APPENDICES

LIST OF APPENDICES

APPENDIX A.

Resolution No. 08-73
Regarding Kainani Street

Resolution

No. 08-73

REFERRING TO THE MAUI PLANNING COMMISSION A DRAFT BILL AMENDING SECTION 19.78.070, MAUI COUNTY CODE, TO PROHIBIT TRAFFIC INGRESS AND EGRESS ON KAINANI STREET TO AND FROM THE DEVELOPMENT WITHIN THE MAUI LANI PROJECT DISTRICT

WHEREAS, the Council of the County of Maui is considering a draft bill entitled "A BILL FOR AN ORDINANCE AMENDING SECTION 19.78.070, MAUI COUNTY CODE, TO PROHIBIT TRAFFIC INGRESS AND EGRESS ON KAINANI STREET TO AND FROM THE DEVELOPMENT WITHIN THE MAUI LANI PROJECT DISTRICT"; and

WHEREAS, Sections 8-8.4 and 8-8.6 of the Revised Charter of the County of Maui (1983), as amended, requires the Council to transmit proposed land use ordinances and amendments to the appropriate planning commission for review and comment; now, therefore,

BE IT RESOLVED by the Council of the County of Maui:

1. That it hereby transmits a draft bill, entitled "A BILL FOR AN ORDINANCE AMENDING SECTION 19.78.070, MAUI COUNTY CODE, TO PROHIBIT TRAFFIC INGRESS AND EGRESS ON KAINANI STREET TO AND FROM THE DEVELOPMENT WITHIN THE MAUI LANI PROJECT DISTRICT", a copy of which is attached hereto as Exhibit "A" and made a part hereof, to the Maui Planning Commission, for appropriate action;

2. That the Maui Planning Commission is respectfully requested to provide its well-considered findings and recommendations to the Council as expeditiously as possible; and

3. That certified copies of this resolution be transmitted to the Mayor; the Planning Director; the Corporation Counsel; and the Maui Planning Commission.

APPROVED AS TO FORM
AND LEGALITY:

DAVID A. GALAZIN
Deputy Corporation Counsel
County of Maui
S:\ALL\DAG\RESO\Council\Kainani 08-146b.doc

ORDINANCE NO. _____

BILL NO. _____ (2008)

A BILL FOR AN ORDINANCE AMENDING SECTION 19.78.070, MAUI COUNTY CODE, TO PROHIBIT TRAFFIC INGRESS AND EGRESS ON KAINANI STREET TO AND FROM THE DEVELOPMENT WITHIN THE MAUI LANI PROJECT DISTRICT

BE IT ORDAINED BY THE PEOPLE OF THE COUNTY OF MAUI:

SECTION 1. Section 19.78.070, Maui County Code, is amended by amending subsection C to read as follows:

"C. Infrastructure.

1. The development shall not burden governmental agencies to provide substantial infrastructure improvements; [and]

2. Individual residential lots shall not have direct access onto major arterials (minimum eighty-foot right-of-way) and shall be minimized on major streets (minimum fifty-six- foot right-of-way); and

3. The development shall not connect to or utilize Kainani Street, Wailuku, Maui, Hawaii as an ingress or egress into any part of the development."

SECTION 2. Material to be repealed is bracketed. New material is underscored. In printing this bill, the County Clerk need not include the brackets, bracketed material, or underscoring.

SECTION 3. This ordinance shall take effect upon its approval.

APPROVED AS TO FORM AND LEGALITY:

_____

Department of the Corporation Counsel
County of Maui

paf:kmh:08-146a

EXHIBIT "A"

COUNCIL OF THE COUNTY OF MAUI

WAILUKU, HAWAII 96793

CERTIFICATION OF ADOPTION

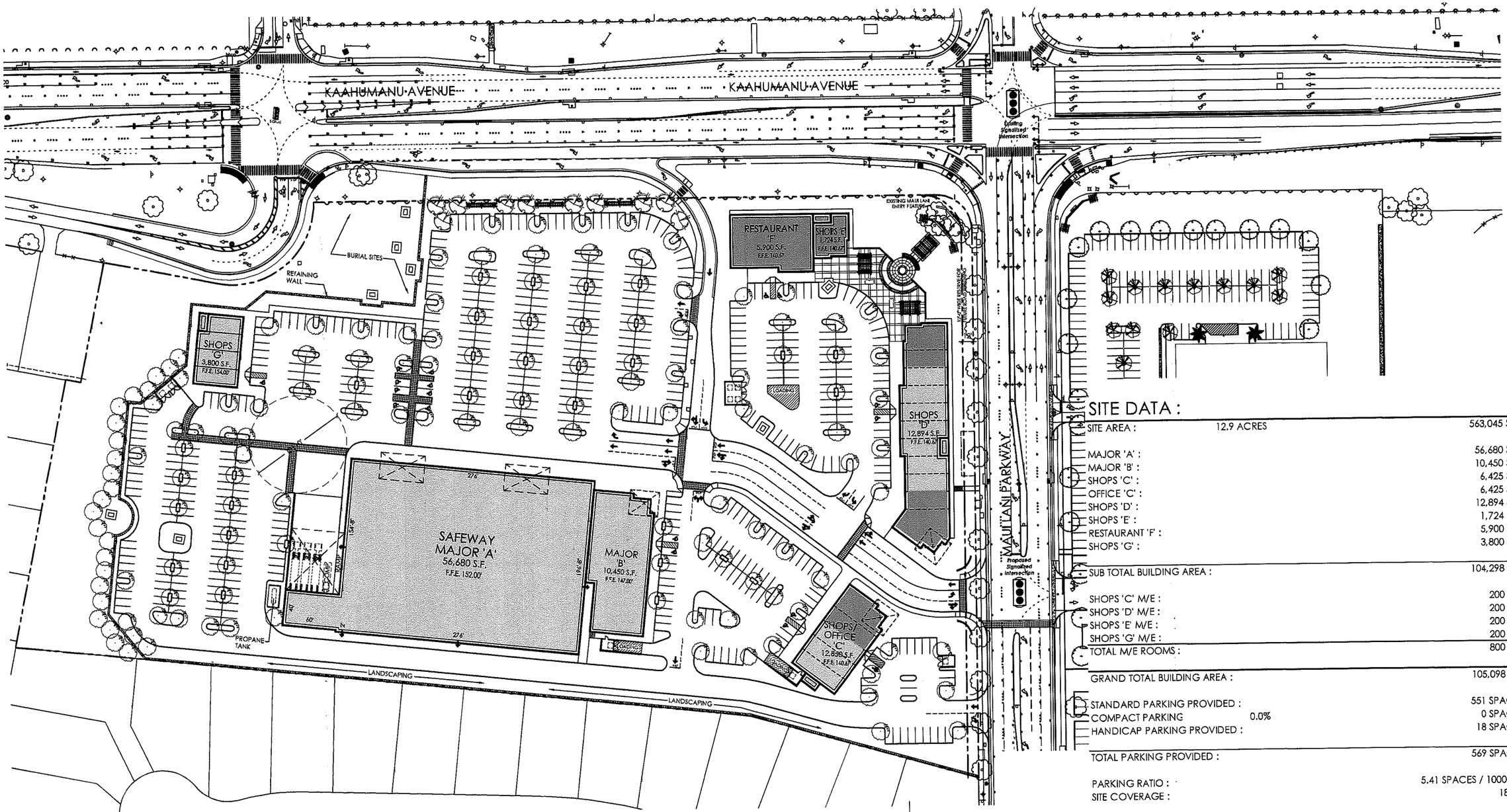
It is HEREBY CERTIFIED that RESOLUTION NO. 08-73 was adopted by the Council of the County of Maui, State of Hawaii, on the 22nd day of August, 2008, by the following vote:

MEMBERS	G. Riki HOKAMA Chair	Dennis A. MATEO Vice-Chair	Michelle ANDERSON	Gladys C. BAISA	Jo Anne JOHNSON	William J. MEDEIROS	Michael J. MOLINA	Joseph PONTANILLA	Michael P. VICTORINO
ROLL CALL	Aye	Aye	Excused	Aye	Aye	Aye	Aye	Aye	Aye

COUNTY CLERK

APPENDIX B.

Preliminary Site and Architectural Plans



SITE DATA :

SITE AREA :	12.9 ACRES	563,045 S.F.
MAJOR 'A' :		56,680 S.F.
MAJOR 'B' :		10,450 S.F.
SHOPS 'C' :		6,425 S.F.
OFFICE 'C' :		6,425 S.F.
SHOPS 'D' :		12,894 S.F.
SHOPS 'E' :		1,724 S.F.
RESTAURANT 'F' :		5,900 S.F.
SHOPS 'G' :		3,800 S.F.
SUB TOTAL BUILDING AREA :		104,298 S.F.
SHOPS 'C' M/E :		200 S.F.
SHOPS 'D' M/E :		200 S.F.
SHOPS 'E' M/E :		200 S.F.
SHOPS 'G' M/E :		200 S.F.
TOTAL M/E ROOMS :		800 S.F.
GRAND TOTAL BUILDING AREA :		105,098 S.F.
STANDARD PARKING PROVIDED :		551 SPACES
COMPACT PARKING	0.0%	0 SPACES
HANDICAP PARKING PROVIDED :		18 SPACES
TOTAL PARKING PROVIDED :		569 SPACES
PARKING RATIO :		5.41 SPACES / 1000 S.F.
SITE COVERAGE :		18.7%

SITE PLAN

SCALE: 1" = 50'

0 50' 100'

50' 25'

Revised: March 9, 2010
January 25, 2010

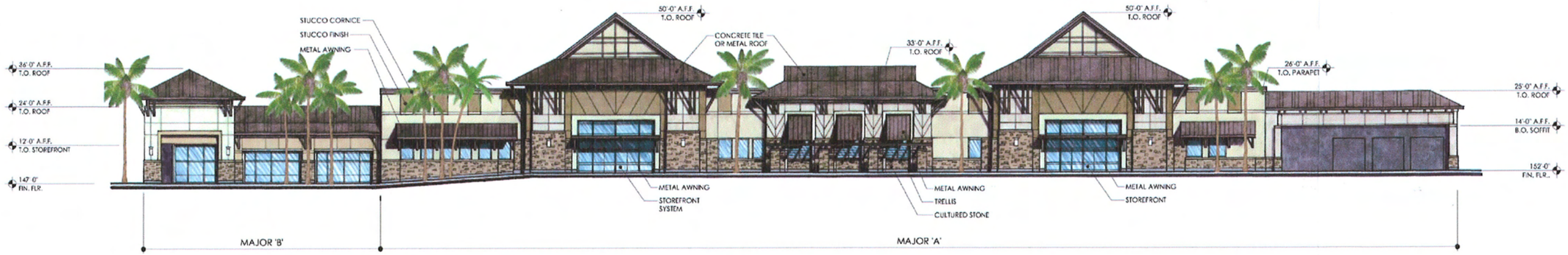
HRT, LTD.
3660 Waialae Ave. Suite 400
Honolulu, Hawaii 96816
Tel : (808) 924 - 1000
Fax : (808) 922 - 3975

Maui Lani Center

Wailuku, Maui, Hawaii

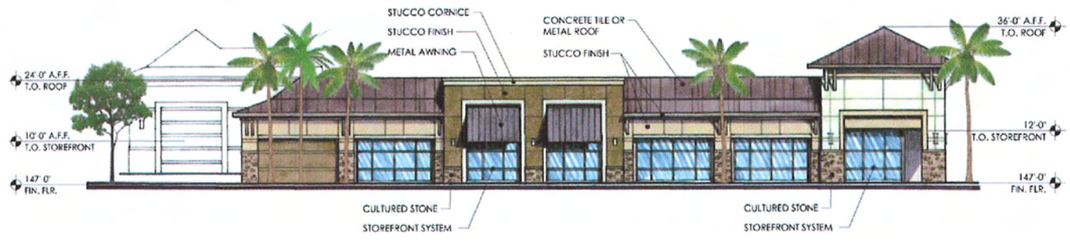
BENNER STANGE ASSOCIATES
ARCHITECTS, INC.
5200 S.W. MEADOWS RD.
SUITE B-130
LAKE OSWEGO, OR 97035
(503) 670-0234
FAX (503) 670-0235
bsa@bsaarch.com
BSAA
ARCHITECTURE & PLANNING

F:\24141 Maui Lani\Site Development\4141sd78.dwg



MAJOR 'A' & 'B' NORTH ELEVATION

SCALE: 1/16" = 1'-0"

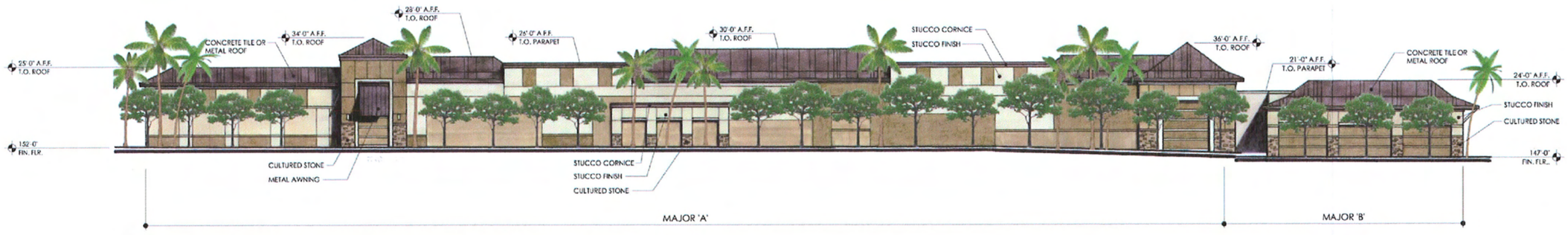


MAJOR 'B' EAST ELEVATION

SCALE: 1/16" = 1'-0"

MAJOR 'A' WEST ELEVATION

SCALE: 1/16" = 1'-0"



MAJOR 'A' & 'B' SOUTH ELEVATION

SCALE: 1/16" = 1'-0"

February 25, 2010

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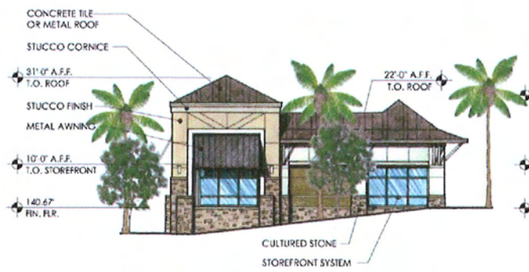
bsa@bsaarch.com
BSAA ARCHITECTURE & PLANNING

DR 2



SHOPS 'C'
NORTH ELEVATION

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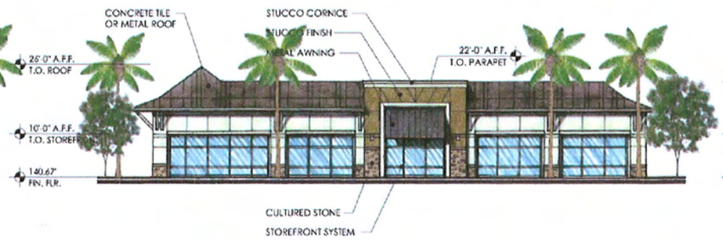

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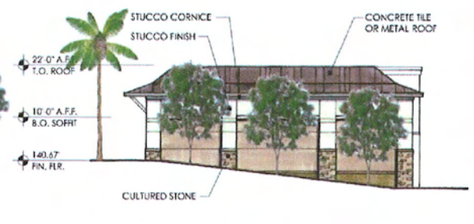

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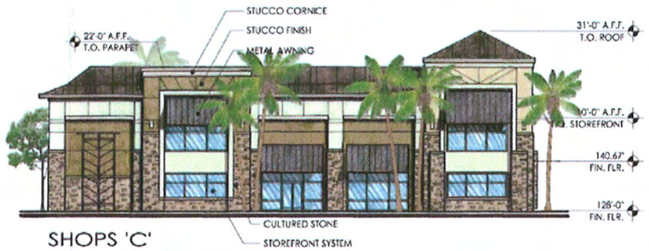

SHOPS 'C'
EAST ELEVATION

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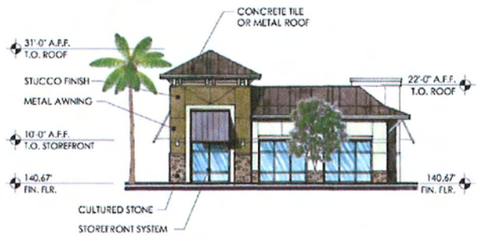

SHOPS 'D'
NORTH ELEVATION

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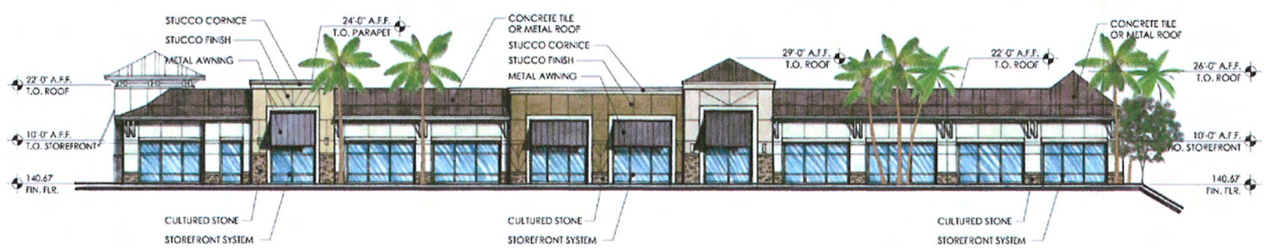

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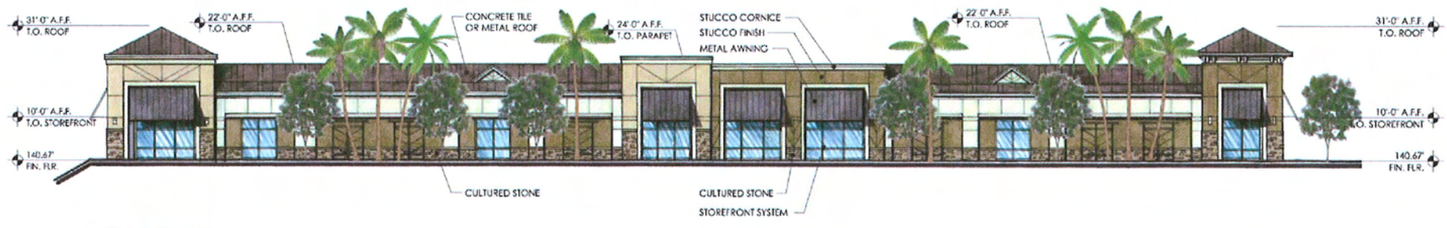

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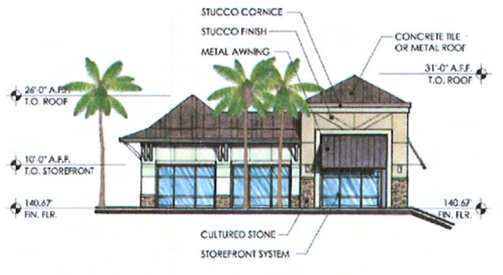

SHOPS 'D'
SOUTH ELEVATION

SCALE: 1/16" = 1'-0"

February 25, 2010

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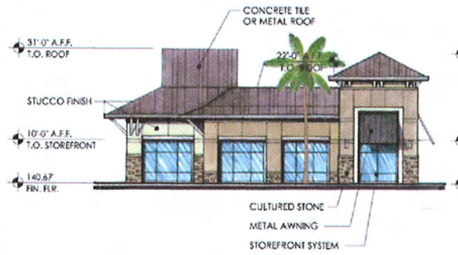

SHOPS 'E' & RESTAURANT 'F'
EAST ELEVATION

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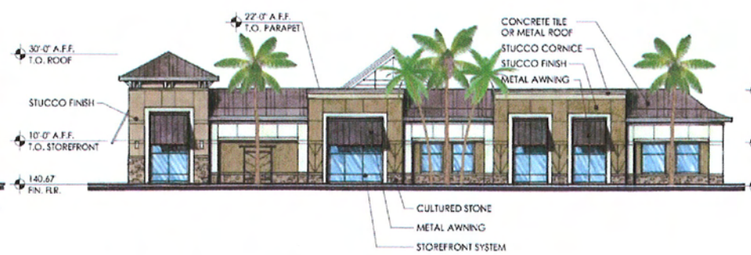

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NORTH ELEVATION

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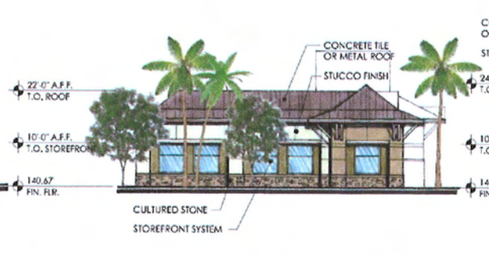
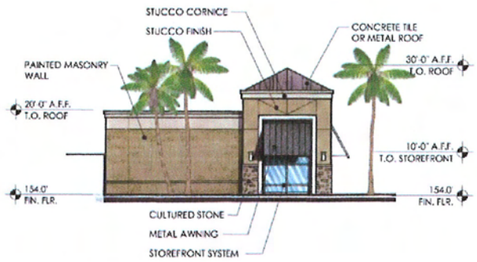


SHOPS 'E' & RESTAURANT 'F'
WEST ELEVATION

SCALE: 1/16" = 1'-0"

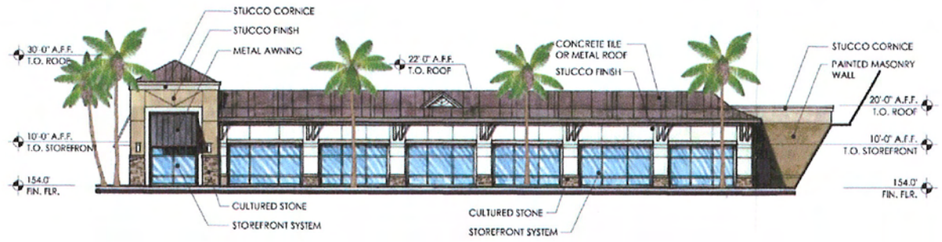
SHOPS 'E' & RESTAURANT 'F'
SOUTH ELEVATION

SCALE: 1/16" = 1'-0"



SHOPS 'G'
SOUTH ELEVATION

SCALE: 1/16" = 1'-0"



SHOPS 'G'
EAST ELEVATION

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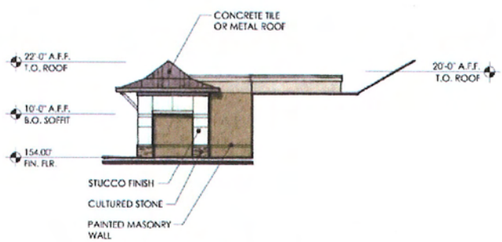

SHOPS 'G'
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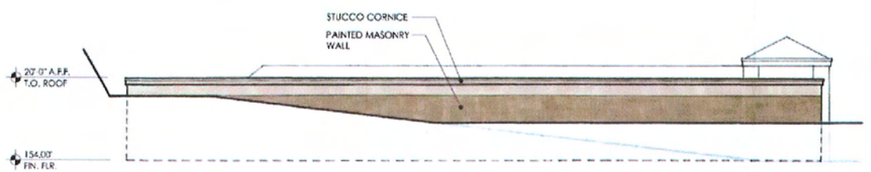

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DR 4

APPENDIX C.

Traffic Study Prepared by PB Americas, Inc.

TRAFFIC EVALUATION

Maui Lani Commercial

WAILUKU/KAHULUI, MAUI, HAWAII

August 2008
Revised August 2009

PB Americas, Inc.

Over a Century of Engineering Excellence

Traffic Evaluation

Maui Lani Commercial

Wailuku/Kahului, Maui, Hawaii

August 2008

Revised August 2009

Prepared For:

Sueda & Associates, Inc. AIA
905 Makahiki Way
Honolulu, Hawaii 96826

Prepared By:
PB Americas, Inc.
American Savings Bank Tower - Suite 2400
1001 Bishop Street
Honolulu, HI 96813
(808) 531-7094

PBQD Reference Number:

16419C

TABLE OF CONTENTS

Appendix

LIST OF FIGURES

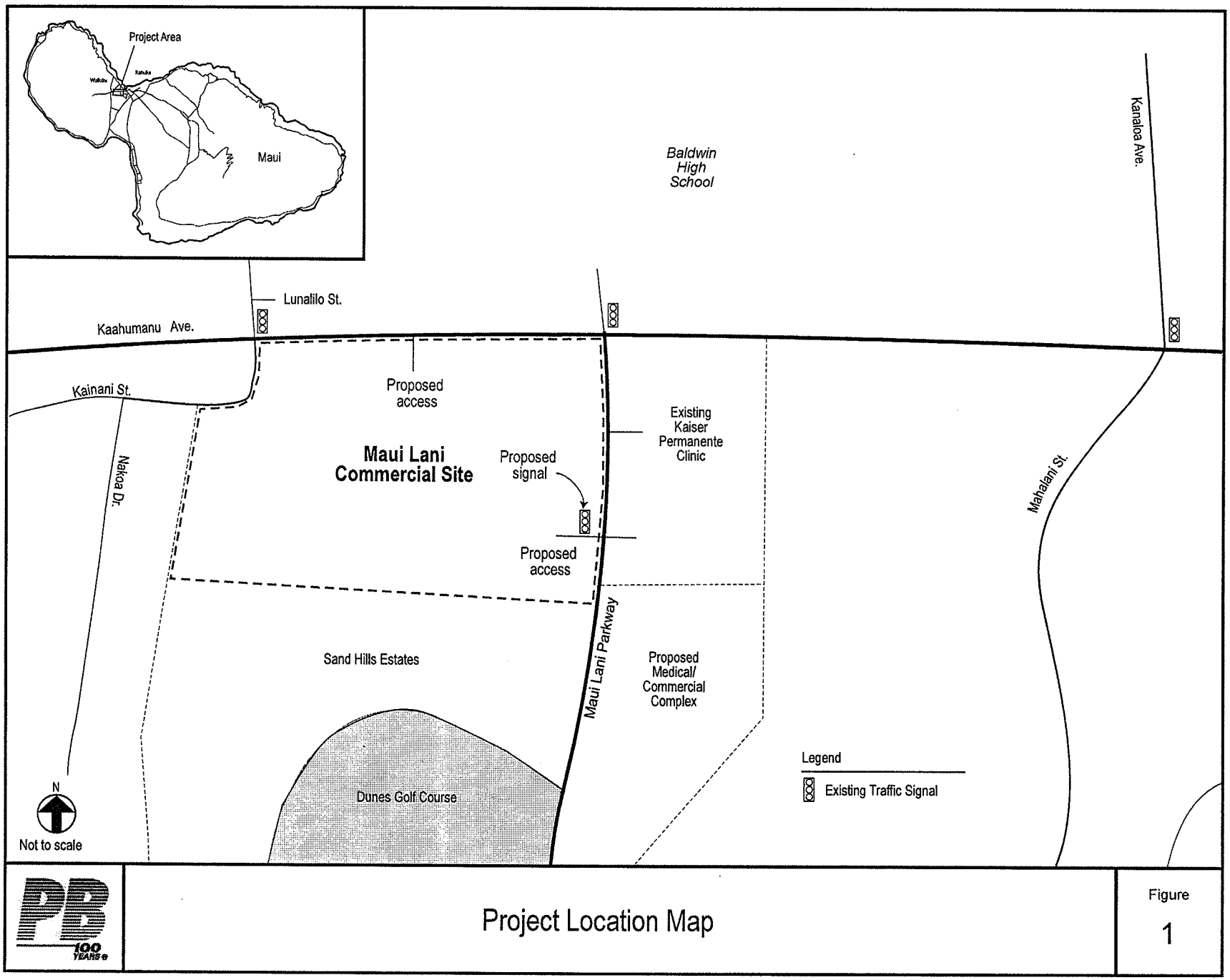
LIST OF TABLES

I. INTRODUCTION

HRT, Ltd. is proposing to develop a retail shopping center in Wailuku, Maui, Hawaii. The proposed development site is located adjacent to and south of Kaahumanu Avenue, between Kainani Street and Maui Lani Parkway. In this report, the proposed development is referred to as the Maui Lani Commercial Development. Figure 1 illustrates the project location.

The proposed shopping center will contain approximately 102,400 square feet of retail floor area, and will include a supermarket. Figure 2 illustrates a conceptual site plan of the development. A full-movement access to Maui Lani Parkway is located on the east side of the property. A right-in only access is also provided from Kaahumanu Avenue between Kainani Street and Maui Lani Parkway.

The purpose of this report is to document the data collected and the methodology used to conduct a traffic impact assessment of the proposed development. The assessment findings and recommendations are summarized.

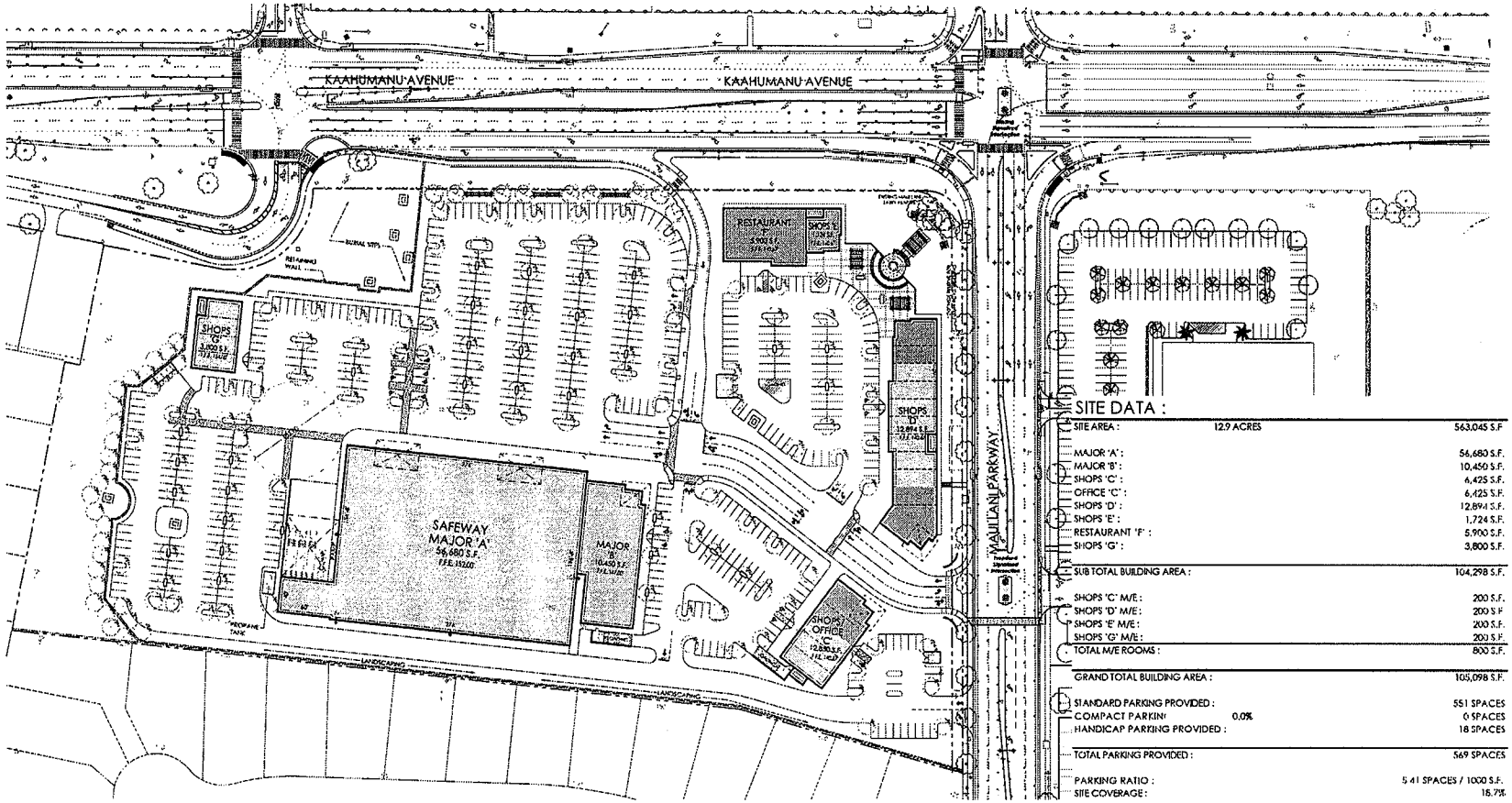


Project Location Map

Figure 1

PB Americas, Inc.

Maui Lani Commercial
August 2009



SITE DATA :

SITE AREA :	12.9 ACRES	563,045 S.F.
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TOTAL PARKING PROVIDED :		569 SPACES
PARKING RATIO :		5.41 SPACES / 1000 S.F.
SITE COVERAGE :		18.7%

N

Not to scale

Conceptual Site Plan

Figure 2

II. EXISTING CONDITIONS

A. Existing Land Use

The proposed Maui Lani Commercial site is currently vacant and is located within the Maui Lani Planned Development. The Sand Hill Estates single-family residential development is currently being constructed south of and adjacent to the proposed site. Across Maui Lani Parkway, to the east, is the recently opened Kaiser Medical Clinic. Baldwin High School is located across Kaahumanu Avenue from the proposed development.

B. Existing Roadway System

1. Existing Roadways

The project site is bordered by three roadways to the north, east, and west:

- Kaahumanu Avenue
- Maui Lani Parkway
- Kainani Street

a) Kaahumanu Avenue

Kaahumanu Avenue is a principal arterial roadway that provides east-west mobility between Wailuku and Kahului. In the vicinity of the proposed development site, Kaahumanu is a four-lane, divided roadway with a raised median. Exclusive left-turn lanes are provided in the median of Kaahumanu Avenue and right-turn acceleration lanes are provided at selected access locations. The posted speed limit within the project vicinity is 45 mph.

Between Wailuku and Kahului, signalized intersections occur at Kainani Street/Lunalilo Street, Maui Lani Parkway, Mahalani Street/Kanaloa Avenue, Papa Avenue, Wakea Avenue, Kahului Beach Road/Kane Street, Lono Avenue, Puunene Avenue, and Kamehameha Avenue.

b) Maui Lani Parkway

Maui Lani Parkway is a four-lane, divided roadway that is currently completed between Kaahumanu Avenue and Waiinu Road. This segment is an initial phase of a roadway that will eventually extend to Kuihelani Highway, providing an alternative route to Kaahumanu Avenue. In its current configuration, it already provides an alternative path to the High Street/Main Street route through Wailuku Town for vehicles traveling between areas located south of Wailuku and areas to the east of Wailuku. Maui Lani Parkway also provides alternative access into Mahalani Parkway, which serves a significant employment area including Maui Memorial Hospital.

Maui Lani Parkway meets Kaahumanu Avenue at a signalized intersection opposite the main Baldwin High School entrance.

c) Kainani Street

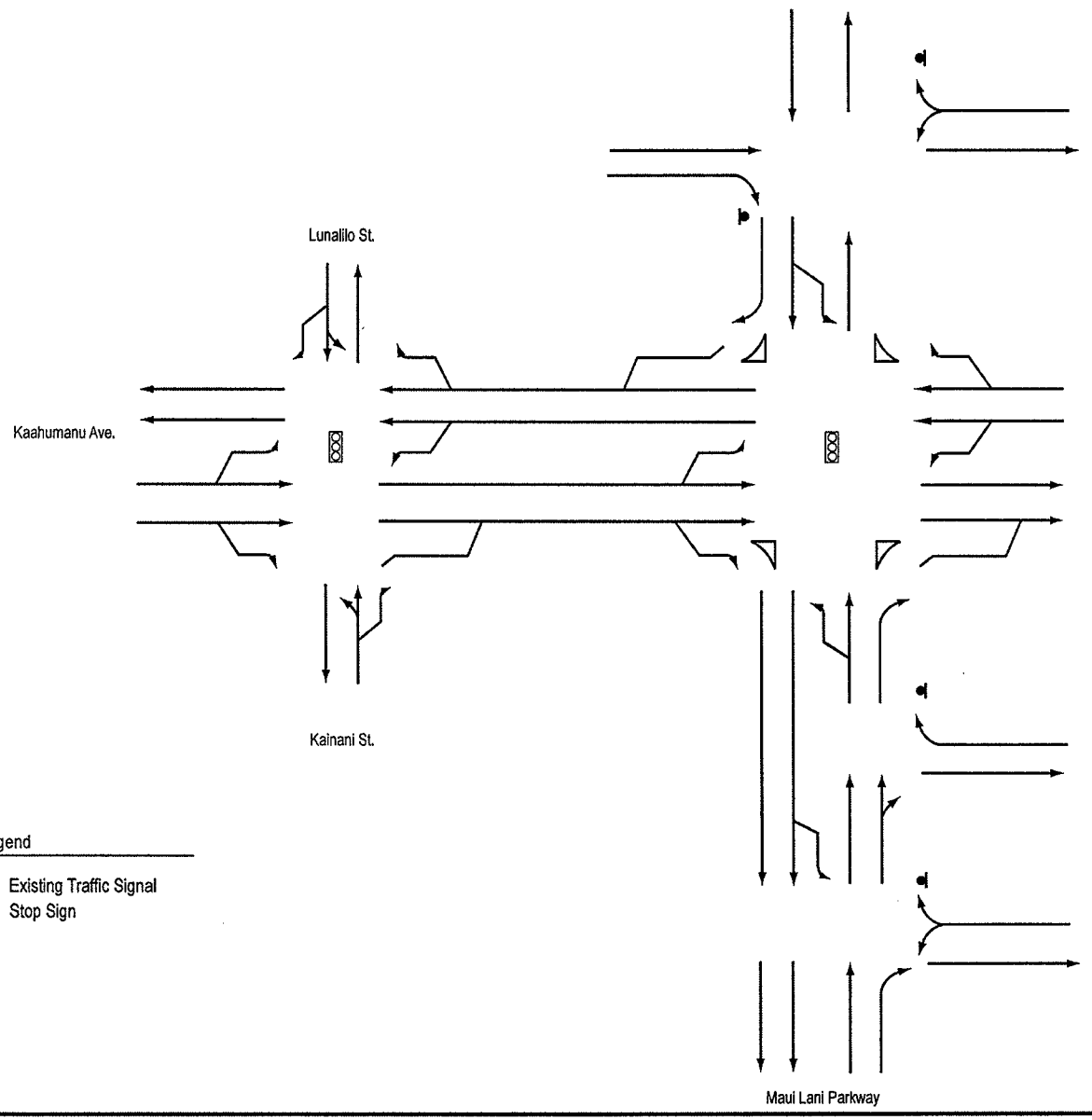
Kainani Street is a 2-lane, undivided collector roadway providing access to Kaahumanu Avenue from existing residential areas located primarily south of Kaahumanu and east of Waiale Road. Kainani Street intersects Kaahumanu Avenue opposite Lunalilo Street, which provides access to Kaahumanu Avenue for the Kanaloa Houselots subdivision.

