overall market environment at the time of pre-sale and project completion. This is, obviously, more difficult to define because it involves forecasting such variables as interest rates, overall market conditions, and general and specific sector real estate market conditions.

The added complications with most projects are the time frames and time lags involved. Since most subdivision projects take several years between conception and completion, market and interest rate conditions can change significantly. Thus, a project may commence in a favorable environment and be completed in an unfavorable one (or vice versa). Furthermore, real estate is a cyclical industry and sales activity tends to move in spurts. It is not unusual for a new project to sell half its units in the first year of marketing and require 2 to 3 years (or longer) to sell the remaining half. Thus, the notion of a linear sales rate may be deemed unrealistic for practical purposes, but is a useful and convenient tool for planning.

INDUSTRIAL SUPPLY CHARACTERISTICS

The area identified as the Central Maui region encompasses the major communities of Kahului and Wailuku. This popular area contains the major business, civic and transportation centers for the entire island of Maui. Many businesses service the entire island from this convenient Central Maui location; and, as a result, demand for industrial space is strong here.

As research was conducted into light industrial lands in Central Maui, it became very clear that, although there are a number of vacant lots in Central Maui, a large number of them are planned for near-term development. Thus, there is a very noticeable difference between (1) vacant industrial land that is available for sale and future development and (2) vacant industrial land that is not available for sale because it is already planned for a near-term project.

This distinction has been addressed in the supply analysis because it identifies which parcels are truly available in the industrial market. The following paragraphs briefly describe the existing, newly developed and proposed industrial developments in Central Maui's industrial market.

Maui's Existing Industrial Developments

Central Maui has approximately 83 percent of the island's industrial land, with the largest amount situated in Kahului, near the harbor and airport. In Kahului, these industrial subdivisions are the Maui Industrial Park; Kamehameha Parkway Subdivision No. 2; Maui Business Park Phase IA and IB; Airport Triangle; and Wakea Industrial Subdivision. Wailuku's industrial projects include the Wailuku Industrial Park, The Millyard, Waiko Baseyard, Consolidated Baseyards Subdivision, and the Maui Lani Village Center.

Table 2 – SUMMARY OF COMMERCIAL AND INDUSTRIAL DEVELOPMENTS ON MAUI

Project Name	Location	Gross Project Area In Acres	Primary Users
EXISTING (Central Maui)			
Maui Industrial Park, Hana Highway and Dairy Road Industrial Subdivisions	Kahului	136	Mixed-Use, Light Industrial
Kamehameha Parkway Subdivision	Kahului	62	Commercial, Mixed-use, Light Industrial
Maui Business Park, Phase 1A & 1-B	Kahului	78	Commercial, Mixed-use, Light Industrial
Traingle Square Subdivision	Kahului	13	Retail & Commercial
Wakea Industrial Subdivision	Kahului	12	Commercial, Mixed-use, Light Industrial
Central Maui Baseyard	Kahului	15	Light Industrial
Wailuku Industrial Park	Wailuku	55	Commercial, Mixed-use, Light Industrial
The Millyard Subdivision	Wailuku	30	Commercial, Mixed-use, Light Industrial
Waiko Baseyard Subdivision	Wailuku	15	Light Industrial
Consolidated Baseyard Subdivision	Wailuku	23	Light Industrial
Maui Lani Village Center	Wailuku	110	Commercial, Mixed-use, Light Industrial
	Total	**549**	
EXISTING (South Maui)			
Kihei Commercial Center	Kihei	16	Commercial, Mixed-use, Light Industrial
Piilani Business Park	Kihei	7	Commercial, Mixed-use, Light Industrial
Kihei Business Park	Kihei	14	Retail & Commercial
	Total	**37**	
EXISTING (West Maui)			
Wili Ko Industrial Subdivision	Lahaina	37	Commercial, Mixed-use, Light Industrial
Lahaina Business Park (Phases I and II)	Lahaina	41	Mixed-Use, Light Industrial
	Total	**78**	
PROPOSED			
Waiko Industrial Park (SUBJECT)	Wailuku	31	Light Industrial
Waikapu Light Industrial	Wailuku	9	Light Industrial
Maui Business Park, Phase II	Kahului	179	Commercial, Mixed-Use, Light Industrial
Waiale Master Plan	Kahului	16.3	Mixed-Use, Light Industrial
	Kahului	23	Commercial
Kaonoulu Business Park	Kihei	75	Commercial, Mixed-Use, Light Industrial
	Total	**333**	

Wailuku

Wailuku Industrial Park

This light industrial subdivision was developed by C. Brewer in the late-1970s and it consists of 74 fee simple lots off of Lower Main Street in Wailuku. Lots range from 10,106 square feet to a parcel 3.089 acres in size. Approximately 72 percent of the parcels are less than one-half acre in size. This subdivision is approximately 95 percent developed with only three lots not improved or used as yard space.

The Millyard

Developed in 1985, this subdivision is comprised of 57 fee simple light industrial lots. Of the 57 lots in this development, only eight are more than one-half acre in size. The remaining balance of properties is between 10,055 and 20,119 square feet in size. Approximately 84 percent of this subdivision has been developed with a mixture of commercial and light industrial uses. This subdivision has developed

into more of an office park than an industrial center. Nine lots are presently vacant with no proposed developments.

Waiko Baseyard Subdivision

The Waiko Baseyard Subdivision consists of 14.891 acres of land that was subdivided into 19 finished lots in 2005. It is located along Waiko Road in Waikapu Town of Wailuku. The lots range in size from 13,342 square feet to 2.86 acres. Lot No. 16 was deeded back to Brewer Environmental, Inc. and was not available for sale. Lots No. 17, 18 and 19 were retained by the developer and also not made available for sale. Of the fifteen remaining lots, fourteen (14) were sold and one retained by the developer for yard space. Approximately 57 percent of the subdivision is improved, 20 percent used for yard space. Businesses in this subdivision include Rojac Trucking and Rojac Construction, Brewer Environmental Services Hawaii, Kula Glass, and Miyake Concrete. Twenty percent (or four lots) remains vacant.

It is noted that public records indicate initial sales between $20.00 and $25.00 per square foot; however, according to the developer, these prices were based on an agreement with the prior land owner and considered below-market. Those lots that sold at market levels indicated prices of $35.00 per square foot. The last resale occurred in April 2006 at a price of $37.50 per square foot for Lot 3.

Consolidated Baseyards Subdivision

The Consolidated Baseyards Subdivision is situated next to the subject. This property was previously zoned for Agriculture use. Rezoning of the site to Light Industrial was approved and the subdivision was developed in 2007. This 35-lot light industrial subdivision is located on Waiko Road in the Waikapu area of Wailuku and encompasses 23.164 acres of land. The lots range in size from 10,375 to 85,502 square feet. Twenty-five (25) lots sold in 2006 with prices ranging from $28.16 to $38.00 per square foot with an average price of $32.89. The lowest prices at about $28.00 to $29.00 per square foot were discounted prices offered only to initial buyers. In 2007, ten (10) more lots sold at prices ranging from $25.18 per square foot for an 85,504 square foot lot to $40.01 per square foot for a 12,933 square foot lot. The average price in 2007 was $32.85 per square foot. The two most recent sales in 2008 indicated prices of $34.99 per square foot for an 85,504 square foot site, and $39.50 per square foot for a 42,715 square foot parcel.

Within this subdivision, approximately 50 percent of the parcels are improved and 23 percent used for yard space. Businesses present in this subdivision include Island Tile Inc., American Electric, Kiwi Car Care, Pacific Source, DHX, Tri Isle, Lanes Carpet and Service and the Maui County Fire Department. Only 18 percent (or 8 lots) remains

vacant, and 9 percent (or 2 lots) have near-term proposed developments.

Maui Lani Village Center Subdivision

The Maui Lani Village Center was recently completed in 2009 and features 78 lots zoned Village-Mixed Use Commercial/Residential. This zoning allows for a mixture of commercial, industrial, and residential use on each property. Lots in this subdivision range from 7,545 square feet to 7.54 acres in size, with the majority around 10,000 to 20,000 square feet. As of the effective date, there have only been 11 sales in this project. These sales ranged in price from $50.00 to $60.00 per square foot. In addition to selling the lots fee simple, the developer has also advertised build-to-suit projects as well.

Businesses that have closed on their lots include Paradise Beverage, Group Investments LLC, Retina Institute of Hawaii, Menehune Water Co., 76 Gas Station, Wailuku Federal Credit Union, Commercial Plumbing and Grace Pacific Roadway Solutions. Others that intend to occupy this subdivision include Times Supermarket, Oceanic Time Warner Cable, Ace Hardware, and Walgreens. Absorption in this project is moving at a slow pace, which is directly attributed to the economic recession.

Kahului

Maui (Kahului) Industrial Park

This leasehold industrial subdivision was developed and owned by Alexander and Baldwin, Inc., in the early 1960's. Most of the land in the Kahului Industrial Park is being leased on a long-term basis to developers and owner-users that have constructed and sub-leased the improvements. Beginning in 1988, A&B began selling the leased fee interest in some of these properties to a select group of lessees. Since that time several other offerings have been made to the lessees of their properties. In fact, many of the lessees have chosen to purchase the leased fee interest in the land rather than renegotiate their respective ground leases. These leased fee sales, according to a representative of Alexander & Baldwin, reflected their estimate of "fee simple" land value.

On Maui, the Kahului Industrial Park subdivision is by far the most established, and enjoys a superior location with respect to harbor and airport facilities, as well as other supporting commercial activities. Occupancy is high, and demand has spurred the development of additional industrial land along Wakea Avenue with this subdivision, as well as other projects in Kahului. According to officials at A&B Properties, their developments in the Kahului Industrial Park have historically had high occupancy rates.

Kamehameha Parkway Subdivision No. 2

High demand in Kahului prompted A&B to develop the Kamehameha Parkway Subdivision. This subdivision contains 40 parcels ranging in size from 12,826 square feet to 2.42 acres. A number of lots in this subdivision were combined to make larger sites.

Currently 96 percent of the subdivision has been improved. Properties include such projects as the Valley Isle Motors, Tesoro Gas Station and Convenience Store, Slims Power Tools, the Valley Isle Community Federal Credit Union, Kula Produce, Kula Community Federal Credit Union, Maui Community Federal Credit Union, Anheuser-Busch Sales of Hawaii, The Fairgrounds office building, three medical office buildings, and Service Rentals and Sales. Only two lots remain vacant in this subdivision.

Airport Triangle

In response to continued demand, A&B Properties developed the Airport Triangle, located makai of the Hana Highway, across the Maui Industrial Park. Airport Triangle is comprised of 42 acres total. The area identified as Triangle Square consists of about10-acres, and is bound by Haleakala Highway, Dairy Road, and Hana Highway. There are 11 lots in this subdivision ranging between 7,172 square feet to 2.32 acres. Properties include a Lexus dealership; a BMW dealership; Tesoro; Krispy Kreme; the Kele Building anchored by Denny's Restaurant; the Triangle Square Apex Building; and a small retail center at the corner of Hana Highway and Dairy Road.

Across from Triangle Square, two large lots of 7.30 and 12.84 acres were sold and developed by Costco and Kmart. With the exception of the Costco and Kmart parcels, all lots in this subdivision were offered as ground leases. In 2008, A&B began selling the leased fee interest in these properties to a select group of lessees and investors. Only two lots remain vacant in this subdivision.

Maui Business Park

A&B then developed seventy-six (76) acres into the Maui Business Park. Phase IA includes 32 light industrial zoned lots ranging in size from 16,801 to 35,522 square feet on about 42 acres of land. Lots were initially priced at an average of $30.00 to $35.00 per square foot. When marketing began in 1995, nine (9) parcels immediately sold, which ranged from $26.00 to $34.38 per square foot. The only parcel to be resold in 2008 was purchased at a price of $41.15 per square foot for an 8,505 square foot lot. The most recent resale occurred in April 2010 and consisted of a 16,525 square foot parcel selling for $41.45 per square foot. The largest project in this subdivision is the Maui Marketplace, which was patterned after Waikele Center in Oahu and was completed in 1997. It includes

tenants such as Lowe's Hardware, Office Max, Old Navy, Petco, Pier One Imports and Sports Authority.

Phase IB consists of 12 lots of about 34 acres of land and includes the large Wal-Mart and Home Depot sites which were 14.014 acres and 12.701 acres, respectively. The remaining 10 lots are located along Hookele Street and range in size from 17,990 to 45,869 square feet, with an average of 22,817 square feet. Initial sales in this subdivision began in 2000 and 2001 with prices ranging from $ 23.75 to $27.00 per square foot. Another wave of developer sales occurred in 2003 and 2004 with prices ranging from $26.00 to $33.35 per square foot. There are presently two vacant lots; only one of which has proposed development in the near term.

Other Industrial Parcels

Outside of the industrial parks, there are a few other industrial lots available individually. In Wailuku, there are two adjacent, industrial-zoned site situated along Kaahumanu Avenue in the Puuone neighborhood. These sites contain a total area of 18,510 square feet. Along Lower Main Street, and interior roads that extend off of Lower Main Street, there are 4 industrial-zoned lots totaling 1.25 acres of available land.

In Kahului, one parcel is the former Brewer Chemical site next to Harbor Lights condominium in Kahului. This light industrial site contains 4.484 acres, and is vacant and available for development. Also, a 2.69-acre, highly irregular shaped site is bounded by Hobron Avenue, Kaahumanu Avenue and Hana Highway near the oil refineries. This site is vacant and available for development.

Other large parcels are visible in the market, but are not considered to be available for development. For instance the former Y. Hata site on Waiehu Beach Road in Wailuku appears to have a significant amount of vacant land. This 6.12-acre light industrial site is highly under-improved with a single warehouse building; however, it is located in a coastal flood zone and further development of the property is judged to not be feasible. Another 2 lots are located adjacent to Kanaha Pond in Kahului. One has an area of 8.46 acres and is zoned M-1 Light Industrial District. Although it is vacant, it is not available for development because it is being utilized by a towing company as a baseyard. The other, a 2.5 acre lot, is the site of a proposed medical center.

Summary of the Supply Characteristics

The existing supply of vacant industrial land available for development in Central Maui is limited to the following amounts. The Consultant surveyed the existing industrial parks as well as other individual industrial-zoned parcels situated in Wailuku and Kahului.

Available Land in Subdivisions

Wailuku Industrial Park	1.62 acres
The Millyard	3.75 acres
Waiko Baseyard	2.89 acres
Consolidated Baseyards	3.67 acres
Maui Lani Village Center	32.77 acres
Maui (Kahului) Industrial Park	0 acres
Kamehameha Parkway No. 2	0.86 acres
Airport Triangle	1.05 acres
Maui Business Park, IA	0.83 acres
Maui Business Park, IB	0.74 acres
Total:	48.18 acres

Other Land Available

Off Lower Main Street	1.25 acres
Off Kaahumanu Avenue	0.42 acres
Off Kahului Beach Road	4.48 acres
Off Hobron Avenue	2.69 acres
Total:	8.85 acres

In order to determine the number of vacant industrial properties truly available to the market, a search was conducted on the Multiple Listing Service. A total of 69 parcels with a total of 34.99 acres of land were found to be actively listed for sale. Of this total, approximately 32.77 acres is situated in the Maui Lani Village Center Subdivision, leaving only 2.22 acres available in industrial subdivisions and other industrial areas in Central Maui.

Central Maui's Proposed Industrial Projects

Research has revealed that the economic recession that started in late 2007 has greatly affected development on the island of Maui. During this same time, two government ordinances, the Workforce Housing Policy and the Water Availability Ordinance, passed by the County of Maui in 2006 and 2007, respectively, placed stringent restrictions on development. Consequently, many developers chose to shelve their near-term proposed projects that were deemed unfeasible.

Developers of long-term projects, however, have continued their planning and approval process despite the current unfavorable market and economic conditions. The Consultant is aware of three proposed projects that will contain industrial-zoned land in Central Maui. The first is Phase II of A&B's Maui Business Park, the second is Waikapu Industrial, and the third is the Waiale Master Plan

Community. Extensive information was not available for these proposed or announced projects, but a summary of these developments follows.

Maui Business Park, Phase II

The Maui Business Park Phase II is comprised of 179 acres of land. This subdivision will be completed on two non-contiguous parcels. One parcel is an extension of the existing Maui Business Park, Phase I, and consists of about 140.8 acres. This area is identified as the South Project Area which will contain 112 lots of various sizes ranging from about 20,000 square feet to 12.5 acres. This portion is planned for mixed light industrial and commercial uses. Expected users include supply companies, mini-storage businesses, warehouses, contractors, clinics, restaurants, and retailers. The other portion of this subdivision, identified as the North Project Area, is a 38.1-acre parcel on the eastern side of the Costco and Kmart properties. This section will consist of 32 lots ranging from 0.5 to 3.3 acres in size. Due to its proximity to the airport, this area may be used for airport-related businesses in addition to other mixed light industrial and commercial users.

Rezoning for the land from Agricultural to Light Industrial was approved by ordinance in 2008. As a condition to the zoning, the State Land Use Commission imposed a restriction on the amount of land area to be used for commercial retail use versus non-retail/light industrial use. For a period of eight (8) years, no less than 50 percent of the project shall be used and developed for non-retail/light industrial use. Since the zoning approval was attained in 2008, the condition is effective until 2016.

The owner, A&B Properties, Inc., has recently opened bids for infrastructure construction of the first increment of the project. They expect to break ground in May or June 2011, with active marketing of the lots to follow shortly thereafter in the later half of the year. Construction of the first increment is expected to take approximately one year; however, absorption of the lots is expected to take several years. The second increment is planned to commence around 2018.

Waikapu Industrial

This project will feature seven land condominium units on an 8.55-acre site in Waikapu, which was previously utilized by a scrap metal operation. The site is situated east of Waiko Baseyard and west of the subject. The land is presently designated Agriculture District under the State Land Use, County Zoning, and Wailuku-Kahului Community Plan. The proposed project is currently in the initial planning stage.

Waiale Master Plan Community

Wai'ale, which is still in its preliminary planning stage, consists of

approximately 545 acres of land located to the west of Kuihelani Highway. This project will abut the subject along its northerly boundary as well as span across Waiko Road to the south of the subject. Preliminary plans call for areas of single-family residential, multi-family residential, village mixed-use, commercial, business/light industrial, park, cultural preserve, as well as a regional park, a community center, an intermediate school site with associated recreational fields, greenway paths and roads. The light industrial segment of this master plan community will be comprised of 16.3 acres with lots forecasted to be between 15,000 and 25,000 square feet. The area reserved for light industrial use will neighbor the subject to the west.

The owner, A&B Properties, Inc. filed a request with the state Land Use Commission to reclassify the entire project site to urban from agricultural. If the reclassification is approved, the next step will be to change the County zoning and community plan for the property. It is anticipated that these State and County Approvals will be obtained by 2013. Build-out is expected to take 10 years.

Summary of the Proposed Projects

The proposed projects will add approximately 204 acres of light industrial land to the Central Maui inventory over the near- and long-term. As mentioned above, the Maui Business Park, Phase II is the most imminent with construction expected in mid-2011. In the case of Waiale, the build-out out could start as early as 2013; however, it is uncertain when the industrial portion will be constructed during the 10 year span of the project. The anticipated timing of the Waikapu Industrial land condominiums is unknown at this time.

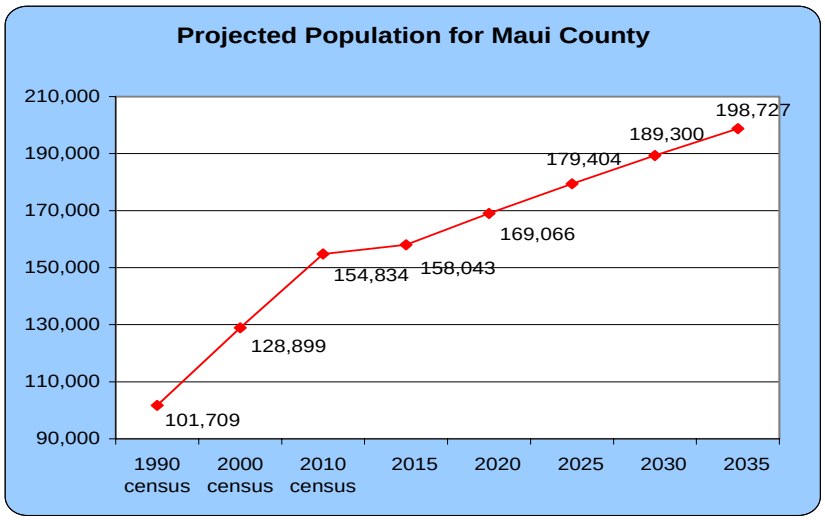
INDUSTRIAL DEMAND CHARACTERISTICS

Demand is analyzed from two perspectives: The first is "demographic" demand, the number of units needed for a given market or employment base. Second is "effective" demand, the process which involves looking at the number of buyers who would be qualified and interested in purchasing industrial properties.

Population

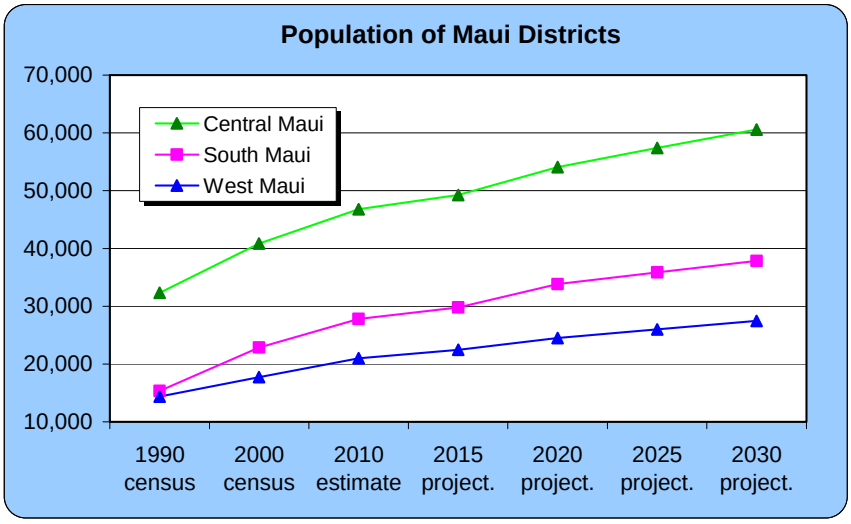
Population growth on Maui over the last past 20 years (1980 to 2000) has been exceptionally high. Overall, population growth for the County of Maui during 1980 to 1990 was 41.67 percent. Meanwhile, the 2000 census figures indicate that population in Maui County increased by 26.73 percent between 1990 and 2000. Maui County was the fastest growing county in the state. With this growth in population came a surge in real estate prices. This increase, driven primarily by foreign and domestic investment and speculation, put the price of homes in Maui County well above the reach of many local residents, and affordable housing became a major concern to everyone. The most recent census data indicates an increase of 20.12 percent in population from 2000 to 2010. Maui County's resident population now stands at 154,834 (2010 census).

According to Resident Population Projections, by County: 2005 to 2035 (*State of Hawaii Data Book 2009*), the projected population of Maui County is expected to be 189,300 by 2030 and 198,727 by the year 2035. The 2030 and 2035 estimates represent 22.3 and 28.3 percent increases over the 2010 census numbers, respectively.



According to demographic statistics by Claritas, Central Maui's population grew by approximately 26 percent from 32,310 people in the 1990 census to 40,867 people in the 2000 census (It is noted that demographic information for individual districts are not yet available from the 2010 census). Central Maui has consistently

maintained approximately 32 percent of the total population of Maui County during this period. The 2010 estimate indicates a population growth rate of approximately 14 percent over the 2000 census numbers. The population of South Maui and West Maui accounted for approximately 18 and 14 percent of Maui County's population, respectively, in each of the past census counts. It should be noted that while West Maui has remained at approximately 14 percent, South Maui jumped to almost 20 percent by 2020 projections. The 2015 population projection for Central Maui indicates a growth rate of approximately 5 percent over the 2010 estimate.



To keep up with its very strong demand for commercial or industrial park space, Central Maui has had numerous developments built within the last 10 years. The Waiko Baseyard Subdivision was completed in 2005, with the Consolidated Baseyards Subdivision following in 2006. The Maui Lani Village Center was also completed in early 2010.

The significantly higher amount of land within Central Maui's commercial/industrial parks can be attributed to its proximity to major transportation and shipping facilities located in Kahului. Based on population estimates for 2010, Central Maui has the lowest number of persons per acre of commercial and/or industrial land (in projects) with a ratio of approximately 85 persons per acre. This demonstrates a very strong demand for industrial land in this region. Meanwhile, West Maui's ratio is approximately 269 persons per acre of land area, while South Maui has the largest ratio, at about 751 persons per acre. Historically, there has been less demand for industrial land in these areas due to their locations far from the main airport and harbor port of the island.

As previously shown in **Table 2** on Page 33, Central Maui's inventory will increase to approximately 784 acres with the addition of A&B Properties' Maui Business Park, Phase II (179 acres), the Waikapu

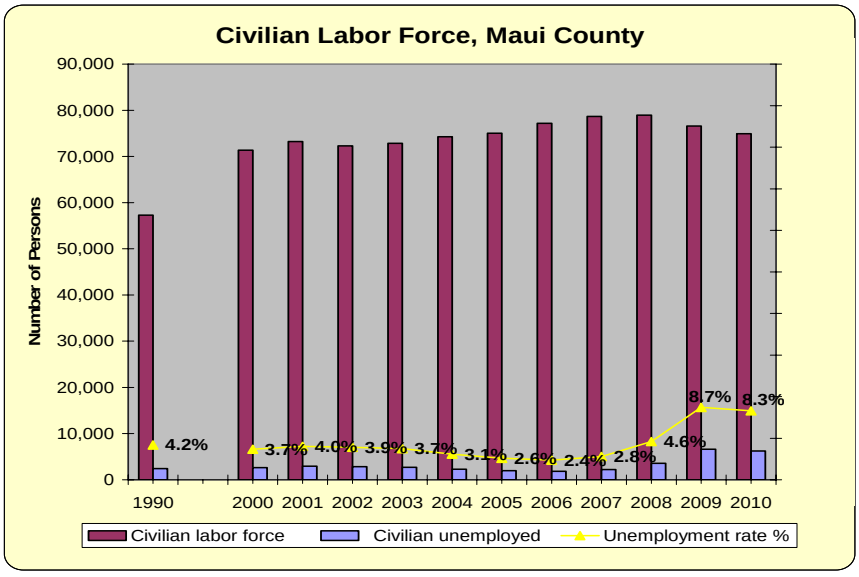
Industrial Land Condominium (9 acres), the Waiale Master Plan (16 acres), and the subject's Waiko Industrial Park (31 acres). In South Maui, the Kaonoulu Light Industrial is slated to add approximately 75 acres of inventory. When the proposed developments are taken into consideration, both Central Maui's and South Maui's ratio would fall, while West Maui's ratio would remain the same.

Table 3 – POPULATION TO LAND AREA IN COMMERCIAL/INDUSTRIAL PARKS

	Central Maui	South Maui	West Maui
Population (2010 estimate)	46,795	27,797	20,996
Commercial and Industrial Land Area			
Total acres (in parks)	549	37	78
Persons per acre	**85.2**	**751.3**	**269.2**
Total acres (includes proposed parks)	784	112	78
Persons per Acre (includes proposed parks)	**59.7**	**248.2**	**269.2**

Employment and Household Income

The unemployment rate on Maui had been on a decline since 1992 when unemployment was at 8.0 percent. In 2007, the unemployment rate was 2.8 percent. For 2008, this rate rose to 4.5 percent, after seeing month-over-month gains beginning May 2008. This trend continued in 2009, with the average unemployment rate jumping to 8.7 percent. The unemployment rate was 8.9 percent in January 2010 and gradually declined throughout the year ending at 7.4 percent in December 2010; the lowest it has been since late 2008. The average unemployment rate for 2010 was 8.3 percent.



Source: State of Hawaii Department of Business, Economic Development & Tourism Monthly Economic Indicators

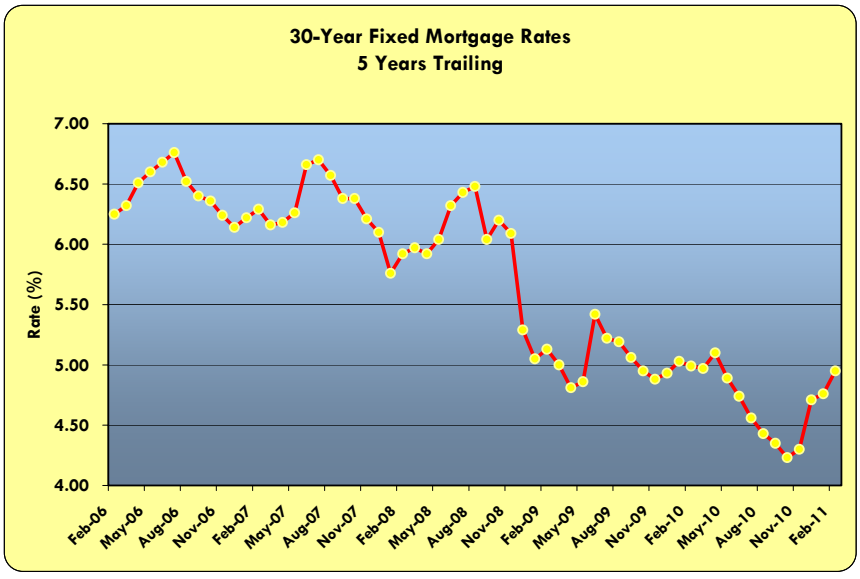
Household income figures have also been increasing. The estimated median annual household income for Maui in 2010 is $76,000 (*Source: U.S. Department of Housing and Urban Development*), a rise of

approximately 53 percent over the 1999 median household income of $49,489 (*Source: US Census 2000*) and a 96 percent increase over the 1989 figure of $38,771 (*Source: US Census 1990*). During the 12 year period from 1999 to 2010, this represented an average increase of over 4 percent per year.

Mortgage Interest Rates

From late-1991 to 2002, mortgage rates varied from 6.0 to 9.0 percent. In 2003, mortgage rates for a 30-year fixed rate mortgage fell below 6.0 percent for the first time since Freddie Mac began tracking 30-year mortgage rates in 1971. Over the next six years, the monthly interest rate fluctuated between 5.23 and 6.76 percent. However, due to cuts to the Federal Funds Rate in late 2008, interest rates in 2009 dipped below the 5.0 percent level on numerous occasions. The average interest rate for 2009 was 5.04 percent. Through 2010, the interest rate has averaged 4.69 percent, with the lowest rate seen in October at 4.23 percent. Records that reach back earlier than Freddie Mac's indicate that this rate is below record lows witnessed in the 1940s, during World War II. Mortgage rates have been steadily increasing over the last four months since October 2010. (See **Table 4** below.)

Table 4 – HISTORICAL TREND OF 30 YEAR, FIXED MORTGAGE RATES



Source: Freddie Mac-Primary Mortgage Survey

The lower mortgage rates typically mean that real estate becomes more affordable to a larger segment of the population. At the same time, however, prices rise. The rising prices can be driven even higher if developers are restrained from building additional inventory by government restrictions, the unavailability of development land, or unreasonably high land prices.

Industrial/Commercial Land Pricing Trend

Up to the Year 2007, there was significant appreciation for commercial/industrial vacant land in Central Maui, as well as the entire island. This rise in prices was attributed primarily to favorable economic conditions, coupled with the lack of entitled land. In Central Maui, a majority of the lots in existing commercial/industrial subdivisions have been built-out or are being held by their owners for development in the short-term future.

There have been very few sales of industrial lots in all areas on Maui since 2008; however it is obvious that there has been a downward trend since the peak of the market in 2007. The Consultant has surveyed the Central Maui industrial parks as well as other areas on the island for trend evidence within the industrial/commercial market.

Waiko Baseyard Subdivision

It is noted that public records indicate initial sales between $20.00 and $25.00 per square foot; however, according to the developer, these prices were based on an agreement with the prior land owner and considered below-market. Those lots that sold at market levels indicated prices of $35.00 per square foot in 2005. In 2006, sales in this project indicated pricing from $36.72 to $37.50 per square foot. The last resale occurred in July 2008 at a price of $36.80 per square foot.

Currently there is only one (1) active listing in this subdivision for $30.06 per square foot. This listing indicates depreciation of about 25 percent from 2006 prices.

Consolidated Baseyards Subdivision

Twenty-five (25) lots sold in 2006 with prices ranging from $28.16 to $38.00 per square foot with an average price of $32.89. The lowest prices at about $28.00 to $29.00 per square foot were discounted prices offered only to initial buyers. In 2007, ten (10) more lots sold at prices ranging from $25.18 per square foot for an 85,504 square foot lot to $40.01 per square foot for a 12,933 square foot lot. The average price in 2007 was $32.85 per square foot. The most recent sales in 2008 indicated prices as high as $34.99 per square foot for an 85,504 square foot site, $39.50 per square foot for a 42,715 square foot parcel, and $41.00 for a 13,145 square foot lot at the entrance to the subdivision.

There are five (5) vacant lots presently listed for sale. Asking prices range from $35.00 to $38.00. Although asking prices are not significantly lower than sales in 2007 and 2008, these listing have extended days on market ranging from 707 to 1,057 days. This suggests that the asking prices of these lots may need to be significantly decreased to attract buyers in today's market.

Maui Business Park

Lots in Phase IA were initially priced at an average of $30.00 to $35.00 per square foot. Nine (9) parcels immediately sold in the late 1990s at a range of $22.00 to $39.00 per square foot in the late 1990s. The remaining lots sold over a period of five years with the same price range. Initial sales in Phase IB of this subdivision began in 2000 and 2001 with prices ranging from $ 23.75 to $27.00 per square foot. Another wave of developer sales occurred in 2003 and 2004 with prices ranging from $26.00 to $33.35 per square foot.

One resale in 2007 indicated a price per square foot of $43.77 for a 27,188 square foot lot. Another parcel resold in 2008 at a price of $41.15 per square foot for an 8,505 square foot lot. The most recent resale occurred in April 2010 and consisted of a 16,525 square foot parcel selling for $39.64 per square foot. This sale indicates 5 to 10 percent deprecation since the peak sales in 2007 and 2008.