2. Key Intersections

Figure 3 illustrates the existing lane configurations at key intersections within the study area.

a) Kaahumanu Avenue/Maui Lani Parkway

The Kaahumanu Avenue/Maui Lani Parkway intersection is signalized, with a cycle length of approximately 130 seconds during the AM peak period and 150 seconds during the PM peak period. Traffic signal phasing is configured to provide a separate phase for left-turn movements as follows: Kaahumanu Avenue left turns are protected only; Maui Lani Parkway/Baldwin High School left turns are protected-permitted. Exclusive right-turn lanes area provided on the Maui Lani Parkway and Baldwin High School driveway approaches, and acceleration lanes are provided on Kaahumanu Avenue for these movements. Deceleration lanes for right turns into Maui Lani Parkway and into Baldwin High School driveway are also provided.



Existing Lane Configurations

Figure 3

b) Kaahumanu Avenue/Kainani Street/Lunalilo Street

The Kaahumanu Avenue/Kainani Street/Lunalilo Street intersection is a signalized intersection. The Lunalilo approach is striped as shared left/through and right turn lanes. The Kainani Street approach is striped as one-lane approaches but is physically wide enough to accommodate simultaneous left-turn/through and right-turn movements. Field observations confirmed that drivers currently utilize the approaches in this manner.

c) Kaiser Access

The main Kaiser access is located on the Kahului side of Maui Lani Parkway. The access is configured as a shared left/right lane out of the parking lot. A left turn lane is provided for the southbound left turn into Kaiser. The east leg of the intersection is stop-controlled. A secondary right-in/right-out access is located just north of the main Kaiser access.

d) Baldwin Internal Intersection

An intersection is located immediately within Baldwin High School. The intersection consists of the Maui Lani Parkway access looping counterclockwise around the main parking lot past the auditorium before intersecting itself and proceeding in the Kahului direction to the secondary parking lot off of Mahalani. The loop road is one-way.

C. Existing Traffic Conditions

1. Peak Hour Traffic Volumes

Existing traffic volumes were collected on Kaahumanu Avenue at the Kainani Street and Maui Lani Parkway intersections. Parsons Brinckerhoff (PB) conducted peak period traffic turning movement counts at these intersections from Wednesday, April 23 to Thursday, April 24, 2008. The peak hours were found to be:

- AM Peak Hour – 7:15 AM to 8:15 AM
- Mid-day Peak Hour – 11:45 AM to 12:45 PM
- Afternoon School Peak Hour – 1:45 PM to 2:45 PM
- PM Peak Hour – 4:00 PM to 5:00 PM

Figure 4
Existing AM/PM Peak Hour Traffic Volumes
Kanaloa Ave.
Mahalani St.
Maui Lani Parkway
Lunalilo St.
Kaahumanu Ave.
Kainani St.
Nakoa Dr.
Baldwin High School
Existing Kaiser Permanente Clinic
Proposed Medical/ Commercial Complex
Proposed Access
Maui Lani Commercial Site
Sand Hills Estates
Dunes Golf Course
Legend
XXX (XXX) - AM (PM) Peak Hour Traffic Volumes
- Proposed Traffic Signal
64 (0)
58 (27)
144 (39)
57 (20)
210 (61)
27 (28)
458 (9)
7 (1)
335 (4)
141 (18)
856 (710)
165 (180)
131 (22)
40 (7)
128 (17)
72 (152)
169 (16)
29 (51)
181 (21)
579 (1050)
59 (32)
13 (27)
6 (0)
257 (192)
264 (219)
5 (51)
16 (23)
110 (85)
154 (134)
34 (15)
258 (141)
33 (23)
956 (698)
24 (57)
71 (51)
6 (4)
0 (2)
25 (35)
1 (1)
71 (28)
27 (46)
723 (1017)
2 (2)
N
Not to scale

Kanaloa Ave.
Mahalani St.
Baldwin High School
Existing Kaiser Permanente Clinic
Proposed Medical/ Commercial Complex
Maui Lani Parkway
Maui Lani Commercial Site
Sand Hills Estates
Dunes Golf Course
Lunalilo St.
Kaahumanu Ave.
Kainani St.
Nakoa Dr.
Legend
XXX (XXX) - Mid-Day (Afternoon) Peak Hour Traffic Volumes
Not to scale
N
Figure 5
Existing Mid-Day/Afternoon School Peak Hour Traffic Volumes

The existing AM and PM peak hour traffic volumes are shown in Figure 4. The existing mid-day and afternoon School peak hour traffic volumes are shown in Figure 5.

2. Intersection Operation Analysis

Using the peak hour traffic turning movement count data, intersection operations at the Kaahumanu Avenue/Kainani Street and Kaahumanu Avenue/Maui Lani Parkway intersections were evaluated using the methodologies for unsignalized and signalized intersections outlined in the 2000 Highway Capacity manual (HCM). Operating conditions at an intersection can be expressed as a qualitative index known as Level of Service (LOS) with letter designations ranging from A through F. LOS A represents operating conditions resulting in low vehicle delay while LOS F represents operating conditions with very long delays. Level of Service criteria is described in Appendix B. Synchro analysis worksheets are included in Appendix C.

The Synchro-generated existing peak hour levels of service are summarized in Table 1.

a) Kaahumanu Avenue/Maui Lani Parkway

During the intersection's peak hour (and especially close to 8:00 AM), the intersection processes a high volume of traffic. Baldwin High School's primary access is located at the north approach. The intersection was found to operate at an acceptable level overall. Eastbound and westbound movements between Wailuku and Kahului are given priority. As a result, the Kaahumanu Avenue through movements operate at LOS C or better.

During the AM peak period, east and westbound left turns operate at an acceptable LOS E, which is acceptable for a peak hour movement with a 150 second cycle length. The eastbound left turn into Baldwin High School is heavier than the westbound left, and vehicles have been observed to queue for this movement. Maui Lani Parkway left turns operate at LOS E, as does the northbound through movement into Baldwin High School. The northbound through movement into Baldwin was observed to have a very sharp peak that occurs between 7:45 AM and 8:00 AM. During this time, queues of up to 15-20 vehicles were observed at the northbound Maui Lani Parkway approach. During other time periods, this movement was very light. Overall, the intersection operates at LOS D during the AM Peak.

Table 1 Existing Peak Hour Intersection Levels of Service

EXISTING CONDITIONS	AM		Midday		Afternoon		PM	
	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay
Kaahumanu Ave/Maui Lani Pkwy	**D**	**35.8**	**B**	**18.1**	**C**	**28.4**	**C**	**22.2**
Kaahumanu Ave. EB Left	E	72.5	E	61.7	E	69.1	E	65.8
Kaahumanu Ave. EB Through	C	24.5	B	17.5	C	25.4	C	23.3
Kaahumanu Ave. EB Right	A	0.0	A	0.0	A	0.0	A	0.0
Kaahumanu Ave. WB Left	E	73.4	E	74.0	E	74.1	E	74.2
Kaahumanu Ave. WB Through	C	30.7	A	5.8	B	15.6	A	6.2
Kaahumanu Ave. WB Right	A	0.1	A	0.0	A	0.0	A	0.0
Maui Lani Pkwy NB Left	E	76.0	E	69.4	E	72.4	E	69.2
Maui Lani Pkwy NB Through	E	66.9	E	70.1	E	73.5	E	70.6
Maui Lani Pkwy NB Right	A	0.1	A	0.1	A	0.1	A	0.1
Baldwin SB Left	E	78.0	E	73.6	E	75.0	E	73.6
Baldwin SB Through	D	47.0	E	77.3	E	64.1	F	88.2
Baldwin Pkwy SB Right	A	0.1	A	0.0	A	0.1	A	0.0
Kaahumanu Ave/Kainani St	**A**	**8.5**	**B**	**12.2**	**B**	**14.6**	**A**	**9.0**
Kaahumanu Ave. EB Left	E	75.6	D	38.6	C	33.1	D	35.4
Kaahumanu Ave. EB Through	A	3.5	B	12.6	B	14.1	A	8.8
Kaahumanu Ave. EB Right	A	0.0	A	0.1	A	0.1	A	0.0
Kaahumanu Ave. WB Left	F	96.8	D	39.2	C	30.6	D	38.9
Kaahumanu Ave. WB Through	A	7.6	A	7.8	B	13.8	A	4.9
Kaahumanu Ave. WB Right	A	0.0	A	0.0	A	0.0	A	0.0
Kainani St. NB Left/Through	E	67.5	C	32.4	C	32.7	C	30.6
Kainani St. NB Right	A	0.1	A	0.0	A	0.0	A	0.0
Lunalilo St. SB Left/Through	E	71.5	C	25.5	C	26.0	C	32.4
Lunalilo St. SB Right	A	0.0	A	0.0	A	0.1	A	0.0
Kaiser Primary Access	**Unsignalized**		**Unsignalized**		**Unsignalized**		**Unsignalized**	
Maui Lani Access WB Left	B	15.0	B	12.1	B	12.6	B	12.2
Maui Lani Access WB Right	A	9.2	A	8.9	A	8.8	A	9.0
Maui Lani Pkwy SB Left	A	8.2	A	7.7	A	7.7	A	7.7

Delay Expressed in Seconds per Vehicle

Traffic in and out of Baldwin is significantly lower during the Mid-Day peak hour. This allows more green time to be provided for the Kaahumanu through movements. Overall, the intersection operates at LOS B during the Mid-Day Peak.

The afternoon peak coincides with adjournment of school and is characterized by a sharp spike in traffic volumes. The intersection operates at LOS C, with heavy movements in and out of Baldwin. The school peak is more intense than the PM commuter peak. Kaahumanu through movements operate at LOS C or better. Most of the queuing associated with this peak occurs within the Baldwin property. Maui Lani turning movements operate at LOS E or better. However, queuing does periodically occur in the Kahului-bound direction but is not persistent throughout the entire peak hour.

During the PM peak hour, the intersection operated at a LOS C with a lower delay than during the afternoon peak. Kaahumanu Avenue left turns operate at LOS E. This delay is caused by relatively long signal cycle length and the priority given to the Kaahumanu Avenue through movements. The cycle length during the PM peak is 150 seconds. The Baldwin southbound through operates at LOS F, but is still acceptable. Only 7 vehicles make this movement, so the delay is caused due primarily to the cycle length. All other minor street through movements operate at LOS E or better.

b) Kaahumanu Avenue/Kainani Street

The intersection of Kaahumanu Avenue and Kainani Street operates at LOS B or better overall during all four peak periods. The westbound Kaahumanu Avenue left turn operates at LOS F during the AM peak primarily due to signal delay. During the all other peak hours, Kaahumanu left turns operate at LOS E. This is primarily due to low volumes and long cycle length, which result in a high delay per vehicle despite the movement clearing completely every cycle. Likewise, the northbound and southbound left/through movements operate at LOS E as well.

The intersection operates at LOS B or better with no movement operating worse than LOS D during the mid-day, afternoon, and PM peak hours.

c) Maui Lani Parkway/Kaiser Access

Movements into and out of the main Kaiser access operate at LOS B or better during all peak periods. The same can be said for the secondary Kaiser access.

d) Baldwin Internal Intersection

The Baldwin internal intersection experiences sharp spikes in traffic demand during the AM peak and the afternoon school peak. During times of high demand, the main gate is partially closed, preventing the southbound through movement. Vehicles must then use the circulator road around the main parking lot to exit the campus. Demand on this circulator road is heavy during both the AM and afternoon peaks. However, the afternoon peak hour is much more concentrated than the AM and as a result this approach can queue for two lanes around the parking lot and in front of the auditorium.

During the mid-day and PM peaks, the amount of traffic processed through this intersection is much lower than during the AM and afternoon peak hours.

III. PROJECTED 2020 WITHOUT PROJECT

A. Year 2020 Background Traffic

The pattern of traffic in the vicinity of the proposed Maui Lani commercial development is expected to change in the future. Projected roadway network changes include the completion of Maui Lani Parkway (between Waiinu Street and Kuihelani Highway), the extension of Kuikahi Drive (between Waiale Road and Maui Lani Parkway), the extension of Onehee Avenue (to connect to Maui Lani Parkway), and the extension of Kamehameha Avenue (to connect to Maui Lani Parkway). These improvements are expected to provide alternate routes for traffic currently using Kaahumanu Avenue, Waiale Road, and Papa Avenue. The forecasted background volume takes this added connectivity into account as well as the buildout of the Maui Lani Development and other major developments like Kehalani and Kehalani Mauka.

The added connectivity provided by Maui Lani Parkway is expected to provide an alternative route for Kaahumanu Avenue, moderating the amount of traffic volume growth there. Consequently, traffic volumes on Maui Lani Parkway and turning movements at the Kaahumanu Avenue/Maui Lani Parkway intersection are much higher than the existing condition.

Traffic turning volumes for the projected year 2020 traffic without the proposed Maui Lani Commercial Development are shown in Figures 6 and 7. As previously discussed Maui Lani Parkway's connectivity is expected to lead to an increase in Maui Lani Parkway volume, and turns to and from Kaahumanu to Maui Lani is expected to increase. Baldwin High School-related volumes are assumed to remain stable.

Figure 6
Projected 2020 AM/PM Peak Hour Traffic Volumes Without Project
Legend
XXX (XXX) - AM (PM) Peak Hour Traffic Volumes
Kanaloa Ave.
Mahalani St.
Maui Lani Parkway
Baldwin High School
Existing Kaiser Permanente Clinic
Proposed Medical/ Commercial Complex
Sand Hills Estates
Dunes Golf Course
Lunalilo St.
Kaahumanu Ave.
Kainani St.
Nakoa Dr.
13 (27)
6 (0)
592 (575)
605 (596)
214 (22)
958 (859)
333 (403)
243 (369)
220 (19)
142 (214)
5 (51)
16 (23)
34 (15)
593 (524)
110 (85)
495 (551)
191 (27)
56 (8)
200 (21)
233 (25)
727 (1270)
216 (185)
1300 (1094)
627 (539)
605 (596)
1176 (1480)
33 (23)
1243 (1014)
24 (57)
71 (51)
6 (2)
0 (4)
25 (35)
1 (1)
71 (28)
27 (46)
1080 (1394)
2 (2)
N
Not to scale

Figure 7

Projected 2020 Mid-Day/Afternoon School Peak Hour Traffic Volumes Without Project

B. Traffic Operations Evaluation

Projected Year 2020 intersection traffic operations without the proposed Maui Lani Commercial Development were evaluated for intersections adjacent to the project site. The results of these analyses are summarized in Table 2.

The Kaiser driveway is projected to satisfy the peak hour signal warrant during the PM peak hour and was therefore analyzed as a signalized intersection.

Within the Year 2020 time frame, Maui Lani Parkway would be continuous between Kaahumanu Avenue and Kuihelani Highway, serving to relieve Kaahumanu Avenue as planned in the Maui Long-Range Land Transportation Plan and the Maui Lani Roadway Master Plan.

This leads to increased turn movements between Kaahumanu Avenue and Maui Lani Parkway. One of the turn movements so affected is at the northbound approach to the intersection. The increase in this volume suggests that the northbound and southbound left turns be protected.

1. Kaahumanu Avenue/Maui Lani Parkway

As previously discussed, the continuity of Maui Lani Parkway between Kaahumanu Avenue and Kuihelani Highway is expected to increase turn movements between the Kaahumanu Avenue and Maui Lani Parkway. Movements most affected are the northbound Maui Lani left and right turns, the eastbound Kaahumanu right turns, and westbound Kaahumanu left turns. A second left turn lane was added to accommodate the forecasted increase in westbound left turn demand. Also, the southbound departure will have two receiving lanes to allow this movement. This diversion is beneficial to Kaahumanu Avenue as it reduces the traffic volumes to the east, where operations on Kaahumanu Avenue are most congested.

Table 2 Projected 2020 Peak Hour Levels of Service Without Project

YEAR 2020 WITHOUT PROJECT	AM		Midday		Afternoon		PM	
	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay
Kaahumanu Ave/Maui Lani Pkwy	**D**	**43.0**	**C**	**21.9**	**C**	**30.9**	**D**	**44.2**
Kaahumanu Ave. EB Left	E	76.3	E	60.2	E	68.9	E	65.0
Kaahumanu Ave. EB Through	D	48.3	C	28.0	D	43.7	E	72.8
Kaahumanu Ave. EB Right	A	0.2	A	0.0	A	0.0	A	0.1
Kaahumanu Ave. WB Left	E	62.9	E	61.4	D	51.4	D	53.9
Kaahumanu Ave. WB Through	D	46.4	A	6.1	B	16.6	B	10.9
Kaahumanu Ave. WB Right	A	0.2	A	0.0	A	0.0	A	0.0
Maui Lani Pkwy NB Left	E	61.0	E	69.7	E	72.6	F	103.3
Maui Lani Pkwy NB Through	E	69.0	E	69.8	E	73.5	E	59.8
Maui Lani Pkwy NB Right	A	0.2	A	0.3	A	0.2	A	0.4
Baldwin SB Left	E	78.6	E	73.4	E	75.0	E	75.6
Baldwin SB Through	E	55.1	E	77.3	E	64.7	F	91.3
Baldwin Pkwy SB Right	A	0.2	A	0.0	A	0.1	A	0.0
Kaahumanu Ave/Kainani St	**A**	**5.6**	**B**	**12.3**	**B**	**16.4**	**B**	**10.8**
Kaahumanu Ave. EB Left	E	75.6	D	38.6	C	33.1	D	35.4
Kaahumanu Ave. EB Through	A	4.2	B	13.0	B	14.3	B	11.4
Kaahumanu Ave. EB Right	A	0.0	A	0.1	A	0.1	A	0.0
Kaahumanu Ave. WB Left	F	102.8	D	39.1	C	32.7	C	34.4
Kaahumanu Ave. WB Through	A	2.6	A	8.0	B	17.9	A	7.7
Kaahumanu Ave. WB Right	A	0.0	A	0.0	A	0.0	A	0.0
Kainani St. NB Left/Through	E	67.5	C	33.0	C	32.7	C	30.6
Kainani St. NB Right	A	0.1	A	0.0	A	0.0	A	0.0
Lunalilo St. SB Left/Through	E	71.5	C	25.7	C	26.0	C	32.4
Lunalilo St. SB Right	A	0.1	A	0.0	A	0.1	A	0.0
Kaiser Primary Access	**Unsignalized**		**Unsignalized**		**Unsignalized**		**Unsignalized**	
Maui Lani Access WB Left	D	30.0	C	15.4	B	13.5	D	25.8
Maui Lani Access WB Right	B	10.5	A	9.4	A	8.8	B	10.6
Maui Lani Pkwy SB Left	A	9.6	A	8.2	A	7.7	A	9.0

Delay Expressed in Seconds per Vehicle

Even with the increased turning movements as well as projected increase in through movement on Kaahumanu Avenue, the intersection is projected to operate at overall LOS D during the AM peak hour. Kaahumanu Avenue through movements are projected to

operate at a LOS D while turn movements operate at LOS E, acceptable for peak hour operation. The Baldwin exit AM left turn is projected to operate at LOS E.

During the Mid-Day peak hour, traffic in and out of Baldwin is projected to be light. This allows more green time to be provided for the Kaahumanu through movements. Overall, the intersection is projected to operate at LOS C during the Mid-Day Peak.

During the afternoon peak hour, the intersection is projected to operate at LOS C overall, with heavy movements in and out of Baldwin. Turn movements operate at LOS E or better while Kaahumanu through movements operate at LOS D or better. Most of the queuing associated with this peak occurs within the Baldwin property. As with the existing afternoon peak, queuing is projected to occur periodically in the Kahului-bound direction.

During the PM peak, the Kaahumanu Avenue/Maui Lani Parkway intersection is projected to operate at LOS D overall even with increased turn movements due to regional diversion into Maui Lani Parkway. The eastbound through is projected to operate at LOS E due to the increase in traffic flow. The northbound left is projected to operate at LOS F due to the increased regional traffic. The southbound left out of Baldwin High School is projected to operate at LOS F due to signal delay. All other selected movements are projected to operate at LOS E, mostly due to the priority allocated to the Kaahumanu Avenue through movement and the relatively long signal cycle length.

2. Kaahumanu Avenue/Kainani Street

The Kaahumanu Avenue/Kainani Street intersection is projected to operate at an overall LOS A during AM peak hour. The Kaahumanu westbound left turn is projected to operate at LOS F primarily due to signal delay, while the Kaahumanu eastbound left turn and Kainani movements are projected to operate at LOS E or better.

The intersection is projected to operate at LOS B or better during the mid-day, afternoon, and PM peak hours.

3. Primary Kaiser Access

The Maui Lani Parkway/Kaiser Driveway intersection is projected to warrant signalization, and is projected to operate at LOS D or better for all movements.

IV. PROJECTED 2020 WITH PROJECT

The travel demand for the Maui Lani commercial development was estimated using the process of trip generation, trip distribution, and trip assignment. This travel demand was then combined with the background traffic (traffic without proposed Maui Lani Commercial Development), and projected Year 2020 intersection operations were evaluated.

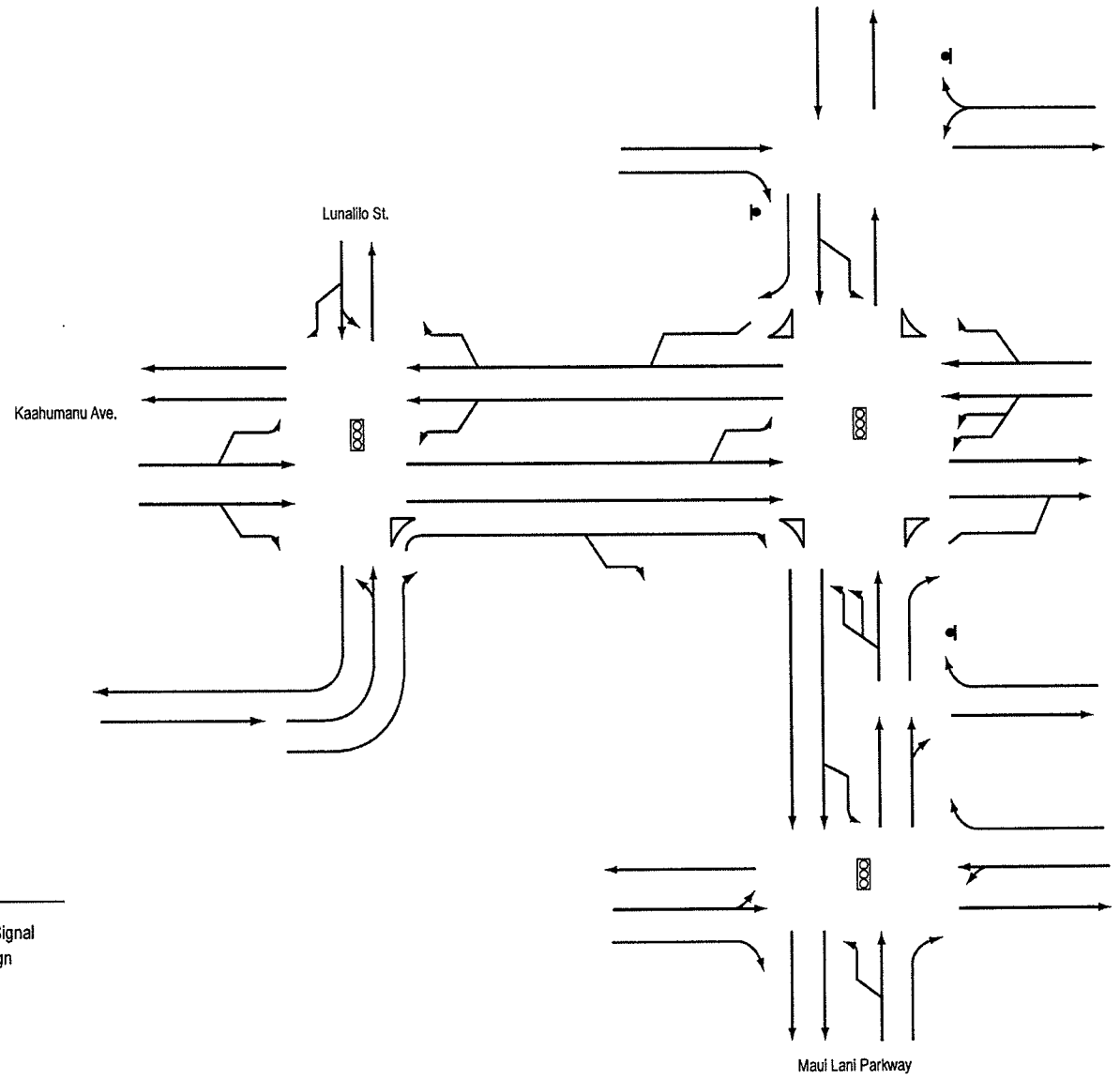
As was discussed in the 2020 without project scenario, major changes to the roadway network are expected to be implemented by 2020. Projected changes to the roadways in the immediate vicinity of the project site are shown in Figure 8.

In addition to changes to the roadway network, modifications are projected to be necessary at the Kaahumanu Avenue/Maui Lani Parkway intersection. As discussed in the without project scenario, protected Maui Lani Parkway left turns are recommended. In addition, a double northbound Maui Lani Parkway left turn lane scenario was analyzed. Implementing fully-protected left turns would remove the direct conflict between pedestrian traffic and Maui Lani Parkway left turn movements, particularly during the AM and afternoon peaks.

A. Project Site Access

The project site plan is shown in Figure 2. The site is accessed from Kaahumanu Avenue, and Maui Lani Parkway. The Maui Lani access is projected to be a full-movement, signalized intersection. Ingress from Kaahumanu Avenue will occur via a right-in only access. An auxiliary lane between Kainani Street and Maui Lani Parkway is proposed as well as a deceleration lane into the project site as shown in Figure 2.

Previously, an access was proposed from the project site to Kainani Street. Various alternatives were discussed, including a full-movement intersection, a restricted-movement intersection, and finally a right-out only. However, Maui County has disallowed the Kainani Street access, leaving Maui Lani Parkway as the only egress.



Projected 2020 Lane Configurations

Figure 8

B. Travel Demand Estimation

1. Trip Generation

Vehicular trips generated by the proposed Maui Lani Commercial Development were estimated using trip generation relationships documented in the Institute of Transportation Engineers publication, Trip Generation, 8th Edition. Table 3 summarizes the estimated vehicle trips for the AM and Mid-Day/Afternoon/PM peak hours.

As shown in Table 3, the Maui Lani Commercial Development proposes to construct approximately 102,400 square feet of retail.

Table 3 Maui Lani Commercial Trip Generation

Commercial Development Pads	Intensity		Weekday AM Peak			Weekday PM Peak		
			Enter	Exit	Total	Enter	Exit	Total
Major A	56,680	SF	53	34	86	175	182	358
Major B	10,450	SF	10	6	16	32	34	66
Shops C (Upper)	5,120	SF	5	3	8	16	16	32
Shops C (Lower)	5,000	SF	5	3	8	15	16	32
Shops D	12,950	SF	12	8	20	40	42	82
Shops E	7,200	SF	7	4	11	22	23	45
Shops F	5,000	SF	5	3	8	15	16	32
Total	102,400	SF	95	61	156	317	330	646

Note: Retail trip generation equations as documented in Trip Generation, 8th Edition. Volumes expressed as vehicles per hour. SF=floor area in square feet

1. Trip Distribution

Because the proposed Maui Lani Commercial Development is primarily retail, trips to and from the development were projected to be heavily oriented toward the immediate surrounding residential areas. Market data obtained from Safeway were used in conjunction with year 2000 census data and projections of future population contained in the Maui County Community Plan Update Program: Socio-Economic Forecast, to determine the project's trip directional distribution. The distribution is shown in Table 4.

Table 4 Maui Lani Commercial Trip Distribution

Direction	Percent
North via Lunalilo	5.0%
South via Maui Lani	54.0%
East Kaahumanu	33.0%
West via Kaahumanu	6.0%
West via Kainani	2.0%

The most dominant movement for the future time frame is to the south. This acknowledges future development of Maui Lani, Kehalani, and other developments in Waikapu and parts of Wailuku. The eastern distribution is smaller because of competing grocery stores (including another Safeway) to the east in Kahului. The western distribution consists primarily of Wailuku, while northern distribution consists of Waiehu and Waihee.

2. Project Generated Traffic Assignment

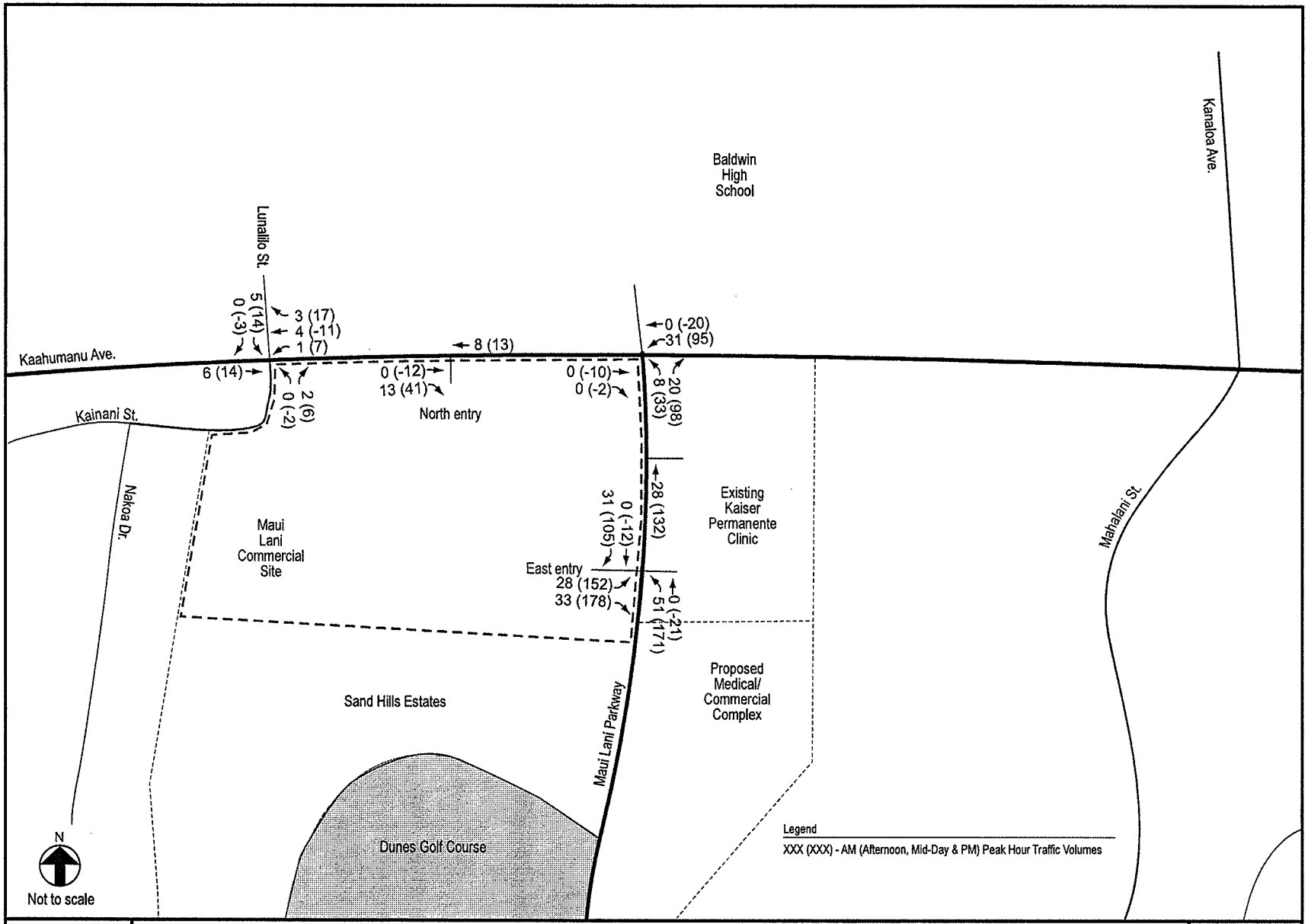
Using the trip distribution shown in Table 4, the project-generated traffic was assigned to the roadway system assumed to be in place in 2020. Figure 9 shows the Maui Lani Commercial Development trip generated volumes for the AM and mid-day/afternoon School/PM peak hours.

3. Background Traffic Volumes

The 2020 'Without Project' traffic volumes shown in Figures 6 and 7 were used to represent the 2020 background traffic. Trips generated by surrounding development including the rest of Maui Lani and Kehalani are included in the background traffic volumes.

4. Total Traffic Assignment

Project-generated traffic assignment and the background traffic were combined to produce total traffic assignments.



Project-Generated Traffic Volumes

Figure 9

PB Americas, Inc.

Maui Lani Commercial
August 2009

Figure 10 illustrates the projected total Year 2020 volumes with Maui Lani Commercial Development during the AM and PM peak hours. Figure 11 illustrates the projected total Year 2020 volumes with Maui Lani Commercial Development during the mid-day and afternoon peak hours.

C. Traffic Operations Evaluation

Projected traffic operations for the scenario with the Maui Lani Commercial Development were evaluated using signalized and unsignalized methodologies documented in the 2000 Highway Capacity Manual. The results of this analysis are shown in Tables 5-7 for the with-project conditions.

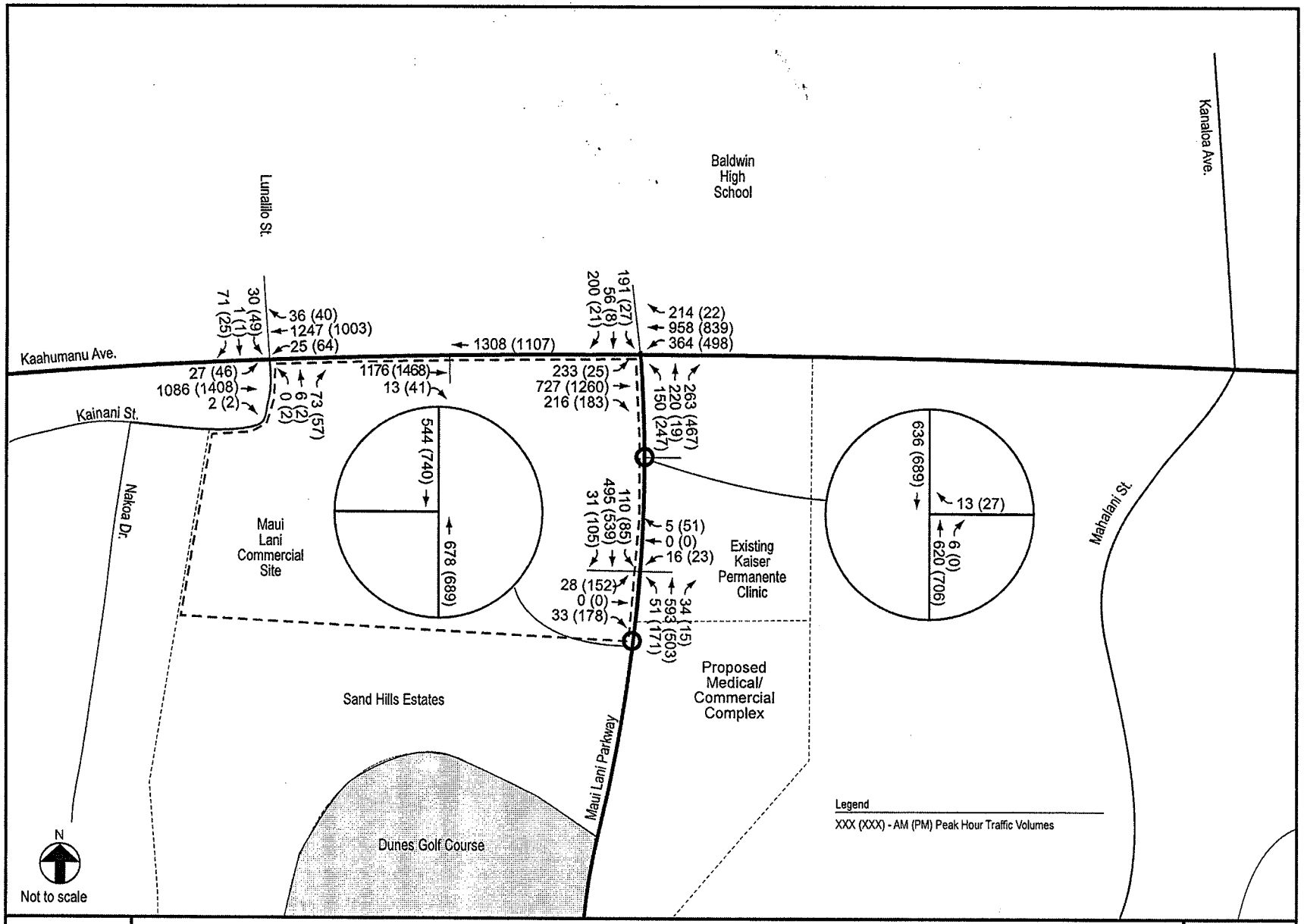
Simtraffic was used to verify the traffic operations. Running this simulation allows for a graphical representation of the traffic data, allowing future operations to be analyzed qualitatively as well as quantitatively. Summaries of the Simtraffic worksheets are included in Appendix C.

Table 5 shows the LOS for Kaahumanu Avenue & Kainani Street intersection, the Maui Lani Parkway Shopping Center Access, and the Kaiser Secondary Access. Double westbound and northbound left turn lanes were assumed at the adjacent intersection of Kaahumanu/Maui Lani intersection.

1. Kaahumanu Avenue/Kainani Street

As shown in Table 5, the Kaahumanu Avenue/Kainani Street intersection is projected to operate at LOS A during the AM peak hour with the proposed development. Kaahumanu Avenue through movements are projected to operate well, at LOS A. All left turn movements from all approaches are projected to operate at LOS E. The LOS E is caused by the cycle length.

The intersection operates at LOS B during the Mid-Day and Afternoon peaks. During the mid-day peak hour, the Kaahumanu Avenue left turn is projected to operate at LOS D. All other movements during the mid-day and afternoon peak hours are projected to operate at LOS C or better.



Projected 2020 AM/PM Peak Hour Traffic Volumes With Project

Figure 10

Kanaloa Ave.
Mahalani St.
Baldwin High School
Existing Kaiser Permanente Clinic
Proposed Medical/ Commercial Complex
Legend
XXX (XXX) - Mid-day (Afternoon) Peak Hour Traffic Volumes
Maui Lani Parkway
Lunalilo St.
Maui Lani Commercial Site
Sand Hills Estates
Dunes Golf Course
Kaahumanu Ave.
Kainani St.
Nakoa Dr.
N
Not to scale
Figure 11
Projected 2020 Mid-Day/Afternoon School Peak Hour Traffic Volumes with Project

Table 5 Comparison of Peak Hour Levels of Service

	AM		Midday		Afternoon		PM	
	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay
Kaahumanu Ave/Kainani St	**A**	**6.5**	**B**	**12.9**	**B**	**19.3**	**B**	**11.9**
Kaahumanu Ave. EB Left	E	75.6	C	38.6	C	33.1	C	35.4
Kaahumanu Ave. EB Through	A	4.5	B	14.6	B	14.9	B	12.7
Kaahumanu Ave. EB Right	A	0.0	A	0.1	A	0.1	A	0.0
Kaahumanu Ave. WB Left	E	58.2	D	36.0	C	26.8	C	29.3
Kaahumanu Ave. WB Through	A	4.5	A	8.0	C	24.9	A	9.0
Kaahumanu Ave. WB Right	A	0.0	A	0.0	A	0.1	A	0.0
Kainani St. NB Left/Through	E	67.3	C	32.9	C	32.9	C	29.8
Kainani St. NB Right	A	0.1	A	0.0	A	0.0	A	0.0
Lunalilo St. SB Left/Through	E	71.5	C	26.6	C	26.9	C	32.4
Lunalilo St. SB Right	A	0.1	A	0.0	A	0.1	A	0.0
Maui Lani Pkwy/Maui Lani Access	**A**	**7.6**	**B**	**12.4**	**B**	**13.1**	**B**	**14.8**
Shopping Center Access EB Left/Through	D	36.7	B	18.9	C	20.6	C	30.1
Shopping Center Access EB Right	B	15.6	A	6.4	A	7.1	B	10.2
Kaiser Entrance WB Left/Through	C	22.8	B	13.5	B	14.3	B	18.4
Kaiser Entrance WB Right	B	13.5	A	9.2	A	10.0	B	15.0
Maui Lani NB Left	B	19.4	B	13.8	B	14.7	B	19.1
Maui Lani NB Through/Right	A	5.6	A	6.1	A	8.8	A	7.2
Maui Lani SB Left	B	17.2	B	18.0	B	19.9	D	45.1
Maui Lani SB Through/Right	A	4.0	B	13.2	B	13.3	B	13.1
Maui Lani/Kaiser Secondary Access	**Unsignalized**		**Unsignalized**		**Unsignalized**		**Unsignalized**	
Kaiser WB Right	A	9.1	A	9.8	A	9.8	A	9.8

Delay Expressed in Seconds per Vehicle

During the PM peak, the Kaahumanu Avenue/Kainani Street intersection is projected to operate at LOS B with the proposed development. All movements are projected to operate at LOS C or better. This is expected to be a peak period of shopping center-related traffic.

2. Maui Lani Parkway Shopping Center Access

During the AM peak hour, the Maui Lani Parkway/Kaiser Driveway/Maui Lani Commercial Driveway intersection is projected to operate at LOS A overall, with each individual movement operating at LOS D or better. A sharp peak of traffic demand is projected just before school starts in the morning between 7:30 AM and 8:00 AM. During this peak, northbound traffic into Baldwin may negatively impact this intersection. However, both shopping center and Kaiser traffic is expected to be low during morning so this should not be an issue.

During the mid-day, afternoon, and PM peak hours, the intersection is projected to operate at LOS B overall as the shopping center-related traffic as well as Kaiser-related traffic increase throughout the day. All movements are projected to operate at LOS D or better.

Synchro analysis was performed during all peak hours to analyze the northbound queuing on Maui Lani Parkway. The longest queue occurred during the PM peak hour at 431 feet for the northbound single left scenario and 176 feet for the northbound double left scenario. For both scenarios, this queue will not reach the Shopping Center Access, which is approximately 450 feet south of the intersection. Synchro queue analysis worksheets can be found in Appendix D.

3. Kaahumanu Avenue Shopping Center Access

Due to the free movement nature of the right-in access from Kaahumanu Avenue, the movement is not projected to experience a delay, provide that the internal layout of the shopping center provides enough storage space to prevent vehicles from spilling onto Kaahumanu. In addition, the auxiliary lane between Kainani Street and Maui Lani would help to reduce weaving between shopping-center traffic and Kahului-bound traffic on Kaahumanu Avenue. Furthermore, because an additional deceleration lane would be

provided, weaving on Kaahumanu would only occur between vehicles traveling at one speed.

4. Kaahumanu Avenue/Maui Lani Parkway

Three future alternatives were considered at the Kaahumanu Avenue and Maui Lani Parkway intersection and analyzed through Synchro:

- Alternative 1 (existing configuration): Single westbound Kaahumanu Avenue left turn lane, single northbound Maui Lani Parkway left turn lane
- Alternative 2: Double westbound Kaahumanu Avenue left turn lanes, single northbound Maui Lani Parkway left turn lane
- Alternative 3: Double westbound Kaahumanu Avenue left turn lanes, double northbound Maui Lani Parkway left turn lanes

The second westbound land will be approximately 500 feet. The second northbound left turn lane will be approximately 275 feet, matching the existing single left turn lane. Table 6 compares the existing LOS with alternatives 1 and 2. Table 7 compares the existing LOS to alternatives 2 and 3.

During the AM peak hour, the Kaahumanu Avenue/Maui Lani Parkway intersection is projected to operate at LOS D overall all three scenarios. Eastbound and westbound through movements are projected to operate at LOS D or better with the proposed development. With a single westbound left turn lanes, this movement is projected to operate at LOS F. As shown in Table 6, adding a second westbound left turn lane improves the LOS to E. Adding a second northbound left turn lane is projected to have a minimal effect on the moment's delay during this peak period. All other street movements are projected to operate at E or better. Baldwin High School-related traffic demand is projected to be similar to existing.

During the mid-day peak, the school-related traffic volumes are expected remain light. The intersection is projected to operate at LOS C overall for all three scenarios. The northbound left is projected to operate at LOS F for both single northbound left scenarios. This movement improves to LOS E with the addition of a second left turn lane, as shown in Table 7. The eastbound through operates at LOS D for scenario 1 and LOS C for

scenarios 2 and 3. The westbound through operates at LOS A for all scenarios. Adding a second westbound left turn improves the LOS from E to D, as shown in Table 6.

Table 6 Comparison of Peak Hour Levels of Service at the Kaahumanu & Maui Lani Intersection

	EXISTING CONDITIONS		YEAR 2020 - NB LT, WB LT		YEAR 2020 - NB LT, WB 2LT	
AM PEAK HOUR	**LOS**	**Delay**	**LOS**	**Delay**	**LOS**	**Delay**
Kaahumanu Ave/Maui Lani Pkwy	**D**	**35.8**	**D**	**50.1**	**D**	**43.7**
Kaahumanu Ave. EB Left	E	72.5	E	72.5	E	72.5
Kaahumanu Ave. EB Through	C	24.5	D	41.3	C	31.4
Kaahumanu Ave. EB Right	A	0.0	D	42.5	C	31.4
Kaahumanu Ave. WB Left	E	73.4	F	110.4	E	70.1
Kaahumanu Ave. WB Through	C	30.7	D	43.8	D	43.8
Kaahumanu Ave. WB Right	A	0.1	C	32.6	C	32.6
Maui Lani Pkwy NB Left	E	76.0	E	69.8	E	69.8
Maui Lani Pkwy NB Through	E	66.9	E	73.6	E	73.6
Maui Lani Pkwy NB Right	A	0.1	A	0.3	A	0.3
Baldwin SB Left	E	78.0	E	78.6	E	78.6
Baldwin SB Through	D	47.0	D	53.3	D	53.3
Baldwin Pkwy SB Right	A	0.1	A	0.2	A	0.2
MIDDAY PEAK HOUR	**LOS**	**Delay**	**LOS**	**Delay**	**LOS**	**Delay**
Kaahumanu Ave/Maui Lani Pkwy	**B**	**18.1**	**C**	**28.5**	**C**	**23.8**
Kaahumanu Ave. EB Left	E	61.7	E	61.3	E	61.3
Kaahumanu Ave. EB Through	B	17.5	D	35.3	C	29.4
Kaahumanu Ave. EB Right	A	0.0	E	59.9	D	52.9
Kaahumanu Ave. WB Left	E	74.0	E	69.5	D	51.3
Kaahumanu Ave. WB Through	A	5.8	A	6.3	A	6.3
Kaahumanu Ave. WB Right	A	0.0	A	4.4	A	4.4
Maui Lani Pkwy NB Left	E	69.4	F	83.8	F	83.8
Maui Lani Pkwy NB Through	E	70.1	E	67.8	E	67.8
Maui Lani Pkwy NB Right	A	0.1	A	0.4	A	0.4
Baldwin SB Left	E	73.6	E	76.2	E	76.2
Baldwin SB Through	E	77.3	E	77.3	E	77.3
Baldwin Pkwy SB Right	A	0.0	A	0.0	A	0.0

Delay Expressed in Seconds per Vehicle

Table 6 Comparison of Peak Hour Levels of Service at the Kaahumanu & Maui Lani intersection (continued)

	EXISTING CONDITIONS		YEAR 2020 - NB LT, WB LT		YEAR 2020 - NB LT, WB 2LT	
AFTERNOON PEAK HOUR	**LOS**	**Delay**	**LOS**	**Delay**	**LOS**	**Delay**
Kaahumanu Ave/Maui Lani Pkwy	**C**	**28.4**	**D**	**36.4**	**C**	**30.6**
Kaahumanu Ave. EB Left	E	69.1	E	77.5	E	77.5
Kaahumanu Ave. EB Through	C	25.4	D	43.5	C	34.0
Kaahumanu Ave. EB Right	A	0.0	E	58.3	D	43.7
Kaahumanu Ave. WB Left	E	74.1	F	81.8	E	57.0
Kaahumanu Ave. WB Through	B	15.6	B	16.7	B	16.7
Kaahumanu Ave. WB Right	A	0.0	B	11.5	B	11.5
Maui Lani Pkwy NB Left	E	72.4	E	71.1	E	71.1
Maui Lani Pkwy NB Through	E	73.5	E	72.9	E	72.9
Maui Lani Pkwy NB Right	A	0.1	A	0.4	A	0.4
Baldwin SB Left	E	75.0	E	72.6	E	72.6
Baldwin SB Through	E	64.1	E	69.3	E	69.3
Baldwin Pkwy SB Right	A	0.1	A	0.1	A	0.1
PM PEAK HOUR	**LOS**	**Delay**	**LOS**	**Delay**	**LOS**	**Delay**
Kaahumanu Ave/Maui Lani Pkwy	**C**	**22.2**	**D**	**53.5**	**D**	**38.9**
Kaahumanu Ave. EB Left	E	65.8	E	71.3	E	71.3
Kaahumanu Ave. EB Through	C	23.3	D	53.4	D	50.1
Kaahumanu Ave. EB Right	A	0.0	D	43.6	D	42.0
Kaahumanu Ave. WB Left	E	74.2	F	149.2	D	51.8
Kaahumanu Ave. WB Through	A	6.2	B	11.7	B	11.7
Kaahumanu Ave. WB Right	A	0.0	A	8.4	A	8.4
Maui Lani Pkwy NB Left	E	69.2	F	114.4	F	114.4
Maui Lani Pkwy NB Through	E	70.6	E	58.0	E	58.0
Maui Lani Pkwy NB Right	A	0.1	A	0.5	A	0.5
Baldwin SB Left	E	73.6	E	75.6	E	75.6
Baldwin SB Through	F	88.2	F	91.3	F	91.3
Baldwin Pkwy SB Right	A	0.0	A	0.0	A	0.0

Delay Expressed in Seconds per Vehicle

Table 7 Comparison of Peak Hour Levels of Service at the Kaahumanu & Maui Lani Intersection

	EXISTING CONDITIONS		YEAR 2020 - NB LT, WB 2LT		YEAR 2020 - NB 2LT, WB 2LT	
AM PEAK HOUR	**LOS**	**Delay**	**LOS**	**Delay**	**LOS**	**Delay**
Kaahumanu Ave/Maui Lani Pkwy	**D**	**35.8**	**D**	**43.7**	**D**	**43.3**
Kaahumanu Ave. EB Left	E	72.5	E	72.5	E	72.5
Kaahumanu Ave. EB Through	C	24.5	C	31.4	C	31.4
Kaahumanu Ave. EB Right	A	0.0	C	31.4	C	31.4
Kaahumanu Ave. WB Left	E	73.4	E	70.1	E	70.1
Kaahumanu Ave. WB Through	C	30.7	D	43.8	D	43.8
Kaahumanu Ave. WB Right	A	0.1	C	32.6	C	32.6
Maui Lani Pkwy NB Left	E	76.0	E	69.8	E	61.6
Maui Lani Pkwy NB Through	E	66.9	E	73.6	E	73.6
Maui Lani Pkwy NB Right	A	0.1	A	0.3	A	0.3
Baldwin SB Left	E	78.0	E	78.6	E	78.6
Baldwin SB Through	D	47.0	D	53.3	D	51.4
Baldwin Pkwy SB Right	A	0.1	A	0.2	A	0.2
MIDDAY PEAK HOUR	**LOS**	**Delay**	**LOS**	**Delay**	**LOS**	**Delay**
Kaahumanu Ave/Maui Lani Pkwy	**B**	**18.1**	**C**	**23.8**	**C**	**23.0**
Kaahumanu Ave. EB Left	E	61.7	E	61.3	E	61.3
Kaahumanu Ave. EB Through	B	17.5	C	29.4	C	29.1
Kaahumanu Ave. EB Right	A	0.0	D	52.9	D	52.4
Kaahumanu Ave. WB Left	E	74.0	D	51.3	D	50.7
Kaahumanu Ave. WB Through	A	5.8	A	6.3	A	6.0
Kaahumanu Ave. WB Right	A	0.0	A	4.4	A	4.2
Maui Lani Pkwy NB Left	E	69.4	F	83.8	E	67.5
Maui Lani Pkwy NB Through	E	70.1	E	67.8	E	68.7
Maui Lani Pkwy NB Right	A	0.1	A	0.4	A	0.4
Baldwin SB Left	E	73.6	E	76.2	E	76.8
Baldwin SB Through	E	77.3	E	77.3	E	77.3
Baldwin Pkwy SB Right	A	0.0	A	0.0	A	0.0

Delay Expressed in Seconds per Vehicle

Table 7 Comparison of Peak Hour Levels of Service at the Kaahumanu & Maui Lani intersection (continued)

	EXISTING CONDITIONS		YEAR 2020 - NB LT, WB 2LT		YEAR 2020 - NB 2LT, WB 2LT	
AFTERNOON PEAK HOUR	**LOS**	**Delay**	**LOS**	**Delay**	**LOS**	**Delay**
Kaahumanu Ave/Maui Lani Pkwy	**C**	**28.4**	**C**	**30.6**	**C**	**30.4**
Kaahumanu Ave. EB Left	E	69.1	E	77.5	E	77.5
Kaahumanu Ave. EB Through	C	25.4	C	34.0	C	33.9
Kaahumanu Ave. EB Right	A	0.0	D	43.7	D	43.6
Kaahumanu Ave. WB Left	E	74.1	E	57.0	E	57.0
Kaahumanu Ave. WB Through	B	15.6	B	16.7	B	16.7
Kaahumanu Ave. WB Right	A	0.0	B	11.5	B	11.4
Maui Lani Pkwy NB Left	E	72.4	E	71.1	E	68.6
Maui Lani Pkwy NB Through	E	73.5	E	72.9	E	73.5
Maui Lani Pkwy NB Right	A	0.1	A	0.4	A	0.4
Baldwin SB Left	E	75.0	E	72.6	E	72.6
Baldwin SB Through	E	64.1	E	69.3	E	65.7
Baldwin Pkwy SB Right	A	0.1	A	0.1	A	0.1
PM PEAK HOUR	**LOS**	**Delay**	**LOS**	**Delay**	**LOS**	**Delay**
Kaahumanu Ave/Maui Lani Pkwy	**C**	**22.2**	**D**	**38.9**	**C**	**33.6**
Kaahumanu Ave. EB Left	E	65.8	E	71.3	E	69.6
Kaahumanu Ave. EB Through	C	23.3	D	50.1	D	46.9
Kaahumanu Ave. EB Right	A	0.0	D	42.0	D	39.9
Kaahumanu Ave. WB Left	E	74.2	D	51.8	D	49.2
Kaahumanu Ave. WB Through	A	6.2	B	11.7	A	9.6
Kaahumanu Ave. WB Right	A	0.0	A	8.4	A	6.9
Maui Lani Pkwy NB Left	E	69.2	F	114.4	E	66.2
Maui Lani Pkwy NB Through	E	70.6	E	58.0	E	62.5
Maui Lani Pkwy NB Right	A	0.1	A	0.5	A	0.5
Baldwin SB Left	E	73.6	E	75.6	E	75.6
Baldwin SB Through	F	88.2	F	91.3	F	91.3
Baldwin Pkwy SB Right	A	0.0	A	0.0	A	0.0

Delay Expressed in Seconds per Vehicle

During the afternoon school peak, the Kaahumanu/Maui Lani intersection is projected to operate at LOS D with the alternative 1 configuration. Adding a second westbound left turn lane improves the westbound left turn LOS from F to E and the intersection's overall

LOS from D to C. The addition of a second northbound left turn lane has a minimal effect during this peak period. Overall, the intersection is projected to operate at LOS C with the alternative 3 lane geometry in place.

During the PM peak, the Kaahumanu/Maui Lani intersection is projected to operate at LOS C for alternative 3, and LOS D for alternatives 1 and 2. The westbound left turn is projected to operate at LOS F with a single left turn. This is projected to improve to LOS D with the addition of a second left turn lane. The northbound Maui Lani left turn movement is projected to operate at LOS F with a single lane and LOS E with a double left turn lane. This additional lane is also projected to improve the LOS from D to C. The southbound through movement is projected to operate at LOS F primarily due to signal delay.

V. SUMMARY AND RECOMMENDATIONS

A. Summary

Analysis of projected Year 2020 intersection operations has determined that the surrounding roadway system will be able to accommodate the proposed Maui Lani Commercial development.

The Maui Lani Commercial Development is part of the larger Maui Lani Planned Development, which has been shown to be consistent with the Wailuku-Kahului Community Plan. The roadway improvements assumed in this study are consistent with those identified in the Maui Long-Range Land Transportation Plan and the Maui Lani Roadway Master Plan.

Significant elements of the Maui Lani Roadway Master Plan have already been implemented in the area surrounding the proposed Maui Lani Commercial Development. The intersection of Kaahumanu Avenue and Maui Lani Parkway has been fully improved and signalized. Maui Lani Parkway is constructed as a 4-lane, divided roadway between Kaahumanu Avenue and Waiinu Street. Waiinu Street has been widened to 3-lanes and includes a median left-turn lane within the Maui Lani Development. When warranted, a traffic signal is planned to be installed at the newly opened Kaiser Clinic Driveway which is opposite the proposed access driveway for the Maui Lani Commercial Development.

Because of the proximity to Baldwin High School, pedestrian safety is a concern. The shopping center is expected to affect existing pedestrian patterns, particularly for students. Safety measures such as median fencing or hedging may be considered to discourage jaywalking.

B. Recommendations

1. Maui Lani Commercial-Related Improvements

Based on the operational analyses of intersections, the following is recommended to be implemented in conjunction with the proposed Maui Lani Commercial Development:

- Monitor the Kaiser/Maui Lani Commercial Development access intersection and install a traffic signal when warranted.

- The Kainani/Kaahumanu intersection should be reconfigured to formalize the exclusive right-turn on the Kainani approach. This should include a pedestrian island on the southeast corner which would channelize the northbound Kainani right turn while also preventing vehicles from making through movements from the eastbound Kaahumanu Avenue right turn lane.

- Construct an auxiliary lane between Kainani Street and Maui Lani Parkway.

- Construct a right-in only shopping center access on Kaahumanu Avenue. Provide a deceleration lane. Configure the interior of the project site to provide sufficient storage space to prevent vehicles from spilling onto Kaahumanu Avenue.

- Investigate the feasibility of a physical barrier on the Kaahumanu Avenue median between Kainani Street and Maui Lani Parkway to prevent jaywalking.

These improvements will be implemented by the developer.

2. Long-Range Regional Roadway Improvements

The following improvements are recommended to improve intersection operations for the projected Year 2020 time frame due to regional traffic:

- Construct a second left turn lane on the westbound approach at the Kaahumanu Avenue and Maui Lani Parkway intersection. Modify the southbound departure to two lanes to accommodate the double left turning movement.

- Provide Right of Way on the western edge of Maui Lani Parkway South of the Kaahumanu Avenue/Maui Lani Parkway intersection for the eventual widening of the Maui Lani approach to accommodate double northbound left turn lanes.

These improvements will improve the projected Year 2020 operation of at the Kaahumanu Avenue/Maui Lani Parkway intersection for the condition in which Maui Lani Parkway has continuity between Kaahumanu Avenue and Kuihelani Highway. Implementation of these improvements would not be needed until Maui Lani Parkway is connected between Waiinu Street and future Kuikahi Drive extension.

APPENDIX D.

Approval Letter Dated December 23, 2009 from the Department of Transportation

LINDA LINGLE
GOVERNOR

BRENNON T. MORIOKA
DIRECTOR

Deputy Directors
MICHAEL D. FORMBY
FRANCIS PAUL KEENO
BRIAN H. SEKIGUCHI
JIRO A. SUMADA

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
869 PUNCHBOWL STREET
HONOLULU, HAWAII 96813-5097

IN REPLY REFER TO:

HWY-PS
2.4184

December 23, 2009

Mr. Honglong Li, P.E.
PB Americas, Inc.
American Savings Bank Tower
1001 Bishop Street, Suite 2400
Honolulu, Hawaii 96813

Dear Mr. Li:

Subject: Maui Lani Commercial – Updated Traffic Evaluation

We received your August 26, 2009 letter transmitting a copy of the Revised Traffic Evaluation dated August 2009 for the subject Maui Lani Commercial development. Based on your emails on November 23, 2009 and various discussions, it is our understanding that a Draft EA and Project District II application for the subject project will be re-filed with the County of Maui. It is further our understanding that you are still engaged in discussions with Baldwin High School and actively pursuing alternatives to improve pedestrian safety between the high school and the proposed new commercial development.

Based on our preliminary review, we find the revised Traffic Evaluation dated August 2009 to generally be acceptable subject to resolution of the potential pedestrian safety issue between Baldwin High School and the proposed commercial development. This preliminary evaluation, however, does not indicate agreement or acceptance of the Draft EA or the Project District II application and we reserve the right to review the formal documents and provide additional comments as deemed necessary and appropriate.

If there are any questions, please contact Ken Tatsuguchi, Head Planning Engineer, at 587-1830.

Very truly yours,

BRENNON T. MORIOKA, Ph.D., P.E.
Director of Transportation

c: Maui County, Planning Department

APPENDIX E.

Meeting Memorandum Regarding Historic Sandhills Neighborhood Association Meeting on September 12, 2007

MUNEKIYO & HIRAGA, INC.

MICHAEL T. MUNEKIYO
GWEN OHASHI HIRAGA
MITSURU "MICH" HIRANO
KARLYNN KAWAHARA

MARK ALEXANDER ROY

September 14, 2007

MEETING MEMORANDUM

Date: September 12, 2007

Participants: Historic Sandhills Neighborhood Association (approximately 37 residents present)
Michael Munekiyo, Munekiyo & Hiraga, Inc.
Erin Mukai, Munekiyo & Hiraga, Inc.

From: Erin Mukai, Planner

Subject: Historic Sandhills Neighborhood Association Meeting re Maui Lani Shopping Center

Munekiyo & Hiraga, Inc.'s attendance at the Historic Sandhills Neighborhood Association meeting of September 12, 2007 was requested by the association's representative Clare Apana. Munekiyo & Hiraga, Inc. was asked to provide comment on, as well as answer questions relating to the Environmental Assessment (EA) process.

DISCUSSION SUMMARY

M. Munekiyo provided information concerning the general EA process and related early consultation period. With regards to the early consultation period, M. Munekiyo clarified that the September 5, 2007 deadline (as indicated on the early consultation letter dated August 16, 2007) to submit comment on the proposed project can be extended. He informed residents that Munekiyo & Hiraga, Inc. and Lloyd Sueda intend to conduct a *community meeting within a couple of weeks. The community meeting, to be scheduled,* will further address the EA process as well as provide the residents with the opportunity to submit input on the proposed project. He also informed residents that L. Sueda intends to bring a revised site plan to the community meeting. As such, comments to the early consultation letter will be received at present, as well as after the community meeting.

The general discussion of the meeting in which Munekiyo & Hiraga, Inc. was present, included residents' concerns regarding the implementation of the proposed project. Such concerns included, but are not limited to:

a. Traffic issues as it relates to Kainani Street (including cut-through traffic)

b. Safety issues related to traffic, as well as the operation of a 24-hour food market

c. Noise impacts generated from the AC and refrigeration units

d. Noise and safety concerns related to delivery trucks

e. Burial sites and related Cultural Impact Assessment (CIA)

f. Lighting within the site

Other concerns mentioned included:

a. Objectivity during the EA process (TIAR and CIA used in the EA are funded by the developer)

b. Responses from the developer after residents submit their comments in the early consultation period

M. Munekiyo responded to both of these concerns by stating that the Maui Planning Commission will most likely be the approving agency for processing of the EA. As such, the Planning Commission serves as a check and balance to the process.

To address questions regarding the preparation of responses to early consultation comments, M. Munekiyo stated that Munekiyo & Hiraga, Inc. drafts response letters on behalf of the applicant. As applicable, input will be solicited from the engineers and/or architect.

Erin Mukai, Planner

EM:lh
cc: Lloyd Sueda, Sueda & Associates, Inc.
F:\DATA\Sueda\MauiLaniCtr\91207memomtg.wpd

APPENDIX F.

Meeting Memorandum Regarding October 16, 2007 Community Meeting

MUNEKIYO & HIRAGA, INC.

MICHAEL T. MUNEKIYO
GWEN OHASHI HIRAGA
MITSURU "MICH" HIRANO
KARLYNN KAWAHARA

MARK ALEXANDER ROY

October 25, 2007

MEETING MEMORANDUM

Date: October 16, 2007

Participants: Lloyd Sueda, Sueda and Associates
Jeffrey Benner, Benner Stange Associates Architects, Inc.
Curtis Miyamura, Architects Pacific
Wayne Yoshioka, PB World
Warren Unemori, Warren S. Unemori Engineering, Inc.
Clifford Mukai, Warren S. Unemori Engineering, Inc.
Lisa Rotunno-Hazuka, Archaeological Services Hawai`i
Michael Munekiyo, Munekiyo & Hiraga, Inc.
Erin Mukai, Munekiyo & Hiraga, Inc.
Sandhills Residents (approximately 30, see **Exhibit "A"**)

From: Erin Mukai, Planner

Subject: Proposed Maui Lani Shopping Center
Community Meeting - Maui Waena Intermediate School

A. PURPOSE OF MEETING

M. Munekiyo introduced the project team. He also went on to explain that the purpose of the meeting was to provide background and the current status of the subject project, including the Project District Phase II and the EA processes. M. Munekiyo also stated that comments received at the meeting would be included in the Draft EA.

B. SITE PLAN-RELATED DISCUSSION

J. Benner noted the revisions made to the site plan, including the deletion of the fueling station, relocation of buildings away from the Sandhills neighborhood, and the addition of a new two-story office building at the northwest corner of the property.

1. ***Noise***

   a. Addressing previously mentioned noise concerns, J. Benner commented that although Safeway will open as a 24-hour store, Safeway will evaluate their hours of operation after one year.

   b. J. Benner also added that noise concerns would be mitigated through the location of large air conditioning units inside the buildings, below the roof. In addition, smaller units would be screened to either absorb or deflect sound. External compactors would be seldom used, and bailers would be located inside the store.

   c. J. Benner stated that there would be no deliveries between the hours of 10:00 pm and 7:00 am. Large vehicles would make their deliveries twice a week, as subject to operations at Kahului Harbor. Smaller vehicles, on the other hand, would make deliveries mostly everyday.

   d. J. Benner commented that the developer will be hiring an acoustical engineer to evaluate noise conditions at the project site.

2. ***Lighting***

   a. A Sandhills resident questioned the addition of the two-story building (Office 'G') located in the northwestern corner of the project site. The resident asked what the hours of operation would be like for that building, as light spillage into the adjacent neighbor's lot might be a potential concern. In addition, the resident questioned whether or not the two-story building could be one-story, instead.

   b. J. Benner answered that the building will serve as an office space, although the specific tenant has not been determined. Typically, offices, such as 'Office 'G', will close relatively early. L. Sueda also noted that Office 'G' is a relatively new concept and addition to the site plan.

3. ***Other Concerns Related to the New Site Plan***

   a. A Sandhills resident asked where and how many trash bins are anticipated to be located on the project site. A resident also asked what time the trash bins will be collected and removed.

   b. J. Benner noted the location of the three (3) trash bins on the project site. The specific times of trash collection would need to be worked out further in the future.

c. A Sandhills resident questioned whether or not the businesses within the shopping center could be local businesses, so as to reflect the character of the neighborhood.

d. J. Benner acknowledged the importance of such, but also noted the importance of national tenants within a shopping center.

e. A Sandhills resident asked whether or not there could be management to oversee the operations of the shopping center. This would then assist in the creation of a working relationship between the residents of the neighboring communities and the owners of the shopping center. In addition, the residents would be able to direct all of their concerns to a single point of contact, instead of reporting concerns to various governmental agencies.

f. M. Munekiyo stated that management of such nature is a possibility, as there are businesses that one can hire to do such work. L. Sueda added that there will be management to oversee the operations of the shopping center.

g. A resident of Sandhills questioned whether or not Office 'G' could be relocated and moved east on the project site.

h. J. Benner noted that was a possibility.

i. A Sandhills resident expressed her concerns relating to the inclusion of a restaurant within the shopping center, noting the late hours of operation and the sale of liquor in close proximity to a high school.

j. A Sandhills resident questioned where the water will go when it rains, noting that during heavy rains, water collects around the project site. It was noted that the Draft EA will address drainage impacts and mitigation measures.

4. <u>Archaeological Resources</u>

a. L. Rotunno-Hazuka noted that archaeological studies have been conducted on the project site since 1997. Another firm conducted an archaeological survey during which one (1) burial was found. Since then, Archaeological Services Hawai`i has monitored all construction activities on the site. There have been several inadvertent finds; two (2) of which have approved burial treatment plans from the State Historic Preservation Division (SHPD). L. Rotunno-Hazuka explained the preservation plans of these burials, commenting that similar design and treatment themes are anticipated to be carried over to those

burials for which treatment plans have not yet been approved by the Burial Council and the SHPD.

b. A Sandhills resident asked what maintenance would be like for the burials preserved onsite.

c. L. Rotunno-Hazuka stated that there are strict rules concerning maintenance of and access to the burials. The applicant will comply with these requirements.

5. ***Traffic***

a. Referring to a PowerPoint presentation, W. Yoshioka provided background on the project site, pointing out key issues relating to traffic. He also noted the history behind the Maui Lani Shopping Center access configurations, and input provided by the DOT relating to such configurations. W. Yoshioka added that in part, the purpose of the community meeting was to receive public input on the access configurations and related traffic concerns.

b. Referring to the latest site plan, (direct access to the shopping center, with turning restrictions-no right turn in, nor left turn out) a Sandhills resident commented that existing conditions at Kainani Street prevent three (3) cars from fitting on the street at the intersection of Kaahumanu Avenue at one time.

c. W. Yoshioka responded by commenting that Kainani Street would have to be widened to accommodate the revised site plan.

d. Concerns were then raised by several residents of the stop sign on Kainani Street restricting turning movements to the shopping center (no right turn in) and allowing only left turns in order to get to the intersection of Kainani and Kaahumanu. Concerns included the potential car build-up on Kainani Street for those cars trying to make a left turn at the stop sign. A resident commented that residents of Sandhills would have to go around onto Maui Lani Parkway to access the site, creating an access inconvenience.

e. W. Yoshioka responded by noting that the intersection of Kaahumanu Avenue and Kainani Street was signalized. He anticipates that the signal will break up the traffic flow, allowing residents to make their left turn after the Kainani Street stop sign. However, W. Yoshioka also stated that an analysis would have to be made in order to assess the situation further. L. Sueda also commented that the purpose of the community meeting was to receive comments from the residents on the revised site plan and its related access points.

f. W. Yoshioka acknowledged that Sandhills residents would have to drive to Maui Lani Parkway to access the site. He explained that the proposed turning movement limitation responds to other residents' concern regarding "cut-through" traffic through Sandhills if full-movement access at Kainani was allowed.

g. A Sandhills resident commented that perhaps no right turn on red (from east-bound Kaahumanu lanes onto Kainani Street) would be needed to accommodate operations at the Kainani Street access point.

h. A resident of Sandhills questioned whether or not a traffic signal, instead of a stop sign could be used at Kainani Street.

i. W. Yoshioka commented that option would be researched, however a minimal design distance from a major intersection is required in order for a traffic signal to be installed.

j. A resident of Sandhills commented that she hopes the project team will explore other access points, as she does not want Kainani Street used for this purpose.

k. A Sandhills resident questioned whether the access off of Maui Lani Parkway could serve as the only access point for the project site. Another resident mentioned that currently Sac' N' Save, located in Wailuku, is serviced by only one (1) access point.

l. W. Yoshioka commented that potential "bottle-necking" by focusing access at one point was a factor in determining more than one (1) access point was needed for the shopping center. He also added that the number of access points as well as the configurations at Sac' N' Save would be examined further.

m. Another concern stated by residents was the issue of cut-through traffic in the neighborhood resulting from project implementation. A resident commented that currently there are no sidewalks located within the neighborhood, that there is a concern for their children's safety, students of Baldwin High School's safety, as well as concerns of impacts to the residents' quality of life.

n. W. Yoshioka acknowledged such concerns, and reiterated that restricting turning movements to and from the shopping center off of Kainani Street (no right turn in, left turn out) would mitigate potential cut-through traffic.

o. Several residents requested that an additional traffic study be conducted for the Kainani Street access point. One resident noted that the proposed alternative was presented without any supporting technical and design details. Residents agreed that such information is important to help reach an understanding of how best to address traffic concerns.

p. W. Yoshioka noted that specific study of the proposed Kainani Street alternative can be done.

q. In addition, a Sandhills resident hoped that the developers could look into "beautifying" the island area located between Kaahumanu Avenue and Kainani Street.

r. Several Sandhills residents expressed their desire to have another community meeting in which they would receive more information and specifics detailing traffic configurations and technical analysis at the access points. They commented that such information is needed before making a decision on the site plan.