There are two (2) active listings with the Maui Business Park. One lot, listed for $55.90 per square foot includes plans and permits for a proposed office building. This property has been on the market for 331 days. The second is a small, 8,503 square foot lot with an asking price of $47.04 per square foot. This lot has been on the market for 1,402 days. The original list price for this lot was $79.97 per square foot. This price was significantly reduced; however, further reduction of the price may be needed to attract potential buyers.

Lahaina Business Park

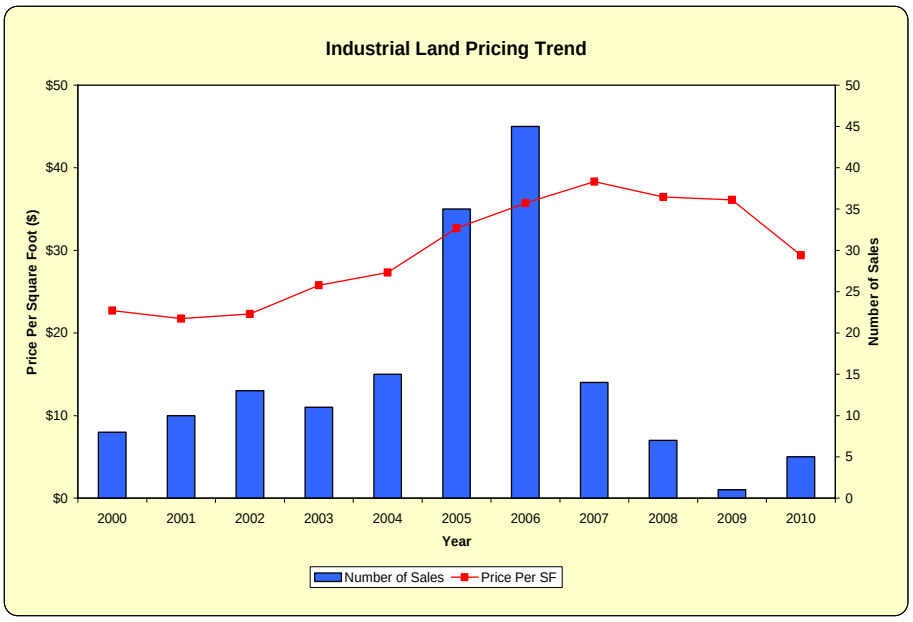
Sales were brisk following the completion of the 28 lots in Phase I in early 2001. These lots originally ranged between $19.00 and $24.00 per square foot. Phase II was completed in 2006 and initial sales prices ranged from $30.00 to $34.00 per square foot. The Consultant notes that sale prices for lots in Phase II in January 2006 averaged $33.75 per square foot.

Resales in the Phase I of the subdivision in 2005 ranged from $31.50 to $34.00. In 2006, resales ranged from $36.99 up to $51.00 per square foot. The average lot price in 2006 appreciated 24 percent from 2005. There were no sales of vacant land in this subdivision in 2007, 2008, and 2009. In April 2010, a bulk sale of five (5) lots occurred with the purchase price reflecting $26.00 per square foot for 127,428 square feet of industrial land. In July 2010 there were two additional bulk sales of two (2) lots each. These transactions indicated a price per square foot of $28.00 and $24.80 for 37,243 and 51,893 square feet of land area, respectively. The 2010 sales indicated depreciation of approximately 33 percent from the peak in 2006.

There are five (5) vacant lots presently listed for sale in the Lahaina Business Park. Asking prices range from $33.22 to $44.00. With the most recent sales occurring in 2010 at prices of $24.80 to $28.00 per square foot. The asking prices of the listed properties will likely require a significant decrease to become attractive in this market.

Kihei Business Park

Business-zoned land sales also reached $51.00 per square foot in Kihei Business Park in 2006. The latest sale in 2009 reflected a 30 percent reduction to $36.12 per square foot. One active listing in this subdivision is asking $35.68 per square foot, a slight decrease from the most recent sale.



When compared to 2007, sales prices in 2009 and 2010 as well as current listings indicate a decrease in land values of between 5 and 35 percent.

The Consultant has not included the sales within the Maui Lani Village Center as part of this analysis. Pricing within the subdivision ranges from $50.00 to $60.00 per square foot. The developer has maintained this price range since it began offering the lots to the market in 2009. Given the subdivision's location and the multitude of uses allowed under the Village Mixed Use zoning ordinance, these lots are able to command a high price range, although the pace of absorption has been slow. The Maui Lani Village Center is situated between the Maui Lani and Kehalani Project Districts and is expected to serve as the primary commercial center for these neighborhoods. Kuikahi Drive, which the subdivision is situated along, is also expected become a major thoroughfare connecting Wailuku and Kahului as the area continues to be developed.

The Village Mixed Use is a unique zoning ordinance that allows for an array of commercial, industrial, and residential uses. All types of uses may be mixed and incorporated into a single project. For example, you could have commercial retail/office on the ground floor, residential units on the second floor, and possibly even warehouse bays in a detached building all on the same lot. The flexibility of its zoning and its central location has attracted potential buyers to the Maui Lani Village Center.

Based on the characteristics described, the Consultant believes that the Maui Lani Village Center provides a unique product very different from typical industrial subdivisions like the proposed Waiko Industrial Park.

Rental Rate Trends

The pricing of real estate mentioned above has a lot to do with the availability of industrial space for rent, such as warehouses, sheds and yards. Our survey of current listings of competing spaces in the Central Maui neighborhood indicates that rents are lower than two to three years ago. Whereas warehouse or storage spaces were being rented for upwards of $1.25 to $1.50 per square foot per month on an absolute net basis, current available spaces are clustered within a general range of $0.75 to $1.00 per square foot per month. There is approximately 186,178 square feet of pure warehouse space available for rent in Central Maui. The average rental rate is $1.06 per square foot, absolute net.

A survey of actual rents was also conducted. Not surprisingly, asking rent was found to be lower than current rent levels. Commercial leasing agents indicated that property owners have had to lower expectations and in some cases provide rent reductions, in order to keep their tenants.

At the height of the market, rental rates for warehouses rose dramatically as the supply of industrial spaces diminished. Part of the reasoning behind it is the gradual conversion of pure industrial space to commercial retail and office uses. This contributed to the rise in the value of industrial land due to the higher rents being received from retail and office tenants as opposed to warehouse occupants. Land prices made it almost impossible for an investor to develop a feasible warehouse project. With the introduction of Waiko Baseyard and Consolidated Baseyards, two subdivisions situated outside of the central business district, pure-industrial users were able to establish their business away from the commercial sprawl. These subdivisions enabled many owner-users to purchase industrial land and feasibly develop their own facilities.

Since late 2007, land prices have been on a downward trend.

Although decreasing prices have vacant land more affordable, the economic recession and tightened financial market has prohibited many from purchasing and developing land. In 2010, signs of stability have been evident in certain local markets. Economists forecast the economy will turnaround in late-2011 and early-2012. As economic conditions continue to recover demand for vacant industrial land and warehouse space is expected to increase.

Vacancy Rates

Most of the industrial development in Central Maui consists of owner-user facilities. Conversations with commercial leasing agents revealed that investment-driven warehouse properties have showed an increase in vacancy, as many businesses have shutdown their operations, or relocated to smaller accommodations.

Vacancy rates for warehouse spaces in Central Maui are estimated to be between 10 and 15 percent, much higher than the norm of about 5 percent. Poor economic conditions have forced many businesses to downsize or even close their operations. There are a number of mid-sized (from 3,000 to 8,000 square feet) and large warehouse facilities (from 10,000 to 23,000 square feet) that are vacant and available for lease. Based on the Consultant's, calculation there is approximately 186,178 square feet of vacant warehouse space available for rent in Central Maui compared to the nearly 2,000,000 square feet of pure industrial space constructed in the district. Since the downturn in the economy in late 2007, the amount of available space has been steadily increasing, and there appears to be little demand at this time.

Market Absorption of Industrial Land

Absorption in Industrial Subdivisions

Recently built subdivisions in Central Maui indicate significantly fast absorption rates. The 11 lots released by the developer of Waiko Baseyard in October 2005 totaled just over five acres and were absorbed within five months. This would indicate an absorption rate of 11.90 acres per year.

Consolidated Baseyards was completed in 2006, with 35 marketable lots totaling approximately 22 acres. There were 27 lots, totaling almost 16 acres, immediately sold between October and December 2006. The remaining eight lots, of approximately 6 acres, were sold in 2007. Overall monthly absorption averaged 1.6 acres, which would translate into about 19 acres per year.

For comparative data, the Consultant has analyzed the market absorption of vacant lots in the Maui Business Park Subdivision in Kahului and the Kihei Business Park in Kihei. These commercial/industrial projects were developed in the mid 1990s when economic real estate market conditions were unfavorable.

These two subdivisions indicated lengthy absorption periods. The Maui Business Park, which has a desirable location in Kahului in close proximity to the other commercial developments, the airport, and harbor facilities, sold its 32 industrial-zoned lots at a pace of 0.44 per month, which extended over a period of 7 years from 1995 through 2002. In the years preceding the completion of the Maui Business Park subdivision, the real estate market was on the rise and began to stabilize. By the time the subdivision was completed, however, the market was cooling and economic conditions deteriorated. Overall monthly absorption averaged 0.44 acres, which would translate into about 5 acres per year.

Similarly, the Kihei Business Park was under construction in the early 1990s. Due to the lack of commercial-zoned land in the Kihei area, it was anticipated that the Kihei Business Park would fill a great need and would be absorbed relatively quickly. Softening market and economic conditions contributed to an actual absorption period extending over 11 years from 1994 through 2005. The 47 business-zoned lots sold at a rate of 0.34 per month. Overall monthly absorption averaged 0.10 acres, which would translate into about 1.27 acres per year.

Although considered a different product, the Consultant also looked at the absorption of the ongoing Maui Lani Village Center. Completed in early 2010, the subdivision features 78 lots, totaling approximately 42 acres. There have been 11 closings, amounting to 9.10 acres, within the 24 months that this subdivision has been marketed. This translated into an absorption rate of about 6.83 acres per year, thus far. It is noted that this project was introduced to the market during the current economic recession.

Absorption of Industrial Land in Central Maui Overall

The Consultant has researched all subdivisions constructed and marketed over the last 20 years in Central Maui. There are seven (7) commercial/industrial subdivisions that have been developed during this time. With the exception of the new Maui Lani Village Center which only began closing lots within the last year, all other subdivisions have been successfully absorbed by the market. Over the last 20 years, approximately 174.74 acres of industrial land has been absorbed, which reflects a market absorption rate of 8.74 acres per year. (Refer to **Table 5** on the following page)

Table 5 – ABSORPTION OF INDUSTRIAL LAND (1991-2011)

Subdivision/Parcel	Tax Map Key	Year Introduced	Absorbed Land Area (Acres)
Kamehameha Pkwy	(II) 3-7-Plat 12	1991	19.34
Airport Triangle (incl. Kmart/Costco)	(II) 3-8-Plat 79	1992-1994	42.23
Maui Business Park 1-A	(II) 3-8-Plat 80	1995	39.65
Maui Business Park 1-B	(II) 3-8-Plat 84	2000	31.95
Waiko Baseyard	(II) 3-5-Plat 27	2006	12.50
Consolidated Baseyards	(II) 3-8-Plat 94	2007	19.98
Maui Lani Village Center	(II) 3-8-Plat 97	2009	9.10
		Total in Acres:	174.74
Average acres absorbed per year (20 Year Period to Present) =			**8.74**

The market has exhibited strong fluctuations during this twenty year period. From early to mid 1990s, the market was stagnant followed by poor economic conditions in the late 1990's. Projects introduced at this time, Maui Business Park in particular, demonstrated lengthy absorption periods. In the early 2000s, the market rebounded and continued to accelerate until the peak in 2006. This rising market resulted in the rapid absorption of Waiko Baseyard and Consolidated Baseyards. The market began to stabilize until late 2007 when the economic downturn followed by the financial crisis in 2008. The economic recession continued into 2010. Signs of stability are evident in some local markets; however, economists forecast economic recovery to begin in late 2011 in to 2012.

Although market conditions are currently soft for commercial and industrial segments, it is the Consultant's opinion that there will be strong demand for the subject's industrial lots upon economic recovery.

B. CONCLUSIONS

The Island of Maui has seen significant growth in virtually all aspects (e.g., population, visitor arrivals, economy) of the community through the last 20 years. Most of the industrial development is typically found in Central Maui where industrial land is currently about 83 percent of the island's total. Its close proximity to the air and sea ports has resulted in the conglomeration of retail, office, service and industrial uses in the Wailuku-Kahului region. As a result, Central Maui has become the center of commerce for the Island of Maui.

During this time, there have been several industrial subdivisions that have been introduced and have been successfully absorbed by the market. With the Maui Business Park selling off the last of their industrial lots in 2003, there was no new product available to the market. The inventory of industrial land in Central Maui had been depleted to a point where land values and industrial rents began to rise significantly.

Through the years, much of the industrial lands have been developed or redeveloped with retail and office uses. This has also occurred on secondary streets within the industrial parks, especially in the sections of the buildings facing the road. This transformation from industrial to commercial utilization is primarily a function of the broad spectrum of permitted uses of the M-1 and M-2 Industrial District zoning ordinances. These industrial designations permit all uses within the B-1, B-2 and B-3 Business Districts which include, among other things, office and retail uses.

As land values rose, retail utilization became more plentiful as landowners sought higher and better uses for their appreciating sites. Former warehouse buildings were converted to retail spaces with second floor offices, thus reducing the amount of true industrial inventory. New projects built on industrial land took on a strong retail flavor reducing the amount of yard space available. Although it may have looked like A&B Properties, Inc. was bringing a lot of light industrial land to the Kahului market in the 1990s, much of it was absorbed by the large retailers. Similarly, The Millyard industrial subdivision in Wailuku has taken on an office park flavor as opposed to the intended industrial use. Although there are one or two dedicated warehouses in the subdivision, most of the development has shifted to office users. This has also occurred in the Kamehameha Parkway Subdivision No. 2 behind Safeway in Kahului.

The conversion to commercial uses in the subdivisions led to increasing land prices. High land prices then dictate that developments have higher rents to financially support the new project. Consequently, the only feasible developments arising in Kahului and Wailuku were

office or retail buildings. Warehouses could not be feasibly constructed due to the increasing land values; hence, there were not any new warehouses built in Central Maui unless they were intended for an owner-occupant.

In 2006 and 2007, the Waiko Baseyard and Consolidated Baseyards Subdivisions, both in Waikapu, brought new inventory to the market. These subdivisions catered to the pure-industrial users, a segment of the market that was displaced from existing industrial subdivisions that had become more commercial retail oriented. Consequently, the lots in these subdivisions were quickly absorbed.

In mid-2007, the United States began to experience an economic slowdown due to the subprime mortgage crisis, high oil prices, and global inflation. In September 2008, the downturn in the economy was solidified by the financial crisis following the bankruptcy of Lehman Brothers, the sale of Merrill Lynch to Bank of America, and the sudden bailout of American International Group by the Federal Reserve. Since these events, lending has tightened up nationwide. Signs of weakening economic and market conditions continued through 2009 including increases in the number of commercial rental listings, listed rental rates being significantly reduced, higher vacancy, longer days on market, decreases in asking list prices, and an overall lack of sales and leasing activity.

The economic downturn being witnessed across the nation has significantly affected Maui, through a drop in visitor counts and the drastic slowdown of construction. These industries are two of the primary employment forces on the island and their decline has had an adverse impact on the local economy. Unemployment has been on the rise, with many who are still employed stating that job security is a concern. Meanwhile, the heavy losses witnessed in the financial sector since the fourth quarter of 2007 have surely diminished the investment capital for other potential buyers. Combined with a more stringent lending environment, it has become increasingly difficult to purchase real estate, regardless of current market conditions. Local economists have varied opinions as to the timing of the economic recovery, but many have pointed to late-2011 or 2012 for this turnaround.

If the Waiko Industrial Park came on-line today, it would likely be facing the same types of sales difficulties that other ongoing projects are witnessing. However, the subject will still need to go through entitlement, design and construction processes, which are expected to take roughly 2 years. As such, construction and release of the subject's lots may be very well timed with the economic recovery. Once market conditions improve, the project can expect to see heightened demand.

It must be noted, that A&B's Maui Business Park Phase II, will also be offered to the Central Maui market at approximately the same time. By the time the subject's project begins construction and marketing, it is anticipated that infrastructure improvements will be completed and initial sales will have closed within the first increment of the Maui Business Park Phase II. Although these two subdivisions will be exposed to the market simultaneously, they will likely attract different users. The Maui Business Park Phase II will attract the large mixed-use commercial users and the national big-box retailers, while the subject is meant to attract the smaller, local pure-industrial users.

Pure-industrial users include plumbers, electricians, contractors, building suppliers, wholesalers, fabrication companies, auto repair companies, warehousing companies, trucking companies, and similar type businesses. Tenants like these which have been displaced from the central areas of Kahului and Wailuku by higher rents driven upward by retail and service users competing for space. The Waiko Industrial Park is meant to include industrial businesses that are looking primarily for warehouse space and fenced yards. The subject's Waikapu neighborhood, outside of the commercial core of Central Maui, has proven to be an ideal location attracting these types of users as evidenced by the success of the neighboring Consolidated Baseyards and Waiko Baseyard Subdivisions.

Also, the majority of the subject's offering includes small lots ranging from 9,536 to less than 15,000 square feet; lots sizes which are not being offered in the Maui Business Park Phase II. These smaller lots provide flexibility—the lots are a better fit for the small owner-user or may be easily combined for larger multi-tenant users. Furthermore, the smaller lots offer affordability—it is easier for small businesses to finance and develop a small lot.

The market absorption was demonstrated earlier to equal about 8.74 acres per year over the past 20 years. At this rate, it would first appear that it would take 6.5 years to absorb the existing inventory. The real estate market, however, does not function in that manner. During a soft market, like the one we are currently experiencing, industrial land is absorbed at a very slow rate. As previously discussed, a stagnant real estate market in the mid-1990s contributed to the lengthy absorption period of the industrial lots in the Maui Business Park. In the years preceding the completion of Phase I of the Maui Business Park subdivision, the real estate market was on the rise and began to stabilize. By the time the subdivision was completed, however, the market was cooling and economic conditions deteriorated. Ultimately, the subdivision took 7 years to sell out indicating absorption of 5 acres per year. Today, the Maui Lani Village Center is experiencing a similar dilemma. The real estate market was on the rise just 2 to 3 years prior to the completion of the

subdivision. However, when the subdivision was actually completed economic conditions deteriorated locally and nationally which inevitably stalled the selling of these lots. Of the 78 lots, only 11 have sold since 2009; indicating absorption of 6.83 acres per year.

On the other hand, during rising markets, absorption rates have doubled, as evidenced by the Waiko Baseyard and Consolidated Baseyards Subdivisions. These projects were completed and offered for sale when demand was high and the market was appreciating, and, as a result were absorbed briskly at rates of 12 and 19 acres per year, respectively.

The real estate market is cyclical. Although the causes and characteristics of these cycles vary, the implications for market participants remain similar in each cycle. On a basic level, when economic activity increases and interest rates rise, real estate becomes less affordable, resulting in decreases in demand and falling prices. Then, as economic activity slows and interest rates decline, properties again become more affordable and, consequently, demand and prices go up repeating the cycle.

According to economists, the local economy has begun its recovery with an expected rebound in late-2011 and early-2012. The real estate market will likely follow suit in the years to follow. As previously stated, the proposed Waiko Industrial Park is presently in its planning stage and would require approximately 2 to 3 years to acquire all necessary entitlements and begin construction. Based on this projection, the project may be very well timed with the economic recovery; thus, encountering strong demand from their target market.

PART III. ECONOMIC IMPACTS OF THE PROPOSED DEVELOPMENT

The development of this project will generate significant expenditures by the developer of this subdivision and the secondary owners and developers of the 38 light industrial lots. These investments are expected to favorably impact the Maui economy on a broad scale, and in a multitude of ways.

- Site work and infrastructure construction for this subdivision will immediately infuse capital into the Maui economy. Numerous consultants will be involved in the initial planning stages, and the construction trades will benefit from the job creation of this project.
- Advertising for the project and marketing of the lots will benefit graphic artists, advertising companies, newspapers, real estate sales agents, escrow companies, etc.
- Individual site development will again result in additional work for engineers, architects, material suppliers, equipment rentals and sales, landscaping companies, and other related industries.
- The new buildings will not only attract existing businesses, but it should also stimulate the generation of new businesses and employment growth. This will have an indirect affect on retail businesses, restaurants and service establishments as the expanded work force purchases goods and services. This should pass through the entire community, causing a ripple effect and increase the amount of capital flowing through Maui.
- Maintenance of this subdivision and the buildings will also translate into work for maintenance companies, painting companies, real estate management and leasing groups, etc.
- Fiscal benefits of this development will include increases in real estate taxes collected by the County of Maui, and additional income tax and general excise tax inflow for the State of Hawaii.

Capital Investment and Construction Costs

Capital investment into the project development is expected to immediately stimulate various phases of the Maui economy.

Construction of the Subdivision Improvements

According to the client, construction costs for this subdivision are estimated to be $10,880,000, or approximately $8.00 per square foot of gross land area. This figure is inclusive of all site work, roads, utilities and landscaping. It also includes the cost of hiring the civil and electrical engineers, soil engineer, environmental engineer, archaeologist, real estate appraiser, traffic engineer, planner, and

other consultants.

Indirect Sales

Development and construction activities will also generate indirect sales, through the supply of goods and services to the various construction companies, in addition to the families of their employees. By the same token, these suppliers and their families will purchase goods and services from other companies. This chain reaction continues over and over, with some of the revenues leaking out of Hawaii's economy with each cycle. Based on State economic multipliers, off-island indirect sales were estimated at about $8,051,379 over the term of the project. Meanwhile, Maui indirect sales were estimated at about $5,635,966 over the term of the project. Indirect sales attributed to the development totaled approximately $13,687,345.

Sales of Individual Light Industrial Lots

The 38 lots will have a total net land area of about 24.42 acres or approximately 1,063,704 square feet of light industrial zoned land. At approximately $30.00 per square foot, the sales of these lots are expected to generate income of about $31,910,000. As an example of the ripple effect of this capital investment, the lot sales are expected to generate approximately $1,910,000 in real estate commissions alone.

Building Construction

The individual developments of the 38 lots are expected to span a period of about five to ten years. Based on the total net land area of about 1,063,704 square feet, and an average building-to-land ratio of 50 percent, the total building area in this subdivision is expected to be approximately 531,852 square feet. Site work on each lot is estimated to be about $100,000 per lot, or about $3,800,000. Building construction costs, at $125 per square foot (direct and indirect costs) are forecasted to be about $66,480,000.

In all, Waiko Industrial Park is expected to infuse an anticipated $113,000,000 into the economy over the development term of the 38 lots. In addition to vacant lot sales over several years, individual project development may span over five to eight years, which equates to an average capital infusion of about $14,100,000 to $22,600,000 per year. This capital infusion is expected to be in the form of added employment and material costs.

Employment Creation

Subdivision Development

New job opportunities created by this development will start with the design and entitlement process, employing architects, engineers, surveyors, and land use planners. These jobs are expected in the first

two years prior to construction. Site work, road work and the installation of utility and drainage lines typically utilize heavy equipment operators, tractor-trailer drivers and utility personnel. These jobs are short-term within the subdivision's initial construction phase, possibly spanning a six- to twelve-month period. Application of State economic multipliers resulted in a forecasted annual average of 44 jobs directly related to the construction of this development. At an average wage of $60,000, inclusive of benefits, this amounts to approximately $2,640,000 spent toward construction employees.

Individual Building Construction

In addition, construction of the individual buildings on the 38 lots will again increase the demand for construction jobs for heavy equipment operators, masons, carpenters, sheet metal workers, roofers, drywall installers, plumbers, electricians, and painters. Finish work will require cabinet makers, carpet and tile installers, interior decorators, and landscapers. These jobs would also be considered temporary in that they will last for only about six to twelve months for each building. Cumulatively, however, they will definitely add a substantial number of hours to Maui's work force over the years, and assist in maintaining employment levels. Over the last five years, there has been approximately 124,000 square feet of floor area constructed each year within industrial subdivisions on Maui. Based on an anticipated 531,852 square feet of building area in the Waiko Industrial Park, total build-out of this subdivision equates to approximately 4.3 years.

Application of State economic multipliers resulted in a forecasted annual average of 281 jobs directly related to the construction of vertical improvements within the subdivision. Again, based on an average wage of $60,000 annually (inclusive of benefits), this amounts to $16,860,000 over the term of construction.

Indirect Employment

The increase in construction will also create the need for supplementary companies to strengthen their labor force. These jobs may be from building supply companies, hardware stores, equipment rental companies, and shipping/warehousing companies. In addition, the construction laborers and their families will patronize local goods and services providers. Grocers, restaurants, service stations, auto repair shops, financial institutions, recreational venues, medical facilities and personal care businesses could be considered potential companies that would need to bolster their employee count.

Ongoing Business Operations

The subject is projected to be highly industrial in the nature of its businesses, due to its location away from the commercial centers of Kahului and Wailuku, and amongst similar industrial subdivision such as the Consolidated Baseyards and Waiko Baseyard Subdivisions.

Retail and commercial businesses generally have one employee per 300 to 500 square feet of building area; however, due to the subject's strong industrial orientation, it is estimated that employment for business operations there can be estimated at one worker per 1,000 square feet of light industrial floor space. This equates to about 66 to 106 jobs created per year based on a five to eight year build-out of the subdivision. At an estimated average wage of $39,000 per year, payroll figures are forecasted to reach nearly $2,600,000 to $4,100,000 annually.

While it is acknowledged that the businesses occupying these buildings will not be entirely new companies, with new workers, Waiko Industrial Park will provide employment opportunities for Maui residents, new arrivals, and youths reaching employment age. The subdivision is being developed based on the expanding demand for additional industrial space on Maui; therefore, the spaces vacated by companies moving to Waiko Industrial Park, will in turn be filled by expanding or newly formed companies which will also offer new employment opportunities.

Fiscal Benefits

State Income Tax

It is anticipated that the State of Hawaii will receive additional income tax revenue due to (1) the increase in employment generated by construction of this project, and the ongoing operation of Waiko Industrial Park and (2) the profits generated by companies doing business within this development, and by the profits of businesses who benefit from doing business with these companies.

General Excise Tax

The State of Hawaii will also recognize increased revenue of 4.166 percent applied against (1) the construction cost of this new subdivision, (2) the construction costs of the individual buildings on each lot, (3) the total gross sales of companies within this subdivision, (4) the gross spending of the work force employed by companies within this development.

Real Property Tax

Land: Based on a total net land area of about 1,063,704 square feet, and an estimated value of approximately $30.00 per square foot, the land alone would amount to an aggregate value of about $31,910,000. At an industrial tax rate of $6.50 per $1,000 of assessed value, this equates to an annual income of $207,415.

Buildings: The individual lots are expected to be developed over the next 5 to 8 years, and continue to expand the tax base. As estimated earlier in this report, at an average building-to-land ratio of 50 percent, the total building area in this subdivision is expected to be

approximately 531,852 square feet. Building construction costs, at $125 per square foot (direct and indirect costs) are forecasted to be about $66,480,000. Employing this figure as an anticipated tax assessment results in an annual income of $432,120. Since all the lots are not expected to be developed at once, this property tax income is expected to steadily increase over the build-out years.

EXHIBITS

EXHIBIT A
Photographs of the Subject Site

Photograph No. 1

Overall view of subject (westerly portion) from Waiko Road. The camera is facing easterly.

Photograph No. 2

Additional overall view of westerly portion of subject taken from Waiko Road. The camera is facing northerly.

PHOTOGRAPHS OF THE SUBJECT

Photograph No. 3

Overall view of subject (southerly portion) from Waiko Road. The camera is facing northwesterly.

Photograph No. 4

Additional overall view of subject (southerly portion) from intersection of Waiko Road and Kuihelani Highway. The camera is facing northwesterly.

PHOTOGRAPHS OF THE SUBJECT

Photograph No. 5

View of Waiko Road with subject at right of photo. The camera is facing westerly.

Photograph No. 6

View of Waiko Road with subject at left of photo. The camera is facing easterly.

PHOTOGRAPHS OF THE SUBJECT

EXHIBIT B

Claritas Demographic Data

MAUI COUNTY

Pop-Facts: Demographic Snapshot Report

County, (see appendix for geographies), aggregate

Description	Total *County*	*%*
Population		
2015 Projection	153,962	
2010 Estimate	146,193	
2000 Census	128,094	
1990 Census	100,374	
Growth 2010-2015	5.31%	
Growth 2000-2010	14.13%	
Growth 1990-2000	27.62%	
2010 Est. Pop by Single Race Class	146,193	
White Alone	54,988	37.61
Black or African American Alone	1,361	0.93
Amer. Indian and Alaska Native Alone	731	0.50
Asian Alone	40,388	27.63
Native Hawaiian and Other Pac. Isl. Alone	14,700	10.06
Some Other Race Alone	2,443	1.67
Two or More Races	31,582	21.60
2010 Est. Pop Hisp or Latino by Origin	146,193	
Not Hispanic or Latino	131,667	90.06
Hispanic or Latino:	14,526	9.94
Mexican	5,914	40.71
Puerto Rican	4,581	31.54
Cuban	55	0.38
All Other Hispanic or Latino	3,976	27.37
2010 Est. Hisp or Latino by Single Race Class	14,526	
White Alone	3,628	24.98
Black or African American Alone	30	0.21
American Indian and Alaska Native Alone	175	1.20
Asian Alone	1,331	9.16
Native Hawaiian and Other Pacific Islander Alone	804	5.53
Some Other Race Alone	2,224	15.31
Two or More Races	6,334	43.60

Pop-Facts: Demographic Snapshot Report

County, (see appendix for geographies), aggregate

Description	Total *County*	*%*
2010 Est. Pop. Asian Alone Race by Cat	40,388	
Chinese, except Taiwanese	1,191	2.95
Filipino	22,491	55.69
Japanese	12,829	31.76
Asian Indian	110	0.27
Korean	812	2.01
Vietnamese	332	0.82
Cambodian	10	0.02
Hmong	0	0.00
Laotian	49	0.12
Thai	81	0.20
All Other Asian Races Including 2+ Category	2,483	6.15
2010 Est. Population by Ancestry	146,193	
Pop, Arab	145	0.10
Pop, Czech	180	0.12
Pop, Danish	485	0.33
Pop, Dutch	1,000	0.68
Pop, English	6,800	4.65
Pop, French (except Basque)	2,059	1.41
Pop, French Canadian	582	0.40
Pop, German	6,384	4.37
Pop, Greek	123	0.08
Pop, Hungarian	666	0.46
Pop, Irish	5,553	3.80
Pop, Italian	5,796	3.96
Pop, Lithuanian	179	0.12
Pop, United States or American	1,540	1.05
Pop, Norwegian	1,106	0.76
Pop, Polish	1,742	1.19
Pop, Portuguese	4,494	3.07
Pop, Russian	566	0.39
Pop, Scottish	1,801	1.23
Pop, Scotch-Irish	1,353	0.93
Pop, Slovak	13	0.01
Pop, Subsaharan African	84	0.06
Pop, Swedish	1,407	0.96
Pop, Swiss	567	0.39
Pop, Ukrainian	65	0.04
Pop, Welsh	857	0.59
Pop, West Indian (exc Hisp groups)	186	0.13
Pop, Other ancestries	93,362	63.86

Pop-Facts: Demographic Snapshot Report

County, (see appendix for geographies), aggregate

Description	Total *County*	*%*
2010 Est. Population by Ancestry		
Pop, Ancestry Unclassified	7,098	4.86
2010 Est. Pop Age 5+ by Language Spoken At Home	136,459	
Speak Only English at Home	109,296	80.09
Speak Asian/Pac. Isl. Lang. at Home	20,876	15.30
Speak IndoEuropean Language at Home	2,669	1.96
Speak Spanish at Home	3,585	2.63
Speak Other Language at Home	33	0.02
2010 Est. Population by Sex	146,193	
Male	74,631	51.05
Female	71,562	48.95
2010 Est. Population by Age	146,193	
Age 0 - 4	9,734	6.66
Age 5 - 9	8,979	6.14
Age 10 - 14	8,732	5.97
Age 15 - 17	5,643	3.86
Age 18 - 20	4,645	3.18
Age 21 - 24	6,623	4.53
Age 25 - 34	21,519	14.72
Age 35 - 44	21,211	14.51
Age 45 - 54	22,098	15.12
Age 55 - 64	18,620	12.74
Age 65 - 74	9,895	6.77
Age 75 - 84	5,686	3.89
Age 85 and over	2,808	1.92
Age 16 and over	116,907	79.97
Age 18 and over	113,105	77.37
Age 21 and over	108,460	74.19
Age 65 and over	18,389	12.58
2010 Est. Median Age	38.40	
2010 Est. Average Age	38.60	

Pop-Facts: Demographic Snapshot Report

County, (see appendix for geographies), aggregate

Description	Total *County*	*%*
2010 Est. Male Population by Age	74,631	
Age 0 - 4	5,031	6.74
Age 5 - 9	4,610	6.18
Age 10 - 14	4,417	5.92
Age 15 - 17	2,877	3.85
Age 18 - 20	2,416	3.24
Age 21 - 24	3,457	4.63
Age 25 - 34	11,890	15.93
Age 35 - 44	11,278	15.11
Age 45 - 54	10,979	14.71
Age 55 - 64	9,388	12.58
Age 65 - 74	4,740	6.35
Age 75 - 84	2,474	3.31
Age 85 and over	1,074	1.44
2010 Est. Median Age, Male	37.32	
2010 Est. Average Age, Male	37.70	
2010 Est. Female Population by Age	71,562	
Age 0 - 4	4,703	6.57
Age 5 - 9	4,369	6.11
Age 10 - 14	4,315	6.03
Age 15 - 17	2,766	3.87
Age 18 - 20	2,229	3.11
Age 21 - 24	3,166	4.42
Age 25 - 34	9,629	13.46
Age 35 - 44	9,933	13.88
Age 45 - 54	11,119	15.54
Age 55 - 64	9,232	12.90
Age 65 - 74	5,155	7.20
Age 75 - 84	3,212	4.49
Age 85 and over	1,734	2.42
2010 Est. Median Age, Female	39.64	
2010 Est. Average Age, Female	39.50	