6. <u>Project Timeline</u>

a. W. Yoshioka commented that completion of the traffic analysis needed for the EA would take sometime. M. Munekiyo explained that the project team will study ways to accelerate schedules so that impacts to the overall EA timeline can be minimized. Coordination with the community will continue.

b. M. Munekiyo noted that Comment Forms, as well as any additional early consultation letters, must be received by October 31, 2007 for inclusion in the Draft EA.

Erin Mukai, Planner

EM:lh

cc: Lloyd Sueda, Sueda & Associates, Inc.
Jeffrey Benner, Benner Stange Associates Architects, Inc.
Lisa Rotunno-Hazuka, Archaeological Services Hawaii
Clifford Mukai, Warren S. Unemori Engineering, Inc.
Wayne Yoshioka, PB World
Curtis Miyamura, Architects Pacific
Warren Unemori, Warren S. Unemori Engineering, Inc.

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PROPOSED MAUI LANI SHOPPING CENTER
COMMUNITY MEETING

Date: Tuesday, October 16, 2007
Time: 5:30 p.m.
Location: Maui Waena Intermediate School - Cafeteria

SIGN-IN SHEET

NAME	MAILING ADDRESS	PHONE, FAX NO. & E-MAIL
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Elizabeth Marie Nishihara	28 Nakoa Dr. Wailuku	Ph: FAX: 808 244-9870 Email:
Kayle & Annette Matsushima	90 Nanilua Dr Wlu	Ph: FAX: Email: k_matsushima@yahoo.com
SAKAE UCHIYAMA	178 NANILOA ~~DRIVE~~	Ph: 244-5732 FAX: Email:
Fumiko Uchiyama	"	Ph: FAX: Email:
Judy Mirzai	453 Lihi St Kahului 96732 Maui Lani	Ph: 244-7196 FAX: Email:
Norma C. Franco	220 W. Papa Ave Kahului	Ph: 871-8774 FAX: Email:

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EXHIBIT "A"

PROPOSED MAUI LANI SHOPPING CENTER
COMMUNITY MEETING

Date: **Tuesday, October 16, 2007**
Time: **5:30 p.m.**
Location: **Maui Waena Intermediate School - Cafeteria**

SIGN-IN SHEET

NAME	MAILING ADDRESS	PHONE, FAX NO. & E-MAIL
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Jackie Davis	77 Nakoa Dr	Ph: FAX: Email: 244-3209
Steph Ohrgiler	179 Halenani Dr.	Ph: FAX: Email: 281-4535 cel
Harry Kogachi	96 Kane St	Ph: 344-5656 FAX: Email:
Hollis Lee	80 Halenani Dr	Ph: 244-0937 FAX: Email:
Wayne Nakata	22 Nakoa Dr	Ph: 283-0457 FAX: Email:
Cordis Higa	17 Nakoa Dr.	Ph: FAX: 244-1936 Email:

PLEASE PRINT LEGIBLY

PROPOSED MAUI LANI SHOPPING CENTER
COMMUNITY MEETING

Date: **Tuesday, October 16, 2007**
Time: **5:30 p.m.**
Location: **Maui Waena Intermediate School - Cafeteria**

SIGN-IN SHEET

NAME	MAILING ADDRESS	PHONE, FAX NO. & E-MAIL
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Eric & Nadine Gomes	169 Kn Dr. Wailuku	Ph: 385-9592 FAX: Email: eric.nadinegomes@hawaiiantel.ne

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PROPOSED MAUI LANI SHOPPING CENTER
COMMUNITY MEETING

Date: Tuesday, October 16, 2007
Time: 5:30 p.m.
Location: **Maui Waena Intermediate School - Cafeteria**

SIGN-IN SHEET

NAME	MAILING ADDRESS	PHONE, FAX NO. & E-MAIL
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Rich & Missy Dunham	320 Nakoa Dr. Wailuku	Ph: 244 3544 FAX: Email: rdmv-13@yahoo.com
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Michael Victorino	200 High St Wailuku	Ph: 270-7710 FAX: Email:
		Ph: FAX: Email:

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APPENDIX G.

Meeting Memorandum Regarding December 13, 2007 Community Meeting

MUNEKIYO & HIRAGA, INC.

MICHAEL T. MUNEKIYO
GWEN OHASHI HIRAGA
MITSURU "MICH" HIRANO
KARLYNN KAWAHARA

MARK ALEXANDER ROY

December 19, 2007

MEETING MEMORANDUM

Date: December 13, 2007

Participants: Lloyd Sueda, Sueda and Associates
Jeffrey Benner, Benner Stange Associates Architects, Inc.
Curtis Miyamura, Architects Pacific
Phillip Matsunaga, PB Americas
Wayne Yoshioka
Warren Unemori, Warren S. Unemori Engineering, Inc.
Lisa Rotunno-Hazuka, Archaeological Services Hawai`i
Yoichi Ebisu, Y. Ebisu & Associates
Michael Munekiyo, Munekiyo & Hiraga, Inc.
Erin Mukai, Munekiyo & Hiraga, Inc.
Sandhills Residents (approximately 24, see **Exhibit "A"**)

From: Erin Mukai, Planner

Subject: Proposed Maui Lani Shopping Center
Community Meeting - Wailuku Hongwanji Social Hall

A. PURPOSE OF MEETING

1. M. Munekiyo introduced the project team. He also went on to explain that the purpose of the meeting was to provide background and the current status of the subject project, including the EA process.

2. M. Munekiyo stated that discussion on the Kainani Street access point continued at the last community meeting on October 16, 2007. At this time W. Yoshioka presented the no right-in/left-out alternative. Comments were received at the meeting, and residents requested a follow-up meeting to discuss the access scenario. It was also decided that the traffic engineer would assemble a traffic analysis based on the straight-in/straight-out configuration.

3. A question was raised by a resident of Sandhills as to whether or not the developer sought or received written opinion from the County of Maui regarding the need to obtain a Project District Phase I (PD I) approval for the

Kainani Street access. The resident recommended consultation with the County Council, Corporation Counsel, or the Department of Planning. The resident said he believed that a PD I approval was required because the PD I map does not show an access at Kainani Street. The project team responded by stating that the matter would be further investigated.

B. *SITE PLAN-RELATED DISCUSSION*

1. J. Benner noted revisions made to the site plan, including the enclosure of Safeway's loading area (covered roof structure); relocation of the loading area for Major B (underground loading); relocation of the 2-story office building to the south-east corner of the project site; and addition/deletion of parking.

2. A Sandhills resident questioned whether or not the loading dock of Safeway could be moved to border the east side of the building, rather than the west side of the building. J. Benner responded by stating that as a safety concern to pedestrians, trucks accessing loading areas should be kept away from the front areas of buildings as pedestrians access stores via the front entrances.

3. The Sandhills resident stated that she would like to request in writing, from Safeway, the reason why the structure cannot be relocated to the east, bordering Maui Lani Parkway. J. Benner noted the request, and will follow up with Safeway for a written response letter.

C. *NOISE-RELATED DISCUSSION*

1. J. Benner noted that many revisions made to the site plan were made to help mitigate acoustical concerns raised by residents of Sandhills.

2. L. Sueda stated that the project will meet the Department of Health criteria for noise. In addition, he noted the relocation of the loading dock for Major B, enclosure of the loading area for Safeway, the use of enclosed air conditioning units, as well as the limitations proposed for loading times. A Sandhills resident questioned how the limited hours of operation for loading would be enforced. L. Sueda answered by stating that lease agreements between the property owner and tenant would cover these limited hours of operations. J. Benner added that Safeway's loading and unloading hours would begin at 7:00 a.m. and end at 10:00 p.m. M. Munekiyo also stated that the loading hours of operation would be noted as conditions as part of the Project District Phase II approval. The Sandhills resident then commented that the least possible impacts to noise would occur through the relocation of the buildings.

3. A Sandhills resident expressed his concern of noise impacts to his neighborhood. Y. Ebisu noted that the south and west perimeters of the project site were studied in preparation for his acoustical study report. Y. Ebisu also noted that the Department of Health (DOH) sets rules for permissible levels of noise during the day and night (permissible levels during the day should not exceed 60dB; levels at night should not exceed 50 dB). Y. Ebisu also noted however, that back-up alarms from delivery trucks (impulse noise), for example, are not covered by the code set forth by DOH. Y. Ebisu also noted that the quietest time at the project site is at 3:00 a.m. when noise levels are at approximately 40 dB.

4. A Sandhills resident asked if they could expect no change with regards to noise after project implementation. Y. Ebisu stated that the backing-up alarm from delivery trucks range from 85-90 dB. J. Benner added that delivery operations would be limited from 7:00 a.m. to 10:00 p.m. L. Sueda also added that there will be a 6 foot high wall constructed at the project perimeter to help mitigate noise concerns. Mitigation results will be included in the noise study.

5. A Sandhills resident questioned whether or not this would apply to equipment such as forklifts used to unload/load at the center. C. Miyamura noted that the containers would be located within the store, and such equipment would be used within the store to unload/load. Y. Ebisu will analyze noise levels of unloading/loading containers.

D. ***TRAFFIC-RELATED DISCUSSION***

1. M. Munekiyo introduced the latest Kainani Street access configuration. He noted that the Kainani Street access that was mailed out as part of the community meeting invitation was preliminary. M. Munekiyo added that although the plan that was mailed out was preliminary, the project team thought it would be important to show the steps and progression made to address the Kainani Street access scenario. He also noted that the configurations were made, in part, to address a previous concern stated by the residents of Sandhills of project-related cut-through traffic. The proposed traffic limitations at Kainani Street were proposed in order to help mitigate the aforementioned concern. M. Munekiyo also noted that following the last community meeting on October 16, 2007, PB Americas evaluated the Kainani Street-Kaahumanu Avenue intersection from a technical standpoint.

   M. Munekiyo noted the revisions made to the Kainani Street access point, as well as the proposed 8,000 square feet of property dedicated to the State.

2. L. Sueda added that the revisions to Kainani Street were made in part to mitigate potential stacking of cars exiting the shopping center site. P.

Matsunaga also noted the potential queuing of cars at the Kainani Street access point.

3. A Sandhills resident commented that he believed the developer was doing the right thing in working with the neighborhood. However, he also commented that Kainani Street is still a "glaring issue." The same resident noted that the Kaiser site at Maui Lani provides exit/entry through one egress/ingress point off of Maui Lani Parkway: He questioned why the proposed shopping center would not be able to operate with one egress/ingress as well.

4. Referring to a Powerpoint presentation slide, P. Matsunaga pointed out a queue of cars exiting the shopping center at the 2020 p.m. peak hour (95th percentile) if the shopping center was serviced by one (1) access at Maui Lani Parkway.

5. A Sandhills resident commented that Maui Lani Parkway is a major thoroughfare, he questioned why an extra access at Maui Lani Parkway could not be considered. P. Matsunaga responded that an additional access would not alleviate the concern of build-up traffic exiting the shopping center. L. Sueda added that safety was another concern if another access was proposed along Maui Lani Parkway.

6. W. Yoshioka added that if one access was proposed via Maui Lani Parkway, the queue exiting the shopping center would extend past the access road-Maui Lani Parkway intersection making it difficult to turn left out of the shopping center onto Maui Lani Parkway.

7. A Sandhills resident questioned whether the right-turn into the shopping center off of Kaahumanu Avenue (at Kainani) would be free movement, signal, or stop-sign controlled. She also noted her concern that making the left turn out of the proposed Kainani Street configuration to access Kaahumanu Avenue would be difficult and dangerous as she believed that there would be limited sight distance as a result of the new configuration. W. Yoshioka responded that a stop sign at the Kainani Street entrance could not be placed because of the potential back-up traffic that would result on Kaahumanu Avenue for those cars turning in. W. Yoshioka indicated that sight distance is not anticipated to be a problem for the new Kainani Street configuration.

8. A Sandhills resident questioned why Kainani Street could not be used as an exit only. W. Yoshioka stated that the idea behind the two (2) accesses proposed is to distribute traffic into/out of the shopping center, and not have traffic focused at one (1) point. A Sandhills resident added that she believes Kainani Street is not meant for this type of activity.

9. Another Sandhills resident added that he believed that Kainani Street could operate as an exit-only. He commented that if the concern is with the exit queue on Maui Lani Parkway, then the use of Kainani Street as an exit-only would help mitigate the traffic concerns. P. Matsunaga stated that is something to look into.

10. A Sandhills resident noted his concern of making the left turn out of Kainani Street to access Kaahumanu Avenue. He stated that the clear zone after the queue of cars trying to access Kaahumanu Avenue should be clearly striped to prevent intersection blockage. The Sandhills resident then questioned whether or not the clear zone would be private or state owned. W. Yoshioka responded by stating the clear zone would be state owned, should the State accept the dedication of land.

11. A Sandhills resident questioned why she as well as other residents could not turn right into the shopping center via Kainani Street. She proposed a right-in entry at Kainani Street, no straight-in access from Lunalilo Street, and a stop sign for (east-bound) traffic turning right into the shopping center from Kaahumanu Avenue. Several Sandhills residents spoke against this proposal.

12. A Sandhills resident commented that much of the traffic issues focus around automobiles. She stated that it is not all cars utilizing Kainani Street and the surrounding area, but cyclists, skateboarders, and pedestrians. W. Unemori responded by stating that sidewalks are proposed as part of the project plans, and that it would be possible to extend bike lanes.

E. OTHER PROJECT-RELATED DISCUSSION

1. A Sandhills resident questioned whether or not Italian Cypress could be used along the southern perimeter of the project site, bordering the Sandhills Estates residential area. He commented the pines are low-maintenance, would serve as a visual blind, and climate suitable. M. Munekiyo responded by stating that the landscape architect is looking into whether or not the tree would be suitable for the project site.

2. A Sandhills resident questioned whether or not Safeway will close at 10:00 p.m. M. Munekiyo responded by stating that as a matter of policy Safeway opens as a 24-hour market, then assesses its hours of operation.

F. PROJECT TIMELINE

1. M. Munekiyo noted that Comment Forms must be received by December 31, 2007 for inclusion in the Draft EA.

Erin Mukai, Planner

EM:lh

cc: Lloyd Sueda, Sueda & Associates, Inc.
Jeffrey Benner, Benner Stange Associates Architects, Inc.
Lisa Rotunno-Hazuka, Archaeological Services Hawaii
Curtis Miyamura, Architects Pacific
Warren Unemori, Warren S. Unemori Engineering, Inc.
Phillip Matsunaga, PB Americas
Yoichi Ebisu, Y. Ebisu & Associates

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PROPOSED MAUI LANI SHOPPING CENTER
COMMUNITY MEETING

Date: **Thursday, December 13, 2007**
Time: **5:30 p.m.**
Location: **Wailuku Hongwanji Social Hall**

SIGN-IN SHEET

NAME	MAILING ADDRESS	PHONE, FAX NO. & E-MAIL
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Nancy Cicacci	43 Nakoa Dr	Ph: 242-6114 FAX: Email:
Cordis Higa	17 Nakoa Dr.	Ph: 244-1936 FAX: Email:
Jackie Davis	77 Nakoa Dr	Ph: FAX: 244-3209 Email:
Wayne Nakata	22 Nakoa Dr.	Ph: 283-0457 FAX: Email:
David Kingsbury	302 Naniloa	Ph: FAX: Email:
		Ph: FAX: Email:

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EXHIBIT A

PROPOSED MAUI LANI SHOPPING CENTER
COMMUNITY MEETING

Date: **Thursday, December 13, 2007**
Time: **5:30 p.m.**
Location: **Wailuku Hongwanji Social Hall**

SIGN-IN SHEET

NAME	MAILING ADDRESS	PHONE, FAX NO. & E-MAIL
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Janet Jennings	Box 1028 Puunene HI 96784	Ph: 280-7755 FAX: [redacted] Email: jjenmaui@yahoo.com
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		Ph: FAX: Email:

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PROPOSED MAUI LANI SHOPPING CENTER
COMMUNITY MEETING

Date: **Thursday, December 13, 2007**
Time: **5:30 p.m.**
Location: **Wailuku Hongwanji Social Hall**

SIGN-IN SHEET

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PROPOSED MAUI LANI SHOPPING CENTER
COMMUNITY MEETING

Date: **Thursday, December 13, 2007**
Time: **5:30 p.m.**
Location: **Wailuku Hongwanji Social Hall**

SIGN-IN SHEET

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		Ph: FAX: Email:
		Ph: FAX: Email:
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APPENDIX H.

Meeting Memorandum Regarding November 12, 2008 Community Meeting

MUNEKIYO & HIRAGA, INC.

MICHAEL T. MUNEKIYO
GWEN OHASHI HIRAGA
MITSURU "MICH" HIRANO
KARLYNN KAWAHARA

MARK ALEXANDER ROY
KYLE GINOZA

November 14, 2008

MEETING MEMORANDUM

Date: November 12, 2008

Participants: Lloyd Sueda, Sueda and Associates
Phillip Matsunaga, PB Americas
Clifford Mukai, Warren S. Unemori Engineering, Inc.
Michael Munekiyo, Munekiyo & Hiraga, Inc.
Erin Mukai, Munekiyo & Hiraga, Inc.
Members of the Public (approximately 37, see **Exhibit "A"**)

From: Erin Mukai, Planner

Subject: Proposed Maui Lani Shopping Center
Community Meeting - Wailuku Elementary School

A. PURPOSE OF MEETING

1. M. Munekiyo introduced the project team. He also went on to explain that the purpose of the meeting was to provide an update on the Kainani Street access point and coordination with the State Department of Transportation (DOT) since the last community meeting of December 13, 2007.

2. PRESENTATION

1. Referring to a PowerPoint presentation, E. Mukai gave a brief summary of previous site plans considered by the applicant and project team. She explained the various changes (including changes made to access points and changes made within the site) that were made to the plans beginning with the plan that was filed with the Project District Phase II application in 2005.

2. M. Munekiyo continued the PowerPoint presentation to describe the latest site plan developed by the project team. He also explained that part of the evolution of the site plan was a result of changes made to address the concerns of neighboring residents.

3. M. Munekiyo further explained that the DOT previously did not support the original site plan (with right turn-in and right turn-out access along Ka`ahumanu Avenue) submitted with the Project District Phase II application because of their concern of weaving traffic in between the intersections of Kainani Street/Ka`ahumanu Avenue and Maui Lani Parkway/Ka`ahumanu Avenue. He also went on to explain the queue issue along Maui Lani Parkway should there be one (1) exit point for the proposed shopping center.

4. M. Munekiyo stated that the latest plan with proposed auxiliary lane and deceleration lane along Ka`ahumanu Avenue, near the proposed right turn-in access point, has been approved by the DOT. He noted that in addition to the aforementioned improvements, the DOT felt it was important to also improve the intersection at Ka`ahumanu Avenue and Maui Lani Parkway. As such, the applicant proposes to create double left turning lanes and receiving lanes along Ka`ahumanu Avenue and Maui Lani Parkway. He noted that discussion with the DOT regarding design specifications is ongoing.

5. M. Munekiyo noted the concerns from neighboring Sandhills residents with regards to cut-through traffic. He added that the current proposed configuration would mitigate such concern as no entrance into the shopping center would be permitted, as well as, no left turns out of the shopping center onto Kainani Street would be permitted. M. Munekiyo also noted the proposed Resolution from Maui County Council that would prohibit use of Kainani Street from the development. He added that the Maui Planning Commission will be discussing the proposed Resolution at their meeting on November 25, 2008.

C. ***QUESTIONS FROM MEMBERS OF THE PUBLIC***

1. A community member asked what the elevation of the proposed office building would be in relation to the Safeway building.

   L. Sueda responded by stating that there is a 60 foot change in grade from Maui Lani Parkway to the western perimeter of the project site. He added that the office building would be lower than the Safeway store.

2. A community member asked how a driver originating from Wailuku Heights would access the site.

   M. Munekiyo answered by stating that access would be from Maui Lani Parkway via Waiinu Road.

3. A member from the community asked for the anticipated completion date of the project.

L. Sueda noted that the project has been ongoing for the past five years. With the continued interest of Safeway, the applicant will move towards implementation as quickly as practicable.

4. A community member asked if the use of Kainani Street by the proposed project is prohibited, would Safeway still be interested in the site.

   L. Sueda stated that the specific question was never asked of Safeway.

5. A community member said she was supportive of the plan and the entrance off of Ka`ahumnu Avenue as she believed it would mitigate the concern of cut through traffic.

   Another community member stated that she believed traffic could not be entirely restricted from utilizing the roads in the Sandhills neighborhood.

6. A member from the community asked if there will be traffic lights installed at the access point along Maui Lani Parkway for those residents traveling from the new Sandhills Estates.

   P. Matsunaga responded by stating that traffic lights would be installed if warranted.

   M. Munekiyo added that part of DOT's recommendation is for the developer to hire a traffic consultant at least once every two years to monitor traffic conditions at the shopping center.

   L. Sueda stated that the developer will be responsible for signalizing the intersection of Maui Lani Parkway and the shopping center driveway.

7. A community member expressed her concern that Maui Lani Parkway should be opened all the way through Kuihelani Highway.

   P. Matsunaga explained the implementation sequence for Maui Lani Parkway. He added that the roadway will be developed in concert with development of parcels adjacent to the road. P. Matsunaga noted that the double left turns at the intersection of Maui Lani Parkway and Ka`ahumanu Avenue are connected to DOT's concerns of fully opening Maui Lani Parkway.

8. A member from the public asked of the purpose of the geometric configuration at the intersection of Kainani Street and Ka`ahumanu Avenue.

M. Munekiyo noted that the bulb-out was requested by the DOT to minimize weaving traffic (no switching of lanes).

9. A community member asked for the distance between the Kainani Street/Ka`ahumanu Avenue intersection and the access point off of Ka`ahumanu Avenue for the shopping center.

   L. Sueda stated that the distance was approximately 400 feet.

10. A community member asked for the queue length along Kainani Street, between the shopping center exit point and the intersection with Ka`ahumanu Avenue.

    P. Matsunaga responded that the length would be 8-9 vehicles.

11. A member from the public asked what other businesses are proposed within the shopping center.

    L. Sueda stated that Safeway is the only proposed tenant at this time, however, other national tenants will be considered.

12. A community member questioned the difficulty for those vehicles traveling east on Kainani Street which have to switch lanes to turn right at the intersection with Ka`ahumanu Avenue.

    P. Matsunaga answered that it shouldn't be a problem for those vehicles, as the traffic light will clear back up traffic along Kainani Street.

13. A member from the public asked if there would be delivery trucks utilizing Kainani Street.

    M Munekiyo stated that there will be no delivery trucks exiting at Kainani Street, as trucks will be required to utilize the access off of Maui Lani Parkway.

14. A community member asked where the loading docks would be located, specifically, if the docks would be facing the Sandhills Estates. She also asked for the location of the trash bins.

    M. Munekiyo stated that there are no loading areas along the backside of the structures (adjacent to Sandhills Estates). He went on to explain that trash bins will be located within the north-easterly portion of the site.

15. A member from the public asked what would become of the preservation areas and burials.

M. Munekiyo pointed out the preservation area within the site, adding that no construction would take place within that area. He also pointed out the burials that will be preserved within the parking lot.

16. Several community members raised questions on the proposed wall along the southern perimeter, specifically asking for the color, material and height. One member added that the owners of the lots within the Sandhills Estates have to follow association rules that limit color options, for example. He asked if the wall would follow those rules. Another member asked that the wall be a stucco wall or another form other than CMU.

    L. Sueda noted that wall would be six (6) feet in height. He noted that specific colors and finish materials (e.g. concrete tilt or block wall) have not been chosen for the wall. He added that the applicant would be willing to explore these suggestions further.

D. CONCLUSION

M. Munekiyo concluded the meeting and noted the upcoming Maui Planning Commission meeting on November 25, 2008 which will address the proposed Resolution on Kainani Street.

Erin Mukai, Planner

EM:lh

cc: Lloyd Sueda, Sueda & Associates, Inc.
Jeffrey Benner, Benner Stange Associates Architects, Inc.
Lisa Rotunno-Hazuka, Archaeological Services Hawaii
Clifford Mukai, Warren S. Unemori Engineering, Inc.
Hong Li, PB Americas
Phillip Matsunaga, PB Americas
Yoichi Ebisu, Y. Ebisu & Associates

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PROPOSED MAUI LANI SHOPPING CENTER
COMMUNITY MEETING

Date: **Wednesday, November 12, 2008**
Time: **6:30 p.m.**
Location: **Wailuku Elementary School Cafeteria**

SIGN-IN SHEET

NAME	MAILING ADDRESS	PHONE, FAX NO. & E-MAIL
ORNELLAS ALVIN	95 Ku Dr Wku 96793	Ph: 244 0170 FAX: Email:
Bill Hoopii	681 Pio Dr. Wailuku 96793	Ph: 870-9403 FAX: 877-5578 Email:
SCOTT ROLLINS	14 ohia Laka Pl Wailuku	Ph: 242-7151 FAX: Email:
Al & Jan Arensdorf	33 Keoneloa St Wailuku	Ph: 2446601 FAX: Email: ARENSDORF001@hawaii.rr.com
Brian + Sharon Yamada	63 Nanilua Pl. Wailuku	Ph: 242-1955 FAX: Email: sybyena@hawaiiantel.net
Gerry & Vernice Takumi	148 Ku Dr.	Ph: 633-4431 FAX: Email:
		Ph: FAX: Email:

PLEASE PRINT LEGIBLY

EXHIBIT "A"

PROPOSED MAUI LANI SHOPPING CENTER
COMMUNITY MEETING

Date: **Wednesday, November 12, 2008**
Time: **6:30 p.m.**
Location: **Wailuku Elementary School Cafeteria**

SIGN-IN SHEET

NAME	MAILING ADDRESS	PHONE, FAX NO. & E-MAIL
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Teresa Wright	150 NANI LOA DRIVE WAILUKU HI 96793	Ph: 244 8973 FAX: Email:
Deanna Nagamine		Ph: 986 8350 FAX: Email:
Florante Garcia	30 Puakala PL. Kahului, HI	Ph: 893-2349 FAX: 893-2049 Email: fgarcia@allstate.com
		Ph: FAX: Email:
		Ph: FAX: Email:
		Ph: FAX: Email:

PLEASE PRINT LEGIBLY

PROPOSED MAUI LANI SHOPPING CENTER
COMMUNITY MEETING

Date: **Wednesday, November 12, 2008**
Time: **6:30 p.m.**
Location: **Wailuku Elementary School Cafeteria**

SIGN-IN SHEET

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PROPOSED MAUI LANI SHOPPING CENTER
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Location: **Wailuku Elementary School Cafeteria**

SIGN-IN SHEET

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Location: **Wailuku Elementary School Cafeteria**

SIGN-IN SHEET

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Jackie Davis	77 Nakoa Dr	Ph: FAX: Email: davis011@hawaii.rr.com
Tom Hiranaga	114 Nakoa Dr.	Ph: 242-6850 FAX: Email:
Derick Hatada	1728 Wiliha Loop #200, Wailuku	Ph: 249-2727 FAX: 249-2122 Email: dhatada@yahoo.com
CLIFFORD N. MUKAI	W.S. UNEMORI ENGINEERING, INC. 2145 WELLS ST., SUITE 403 WAILUKU, HI 96793	Ph: 242-4403 FAX: 244-4856 Email: cmukai@wsue.com
Cordis Higa	17 Nakoa Dr. Wku	Ph: 244-1936 FAX: Email:
		Ph: FAX: Email:

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PROPOSED MAUI LANI SHOPPING CENTER
COMMUNITY MEETING

Date: **Wednesday, November 12, 2008**
Time: **6:30 p.m.**
Location: **Wailuku Elementary School Cafeteria**

SIGN-IN SHEET

NAME	MAILING ADDRESS	PHONE, FAX NO. & E-MAIL
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Judy Mirzai	453 Lihi St Kahului	Ph: 244-7196 FAX: Email:
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		Ph: FAX: Email:

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APPENDIX I.

Archaeological Inventory Survey Prepared by Xamanek Researches, LLC

M-705

3-8

accepted 11/14

ARCHAEOLOGICAL INVENTORY SURVEY REPORT ON MAUI LANI LOT 11-A PROJECT WAILUKU *AHUPUA`A,* WAILUKU DISTRICT, MAUI ISLAND (TMK: 3-8-07: por. 121)

Prepared for:

Mr. Jeffrey Pearson
Sato and Associates, Inc.
Wailuku, Maui, Hawaii

Prepared by:

Xamanek Researches
P.O. Box 131
Pukalani, Hawaii 96788

Erik M. Fredericksen
Demaris L. Fredericksen

June 1997

ABSTRACT

An archaeological inventory survey was conducted on Maui Lani Lot 11-A (TMK 3-8-07: por. 121) located in Wailuku *ahupua`a,* Wailuku District, Island of Maui. A surface walk-over of the 20.7 acre parcel was first performed. Subsequent subsurface investigation consisted of 53 backhoe trenches and 2 test units. No evidence of significant post-contact or indigenous cultural deposits was located during the survey. However, an *in situ* indigenous burial was discovered in the unfinished access ramp for a completed backhoe trench. These remains were assigned SIHP site number 50-50-04-4401. The final disposition of the Site 4401 remains will be determined by the Maui and Lana`i Islands Burial Council.

No evidence of habitation activity was located during the survey, and it is unlikely that any is present, given the precontact usage of this ecological area of the island. However, there is a high probability that other human burials are present in unsampled portions of Lot 11-A. This parcel lies in the Pu`uone Sand Dune formation which contained burials on the Maui Lani Partners development project that lies to the south of the study area. In addition, 2 burials (Sites 4368 and 4435) have been recently located by Xamanek Researches during inventory level and monitoring work associated with the Maui Lani Parkway project. Consequently, archaeological monitoring is the recommended mitigation for all future grubbing and earthmoving activities on Maui Lani Lot 11-A.

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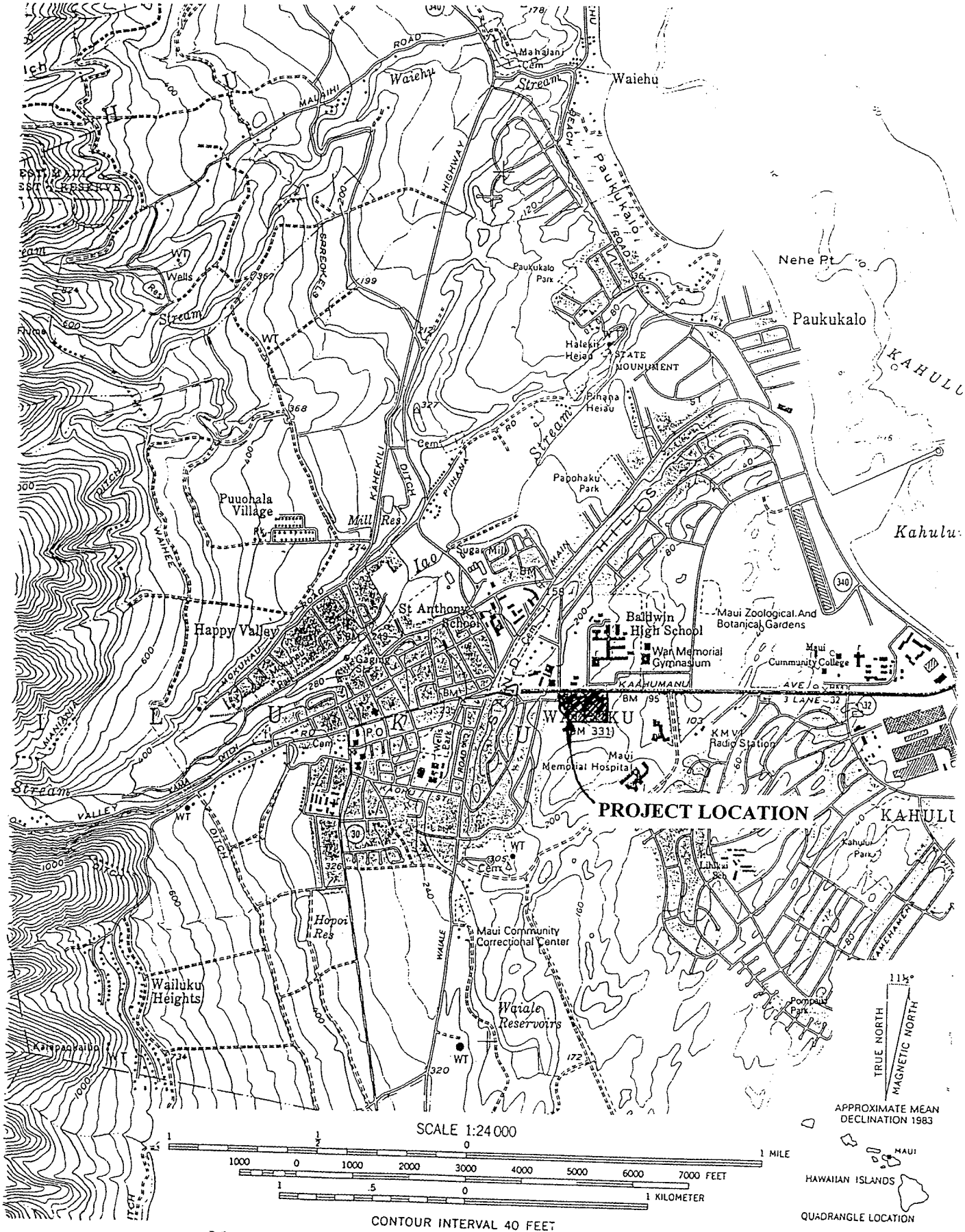
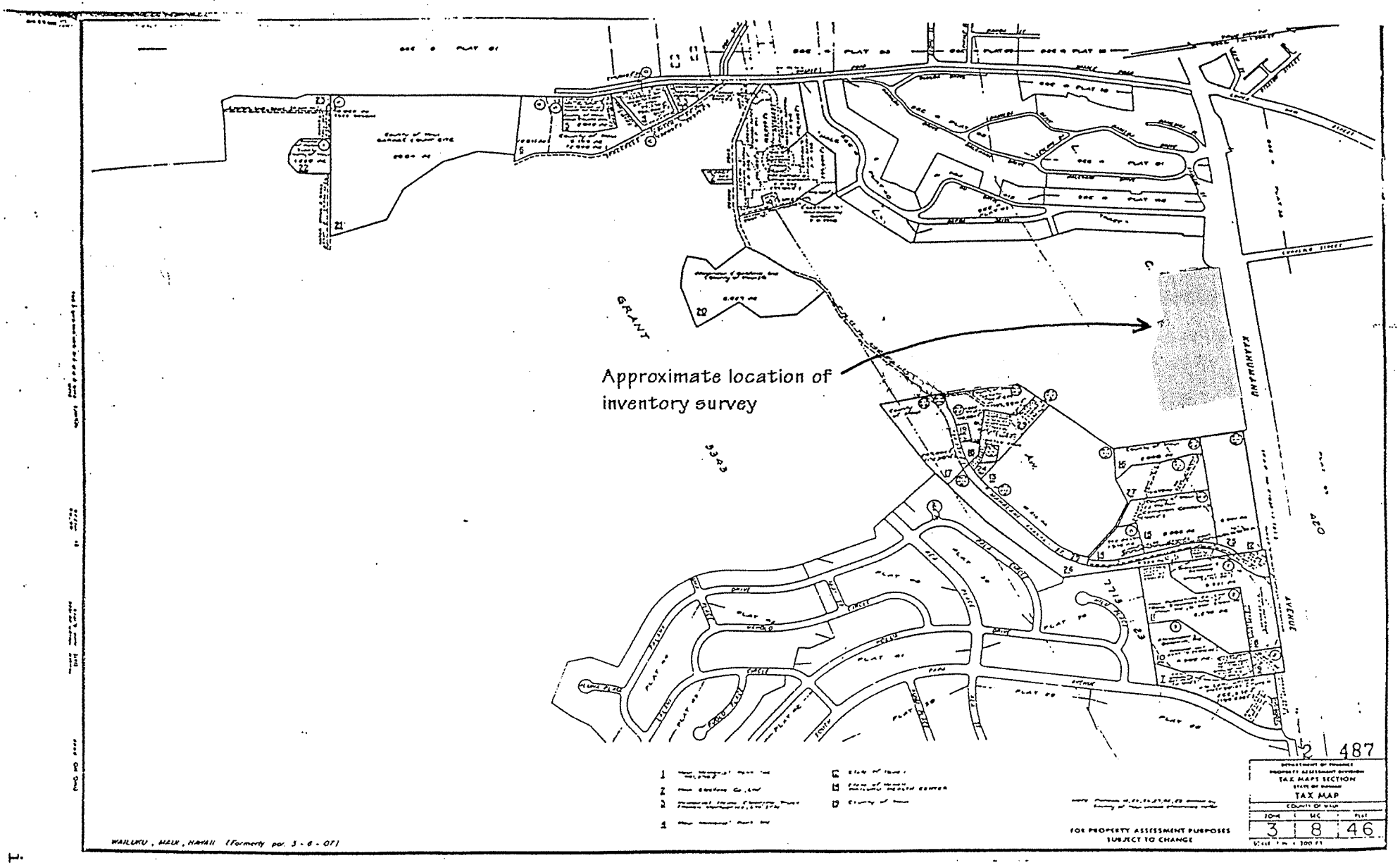
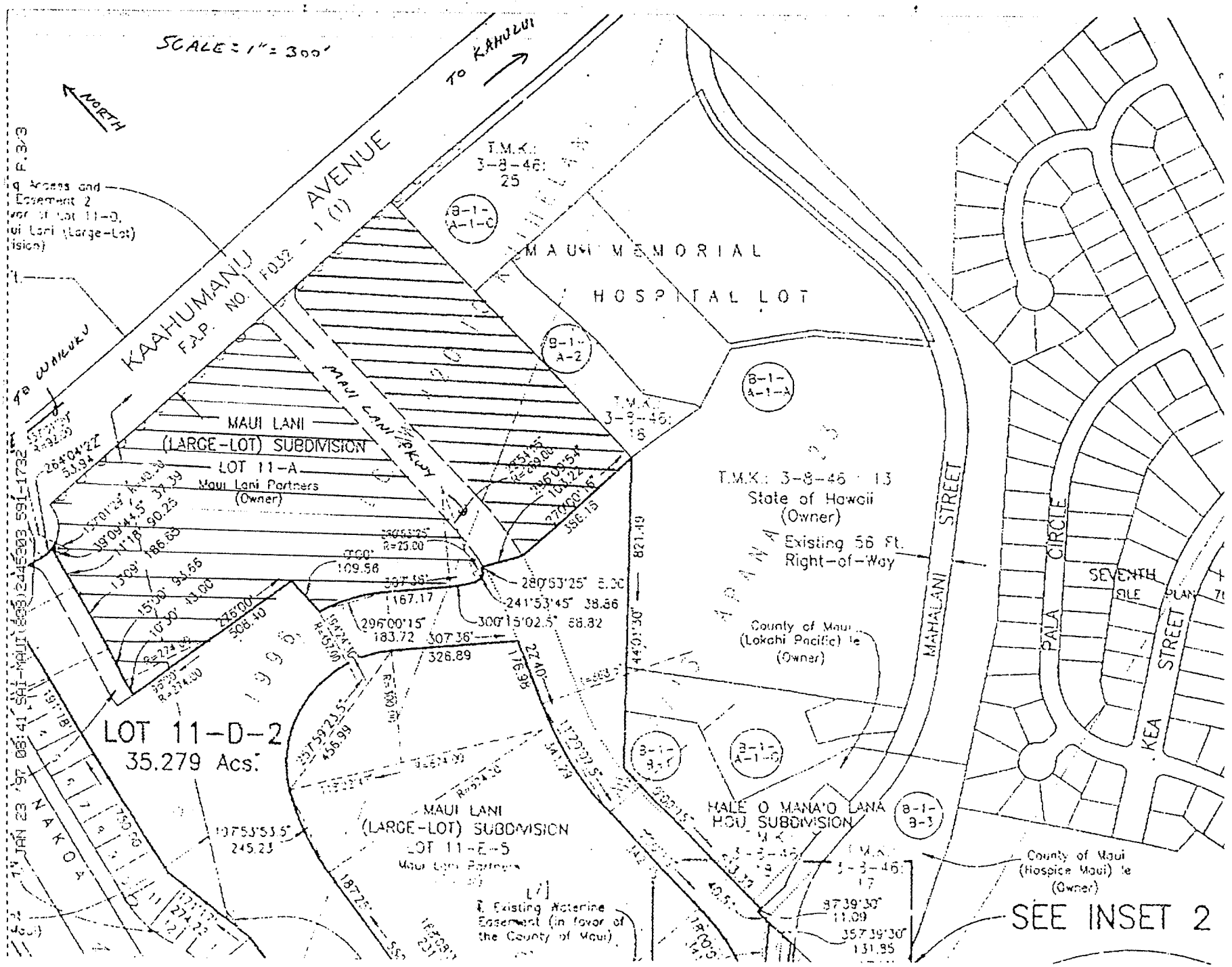