Pop-Facts: Demographic Snapshot Report

County, (see appendix for geographies), aggregate

Description	Total *County*	*%*
2010 Est. Pop Age 15+ by Marital Status	118,748	
Total, Never Married	37,238	31.36
Males, Never Married	21,914	18.45
Females, Never Married	15,324	12.90
Married, Spouse present	54,591	45.97
Married, Spouse absent	6,861	5.78
Widowed	6,128	5.16
Males Widowed	1,208	1.02
Females Widowed	4,920	4.14
Divorced	13,930	11.73
Males Divorced	6,403	5.39
Females Divorced	7,527	6.34
2010 Est. Pop. Age 25+ by Edu. Attainment	101,837	
Less than 9th grade	5,342	5.25
Some High School, no diploma	6,039	5.93
High School Graduate (or GED)	33,352	32.75
Some College, no degree	22,833	22.42
Associate Degree	9,806	9.63
Bachelor's Degree	16,576	16.28
Master's Degree	5,208	5.11
Professional School Degree	2,101	2.06
Doctorate Degree	580	0.57
2010 Est Pop Age 25+ by Edu. Attain, Hisp. or Lat	101,837	
Less than 9th grade	269	0.26
Some High School, no diploma	1,258	1.24
High School Graduate (or GED)	3,740	3.67
Some College, no degree	1,409	1.38
Associate Degree	569	0.56
Bachelor's Degree	250	0.25
Master's Degree	292	0.29

Pop-Facts: Demographic Snapshot Report

County, (see appendix for geographies), aggregate

Description	Total *County*	*%*
Households		
2015 Projection	54,018	
2010 Estimate	50,880	
2000 Census	43,507	
1990 Census	33,145	
Growth 2010-2015	6.17%	
Growth 2000-2010	16.95%	
Growth 1990-2000	31.26%	
2010 Est. Households by Household Type	50,880	
Family Households	34,948	68.69
Nonfamily Households	15,932	31.31
2010 Est. Group Quarters Population	1,608	
2010 HHs by Ethnicity, Hispanic/Latino	3,585	7.05
2010 Est. HHs by HH Income	50,880	
Income Less than $15,000	4,374	8.60
Income $15,000 - $24,999	3,869	7.60
Income $25,000 - $34,999	4,201	8.26
Income $35,000 - $49,999	6,485	12.75
Income $50,000 - $74,999	9,847	19.35
Income $75,000 - $99,999	8,241	16.20
Income $100,000 - $124,999	4,520	8.88
Income $125,000 - $149,999	3,216	6.32
Income $150,000 - $199,999	3,251	6.39
Income $200,000 - $499,999	2,340	4.60
Income $500,000 and more	536	1.05
2010 Est. Average Household Income	$85,521	
2010 Est. Median Household Income	$66,530	
2010 Est. Per Capita Income	$30,004	

Pop-Facts: Demographic Snapshot Report

County, (see appendix for geographies), aggregate

Description	Total *County*	*%*
2010 Median HH Inc by Single Race Class. or Ethn		
White Alone	67,201	
Black or African American Alone	57,839	
American Indian and Alaska Native Alone	55,000	
Asian Alone	73,355	
Native Hawaiian and Other Pacific Islander Alone	57,608	
Some Other Race Alone	47,914	
Two or More Races	62,030	
Hispanic or Latino	53,365	
Not Hispanic or Latino	67,580	
2010 Est. Family HH Type, Presence Own Children	34,948	
Married-Couple Family, own children	11,017	31.52
Married-Couple Family, no own children	14,837	42.45
Male Householder, own children	1,152	3.30
Male Householder, no own children	1,686	4.82
Female Householder, own children	3,127	8.95
Female Householder, no own children	3,129	8.95
2010 Est. Households by Household Size	50,880	
1-person household	11,722	23.04
2-person household	15,854	31.16
3-person household	8,725	17.15
4-person household	6,925	13.61
5-person household	3,722	7.32
6-person household	1,988	3.91
7 or more person household	1,944	3.82
2010 Est. Average Household Size	2.84	

Pop-Facts: Demographic Snapshot Report

County, (see appendix for geographies), aggregate

Description	Total *County*	*%*
2010 Est. Households by Presence of People	50,880	
Households with 1 or more People under Age 18:	17,967	35.31
Married-Couple Family	12,183	23.94
Other Family, Male Householder	1,657	3.26
Other Family, Female Householder	4,089	8.04
Nonfamily, Male Householder	24	0.05
Nonfamily, Female Householder	14	0.03
Households no People under Age 18:	32,913	64.69
Married-Couple Family	12,978	25.51
Other Family, Male Householder	1,105	2.17
Other Family, Female Householder	1,996	3.92
Nonfamily, Male Householder	8,770	17.24
Nonfamily, Female Householder	8,064	15.85
2010 Est. Households by Number of Vehicles	50,880	
No Vehicles	2,629	5.17
1 Vehicle	15,744	30.94
2 Vehicles	19,766	38.85
3 Vehicles	7,584	14.91
4 Vehicles	3,316	6.52
5 or more Vehicles	1,841	3.62
2010 Est. Average Number of Vehicles	2.01	
Family Households		
2015 Projection	37,102	
2010 Estimate	34,948	
2000 Census	29,899	
1990 Census	23,537	
Growth 2010-2015	6.16%	
Growth 2000-2010	16.89%	
Growth 1990-2000	27.03%	
2010 Est. Families by Poverty Status	34,948	
2010 Families at or Above Poverty	33,167	94.90
2010 Families at or Above Poverty with Children	16,990	48.62
2010 Families Below Poverty	1,781	5.10
2010 Families Below Poverty with Children	1,345	3.85

Pop-Facts: Demographic Snapshot Report

County, (see appendix for geographies), aggregate

Description	Total *County*	*%*
2010 Est. Pop Age 16+ by Employment Status	116,907	
In Armed Forces	396	0.34
Civilian - Employed	77,635	66.41
Civilian - Unemployed	3,734	3.19
Not in Labor Force	35,142	30.06
2010 Est. Civ Employed Pop 16+ Class of Worker	74,231	
For-Profit Private Workers	50,672	68.26
Non-Profit Private Workers	4,052	5.46
Local Government Workers	2,815	3.79
State Government Workers	6,815	9.18
Federal Government Workers	1,363	1.84
Self-Emp Workers	8,207	11.06
Unpaid Family Workers	307	0.41
2010 Est. Civ Employed Pop 16+ by Occupation	74,231	
Architect/Engineer	958	1.29
Arts/Entertain/Sports	2,212	2.98
Building Grounds Maint	5,559	7.49
Business/Financial Ops	1,742	2.35
Community/Soc Svcs	1,249	1.68
Computer/Mathematical	501	0.67
Construction/Extraction	6,380	8.59
Edu/Training/Library	4,083	5.50
Farm/Fish/Forestry	880	1.19
Food Prep/Serving	6,994	9.42
Health Practitioner/Tec	2,753	3.71
Healthcare Support	1,620	2.18
Maintenance Repair	2,864	3.86
Legal	539	0.73
Life/Phys/Soc Science	518	0.70
Management	6,545	8.82
Office/Admin Support	8,824	11.89
Production	2,145	2.89
Protective Svcs	2,472	3.33
Sales/Related	8,881	11.96
Personal Care/Svc	2,800	3.77
Transportation/Moving	3,712	5.00

Pop-Facts: Demographic Snapshot Report

County, (see appendix for geographies), aggregate

Description	Total *County*	*%*
2010 Est. Pop 16+ by Occupation Classification	74,231	
Blue Collar	15,101	20.34
White Collar	38,805	52.28
Service and Farm	20,325	27.38
2010 Est. Workers Age 16+, Transp. To Work	72,261	
Drove Alone	50,850	70.37
Car Pooled	10,971	15.18
Public Transportation	1,361	1.88
Walked	1,986	2.75
Bicycle	461	0.64
Other Means	1,541	2.13
Worked at Home	5,091	7.05
2010 Est. Workers Age 16+ by Travel Time to Work	72,261	
Less than 15 Minutes	26,723	36.98
15 - 29 Minutes	21,220	29.37
30 - 44 Minutes	12,554	17.37
45 - 59 Minutes	4,876	6.75
60 or more Minutes	3,324	4.60
2010 Est. Avg Travel Time to Work in Minutes	22.72	
2010 Est. Tenure of Occupied Housing Units	50,880	
Owner Occupied	29,265	57.52
Renter Occupied	21,615	42.48
2010 Owner Occ. HUs: Avg. Length of Residence	17	
2010 Renter Occ. HUs: Avg. Length of Residence	8	

Pop-Facts: Demographic Snapshot Report

County, (see appendix for geographies), aggregate

Description	Total *County*	*%*
2010 Est. All Owner-Occupied Housing Values	29,265	
Value Less than $20,000	67	0.23
Value $20,000 - $39,999	53	0.18
Value $40,000 - $59,999	130	0.44
Value $60,000 - $79,999	66	0.23
Value $80,000 - $99,999	82	0.28
Value $100,000 - $149,999	300	1.03
Value $150,000 - $199,999	625	2.14
Value $200,000 - $299,999	2,989	10.21
Value $300,000 - $399,999	3,835	13.10
Value $400,000 - $499,999	4,622	15.79
Value $500,000 - $749,999	8,863	30.29
Value $750,000 - $999,999	3,625	12.39
Value $1,000,000 or more	4,008	13.70
2010 Est. Median All Owner-Occupied Housing Value	$552,572	
2010 Est. Housing Units by Units in Structure	66,980	
1 Unit Attached	2,868	4.28
1 Unit Detached	37,488	55.97
2 Units	3,871	5.78
3 or 4 Units	2,482	3.71
5 to 19 Units	8,881	13.26
20 to 49 Units	4,302	6.42
50 or More Units	7,024	10.49
Mobile Home or Trailer	64	0.10
Boat, RV, Van, etc.	0	0.00
2010 Est. Housing Units by Year Structure Built	66,980	
Housing Unit Built 2000 or later	11,064	16.52
Housing Unit Built 1990 to 1999	13,092	19.55
Housing Unit Built 1980 to 1989	14,033	20.95
Housing Unit Built 1970 to 1979	16,550	24.71
Housing Unit Built 1960 to 1969	5,562	8.30
Housing Unit Built 1950 to 1959	2,756	4.11
Housing Unit Built 1940 to 1949	1,645	2.46
Housing Unit Built 1939 or Earlier	2,278	3.40
2010 Est. Median Year Structure Built **	1983	

**1939 will appear when at least half of the Housing Units in this reports area were built in 1939 or earlier.

Pop-Facts: Demographic Snapshot Report

Appendix: Area Listing

Area Name:

Type: List - County Reporting Detail: Aggregate Reporting Level: County

Geography Code	Geography Name	Geography Code	Geography Name
15009	Maui County, HI		

Project Information:

Site: 1

Order Number: 969072959

CENTRAL MAUI

Pop-Facts: Demographic Snapshot 2010 Report

Place, (see appendix for geographies), aggregate

Description	Total *Place*	*%*
Population		
2015 Projection	49,269	
2010 Estimate	46,795	
2000 Census	40,867	
1990 Census	32,310	
Growth 2010-2015	5.29%	
Growth 2000-2010	14.51%	
Growth 1990-2000	26.48%	
2010 Est. Pop by Single Race Class	46,795	
White Alone	7,916	16.92
Black or African American Alone	241	0.52
Amer. Indian and Alaska Native Alone	203	0.43
Asian Alone	20,346	43.48
Native Hawaiian and Other Pac. Isl. Alone	5,222	11.16
Some Other Race Alone	686	1.47
Two or More Races	12,181	26.03
2010 Est. Pop Hisp or Latino by Origin	46,795	
Not Hispanic or Latino	41,668	89.04
Hispanic or Latino:	5,127	10.96
Mexican	1,499	29.24
Puerto Rican	2,135	41.64
Cuban	7	0.14
All Other Hispanic or Latino	1,486	28.98
2010 Est. Hisp or Latino by Single Race Class	5,127	
White Alone	880	17.16
Black or African American Alone	6	0.12
American Indian and Alaska Native Alone	66	1.29
Asian Alone	580	11.31
Native Hawaiian and Other Pacific Islander Alone	307	5.99
Some Other Race Alone	632	12.33
Two or More Races	2,656	51.80

Pop-Facts: Demographic Snapshot 2010 Report

Place, (see appendix for geographies), aggregate

Description	Total *Place*	*%*
2010 Est. Pop. Asian Alone Race by Cat	20,346	
Chinese, except Taiwanese	472	2.32
Filipino	10,764	52.90
Japanese	7,319	35.97
Asian Indian	26	0.13
Korean	451	2.22
Vietnamese	131	0.64
Cambodian	3	0.01
Hmong	0	0.00
Laotian	22	0.11
Thai	23	0.11
All Other Asian Races Including 2+ Category	1,135	5.58
2010 Est. Population by Ancestry	46,795	
Pop, Arab	38	0.08
Pop, Czech	25	0.05
Pop, Danish	14	0.03
Pop, Dutch	73	0.16
Pop, English	814	1.74
Pop, French (except Basque)	284	0.61
Pop, French Canadian	145	0.31
Pop, German	801	1.71
Pop, Greek	1	0.00
Pop, Hungarian	76	0.16
Pop, Irish	712	1.52
Pop, Italian	669	1.43
Pop, Lithuanian	14	0.03
Pop, United States or American	209	0.45
Pop, Norwegian	152	0.32
Pop, Polish	183	0.39
Pop, Portuguese	1,514	3.24
Pop, Russian	36	0.08
Pop, Scottish	165	0.35
Pop, Scotch-Irish	156	0.33
Pop, Slovak	1	0.00
Pop, Subsaharan African	19	0.04
Pop, Swedish	187	0.40
Pop, Swiss	18	0.04
Pop, Ukrainian	1	0.00
Pop, Welsh	80	0.17
Pop, West Indian (exc Hisp groups)	41	0.09
Pop, Other ancestries	38,217	81.67

Pop-Facts: Demographic Snapshot 2010 Report

Place, (see appendix for geographies), aggregate

Description	Total *Place*	*%*
2010 Est. Population by Ancestry		
Pop, Ancestry Unclassified	2,150	4.59
2010 Est. Pop Age 5+ by Language Spoken At Home	43,428	
Speak Only English at Home	32,768	75.45
Speak Asian/Pac. Isl. Lang. at Home	9,355	21.54
Speak IndoEuropean Language at Home	385	0.89
Speak Spanish at Home	913	2.10
Speak Other Language at Home	7	0.02
2010 Est. Population by Sex	46,795	
Male	23,694	50.63
Female	23,101	49.37
2010 Est. Population by Age	46,795	
Age 0 - 4	3,367	7.20
Age 5 - 9	2,954	6.31
Age 10 - 14	2,937	6.28
Age 15 - 17	1,840	3.93
Age 18 - 20	1,548	3.31
Age 21 - 24	2,157	4.61
Age 25 - 34	7,335	15.67
Age 35 - 44	6,462	13.81
Age 45 - 54	6,062	12.95
Age 55 - 64	5,352	11.44
Age 65 - 74	3,171	6.78
Age 75 - 84	2,419	5.17
Age 85 and over	1,191	2.55
Age 16 and over	36,937	78.93
Age 18 and over	35,697	76.28
Age 21 and over	34,149	72.98
Age 65 and over	6,781	14.49
2010 Est. Median Age	36.95	
2010 Est. Average Age	38.40	

Pop-Facts: Demographic Snapshot 2010 Report

Place, (see appendix for geographies), aggregate

Description	Total *Place*	*%*
2010 Est. Male Population by Age	23,694	
Age 0 - 4	1,747	7.37
Age 5 - 9	1,517	6.40
Age 10 - 14	1,485	6.27
Age 15 - 17	937	3.95
Age 18 - 20	856	3.61
Age 21 - 24	1,125	4.75
Age 25 - 34	4,061	17.14
Age 35 - 44	3,425	14.46
Age 45 - 54	3,021	12.75
Age 55 - 64	2,646	11.17
Age 65 - 74	1,423	6.01
Age 75 - 84	1,016	4.29
Age 85 and over	435	1.84
2010 Est. Median Age, Male	35.35	
2010 Est. Average Age, Male	37.10	
2010 Est. Female Population by Age	23,101	
Age 0 - 4	1,620	7.01
Age 5 - 9	1,437	6.22
Age 10 - 14	1,452	6.29
Age 15 - 17	903	3.91
Age 18 - 20	692	3.00
Age 21 - 24	1,032	4.47
Age 25 - 34	3,274	14.17
Age 35 - 44	3,037	13.15
Age 45 - 54	3,041	13.16
Age 55 - 64	2,706	11.71
Age 65 - 74	1,748	7.57
Age 75 - 84	1,403	6.07
Age 85 and over	756	3.27
2010 Est. Median Age, Female	38.76	
2010 Est. Average Age, Female	39.80	

Pop-Facts: Demographic Snapshot 2010 Report

Place, (see appendix for geographies), aggregate

Description	Total *Place*	*%*
2010 Est. Pop Age 15+ by Marital Status	37,537	
Total, Never Married	11,963	31.87
Males, Never Married	6,997	18.64
Females, Never Married	4,966	13.23
Married, Spouse present	16,993	45.27
Married, Spouse absent	2,676	7.13
Widowed	2,447	6.52
Males Widowed	490	1.31
Females Widowed	1,957	5.21
Divorced	3,458	9.21
Males Divorced	1,569	4.18
Females Divorced	1,889	5.03
2010 Est. Pop. Age 25+ by Edu. Attainment	31,992	
Less than 9th grade	2,757	8.62
Some High School, no diploma	2,365	7.39
High School Graduate (or GED)	11,515	35.99
Some College, no degree	6,245	19.52
Associate Degree	3,065	9.58
Bachelor's Degree	4,389	13.72
Master's Degree	1,127	3.52
Professional School Degree	491	1.53
Doctorate Degree	38	0.12
2010 Est Pop Age 25+ by Edu. Attain, Hisp. or Lat	2,684	
Less than 9th grade	99	3.69
Some High School, no diploma	364	13.56
High School Graduate (or GED)	1,360	50.67
Some College, no degree	444	16.54
Associate Degree	196	7.30
Bachelor's Degree	111	4.14
Graduate or Professional Degree	110	4.10

Pop-Facts: Demographic Snapshot 2010 Report

Place, (see appendix for geographies), aggregate

Description	Total *Place*	*%*
Households		
2015 Projection	15,593	
2010 Estimate	14,735	
2000 Census	12,626	
1990 Census	9,953	
Growth 2010-2015	5.82%	
Growth 2000-2010	16.70%	
Growth 1990-2000	26.86%	
2010 Est. Households by Household Type	14,735	
Family Households	10,921	74.12
Nonfamily Households	3,814	25.88
2010 Est. Group Quarters Population	937	
2010 HHs by Ethnicity, Hispanic/Latino	1,186	8.05
2010 Est. HHs by HH Income	14,735	
Income Less than $15,000	1,351	9.17
Income $15,000 - $24,999	1,288	8.74
Income $25,000 - $34,999	1,150	7.80
Income $35,000 - $49,999	1,797	12.20
Income $50,000 - $74,999	2,955	20.05
Income $75,000 - $99,999	2,328	15.80
Income $100,000 - $124,999	1,388	9.42
Income $125,000 - $149,999	928	6.30
Income $150,000 - $199,999	888	6.03
Income $200,000 - $499,999	553	3.75
Income $500,000 and more	109	0.74
2010 Est. Average Household Income	$81,332	
2010 Est. Median Household Income	$65,071	
2010 Est. Per Capita Income	$25,887	

Pop-Facts: Demographic Snapshot 2010 Report

Place, (see appendix for geographies), aggregate

Description	Total *Place*	*%*
2010 Median HH Inc by Single Race Class. or Ethn		
White Alone	57,933	
Black or African American Alone	50,466	
American Indian and Alaska Native Alone	60,417	
Asian Alone	73,339	
Native Hawaiian and Other Pacific Islander Alone	57,698	
Some Other Race Alone	73,877	
Two or More Races	61,999	
Hispanic or Latino	44,619	
Not Hispanic or Latino	66,688	
2010 Est. Family HH Type, Presence Own Children	10,921	
Married-Couple Family, own children	3,524	32.27
Married-Couple Family, no own children	4,280	39.19
Male Householder, own children	309	2.83
Male Householder, no own children	572	5.24
Female Householder, own children	1,008	9.23
Female Householder, no own children	1,228	11.24
2010 Est. Households by Household Size	14,735	
1-person household	3,078	20.89
2-person household	3,908	26.52
3-person household	2,610	17.71
4-person household	2,252	15.28
5-person household	1,340	9.09
6-person household	723	4.91
7 or more person household	824	5.59
2010 Est. Average Household Size	3.11	

Pop-Facts: Demographic Snapshot 2010 Report

Place, (see appendix for geographies), aggregate

Description	Total *Place*	*%*
2010 Est. Households by Presence of People	14,735	
Households with 1 or more People under Age 18:	5,877	39.88
Married-Couple Family	4,009	68.22
Other Family, Male Householder	472	8.03
Other Family, Female Householder	1,388	23.62
Nonfamily, Male Householder	3	0.05
Nonfamily, Female Householder	5	0.09
Households no People under Age 18:	8,858	60.12
Married-Couple Family	3,664	41.36
Other Family, Male Householder	378	4.27
Other Family, Female Householder	785	8.86
Nonfamily, Male Householder	1,890	21.34
Nonfamily, Female Householder	2,141	24.17
2010 Est. Households by Number of Vehicles	14,735	
No Vehicles	1,015	6.89
1 Vehicle	4,451	30.21
2 Vehicles	5,283	35.85
3 Vehicles	2,300	15.61
4 Vehicles	1,070	7.26
5 or more Vehicles	616	4.18
2010 Est. Average Number of Vehicles	2.03	
Family Households		
2015 Projection	11,589	
2010 Estimate	10,921	
2000 Census	9,312	
1990 Census	7,549	
Growth 2010-2015	6.12%	
Growth 2000-2010	17.28%	
Growth 1990-2000	23.35%	
2010 Est. Families by Poverty Status	10,921	
2010 Families at or Above Poverty	10,291	94.23
2010 Families at or Above Poverty with Children	5,416	49.59
2010 Families Below Poverty	630	5.77
2010 Families Below Poverty with Children	499	4.57

Pop-Facts: Demographic Snapshot 2010 Report

Place, (see appendix for geographies), aggregate

Description	Total *Place*	*%*
2010 Est. Pop Age 16+ by Employment Status	36,937	
In Armed Forces	150	0.41
Civilian - Employed	22,730	61.54
Civilian - Unemployed	1,221	3.31
Not in Labor Force	12,836	34.75
2010 Est. Civ Employed Pop 16+ Class of Worker	21,397	
For-Profit Private Workers	14,966	69.94
Non-Profit Private Workers	1,252	5.85
Local Government Workers	1,170	5.47
State Government Workers	2,324	10.86
Federal Government Workers	401	1.87
Self-Emp Workers	1,205	5.63
Unpaid Family Workers	79	0.37
2010 Est. Civ Employed Pop 16+ by Occupation	21,397	
Architect/Engineer	382	1.79
Arts/Entertain/Sports	324	1.51
Building Grounds Maint	1,888	8.82
Business/Financial Ops	498	2.33
Community/Soc Svcs	293	1.37
Computer/Mathematical	110	0.51
Construction/Extraction	1,519	7.10
Edu/Training/Library	1,016	4.75
Farm/Fish/Forestry	315	1.47
Food Prep/Serving	1,478	6.91
Health Practitioner/Tec	807	3.77
Healthcare Support	564	2.64
Maintenance Repair	1,085	5.07
Legal	186	0.87
Life/Phys/Soc Science	146	0.68
Management	1,355	6.33
Office/Admin Support	3,012	14.08
Production	826	3.86
Protective Svcs	807	3.77
Sales/Related	2,824	13.20
Personal Care/Svc	617	2.88
Transportation/Moving	1,345	6.29

Pop-Facts: Demographic Snapshot 2010 Report

Place, (see appendix for geographies), aggregate

Description	Total *Place*	*%*
2010 Est. Pop 16+ by Occupation Classification	21,397	
Blue Collar	4,775	22.32
White Collar	10,953	51.19
Service and Farm	5,669	26.49
2010 Est. Workers Age 16+, Transp. To Work	20,957	
Drove Alone	15,014	71.64
Car Pooled	3,830	18.28
Public Transportation	474	2.26
Walked	400	1.91
Bicycle	59	0.28
Other Means	464	2.21
Worked at Home	716	3.42
2010 Est. Workers Age 16+ by Travel Time to Work *		
Less than 15 Minutes	9,000	
15 - 29 Minutes	5,176	
30 - 44 Minutes	3,622	
45 - 59 Minutes	1,772	
60 or more Minutes	889	
2010 Est. Avg Travel Time to Work in Minutes	22.96	
2010 Est. Tenure of Occupied Housing Units	14,735	
Owner Occupied	9,000	61.08
Renter Occupied	5,735	38.92
2010 Owner Occ. HUs: Avg. Length of Residence	19	
2010 Renter Occ. HUs: Avg. Length of Residence	9	

Pop-Facts: Demographic Snapshot 2010 Report

Place, (see appendix for geographies), aggregate

Description	Total *Place*	*%*
2010 Est. All Owner-Occupied Housing Values	9,000	
Value Less than $20,000	1	0.01
Value $20,000 - $39,999	26	0.29
Value $40,000 - $59,999	74	0.82
Value $60,000 - $79,999	35	0.39
Value $80,000 - $99,999	38	0.42
Value $100,000 - $149,999	60	0.67
Value $150,000 - $199,999	214	2.38
Value $200,000 - $299,999	878	9.76
Value $300,000 - $399,999	1,430	15.89
Value $400,000 - $499,999	1,927	21.41
Value $500,000 - $749,999	3,104	34.49
Value $750,000 - $999,999	814	9.04
Value $1,000,000 or more	399	4.43
2010 Est. Median All Owner-Occupied Housing Value	$490,482	
2010 Est. Housing Units by Units in Structure	15,348	
1 Unit Attached	984	6.41
1 Unit Detached	10,542	68.69
2 Units	490	3.19
3 or 4 Units	545	3.55
5 to 19 Units	1,892	12.33
20 to 49 Units	468	3.05
50 or More Units	399	2.60
Mobile Home or Trailer	28	0.18
Boat, RV, Van, etc.	0	0.00
2010 Est. Housing Units by Year Structure Built	15,348	
Housing Unit Built 2000 or later	2,402	15.65
Housing Unit Built 1990 to 1999	3,146	20.50
Housing Unit Built 1980 to 1989	2,377	15.49
Housing Unit Built 1970 to 1979	2,586	16.85
Housing Unit Built 1960 to 1969	2,305	15.02
Housing Unit Built 1950 to 1959	1,367	8.91
Housing Unit Built 1940 to 1949	497	3.24
Housing Unit Built 1939 or Earlier	668	4.35
2010 Est. Median Year Structure Built **	1981	

*This row intentionally left blank. No total category data is available.

**1939 will appear when at least half of the Housing Units in this reports area were built in 1939 or earlier.

Pop-Facts: Demographic Snapshot 2010 Report

Appendix: Area Listing

Area Name:

Type: List - Place Reporting Detail: Aggregate Reporting Level: Place

Geography Code	Geography Name	Geography Code	Geography Name
1522700	Kahului CDP	1575510	Waihee-Waiehu CDP
1575950	Waikapu CDP	1577450	Wailuku CDP

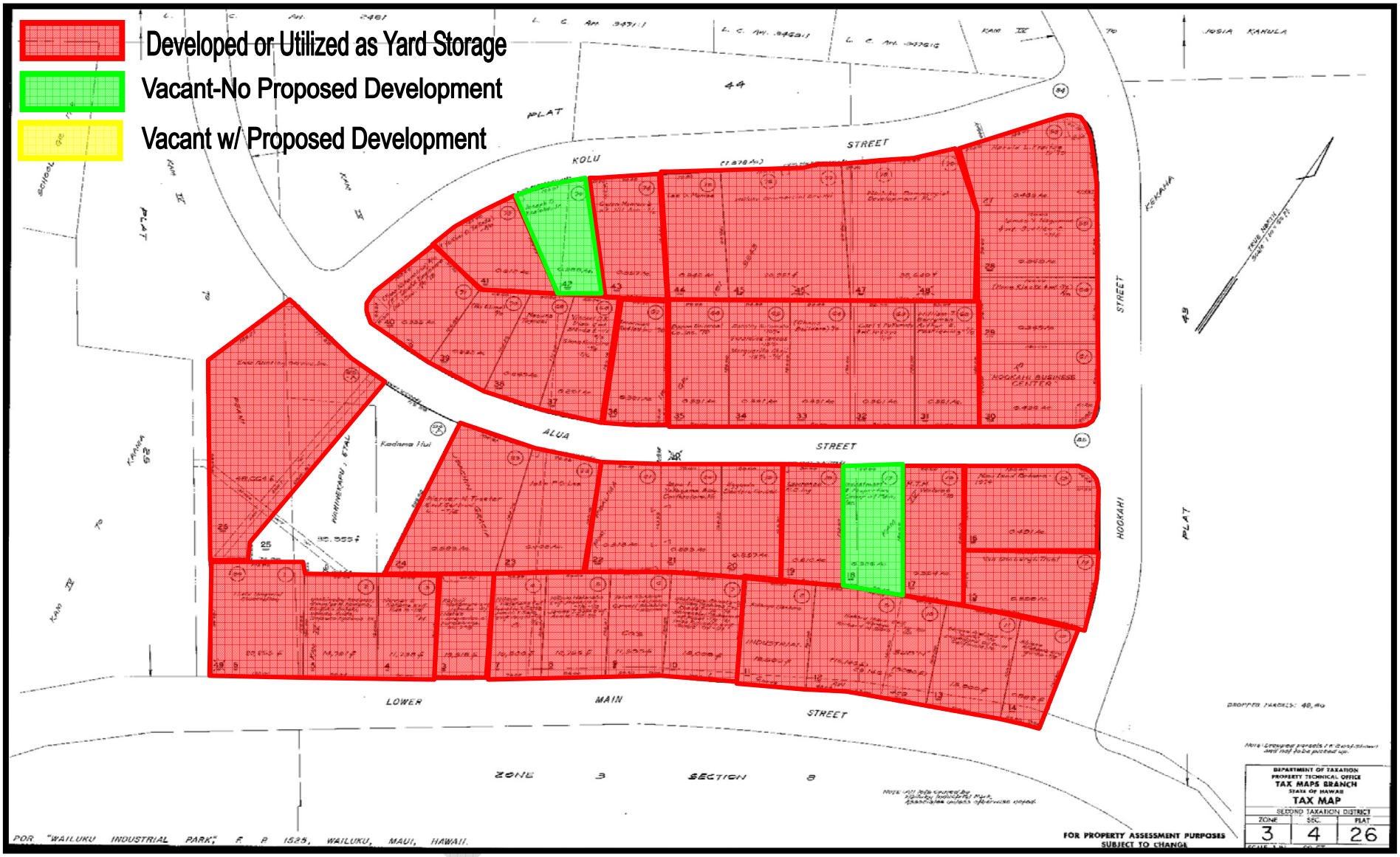
Project Information:

Site: 1

Order Number: 969114179

EXHIBIT C

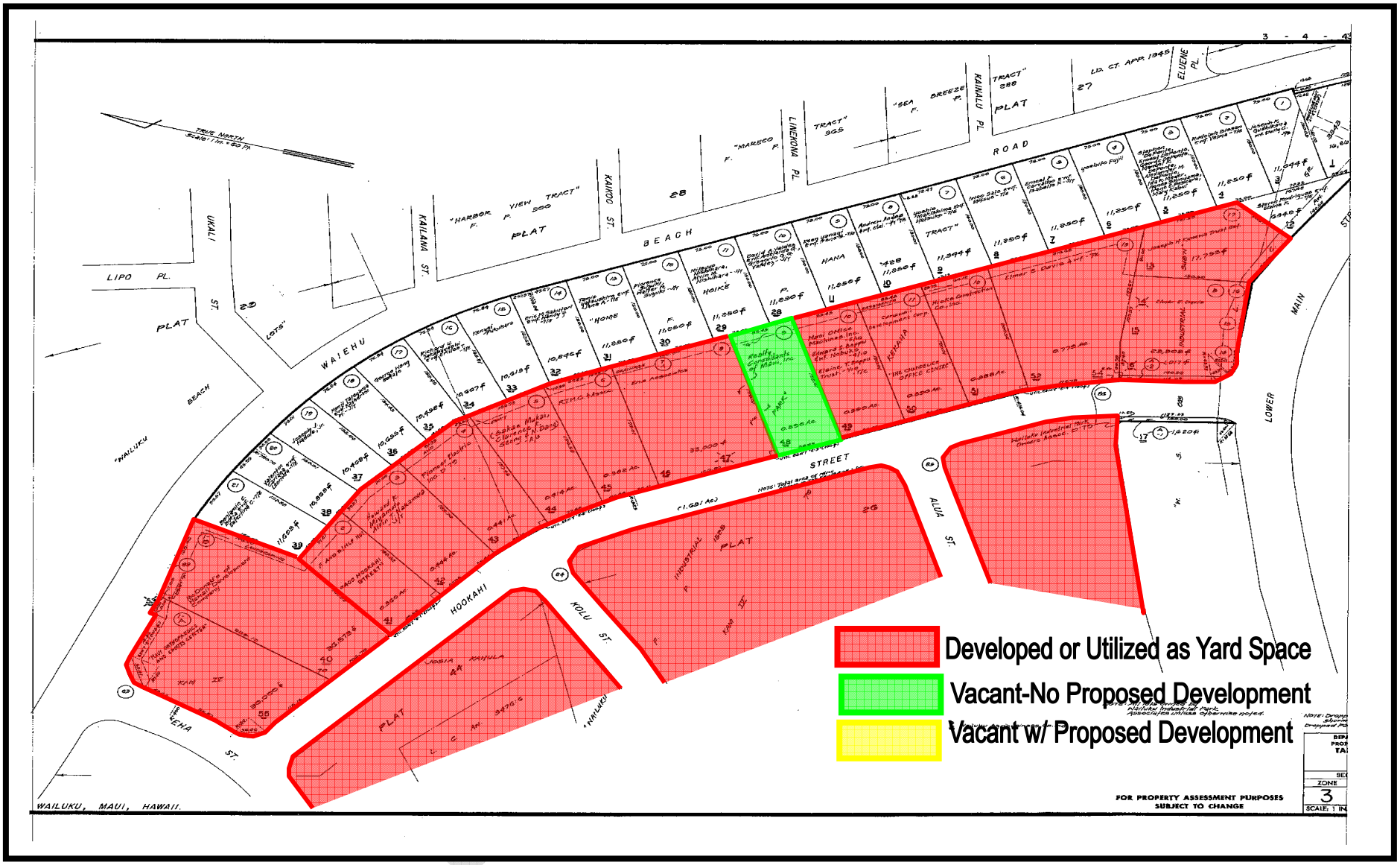
Maps of the Industrial Subdivisions in Central Maui



Not To Scale!

WAILUKU INDUSTRIAL SUBDIVISION (MAP I)

TMK: (II) 3-4-Plat 026



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WAILUKU INDUSTRIAL SUBDIVISION (MAP II)

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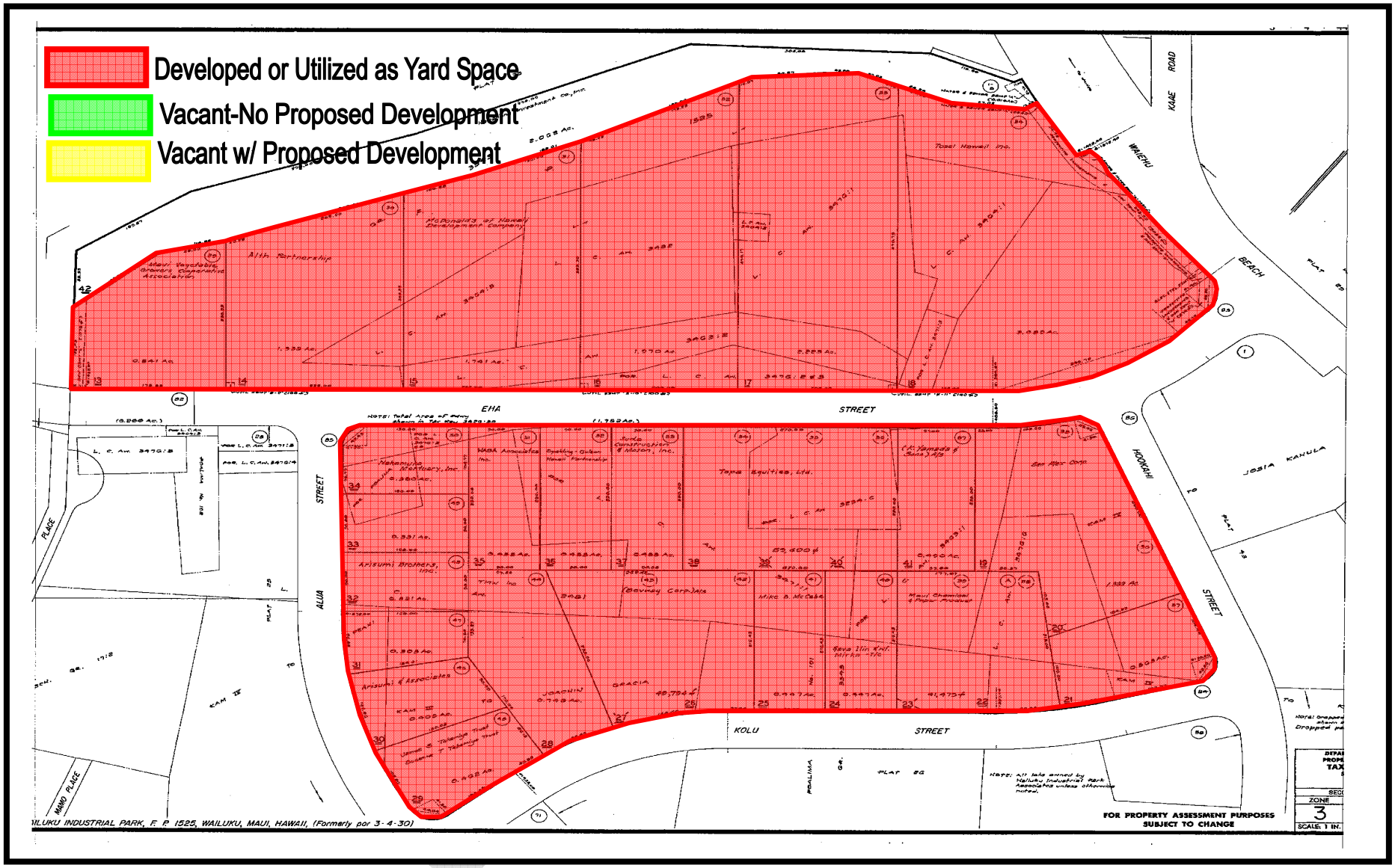

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WAILUKU INDUSTRIAL SUBDIVISION (MAP III)

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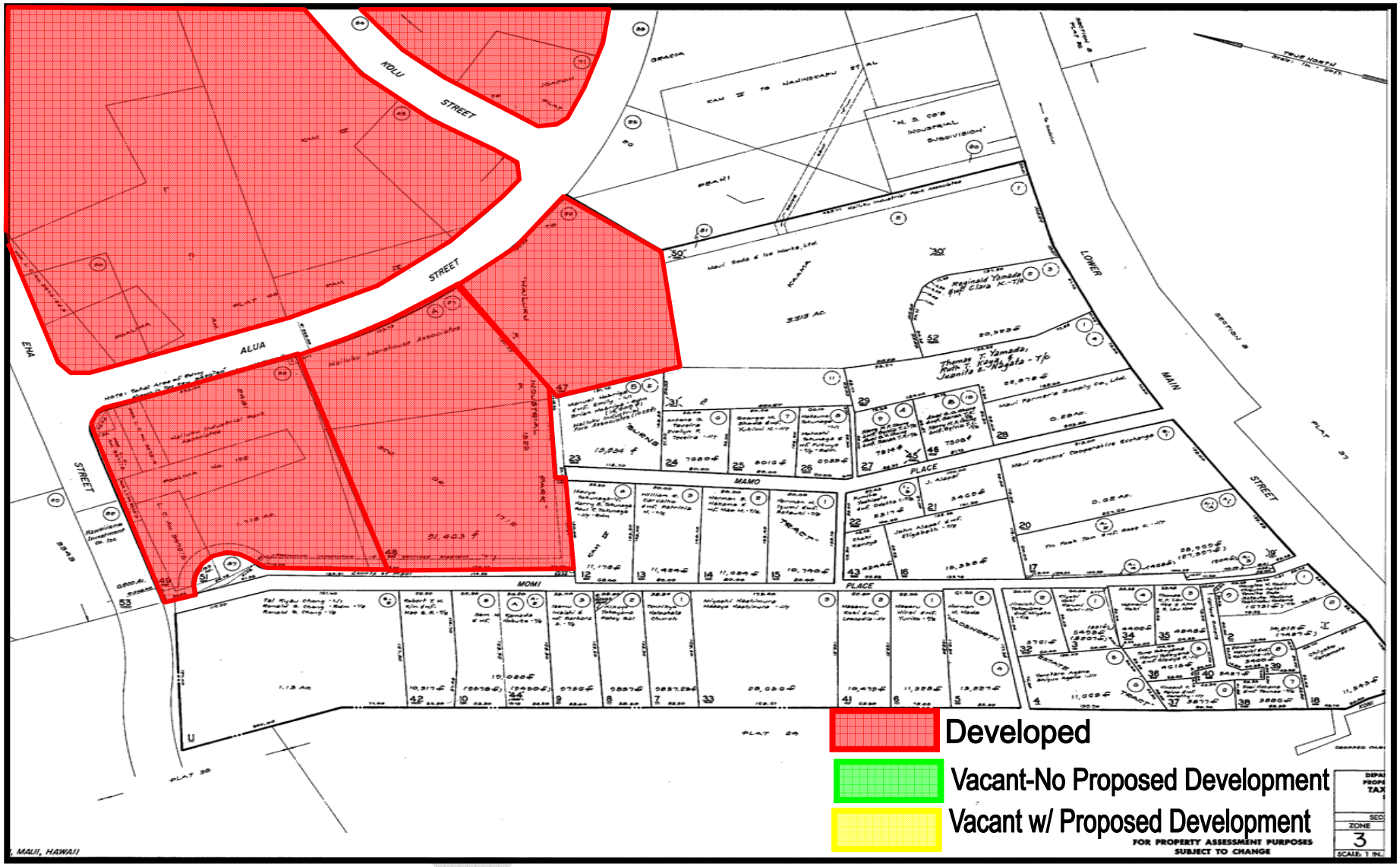

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WAILUKU INDUSTRIAL SUBDIVISION (MAP IV)

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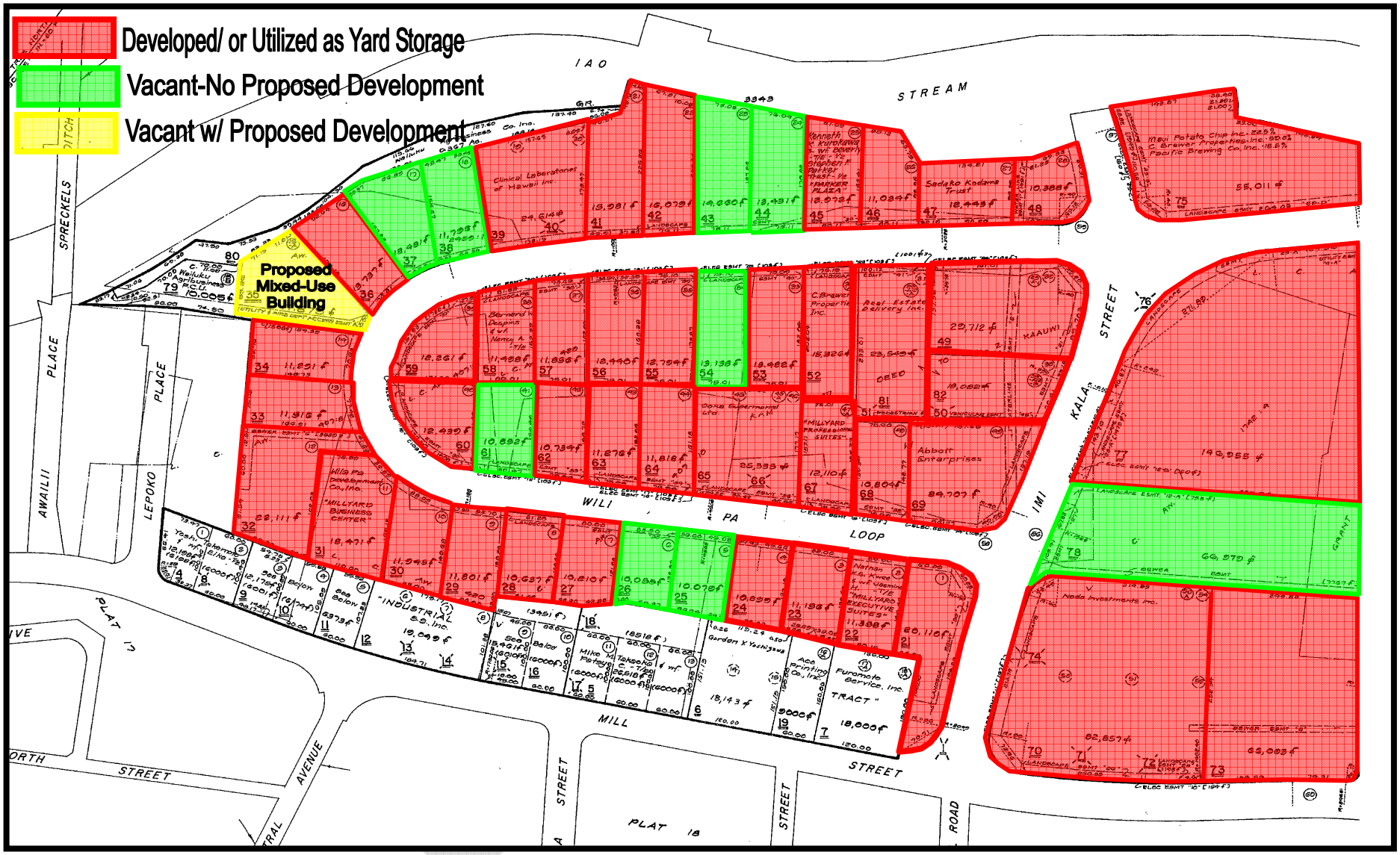
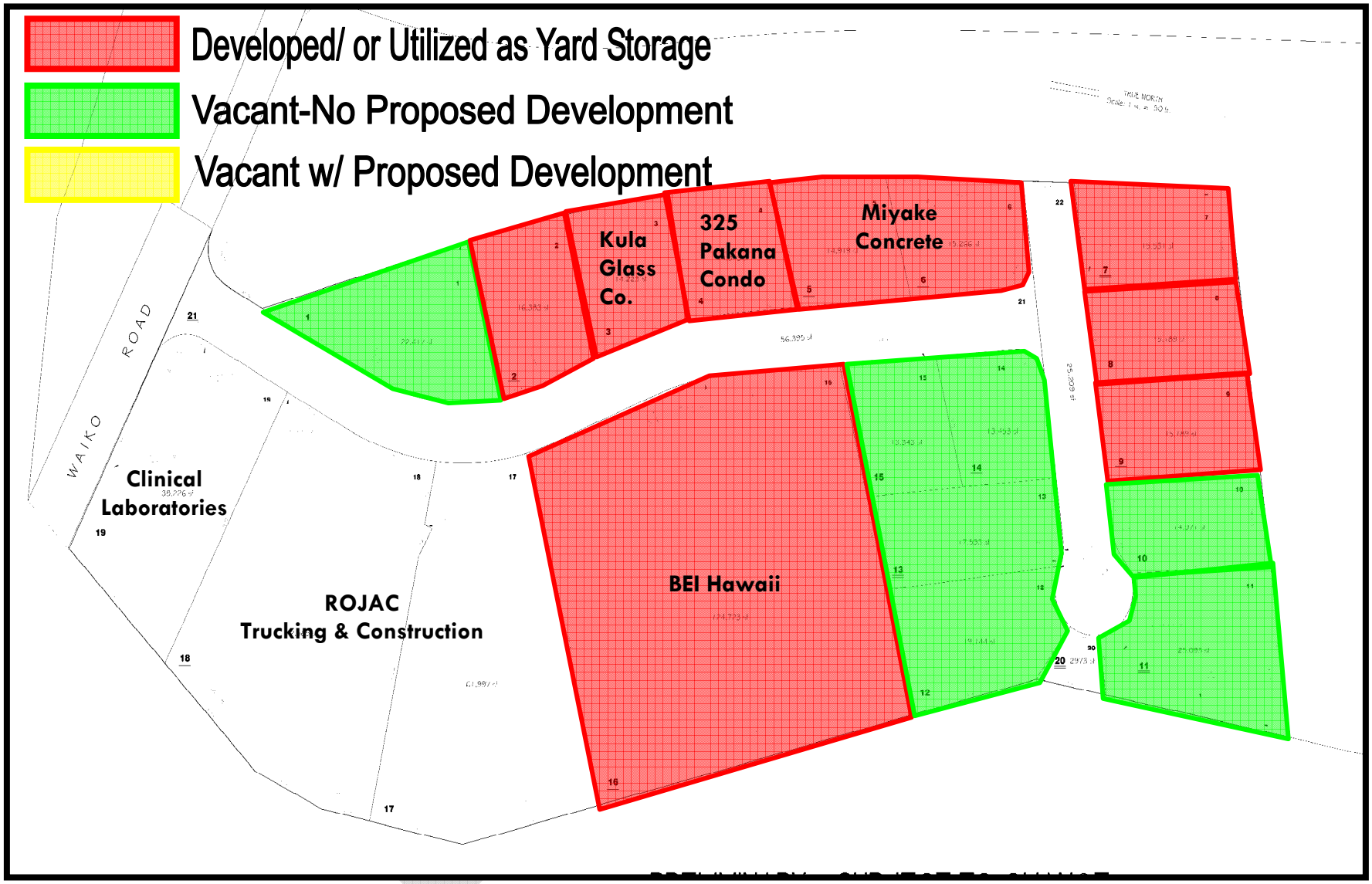


Not To Scale!

THE MILLYARD SUBDIVISION

TMK: (II) 3-4-Plat 020



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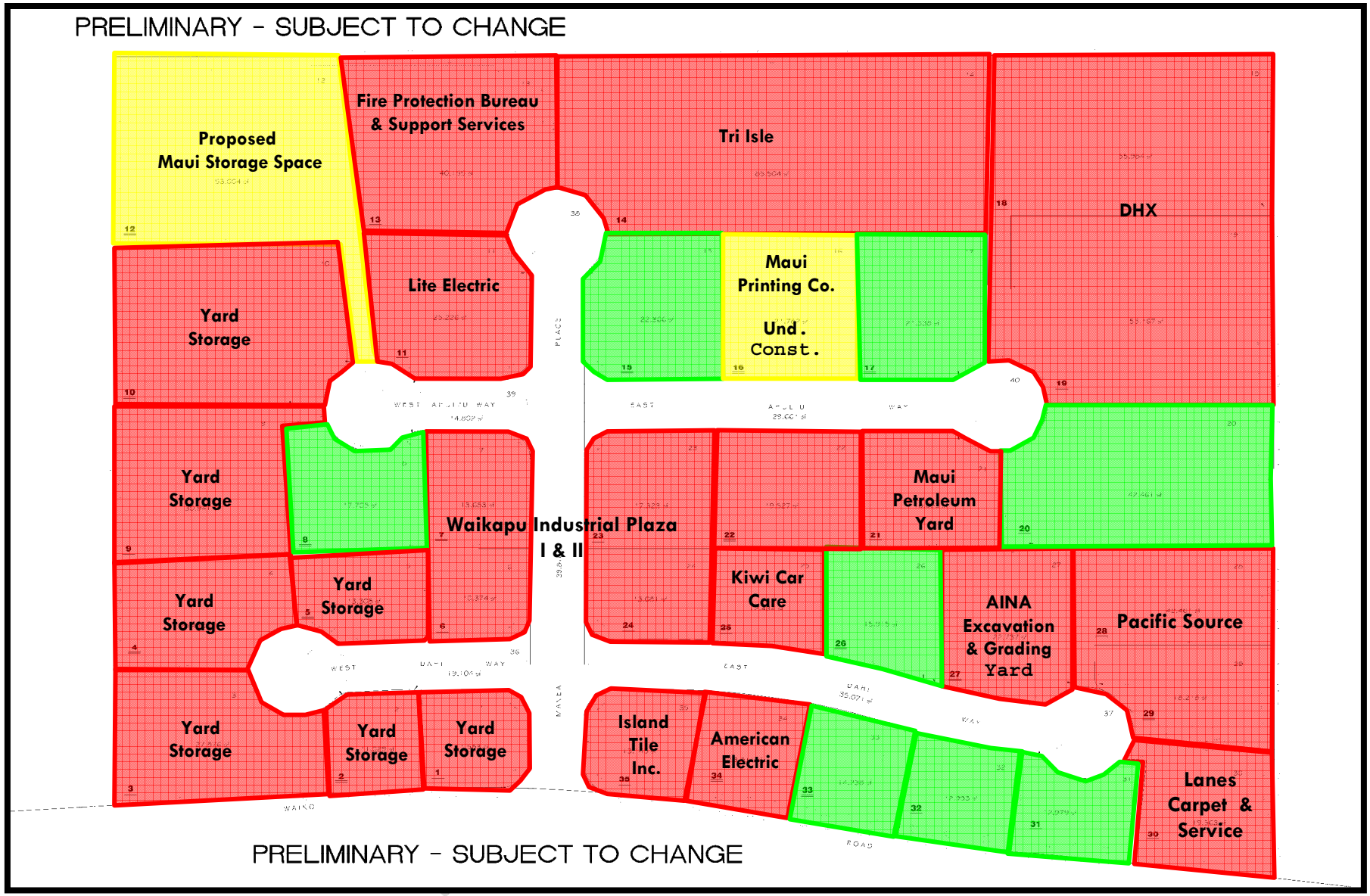
WAIKO BASEYARD SUBDIVISION
TMK: (II) 3-5-Plat 027



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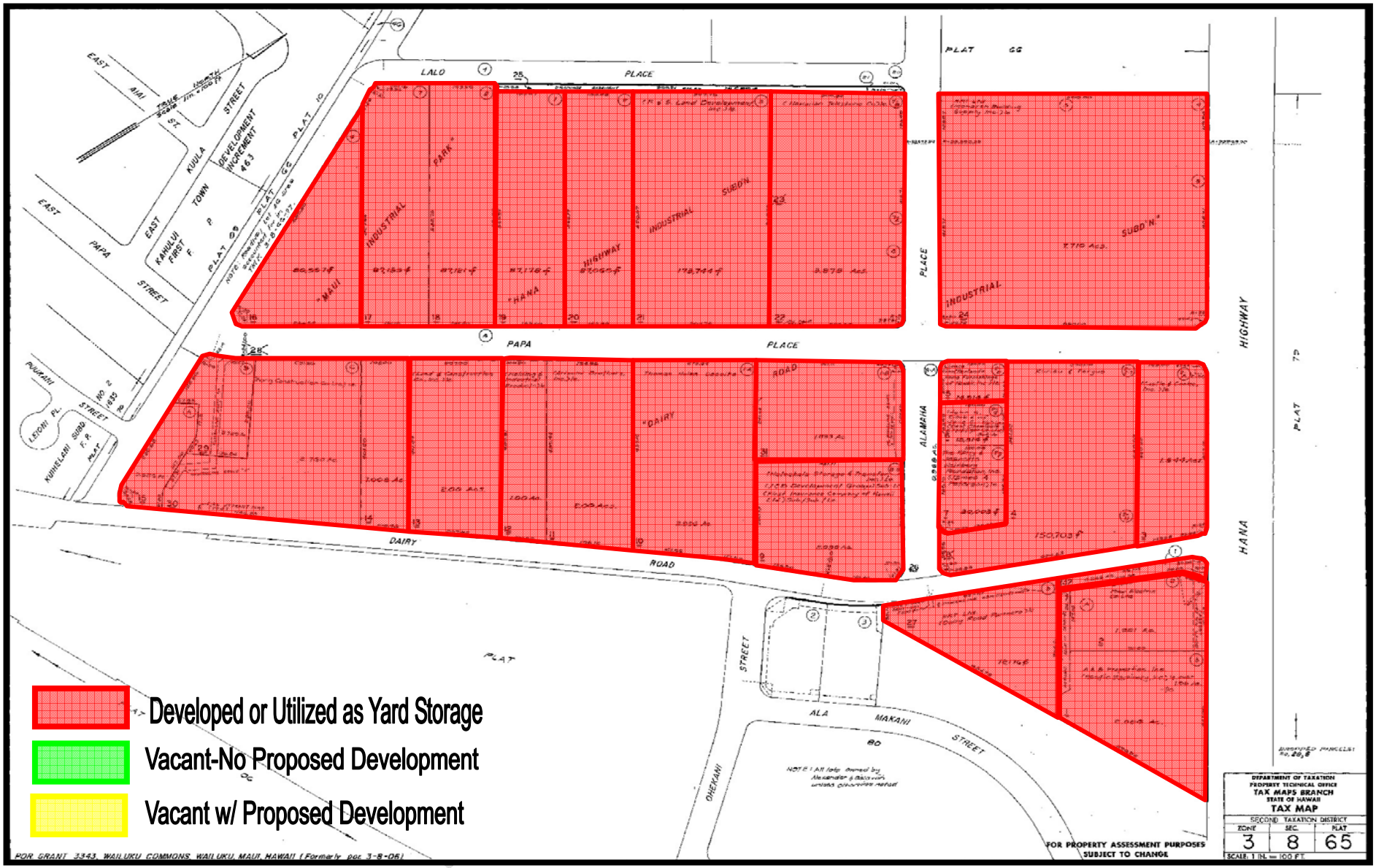
CONSOLIDATED BASEYARDS SUBDIVISION

TMK: (II) 3-8-Plat 094



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KAHULUI INDUSTRIAL SUBDIVISION (MAP I)

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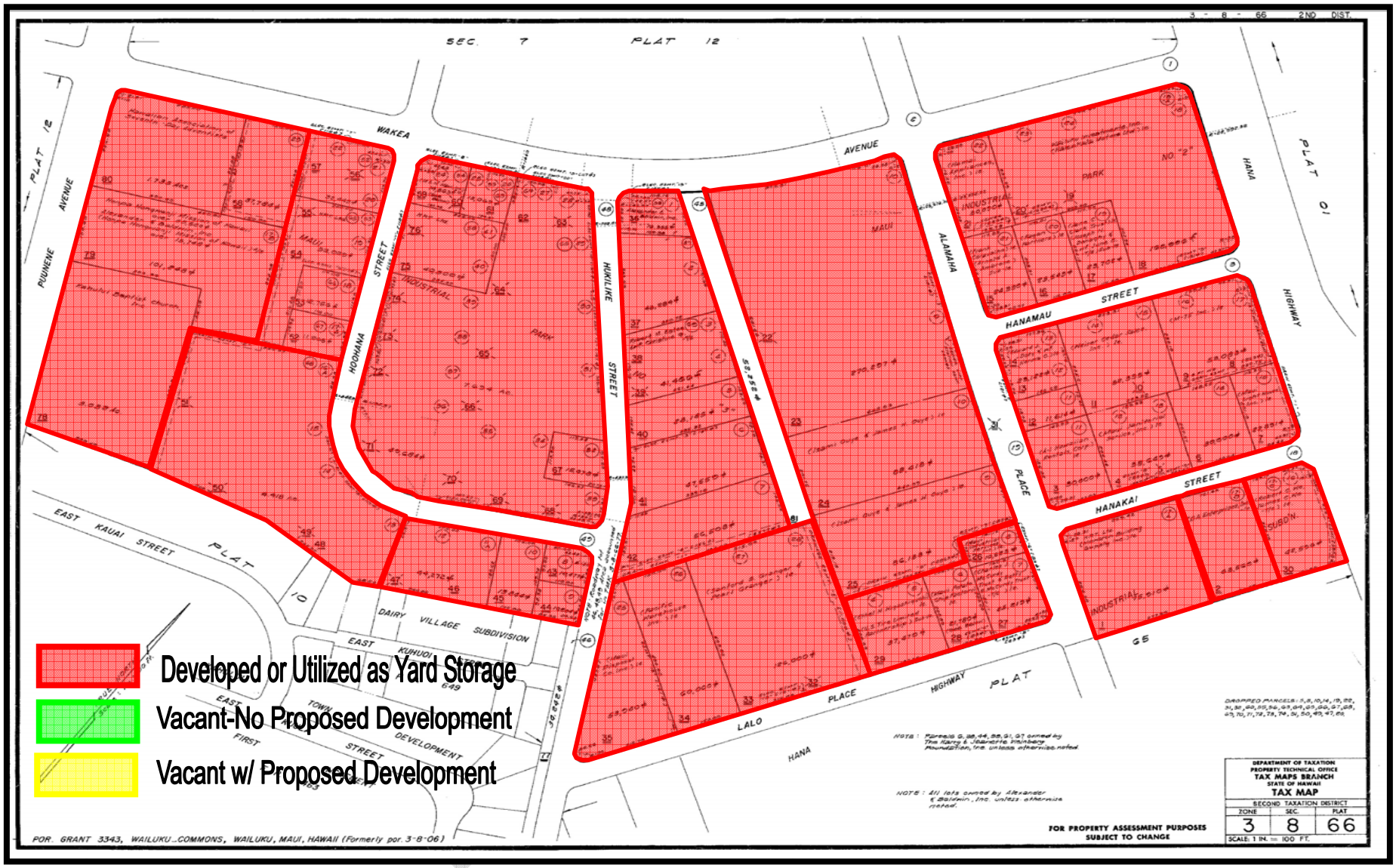

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KAHULUI INDUSTRIAL SUBDIVISION (MAP II)

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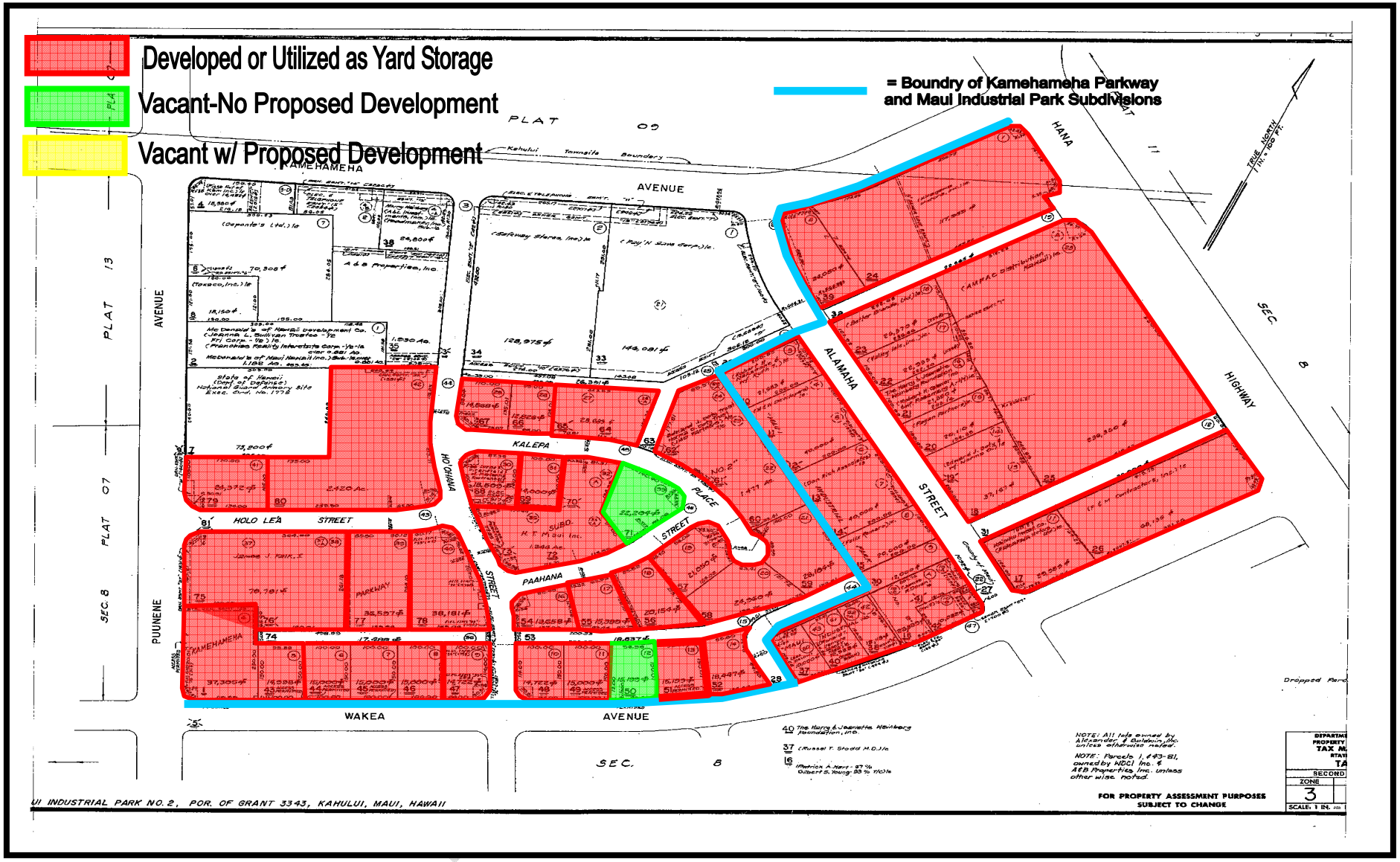

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KAMEHAMEHA PARKWAY SUBDIVISION