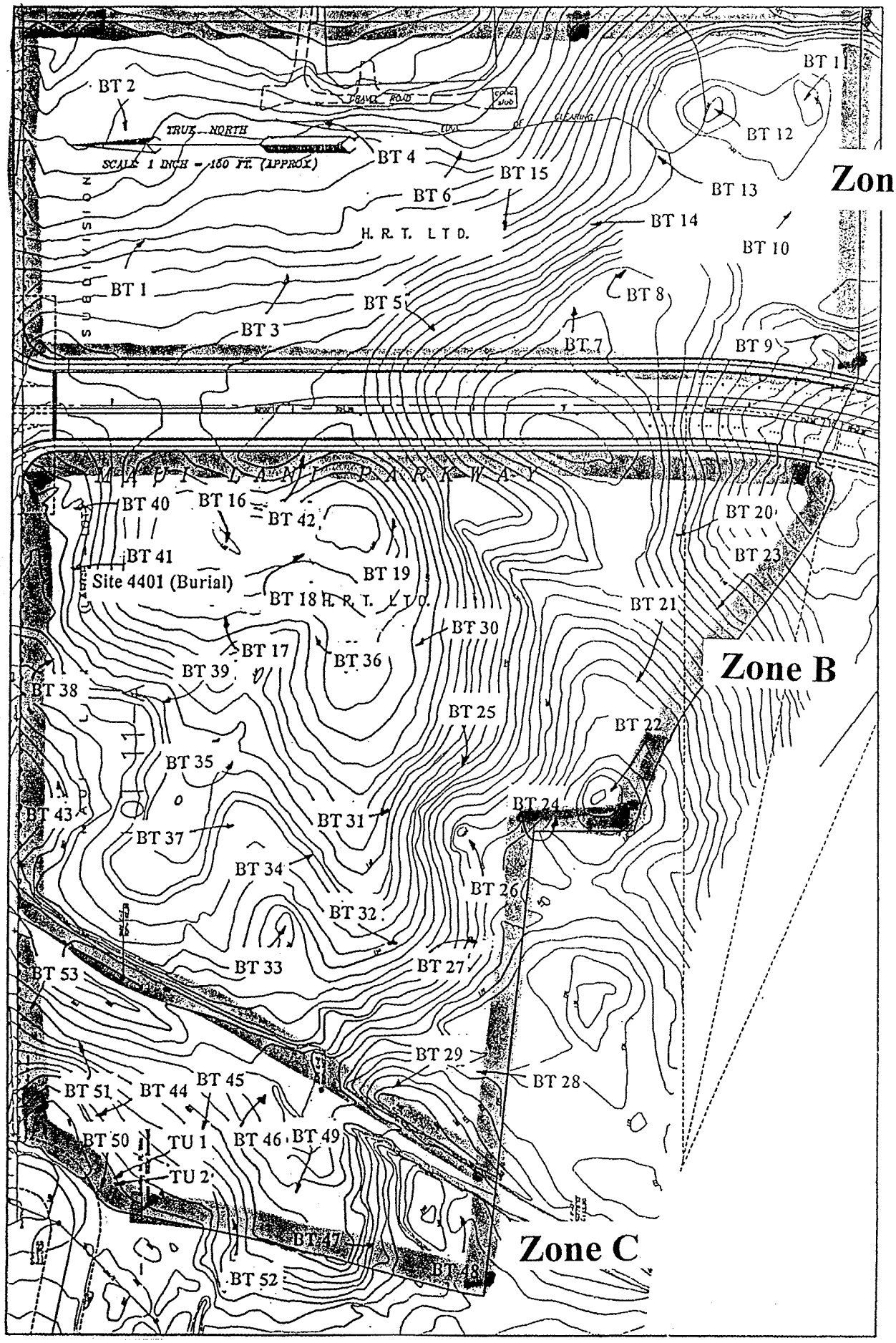
Map 1 - Topographic Map, U.S.G.S. Wailuku Quadrangle, 1983.



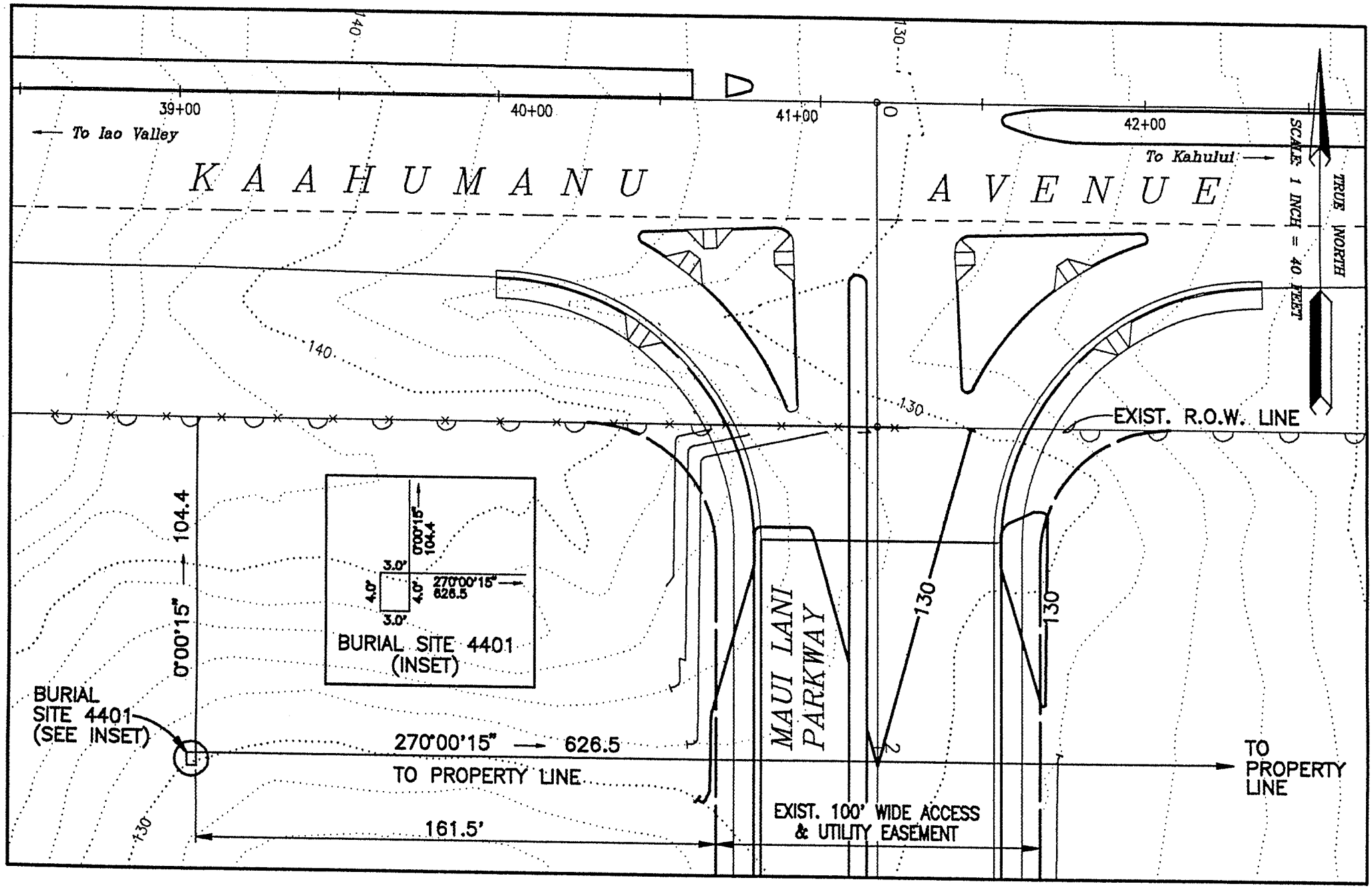
Map 2 - Tax Map, Zone 3, Section 8, Plat 46 (Formerly por. 3-8-07), State of Hawaii, Tax Map Division.



Map 3 - Site Map showing location of Lot 11-A.



Map 4 - Site Map showing locations of Backhoe Trenches.



Map 5 - Site Map showing exact location of Burial Site #4401.

MAUI LANI PARKWAY

BURIAL SITE 4401 LOCATION

03/18/97 SCALE: 1"=40'

SATO &

INTRODUCTION

The present inventory survey is a continuation of research begun in December of 1996, when Xamanek Researches conducted an inventory survey of the proposed Maui Lani Parkway road corridor for Mr. Jeffrey Pearson, of Sato and Associates, Engineering Consultants, Wailuku (Fredericksen and Fredericksen, January 1997). When that work was concluded, we were requested to prepare an inventory survey for another 20.7 acre portion of TMK: 3-8-07: 121, which lies on the east and west sides of the Maui Lani Parkway corridor near Kaahumanu Avenue. This has been identified as the Maui Lani Lot 11-A project, and it is located in the *ahupua`a* of Wailuku, District of Wailuku, and on Maui Island.

STUDY PARCEL

Natural History

The project area lies on the western side of the Kahului Isthmus, on the alluvial flank of the West Maui Mountains, in an area that is generally referred to as Wailuku Sand Hills. The Sand Hills make up part of the Pu`uone Sand Dune Formation—a large feature which extends from Kahului Harbor to Waikapu. The surface soils are classified as Pu`uone sands. They are underlain by lava flows from Haleakala and alluvial sediments from the West Maui Mountains (Stearns and Macdonald, 1942, P.54). These underlying soils are classified as Pulehu-Ewa-Jaucas association. They are described as "Deep, nearly level to moderately sloping, well-drained and excessively drained soils that have a moderately fine-textured to coarse-textured subsoil or underlying material; on alluvial fans and in basins." (Foote, et. al., 1972, p. 8).

The overlying Pu`uone sand is grayish-brown to light brown in color, and forms layers of strongly alkaline cemented sand hard pan (referred to as lithified sand in this report), occurring 20 to 40 inches below the surface. In some instances, the loose sand has blown away, making this formation much closer to the surface. Old root molds filled with hard, white alkaline deposits are a common feature in the sands (Ibid., p. 117). Pu`uone sands occur on slopes of 7 to 30 degrees, and develop in material derived from coral and sea shells (Ibid.).

The annual rainfall in this area of Maui averages 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, p. 56).

In general, the study area is heavily vegetated. The bulk of the project parcel is covered by *kiawe* (Prosopis pallida) trees. Predominant understory plants include *koa haole* (Leucaena leucocephala), lantana (Lantana camara) and various alien annuals and grasses including Guinea grass (Panicum maximum) and buffelgrass (Cenchrus cilliaris). On exposed dune ridges, 2 indigenous plants are relatively common--*`ilima* (Sida fallax) and *`uhaloa* (Watheria americana).

The eastern boundary of the subject parcel has been graded in the past and is currently used as a plant nursery. At present Lot 11-A is not being utilized. The elevation of the parcel ranges from 122 feet AMSL to 190 feet AMSL.

BACKGROUND RESEARCH

Precontact Period

The *ahupua'a* of Wailuku is a large land unit stretching around Kahului Bay from Paukukalo to Kapukaulua. It includes Iao Valley and the northern half of the Kahului Isthmus. This single land division comprises nearly half of the District of Wailuku, and is noted as a place where chiefs were buried and wars were fought. The word itself can be translated as "water of destruction" (Pukui, et. al., 1974, p. 225), and this name is in reference to the battles which took place in the area.

Iao Valley and the two associated dune formations on the north and south sides of the river, constituted the core area of Wailuku. This was the central place of religious and political power on Maui, which culminated during the time of Pi`ilani (c. 1600 AD). In the late precontact period, warfare increased as the chiefs from Maui, Oahu and Hawaii vied for political and military dominance. High Chief Pi`ilani unified the districts of Maui by warfare, but after his death, his sons fought with one another. Each tried to establish political control. Eventually Kiha-a-Pi`ilani became victorious (Speakman, 1978, pp. 9-13). Each succeeding generation of chiefs had to struggle through warfare to secure their positions of political domination.

During the reign of the last powerful paramount chief or king, Kahekili (who ruled from 1765 to 1790), Wailuku again became the site of intense warfare. Kahekili's royal residence, Kalanihale, was located in Wailuku.[1] In the mid-1770s, Kalanihale was marched upon by a Big Island chief named Kalani`opu`u and his *alapa* (the name given to his warriors). News of his coming 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 Kalani`opu`u's army was pushed to the sea and slaughtered (Speakman, pp. 16-17).

By 1786, Kahekili controlled not only Maui, but Molokai, Lanai, and Oahu as well. This undisputed political control lasted for only 4 years, however. In 1790, Kamehameha the First made his move on Kahekili's domain, an action which ended in the battle of Kepaniwai[2] and the defeat of the Maui ruler. The word Kahului can be translated as "the winning", and the Bay takes this name because Kamehameha gathered his warriors there prior to fighting the battle in Iao Valley (Pukai, et. al., 1974).

Early Post-Contact Period

The reign of Kamehameha was intertwined with the increasing presence of foreigners (*haoles*) in the islands. The arrival of Captain Cook offshore at Kahului Bay in 1778 began the steady flow of outside influences which would forever alter the indigenous population and environment. One of the first of these influences came with missionaries, whose charge it was to save heathen souls. The first missionaries arrived in Wailuku in 1832, and the traditional religion began to wane under their influence. A girls' seminary (Central Female Boarding School) was established by Rev. Jonathan Green in 1836, where young Hawaiian women were taught the language and customs of the foreigners, as well as their religion.

Another influence to bring change to the Hawaiians was foreign commercialism, and it came initially in the form of sugar production. The first sugar cane crops grown in the *ahupua'a* were harvested and processed in 1828. Kamehameha III, with the help of two Chinese technicians, established a water-powered mill in Wailuku. This was known as Hungtai Sugar Works, and its location was fairly close to the later location of the Wailuku Sugar Mill, which was established in 1862. Hungtai Sugar Works continued to operate until the opening of the new mill.

The population of the *ahupua'a* of Wailuku was listed in the 1831-32 census as 2,256, with most of it being in the northern portion, presumably in Iao Valley (Cordy, 1978, p. 59).

In Central Maui, on the southern and eastern side of the Iao Valley dunes (Pu`uone Dunes), commercial activity took the form of cattle raising. This sizable area

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

[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, p. 109).

was used for pasturage. By as early as 1845, large herds of cattle were roaming the Kahului Isthmus (cattle had been introduced on the Big Island by Vancouver in 1793). The Maui cattle were under royal *kapu,* so were not to be molested. They were so destructive to the environment that Native Hawaiian landowners protested, but to no avail (Barrere, 1975, p. 52). In addition to the commercial raising of cattle, there were also other commercial efforts, one being a brief attempt at the production of cotton in the 1830s. This endeavor met with little commercial success however[3], and further adversely impacted the landscape.

Post-1850s Period

After the Mahele in 1848, much of the *ahupua'a* of Wailuku was designated as 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) was granted to Kuihelani, a steward to Kamehameha I. The much smaller northern section (the *ili* of *Kalua*-LCA 7713, Apana 23--391 acres) was awarded to Princess Ruth's half-sister, Victoria Kamamalu. In 1882, Princess Ruth sold one-half of the Crown Lands of Hawaii to sugar producer, Claus Spreckels, in order to settle her debts with him. Spreckels already held a lease for 16,000 acres of Wailuku *ahupua'a*, dating from 1878. Worried about what Spreckels might do with half of the Crown Lands, King Kalakaua gave him Land Grant 3343, a 24,000 acre portion of the southeastern section of Wailuku *ahupua'a.* in return for the surrender of his claim (Adler, 1966, pp. 262-264).

The Reciprocity Treaty of 1876 with the United States gave a boost to the sugar industry by increasing the prices of sugar. The dry eastern part of the *ahupua'a* became attractive as potential sugar land if only water could be brought to it. In 1880, Spreckels began construction of what was called "Spreckels' Ditch", located *makai* of the Hamakua Ditch, built earlier by Alexander and Baldwin to water their Maui Agricultural Company's fields. The "Spreckels' Ditch" brought Haleakala water to 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 also built another ditch, 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, pp. 48-49).

---

[3]The Anglican Church felt that "the Hawaiian people, freed from their service to and dependence on the chiefs should be self-supporting and thought that the encouragement of the manufacture of cloth from the superior cotton which grew luxuriantly in the islands would be a means to that end. They therefore suggested that a manufacturer be sent with sufficient machinery to get the project started. They felt that the people would continue to work with the encouragement and cooperation of the chiefs." (Lemmon et. al., 1973, p. 2.B.3). To this end they sent Miss Lydia Brown in 1835 with " 'a quantity of domestic spinning apparatus' (presumably spinning wheels and a loom)" (Ibid.), and "charged with the responsibility of teaching the Hawaiian girls the arts of carding, spinning, weaving and knitting locally grown cotton and wool." (Ibid.) As each class grew proficient enough to teach others, a new class was formed (Ibid., 2.B.4).

These endeavors enabled him, in 1882, to found Hawaiian Commercial and Sugar Company. He continued involvement in that company until 1898, when control was wrested from his hands. The parent company still bears the name of Alexander and Baldwin, the principal participants in the transfer of corporate control. The production of sugar cane continues to be an activity in the isthmus area to this day, although some portions operated by C. Brewer and Company have shifted to pineapple production.

The environmental conditions in the lower Iao Valley, which in precontact times were ideal for agricultural necessary to support a large population, were a wide valley floor, rich alluvial soils, and a constant water supply from Iao Stream. These combined with the access to Kahului Harbor, rich in marine resources, made this area the prime precontact location on West Maui for a political and religious center. The lower portion of Iao Valley contained some of the most productive taro land on the island, and the abundance of Land Commission Awards in the lower valley attest to this. There are 66 LCA's, primarily taro patch *kuleana*, and 39 *po'alima* located between the old Wailuku Mill site and Paukukalo, on the southern side of Iao stream. In addition, 13 awards were made directly to individual chiefs by Kamehameha IV.[4]

Lower Main Street was built along the route of an old government road, which very likely followed the course of existing transportation routes from the ocean to the inland portions of Iao Valley. Many of the LCAs in this area have borders aligned with the road, indicating it was an important transportation corridor at the time the *kuleana* were granted. This corridor follows the natural boundary between the sand dune and the alluvial deposits of the valley. The Kahului Railroad paralleled Lower Main Street, and was one of the earliest known commercial projects which impacted the dune itself.

The route of the railroad from Kahului Harbor to Wailuku Sugar Mill is shown on both the 1954 USGS map, and the 1937 Towill Map. The remnants of this old railroad bed can still be noted in a few places along Lower Main and Waiale Road. Railroad construction was begun in the late 1870s and continued for nearly 2 decades, as routes were added and service expanded. The railroad continued operations until after World War II. Then slowly, demands began to change, and segments of the system were phased out. An article in **The Maui News** of October 15, 1957 bore the headline "Iron Horses Bow Out As Wailuku Sugar Company Discontinues Use of Railroad". The railroad continued to serve other areas until 1966, when it ceased operation.

The commercial and residential growth along Lower Main Street is related, no doubt, to the growth of the railroad. After the railroad's closure, development on the southern side of the street began, and generally the dune was cut down to street level in the developed portions. At the time of this construction and development, little or no

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[4] 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.

attention was paid to archaeological sites impacted by such construction. If burials were encountered, the bones were simply turned over to the local mortuary for disposal.

In the Central Maui area to the south and east, development did not occur until later. During World War II, portions were used by the military. There was a large Marine Base in the area occupied by Maui Community College and the Maui Arts and Cultural Center. After the war, several housing developments were built in the Kahului and Wailuku area. The Police Station lies just east of the study parcel, while Maui Memorial Hospital lies to the southeast.

Alexander and Baldwin began planning the Maui Lani Development in the 1970s and 1980s, a project which covers more than 1000 acres. It includes 634.2 acres for residential use; c. 200 acres for recreational use, including an 18-hole golf course; 68 acres for public/quasi-public use; 21.7 acres for commercial use; and 67.8 acres for circulation and open space.

This Maui Lani Partners project lies to the south of the present study area, and the Mahalani Road Extension will serve as a transportation link for that development. It will also provide an alternative route from Kaahumanu Avenue near Maui Memorial Hospital to Honoapiilani Highway near Wailuku Heights, and connect with Maui Lani Parkway, which bisects the current study parcel.[5]

PREVIOUS ARCHAEOLOGICAL WORK

Iao Valley/Pu`uone Dunes Area

The earliest archaeological work in the Wailuku area was part of the island-wide survey done by Winslow Walker in 1931. He reported that there were a number of *heiau* in the general area of Wailuku. Two lie on the northern side of Iao Stream atop the large dune formation there--Pihana and Haleki'i. Both have been restored and are designated as the Halekii-Pihana Heiau State Monument, under the supervision of the Division of State Parks (DLNR). Walker also reported that there were a number of other *heiau* in this area of Wailuku, which were said to have been consecrated by Liholiho during his visit to Maui for that purpose in 1801 (Walker, 1931, pp. 146-147). At the time of his survey, none of these reported *heiau* (named Keahuku, Olokua, Olopio, Malena, Pohakuokahi, Lelemako, Kawelowelo, Kaulupala, Palamaihiki, and Oloolokalani) could be found (Ibid., p. 148).

[5] Work on Maui Lani Parkway is underway as of April 1997.

A personal communication (1992) from Mr. Charles Keau, a well-respected authority on history and prehistory of Maui, provides more information about some of these *heiau* which Walker could not find. By Mr. Keau's account, there were 3 *heiau* located in the Lower Main Street corridor from Kahului Harbor to the intersection of Lower Main and Mill Streets. One was situated across the street from the Maui Soda Company. Another was located on parcel 83 (TMK: 3-4-39) between the Maui Electric Power Station and the County of Maui Wailuku Government cemetery. A third may have been located near the Home Maid Bakery. During the construction of the parking lot next to the bakery, Mr. Keau reported that Wesley Wong, a well-known local antiquity collector, found 5 adzes of "Tahitian" style. He did not specify when this was, but thought there might still be portions of the *heiau* there as well as some burials. Recent archaeological work has corroborated at least the latter part of this supposition (see discussion below).

Nisei Veterans Memorial Center

In February of 1992, the present authors began an inventory survey on the site for the Nisei Veterans Memorial Center, a 2 acre parcel of land at the intersection of Lower Main and Waiehu Beach Road (Fredericksen and Fredericksen, December 1992). The most notable feature was the railroad bed which runs the length of the property (Site 3112). Another historic site (Site 3119A) was a refuse disposal area about 20 cm. below the surface. The predominant historic items were bottles and ceramics dating from the late 1800s, about the time the railroad was in use. A subsurface excavation which cut through the historic site located a subsurface precontact site designated as Site 3119B.[6]

This site became extremely interesting when a very early radiocarbon date of AD 233-410 was obtained. However, later data recovery work did not produce material of a comparable date. The deposits from which it came turned out to have been previously disturbed by excavations done during the construction of the railroad bed, and the original source was not located.

In another area of the site, test excavations produced a number of artifacts, including coral files, bone picks, an unfinished fishhook, and worked bone, along with large quantities of food midden. This was designated as Site 3120. Data recovery research has shown this to be a large habitation site, which contains a cluster of burials. The latter have remained *in situ* and will be preserved as a permanent burial/grave site. A number of fire pit features have been recovered and a series of 12 radiocarbon dates were obtained. They range from the very early date mentioned above (AD 233-410) to AD 1200-1740, with the majority of the precontact dates falling in a AD 1400 to 1700 range. An interim report was prepared (Fredericksen, et. al., November 1995), and the final data recovery report is nearing completion.

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[6]Later data recovery work at this site has caused a revision in numbering. All precontact components of the site are designated as Site 3120, while the historic components bear the Site 3119 designation.

The entire subsurface habitation site will be preserved and the Nisei Veterans Memorial Center grounds will be landscaped in such a way as to ensure that the site will not be impacted by future activity.

Home Maid Bakery

Recent grading work at the Home Maid Bakery uncovered human remains. State Historic Preservation Division archaeologist, Theresa Donham ordered that an inventory survey be undertaken. During this survey, two sites were identified. Site 3924 contained 2 *in situ* burials, and a thin remnant of a cultural layer. Much of the cultural layer had been displaced by previous bulldozer action. Marine shell, 2 edge altered flakes, small waterworn stones, 6 basalt flakes, and 6 pieces of volcanic glass were found, along with a piece of coal and a chert flake (Burgett and Spear, 1995, pp. 20-24), which most likely have an historic origin.

Another site, Site 3925, represents a site with 2 primary cultural layers, and three very narrow, restricted cultural layers, along with 6 features. These are interpreted as hearth features, pits, and a possible post hole. A radiocarbon date from one fire pit yielded a date of AD 1436 to 1671. Another fire pit produced charcoal dated at AD 1430 to 1529. Ninety-nine artifacts were recovered, 87 pieces of basalt debitage, 4 basalt flakes with polish, 3 coral abraders, 2 edge altered flakes, 1 adze perform, 1 chert flake, and 1 worked mammal bone (Ibid., pp. 24-30). Quantities of shell midden were also recovered.

Theresa Donham spoke at the June 1995 meeting of the Maui County Cultural Resources Commission, and described these recent archaeological projects in Wailuku to commissioners. She feels that these two sites mentioned above are probably part of the same site which has been significantly disturbed. It was most likely part of a complex habitation and activity area which was associated with the *heiau* reported by Mr. Keau (Minutes, MCCRC, June 1, 1995).

Another site on the same Home Maid Bakery property, Site 4066 was identified during archaeological monitoring of a County of Maui road widening project along Lower Main, in 1995. A test trench, just 2 feet from the roadway bisected an intact portion of the dune which contained boulder alignments, fire pits, artifacts, and midden. An area c. 10 feet wide by 134 feet long was impacted. The remains of 4 individuals recovered were reburied in a crypt, along with the 2 *in situ* burials around which the crypt was built (Spear, December 1995).

Additional Sites along Lower Main Street

Other burial sites along Lower Main include Site 3556, which contained both historic and prehistoric burials; Site 3996 which is an identified human burial that is eroding from the face of the dune; Site 3928 is a remnant of a habitation site which

contained burials. A radiocarbon date from that site gives a range from AD 1424 to 1635 (Donham, n. d.).

Site 1172 was identified by a Bishop Museum archaeological team in 1971, as the Lower Main Street site. It consists of at least one cultural layer containing shell (*opihi, pipipi,* drupe, cowrie and land shells), coral, charcoal and water-worn stones. Three precontact artifacts included a coral file, a hammerstone fragment, and a possible hammerstone, triangular in shape (Connolly, 1973). Later sand mining activity apparently uncovered burials which were reburied upslope from the existing excavation, but their exact location is not known (Personal communication, Theresa Donham, recorded in minutes of the Cultural Resources Commission, June 1, 1995). Two additional burials were discovered eroding from this site in June 1994. They were recorded and disinterred by Ms. Donham, and have since been reinterred on the property (Burgett and Spear, 1995, p. 17).

Oceanhouse Site

In 1990, the present authors surveyed a half-acre commercial parcel in the Lower Main corridor (TMK: 3-4-39: 77). At the time of the study a good portion of the dune had been excavated to street level. No significant surface archaeological finds were made, but monitoring was recommended during any subsurface excavation, since the inventory survey did not include subsurface testing (Fredericksen and Fredericksen, 1990). This parcel was studied again in 1996, for Oceanhouse, Inc. by Scientific Consultant Services, Inc., following considerable alteration by grading. A site remnant was identified on the lip of the dune (Site 4004), and a few fragments of human bone were also found on the cliff face. A radiocarbon date range from AD 1420 to 1640 was established for the site remnant (Burgett and Spear, 1996).

Lower Main and Mill Street Intersection

Xamanek Researches conducted a surface archaeological survey on parcel 82 (TMK 3-4-39). Again, no surface features were found, with the exception of the raised railroad bed directly adjacent to Lower Main Street. Monitoring was recommended because of the lack of subsurface testing (Fredericksen and Fredericksen, January 1992). In 1995, an inventory survey, with subsurface testing, was conducted on a narrow strip of this parcel alongside Lower Main Street, as well as on parcels 81 and 83 (Fredericksen and Fredericksen, 1995). This was in response to a County of Maui Public Works project to widen and install traffic signals at the intersection of Lower Main and Mill Streets.

Seven backhoe trenches were excavated along with 5 auger tests and one manual test unit. The dominant surface feature was the Kahului Railroad Bed, which rose c. 1 to 1.5 meters above the street level. Beneath this historic feature, a fairly extensive subsurface habitation site was located in the 2 most northern backhoe tests (Site 4127). An unfinished bone fishhook and a dense basalt hammerstone were recovered from Backhoe Trench 1, along with shell midden. In Backhoe Trench 2, a large pit was

identified, which was thought to possibly be associated with a human burial. Data recovery was recommended and completed on the site. Radiocarbon dates indicated that Site 4127 was occupied in late precontact times (AD 1570-1780). Material culture remains included artifacts associated with fishhook manufacture, lithic tool use and production, and food preparation. While no human burials were found, the remains of an intentionally buried Hawaiian monk seal (Monachus schauinslandi) were present (Fredericksen and Fredericksen, September 1996). Monitoring was recommended during the excavation phase of the road widening project, since the possibility of human burials is high.

Waiale Road Corridor/Pu`uone Dunes

A precontact burial was found while road crews were excavating under the Kaahumanu Avenue bridge crossing Waiale Road (Site 4126).

Along Waiale Road, which forms the western border of the Wailuku Sand Hills (Pu`uone Sand Dunes), monitoring for a drainage project for C. Brewer found human remains which had been disturbed by a former pipe line trench that runs perpendicular to the road (Site 4005). Site 3502 also contains burials, an historic coffin burial and another disturbed burial that is thought to be precontact. Site 4067 is the remnant of a habitation site identified during the monitoring for the pipe line that revealed Site 4005. Site 4068 is a habitation site with an associated cluster of human burials (Dunn and Spear, 1995).

During construction for the Maui Homeless Shelter in May of 1992, 3 human burials were inadvertently discovered (Site 50-50-04-2916). These skeletal remains were investigated by Theresa Donham. She found the remains of an adult male in a grading cut, roughly 2 feet below the original surface (Burial 1). No cultural materials were associated, and a burial pit could not be identified. On May 21, a cranium (Burial 2) was exposed during construction of a desilting basin located along the lower slope of the dune at the southeastern[7] corner of the project area (Donham, 1992, p. 3). A test unit measuring 5 by 3 meters was excavated to a depth of 0.50 to 0.75 meters below the surface. All sand material was screened and a total of 280 identifiable elements or fragments were recovered, along with 235 miscellaneous fragments. Two individuals were represented, an adult female, and a smaller adult individual of undetermined sex.

The parcel adjacent to the south was surveyed by Xamanek Researches in 1995 (Fredericksen and Fredericksen, June 1995). While no sites or human remains were located during the survey, it was recommended that archaeological monitoring take place during construction. Human remains were located in April of 1996, but not before they had been seriously disturbed by grading activity during initial construction of the Ka Hale A Ke Ola affordable housing development. The remains were scattered over a 100 by 10

[7] This desilting basin extends to the border shared by the Homeless Shelter and the Ka Hale A Ke Ola affordable housing development.

meter strip near the fence of the Homeless Shelter where the burials had been discovered earlier. It is felt that these remains may be part of that burial complex (Site 2916), but have been issued a separate Site number—50-50-04-4192. The sands in which they were found were collected and moved across Waiale Road, so that construction work could continue. Approximately 9 truckloads of sand containing human remains were sifted by a mechanical sifter. This activity was completed in September, 1996, and skeletal remains of at least 4 individuals were identified, 3 adults and 1 child (Fredericksen, February 1997).

Another series of burials was encountered at a sand mining operation located ca. 1 km. to the south, at the Maui Scrap Metal Company in Waikapu. Sand from the site was transported to Lahaina for use at the Sewer Plant, and was found to contain human remains. Their origin was established, and for a period of several months, from November 1994 to March of 1995, sand material was screened by a large mechanical sifter in an effort to recover the human remains disturbed by the sand mining activities. The burial site bears the number 50-50-04-3525. A minimum number of 22 individuals were dislocated by sand mining activity, and were reinterred at the site by members of the Maui and Lanai Islands Burial Council in early March, 1995. The site is to be fenced and preserved as a burial site (Fredericksen and Fredericksen, February 1996).

Maui Lani Partners Project Area

Early surveys by Barrera (1976) of the 1,000 acre Maui Lani project which surrounds the present study parcel, and of the Hale Laulea Subdivision (Barrera, 1983) in Kahului did not identify any sites. Neller (1984) investigated the area known as the "sand borrow site" after sand from there, used at a construction site in Lahaina, was discovered to contain human remains. His research revealed one complete *in situ* burial, and skeletal fragments of at least 3 other individuals scattered in the vicinity.

In 1987, in response to a call from the Maui Police Department, the present authors visited this same general area ("sand borrow site") to determine the nature of skeletal material reported by local residents. The disturbed, flexed burial of a young female (18 to 25 years of age), and a 4 or 5 year old child nearby, lay partially exposed in a trail used by dirt bikers. At the request of the Police Department, the burials were removed. The presence of a shattered 4th thoracic rib and lower scapula blade on the left side, suggested that a frontal, traumatic puncture wound caused the death of the young female. The remains were curated at Maui Community College until they were turned over to SHPD on Maui for permanent disposition.