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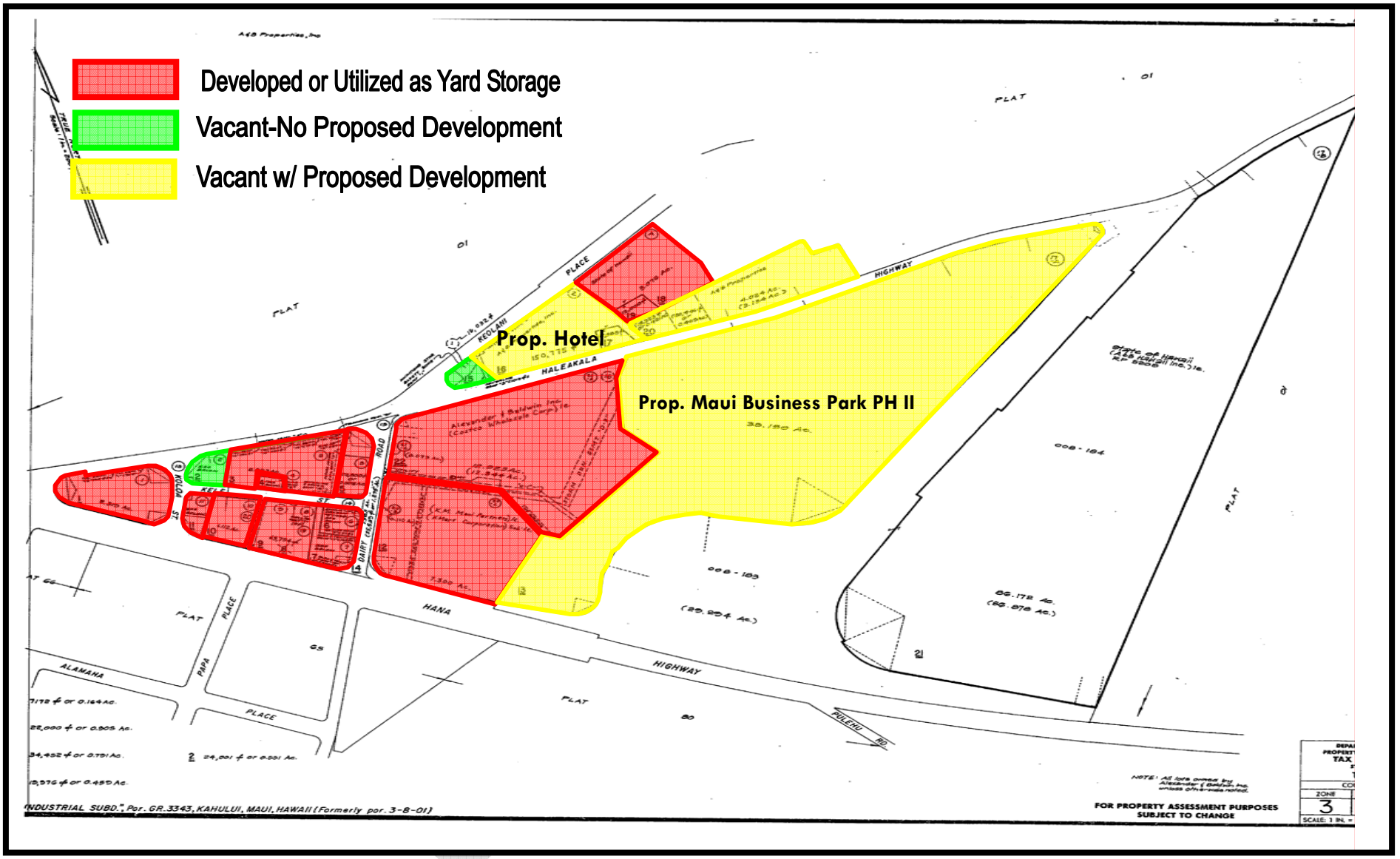

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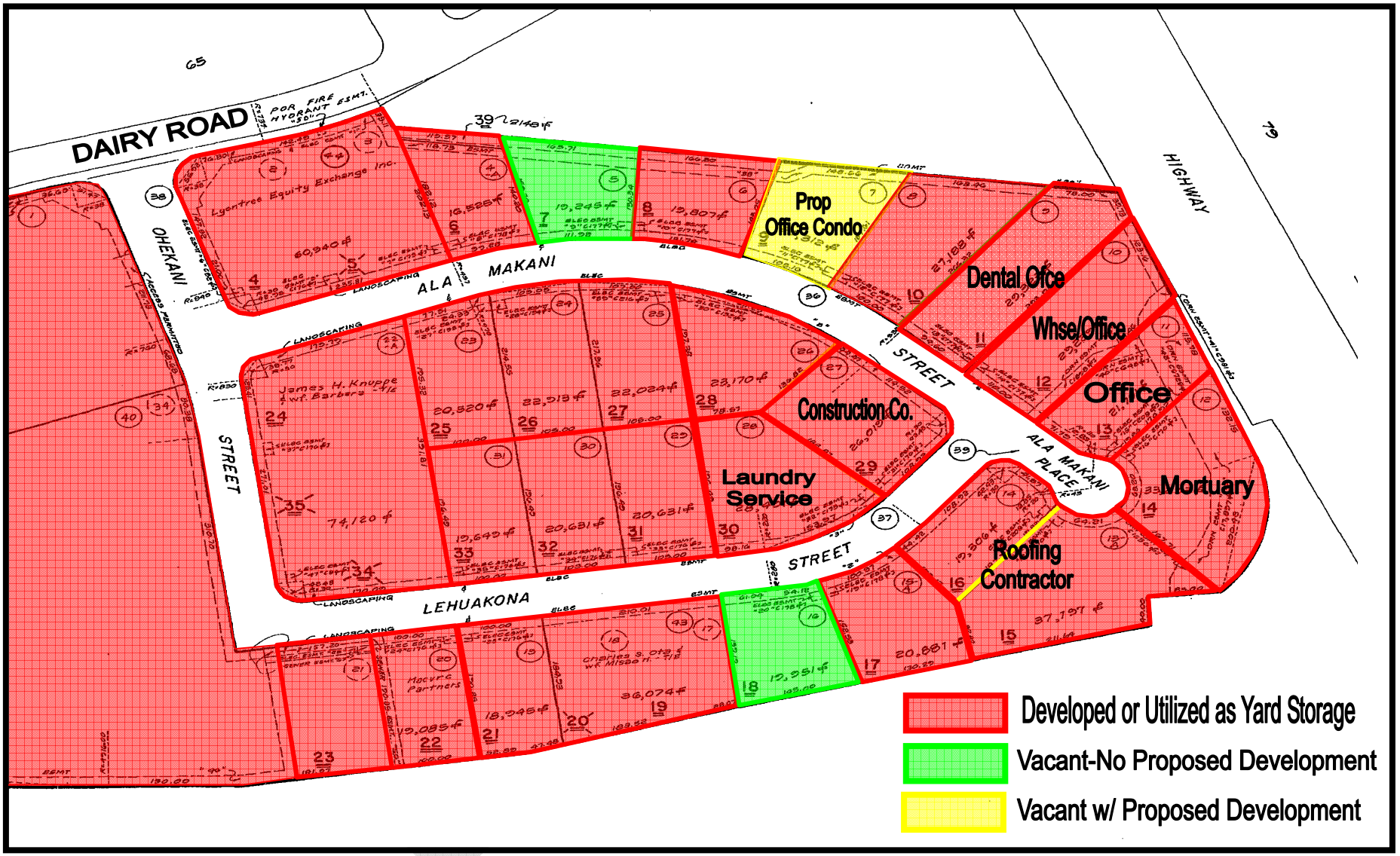
AIRPORT TRIANGLE

TMK: (II) 3-8-Plat 079



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MAUI BUSIINESS PARK, PHASE I-A

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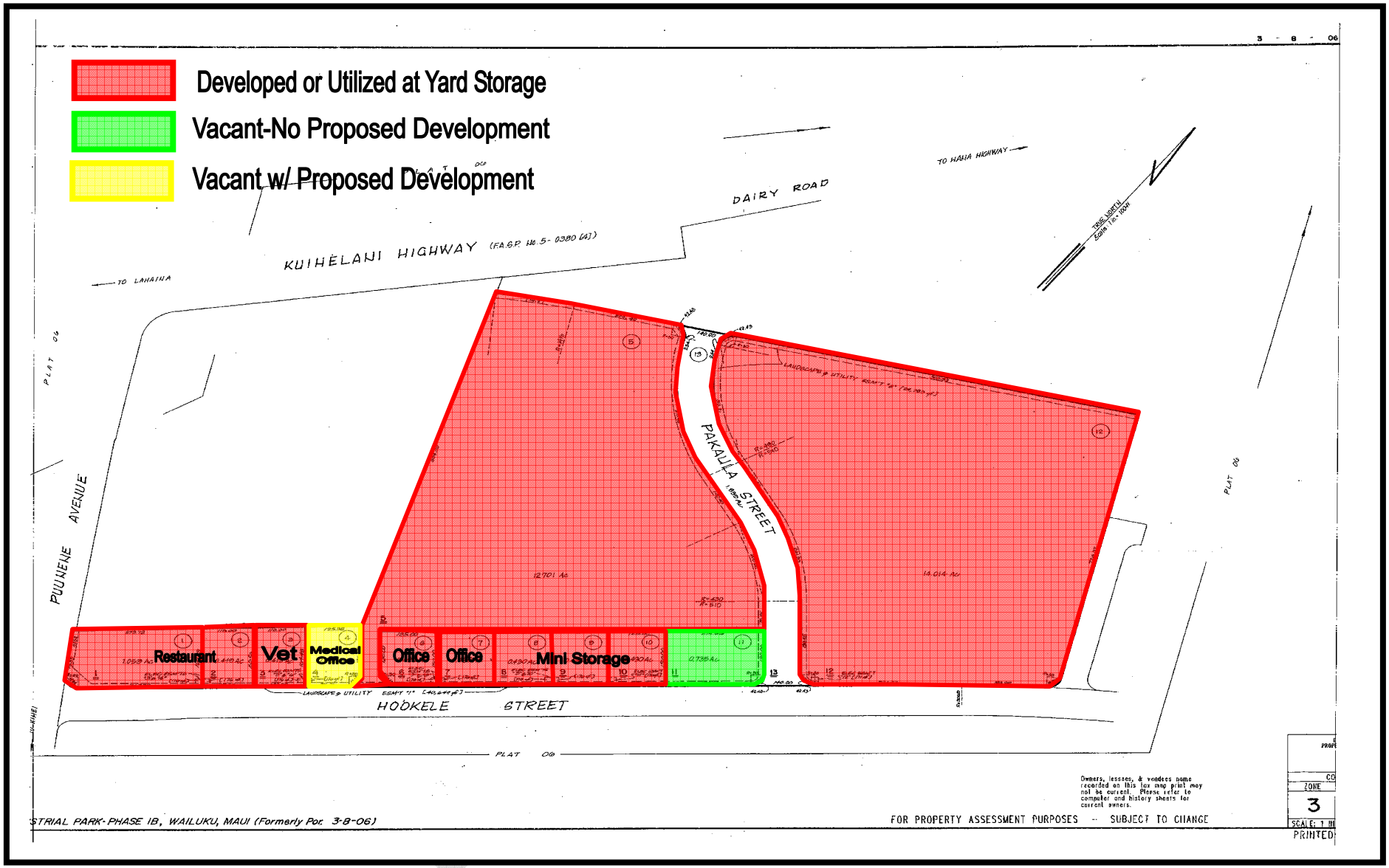

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MAUI BUSIINESS PARK, PHASE I-B

TMK: (II) 3-8-Plat 088

ADDENDA

DEFINITIONS

The purpose of this Glossary is to assist the reader in understanding specific terminology used in this report.

Appraisal (noun) the act or process of developing an opinion of value; an opinion of value (adjective) of or pertaining to appraising and related functions such as appraisal practice or appraisal services.

Cash Equivalent A price expressed in terms of cash, as distinguished from a price expressed totally or partly in terms of the face amounts of notes or other securities that cannot be sold at their face amounts.

Counseling Providing competent, disinterested, and unbiased advice and guidance on diverse problems in the broad field of real estate; may involve any or all aspects of the business such as merchandising, leasing, management, acquisition/disposition planning, financing, development, cost-benefit studies, feasibility analysis, and similar services. Counseling services are often associated with evaluation, but they are beyond the scope of appraisal.

Discounting A procedure used to convert periodic incomes, cash flows, and reversions into present value; based on the assumption that benefits received in the future are worth less than the same benefits received now.

Extraordinary Assumption An assumption, directly related to a specific assignment, which, if found to be false, could alter the appraiser's opinions or conclusions. Extraordinary assumptions presume as fact otherwise uncertain information about physical, legal, or economic characteristics of the subject property; or about conditions external to the property such as market conditions or trends; or about the integrity of data used in an analysis. An extraordinary assumption may be used in an assignment only if:

- It is required to properly develop credible opinions and conclusions;
- The appraiser has a reasonable basis for the extraordinary assumption;
- Use of the extraordinary assumption results in a credible analysis; and
- The appraiser complies with the disclosure requirements set forth in USPAP for extraordinary assumptions.

Fair Value The cash price that might reasonably be anticipated in a current sale under all conditions requisite to a fair sale. A fair sale means that buyer and seller are each acting prudently, knowledgeably, and under no necessity to buy or sell-, i.e., other than in a forced or liquidation sale. The appraiser should estimate the cash price that might be received upon exposure to the open market for a reasonable time, considering the property type and local market conditions. ***When a current sale is unlikely-i.e., when it is unlikely that the sale can be completed within 12 months-the appraiser must discount all cash flows generated by the property to obtain the estimate of fair value.*** These cash flows include, but are not limited to, those arising from ownership, development, operating, and sale of the property. The discount applied shall reflect the appraiser's judgment of what a prudent, knowledgeable purchase under o necessity to buy would be willing to pay to purchase the property in a current sale.

Fee Simple Estate Absolute ownership encumbered by any other interest or estate, subject only to the limitations imposed by the governmental powers of taxation, eminent domain, police power, and escheat.

Hawaiian Terms The Hawaiian words "mauka" and "makai" are commonly used in the islands as indicators of direction. The word "mauka" means toward the mountain, and "makai" means toward the ocean.

Highest and Best Use The reasonably probable and legal use of vacant land or an improved property, which is physically possible, appropriately supported, financially feasible, and that results in the highest value. The four criteria the highest and best use must meet are legal permissibility, physical possibility, financial feasibility, and maximum profitability.

Highest and Best Use of Land or a Site as Though Vacant Among all reasonable, alternative uses, the use that yields the highest present land value, after payments are made for labor, capital, and coordination. The use of a property based on the assumption that the parcel of land is vacant or can be made vacant by demolishing any improvements.

Highest and Best Use of Property as Improved The use that should be made of a property as it exists. An existing improvement should be renovated or retained as is so long as it continues to contribute to the total market value of the property, or until the return from a new improvement would more than offset the cost of demolishing the existing building and constructing a new one.

Hypothetical Condition That which is contrary to what exists, but is supposed for the purpose of analysis. Hypothetical conditions assume conditions contrary to known facts about physical, legal, or economic characteristics of the subject property; or about conditions external to the property, such as market conditions or trends; or about the integrity of data used in an analysis. A hypothetical condition may be used in an assignment only if:

- Use of the hypothetical condition is clearly required for legal purposes, for purposes of reasonable analysis, or for purposes of comparison;
- Use of the hypothetical condition results in a credible analysis; and
- The appraiser complies with the disclosure requirements set forth in USPAP for hypothetical conditions

Leased Fee Interest An ownership interest held by a landlord with the rights of use and occupancy conveyed by lease to others. The rights of the lessor (the leased fee owner) and the lessee are specified by contract terms contained within the lease.

Leasehold Interest The interest held by the lessee (the tenant or renter) through a lease transferring the rights of use and occupancy for a stated term under certain conditions.

Market Rent

The most probable rent that a property should bring in a competitive and open market reflecting all conditions and restrictions of the specified lease agreement including term, rental adjustment and revaluation, permitted uses, use restrictions, and expense obligations; the lessee and lessor each acting prudently and knowledgeably, and assuming consummation of a lease contract as of a specified date and the passing of the leasehold from lessor to lessee under conditions whereby:

- Lessee and lessor are typically motivated.
- Both parties are well informed or well advised, and acting in what they consider their best interests.
- A reasonable time is allowed for exposure in the open market.
- The rent payment is made in terms of cash in United States dollars, and is expressed as an amount per time period consistent with the payment schedule of the lease contract.
- The rental amount represents the normal consideration for the property leased unaffected by special fees or concessions granted by anyone associated with the transaction.

Market Value

The major focus of most real property appraisal assignments. Both economic and legal definitions of market value have been developed and refined. Continual refinement is essential to the growth of the appraisal profession.

The most widely accepted components of market value are incorporated in the following definition:

"The most probable price, as of a specified date, in cash, or in terms equivalent to cash, or in other precisely revealed terms, for which the specified property rights should sell after reasonable exposure in a competitive market under all conditions requisite to a fair sale, with the buyer and seller each acting prudently, knowledgeably, and for self-interest, and assuming that neither is under undue duress."

Market value is defined in the Uniform Standards of Professional Appraisal Practice (USPAP) as follows:

"A type of value, stated as an opinion, that presumes the transfer of a property (i.e., a right of ownership or a bundle of such rights), as of a certain date, under specific conditions set forth in the definition of the term identified by the appraiser as applicable in an appraisal."

The following definition of market value is used by agencies that regulate federally insured financial institutions in the United States:

"The most probable price which a property should bring in a competitive and open market under all conditions requisite to a fair sale, the buyer and seller each acting prudently and knowledgeably, and assuming the price is not affected by undue stimulus. Implicit in this definition is the consummation of a sale as of a specified date and the passing of title from seller to buyer under conditions whereby:"

- Buyer and seller are typically motivated;

- Both parties are well informed or well advised, and acting in what they consider their best interests;
- A reasonable time is allowed for exposure in the open market;
- Payment is made in terms of cash in U.S. dollars or in terms of financial arrangements comparable thereto; and
- The price represents the normal consideration for the property sold unaffected by special or creative financing or sales concessions granted by anyone associated with the sale.

Prospective Market Value Upon Completion of Construction The prospective future value of a property on the date that construction is completed, based upon market conditions forecast to exist as of the completion date.

Prospective Value Opinion A forecast of the value expected at a specified future date. A prospective value opinion is most frequently sought in connection with real estate projects that are proposed, under construction, or under conversion to a new use, or those that have not achieved sellout or a stabilized level of long-term occupancy at the time the appraisal report is written.

Report Any communication, written or oral, of an appraisal, appraisal review, or appraisal consulting service that is transmitted to the client upon completion of an assignment. The types of written reports listed below apply to real property appraisals:

Self-Contained Appraisal Report: A written appraisal report prepared under Standards Rule 2-2(a) of the Uniform Standards of Professional Appraisal Practice. A self-contained appraisal report sets forth the data considered, the appraisal procedures followed, and the reasoning employed in the appraisal, addressing each item in the depth and detail required by its significance to the appraisal and providing sufficient information so that the client and the users of the report will understand the appraisal and not be misled or confused.

Summary Appraisal Report: A written report prepared under Standards Rule 2-2(b) or 8-2(b). A summary appraisal report contains a summary of all information significant to the solution of the appraisal problem. The essential difference between a self-contained appraisal report and a summary appraisal report is the level of detail of presentation.

Restricted Appraisal Report: A written report prepared under Standards Rule 2-2(c), 8-2(c), or 10-2(b). A restricted use appraisal report is for client use only. The restricted use appraisal report should contain a brief statement of information significant to the solution of the appraisal problem.

Uniform Standards of Professional Appraisal Practice Current standards of the appraisal profession, developed for appraisers and the users of appraisal services by the Appraisal Standards Board of The

Appraisal Foundation. The Uniform Standards set forth the procedures to be followed in developing an appraisal, analysis, or opinion and the manner in which an appraisal, analysis, or opinion is communicated. They are endorsed by the Appraisal Institute and by other professional appraisal organizations.

LIMITING AND CONTINGENT CONDITIONS
ACM Consultants, Inc.

1. This is a Counseling Report which is intended to comply with the reporting requirements set forth under Standards Rule 5 of the Uniform Standards of Professional Appraisal Practice for a Counseling Report. The information contained in this report is specific to the needs of the client and for the intended use stated in this report. The Consultant is not responsible for unauthorized use of this report.

   This report has not been prepared for federally-related mortgage financing purposes, and has not been prepared in compliance with the requirements of Title XI of the Federal Financial Institutions Reform, Recovery, and Enforcement Act of 1989.

2. No responsibility is assumed for legal or title considerations. Title to the property is assumed to be good and marketable unless otherwise stated in this report.

3. The property analyzed is free and clear of any or all lines and encumbrances unless otherwise stated in this report.

4. Responsible ownership and competent property management are assumed unless otherwise stated in this report.

5. The information furnished by others is believed to be reliable. However, no warranty is given for its accuracy.

6. All engineering is assumed to be correct. Any plot plans and illustrative material in this report are included only to assist the reader in visualizing the property.

7. It is assumed that there are no hidden or unapparent conditions of the property, subsoil, or structures that render it more or less valuable. No responsibility is assumed for such conditions or for arranging for engineering studies that may be required to discover them.

8. It is assumed that there is full compliance with all applicable federal, state, and local environmental regulations and laws unless otherwise stated in this report.

9. It is assumed that all applicable zoning and use regulations and restrictions have been complied with, unless a non-conformity has been stated, defined, and considered in this counseling report.

10. It is assumed that all required licenses, certificates of occupancy or other legislative or administrative authority from any local, state, or national governmental or private entity or organization have been or can be obtained or renewed for any use on which the value estimates contained in this report are based.

11. Any sketch in this report may show approximate dimensions and is included to assist the reader in visualizing the property. Maps and exhibits found in this report are provided for reader reference purposes only. No guarantee as to accuracy is expressed or implied unless otherwise stated in this report. No survey has been made for the purpose of this report.

12. It is assumed that the utilization of the land and improvements is within the boundaries or property lines of the property described and that there is no encroachment or trespass unless otherwise stated in this report.

13. The Consultant is not qualified to detect hazardous waste and/or toxic materials. Any comment by the Consultant that might suggest the possibility of the presence of such substances should not be taken as confirmation of the presence of hazardous waste and/or toxic materials. Such determination would require investigation by a qualified expert in the field of environmental assessment. The presence of substances such as asbestos, urea-formaldehyde foam insulation, or other potentially hazardous materials may affect the value of the property. The Consultant's value estimate is predicated on the assumption that there is no such material on or in the property that would cause a loss in value unless otherwise stated in this report. No responsibility is assumed for any environmental conditions, or for any expertise or engineering knowledge required to discover them. The Consultant's descriptions and resulting comments are the result of the routine observations made during the analysis process.

14. Unless otherwise stated in this report, the subject property is evaluated without a specific compliance survey having been conducted to determine if the property is or is not in conformance with the requirements of the Americans with Disabilities Act. The presence of architectural and communications barriers that are structural in nature that would restrict access by disabled individuals may adversely affect the property's value, marketability, or utility.

15. Any proposed improvements are assumed to be completed in a good workmanlike manner in accordance with the submitted plans and specification.

16. The distribution, if any, of the total valuation in this report between land and improvements applies only under the stated program of utilization. The separate allocations for land and buildings must not be used in conjunction with any other appraisal and are invalid if so used.

17. Possession of this report, or a copy thereof, does not carry with it the right of publication. It may not be used for any purpose by any person other than the party to whom it is addressed without the written consent of the consultant, and in any event, only with property written qualification and only in its entirety.

18. Neither all nor any part of the contents of this report (especially any conclusions as to value, the identity of the Consultant, or the firm with which the Consultant is connected) shall be disseminated to the public through advertising, public relations, news sales, or other media without prior written consent and approval of the Consultant.

ACCEPTANCE OF, AND/OR USE OF THIS APPRAISAL REPORT BY CLIENT OR ANY THIRD PARTY CONSTITUTES ACCEPTANCE OF THE ACM CONSULTANTS, INC., CERTIFICATION, LIMITING AND CONTINGENT CONDITIONS. CONSULTANT LIABILITY EXTENDS ONLY TO STATED CLIENT, NOT SUBSEQUENT PARTIES OR USERS OF ANY TYPE, and the total liability of Consultant(s) and firm is limited to the amount of fee received by Consultant.

PROFESSIONAL QUALIFICATIONS

Glenn K. Kunihisa, MAI, CRE

STATE LICENSING

State Certified General Appraiser,
State of Hawaii, License No. CGA 39, July 17, 1991
Expiration: December 31, 2011

PROFESSIONAL AFFILIATIONS

Member, Appraisal Institute, MAI Designation, Hawaii Chapter No. 67
Member, The Counselors of Real Estate, CRE Designation, Hawaii Chapter
Member, International Right of Way Association
Member, National Association of Realtors, Maui Board of Realtors

PROFESSIONAL INVOLVEMENT

Past President – Hawaii Chapter of the Appraisal Institute – 2009
Vice Chairperson – Hawaii Chapter of The Counselors of Real Estate - 2010
Education Chairperson – Hawaii Chapter of the Appraisal Institute – 2004 and 2005
Former Multiple Listing Service (MLS) Committee Member – Realtors Association of Maui

COMMUNITY AFFILIATIONS

St. Anthony Parish School Board
- Board Member 1995 to 2008
- Board President 1997 and 1998

Alii Community Care, Inc. – A non-profit health care corporation
- Board Member 2004 to 2006

EMPLOYMENT

President
ACM Consultants, Inc.
May, 1997 to present

Previously associated with the following:
- ACM, Real Estate Appraisers, Inc. - 1986 to 1997
- A&B Commercial Company; a division of Alexander & Baldwin, Inc. - 1979 to 1985
- Bank of Hawaii - 1976 to 1979

GENERAL EDUCATION

University of Hawaii at Manoa
- Master of Business Administration (MBA) - Executive MBA Program V, 1988
- Bachelor of Business Administration (BBA), 1976

Iolani School, 1971

LEGAL & CONSULTING

Qualified as an expert witness in the Second Circuit Court of the State of Hawaii
Qualified as an expert in testimony to the State Land Use Commission
Experienced in real estate arbitration assignments in the State of Hawaii

APPRAISAL EDUCATION

Appraisal Institute

Seminar *Appraisal Curriculum Overview (2-day general)*
Honolulu, Hawaii – July 2010

Seminar	*Online Valuation of Green Residential Properties* Chicago, Illinois – July 2010
Seminar	*Hotel Valuation* Honolulu, Hawaii – February 2010
Seminar	*Online Small Hotel/Motel Valuation* Chicago, Illinois – November 2009
Seminar	*Business Practices and Ethics* Honolulu, Hawaii – September 2009
Seminar	*Hawaii Lands, Historical Review* Lihue, Hawaii – August 2009
Seminar	*Appraisal Challenges: Declining Markets and Sales Concessions* Cambria, California – October 2008
Course	*7-Hour National USPAP Update Course* Honolulu, Hawaii – September 2008
Course	*Online 7-Hour National USPAP Equivalent Course* Chicago, Illinois – October 2007
Course	*Valuation of Conservation Easements* Denver, Colorado – October 2007
Seminar	*Uniform Standards for Federal Land Acquisitions ("Yellow Book")* *Practical Applications for Fee Appraisers* Honolulu, Hawaii – December 2006
Seminar	*California Conservation Easements* Sacramento, California – November 2005
Course 400	*7-Hour National USPAP Update Course* Honolulu, Hawaii – October 2005
Seminar	*Case Studies in Limited Partnership and Partial Interest Valuation* Honolulu, Hawaii – May 2005
Seminar	*Appraisal Consulting: A Solutions Approach for Professionals* Honolulu, Hawaii – February 2005
Seminar	*Real Estate Finance, Value and Investment Performance* Honolulu, Hawaii – February 2005
Seminar	*Fannie Mae Residential Presentation* Honolulu, Hawaii - July 2004
Seminar	*Subdivision Analysis* Chicago, Illinois - August 2003
Seminar	*Supporting Capitalization Rates* Chicago, Illinois - August 2003
Seminar	*The Technology Assisted Appraiser* Chicago, Illinois - August 2003
Seminar	*Scope of Work: Expanding Your Range of Services* Chicago, Illinois - August 2003
Course 400	*National Uniform Standards of Professional Practice* Honolulu, Hawaii - May 2003
Course 420	*Business Practices and Ethics* Honolulu, Hawaii - May 2003
Seminar	*The Private Conservation Market* Honolulu, Hawaii - July 2002
Seminar	*Finance Reporting Valuations Parts I and II* Honolulu, Hawaii - July 2002
Seminar	*Future of Appraisal Profession from a Global Perspective* Honolulu, Hawaii - July 2002

Seminar	*Appraisal Office Management* Honolulu, Hawaii - July 2002
Course 540	*Report Writing* Denver, Colorado - December 2000
Seminar	*Partial Interests: Theory and Case Law* Las Vegas, Nevada - July 2000
Seminar	*Easement Valuation* Las Vegas, Nevada - July 2000
Seminar	*Bridging the Gap: Marketability Discounts for Real Estate Interests* Las Vegas, Nevada - July 2000
Course 430	*Standards of Professional Practice, Part C* Honolulu, Hawaii - September 1999
Seminar	*Litigation Skills for the Appraiser: An Overview* Honolulu, Hawaii - May 1998
Seminar	*Special Purpose Properties* Honolulu, Hawaii - September 1997
Seminar	*Highest and Best Use Applications* Honolulu, Hawaii - September 1997
Seminar	*Detrimental Conditions* Honolulu, Hawaii - July 1997
Seminar	*The Appraiser As Expert Witness* Honolulu, Hawaii - August, 1995
Seminar	*How to Appraise FHA-Insured Property* Los Angeles, California - January, 1995
Seminar	*Understanding Limited Appraisals and Reporting Options* Honolulu, Hawaii - August, 1994
Seminar	*Valuation of Leasehold Interests* Honolulu, Hawaii - May, 1993
Seminar	*Valuation of Leased Fee Interests* Honolulu, Hawaii - May, 1993
Seminar	*Valuation Considerations: Appraising Non-Profits* Boston, Massachusetts - July, 1992
Seminar	*Americans With Disabilities Act* Boston, Massachusetts - July, 1992
Seminar	*Valuation in Today's Capital and Financing Markets* Honolulu, Hawaii - June 1992
Seminar	*Arbitration Principles, Procedures and Pitfalls* Honolulu, Hawaii - June, 1992
Seminar	*Institutional Real Estate in the 1990's* Honolulu, Hawaii - June, 1992
Seminar	*FIRREA and its Impact on Appraisers* Honolulu, Hawaii - June, 1992
Course 410/420	*Standards of Professional Practice, Parts A & B* Honolulu, Hawaii - April, 1991

<u>The American Society of Farm Managers and Rural Appraisers, Inc.</u>

Seminar	*Agricultural Lease Valuation* Honolulu, Hawaii – March 2006

Maui Coastal Land Trust

Seminar *Understanding the New Tax Incentives: Conservation Easements & Other Charitable Contributions*
Wailuku, Hawaii – June 2007

Society of Real Estate Appraisers

Course 101 *Introduction to Appraising Real Property*
Dallas, Texas – 1987

Course 102 *Applied Residential Property Valuation*
Honolulu, Hawaii - July 1990

Course 201 *Principles of Income Property Appraising*
Chicago, Illinois, 1987

Course 202 *Applied Income Property Valuation*
San Diego, California - 1988

Seminar *Professional Practice and the Society of Real Estate Appraisers*
Honolulu, Hawaii - 1988

Seminar *Appraisal Standards Seminar - Federal Home Loan Bank Board Guidelines, Regulations and Policies*
Honolulu, Hawaii - April, 1988

Seminar *Appraisal Standards Seminar - Federal Home Loan Bank Board Guidelines, Regulations and Policies*
Honolulu, Hawaii - April, 1988

American Institute of Real Estate Appraisers

Seminar *Rates, Ratios and Reasonableness*
Honolulu, Hawaii - 1989

Seminar *Discounted Cash Flow Analysis*
Honolulu, Hawaii - 1989

Seminar *Highest and Best Use*
Honolulu, Hawaii - 1989

Seminar *Capitalization Overview - Part A*
Honolulu, Hawaii - 1990

Seminar *Capitalization Overview - Part B*
Honolulu, Hawaii – 1990

Seminar *Accrued Depreciation*
Honolulu, Hawaii - 1990

International Right of Way Association

Course 101 *Appraisal*
Las Vegas, Nevada - October, 1998

Course 101 *Negotiation*
Las Vegas, Nevada - October 1998

National Business Institute, Inc.

Seminar *Commercial Real Estate Leasing In Hawaii*
Honolulu, Hawaii - 1989

American Arbitration Association

Seminar *Real Estate Dispute Resolution - Mediation and Arbitration*
Kahului, Maui, Hawaii - October, 1990

Appendix M

Biological Resources Survey Report

BIOLOGICAL RESOURCES SURVEY

for the

Waiko Industrial Development Project

WAILUKU, MAUI, HAWAII

by

Robert W. Hobdy
Environmental Consultant
Kokomo, Maui
December 2010

Prepared for:
Pacific Rimland, Inc.

BIOLOGICAL RESOURCES SURVEY
Waiko Industrial Development Project

INTRODUCTION

The Waiko Industrial Development Project lies on 31.222 acres of forested agricultural and pasture land, TMK (2) 3-8-07:102, along East Waiko Raod in Waikapu, Maui. It is adjacent on its west side to an existing industrial baseyard complex and East Waiko Road, on its south side by Kuihelani Highway, and on its north and east sides by undeveloped forested pasture lands. This biological study was initiated by the owners in fulfillment of environmental requirements of the planning process.

SITE DESCRIPTION

The terrain within the project area is gently sloping with a few scattered, low, stabilized sand dunes. Vegetation consists of open forest over grasses and shrubs. Soils are entirely of the Puu One Sand series (PZUE) which is a Loose Sandy soil over subsurface lithified sand layers (Foote et al, 1972). Rainfall averages 20 inches to 24 inches per year with most falling during winter storms (Armstrong, 1983). Elevations range between 200 feet and 240 feet above sea level.

BIOLOGICAL HISTORY

In pre-contact times this area would have been an open duneland, sparsely vegetated with low native shrubs and grasses. The diversity of native species was all but eliminated by over a century of browsing and grazing by feral and domesticated herbivores and replaced by aggressive non-native plant species. Charred stumps and fence posts indicate that portions of the area have burned in the recent past. The project area now contains only some of the commoner native species that have proven to be stronger competitors and more resistant to disturbance.

SURVEY OBJECTIVES

This report summarizes the findings of a flora and fauna survey of the proposed Waiko Industrial Development Project which was conducted in December 2010. The objectives of the survey were to:

1. Document what plant and animal species occur on the property or may likely occur in the existing habitat.
2. Document the status and abundance of each species.
3. Determine the presence or likely occurrence of any native flora and fauna, particularly any that are Federally listed as Threatened or Endangered. If such occur, identify what features of the habitat may be essential for these species.
4. Determine if the project area contains any special habitats which if lost or altered might result in a significant negative impact on the flora and fauna in this part of the island.
5. Note which aspects of the proposed development pose significant concerns for plants or for wildlife and recommend measures that would mitigate or avoid these problems.

BOTANICAL SURVEY REPORT

SURVEY METHODS

A walk-through botanical survey method was used following routes to ensure complete coverage of this irregularly shaped property. Special focus was made to search for any native plant species that might occur on the property. Notes were made on plant species, distribution and abundance as well as on terrain and substrate.

DESCRIPTION OF THE VEGETATION

The vegetation throughout the project area is fairly uniform. It consists of an almost continuous cover of buffelgrass (*Cenchrus ciliaris*) and guinea grass (*Megathyrsus maximus*) with scattered kiawe trees (*Prosopis pallida*). The grasses were dense and two to three feet deep. The kiawe trees are scattered throughout the whole area but sometimes form a closed canopy in small areas. Some areas where the grass is less dense support a variety of other herbaceous species many of which are ephemeral annuals in this dry locality. Just two common native shrubs were found: ʻilima (*Sida fallax*) and ʻuhaloa (*Waltheria indica*) out of a total of 43 plant species observed. The remaining 41 species were non-native pasture grasses and weeds.

DISCUSSION

The vegetation throughout the project area is totally dominated by just three species, buffelgrass, guinea grass and kiawe that together comprise at least 95% of the biomass. Most of the rest of the forty three plant species found are ephemeral annuals that all but disappear during the hot, dry summer and fall seasons.

A total of two native plant species were found within the project area. Both of these are common lowland species in Maui County and throughout much of the Pacific. No officially Threatened or Endangered plants (USFWS 2009) are found on the site, nor do any plants proposed as candidates for such status occur on the property. No special native plant habitats were identified.

No wetlands occur on the site. Nothing remotely approaching the three essential criteria that define a Federally recognized wetland, namely 1) hydrophytic vegetation 2) hydric soils and 3) wetland hydrology occur within this dry project area.

Because the vegetation on the site is dominated primarily by common non-native plants and because there are no rare or protected native species within the project area, there is little of botanical concern and the proposed project is not expected to have a significant negative impact on the botanical resources in this part of Maui.

RECOMMENDATIONS

No recommendations with reference to the botanical resources are deemed necessary or appropriate.

PLANT SPECIES LIST

Following is a checklist of all those vascular plant species inventoried during the field studies. Plant families are arranged alphabetically within two groups: Monocots and Dicots. Taxonomy and nomenclature of the flowering plants are in accordance with Wagner et al. (1999).

For each species, the following information is provided:

1. Scientific name with author citation.

2. Common English or Hawaiian name.

3. Bio-geographical status. The following symbols are used:

   endemic = native only to the Hawaiian Islands; not naturally occurring anywhere else in the world.
   indigenous = native to the Hawaiian Islands and also to one or more other geographic area(s).
   non-native = all those plants brought to the islands intentionally or accidentally after western contact.

4. Abundance of each species within the project area:

   abundant = forming a major part of the vegetation within the project area.
   common = widely scattered throughout the area or locally abundant within a portion of it.
   uncommon = scattered sparsely throughout the area or occurring in a few small patches.
   rare = only a few isolated individuals within the project area.

SCIENTIFIC NAME	COMMON NAME	STATUS	ABUNDANCE
MONOCOTS			
POACEAE (Grass Family)			
Cenchrus ciliaris L.	buffelgrass	non-native	common
Chloris barbata (L.) Sw.	swollen fingergrass	non-native	rare
Cynodon dactylon (L.) Pers.	Bermuda grass	non-native	uncommon
Dactyloctenium aegyptium (L.) Willd.	beach wiregrass	non-native	uncommon
Digitaria violascens Link	smooth crabgrass	non-native	rare
Eragrostis pectinacea (Michx.) Nees.	Carolina lovegrass	non-native	common
Megathyrsus maximus (Jacq.) Simons & Jacobs	Guinea grass	non-native	abundant
DICOTS			
AMARANTHACEAE (Amaranth Family)			
Amaranthus spinosus L.	spiny amaranth	non-native	uncommon
Chenopodium carinatum R. Br.	keeled goosefoot	non-native	uncommon
Chenopodium murale L.	'aheahea	non-native	uncommon
APOCYNACEAE (Dogbane Family)			
Calotropis procera (Aiton) W.T. Aiton	small crown flower	non-native	rare
ASTERACEAE (Sunflower Family)			
Pluchea carolinensis (Jacq.) G.Don	sourbush	non-native	rare
Pluchea indica (L.) Less.	Indian fleabane	non-native	rare
Verbesina encelioides (Cav.) Benth. & Hook.	golden crown-beard	non-native	common
BORAGINACEAE (Borage Family)			
Heliotropium procumbens Mill.	four-spike heliotrope	non-native	uncommon
CLEOMACEAE (Cleome Family)			
Cleome gynandra L.	wild spider flower	non-native	rare
CONVOLVULACEAE (Morning Glory Family)			
Ipomoea obscura (L.) Ker. Gawl.	----------	non-native	rare
Ipomoea triloba L.	little bell	non-native	rare
CUCURBITACEAE (Gourd Family)			
Momordica charantia L.	bitter melon	non-native	rare
EUPHORBIACEAE (Spurge Family)			
Euphorbia heterophylla L.	kaliko	non-native	rare
Euphoriba hypericifolia (L.) Millsp.	graceful spurge	non-native	rare
Ricinus communis L.	Castor bean	non-native	uncommon
FABACEAE (Pea Family)			
Crotalaria incana L.	fuzzy rattlepod	non-native	rare
Desmanthus pernambucanus (L.) Thellung	slender mimosa	non-native	rare
Desmodium tortuosum (Sw.) DC.	Florida beggarweed	non-native	rare
Indigofera hendecophylla Jacq.	creeping indigo	non-native	rare
Indigofera suffruticosa Mill.	'inikö	non-native	uncommon
Leucaena leucocephala (Lam.) de Wit	koa haole	non-native	common
Macroptilium atropurpureum (DC.) Urb.	siratro	non-native	uncommon
Neonotonia wightii (Wight & Arnott) Lackey	glycine	non-native	uncommon

SCIENTIFIC NAME	COMMON NAME	STATUS	ABUNDANCE
Prosopis pallida (Humb.&Bonpl.ex Willd.) Kunth	kiawe	non-native	abundant
Samanea saman (Jacq.) Merr.	monkeypod	non-native	rare
LAMIACEAE (Mint Family)			
Leonotis nepetifolia (L.) R.Br.	lion's ear	non-native	common
MALVACEAE (Mallow Family)			
Abutilon grandifolium (Willd.) Sweet	hairy abutilon	non-native	rare
Malva parviflora L.	cheese weed	non-native	common
Malvastrum coromandelianum (L.) Garcke	false mallow	non-native	uncommon
Sida fallax Walp.	'ilima	indigenous	uncommon
Sida rhombifolia L.	Cuban jute	non-native	uncommon
Waltheria indica L.	'uhaloa	indigenous	uncommon
NYCTAGINACEAE (Four-o'clock Family)			
Boerhavia coccinea Mill.	scarlet spiderling	non-native	rare
PORTULACACEAE (Purslane Family)			
Portulaca oleracea L.	pigweed	non-native	rare
SOLANACEAE (Nightshade Family)			
Nicotiana glauca R.C. Graham	tree tobacco	non-native	rare
VERBENACEAE (Verbena Family)			
Lantana camara L.	lantana	non-native	uncommon

FAUNA SURVEY REPORT

SURVEY METHODS

A walk-through fauna survey method was conducted in conjunction with the botanical survey. All parts of the project area were covered. Field observations were made with the aid of binoculars and by listening to vocalizations. Notes were made on species abundance, activities and location as well as observations of trails, tracks, scat and signs of feeding. In addition an evening visit was made to the area to record crepuscular activities and vocalizations and to see if there was any evidence of occurrence of the Hawaiian hoary bat (*Lasiurus cinereus semotus*) in the area.

RESULTS

MAMMALS

Five species of non-native mammals or their signs were observed in the project area during two site visits. These species included: numerous domestic cattle confined in a feedlot, many tracks and antler rubbings of axis deer throughout the property, three feral cats seen hunting around the feedlots, one domestic horse in a fenced pasture and sign of one domestic dog.

Other non-native mammals one could expect to see in this habitat include: species of rats and mice which feed on seeds, fruits, insects and herbaceous vegetation, and mongoose which prey on these rodents and birds.

A special effort was made to look for the native Hawaiian hoary bat by making an evening survey at two sites in the area.. When present in an area these bats can be easily identified as they forage for insects, their distinctive flight patterns clearly visible in the glow of twilight. No evidence of such activity was observed though visibility was excellent and plenty of flying insects were seen. In addition, a bat-detecting device (Batbox IIID) was employed, set to the frequency of 27,000 Hertz which these bats are known to use for echolocation. No bats were detected at either site using this device.

BIRDS

Both the diversity of birds and their numbers were substantial across the project area due to the presence of cattle feedlots with grains and insect populations. Fourteen species of birds were seen during two site visits, including twelve introduced, non-native species, one migratory species the Pacific golden plover (*Pluvialis fulva*), and one indigenous waterbird, auku'u or the black-crowned night-heron (*Nycticorax nycticorax hoactli*) which was seen during the evening survey flying overhead towards a distant roosting tree along Waikapu stream. The non-native birds were: common myna, zebra dove, spotted dove, chicken, house sparrow, northern cardinal, peacock, gray francolin, Guinea fowl, red-crested cardinal, cattle egret and northern mockingbird. A few other non-native birds such as the house finch, Java sparrow, Japanese white-eye, nutmeg mannikin, chestnut mannikin and African silverbill might be expected to occasionally be seen, but the habitat is not suitable for Hawaii's native forest birds that are presently restricted to higher elevations beyond the range of mosquitoes and the deadly avian disease they transmit. None of the Endangered nene goose (*Branta sandvicensis*) were seen either within this kiawe forest habitat.

REPTILES

Just one species of reptile, the non-native mourning gecko, was observed. These geckos were scattered throughout the project area and could be heard making their chipping calls during the evening survey.

INSECTS

A variety of insect species were observed. The onset of the wet season stimulates the emergence of many species from dormancy. Also the presence of the feedlots and an adjacent settling pond attracts many species. A total of sixteen species were recorded including fourteen non-native species and two indigenous dragonflies: the globe skimmer (*Pantala flavescens*) which is also found throughout the tropics worldwide, and the green darner (*Anax junius*) which is also found in North America. The non-native insects included: kiawe moth, two species of droneflies, saddlebags dragonfly, monarch butterfly, Asian swallowtail, long-tail blue, carpenter bee, Argentine ant, short-horned locust, praying mantis, blue-bottle fly, mosquito and garden spider. A number of other non-native insects likely inhabit the project area or cycle through seasonally. One large native moth, Blackburn's hawk moth (*Manduca blackburni*) which is both endemic to Hawaii and listed as an Endangered species (USFWS, 2003) could occur here. One of the host plants of this Endangered moth is the non-native tree tobacco plant (*Nicotiana glauca*) which is in the nightshade family. Six tree tobacco were found during the survey. Each of these plants were carefully examined and no Blackburn's hawk moths or their larve were found.

MOLLUSKS

A few shells of the large, non-native African snail (*Achatina fulica*) were found scattered through the project area. This snail is of no conservation interest or concern. None of Hawaii's native snail species are likely to occur in this habitat and none were seen.

CONCLUSIONS AND RECOMMENDATIONS

The fauna on this project area are strongly dominated by non-native species of mammals, birds, reptiles, insects and mollusks. Just three widespread and common indigenous native animals were found. The auku'u is widespread throughout Hawaii and occurs in the U.S. Mainland and in Mexico. It is considered secure and of lower conservation concern. The two indigenous dragonflies, the globe skimmer and the green darner, are likewise widespread in Hawaii and elsewhere and are of lower conservation concern. No special wildlife habitats were identified within or adjacent to the project.

As a result of the fauna inventory encountered, the disturbed nature of the habitat and that no Endangered, Threatened or candidate animal species were found, it is determined that the proposed project will not have a significant negative impact on the fauna resources in this part of Maui.

No recommendations regarding the fauna resources are deemed necessary or appropriate.

ANIMAL SPECIES LIST

Following is a checklist of the animal species inventoried during the field work. Animal species are arranged in descending abundance within five groups: Mammals, Birds, Reptiles, Insects and Mollusks.. For each species the following information is provided:

1. Common name
2. Scientific name
3. Bio-geographical status. The following symbols are used:

    endemic = native only to Hawaii; not naturally occurring anywhere else in the world.
    indigenous = native to the Hawaiian Islands and also to one or more other geographic area(s).
    non-native = all those animals brought to Hawaii intentionally or accidentally after western contact.
    migratory = spending a portion of the year in Hawaii and a portion elsewhere. In Hawaii the migratory birds are usually in the overwintering/non-breeding phase of their life cycle.

4. Abundance of each species within the project area:

    abundant = many flocks or individuals seen throughout the area at all times of day.
    common = a few flocks or well scattered individuals throughout the area.
    uncommon = only one flock or several individuals seen within the project area.
    rare = only one or two seen within the project area.

5. Taxonomy and nomenclature for each of the fauna groups are as follows:

    Mammals – Tomich (1986)
    Birds – American Ornithologists' Union (2009)
    Reptiles – Tinker (1980)
    Insects – Nishida et al (1992)

COMMON NAME	SCIENTIFIC NAME	STATUS	ABUNDANCE
MAMMALS			
Cattle	*Bos taurus*	non-native	common
Axis deer	*Axis axis*	non-native	common
Horse	*Equus caballus*	non-native	uncommon
Cat	*Felis catus*	non-native	uncommon
Dog	*Canis familiaris*	non-native	rare
BIRDS			
Zebra dove	*Geopelia striata*	non-native	common
Spotted dove	*Streptopelia chinensis*	non-native	common
Chicken	*Gallus gallus*	non-native	common
Common myna	*Acridotheres tristis*	non-native	common
House sparrow	*Passer domesticus*	non-native	common
Northern cardinal	*Cardinalis cardinalis*	non-native	uncommon
Peacock	*Pavo cristatus*	non-native	uncommon
Gray francolin	*Francolinus pondicerianus*	non-native	uncommon
Guinea fowl	*Numida meleagris galeata*	non-native	rare
Pacific golden-plover	*Pluvialis fulva*	migratory	rare
Red-crested cardinal	*Paroaria coronata*	non-native	rare
Cattle egret	*Bubulcus ibis*	non-native	rare
Northern mocking bird	*Mimus polyglottos*	non-native	rare
Auku'u	*Nycticorax nycticorax hoactli*	indigenous	rare
REPTILES			
Mourning gecko	*Lepidodactylus lugubris*	Polynesian	common
INSECTS			
Kiawe moth	*Anacamptodes fragilaria*	non-native	common
Drone fly (honey bee mimic)	*Eristalis tenax*	non-native	uncommon
Globe skimmer dragonfly	*Pantala flavescens*	indigenous	uncommon
Drone fly	*Eristalinus aeneus*	non-native	rare
Saddle bags dragonfly	*Tramea lacerata*	non-native	rare
Monarch butterfly	*Danaus plexippus*	non-native	rare
Asian swallowtail	*Papilio xuthus*	non-native	rare
Long-tail blue butterfly	*Lampides boeticus*	non-native	rare
Carpenter bee	*Xylocopa sonorina*	non-native	rare
Argentine ant	*Linepithema humile*	non-native	rare
Short-horned locust	*Oedaleus abruptus*	non-native	rare
Praying mantis	*Tenodera angustipennis*	non-native	rare
Bluebottle fly	*Calliphora vomitoria*	non-native	rare
Green darner dragonfly	*Anax junius*	indigenous	rare
Mosquito	*Aedes quinquefasciatus*	non-native	rare
Garden spider	*Argiope appensa*	non-native	rare
MOLLUSKS			
Giant African snail	*Achatina fulica*	non-native	uncommon

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Appendix N

Cultural Impact Assessment Report

CULTURAL IMPACT ASSESSMENT FOR A 31.222-ACRE PARCEL LOCATED ALONG WAIKO ROAD WAIKAPU *AHUPUA`A*, WAILUKU DISTRICT MAUI ISLAND

(TMK (2) 3-8-007:102)

Prepared on behalf of:

Waiko Industrial Development, LLC
Wailuku, Maui

Prepared by

Xamanek Researches, LLC
Pukalani, Maui

Erik M. Fredericksen

20 September 2011

ABSTRACT

Xamanek Researches, LLC was contacted regarding proposed plans for a 31.222-acre parcel of land in Waikapū, Maui. The project area is currently utilized for a variety of purposes, including pasture near Kuihelani Highway, a construction base yard (Consolidated Base Yard), and cattle feed lot. The development project is proposed as a light industrial zoned district with associated infrastructure improvements (roadways, drainage, utilities and grading). Based on Hawai`i Revised Statutes and Chapter 200 of Title 11, Department of Health, Hawai`i Administrative Rules, Environmental Impact Statement rules, in accordance with the provisions of Chapter 343; an Environmental Assessment is required for the planned project since a change in zoning is being sought.

As a result of the foregoing, the compilation of this Cultural Impact Assessment is required. The subject parcel is located along the northern side of Waiko Road within Waikapū *Ahupua`a*, Wailuku District, Island of Maui (TMK: [2] 3-8-007: 102). Sections of a state highway right-of-way are also adjacent to and east of the proposed project area. Mr. Hinano Rodrigues, Cultural Historian, State Historic Preservation Division (SHPD), and Mr. Keola Lindsey of the Office of Hawaiian Affairs (OHA) were contacted. Both individuals provided general recommendations regarding this Cultural Impact Assessment. Mr. Hinano and Mr. Lindsey will be sent copies of this document, because it is part of an Environmental Assessment.

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INTRODUCTION

Xamanek Researches, LLC has previously conducted an Archaeological Assessment Survey on this 31.222 acre parcel in Waikapū *Ahupua`a*, Wailuku District, Maui Island on Tax Map Key (TMK) [2] 3-8-007:102 (Figure 1 and Figure 2). The report (Pickett and Fredericksen, 2011 [Draft]) was prepared following the Department of Land and Natural Resources (DLNR), State Historic Preservation Division (SHPD) Hawai`i Administrative Rules (HAR 13-275-276-5); in compliance with Maui County guidelines, rules, and recommendations. The assessment survey report has previously been submitted to the SHPD for review and comment as part of the Environmental Assessment process for this project. The proposed development project consists of a light industrial zoned district with associated infrastructure improvements such as roadways, drainage, utilities and grading.

Portions of the project area have been utilized as pastureland for cattle and horses. Much of the land is currently in use for base yards with various large stockpiles, as well as cattle feed lots and associated settling ponds. The bulk of the subject area has been previously disturbed through grubbing, grading, sand mining and agricultural or pastoral endeavors. An electrical easement in favor of Maui Electric Company, Ltd. connects the western and eastern portions of the parcel. There are a series of fence-lines spread throughout the area and access involves coordination with different leaseholders and avoidance of grazing horses. No historic properties were identified within the perimeters of the subject parcel during the archaeological fieldwork. Subsurface testing included twenty, controlled mechanical Backhoe Trench (BT) excavations. Although no significant material culture remains were identified during subsurface testing, it is possible that subsurface features could be located in the uninvestigated portions of the subject parcel. Isolated, clustered, and scattered human burial features have been discovered at several locations throughout this sand dune region, known as Pu`uone.

Given the presence of sand dune deposits in all test instances, Ms. Morgan Davis, SHPD Lead Archaeologist, Maui Office, has concurred that archaeological monitoring is the appropriate form of mitigation for all future earthmoving actions within the project area. The monitoring plan (E. Fredericksen, 2011) for this project has also been submitted to the SHPD for review and comment.

The following Cultural Impact Assessment study is also a component of the Environmental Assessment process. This document has been prepared on behalf of the landowner, Waiko Industrial Development, LLC, Wailuku, Maui.

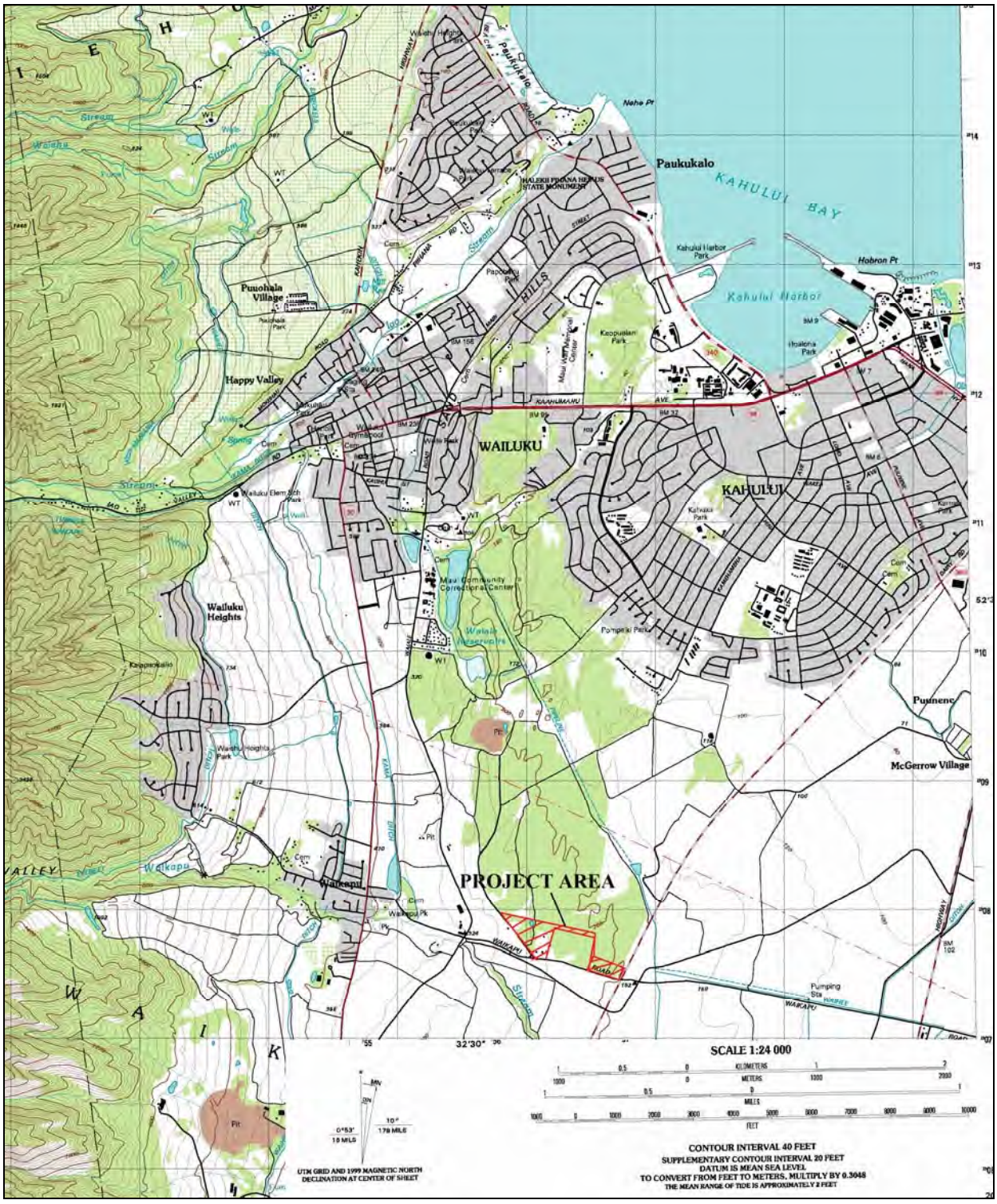

Figure 1: Portion of the Wailuku United States Geological Survey Topographic Map Depicting the Project Area Location (red).

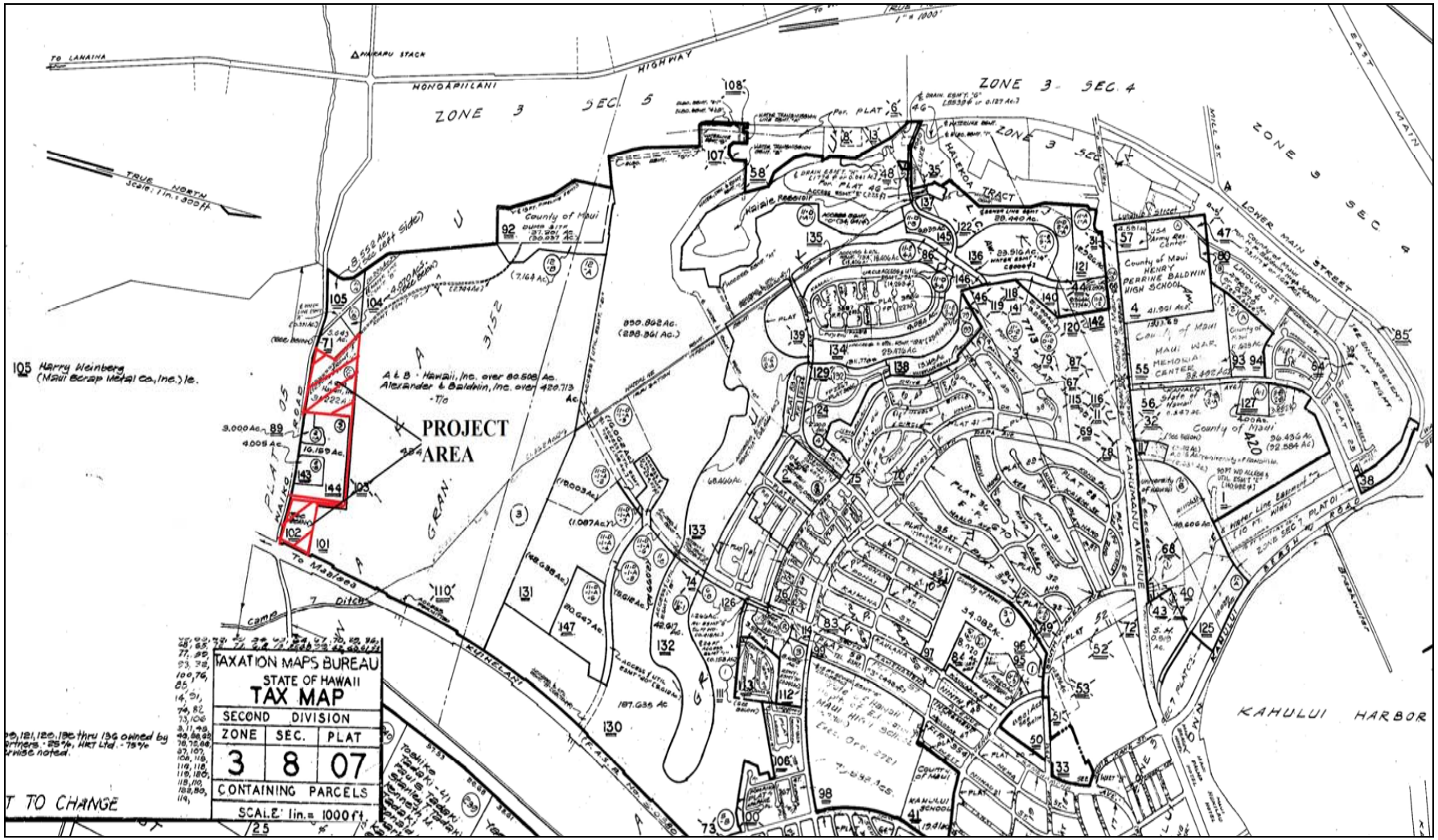

Figure 2: Tax Map Key (TMK) Depicting the Project Area Location at [2] 3-8-007:102.

CULTURAL IMPACT ASSESSMENT

The purpose of this Cultural Impact Assessment (CIA) study is to assess potential impacts of the proposed light industrial subdivision project on traditional cultural practices in the study area. The following components were considered with respect to this CIA:

- Information on cultural sites that may potentially be impacted by the proposed development project;
- Knowledge of any traditional gathering activities in the general project area (past/present);
- Traditional uses within the project area;
- Referrals of community elders who may be willing to share their cultural knowledge of the study area and the surrounding environs.

ACKNOWLEDGEMENTS

We wish to take this opportunity to thank the following individuals with physical ties to Waikapu for participating in this study: Ted and Zelie Harders, Flo Nakama, and Walette Pelegrino. In addition, we also wish to thank Dana Hall, community activist, for providing insight regarding the general area's cultural significance and for sharing some of her past experiences with projects in the Pu`uone region of Maui. (Note: interviews are located in Appendix B of this document.)

STUDY AREA DESCRIPTION

As previously noted, the study area lies within Waikapū *Ahupua`a* in Wailuku District (Photos 1-5). The project area includes 31.222 acres of undulating sand dunes (see Photo 1). Current and prior land use includes pastureland for horses and cows; construction or farming base-yard(s); previously sand mined areas; stockpiles of sand, rock, dirt, gravel; cattle feed lots; settling ponds; and a narrow, enclosed easement behind the relatively recently developed Consolidated Base Yards development (see Photo 2). The narrow easement and power lines delineate the northern boundary of the subject parcel.

Background information

As previously noted, Xamanek Researches LLC carried out an archaeological assessment survey on the subject parcel in the summer of 2011. Archaeological fieldwork took place during the months of May and June 2011. Fieldwork consisted of both surface and subsurface investigations throughout the subject parcel. The survey covered accessible portions of the subject parcel. Subsurface testing included twenty, controlled mechanical Backhoe Trench (BT) excavations. No historic properties were identified within the perimeters of the subject parcel during our archaeological fieldwork.

Given the presence of sand dune deposits in all test instances, Ms. Morgan Davis, State Historic Preservation Division Lead Archaeologist, Maui Office, has concurred that archaeological monitoring is the appropriate form of mitigation for all future earthmoving actions within the project area. This form of mitigation is recommended; because there is a possibility that human remains may be present within the project area. A monitoring plan has been prepared, and outlines the steps that will be followed during project earthmoving activities.

Monitoring Plan conventions

As noted above, a monitoring plan has been prepared and submitted to the SHPD for review and comment. This plan presents the steps that will be taken during the course of the proposed project. The 12 steps to be followed during the monitoring program are presented below. Mitigation actions are also proposed within the monitoring plan document (refer to APPENDIX A for the entire monitoring plan document).

Monitoring methodology (excerpt from E. Fredericksen, 2011)

"Topics for discussion shall include, but not necessarily be limited to the following:

1. The contractor shall be responsible for ensuring that the archaeological consultant is aware of all pertinent construction schedules and that the monitor is present for all subsurface excavation activities on this coastal parcel.
2. Both the archaeological consultant and the contractor are responsible for ensuring that on-site work is halted in an area of significant findings and to protect any such find from any further damage (i.e., construction fencing, protective covering, etc.). The State Historic Preservation Division will recommend appropriate mitigation actions. The SHPD Burial Sites Program, the SHPD Maui office, and the regional geographic representative of the Maui/Lana`i Islands Burial Council (MLIBC) will be consulted in the event that human remains are found.
3. In the event of the discovery of human remains, work shall cease in the immediate find area. In situ human remains will be left in place and any previously disturbed human remains will only be removed with written consent from SHPD. If at all possible, previsions for secure on-site storage will be made. The monitoring archaeologist will be responsible for notifying the SHPD Maui office and the Historic Preservation Division Burial Sites Program, which, in consultation with the regional geographic representative of the Maui/Lana`i Islands Burial Council, will determine the appropriate mitigation measures. This notification will include accurate information regarding the context and composition of the find.
4. The archaeological consultant will work in compliance with Hawai`i Revised Statutes Chapter 6E (procedures Relating to Inadvertent Discoveries).
5. The monitoring archaeologist will have the authority to closedown construction activities in areas where potentially significant discoveries have been made until they have been properly evaluated. Normally, construction activities may continue in unaffected portions of the project area.
6. Field procedures to be followed for documentation of discovered cultural features or human skeletal remains: a) standard field methods including recordation of profiles showing stratigraphy, cultural layers, etc.; b) mapping and photographing of finds other than human remains; c) and excavation of cultural materials and/or exposed features.
7. The SHPD Maui cultural historian shall be notified and in consultation with the MLIBC will determine treatment of identified human remains; the SHPD

Maui staff archaeologist will be notified about features such as cultural layers, artifact or midden concentrations, structural remains, etc., considered to be of significance under S13-279-2 (definitions).

8. The contractor should take into account the necessity for machine excavation at a speed slow enough to allow for reasonable visual inspection of the work. The monitoring archaeologist must make a "best effort" to search for significant material culture remains (i.e. artifacts, features, midden, skeletal remains, etc.). Machine excavation speed will need to be slowed in an area where significant material culture remains have been identified.
9. Significant archaeological discoveries, if they occur, shall be protected and identified by construction "caution" tape, fencing, or other reasonable means, until the SHPD Maui office and the archaeological consultant decide appropriate mitigation actions. All recovered material culture remains—with the possible exception of charcoal samples for radiometric analysis—will remain on Maui. Standard laboratory methods shall be utilized by the archaeological consultant in the event that cultural materials are recovered during monitoring and/or mitigation work. The archaeological consultant shall curate recovered significant cultural materials on Maui.
10. One monitor in most instances will carry out the necessary fieldwork. Tasks will include observation of grubbing and earth-moving activities. However, the SHPD and the MLIBC require that one archaeological monitor be assigned to each piece of major earth-moving equipment in sand dune areas or other culturally sensitive locations. (Change work order if more than one piece of machinery is to be utilized)
11. In the event of night work, the general contractor shall supply adequate lighting for the onsite monitor.
12. Chapter 6E-11 (a) specifies the following "It shall be unlawful for any person or corporate, to take, appropriate, excavate, injure, destroy, or alter any historic property or aviation artifact located on the private lands of any owner thereof without the owner's written permission being first obtained. It shall be unlawful for any person, natural or corporate, to take, appropriate, excavate, injure, destroy, or alter any historic property located upon lands owned or controlled by the State or any of its political subdivisions, except as permitted by the department." "

Selected project photographs, current conditions

Photo # 1: General Overview of Sand Dune area (foreground) with Haleakalā (background), View to East.

Photo # 2: Overview of the Narrow Easement (North) Adjacent to the Consolidated Base Yards Development Project; View to West.

Various fence-lines and four-wheel access roadways meander throughout the parcel (see Photo 3). The property is located south of the Maui Lani development and is bounded by Kuihelani Highway as well as Waiko Road. A wide and well-used access road bisects the west section of the project area (see Photo 4). This unpaved road provides access for the landowners, lessees, and trucking firms for hauling mined sand or construction related material (no sand mining activities appear to have occurred on the project area for some).