In 1990, the Anthropology Department of the Bishop Museum under contract to Maui Lani Partners conducted test excavations on 4 sites which had been identified in a reconnaissance survey done in January 1990 (Rotunno and Cleghorn, February 1990). The sites included 2 parallel alignments, 2 adjacent rock mounds, and a single rock mound. These sites were determined to be of recent origin related to off-road vehicular traffic, and not archaeologically significant. The fourth site (Site 50-50-04-2797) is a

human burial site found at the sand borrow pit near the eastern boundary of the Maui Lani project area. No intact burials were recovered, but the scattered remains of at least 3 individuals were recovered in the surface layer (Rotunno-Hazuka et. al., May 1994a). A subsequent burial search was undertaken. These investigations resulted in the identification of at least 12 individuals from 10 burial features. Six features were preserved *in situ* (Rotunno-Hazuka et. al., May 1994b).

The most recent work has been archaeological subsurface sampling of the Maui Land Development Phases 1 and 1A, 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 inventory survey (Pantaleo and Sinoto, January 1996).

A total of 90 backhoe trenches, 2 shovel scrapes and 1 manual trench were excavated in 58 localities (Ibid., p. iii). Six previously unrecorded burials were found—4 associated with the sand borrow site (Site 2797); one on top of a high dune (Site 4146), and another exposed in a road cut (Site 4147). All of these sites lie c. .5 mile south of the study area. The authors state: "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.)

No further archaeological work at the inventory level was deemed necessary. However, monitoring was recommended during the grading phase of construction.

Maui Lani Parkway and Mahalani Street Extension

Two inventory surveys in the immediate vicinity of the study area have been recently completed by Xamanek Researches.

Maui Lani Parkway is a roadway connecting Kaahumanu Avenue to the north with Mahalani Road to the south. This corridor is c. 2500 feet in length and ranges from c. 200 to 300 feet in width, and encompasses approximately 12 acres. It crosses two dune features. A 172 acre 18-hole golf course is planned for the area to the west, as part of the Maui Lani Development project discussed above.

Subsurface testing included 31 backhoe test trenches, placed in areas which appeared to be have a relatively high potential for locating archaeological finds. However, no significant material cultural remains were encountered in the project area during the inventory survey. Human remains were discovered on the western flank of one of the dunes in the vicinity of Hole #10 on the adjacent golf course (Site 4368). The scattered surface remains consisted of several cranium fragments and a cervical vertebra. These were turned over to SHPD immediately after their discovery.

Because of the burial find, and the fact that burials have been reported in the Pu`uone Dune formation elsewhere, monitoring during grubbing and earthmoving activities was recommended (Fredericksen and Fredericksen, January, 1997).

An inventory survey on Mahalani Street Extension corridor was conducted in February of 1997. A Programmatic Agreement (PA) between SHPD, DOT and FHWA was made as to what areas were to be covered by the survey. Since the proposed roadway will cross areas which have been substantially disturbed, the subsurface testing portion of the inventory survey was conducted in the 3 areas recommended in the PA. Eight subsurface backhoe tests were dug in these 3 areas. No significant historic features were located, but monitoring was again recommended in the sensitive areas, because of the continued discovery of human burials in the surrounding environs.

Summary

The settlement pattern seems to be one of intensive land usage in the Iao Valley and the Waiale Road corridor, along the northern and western sides of the Pu`uone Dunes formation. However, in the central area to the east of the dunes, very few sites other than scattered burials have been found. The authors have conducted studies at Maui Community College, Maui Central Parkway (Fredericksen and Fredericksen, December 1992; Fredericksen, et. al., 1994), and at the Keiki Zoo Maui (Fredericksen and Fredericksen, September 1995)—all with negative results. Archaeological Consultants of Hawaii conducted a survey for the Maui Arts and Cultural Center, again without significant findings (Kennedy, 1990). An inventory survey for the 110 acre Maui Central Park area, in which a large intact dune is present, was conducted by Cultural Surveys of Hawaii. Here again, no indigenous cultural sites were found. However, scattered remains (Site 50-50-04-4211) were located on the surface near the Maui Arts and Cultural Center, during a botanical survey conducted by Xamanek Researches. Subsequent archaeological work at the inventory level indicated that no additional human remains were present, and Site 4211 was evaluated as no longer significant (Heidel, Pyle and Hammatt, January 1997, p. 97). Other historic sites noted in the Maui Central Park inventory survey include Site 4232, a former WW II military facility, and Site 3112, the Kahului Railroad Berm. Both sites will be partially preserved by being incorporated into the landscaping of the Park (Ibid., p. 96).

While the extensive military activity associated with World War II could have altered the Central Maui landscape, thereby totally destroying archaeological sites, it is also possible that this area of Maui was simply not used much in precontact times.

Settlement Pattern and Land Use

The lower Iao Valley portion of Wailuku *ahupua'a* was a central political and religious area of West Maui, because of its fertile taro lands and close proximity to the sea. Given these conditions, a large population could be supported, and wherever large

population clusters are found, the social framework of chiefly importance and religious expression is also present. This is attested to by the existence of the 2 *heiau* (Haleki'i and Pihana) atop the northern dune system, and others reported by Walker (1931) and Keau (1992, oral communication) within the Iao Stream corridor. The middle and upper reaches of Iao Valley were also rich in *lo'i* and *'auwai* which produced additional food stuffs to support political and religious activities. The Upper Iao Valley had been traditionally known as a very significant sacred place in the history of Maui (Donham, MCCRC minutes, June 1, 1995). Coastal sites, such as Site 3120, have been occupied since the 1200s (and possibly much earlier), and no doubt provided the complex with marine resources. There seems to be a pattern whereby sites closer to the ocean have earlier dates than the ones farther inland, suggesting that settlement occurred first along the sea shore and gradually moved inland as the population numbers increased.

An intensification of usage appears to have occurred during the 16th century, and seems to have peaked around the time of Pi'ilani, ca. 1600 AD (Ibid.). All radiocarbon dates which have been recovered from the sites along this corridor fall into this temporal framework.

The central Maui area to the southeast, in which the present survey took place, is a part of the island which apparently was not used extensively in precontact times. It was much drier and less hospitable. Given such an arid climate and resultant poor soil conditions, one would not expect large permanent settlements to occur. There simply was not a constant water supply to provide for agricultural activities necessary to support permanent habitation. None of the archaeological studies conducted in the immediate environs have produced midden or architectural features suggesting habitation activities. On the other hand, the literature is replete with references to human burials, making the likelihood of their occurrence in the study corridor quite high.

TABLE 1

Listing of Archaeological Studies Done in Lower Iao Valley, Waiale Road, and Central Maui Area.

AUTHORS	LOCATION	FINDINGS
Burgett and Spear, 1995	TMK: 3-8-37: 48, Lower Main St., Home Maid Bakery. Sites 3924 and 3925	Habitation sites; human burials. Dated c. AD 1430 to 1671.
Burgett and Spear, 1996	TMK: 3-4-39: 77, Lower Main St., Oceanhouse, Inc., Site 4004	Habitation site remnant; human burials. Dated 1420 to 1640 AD.
Connolly, 1973	TMK: 3-8-36: 94, Lower Main St., Site 1171	Habitation site; burials discovered 1994 eroding from dune face.
Donham, 1994	TMK: 3-8-37: 49, Lower Main St., , Home Maid Bakery, Site 3556	Inadvertent burial discovery, both historic and precontact burials
Donham, 1992	TMK: 3-8-46: 21, Waiale Road, Maui Homeless Shelter, Site 2916.	Human burials.
Dunn and Spear, 1995	TMK: 3-4-02: 36, RR bed along Waiale Rd. Sites 4068, 4067; Site 3502 at Waiale Rd. and Kaohu Street	Habitation site and burials (4068); Habitation (4067).
Fredericksen, W. and Fredericksen, D, December 1992a	TMK:3-8-07: 40 and 43; Maui Community College Parking Lot Extension.	Historic sites from WWII. No precontact cultural materials.
Ibid., September 1995	TMK: 3-8-07: por. 1; Keiki Zoo Maui.	No findings of significance.
Ibid., February 1996	TMK: 3-8-07: 104; Maui Scrap Metal Company, Waikapu. Borrow Site, Site 3525.	Remains of at least 22 individuals recovered from mined sand.
Fredericksen D. and Fredericksen, W. December 1992b Fredericksen, et. al., November 1995 (Interim report)	Inventory Survey and Data Recovery: TMK: 3-8-07: 123, at Lower Main and Waiehu Road, Nisei Veterans Memorial Center.	Historic site, Kahului Railroad (Site 3112); large precontact habitation site, with continuous occupation from c. 1200 AD to c. 1740 (Site 3120); numerous burials to be preserved *in situ.*
Fredericksen, et. al., July 1995; Fredericksen, E. and Fredericksen, D. September 1996	Inventory Survey and Data Recovery: TMK: 3-4-39: por. 81, 82, 83 at Lower Main and Mill Streets, Site 4127	Habitation site; dated c. AD 1450 to 1675.
Fredericksen, E., D., and W., August 1994	TMK: 3-8-46: 30; Maui Memorial Park	No significant findings.
Fredericksen, E., W., and D., September 1994	TMK: 3-8-07: por. 125; Maui Central Park, 10 acres along Kahului Beach Road	No significant findings.

Fredericksen E., and Frederick-sen, D., June 1995	TMK: 3-8-46: 21, Waiale Road; Ka Hale A Ke Ola.	No significant findings during inventory survey—monitoring recommended.
Ibid., January 1997	TMK: 3-4-07: por. 121, Maui Lani Parkway corridor	No precontact finds in corridor—human remains (Site 4368) on Golf Course Hole #10—monitoring recommended.
Ibid., May 1997	TMK: 3-8-47: por. 1, 2, 3, 4, 17, 18, 30, and 32; 3-9-07: por 121 Mahalani Street Extension	No significant findings—limited monitoring recommended.
Fredericksen, E., February 1997 (post-field summary)	TMK: 3-4-07: por. 121, Lot 11-A, Maui Lani Project—20.7 acres	One indigenous *in situ* burial (Site50-50-04-4401)-Monitoring recommended.
Fredericksen, D. February 1997	TMK: 3-8-46: 21, Waiale Road; Ka Hale Ke Ola.	Human burials uncovered during grading—remains of at least four individuals recovered.
Heidel, Pyle and Hammatt, 1997	TMK: 3-8-07: 1 and 3-7-01: 2; Maui Central Park	Historic sites: 4232-WW II military camp; 3112-Kahului Rail-road Berm; 4211-scattered human remains.
Kennedy, 1992	TMK: 3-8-07; Maui Arts and Cultural Center.	No findings.
Pantaleo, J. and A. Sinoto, January 1996	TMK: 3-8-07: 2, 110; Phase 1 and Phase 1A, Maui Lani Partners Development, Wailuku.	No habitation sites. Human burials in several locations. Mon-itoring recommended. Additional burials during monitoring.
Rotunno and Cleghorn, 1990 Rotunno-Hazuka, et. al. May 1994a	TMK: 3-8-07: 2, 110: Maui Lani Development Property.	No precontact sites other than burials (Site 2797).
Spear, 1995	TMK: 3-8-37: 48; Lower Main St., Site 4066.	Human burials and habitation.

ARCHAEOLOGICAL FIELD METHODS

The archaeological inventory survey was carried out in 2 phases. A pedestrian survey covering the entire 20.7 acre parcel was first conducted by field team members spaced at c. 5 m. intervals. Ground visibility for Lot 11-A was generally poor due to dense grass cover. The walk-over inspection occurred after the property boundaries had been surveyed, and the study area was transected along roughly N-S lines. During this initial phase of the inventory survey, no surface evidence of significant cultural resources or features was located on the subject parcel.

The second portion of the inventory survey consisted of subsurface testing. A backhoe was used to excavate a total of 53 trenches. The subject parcel was divided into 3 zones - Zones A, B and C (see Map 4). Sampling in each zone was based on the general topography, and any indication of past disturbance factors. The backhoe trenches (BT) were from 5 to 7 m. in length by 1.5 m. in width and ranged from 1.8 to 3.8 m. in depth. The excavation of each of these trenches was monitored by 2 archaeologists. The backfill from each trench was inspected and spot-checked with 1/8 inch mesh screen. Trench profiles were visually inspected and recorded. It was not possible to closely check BTs 19, 34, 38, 41 and 47 due to very unstable trench conditions. In addition to being very unstable, BT 41 also contained a human burial (Site 4401) in the partial access ramp that was cut into it. All back dirt was screened with 1/8 inch screen in order to recover skeletal materials inadvertently removed during excavation of the unfinished ramp. Ms. Dana Naone Hall, Chair, Maui and Lana'i Islands Burial Council, inspected the site on the day of discovery (10 February 1997). At her request, these materials were reinterred with the portion of the *in situ* burial remaining in the profile of the trench ramp. Later on the same day, this ramp was subsequently backfilled by hand with screened sand.

In addition to the backhoe trenches, 2 test units measuring 50 cm. by 50 cm. by 50 cmbs were hand excavated. All soil from these test units was screened through 1/8 inch screen. Field mapping was carried out with metric survey tapes and hand held electronic compasses. Site 4401 and the tests placed in the project area were located and plotted on the topographic map supplied by Sato and Associates, Inc.[8] Photographs of the study area were taken with color film.

[8] Erik Fredericksen of Xamanek Researches subsequently accompanied a representative from Newcomer - Lee Land Surveyors to plot the location of the Site 4401 burial on 11 March 1997.

ARCHAEOLOGICAL FIELD RESULTS

The walk-over of the subject parcel produced no surface evidence of significant cultural resources. It appears that much of the 20.7 acre property is relatively undisturbed. However, 4 areas of impact were noted. The eastern boundary and portions of the study area have been graded in modern times. A rough gravel access road, a shed and various plant nursery materials were noted in this area (see Photo 1). The second zone of disturbance includes the proposed Maui Lani Parkway project which crosses the study area in approximately a N-S direction. A rough vehicle access track c. 5 m. wide associated with earlier soils testing and subsequent archaeological inventory testing is visible. The third area of modern disturbance is located near the western end of the parcel. A sewer line crosses the study area in a roughly NE to SW direction. This line dates back to the 1940s and has an unimproved access road associated with it. The sewer line and access road cut through a portion of the dune that essentially forms the southern boundary of the property. The last noted area of modern disturbance occurs near the western boundary. Past earthmoving activities associated with the placement Kainani Street and some minor grading were noted in this area (Photo 2). During the surface inspection of the study area, it became clear that the entire parcel is covered with sand dune deposits.

The subsurface testing phase of the inventory survey followed the surface walk-over of the project area. As noted in the previous methods section, the 20.7 acre parcel was divided into Zones A, B and C. Subsurface testing consisted of 53 backhoe trenches (BT) and 2 test units (TU). All of the backhoe trenches were halted when sterile dune sand or lithified sand deposits were encountered. There was no evidence of *in situ* cultural deposits located during the subsurface investigation.

In general, 2 types of stratigraphy were noted during subsurface testing on Lot 11-A. The first type is associated with areas at or near dune crests and along dune flanks (Photo 2). This type generally consisted of a thin (10 to 20 cm.) pale brown to brown (10 YR 6/3 to 5/3) surface sand layer that contained low amounts of organic materials. This is identified as Layer I, and when not sterile, contained pieces of modern materials including various types of plastic, metal and modern bottle glass fragments. The second layer, when present, was most commonly composed of very pale brown (10 YR 8/3 to 7/4) unconsolidated sand. Identified as Layer II, this unconsolidated sand ranged from 1.4 to 2.6 m. in thickness. This layer did not yield any *in situ* cultural deposits. However, a primary indigenous burial (Site 4401) was encountered in Layer II in the partly completed access ramp for BT 41.

Lithified sand was typically the bottom most layer in test instances. This stratum (Layer III) tended to be very pale brown (10 YR 8/3 to 7/3) in color and was sterile. This

very hard layer was occasionally underlain by unconsolidated, sterile sand. The lithified sand ranged from c. 1.6 to 2 m. in thickness in these instances, while the unconsolidated, sterile sand (Layer IV) extended to the bottom of the trench.

The second general type of stratigraphy tended to occur in low lying areas and is associated with deposition (Photo 4). All layers were slightly moist and essentially devoid of rocks. In most instances, Layer I was composed of dark grayish brown to black (10 YR 4/2 to 2/1) silty sand to very sandy loam. This stratum was up to 50 cm. thick. It was typically underlain by silty sand that was grayish brown to brown (10 YR 5/2 to 5/3) in color. Layer II ranged from c. 20 to 60 cm. thick. This layer was generally underlain by very pale brown to yellow (10 YR 8/3 to 8/6) unconsolidated sand (Layer III) which typically extended to the bottom of most trenches.

Refer to Table 2 for a summary of backhoe trench results. See Map 3 for locations of the 53 trenches, 2 test units, and the Site 4401 burial. A brief discussion of subsurface findings in Zones A, B and C follows.

Zone A

This c. 7 acre zone lies adjacent to and east of the proposed Maui Lani Parkway corridor. Zone A extends south from its northern border of Ka'ahumanu Avenue with a low elevation of c. 100 ft. AMSL to a dune ridge with a maximum height of 148 ft. AMSL near the southern boundary. Portions of Zone A exhibit signs of modern disturbance along the eastern boundary of the subject parcel. As noted earlier, modern activities associated with a nearby nursery have impacted the landscape. Portions of the property have been graded, in some instances, down to lithified sand deposits. A gravel vehicle access road is another indicator of relatively recent disturbances. In addition, several alien landscaping plants are present in this area that are not found elsewhere on the study parcel. This easternmost portion of Lot 11-A was not sampled during the subsurface portion of the archaeological inventory survey because of the proximity of the nursery operation (Photo 1). However, this part of Zone A was visually inspected during the earlier pedestrian survey. A total of 15 backhoe trenches (BTs 1 through 15) were excavated in Zone A. The following discussion presents representative backhoe trench profile descriptions.

Backhoe Trenches 1, 2, 5, 9, 10, 14 and 15

These 9 trenches were excavated in various locations in Zone A. In several instances, modern materials were noted on the surface, in the vicinity of trenches. Vegetation near these trenches was typically composed of *kiawe*, *koa haole*, alien annuals, grasses, and, occasionally, isolated *'ilima* and *'uhaloa*. Stratigraphy encountered in all 9 trenches was similar and consisted of 3 sand layers (Figure 1).

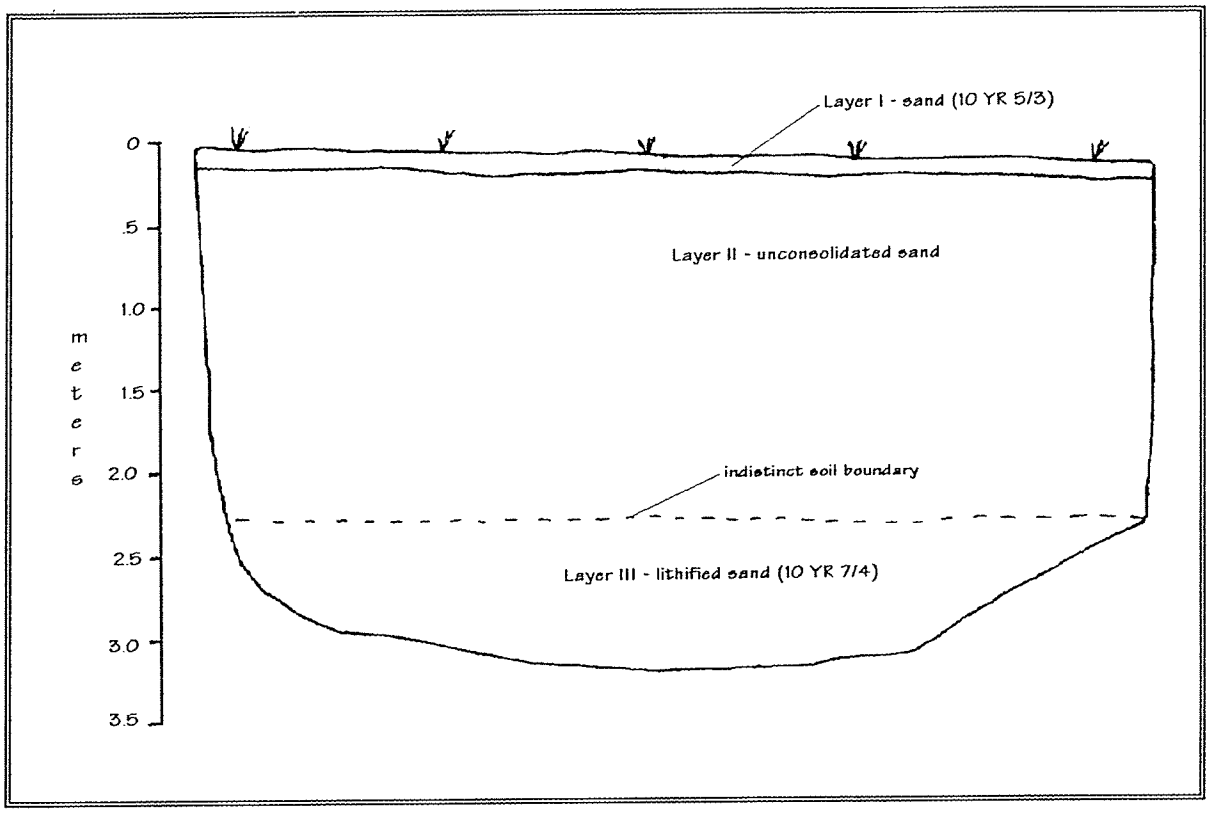

Figure 1 - East face profile, Backhoe Trench 2, Zone A (Representative of BTs 1, 2, 5, 9, 10, 11, 12, 14 and 15).

Layer I consisted of brown (10 YR 5/3) sand that generally contained moderate amounts of organic material. This surface layer ranged from c. 10 to 20 cm. in thickness and was typically sterile. It was underlain by unconsolidated dune sand that was very pale brown (10 YR 8/3 to 8/4) to yellow (10 YR 8/6) in color. This layer ranged from 0.8 m. to 2.6 m. in thickness in test instances. Layer II did not yield any material culture remains in Zone A. Layer III was composed of very pale brown (10 YR 7/3 to 8/4) lithified sand in all 9 trenches. Excavation was halted in this very hard stratum.

Backhoe Trench 3

This trench was located near the Maui Lani Parkway road corridor. Several modern beer bottles were noted c. 10 m. to the east. Backhoe Trench 3 was c. 6 m. long by 1.5 m. wide by 2.9 m. deep. Trench orientation was E-W. Vegetation consisted of *kiawe* trees, alien grasses and annuals. A total 3 sterile sand layers were encountered before excavation of BT 3 was halted (Figure 2).

Layer I consisted of the common brown (10 YR 5/3) sand that contained moderate amounts of organic material. This stratum was about 20 cm. thick. It was underlain by pale brown (10 YR 6/3) sand. Layer II extended to c. 80 cmbs The soil boundary with

Layer III was somewhat indistinct. This layer extended from c. 0.8 m. to the bottom of the trench. It was composed of very pale brown (10 YR 7/4) unconsolidated dune sand. Excavation was halted when a portion of the south face collapsed. It was possible, however, to obtain a profile of BT 3.

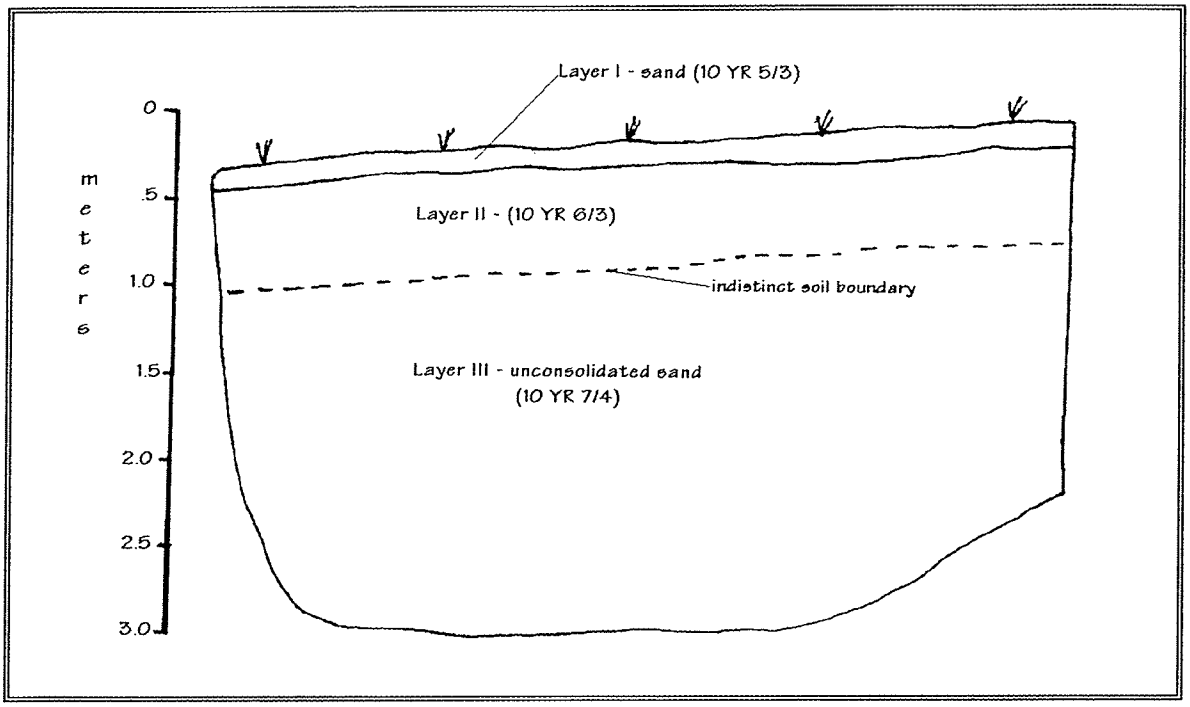

Figure 2 - North face profile, Backhoe Trench 3, Zone A.

Backhoe Trench 4

This trench was located near a grubbed area, likely associated with the nursery adjacent to and east of Lot 11-A. Vegetation in the vicinity consisted of alien grasses, *koa haole* shrubs and *kiawe* trees. Backhoe Trench 4 was c. 5.5 m. long by 1.5 m. wide by a maximum of 2.8 m. deep. Trench orientation was E-W. Modern materials, including several wooden pallets, were noted on the surface in the general area. A total of 4 soil layers were encountered before the unit was terminated in lithified sand (Figure 3).

Layer I consisted of brown (10 YR 5/3) sand with moderate amounts of organic material. This stratum was c. 10 cm. thick and did not contain any cultural material. Layer II consisted of reddish brown (10 YR 5/3) sandy clay fill that extended to c. 30 cmbs. This fill layer was sterile. Layer III was composed of unconsolidated dune sand. This very pale brown (10 YR 8/4) stratum extended to a maximum depth of 2.1 mbs. This sterile stratum was underlain by very pale brown (10 YR 7/4) lithified sand. Layer

IV extended to the bottom of BT 4. The trench was abandoned at a maximum depth of 2.8 mbs due to extremely hard subsurface conditions.

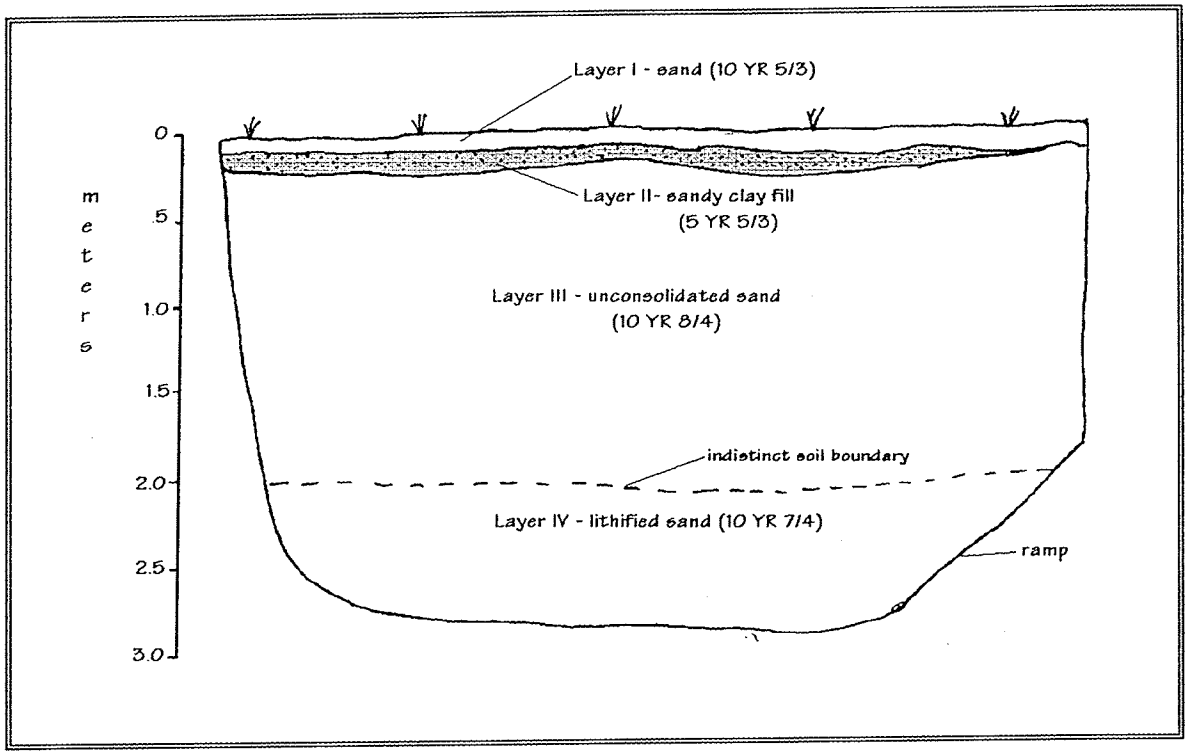

Figure 3 - South face profile, Backhoe Trench 4, Zone A.

Backhoe Trench 6

Backhoe Trench 6 was placed near the eastern boundary of Lot 11-A in the vicinity of a long brush and tree push pile. This grubbed material is most likely associated with past nursery activities. Trench dimensions were c. 6 m. in length by 1.5 m. in width by a maximum of 3.0 m. in depth. Unit orientation was E-W and a total of 4 soil layers were located before BT 6 was completed (Figure 4).

Layer I was made up of reddish brown (5 YR 5/4) sandy clay fill that was c. 35 cm. thick. This fill layer contained modern materials associated with plant nursery operations including a plastic Nitrohumus bag, a plastic plant container, and part of a wooden pallet. Layer II was composed of reddish brown (5 YR 4/3) small grade cinder fill up to 15 cm. thick. It appears probable that this cinder is also associated with past plant nursery operations. Layer III extended from c. 0.5 to 2.7 mbs and represents an intact dune deposit. This very pale brown (10 YR 8/3) sand appeared to be sterile. Layer IV was encountered between 2.6 and 2.7 mbs, and was composed of lithified sand. This stratum was very pale brown (10 YR 7/3) in color. Excavation was terminated because of extremely hard subsurface conditions.

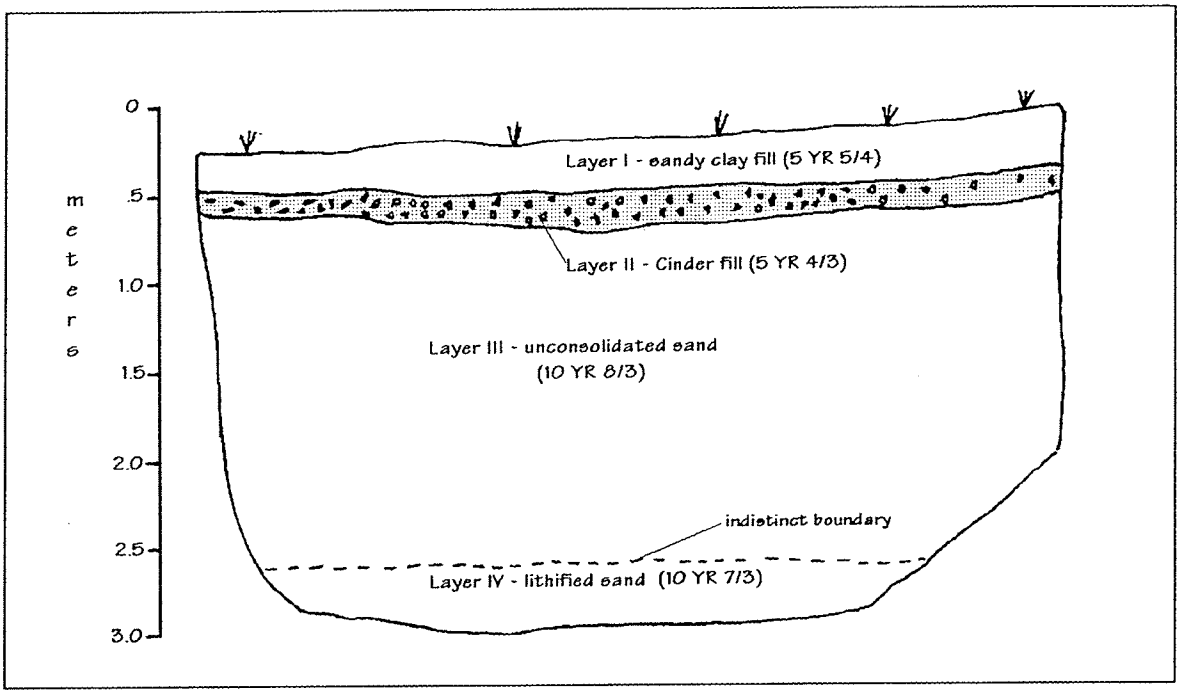

Figure 4 - South face profile, Backhoe Trench 6, Zone A.

Backhoe Trenches 11, 12 and 13

These 3 trenches were excavated near the southeastern corner of Lot 11-A. Backhoe Trenches 11 and 12 were located on dune crests, while BT 13 was placed on the dune flank below BT 12. Dimensions for these 3 trenches were c. 6 m. in length by 1.5 m. in width by 2.6 to 3.1 m. in depth. Two common soil layers were present in these 3 trenches (Figure 5).

Layer I consisted of pale brown (10 YR 6/3) sand that contained low amounts of organic materials. This thin surface layer was a maximum of 20 cm. thick in BT 13 and c. 10 cm. thick in BTs 11 and 12. While Layer I was sterile in BTs 11 and 12, it contained black plastic mulch sheeting in BT 13. Layer II was made up of very pale brown (10 YR 8/4) lithified sand that was sterile. This very hard stratum extended to the bottoms of all 3 trenches. Excavation was halted in these trenches because of very difficult subsurface conditions.

Zone B

This c. 12 acre portion of the project lies between the Maui Lani Parkway road corridor and the sewer line access road. Zone B ranges from a low of c. 122 ft. AMSL to a maximum of 188 ft. AMSL. This portion of Lot 11A exhibits the greatest relief. It appears for the most part to be undisturbed except in areas adjacent to the Parkway

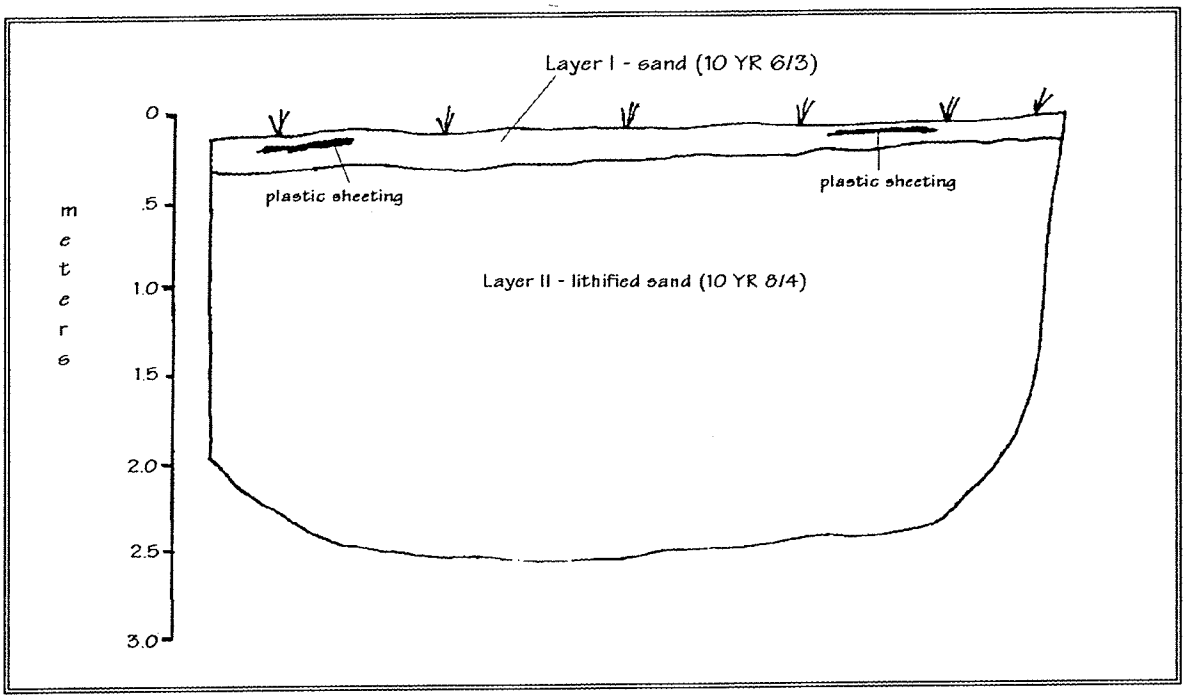

Figure 5 - West face profile, Backhoe Trench 13, Zone A.

corridor and the sewer line access road. However, a recently abandoned transient camp was located near the sewer line access road on the flank of a dune. In addition, modern refuse was noted in several other locations, along with 2 old transient camp sites. A total of 28 trenches (BTs 16 through 43) were placed in Zone B. The following discussion focuses on representative trench profile descriptions and the Site 4401 burial.