Photo # 3: Four-wheel Access Roadway within Project Area, View to South.

Photo # 4: Graded Access Road Bisecting the Western Portion of the Project Area, View to Northwest.

Photo # 5: Settling pond overview (near the cattle feed lot) to northeast.

Natural History

The project area ranges in elevation from c. 150 to 250 feet above mean sea level. The study area lies within a portion of an extensive Aeolian sand dune formation—a large geologic feature that extends at least eight miles from Waiehu through Waikapū. The sandy matrix is underlain by lava flows from Haleakalā and alluvial sediments from the West Maui Mountains (Stearns and Macdonald 1942: 54). Much of the central isthmus is comprised of sand, and is commonly referred to as Pu`uone, which loosely translates as sand dune.

Soil classification consists of *three* types: *Jaucas Sand* with 7-30% slopes commonly used for pasture and home sites, permeability is moderately rapid above the cemented (lithified) layers, runoff is slow and the wind erosion hazard is moderate to severe; *Pulehu Clay Loam* with 0-3% slopes commonly used for sugarcane cultivation, truck crops, and pasture land, permeability is moderate, runoff is slow, and the erosion hazard is no more than slight; and *Pulehu Cobbly Silt Loam* with 3-7% slopes –this type is similar to Pulehu Clay Loam except the texture is silt loam with a cobbly surface layer. This type is commonly used for used for sugarcane cultivation. Permeability is moderate, runoff is slow, and erosion hazard is slight (Foote, et.al 1972).

The color of the sand varies from grayish-brown to light brown and golden that generally forms layers of strongly alkaline, cemented sand hardpan - otherwise known as lithified sand that undulates above and below the surface. Old root molds, or root castings, filled with hard, white alkaline deposits are a common feature in the sand dunes. Pu`uone sands occur on slopes of 7 to 30 degrees, and develop in material derived from coral and seashells (Foote, et.al 1972).

Annual precipitation in this portion of Maui ranges from 20 to 30 inches. The highest monthly rainfall occurs during the winter and spring months. Temperatures range from 60 to 80 degrees Fahrenheit in January to 68 to 90 degrees Fahrenheit in July. Winds are generally trade winds from the northeast, averaging 16 to 18 miles per hour (University of Hawaii, 1983:56).

The project area has been impacted by previous ground altering work. Most of the sand dunes in the immediate area have been developed, or partially developed. Past disturbance actions include grubbing, grading, sand mining, and agricultural and pastoral activities. All of the above activities have substantially impacted the project area.

BACKGROUND RESEARCH

Hawaiian Settlement

Wailuku District is a significant area and was referred to as such in early Hawaiian days. Waikapū *Ahupua`a* contained many *`ili*, or smaller land divisions. Waikapū was one of several *ahupua`a* within the traditional land division called Wailuku *Moku,* or "district" formerly known as Pū`ali Komohana *Moku* (Kame`eleihiwa 1992).

In ancient Hawaiian days, the prime environmental condition of lower `Īao Valley was ideal for agricultural endeavors necessary to support a large population. The area consisted of a wide valley floor, rich alluvial soils, and a constant water supply from `Īao Stream (AKA Wailuku Stream). These conditions combined with immediate access to the wetlands and Kahului Harbor; rich in marine resources, made an ideal setting for a communal political and cultural center. The lower portion of `Īao Valley provided a perfect climate for some of the most productive taro cultivation throughout the islands.

Īao Valley is noted as a place where chiefs were buried and wars were fought. *Wailuku* translated as "water of destruction" (Pukui, et. al., 1974: 225). Wailuku was once known as the political center of Maui that culminated during the time of Chief Pi`ilani (approximately 1600 AD). In the late pre-Contact period, warfare increased as the chiefs of Maui, O`ahu and the Big Island struggled for political and military dominance. High Chief Pi`ilani succeeded in unifying the districts (*Moku)* of Maui through warfare, but following his death, his sons fought amongst each another; each hoping to succeed their father as high chief. Eventually Kiha-a-Pi`ilani was victorious, but the following generation of chiefs struggled through warfare to secure their positions of political domination (Speakman 1978: 9-13).

During the reign of the last powerful paramount chief or king (*Mō`ī*) of Maui Kahekili (1765 to 1790), Wailuku again became the site of intense warfare. Allegedly, Chief Kehekili was Kamehameha I's father. Wailuku was considered to be the capital of Maui and Kahekili's royal residence, Kalanihale, was located in Wailuku, where he was surrounded by his retinue.[1] In the mid-1770s, the royal residence in Wailuku was marched upon by the Big Island chief named Kalani`ōpu`u and his *Alapa* (his warriors). News of Kalaniōpu`u's arrival preceded him, and Kahekili hid his warriors in the sand dunes above Haleki`i *Heiau* to surprise the invading troops. A fierce battle ensued, and

[1] The location is said to be just north of the intersection of High Street and Main Street leading into Iao Valley in Wailuku town.

Kalani`ōpu`u's invading troops were pushed toward the sea and slaughtered (Speakman 1978: 9-13 and 16-17).

For four years Kahekili ruled Maui, Moloka`i, Lāna`i, and O`ahu. With the aid of foreign weapons such as guns and a canon, in 1790, Kamehameha I invaded Kahekili's territory—an action that ended with the notorious battle of Kepaniwai[2] and eventual political control over Maui Island. *Kahului* translates as "the winning", and the nearby town and Bay take the name because Kamehameha I gathered his warriors there before fighting the battle in `Īao Valley (Pukui, et. al. 1974).

The reign of Kamehameha I was intertwined with the increasing presence of foreign arrivals and commercialism. The arrival of Captain Cook offshore at Kahului Bay in 1778 began the steady flow of outside influences that would forever alter the population and environment of the Hawaiian Islands.

The Waikapū wetland field system is a complex system of *lo`i* extending over 700 acres, built around the central Waikapū Stream, with *`auwai* leaving the main stream in the upper reaches on both sides to provide water for the hundreds of taro fields. The upper reaches of the system may date back to the 1100s (Creed, v. I: 74-78).

According to the Supreme Court of the Hawaiian Kingdom (Journal 2006: 198-206), a big part of obtaining the territory divisions:

> …was that a land should run from the sea to the mountains, thus affording to the chief and his people a fishery residence at the warm seaside, together with the products of the high lands, such as fuel, canoe timber, mountain birds, and the right of way to the same, and all the varied products of the intermediate land as might be suitable to the soil and climate of the different altitudes from sea soil to mountainside or top. But this mode of allotment had numerous exceptions, because some of the lands were for some reasons not always understood, and perhaps arbitrary in the beginning, very wide at the top, cutting off a great number of other lands from the mountain; others in like manner wide in the lowlands, cut off land from the sea. With the Hawaiians, from prehistoric times, every portion of the land constituting these Islands was included in some division, larger or smaller, which had a name, and of which the boundaries were known to the people living thereon or in the neighborhood. Some persons were specially taught and made the repositories of this knowledge, and it was carefully delivered from father to son…

Ancient names have been passed from generation to generation. Native testimonies in the archives and in legal documents associated with land disputes indicate

[2]Kepaniwai means literally "water dam" in reference to Iao Stream, because the stream was choked with human bodies after the slaughter there (Pukui, et. al. 1974: 109).

that *Ka`ōpala* is the name of the place where the waters from the two great mountains of east and west Maui meet. *Ka`ōpala* is described by Pukui (1974) as a coastal area and gulch within the Honolua quad that literally translates as "the rubbish". The former name of the place now called Ka`ōpala, was *Kailinawai* because there the waters of the two mountains joined.

Original Hawaiian settlers may have utilized the area for permanent habitation, ceremony, or agriculture. Ceremonial, agricultural, habitation and human burial features have all been documented throughout the central Maui isthmus. Archaeological information indicates that the Pu`uone sand dune region was an important traditional burial area.

During initial human occupation, Waikapū was a relatively well-populated area, rich with ancient traditional Hawaiian cultural practices. Significant *mo`olelo*, or stories of old, are associated with the area including the adjacent infamous `Īao Valley. The Kahului Isthmus was rich in natural resources. No doubt fishponds were abundant along the nearby fringing coral reefs and throughout the low-lying wetlands or mudflats.

Kealia was purportedly an ancient fishpond fed by water from the meandering Waikapū Stream from the West Maui Mountains through the general current project area, and from Kolaloa Gulch in the East Maui Mountains. The artful skill of fishpond construction involves a system of ditches and sluice gates to let fish into and out of the pond. Various types of fish may have been raised including *awa* (milkfish, *Chanos chanos*) and *ama`ama* (flathead mullet, *Mugil cephalus*). Ashdown (on file) says the pond was attributed to King Umi-a-Liloa after the death of Pi`ilani in Lāhaina.

The Plains of Kama`oma`o

Some areas in the Central Maui Isthmus have been referred to as Kama`oma`o or the Plains of Kama'oma'o. Fornander (1919b: 572) describes *Kama`oma`o* as the region of the central plains of Maui known as a place where the souls of the common people were cast off with hopes of either finding a guiding *`aumakua* (family god) for companionship to the afterlife; or the soul may descend into the underworld realm known as *Milu,* which is also the name of the ruler of the underworld.

Pukui (1974) explains Kama`oma`o as a Plain near Pu`u-nēnē, Maui and that "ghosts are believed to have wandered here". Literally, Kama`oma`o translates to "the greenness." Fornander (1919:554) also refers to the "desolate plains" south of Pu`u-nēnē as a location where the souls of the dead are attracted to the "nether world" entrance.

In the book *Hawaiian Mythology*, Martha Beckwith describes a possible relation to the area of Kama`oma`o, but she refers to the area as *Oma`oma`o*:

> Among the peoples said to have appeared during the fifth period of the Kumulipo, when the hog-man was building up his family line, are the

> dog people… *(Born were the wagging tails; they had no fixed line of decent)*…This seems to mean that they intermarried without regard to class distinction and hence built up no inherited chief class. The reference is to the Ha`a people, according to David Malo Kupihea, the hairless olohe people first discovered on Maui on the plains in Kula called Oma`oma`o…they were still there in Kahekili's time. Some were in his army. They lived in the sand hills and they had mystical power of the demigods (kupua) in the form of big war dogs. These dog people still appear on Maui in the procession of spirits known as 'Marchers of the Night.' They look like other human beings but have tails like a dog...Olohe, or Ha`a people were hence a well recognized class in old days, skilled in wrestling and bone-breaking (lua) and with hairless bodies. It is said that they used to pull out their hair and smear their bodies with oil in order to give no hold to an antagonist (Beckwith 1970: 343).

The general area was known for massive battles that ensued across the land. There were many defeats of Big Island Mō`ī Kalaniopu`u's forces around 1776-1790, by the infamous Maui armies of Kahekili. The retreat took the Big Island army through Kama'oma'o (Fornander 1919:545). An area associated with Kama`oma`o was later referred to as Waikapū Common.

Waikapū Common

There are several accounts referring to a battle in the area that took place in 1776 (Fornander 1996:153-155). The Big Island King Kalaniopu`u gathered his forces and came ashore on Maui without resistance at Honua`ula, from Ke`one`oi`o to Makena. The Big Island regiment is known as *Alapa*, which consisted of several hundred highly skilled and trained men. Chaos and plunder marked the arrival of the *Alapa*. The Maui country people fled into the forest and mountain ravines for shelter. The Big Island forces were split so part of the army landed at Kīheipukoa, near the Kealia salt marsh between Kalepolepo and Ma`alaea. They were after the skilled warrior - King Kahekili in Wailuku.

With great courage the *Alapa* warriors crossed the isthmus of Kama`oma`o, also known as the Waikapū common. The warriors were determined "to drink the waters of Wailuku that day". The Big Island *Alapa* regiment was considered the bravest and best. The warriors were all of equal stature and their spears of equal length. The legend represents their appearance as a gorgeous and magnificent spectacle. The *brilliant feather cloaks reflected the sunshine and the plumes of their helmets tossed in the wind*. Kahekili offered no resistance while the *Alapa* crossed the common. Instead, he distributed his forces in various directions throughout the Wailuku side of the common. Kahekili's army fell upon the *Alapa* as they entered the sandhills -southeast of Kalua, near Wailuku…"the gallant and devoted *Alapa* were literally annihilated; only two out of the eight hundred escaped alive" (ibid).

Perhaps additional insight is portrayed by Kamakau who explains when Kaluli *Heiau* was completed, Kaleopu`upu told Kahekili, "This is the house of your god; open the sluice gate that the fish may enter". Then, in 1776 Kalaniopu`u's army landed at Keoneo`o`i`o with their war canoes extending to Makena at Honua`ula and proceeded to ravage the countryside. Additional forces combined to 800 strong. War canoes landed from Kihepuko`a at Kealia to Kapa`ahu. The warrior's feather cloaks stood out along the plains of Pu`u`ainako (Can-trash-hill) and Kama`oma`o. King Kahekili was at Kalanihale just below Kihahale and above the plateau of Ka`ilipoe at Pohakuaokahi. It was then that Kaleopu'upu'u told Kahekili, "The fish have entered the sluice; draw in the net" (Kamakau 1992:85).

Kahekili had secretly spread his forces among the sand hills southeast of Kalua, near Wailuku. With the advantage of dune elevation providing a bird's eye view from the slopes combined with the element of surprise, Kahekili and his warriors annihilated the invading *Alapa* army. Two survivors were left alive to relay the news of the defeat to Kalaniopu1u's encampment (Fornander 1880:154). The day after the "Slaughter of the Pi`ipi`i at Kakanilua", the remaining forces of Kalaniopu`u were sent to battle Kahekili. Numerous attacks from the Big Island warriors ensued. Several years later, with aide from muskets and cannons, Kamehameha I claimed control, or unified the islands under one rule. Kahekili was said to be Kamehameha's father.

In 1790 Kamehameha I marched with his army across the central Maui isthmus with *Lopaka*—the cannon from the captured American trading vessel, the Fair American. Kamehameha the Greats' conquest of Maui concluded with the well known battle of *Kepaniwai*—a most devastating combat that eventually pushed into `Īao Valley and ended with many dreadful fatalities, allegedly jamming the stream with bodies.

The Māhele

The *Māhele*, or *Division*, defines the development of the mid-1800s land tenure system transformation, which essentially divided all Hawaiian lands into three categories: (1) Crown Land: designated for the occupant of the throne, (2) Government Land, and (3) Konohiki Land: set aside for 245 of the highest ranking *Ali`i*.

The Māhele of 1848-1851 marks a "period of significance" because it is the first extensive written record of how land was utilized (Creed v. I 1993: vii). The Hawaiian leaders had influential foreign powers advising that private ownership of land was desirable and necessary to move forward into the modern world. The Māhele award books as well as the foreign and *kuleana* land claims help document the introduced land tenure system.

Not everyone, particularly older Hawaiians, fully understood the ramifications of the process of filing or not filing a claim for lands on which their families lived and worked for generations. Marion Kelly (Creed, v. I: 42) elaborates that "…many people

who had use rights in the land did not register their claims…chiefs who participated in the division of lands with King Kamehameha III were not required to present claims to the Commissioners …not all testimonies and awards corresponded with registered claims, and there were often contentions. Many registered claims were rejected, and some lands listed in claims were not awarded…" The process was a complex one that presented a plethora of issues.

The idea of *private property* was introduced to the islands. All of the lands were subject to the *rights of native tenants*. If the common people (*maka`āinana*), or "Native Tenants", met certain criteria and filed land claims under specific guidelines, a Land Commission Award (LCA) was issued. According to the Hawaiian Journal of Law & Politics (Volume 2: 2006):

> …After the surrender by Kamehameha III, in 1848, of the greater part of the land of the Kingdom to his chiefs and people, the necessity of a speedy distribution of it in accordance with what may be called the feudal rights of the chiefs, required that awards of lands be made by name only without survey. No body of surveyors could have been found in the country or practically could have been brought here, who might have surveyed these large estates within the lifetime of half the grantees, so that every award should have been issued as of a tract defined by metes and bounds, or with even an approximate statement of the acreage. The "Mahele" or division was, therefore, made without survey. Tracts of land known to Hawaiians as an ahupuaa or ili were awarded to those entitled by name of the ahupuaa or ili. By such grant was intended to be assigned whatever was included in such tract according to its boundaries as known and used from ancient times.

Further efforts for native tenant land rights required paying hefty commutation in addition to conducting expensive land surveys -with limited available land surveyors- then finally, a land grant may be awarded. The awarded lands are referred to as *kuleana*.

According to the on-line *Waihona `Āina* database: In 1848, much of Wailuku was designated Crown Land, to be used in support of the royal "state and dignity". In 1872, Kamehameha V died, and his sister Princess Ruth Ke`elikolani inherited the land. She was designated as the owner of the *Ka`a* lands of Wailuku, the southern portion of the *ahupua`a*. The *ili* of *Owa* comprised of 743.40 acres, (LCA 420) and was granted to Kuihelani. The study area is located within a section of LCA 420 to Kuihelani; being a portion of Royal Patent 1996.

The lower portion of `Īao Valley, to the northwest, contained some of the most productive taro lands on the island, reported in historic testimonies and maps related to LCAs in the lower valley. There are 66 LCAs identified between the old Wailuku Mill site and Paukūkalo, on the southern side of `Īao stream, listed primarily as taro patch

kuleana, and 39 *po`alima*. Additionally, thirteen awards were given to individual chiefs by Kamehameha IV.[3]

By 1876, a reciprocity treaty with the United States gave a boost to the sugar industry by increasing prices, and the dry eastern section of Wailuku *Ahupua`a* became more attractive for potential sugar land. Claus Spreckels developed a friendship with King Kalākaua, and through him purchased or leased 40,000 acres of dry lands in 1878. The lease included 16,000 acres within Wailuku *Ahupua`a*. Later in 1882, one-half of the Crown Lands of Hawaii were deeded to sugar producer, Claus Spreckels, allegedly in order to settle debts.

Worried about what Spreckels might do with half of the Crown Lands, King Kalākaua deeded one of the aforementioned grants: Land Grant 3343 to Spreckels. The grant included a 24,000 acre portion of the southeastern section of Wailuku *Ahupua`a,* in return for the surrender of his claim (Adler 1966: 262-263). Much of the land shifted after the Māhele. According to Kame`eleihiwa (1992: 314-315), King Kalākaua's mother received fifty *ahupua`a* as a result of the Māhele and by the time she died, Kalākaua only received two *ahupua`a*…

> …which meant he was virtually a landless *Ali`i Nui*, equivalent to a mere *konohiki* of twenty years before. But if he were to live and rule as an *Ali`i Nui* in the new capitalist system, he needed money. His attempts to make money via his capitalist friend Spreckels, through shady land deals and auctioning of the sole opium license for the kingdom to various contending Chinese businessmen, gave the missionary faction an excuse to ferment a rebellion that culminated in 1887…The Bayonet Constitution stripped power from the Hawaiian *Mō`ī* [King] and gave it to foreign capitalists. Broken in spirit and disheartened by the betrayal of foreigners whom he thought could be his friends, Kalākaua's health deteriorated. In 1891 he died… Kalākaua had discovered that it was impossible to rule Hawai`i with *pono* for both Natives and foreigners-their worlds were too different.

Disputes were common. The Hawai`i Court Appeal addressed the topic of the Pūlehu-Nui and the Waikapū boundary issue. According to the Commissioner, Pūlehu-Nui includes an area of 16,687 78-100 acres. It extends from Kilohana Peak at the rim of Haleakalā Crater at an altitude of approximately 10,000 feet. Pūlehu-Nui continues westward, down about fifteen miles. The eastern or mountain section is *comparatively narrow, often less than half a mile wide.* The western section meets the low land and becomes wider –from three to four miles wide- until meeting at the west boundary with Waikapū Ahupua`a.

The west boundary was disputed. The claim states that Pūlehu-Nui boundary included c. 5,000 acres that belong to Waikapū. The Commissioner's boundary includes

[3] This is in contrast to the area south and east of Lower Iao Valley, in which the study parcel lies. Here there were 2 LCAs awarded—one to Victoria Kamamalu (7713), and one to Kuihelani (420). The largest land partition of Central Maui is Grant 3343 to Claus Spreckels.

~2,000 feet along the shore from Kīhei sand spit to a point of rocks called Kalaepohaku. The proposed Waikapū border cut Pūlehu-Nui off from the sea. Pūlehu-Nui extends to a level place where the water ran down and stood still by the ancient name *Kaopala*. The boundary of Pūlehu-Nui ran through Kaopala with the streambed as the boundary. At Kaopala the water turned southward and ran down to the ocean towards Kealia Pond, which belonged to Waikapū. Pohakiikii is within Pūlehu-Nui (ibid).

Pūlehu-Nui borders Waikapū at Waikapū Common. *Waikapū Common* was granted to the Department of Education during the Māhele since there were no claimants named. In 1879 the Supreme Court ruled on the disputed boundary indicating that because the 10 parcels for the Common were returned to the Department of Education, the patents on the Common "cannot be held to have an existence for any purpose" and further "if any inference is to be drawn it should be that the Government, or the Board of Education, did not have an assurance that Waikapū extended as they had sold it" (Judd 1883: 250).

Sugarcane and water

All of Hawai`i, including Wailuku and Waikapū continued to transform under foreign influence. Because sugarcane cultivation requires an immense amount of water, the natural water flow in *Na Wai Eha* drastically shifted. In 1880, Spreckels began the construction of "Spreckels' Ditch", located *makai* of the aforementioned "Hāmākua" Ditch, which was built earlier by Alexander and Baldwin to water *Maui Agricultural Company's* fields in and around Pā`ia. The "Spreckels' Ditch" carried water from Haleakalā farther west onto the arid Kahului isthmus. The ditch was 30 miles long, delivered about 60 million gallons of water a day, and cost $500,000 to construct.

Spreckels spearheaded construction for the Waihe`e ditch in 1882, which tapped the water resources from the West Maui Mountains, thus bringing water to both sides of the *Wailuku Commons* isthmus area (Adler, 1966: 48-49). These endeavors enabled him, in 1882, to establish Hawaiian Commercial and Sugar Company (HC&S). He received a large grant of land in the central Maui area that was utilized for this agricultural development.[4] He continued involvement in HC &S until 1898, when control was wrested from his hands. The parent company still bears the name *Alexander and Baldwin*, the principal participants in the transfer of corporate control. The production of sugarcane continues to be an activity in the isthmus area to this day, although some portions operated by C. Brewer and Company shifted to pineapple production. Most of the earlier plantation agricultural endeavors have ceased or scaled back operations. However, sugarcane is still cultivated adjacent to and east of Kuihelani Highway. This highway borders the project area to the east.

[4] The current project area is located within another large land grant - Grant 3152.

CULTURAL RESOURCES IN AREA

The earliest archaeological work in Wailuku and Waikapū was part of the island-wide survey of *heiau* (place of worship) compiled by Winslow Walker during 1928-1931. A number of *heiau* were listed for Wailuku. The infamous - *Pihana Heiau* and *Haleki'i Heiau* - lie on the northern side of `Īao Stream atop the large dune formation. Efforts in the 1970s led to the preservation and designation of a State Monument, under the supervision of the Division of State Parks (DLNR).

Walker reported a number of additional significant *heiau* in Wailuku, which were allegedly consecrated by Liholiho during his visit to Maui in 1801 (Walker 1931: 146-147). At the time of Walker's survey, none of the following Wailuku *heiau* could be located: Keahuku, Olokua, Olopio, Mālena, Pohakuokahi, Lelemākō, Kāwelowelo, Kaulupala, Palamaihiki, and Oloolokalani (ibid: 148).

Walker notes an unnamed *Heiau* and Petroglyphs located 0.25 mile from the village of Ma`alaea at the base of the foothills of the West Maui Mountains. An ancient village with house and shelter sites is also noted. During the Statewide inventory of historic sites project, the Sites were listed as SIHP -1441 (McGregor Point C-shapes) and SIHP -1287 (Ma`alaea Complex). At least 45 house and shelter sites were noted above (*mauka*) the highway during the survey.

At Ma`alaea Harbor, two large basalt boulders with cultural significance were re-located to the grounds of Buzz's Wharf Restaurant. One of the features is a large grindstone, referred to as the "King's Table". The grindstone was allegedly removed from the ocean during the expansion of the Harbor. The second feature was traditionally used to deposit newborn's umbilical cords into boulder, which has been referred to as a *Piko Stone* (SIHP -1286 and -1440]). The *Piko* Stone is most likely the one referred to in the Boundary Commission testimony (Creed v. I: 25). Prior to its' current location next to the grindstone, the *Piko* Stone was positioned at Kapoli Spring[5]

Kennedy conducted an archaeological survey approximately 600-1000 feet above sea level. Several traditional Hawaiian dry-land agricultural features were documented during the survey (Kennedy, 1990). In Waikapū Valley traditional Hawaiian wetland agricultural sites were documented by Theresa Donham (1991). The wetland features were identified approximately 750 feet above sea level, to the west of the current project

[5] The location of Kapoli Spring is offered by a local resident, who wishes to remain anonymous. It is a spring that has partially been sealed off - near Buzz's Wharf restaurant - at the public restroom facility.

area. It is interesting to note that alluvial deposits were located within some backhoe trenches during testing on the current study area.

Human burial finds in the Pu`uone area in vicinity of the project area

In 1994 and 1995, Xamanek Researches conducted a salvage recovery project in response to the inadvertent discovery of human skeletal remains in Waikapū. Human burials were displaced by sand mining activities at Maui Scrap Metal Company. This project was located on a property that is just to the WNW of the current project area. The transported sand contained human skeletal remains and the Maui/Lanai Islands Burial Council and the SHPD recommended mitigation measures including investigation, recovery, and reburial procedures. The skeletal remains represented more than 22 individuals. Ten pieces of a boar tusk anklet (*kupe`e hoaka*) and a hand drilled canine dogtooth pendant was also recovered. The artifacts were treated as burial associated items so the recovered artifacts and human skeletal remains were placed as close to the original burial site as possible (Fredericksen and Fredericksen 1996).

Joseph Kennedy conducted research at a Waikapū sand mining project that resulted in the identification and preservation of a human burial complex (Kennedy 1989). This site, which is recommended for permanent preservation, is located on the parcel adjacent to the project area.

Early archaeological reconnaissance surveys by Barrera (1976) of the approximately 1,000 acre neighboring Maui Lani Project, and of the Hale Laulea Subdivision (Barrera, 1983) in Kahului did not report any sites. However, since then many human burial features have been inadvertently discovered throughout these areas.

Neller (1984) investigated the "sand borrow site" after sand from the dunes was transported to a construction site in Lāhaina, was discovered to contain human remains. Upon investigation, one *in situ* human burial, and skeletal fragments representing at least 3 other individuals were displaced throughout the vicinity. In 1987, Xamanek Researches and the Maui Police Department investigated the discovery of human skeletal remains. This area was also referred to as the "sand borrow site". Archaeologists were sent to determine the nature of additional skeletal material reported by local informants. A well-utilized dirt bike trail had exposed the disturbed, flexed burial of a young female (18 to 25 years of age), and a 4 or 5 year old child nearby, partially exposed in the trail. Maui Police Department recommended the burials be removed. A shattered 4th thoracic rib and lower left scapula blade, suggests a frontal traumatic puncture wound may have caused the death of the young female. The burials were eventually turned over to the State Historic Preservation Division on Maui until permanent replacement.

Under contract to Maui Lani Partners, the Bernice Pauahi Bishop Museum Anthropology Department conducted test excavations at 4 sites identified during a reconnaissance survey (Rotunno and Cleghorn, February 1990). Three of the sites included 2 parallel alignments, 2 adjacent rock mounds, and a single rock mound. The surface features were all determined recent origin related to off-road vehicular traffic.

The fourth Bishop Museum site (Site 50-50-04-2797) is a human burial complex. The burials were identified across a *sand borrow pit* "near the eastern boundary of the Maui Lani Project area". No intact burials were recovered, but the scattered remains from at least 3 individuals were recovered near the surface (Rotunno-Hazuka et. al., May 1994a). Subsequent data recovery methods were employed. Results documented the identification of at least 12 individuals from 10 burial features. Six of the features were preserved *in situ* (Rotunno-Hazuka et. al., May 1994b). The site is nestled in the current Maui Lani golf course and residential development.

Archaeological subsurface sampling of the Maui Lani Development Phases 1 and 1A was conducted by Aki Sinoto Consulting. The objective of the work was to implement a strategy for subsurface sampling to test for the predictability of burials based on topographic features within the unmodified dune areas, and to address the deficiencies in the reconnaissance or inventory survey (Pantaleo and Sinoto, January 1996). A total of 90 backhoe trenches, 2 shovel scrapes and a manual trench were excavated in 58 areas (ibid: iii). Six previously unrecorded burials were identified – 4 associated with the sand borrow site (Site -2797); and one on top of a high dune (Site -4146). "No predictable pattern of traditional interment of the dead based on preference for topographic features was established during the current investigation. Rather, the resultant data indicates only one concentration or complex of multiple burials at Site -2797 and isolated individual burials at the top of dunes in the highest locations in the project area" (ibid.). Subsequent archaeological monitoring of Maui Lani residential and commercial development resulted in the discovery of hundreds of additional human burial features throughout the sand dunes.

Xamanek Researches conducted an archaeological inventory survey along the Maui Lani Parkway, Lot 11-A in 1997. A human burial site was documented and assigned SIHP 50-50-04-4401. Several other burial features are documented along the Maui Lani Parkway Development such as Sites -4368 and -4435 (Xamanek Researches).

A pre-Contact human burial was discovered while road crews were excavating under the Ka`ahumanu Avenue bridge crossing along Wai`ale Road (Site -4126).

Also along Wai`ale Road, which forms the western border of the Wailuku Sand Hills residential neighborhood, human burial features have been documented. Archaeological monitoring occurred for a drainage project (C. Brewer) and archaeologists identified human remains formerly disturbed by an old pipeline trench running perpendicular to the road (Site -4005). Site -3502 contains human burial features including an historic coffin burial and a disturbed burial determined to be ancient Hawaiian. Site -4067 is a habitation site associated with Site -4005, which was identified during the drainage project. Site -4068 is another habitation site with an associated cluster of human burials (Dunn and Spear 1995).

During construction for the Maui Homeless Shelter (Ka Hale A Keola) to the north, in May of 1992, 3 human burials were inadvertently discovered (Site 50-50-04-

2916). These skeletal remains were investigated by Theresa Donham, SHPD. Skeletal remains representing an adult male were documented roughly 2 feet below the original surface (Burial 1), a cranium (Burial 2) was exposed during construction of a de-silting basin located along the lower slope of the dune at the southeastern corner of the project area (Donham, 1992:3). A test unit yielded 280 identifiable elements or human skeletal fragments were recovered, along with 235 non-diagnostic fragments. Two adult individuals were represented in the collection.

General comments regarding the Pu`uone region

As previously noted, the current project area is located within the Pu`uone region of Maui. This extensive sand dune system covers much of the central isthmus area to the north and extends to the south of Waikapū. The Maui/Lana`i Islands Burial Council (MLIBC) has been actively involved in numbers of projects in this area that have encountered human burials over the years. Ms. Dana Hall, community activist and former MLIBC member (including Chair and Vice-Chair positions), has remarked on many occasions that this general area was a traditional burial area (personal communication with Erik Fredericksen, various occasions). The MLIBC has noted its concern for this general physiographic area on several occasions as well. As such, the possibility exists for encountering human burials on all properties that are located within this sand dune region. Consequently, archaeological monitoring is necessary for any project that includes earth disturbance activities that occurs in this area.

SUMMARY AND CONCLUSIONS

As noted previously in this document, an archaeological assessment was carried out on the project area. There were no significant surface or subsurface cultural remains identified during the previous assessment survey. Portions of the project area appear to have been heavily impacted by mechanical grading and/or sand mining activities. Cattle grazing with associated feedlots and large drainage ponds have also reshaped sections of the subject parcel.

The subject parcel is located within the general area that contains isolated and clustered human burials – the Pu`uone sand dune system. Surface and subsurface historic properties have been documented on some of the adjacent parcels. Although no surface or subsurface historic properties were identified during the previous archaeological assessment survey, there is a possibility of the inadvertent discovery of undocumented subsurface cultural properties during any potential future land alteration activities. It is important to note that sand dune deposits were located in all test instances.

Some informants voiced concern for possible human remains that may be located on untested portions of this previously disturbed parcel. While the assessment survey did not locate historic properties, the possibility nevertheless exists that significant material culture remains may be contained within untested portions of the project area. Consequently, archaeological monitoring is the proposed mitigation for all future earth moving activities on the subject parcel.

Based on our research and interviews, we are not aware of any specific traditional Hawaiian cultural uses for the subject parcel at present. Interviewees did not know of any specific cultural uses of the project area as well.

Assessment of Cultural Impacts

The subject parcel and surrounding areas have been heavily impacted by post-contact activities of the 19th and 20th centuries. If traditional Hawaiian cultural sites were present prior to the Plantation Era, they were either destroyed or buried by earth altering activities, or more recent land alterations. The project area is currently utilized for a variety of purposes, including pasture near Kuihelani Highway, a construction base yard (Consolidated Base Yard), and a feedlot for cattle.

Informants were not aware of any traditional cultural practices that occur on the project area at present. However, two individuals remarked that this sand dune area is generally known for containing burials.

Potential Impacts by Future Construction Activities

Given the location of the project area, there is a possibility that traditional Hawaiian burials could be located in untested subsurface portions of the project area. The Pu`uone dune system is known for containing isolated and clustered human burials. In addition, traditional Hawaiian or more recent historical subsurface habitation or agricultural sites could be present in untested subsurface sections of the subject parcel. Traditional Hawaiian cultural deposits may include midden deposits, charcoal, cooking pits, waterworn pebbles, or stone features. More recent post-contact cultural deposits may include discarded bottles, crockery, and other domestic objects. Given that there is a possibility of encountering significant material culture remains, including human burials during subsurface ground disturbance activities on the subject parcel, archaeological monitoring is the recommended mitigation for the proposed development on this 31.222-acre portion of land in Waikapū. To this end, a monitoring plan for the project area has concurrently been submitted to the State Historic Preservation Division for review and comment.

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APPENDIX A: Project archaeological monitoring plan.

An Archaeological Monitoring Plan for a 31.222-acre Parcel Located along Waiko Road Waikapū *Ahupua`a*, Wailuku District Maui Island TMK (2) 3-8-007:102

Prepared on behalf of:

Waiko Industrial Development, LLC
Wailuku, Maui

Prepared by

Xamanek Researches, LLC
Pukalani, Maui

Erik M. Fredericksen

2 September 2011

INTRODUCTION

Xamanek Researches, LLC conducted an Archaeological Assessment Survey for a 31.222 acre parcel in Waikapū *Ahupua`a*, Wailuku District, Maui Island on Tax Map Key (TMK) [2] 3-8-007:102 (Figure 1 and Figure 2). The report (Pickett and Fredericksen, 2011) was prepared following the Department of Land and Natural Resources (DLNR), State Historic Preservation Division (SHPD) Hawai`i Administrative Rules (HAR 13-275-276-5); in compliance with Maui County guidelines, rules, and recommendations. This report has been submitted to the SHPD for review and comment.

Archaeological fieldwork took place during the months of May and June 2011. Fieldwork consisted of both surface and subsurface investigations throughout the subject parcel. The survey covered accessible portions of the subject area. The project area has been utilized as pastureland for cattle and horses. Much of the land is currently heavily utilized as base-yards with various large stockpiles, as well as cattle feed lots and associated settling ponds. The bulk of the subject area has been previously disturbed through grubbing, grading, sand mining and agricultural or pastoral endeavors. An electrical easement in favor of Maui Electric Company, Ltd. connects the western and eastern portions of the parcel.

There are a series of fence-lines spread throughout the area and access involved coordination with different leaseholders and avoidance of grazing horses. Cattle feedlots cover sections of the project area. Access was limited in these areas and mechanical backhoe work did not occur in the stockpile areas or the cattle feedlots. Subsurface testing included twenty, controlled mechanical Backhoe Trench (BT) excavations. No historic properties were identified within the perimeters of the subject area during the archaeological fieldwork. However, remnants of traditional Hawaiian occupation, burial features, and/or ceremonial areas may still exist. Historic plantation, ranching, and military features could also be encountered. Although subsurface testing occurred, it is possible that subsurface features could be located in the uninvestigated portions of the subject parcel. Isolated, clustered, and scattered human burial features have been discovered at several locations throughout this sand dune region.

Given the presence of sand dune deposits in all test instances, Ms. Morgan Davis, SHPD Lead Archaeologist, Maui Office, has concurred that monitoring is the appropriate form of mitigation for all future actions on the project area. The following monitoring plan has been prepared on behalf of Waiko Industrial Development, LLC, Wailuku, Maui.

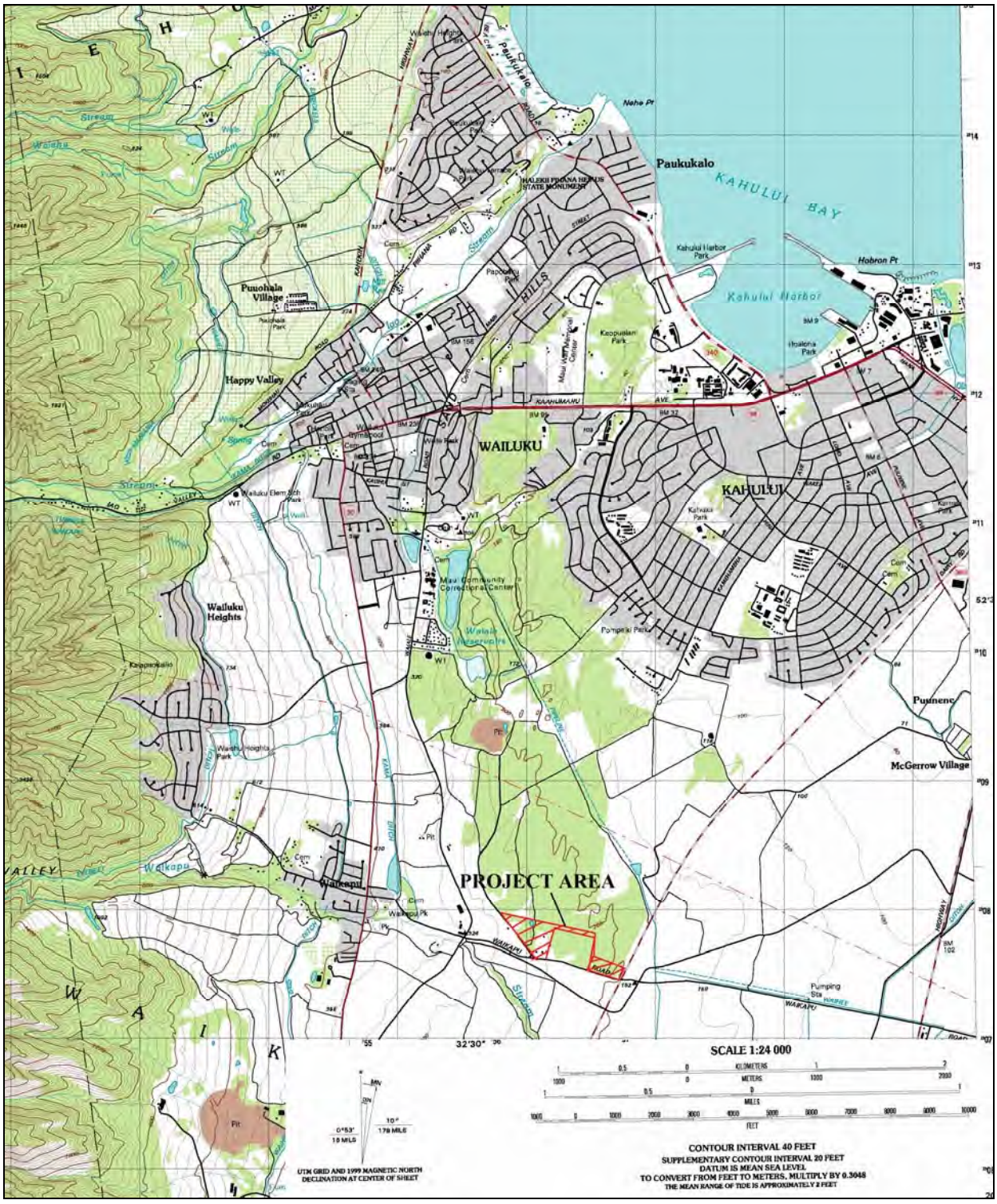

Figure 3: Portion of the Wailuku United States Geological Survey Topographic Map Depicting the Project Area Location (red).

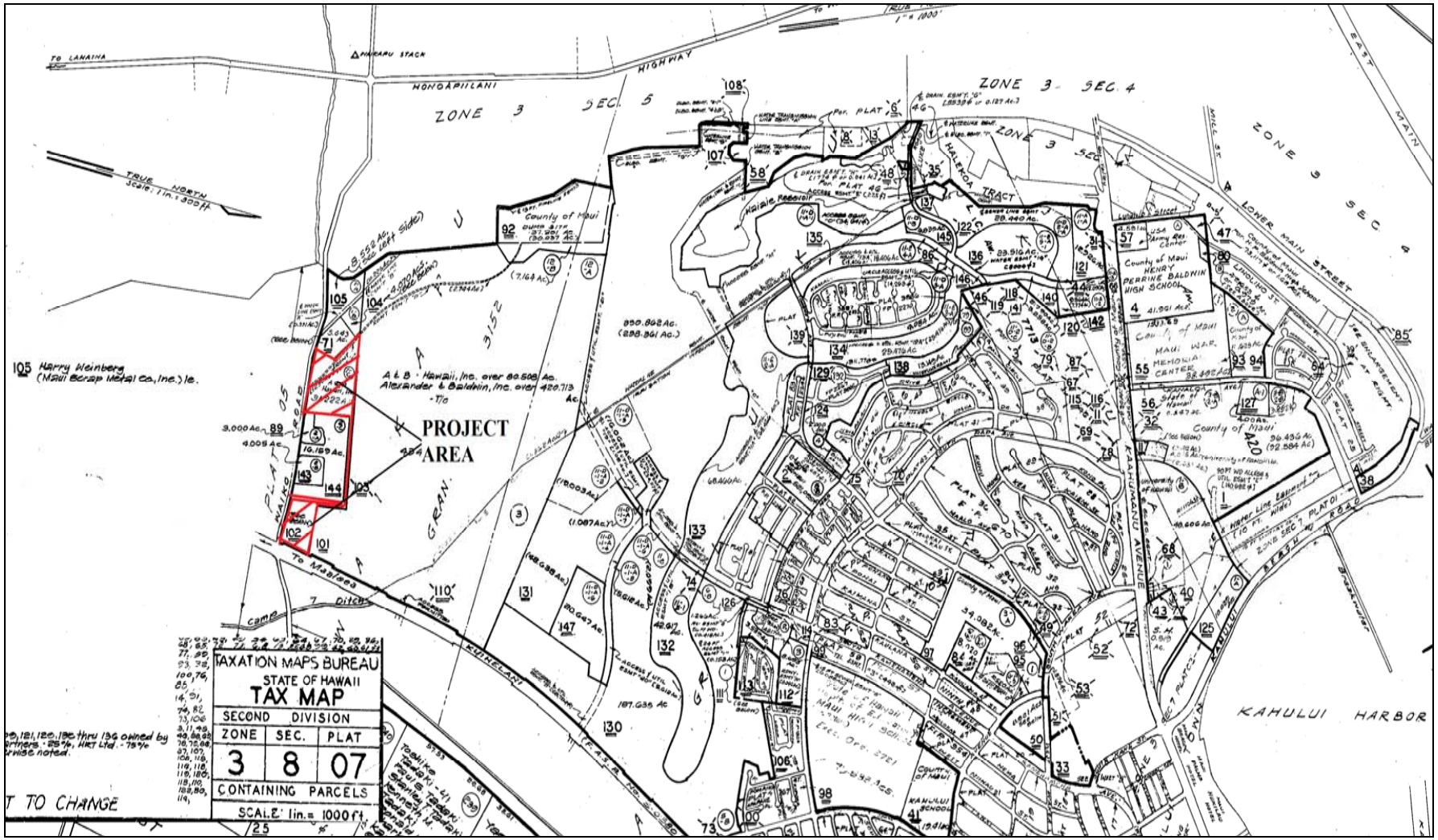

Figure 4: Tax Map Key (TMK) Depicting the Project Area Location at [2] 3-8-007:102.

STUDY AREA DESCRIPTION

The study area lies within Waikapū *Ahupua`a* in Wailuku District. The subject area consists of 31.222 acres of undulating sand dunes. Generally, prior land use includes pastureland for horses and cows; construction or farming base-yard(s); sand-mined areas; stockpiles of sand, rock, dirt, gravel (etc); ponds; cattle feed lots; and a relatively narrow, enclosed easement behind the relatively recently developed Consolidated Base-yard facility. The narrow easement and power lines delineate the northern boundary of the subject area.

Various fence-lines and *jeep* access roadways meander throughout the parcel. The subject parcel is located south of the Maui Lani development and is bounded by Kuihelani Highway as well as Waiko Road. A wide, well-used access road bisects the west section of the project area. The landowner, lessees, and commercial traffic mainly utilize this dirt road for hauling mined sand or construction related material (no sand mining activities are actively occurring on the project area).

Natural History

The project area ranges in elevation from approximately 45 to 75 meters (150-250 feet) above mean sea level. The area lies within a portion of an extensive Aeolian sand dune formation—a large geologic feature that extends at least eight miles from Waiehu through Waikapū. The sandy matrix is underlain by lava flows from Haleakalā and alluvial sediments from the West Maui Mountains (Stearns and Macdonald 1942: 54). Much of the central isthmus is comprised of sand, and is commonly referred to as *Pu`uone,* which loosely translates as sand dune.

Soil classification consists of *three* types: *Jaucas Sand* with 7-30% slopes commonly used for pasture and home sites, permeability is moderately rapid above the cemented (lithified) layers, runoff is slow and the wind erosion hazard is moderate to severe; *Pulehu Clay Loam* with 0-3% slopes commonly used for sugarcane cultivation, truck crops, and pasture land, permeability is moderate, runoff is slow, and the erosion hazard is no more than slight; and *Pulehu Cobbly Silt Loam* with 3-7% slopes –this type is similar to Pulehu Clay Loam except the texture is silt loam with a cobbly surface layer. This type is commonly used for used for sugarcane cultivation. Permeability is moderate, runoff is slow, and erosion hazard is slight (Foote, et.al 1972).

The color of the sand varies from grayish-brown to light brown and golden that generally forms layers of strongly alkaline, cemented sand hardpan - otherwise known as lithified sand that undulates above and below the surface. Old root molds, or root castings, filled with hard, white alkaline deposits are a common feature in the sand dunes.

Pu`uone sands occur on slopes of 7 to 30 degrees, and develop in material derived from coral and seashells (Foote, et.al 1972).

Annual precipitation in this portion of Maui averages between 20 to 30 inches. The highest monthly rainfall occurs during the winter and spring months. Temperatures range from 60 to 80 degrees Fahrenheit in January to 68 to 90 degrees Fahrenheit in July. Winds are generally trade winds from the northeast, averaging 16 to 18 miles per hour (University of Hawaii, 1983:56).

The project area has been impacted by previous groundwork. Most of the sand dunes in the immediate area have been developed, or partially developed. Past disturbance actions include grubbing, grading, sand mining, and agricultural and pastoral activities, which have affected the natural environment.

ARCHAEOLOGICAL MONITORING PLAN

Scope of monitoring

As previously noted, sand dune deposits were located in all test instances. The scope of this monitoring plan includes having an archaeological monitor present during all subsurface earthmoving activities scheduled for the subject parcel. Actual on-site time and specific actions to be followed in the event of inadvertent discoveries will be discussed and agreed upon by the general contractor and the archaeological consultant at a pre-construction meeting held for this purpose. Additional meetings may be called, if either the monitoring archaeologist or contractor believes that other relevant information should be disseminated. As previously mentioned, this plan covers this 31.222-acre portion of land in Waikapū (TMK: (2) 3-8-007:102).

By way of background information, Xamanek Researches conducted a salvage recovery project in 1994 and 1995, in response to the inadvertent discovery of human skeletal remains on a nearby parcel in Waikapū. Human burials were impacted by sand mining activities at a parcel leased by Maui Scrap Metal Company. The transported sand contained human skeletal remains. The Maui/Lanai Islands Burial Council and the SHPD recommended mitigation measures including investigation, recovery, and reburial procedures. The skeletal remains represented more than 22 individuals. In addition, ten pieces of a boar tusk anklet (*kupe`e hoaka*) and a hand drilled canine dogtooth pendant was also recovered. The artifacts were treated as burial associated items. The recovered

artifacts and human skeletal remains were placed as close to the original burial locale as possible, and designated Site 50-50-04-3524 (Fredericksen and Fredericksen 1996). The above site is located within 500 m WNW of the project area.

Monitoring methodology

Given the locale of the project area and the presence of sand dune deposits in all test instances during inventory survey sampling, there is a possibility that significant material culture remains may be inadvertently disturbed during earthmoving activities on this portion of Waikapū, Maui. Possible material culture remains could include precontact and/or post-contact subsurface building, habitation and/or agricultural site remnants. In addition, there is a chance that human remains could be encountered (such as Site -3524).

Close cooperation between the monitoring archaeologist and construction personnel is important to a successful monitoring program. The monitoring program will follow the 12 conditions listed below:

1) The contractor shall be responsible for ensuring that the archaeological consultant is aware of all pertinent construction schedules and that the monitor is present for all subsurface excavation activities on this parcel.

2) Both the archaeological consultant and the contractor are responsible for ensuring that on-site work is halted in an area of significant findings and to protect any such find from any further damage (i.e., construction fencing, protective covering, etc.). The State Historic Preservation Division (SHPD) Maui office will recommend appropriate mitigation actions. The SHPD Burial Sites Program, the SHPD Maui office, and the Maui/Lana`i Islands Burial Council (MLIBC) will be consulted in the event that human remains are found. (Change work order)

3) In the event of the discovery of human remains, work shall cease in the immediate find area. *In situ* human remains will be left in place, and any disturbed human remains will only be removed after written notification from the SHPD. If at all possible, provisions for secure on-site storage of inadvertently disturbed human remains will be made. The monitoring archaeologist will be responsible for notifying the SHPD Maui office (including the Cultural Historian), and the Historic Preservation Division Burial Sites Program, which, in consultation with the Maui/Lana`i Islands Burial Council regional geographic representative, shall determine appropriate mitigation measures. This notification will include accurate information regarding the context and composition of the find. (Change work order)

4) The archaeological consultant will work in compliance with Hawai`i Revised Statutes Chapter 6E (procedures Relating to Inadvertent Discoveries).

5) The monitoring archaeologist will have the authority to closedown construction activities in areas where potentially significant discoveries have been made until they have been properly evaluated. Normally, construction activities may continue in unaffected portions of the project area. (Change work order)

6) Field procedures to be followed for documentation of discovered cultural features or human skeletal remains: a) standard field methods including recordation of profiles showing stratigraphy, cultural layers, etc.; b) mapping and photographing of finds other than human remains; c) and excavation of cultural materials and/or exposed features.

7) The SHPD Maui archaeologist shall be notified and consulted with regarding treatment of identified features such as cultural layers, artifact or midden concentrations, structural remains, etc., considered to be of significance under S13-279-2 (definitions).

8) The contractor should take into account the necessity for machine excavation at a speed slow enough to allow for reasonable visual inspection of the work. The monitoring archaeologist must make a "best effort" to search for significant material culture remains (i.e. artifacts, features, midden, skeletal remains, etc.). Machine excavation speed will need to be slowed in an area where significant material culture remains have been identified. (Change work order)

9) Significant archaeological discoveries, if they occur, shall be protected and identified by construction "caution" tape, fencing, or other reasonable means, until the SHPD Maui office and the archaeological consultant decide appropriate mitigation actions. All recovered material culture remains—with the possible exception of charcoal samples for radiometric analysis—will remain on Maui. Standard laboratory methods shall be utilized by the archaeological consultant in the event that cultural materials are recovered during monitoring and/or mitigation work. The archaeological consultant will curate significant cultural materials on island. (Change work order)

10) One monitor in most instances will carry out the necessary fieldwork. Tasks will include observation of grubbing and earth-moving activities. However, the SHPD and the MLIBC require that one archaeological monitor be assigned to each piece of major earth-moving equipment in sand dune areas or other culturally sensitive locations. (Change work order if more than one piece of machinery is to be utilized)

11) In the event of night work, the general contractor shall supply adequate lighting for the onsite monitor (s).

12) Chapter 6E-11 (a) specifies the following "It shall be unlawful for any person or corporate, to take, appropriate, excavate, injure, destroy, or alter any historic property or aviation artifact located on the private lands of any owner thereof without the owner's written permission being first obtained. It shall be unlawful for any person, natural or corporate, to take, appropriate, excavate, injure, destroy, or alter any historic property located upon lands owned or controlled by the State or any of its political subdivisions, except as permitted by the department."

Field methods utilized shall include photographic recordation (where appropriate), artifact excavation (recovery and recordation), profile documentation of cultural layers and stratigraphy, excavation and recordation of exposed features, and mapping of all pertinent features on an appropriate site map. A daily log (field notes) of activities and findings will also be kept. Gathered information shall be utilized in the preparation of the monitoring report to be submitted to the SHPD.

In the event human skeletal remains are inadvertently disturbed, the SHPD Maui office, the SHPD Burial Sites Program, and the Maui/Lana`i Islands Burial Council shall be notified, and appropriate mitigation actions determined (photographs of human skeletal remains will not be taken).

A supervisory archaeologist may periodically visit the monitoring site as often as is necessitated by the nature of the construction activities and archaeological findings. If significant discoveries are made, appropriate mitigation measures will be discussed with the SHPD Maui office.

The archaeological consultant shall curate all cultural materials recovered from this monitoring project on Maui, with the exception of human remains. When analysis is completed, recovered material culture remains will be turned over to the appropriate parties. Long-term curation arrangements of such materials will be approved by the SHPD.

A draft monitoring report detailing the results of the monitoring program will be prepared. This draft report shall be submitted to the State Historic Preservation Division within 180 days of the completion of fieldwork, for comment and approval. Approved changes and corrections will result in the final monitoring report on the proposed improvements for this 31.222 acre portion of land in Waikapū, Maui (2) 3-8-007:102).

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APPENDIX B: INTERVIEWS

Ted and Zelie Harders (interviewed by Erik Fredericksen on 8 September 2011).

This interview was conducted over the phone, due to scheduling constraints. This pleasant couple first met when they were attending 6th grade at Punahoe School on Oahu.

Zelie (maiden name - Rogers) was born (15 June 1935) in the old Malulani Hospital (this location now houses the Hale Makua facility), and raised in Waikapū Village. Her Hawaiian family has lived in this area for some time. The Cockett line of her family arrived in Hawaii in the mid-1800s, and has lived in Waikapū for about 5 generations. Zelie has one brother who lives in Perth, Australia, and one brother who lives in Waikapū; both siblings are younger than her. Zelie's grandmother raised her father (she was actually her father's aunt). She recalls her grandmother's advice: "never sell the land".

Ted Harders was born (23 June 1934) and raised on Oahu; his parents moved to Oahu in 1924 from the mainland (Wisconsin). Ted's father founded the Harder's Company on Oahu. Ted has lived in Waikapu since his marriage to Zelie. Ted has one sister.

One of Zelie's earliest and fondest memories of Waikapū is of the plantation stables that were located near the former government road (now Honoapi`ilani Highway). Her father used to take her to the stables to look at the horses. Wailuku Sugar Company owned these stables, and the horses were used as pack animals for sugar plantation operations. She believes that the road was paved in the 1950s. She also has fond memories of playing in Waikapū Valley as a child. They swam and built dams in the stream. They also ate guavas.

Zelie recalls that her grandparents maintained several *lo`i* in Waikapū Valley when she was in school. They also operated a poi factory. Her grandmother taught at Waikapū School, which went from 1st-8th grade at this time. Zelie attended Kaunoa School in Spreckelsville, and was in first grade when the Japanese bombed Pearl Harbor. She then transferred to Waikapū School. Her mother taught at the old Kihei School in north Kihei, which is now used for a variety of purposes, including a paramedic station. Zelie recalls that the Kihei School students would go out to the beach to view the *akule* catch when it was hauled ashore by local fishermen.

Zelie also remembers the old open-air theater that used to operate in Waikapū. She recalls that children often went there in their pajamas to watch movies. There were two stores in town at the time – Sakamoto and Furukawa Stores. Both shut down numbers of years ago.

She also recalls that Bon dances took place in Waikapū before WWII. Zelie remembers hearing about the old Cromwell Sugar Mill that was in the area, and seeing its old stack. She remembers hearing that people used to come by horse and buggy to wait for the ships that landed at Olowalu and Lahaina. When they could see the ships from Waikapū they would load up and head out to meet the vessels and go to O`ahu. She remembered hearing her father talk about when the Valley still was populated and the people lived on

the land and raised *kalo*. She also recalls hearing that a relative on her father's side (a Duvauchelle) was a cook for King Kamehameha III.

She recalls that many Waikapū residents maintained Victory gardens during World War II, because supply ships could not always deliver food on a regular basis. Ethnic fruit and vegetables were typically grown. There were two plantation camps in Waikapū that she remembers – Filipino Camp and Hiyashi Camp. Both were connected with Wailuku Sugar Company. Residents of these camps kept gardens at other times as well. Zelie's maternal grandfather, Joseph Cockett, was a black smith at the plantation. Her father had a contract with the military during WWII to collect pig slop. At the height of his pig farm operation, he kept about 1,000 pigs. Some of her father's land was used during the war to house a hospital. The Hawaiian Protestant Church building in Waikapū was utilized as a surgery. Her father rented cottages out to military personnel during the war.

Both Zelie and Ted attended Punahoe School on O`ahu and met when she was in 6th grade. Ted recalls flying into the old Kahului Airport on a DC3 when he was in high school, and catching a ride through Wailuku to visit Zelie and her family. He recounted that Ka`ahumanu Church was a landmark at the time, because there were no other tall buildings in Wailuku. The road to Waikapū was narrower than it is today.

They were married on 23 June 1956. They have three children – Cindy, Zelie (KK), and Carl. Cindy (1 daughter) lives in Zelie's grandmother's old home, and Carl (3 sons) lives in the area as well. Their daughter Zelie (KK) lives on the mainland in the San Francisco Bay area with her family (4 children). Ted and Zelie remember the tsunami in the 1960s and Hurricane Ewa in 1980. Ted recalls that volleyball tournaments were popular in the town in the 1950s. He speculates that the advent and popularity of television took interest away from this sport activity.

In regards to the current project area, both Ted and Zelie recall that it has always had pasture and *kiawe* trees on portions of it. They remember cattle being raised there over the years; Ted remembers it being vacant at times as well. While, they do not recall that this particular portion of Waikapū was used for traditional gathering purposes, they noted that they typically did not take much notice of it, because it was in an out of the way location.

Flo Nakama (interviewed by Marco P. Molina on 13 September 2011).

This interview was conducted over the phone, due to scheduling constraints.

Flo Nakama wars born 14 April 1939. She was born and raised in Waikapū, Maui. She lived in the same household until she attended college in 1956 to 1961. She has two younger siblings, a brother who lives in Napili, Maui and a sister who lives in O`ahu.

Father- Chuyu Nakama immigrated from Okinawa.

Mother- Haruko Kaneshiro born in O'ahu, grew up in Okinawa.

Ms. Nakama recalls that the general project area contained *kiawe* trees, pasture land, and some pig fences by an area (to the west) now known as Spencer Homes.

Her family lived in East Waiko with the rest of the sugarcane field workers. All of her relatives lived in the same area, too - cousins, aunties, and uncles. Cultivated sugarcane fields surrounded this area.

As a child she recalled that they would play marbles, kick the can, steal the base, and they would fill a tea bag with hibiscus leaves and hit each other with it, this was done in teams. There is another game the name of which she cannot recall. She thinks that it may have been called peewee. It used two sticks, one long and the other short.

Another fun activity that they passed the time with was swimming in the "river", though they were told not to play there. She mentioned that the parents didn't have to worry about the kids as long as they came home when it got dark.

The area has not changed too much, many of the old houses are still standing but are now renovated, and some of the old-time families are still there. The population of the plantation camp did decline. She recalls going to the outdoor theater in Waikapū; the back section contained bleachers with a wooden roof, the middle section contained benches with backs, and the front area was just open air where people who smoked would be. She remembers that people from all over Maui would come to this place. This open theater was located near where the existing County of Maui Bus Stop that is along Honoapi`ilani Highway. The biggest changes in the area in her opinion are the new housing subdivisions.

Flo recalls going to school in Waikapū School from first grade to third grade, and beyond third grade you attended Wailuku elementary. The school had two separate locations, one was behind the existing Waikapū on 30 store, and the other was where the Hawaiian Protestant Church was located. This church location now contains a house.

Like everyone in the area people grew their own vegetables and fruit trees. There were people who farmed vegetables where the existing Spencer Homes development is located. They called it truck farming; these were the people who grew vegetables and

sold their produce in the market. Another family by the river also did truck farming. By the Waikapū graveyard on the Wailuku side people leased land from Wailuku Sugar Company to raise pigs. Also, the Vida family from the Waiolani area to the northwest raised pigs too; they did this until the existing Waiolani sub-division was developed, and the new residents started to complain about the smell.

Some families moved away from Waikapū, some renovated their homes and stayed just like her. Her house was renovated 30 years ago. Flo recalled that with the plantation houses, they were built on "stilts", and you would always see fruit trees, especially the common mangos, and plumeria trees. She also recalls plumeria flower leis being placed on graves on Memorial Day.

Flo mentioned that she heard of old Japanese movies being shown next to the Sakamoto Service Station. This station was across from the existing Waikapū on 30 convenience store. Also, she has heard of people doing the Bon Dance by the cemetery to the west of the project area.

Flo did enjoy the outside *furo* (bathhouses separated from main house, which is heated with firewood). What she liked about the outside *furo* is that when she and her friends would go to each other's houses and relax on the outside *furo*, just like sleep over. The outside *furo* was widely used before showers were installed in the houses. Some residents continued using the *furo* because they enjoyed the relaxing experience, especially after working hard in the fields. Flo added that it was fun playing by the river, climbing the trees, particularly the Tamarind and the Java Plum. Flo explained that they would carry a glass jar with some salt, pepper, and a little bit of sugar in it, and they would put Java Plums inside a jar and shake the mixture really well. Then it was ready to eat.

The plantation cane fire was her least favorite periodic event that occurred in the area. As a kid she recalls that it wasn't that bad. But the chore of cleaning up after the mess that the cane fire left behind was not fun.[6]

Flo mentioned that the Waikapū Community Association is trying to bring the community together by sponsoring some gatherings. She particularly noted that a community picnic is happening on Saturday, September 17th at the Waikapū Community Center. This event is basically about sharing and educating the people who live in the area, especially the new residents who may not know the history of Waikapū and what can be done to protect the river.

[6] This black soot/ash was referred to as "black snow" in Lahaina in the 1960s when Pioneer Mill burned sugarcane (personal communication, Erik Fredericksen).

Wallette Pellegrino (interviewed by Marco P. Molina on 14 by phone, and in-person on 17 September 2011 at the annual Waikapū Community Association picnic)

Note: Ms. Pellegrino requested that we not include a full interview with her, because she did not feel that she had much knowledge about the cultural importance of the area around the project area. She did give us permission to include a brief summary of her opinion/recollection of the project area and the area around it.

Wallette Pellegrino was born and raised in Wailuku, but has lived in Waikapū with her husband Victor for many years. She did not feel comfortable being interviewed more fully, because she did not live in this community as a child. She is currently a member of the Waikapū Community Association.

In regards to the area around the Waiko project area, she has heard that burials are located in this general sand dune area. She recalls that the project area in general has been used for ranching for numbers of years.

Waikapū plantation village

In 1919, the main camp at Waikapū was enlarged when six houses were brought in from Pu'uhele camp.[7] Prior to this time, the area was focused more around traditional habitation patterns in the valley.

[7] Source: Waikapū Community Association Annual Picnic, 17 September 2011.

Dana Hall (interviewed in Wailuku by Jenny L. Pickett on 13 September 2011).

(Editor's note: the following interview was conducted outside on a windy day with a fair amount of background noise. The first portion of the interview was not recorded, because it contains culturally sensitive information about burials located in this area. The recorded portion of the interview begins with Dana Hall speaking about the general cultural significance of the area).

We had the standing exhibitions of the different peoples and it had maps of where they came from so you could locate them in some way. But they had their their feathered collars and feathered head-dresses. But the one exhibit that really got to me was a big black and white photograph of the Pueblo people standing about 5 feet tall in a semi-circle. And so you're standing there as a person, you know, in you're own contemporary time looking at this photograph, and it's a ceremonial dance that's going on. Then you see all the faces and the participants and people looking in intently while this religious ceremony is being conducted. I looked at this and realized what it was and started crying because they had done it in such a way that as you stood in the open part of where this photograph was displayed on this semi-circular wall, that you were part of the ceremony, a part of what was going on. And who knows when that photograph was taken; probably in the 19th century. And then the caption was something about tradition...*"The continuity of tradition: Sometimes it disappears and goes underground and is not seen for a long time. And then it emerges again. But you will always emerge when you are a part of the circle."* It was so neat!

And that's what I mean about being a student...there's these places evoke in us some kind of emotion, some kind of caring that connect us to these places. It's the resurfacing of some kind of ancient feeling that forms the basis of tradition. And tradition is not something that's dead and gone and buried. Tradition is something that revives and becomes alive again in living people when they can make that connection again to a particular place, or a particular object or a particular structure. And that's why I say, the only way to reach that is through your spiritual, imaginative self. We can make that leap, yeah?

I'll tell you another story about a sand dune. When I was going out every week to check on the archaeologists at the Waihe`e sand dune. I can remember walking up a slope real slow and looking down and seeing a brown paper bag with artifacts, (?) and for some reason I just picked up this one paper bag and saw the convenience information and I looked in the bag, and there was a shell ornament with a drilled hole in it. I realized it was a lei-opu, a broken piece of lei-opu with a drilled end but the top end of it was still there. And I looked at that and I immediately felt this connection...I was the first Hawaiian looking at this ornament since it was lost or dissociated from the person to whom it had belonged. And I just like, some spark traveled back to that time, in the past. And while all this was happening non-verbally, the person who was in charge of me said, "Put that down Dana. You're not allowed to look at that." And the tears just flowed. Bitter tears flowed from my eyes. Not everybody is called to want to protect us. Because I know you and some other people, who knows, you don't have to be Hawaiian to

experience. Yeah, so neat. To me, that's why archeology is very interesting. Because archaeology can help us make those connections. You know, the connective part. That's what you want to talk to people about. Otherwise, it doesn't make any difference. Does that person feel a particular connection? Can they articulate what that connection's about? What it means? Otherwise, it's all...you know, bull----. When we don't know things just through….especially when you're dealing with pre-contact, pre-western culture, we're not dealing with empirical data. It's how you access.

It's gotta be through your imaginative process, spiritual happenings. We're not gonna do it through science.

Q. Did you ever notice any plants?

A. I think we used to some degree. `Ilima, Kulikuli, and the trees (inaudible—lots of background noise throughout interview). It's a travesty to try, it doesn't really help how CIA---. You know, these dunes that we're talking about in this specific area of the project--the project area—there're not habitation features.

Imagine the waters of Waikapu Stream, going all the way to Kealia, and then along the ways of --------. I think to myself, how I wish I could see how things were. Kamehameha Kahekilii's son,....Wailuku's home....those four streams were really important, yeah? Those four rivers. Waihe`e maybe that's an older name. And we can't really source the age of those (inaudible). Kepaniwai is probably the most well known story for the area. It's so close to being the time to document this historical period. Ho, can you imagine Kahekili, what a formidable person he was. How he commanded Iao Valley.