Test Trenches 16, 17, 18, 19, 31, 32 and 34

These 7 trenches were excavated in low lying portions of Zone B. The trenches were c. 5.5 to 6.5 m. in length by 1.5 m. in width by c. 2.5 to 3.5 m. in depth. All trenches revealed stratigraphy that indicated deposition. There were 3 to 4 similar, slightly moist soil layers encountered in each of these trenches (Figure 6). Vegetation in the low lying areas consisted of *kiawe*, *koa haole*, alien annual weeds, and alien grasses (Photo 4).

Layer I ranged from sandy silt to very sandy loam and was brown to very dark brown (10 YR 5/3 to 2/2) in color. This loose to very friable soil essentially contained no rocks, and was 20 to 40 cm. thick. Layer II consisted of silty sand that ranged from 20 to 60 cm. in thickness. This loose stratum was slightly moist and ranged from grayish brown (10 YR 5/2) to yellowish brown (10 YR 5/4) in color. It was underlain unconsolidated dune sand (Layer III). This slightly moist stratum extended to the bottoms of BTs 17, 18, 19 and 34 and was c. 1.6 to 1.8 m. thick. BTs 16, 31 and 32 had

contained a fourth layer that was composed of lithified sand. Layer IV was extremely compact and very pale brown (10 YR 8/4) to yellow (10 YR 8/6) in color. This stratum extended to the bottoms of the above 3 trenches. There was no evidence of material culture remains found in any of the 7 backhoe trenches excavated in the low lying areas of Area B. The bulk of these trenches were abandoned because of unstable subsurface conditions. Backhoe Trenches 31 and 32 were halted in very hard lithified sand.

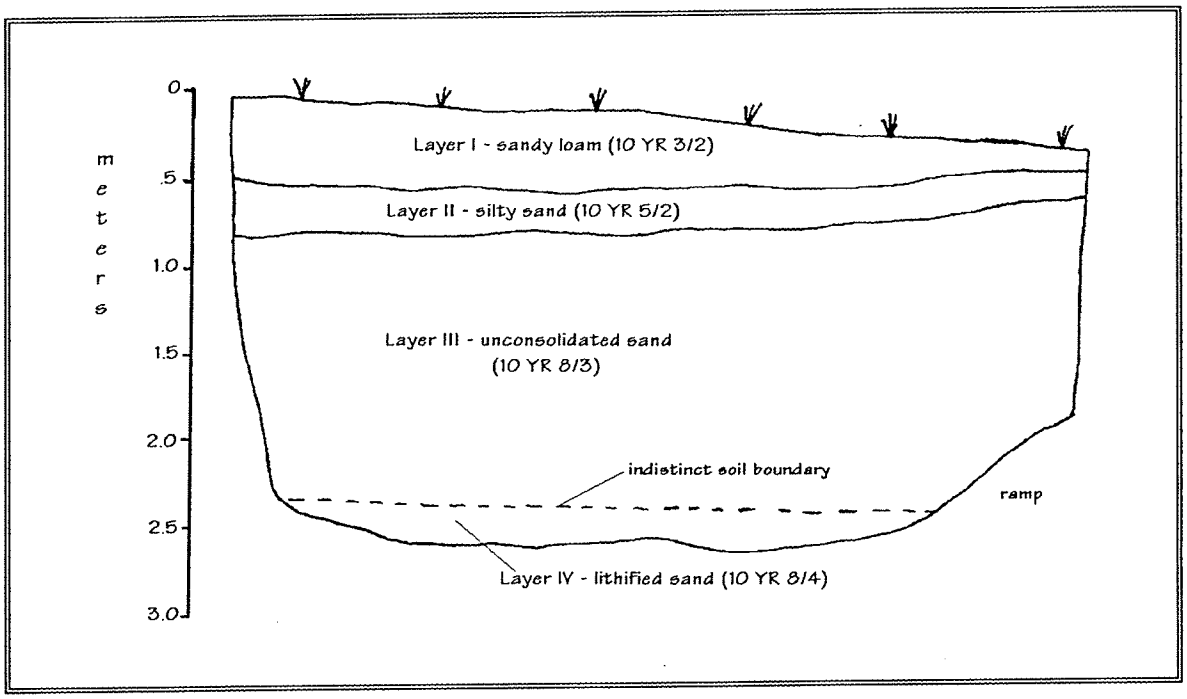

Figure 6 - East face profile, Backhoe Trench 16, Zone B (Representative profile for BTs 16, 17, 18, 19, 31 and 34).

Backhoe Trenches 30, 38, 40, 41, 42 and 43

These trenches were excavated near dune crests and on dune flanks. Vegetation consisted of stunted *koa haole* shrubs, indigenous *'ilima* and *'uhaloa*, and alien grasses and annuals near dune crests, while *kiawe*, *koa haole*, and alien grasses and annuals were present on the dune flanks. Trench dimensions were c. 5.5 to 6.5 m. in length by 1.5 m. in width by 2.8 to 3.3 m. in depth. Three common soil layers were present in these subsurface tests (Figure 11).

Layer I ranged from pale brown (10 YR 6/3) to grayish brown (10 YR 5/2) sand that contained low to moderate amounts of organic material. This thin stratum was up to 30 cm. thick and was sterile. Layer II was composed of very pale brown (10 YR 8/3 to 8/4) unconsolidated sand. This loose, dry layer ranged from 1.2 m. to 2.7 m. thick in test instances. No evidence of portable remains was encountered in any of the trenches.

However, an *in situ* burial was inadvertently located in the unfinished access ramp for BT 41.

Layer III was made up of very dense lithified sand that extended to the bottoms of the trenches. This very pale brown to yellow (10 YR 8/3 to 8/6) stratum was sterile. Excavation was halted in all instances because of very difficult digging conditions.

Site 4401, an *in situ* burial was located in the afternoon of 10 February 1997 after BT 41 had been completed. The trench was unstable, and so an access ramp was excavated in order to more safely inspect it. The human remains were encountered in the unfinished ramp between c. 70 and 80 cmbs. The burial was in flexed position, but a burial pit was not apparent. Work was halted immediately and Dana Naone Hall, Chair, Maui and Lana'i Islands Burial Council, was notified. Ms. Hall visited the site the same day, and requested that the burial be stabilized and reinterred on the same day. The sand with the inadvertently disturbed remains was sifted through 1/8 inch mesh screen. The recovered remains, along with associated cultural items were placed with the *in situ* portion of the burial. Screened sand was then placed over the remains and the location was marked in the field. Subsequently, Site 4401 was plotted in by representatives of Newcomer-Lee Land Surveyors, Inc.

Due to dangerous subsurface conditions, it was not possible to obtain profile of BT 41. It appears that the Site 4401 burial consists of an indigenous, robust, adult male individual. In addition, 3 dog teeth were associated with the burial. No other grave goods were found. It is assumed that this is a precontact burial. The final disposition of Site 4401 will be decided by the Maui and Lana'i Islands Burial Council.

Backhoe Trenches 20 through 29, 33, 35, 36 and 37

Like the previous subsurface tests, these trenches were located along dune crests and upper dune flanks in Zone B. Vegetation primarily consisted of stunted *koa haole*, indigenous *'ilima* and *'uhaloa*, alien grasses and annuals, and scattered *kiawe* trees (see Photo 5). Trench dimensions were c. 5.5 to 6.5 m. in length by 1.5 m. in width by 1.8 m. to 3.8 m. in depth. Stratigraphy typically consisted of 2 common sand layers (Figure 8). In 3 instances, a third layer occurred under the 2 common strata in BTs 20, 24 and 25 (Figure 7). In another instance, pushed sand was observed at the eastern part of BT 23 (Figure 9). However, BT 23 contained the 2 common sand layers of Zone B.

Layer I was composed of loose, pale brown (10 YR 6/3) sand that contained low amounts of organic material. This sterile layer was up to 20 cm. thick in most cases. However, in 3 instances, portable remains were found in Layer I. A total of 3 items were found in BT 24, BT 26 and BT 29. A profile of BT 24 was recorded (Figure 10). In BT 24, a possible basalt artifact was recovered from the upper 10 cm. of Layer I. This cobble was c. 6 to 8 cm. in diameter and weighed 223.7 g. It had what appeared to be minor pecking scars on one portion of its surface. No other portable remains were

located in BT 24. However, a waterworn manuport was noted on the ground surface c. 5 m. to the east and a modern surface scatter was present c. 8 m. to the south of the trench. The manuport was apparently recently deposited.[9] The surface scatter represents an abandoned transient camp and contained various rusted food containers and broken bottle glass. Backhoe Trench 26 was located c. 35 m. northwest of BT 24 on a dune crest. Layer I of this trench contained a broken (old break) dog femur. Close examination of the bone revealed canine tooth marks. It appears that the bone was dragged to this locale. No other evidence of material remains was found in BT 26. Like both Backhoe Trenches 24 and 26, BT 29 yielded an isolated find. A broken Maui Soda Works bottle was recovered from the thin Layer I deposit. It is probable that this bottle was manufactured in the 1920s or 1930s. As noted above, Layer I in all other trenches was sterile.

Layer I was underlain by lithified sand in all trenches. Layer II was very pale brown (10 YR 8/3 to 7/4) and extended to the bottoms of all trenches but BTs 20, 21, 24 and 25. Layer III in these 4 trenches was composed of very pale brown (10 YR 8/4) to yellow (10 YR 8/6) unconsolidated dune sand. This stratum was sterile and partially collapsed in all 4 trenches. However, it was possible to obtain a profile of BT 20 (Figure 7).

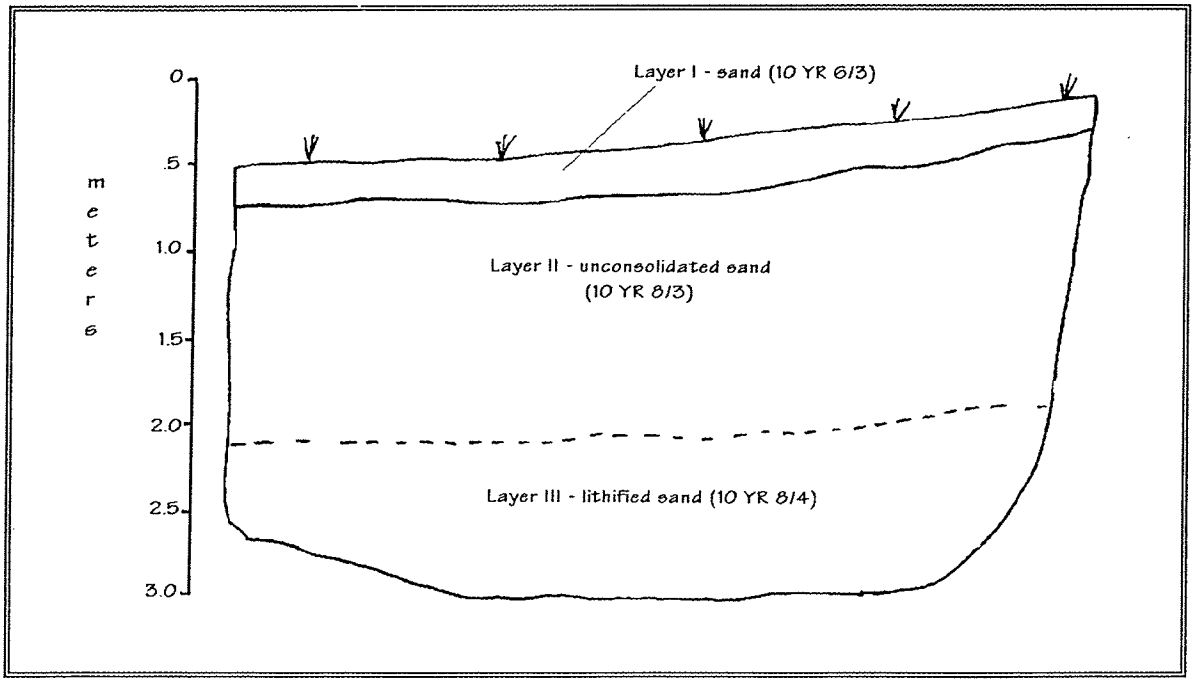

Figure 7 - South face profile, Backhoe Trench 20, Zone B.

[9] This waterworn piece of basalt was on top of growing grass.

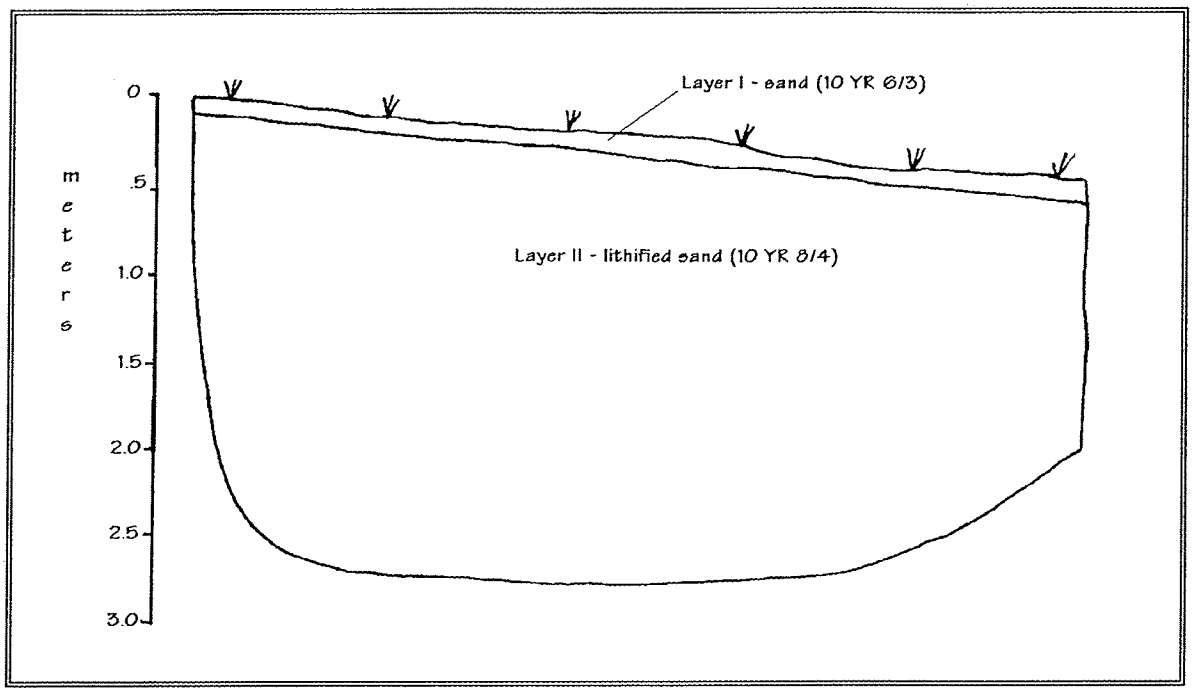

Figure 8 - North face profile, Backhoe Trench 22, zone B (Representative profile for BTs 22, 23, 24, 26, 27, 28, 29, 33, 35, 36, 37 and 39).

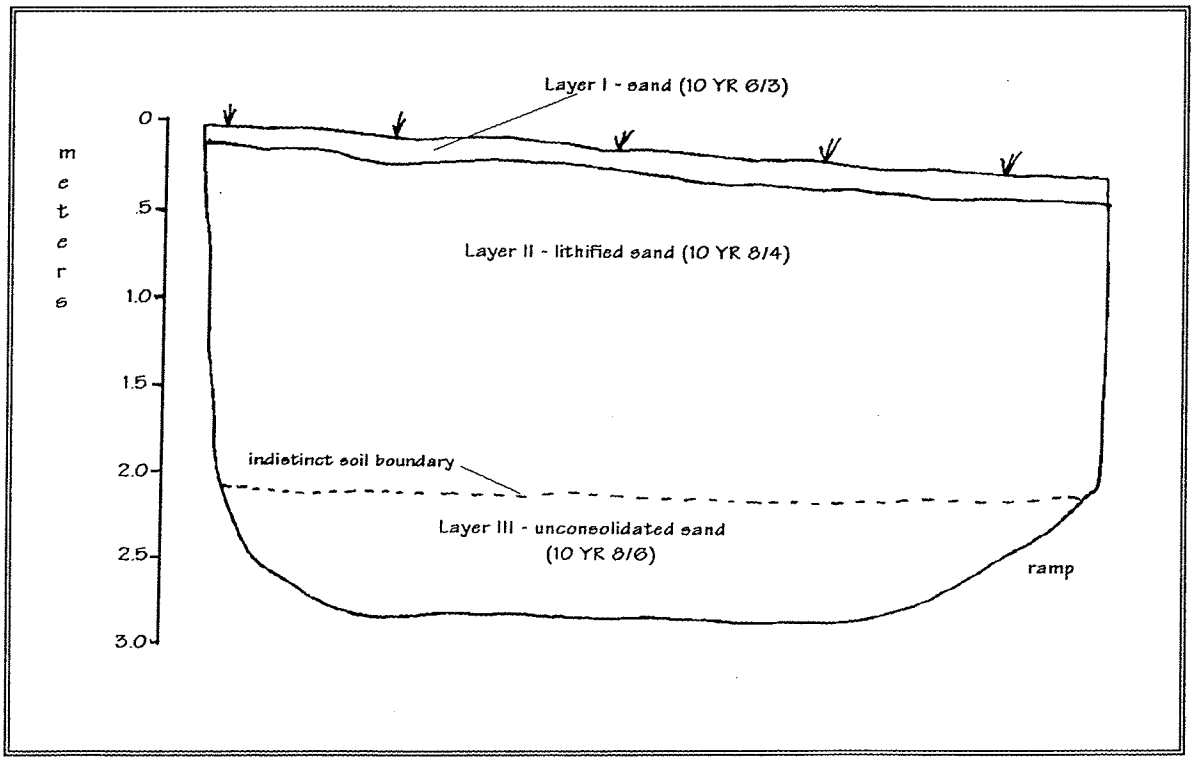

Figure 9 - South face profile, Backhoe Trench 23, Zone B.

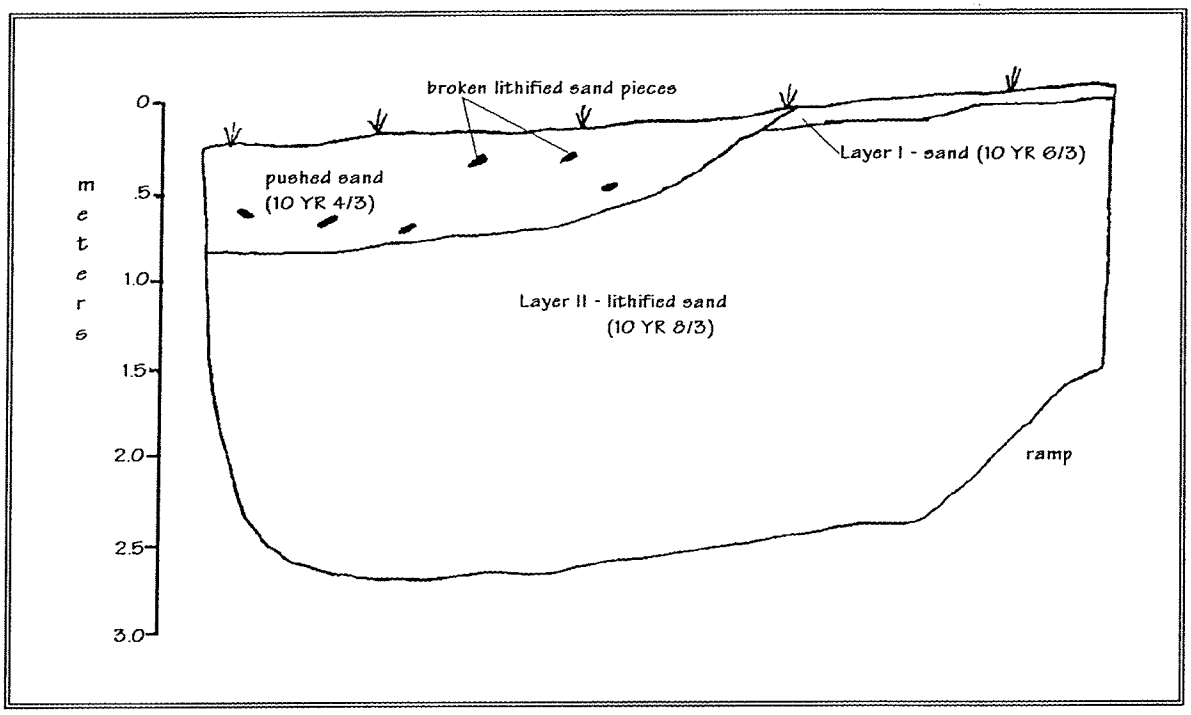

Figure 10 - North face profile, Backhoe Trench 24, Zone B (Representative profile of BTs 21, 24 and 25).

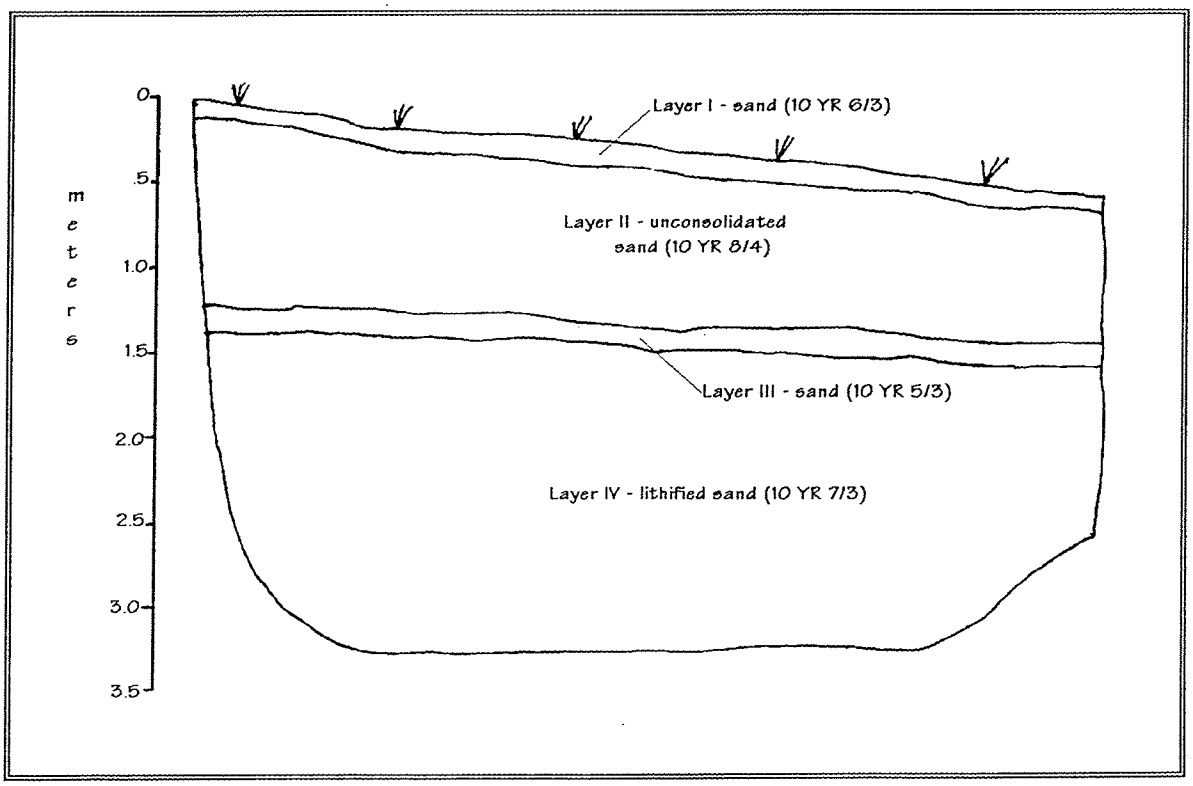

Figure 11 - East face profile, Backhoe Trench 40, Zone B.

Zone C

Zone C represents the smallest part of Lot 11A (c. 2 ½ acres). It lies west of the sewer access road and ranges from c. 158 to 190 ft. AMSL. Both the eastern and western portions of Zone C have been impacted by construction activities associated with placement of the sewer line, its access road and Kainani Street. In addition, portions of the western boundary were grubbed and filled in recent times (Photo 2). Representative trench profiles and Test Units 1 and 2 are discussed below.

Backhoe Trenches 44, 45, 47, 48, 49, 51, 52 and 53

Five of these trenches in Zone C were excavated on dune flanks, while BTs 48 and 53 were located near dune crests. Vegetation consisted of *kiawe* trees, alien grasses and annuals, and, near the dune crests, isolated *'ilima* and *uhaloa* shrubs. Trench dimensions were c. 5.5 to 7.5 m. in length by 1.5 m. in width by 2.7 to 3.1 m. in depth. Three common sand layers were present in these trenches (see Figure 12).

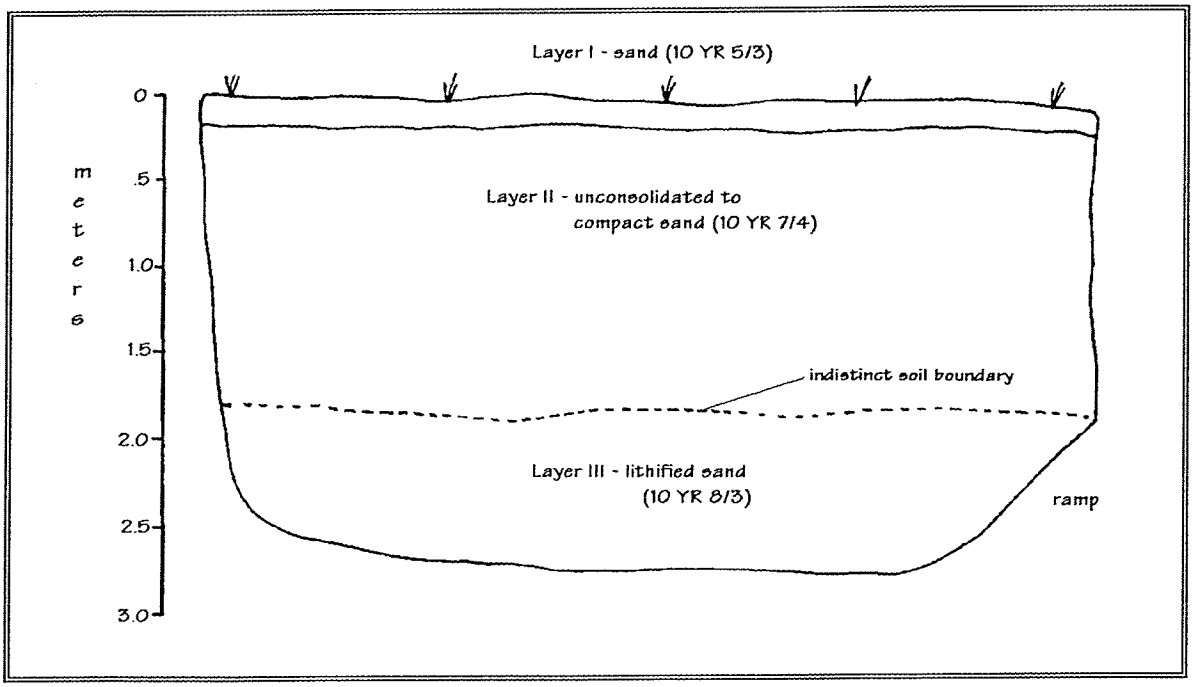

Figure 12 - South face profile, Backhoe Trench 44, Zone C.

Layer I consisted of pale brown (10 YR 6/3) to brown (10 YR 5/3) sand with generally low amounts of organic material. This loose stratum was up to 20 cm. thick and did not contain any material culture remains. Layer II was composed of very pale brown (10 YR 8/3 to 7/3) compact to unconsolidated dune sand. This stratum was c. 1 to 2.5 m. thick and sterile. Layer III was made up of very pale brown (10 YR 8/3 to 8/4) lithified sand. Excavation was halted in this very hard stratum in the above trenches.

Backhoe Trench 46

This trench was oriented E-W. It was located in a low area west of the sewer line access road. This partly open area contained scattered *kiawe* trees, *koa haole*, alien annuals and grasses. Trench dimensions were c. 6 m. in length by 1.5 m. in width by a maximum of 3.1 m. in depth. Trench orientation was E-W. Modern refuse was visible in the general vicinity of BT 46. Three soil layers were located before the trench was halted in very hard lithified sand (Figure 13).

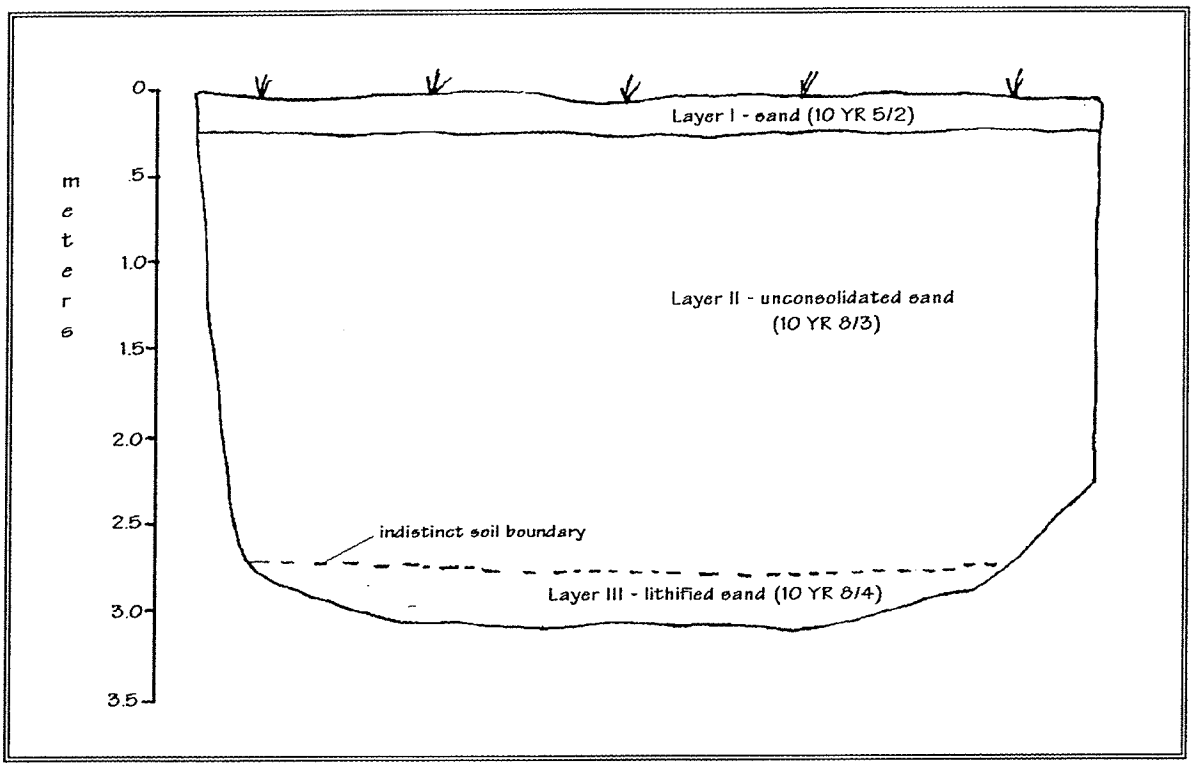

Figure 13 - North face profile, Backhoe Trench 46, Zone C.

Layer I was made up of grayish brown (10 YR 5/2) sandy silt. This stratum was approximately 20 cm. thick and culturally sterile. This slightly moist layer contained low amounts of organic material. Layer II was composed of very pale brown (10 YR 8/3) unconsolidated sand which was up to 2.4 m. thick. This dune sand deposit was sterile and overlaid lithified sand. Layer III was very pale brown (10 YR 8/4) and sterile. Excavation was halted due to the extreme hardness of the lithified sand.

Backhoe Trench 50

Backhoe Trench 50 was located near the northwestern corner of Lot 11-A. It was located on a dune flank in a disturbed area. Modern materials and apparent road

construction debris and push were noted in the vicinity of BT 50. *Kiawe* trees, *koa haole*, and alien grasses and annuals made up the vegetation in the general area of BT 50. The dimensions of this trench were c. 7 m. in length by 1.5 m. in width by 2.7 m. in depth. The trench was oriented N-S. In all, 5 soil layers were located before the trench was abandoned in lithified sand (Figure 14).

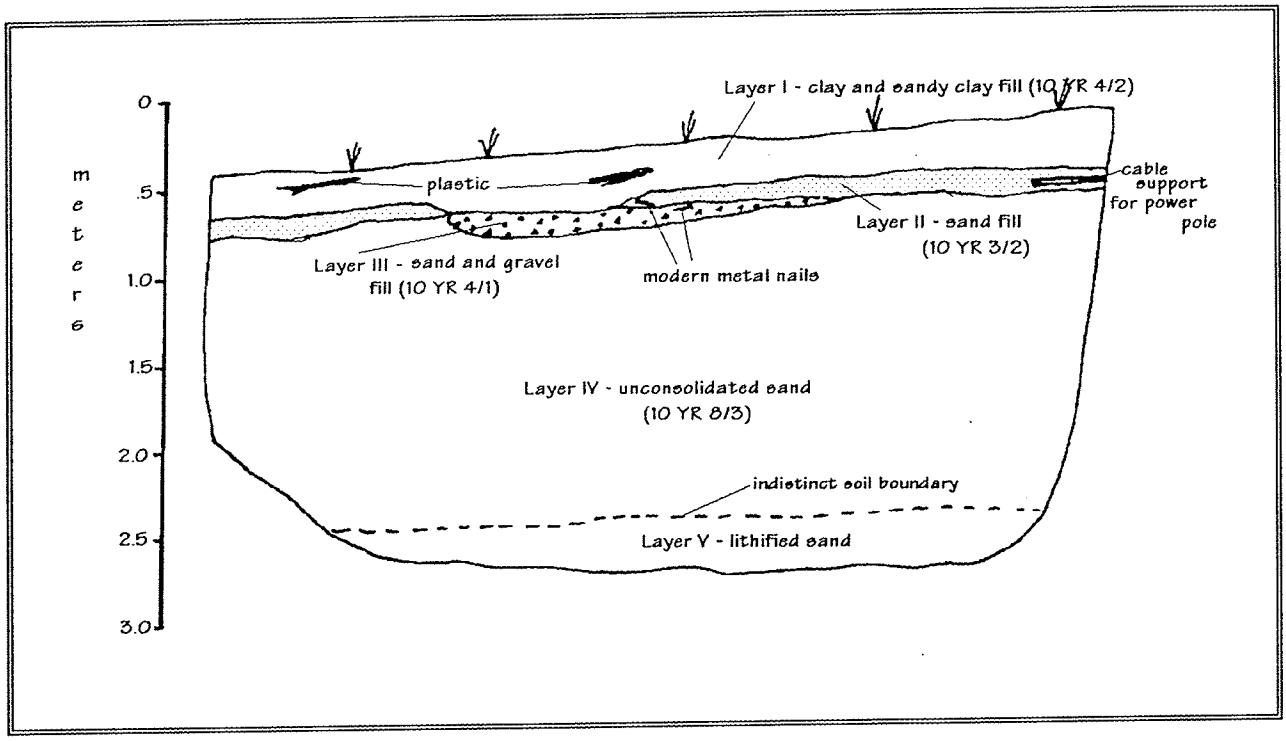

Figure 14 - West face profile, Backhoe Trench 50, Zone C.

Three fill layers overlaid intact sand dune deposits. Layer I was composed of dark grayish brown (10 YR 4/2) clay and sandy clay fill. This fill extended to c. 40 cmbs and contained modern materials including broken glass, scattered road gravel, rusted metal, and plastic. Layer II was made up of very dark grayish brown (10 YR 3/2) coarse sand. This fill contained modern materials such as rusted metal, plastic, and a power pole support cable that extended into the northern profile of BT 50. Layer II extended to c. 60 cmbs. Layer III consisted of light gray (10 YR 4/1) sand and road gravel fill. Modern materials were observed in this fill included round head nails, bottle glass, and paper. Layer III extended up to 60 cmbs. Layer IV consisted of very pale brown (10 YR 8/3) unconsolidated dune. This stratum extended to c. 2.4 mbs and overlaid lithified sand. Layer V was very pale brown (10 YR 8/4) in color. Excavation of BT 50 was terminated in this very hard and sterile layer.

Backhoe Trench 52

This trench was excavated in an area that appeared to have been recently graded (Photo 2). Dimensions of BT 52 were c. 5.5 m. in length by 1.5 m. in width by 2.8 m. in depth. Backhoe Trench 52 was oriented E-W. Three sterile soil layers were encountered before excavation of BT 52 was halted due to very hard subsurface conditions (Figure 15).

Stratigraphy in BT 52 indicated that a portion of a formerly intact sand dune had been recently graded. Layer I consisted of pale brown (10 YR 6/3) pushed sand fill. This layer was up to 30 cm. thick in the eastern portion of the trench. This layer and the underlying pushed layer were found to slope from the west to the east. Layer II was made up of yellowish brown (10 YR 5/4) pushed sand that was up to 30 cm. thick near the eastern end of BT 52. Layer III was composed of very pale brown (10 YR 8/4) unconsolidated sand. This stratum was at the surface on the western half of the trench end of BT 52. Layer III extended to c. 1.2 mbs. Lithified sand (Layer IV) extended to the bottom of the trench. This very pale brown (10 YR 7/3) stratum was sterile.

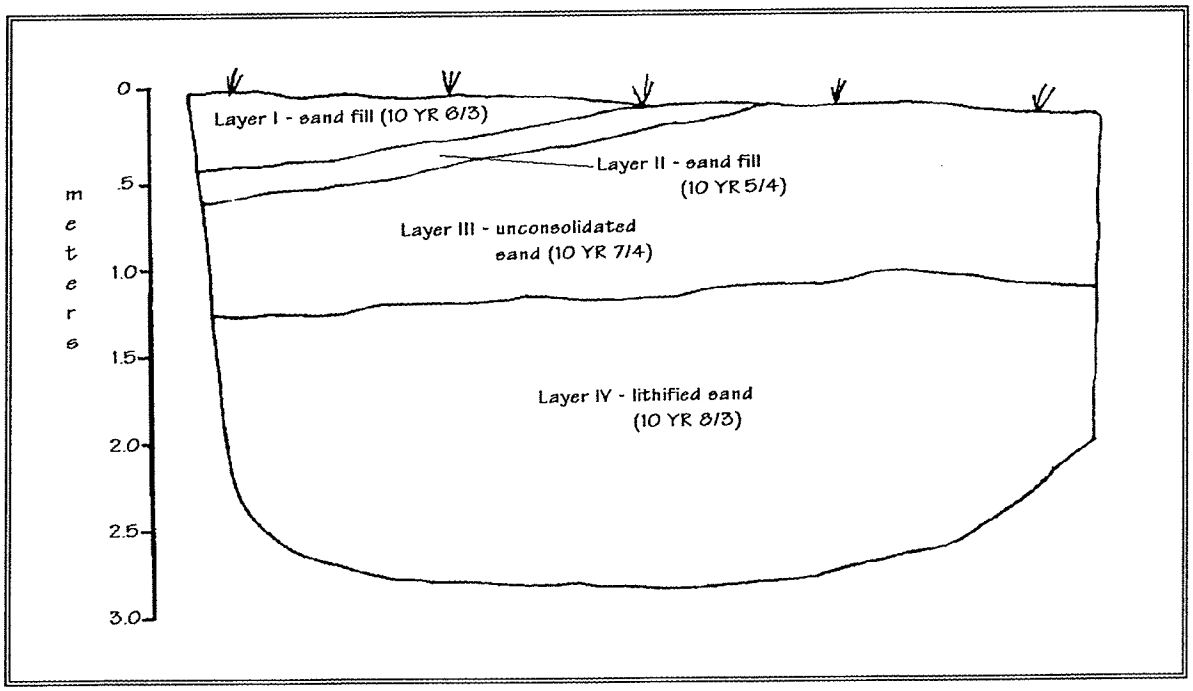

Figure 15 - South face profile, Backhoe Trench 52, Zone C.

Test Units 1 and 2

Both of these 50 cm. by 50 cm. units were excavated in a surface scatter of waterworn cobbles and coral (Photo 7). These units were located within c. 4 m. southeast of BT 50 which had been earlier placed in a disturbed area. Excavation of TU 1 and TU 2 revealed that the surface scatter was associated with modern grading and disposal activities on the subject parcel. It appears probable that the materials present originated on or near a beach. Three sand layers were located before both units were halted in sterile dune sand c. 50 cmbs.

Layer I consisted of yellowish brown (10 YR 5/4) sand. This layer contained low amounts of organic materials and was composed of sand which was more coarse grained than any sand encountered during testing in the project area. While no indigenous materials were in Layer I, 2 pieces of rusted metal were recovered from this stratum in TU 1, and 2 modern, round head nails were found in TU 2. In addition, this stratum contained several waterworn pebbles, small cobbles (up to 15 cm. in diameter), and coral pieces. Layer I is interpreted as imported fill or spill. Layer I was up to 18 cm. thick and overlaid pale brown (10 YR 6/3) sand. The soil boundary between Layers I and II was wavy and indistinct, reflecting past disturbance. Layer II was sterile and likely represents the common Layer I surface sand found in the bulk of the backhoe trenches. This stratum was c. 5 to 9 cm. thick. Layer III consisted of very pale brown (10 YR 8/4) dune sand. Excavation was halted at 50 cmbs in this sterile stratum.

SUMMARY AND CONCLUSIONS

The surface walk-over phase of the archaeological inventory survey located no significant cultural resources on the study parcel. There were, however, 3 transient camps located, along with modern refuse. Four portions of the project area were found to have been impacted by modern activities. These impact areas include the eastern border near the plant nursery, the test area associated with the earlier Maui Lani Parkway road corridor inventory survey, the sewer line and its access road, and the western boundary. Surface inspection indicated that the entire project area is covered with sand dune deposits.

The subsurface portion of our inventory survey consisted of 53 backhoe trenches and 2 manually excavated test units. Subsurface testing confirmed surface inspection data, which indicated that the Lot 11-A project area contains extensive sand dune deposits. While there was no evidence of *in situ* indigenous cultural deposits encountered in any test instances, an *in situ* burial was found in the unfinished access ramp for BT 41. This burial was located on a dune flank, c. 50 m. east of the proposed Maui Lani Parkway road project. This *in situ* burial has been designated as Site 50-50-04-4401. Its final disposition will be decided by the Maui and Lana'i Islands Burial Council.

In conclusion, information obtained at the inventory level from sampled portions of the Lot 11-A project area indicates that there is a low probability of encountering any significant surface or subsurface cultural deposits. However, an *in situ* burial—Site 4401—was encountered during our survey. It is considered significant under categories D—information content, and E—cultural significance. Exposed human remains (Site 4368) were also located during an earlier Xamanek Researches inventory survey of the proposed Maui Lani Parkway corridor. This site and a subsequent burial found during monitoring lie within 300 m. south of the Lot 11-A project area.[10]

Other human remains have also been located on the Maui Lani Partners development which lies to the south of the study area. The probability of encountering more burials on the Maui Lani Lot 11-A property during development is relatively high, given the parcel location in the Pu'uone Sand Dune region. Consequently, archaeological monitoring is the recommended mitigation for any grubbing and/or earthmoving activities that occur on this parcel.[11] If any inadvertent human remains are uncovered,

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[10] Human remains were located during monitoring conducted by Xamanek Researches for the Maui Lani Parkway corridor in a sand borrow area within 80 meters of Site 4368. This inadvertent find occurred on 5 May 1997 and was subsequently assigned SIHP Site 50-50-04-4435.

[11] A monitoring plan has been prepared by Xamanek Researches for Sato and Associates, Inc., and approved by the SHPD.

work must halt in the immediate area of the find until mitigation measures can be determined by the SHPD and the Maui and Lana'i Islands Burial Council.

TABLE 2

Summary of Backhoe Trench Results

BT #	DEPTH (mbs)	STRATA	RESULTS
1	3.2	Layer (L) I sand (10 YR 5/3) to c. 0.2 mbs L II unconsolidated sand (10 YR 8/4 to 8/6) to c. 2.6 mbs L III lithified sand (10 YR 7/4) to bottom	All layers sterile; modern materials in vicinity
2	3.1	L I sand (10 YR 5/3) to c. 0.1 mbs L II unconsolidated sand (10 YR 8/4 to 8/6) to c. 2.3 mbs L III lithified sand (10 YR 7/4) to bottom	All layers sterile; grading has occurred to the east in the past Plant nursery materials near by
3	2.9	L I sand (10 YR 5/3) to c. 0.2 mbs L II sand (10 YR 6/3) to 0.8 mbs L III unconsolidated sand (10 YR 7/4) to bottom	All layers sterile; beer bottles (modern) in vicinity
4	2.8	L I sand (10 YR 5/3) to c. 0.1 mbs L II sandy clay (5 YR 5/3) fill to c. 0.3 mbs L III unconsolidated sand (10 YR 8/4) to 2.1 mbs L IV lithified sand (10 YR 7/4) to bottom	All layers sterile; grubbed, cleared area to the east, modern materials in vicinity
5	3.5	L I sand (10 YR 5/3) to c. 0.2 mbs L II unconsolidated sand (10 YR 8/4 to 8/6) to 3.2 mbs L III lithified sand (10 YR 7/4) to bottom	All layers sterile BT 5 on dune flank
6	3.0	L I sandy clay (5 YR 5/4) fill to c. 0.35 mbs L II cinder (5 YR 4/3) fill to c. 0.5 mbs L III unconsolidated sand (10 YR 8/3) to 2.7 mbs L IV lithified sand (10 YR 7/3) to bottom	Modern materials in area including a "Nitrohumus" plastic bag in L I All layers sterile
7	3.0	L I sand (10 YR 6/3) to c. 0.1 mbs L II unconsolidated sand (10 YR 7/4) to bottom	Modern materials including broken concrete pieces and a broken iron pipe in area All layers sterile BT 7 on dune crest
8	3.1	L I sand (10 YR 6/3) to c. 0.1 mbs L II unconsolidated sand (10 YR 8/4) to bottom	All layers sterile BT 8 on dune crest
9	2.6	L I sand (10 YR 5/3) to c. 0.2 mbs L II unconsolidated sand (10 YR 8/4) to c. 1.9 mbs L III lithified sand (10 YR 8/3) to bottom	All layers sterile BT 9 excavated near dune crest

Table (cont.)

BT #	DEPTH (mbs)	STRATA	RESULTS
10	3.3	L I sand (10 YR 5/4 to 5/3) to c. 0.2 mbs L II unconsolidated sand (10 YR 8/4) to 2.8 mbs L III lithified sand (10 YR 8/3) to bottom	All layers sterile
11	3.1	L I sand (10 YR 6/3) to c. 0.1 mbs L II lithified sand (10 YR 8/4) to bottom	Both layers sterile BT 11on dune crest
12	3.2	L I sand (10 YR 6/3) to c. 0.1 mbs L II lithified sand (10 YR 8/4) to bottom	Both layers sterile BT 12 on dune crest
13	2.6	L I sand (10 YR 6/3) to c. 0.2 mbs L II lithified sand (10 YR 8/4) to bottom	L I contains black plastic sheet mulch L II is sterile BT 13 on dune flank
14	2.4	L I sand (10 YR 6/3) to c. 0.1 mbs L II unconsolidated sand (10 YR 8/3) to c. 1.9 mbs L III lithified sand (10 YR 8/4) to bottom	All layers sterile BT 14 on dune flank
15	2.3	L I sand (10 YR 6/3) to c. 0.1 mbs L II unconsolidated sand (10 YR 8/3) to c. 2.1 mbs L III lithified sand (10 YR 8/4) to bottom	All layers sterile BT 15 on flank of dune
16	2.6	L I very sandy loam (10 YR 3/2) to c. 0.5 mbs L II silty sand (10 YR 5/2) to c. 0.8 mbs L III unconsolidated sand (10 YR 8/3) to c. 2.4 mbs L IV lithified sand (10 YR 8/4) to bottom	All layers sterile BT 16 in area of deposition
17	2.5	L I sandy silt (10 YR 4/2) to c. 0.3 mbs L II silty sand (10 YR 5/3) to c. 0.9 mbs L III unconsolidated sand (10 YR 8/4) to bottom	All layers sterile BT 17 in area of deposition
18	2.6	L I sandy loam (10 YR 2/2 to 2/1) to 0.4 mbs L II silty sand (10 YR 5/2) to 0.7 mbs L III unconsolidated sand (10 YR 8/4) to bottom	All layers sterile BT 18 in area of deposition.
19	3.5	L I very sandy loam (10YR 2/2) to c. 0.3 mbs L II silty sand (10 YR 4/3) to c. 0.9 mbs L III unconsolidated sand (10 YR 8/4) to bottom	All layers sterile BT 19 in area of deposition
20	2.8	L I sand (10 YR 6/3) to c. 0.3 mbs L II lithified sand (10 YR 8/4) to 2.1 mbs L III unconsolidated sand (10 YR 8/3) to bottom	All layers sterile BT 20 near dune crest

Table (cont.)

BT #	DEPTH (mbs)	STRATA	RESULTS
21	3.4	L I sand (10 YR 6/3) to c. 0.1 mbs L II lithified sand (10 YR 8/4) to c. 1.8 mbs L III unconsolidated sand (10 YR 8/3) to bottom	All layers sterile BT 21 near dune crest
22	2.8	L I sand (10 YR 6/3) to c. 0.1 mbs L II lithified sand (10 YR 8/4) to bottom	Both layers sterile BT 22 near dune crest
23	2.4	L I sand (10 YR 6/3) to c. 0.1 mbs L II lithified sand (10 YR 8/3) to bottom	L I and L II sterile; pushed sand (10 YR 4/3) present on SE half of BT 23
24	2.8	L I sand (10 YR 6/3) to c. 0.2 mbs L II lithified sand (10 YR 8/4) to 2.1 mbs L III unconsolidated sand (10 YR 8/6) to bottom	Waterworn basalt manuport on surface, utilized basalt, modern camp in vicinity in L I L II and L III sterile, BT 24 near dune crest
25	3.6	L I sand (10 YR 6/3) to c. 0.2 mbs L II lithified sand (10 YR 7/3) to c. 2.8 mbs L III unconsolidated sand (10 YR 8/4) to bottom	All layers sterile BT 25 on dune flank
26	3.2	L I sand (10 YR 6/3) to 0.2 mbs L II lithified (10 YR 8/4) sand to bottom	Broken dog femur (old break) found in L I L II sterile BT 26 on dune crest
27	3.8	L I sand (10 YR 6/3) to 0.2 mbs L II lithified sand (10 YR 8/3) to bottom	Both layers sterile BT 27 near dune crest
28	2.9	L I sand (10 YR 6/3) to c. 0.1 mbs L II lithified sand (10 YR 8/4) to bottom	Both layers sterile BT 28 near dune crest
29	2.8	L I sand (10 YR 6/3) to c. 0.1 mbs L II lithified sand (10 YR 8/3) to bottom	Broken Maui Soda Works bottle (c. 1920s to 30s) in L I L II sterile BT 29 near dune crest
30	3.1	L I sand (10 YR 6/3 to 5/3) to c. 0.2 mbs L II unconsolidated sand (10 YR 8/4) to c. 2.9 mbs L III lithified sand (10 YR 8/3) to bottom	All layers sterile BT 30 on dune flank
31	2.3	L I sandy silt (10 YR 5/3) to c. 0.2 mbs L II silty sand (10 YR 5/4) to c. 0.4 mbs L III unconsolidated sand (10 YR 8/3) to c. 2.1 mbs L IV lithified sand (10 YR 8/4) to bottom	All layers sterile BT 31 in area of deposition
32	2.7	L I sand (10 YR 5/3) to c. 0.2 mbs L II silty sand (10 YR 5/4) to c. 0.5 mbs L III unconsolidated sand (10 YR 8/4) to c. 2.3 mbs L IV lithified sand (10 YR 8/6) to bottom	All layers sterile BT 32 on dune flank

Table (cont.)

BT #	DEPTH (mbs)	STRATA	RESULTS
33	2.6	L I sand (10 YR 6/3) to c. 0.1 mbs L II lithified sand (10 YR 7/4) to bottom	Both layers sterile; metal cans and water hose in vicinity BT 33 on low dune crest
34	3.1	L I very sandy loam (10 YR 3/2) to c. 0.3 mbs L II silty sand (10 YR 5/2) to c. 0.7 mbs L III unconsolidated sand (10 YR 8/4) to bottom	All layers sterile BT 34 in area of deposition
35	1.8	L I sand (10 YR 7/3 to 6/3) to c. 0.1 mbs L II lithified sand (10 YR 8/4) to bottom	Both layers sterile BT 36 on top of low dune
36	2.3	L I sand (10 YR 6/3) to c. 0.2 mbs L II lithified sand (10 YR 8/3) to bottom	Both layers sterile BT 36 near dune crest
37	2.2	L I sand (10 YR 6/3) to c. 0.2 mbs L II lithified sand (10 YR 8/4) to bottom	Both layers sterile BT 37 near low dune crest
38	3.3	L I sand (10 YR 6/3) to c. 0.15 mbs L II unconsolidated sand (10 YR 8/4) to c. 2.7 mbs L III lithified sand to bottom	All layers sterile BT 38 on dune flank
39	2.9	L I silty sand (10 YR 3/2) to c. 0.2 mbs L II unconsolidated sand (10 YR 7/3 to 6/3) to bottom	Both layers sterile BT 39 near area of deposition
40	3.3	L I sand (10 YR 6/3) to c. 0.2 mbs L II unconsolidated sand (10 YR 8/4) to 1.4 mbs L III sand (10 YR 5/3) to 1.6 mbs L IV lithified sand (10 YR 7/3) to bottom	All layers sterile BT 40 on dune flank
41	3.1	L I sand (10 YR 5/2) to c. 0.2 mbs L II unconsolidated sand (10 YR 6/3) to c. 2.7 mbs L III lithified sand (10 YR 8/4) to bottom	L I sand L III sterile L II - ramp of trench contained *in situ* burial (Site 4401) BT 41 on dune flank
42	3.2	L I sand (10 YR 5/3) to c. 0.2 mbs L II unconsolidated sand (10 YR 7/4) to c. 2.2 mbs L III lithified sand (10 YR 8/4) to bottom	All layers sterile BT 42 on dune flank
43	3.2	L I sand (10 YR 5/2) to c. 0.2 mbs L II unconsolidated sand (10 YR 6/3) to c. 2.9 mbs L III lithified sand (10 YR 8/3) to bottom	All layers sterile BT 43 on dune flank
44	2.7	L I sand (10 YR 5/3) to c. 0.2 mbs L II compact sand (10 YR 7/4) to c. 1.8 mbs L III lithified sand (10 YR 8/3) to bottom	All layers sterile; modern refuse in vicinity BT 44 on dune flank

Table (cont.)

BT #	DEPTH (mbs)	STRATA	RESULTS
45	3.0	L I sand (10 YR 5/3) to c. 0.2 mbs L II unconsolidated sand (10 YR 8/3) to c. 2.6 mbs L III lithified sand (10 YR 8/4) to bottom	All layers sterile BT 45 on dune flank
46	3.1	L I sandy silt (10 YR 5/2) to 0.2 mbs L II unconsolidated sand (10 YR8/3) to c. 2.6 mbs L III lithified sand (10 YR 8/4) to bottom	All layers sterile; modern refuse in area BT 46 in area of deposition next to sewer line access road.
47	3.0	L I sand (10 YR 5/3) to c. 0.2 mbs L II unconsolidated sand (10 YR 7/4) to 2.1 mbs L III lithified sand (10 YR 8/4) to bottom	All layers sterile BT 47 on dune flank
48	2.8	L I sand (10 YR 6/3) to c. 0.1 mbs L II unconsolidated sand (10 YR 7/3) to c. 2.6 mbs L III lithified sand (10 YR 8/4) to bottom	All layers sterile BT 48 near dune crest
49	2.9	L I sand (10 YR 5/3) to c. 0.2 mbs L II unconsolidated sand (10 YR 8/6) to c. 2.6 mbs L III lithified sand (10 YR 8/4) to bottom	All layers sterile BT 49 on dune flank
50	2.7	L I clay and sandy clay (10 YR 4/2) fill to c. 0.4 mbs. L II sand (10 YR 3/2) fill to c. 0.6 mbs L III sand (10 YR 4/1) and gravel fill/spoil to c. 0.6 mbs L IV unconsolidated dune sand (10 YR 8/3) to c. 2.4 mbs L V lithified sand (10 YR 8/4) to bottom	Modern materials in L I, L II and L III L IV and L V sterile BT 50 on dune flank
51	2.9	L I sand (10 YR 5/3) to c. 0.2 mbs L II compact sand (10 YR 7/4) to c. 2.1 mbs L III lithified sand (10 YR 8/3) to bottom	All layers sterile; modern refuse in vicinity BT 51 on dune flank
52	2.8	L I sand (10 YR 6/3) fill to c. 0.3 mbs L II sand (10 YR 5/4) fill to c. 0.6 mbs L III unconsolidated sand (10 YR 8/4) to c. 1.2 mbs L IV lithified sand (10 YR 7/3) to bottom	All layers sterile BT 52 in graded area
53	2.7	L I sand (10 YR 5/3) to c. 0.2 mbs L II compact sand (10 YR 7/4) to c. 1.2 mbs L III lithified sand (10 YR 8/3) to bottom	All layers sterile; modern refuse in area BT 53 near dune crest

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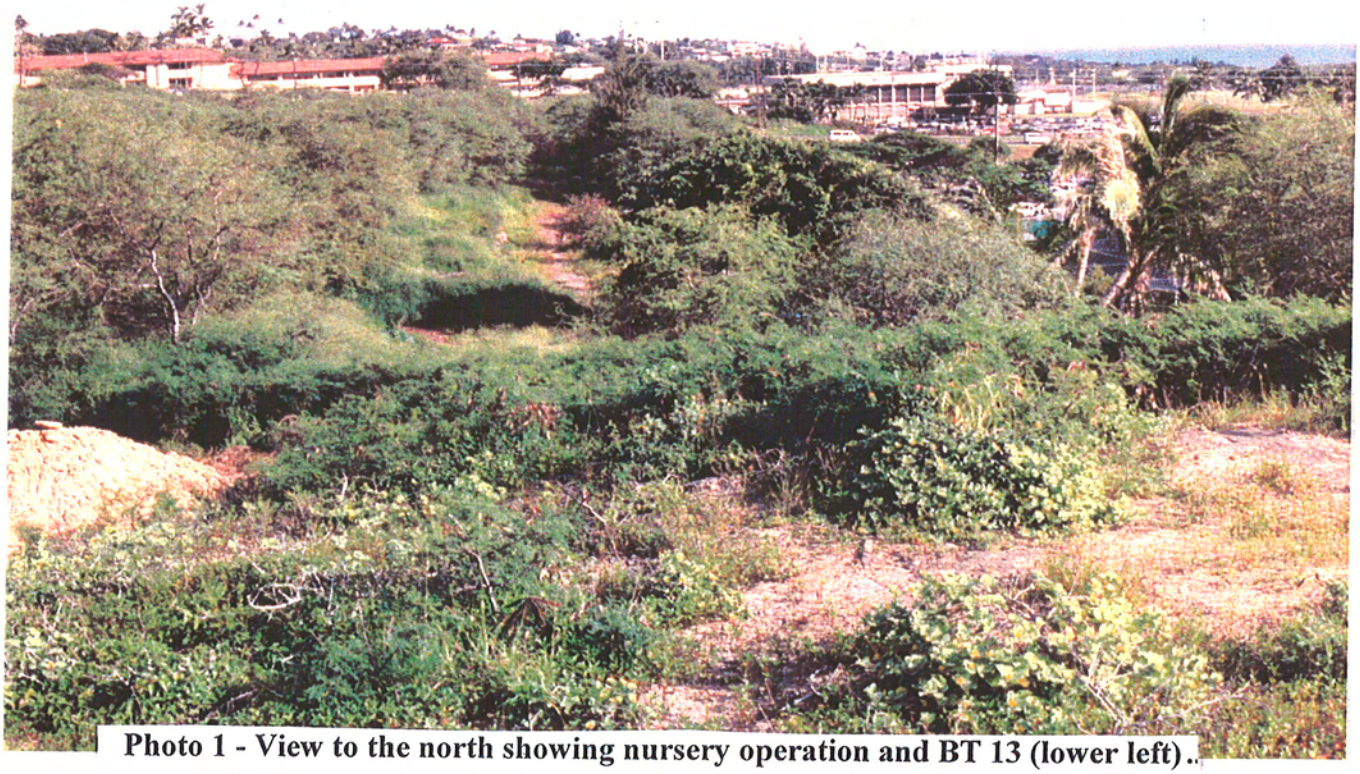


Photo 1 - View to the north showing nursery operation and BT 13 (lower left)..

Photo 2 - View to the south showing area of recent disturbance and BT 52.

Photo 3 - View to east along top of dune from southern boundary area, showing BTs 22 and 21 completed..

Photo 4 - General vegetative cover in low-lying portion of project area—view to the north.

Photo 5 - View to west along dune ridge from southern boundary—excavation of BT 27 in process.

Photo 6 - Excavation of BT 21 in process, along dune ridge in area of recent disturbance.

Photo 7 - Excavation of TU 1 in process, near western boundary. View to the southwest. Backhoe Trench 52 is in the background .

APPENDIX J.

Archaeological Summary of Maui Lani Commercial Site Prepared by Archaeological Services Hawaii, LLC

SUMMARY OF HISTORIC PROPERTES SITES 50-50-04-4401, 5236, 6569 AND 6570 AT MAUI LANI COMMERCIAL SITE LOCATED WITHIN WAILUKU *AHUPUA'A*, WAILUKU DISTRICT ISLAND OF MAUI TMK: 3-8-07: 121 PORS

FOR: HRT. LTD

BY: Lisa J. Rotunno-Hazuka (B.A.), And Jeffrey Pantaleo (MA)

NOVEMBER 2008

ARCHAEOLOGICAL SERVICES HAWAII, LLC.
1930 A VINEYARD ST.
WAILUKU, HI 96793

"Protecting, Preserving, Interpreting the Past While Planning the Future"

INTRODUCTION

Under contract to HRT. Ltd., and for the purposes of an Environmental Assessment, Archaeological Services Hawaii, has prepared this summary of historic properties identified to date at the Maui Lani Commercial Site. The project area is situated along Ka`ahumanu Avenue at its' intersection with Maui Lani Parkway. It is located within Wailuku *ahupua`a,* Wailuku District, Island of Maui, TMK 3-8-07: 121 pors (Figures 1-2).

BACKGROUND

In 1997, Xamanek Researches conducted an inventory survey where one burial feature, designated State Inventory of Historic Places (SIHP) 50-50-04-4401, was identified. Site 4401 is located within the northeast quadrant of the project area (Figure 3). This previously identified burial feature was presented to the Maui/Lanai Islands Burial Council (MLIBC) and the proposed mitigation for Site 4401 was preservation in place. No Burial Treatment Plan was prepared at the time, however the landowner began to design the proposed commercial complex around Site 4401. Upon completion of the proposed construction plans, archaeological monitoring was undertaken by Archaeological Services Hawaii.

Archaeological monitoring for vegetation removal and grading was conducted intermittently at the Maui Lani Commercial Site from 1999-2005. During this time period, a total of 19 localities (Sites 5236 Feature 1 formerly FS 58; 5236 Feature 2 formerly FS 83; 6569 formerly FS 84; 6570 Features 1-12 formerly FS 85a-l; and 6571 Features 1-4 formerly FS 88a-d) containing the human skeletal remains from 21 individuals has been documented. During monitoring along Ka`ahumanu Avenue for an unrelated monitoring project, previously disturbed skeletal remains assigned Site 5229 were recovered. Due to the site's close proximity to the project area, the landowner agreed to have Site 5229 reinterred within the project area. All human remains are believed to be of Native Hawaiian ancestry.

Archaeological monitoring is slated to re-commence when the buildings and infrastructure are constructed and or installed, thus a final monitoring report shall be submitted upon the completion of all phases of archaeological monitoring.

A Burial Preservation plan has been accepted for inadvertent burial features, Sites 5229 (FS 63) and 5236 Feature 1 (FS 58), as well as previously identified burial Site 4401. Site 4401 is an *in situ* burial with minimal disturbance, and will be preserved in place within a preservation area

established within the central portion of the project area (Figures 3 and 4). Through consultation with the Maui Lanai Islands Burial Council (MLIBC), it was determined that a low rock burial platform will be placed over the burial feature and protected by a black wrought iron fence placed 3.0 ft. from the burial platform. Two benches and shade trees shall be planted outside the fence for visitation. Signage stating that this is a Native Hawaiian Burial Site, and Please Respect This Area, will be affixed to the top of the burial platform.

Site 5236 was the partial *in situ* remains of the feet of one individual. This burial feature had been previously disturbed during years of land clearing activities for a firebreak lane between the project area and the Historic Sandhills subdivision. Due to the location of Site 5236 at 10.0 ft. above proposed grade, the site will be relocated in the same area but at a deeper elevation. Additionally, Site 5229, a scatter of previously disturbed human skeletal remains identified along Ka`ahumanu Avenue outside of the project area, will be reinterred within the commercial site. The preservation areas for Site 5236 and 5229 will be similar to the plan presented in Figure 4.

During monitoring activities from 2004-2005, inadvertent burial features comprised of single burial features, Sites 5236 Feature 2 and 6569, as well as burial concentrations 6570 Features 1-12 and 6571 Features 1-4 were documented and consisted of scatters of previously and recently displaced human skeletal remains, and partial *in situ* burial features. Through consultation with the State Historic Preservation Division (SHPD) and the Maui Lanai Islands Burial Council (MLIBC) at its 2005 July meeting, relocation of disturbed burial features located at Site 6571 and Feature 2 of Site 5236, and preservation in place of Site 6569 as well as Features 1-12 at Site 6571 was accepted. A determination letter has been prepared by Mr. Hinano Rodrigues and a Burial Preservation Plan is being developed in consultation with the SHPD and MLIBC for these inadvertently discovered burial sites. A description, as well as the proposed long-term preservation measures for the burial features is presented below.

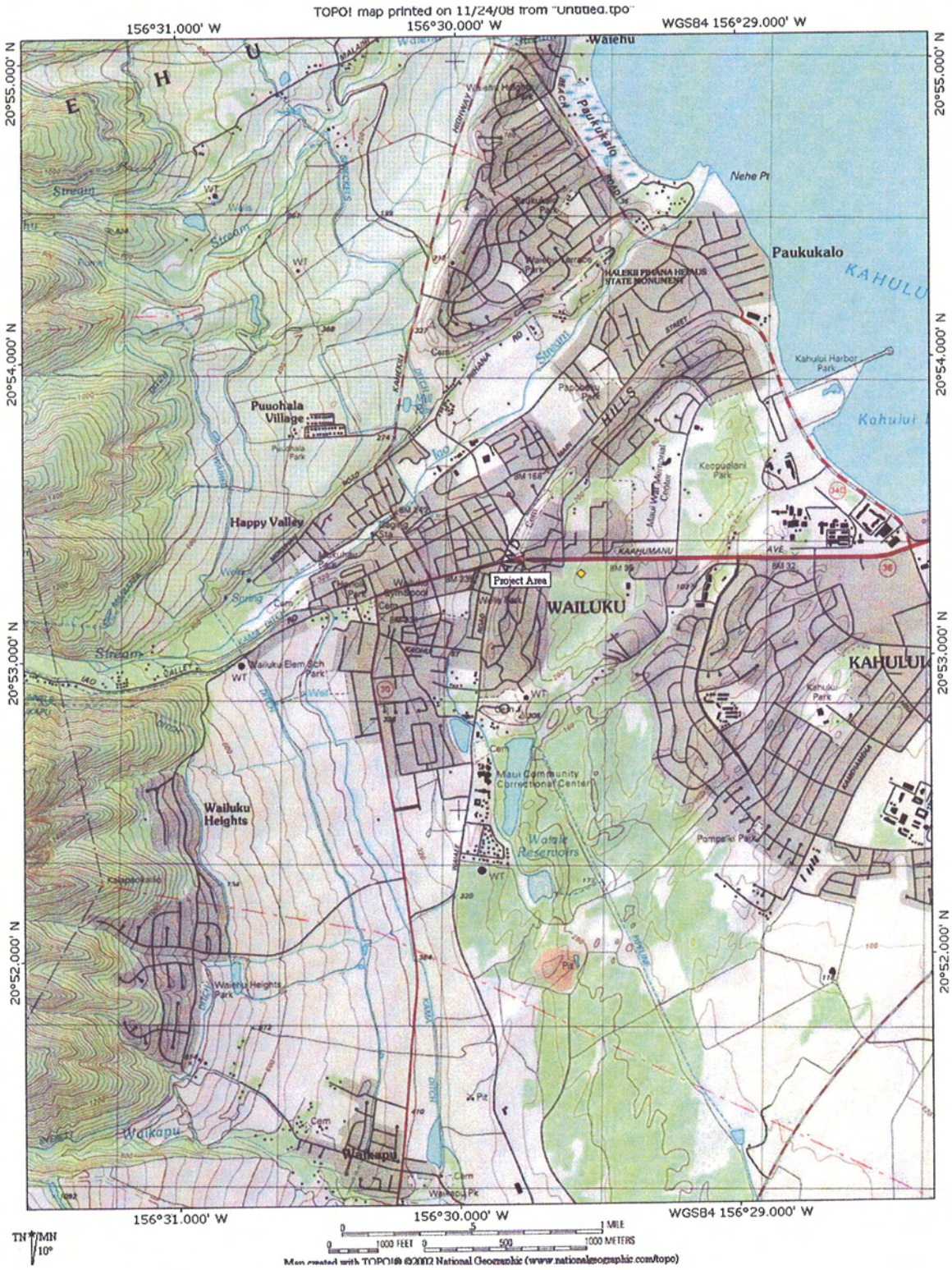


Figure 1. Location of Project Area on USGS Map

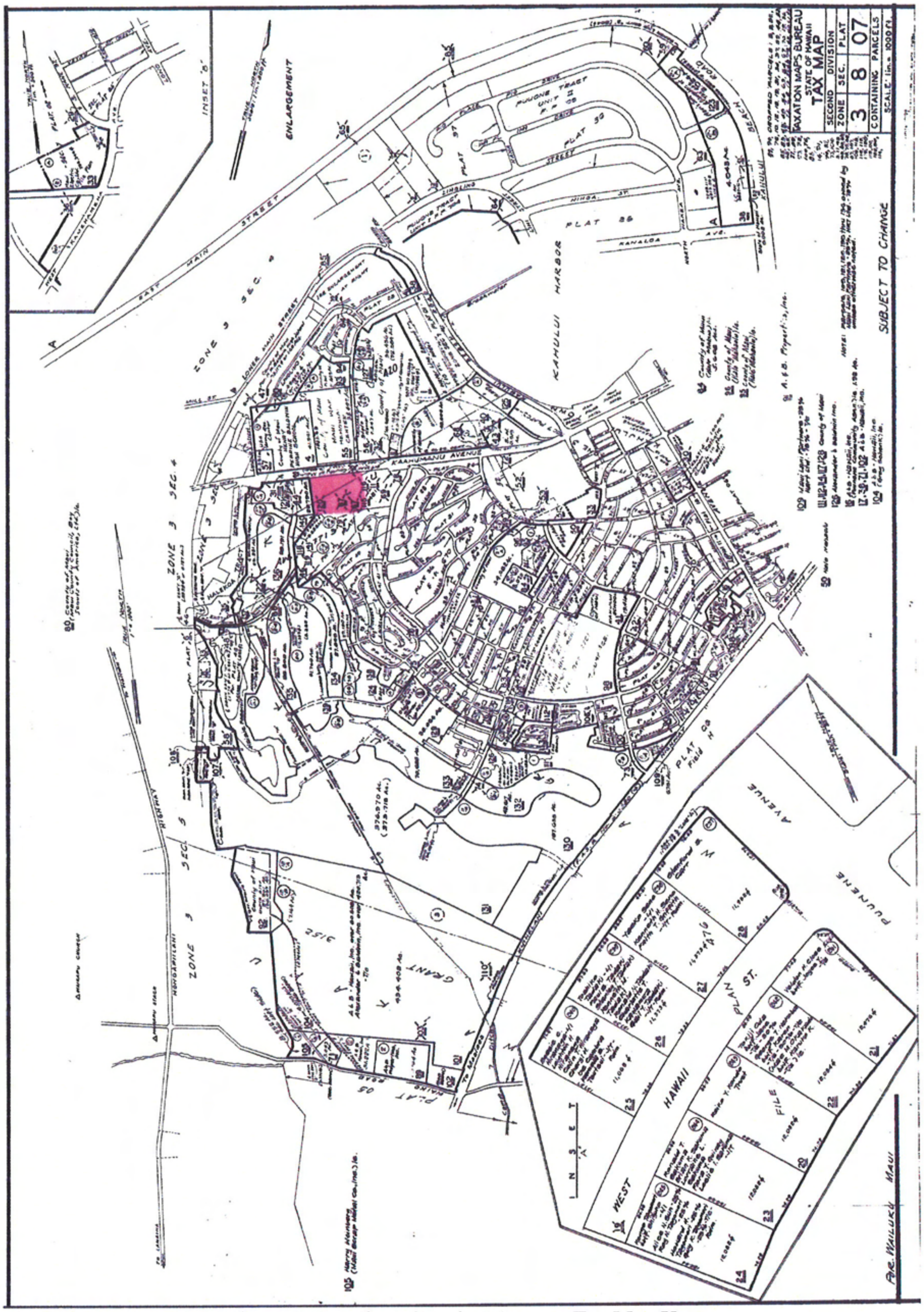


Figure 2. Location of Project Area on Tax Map Key

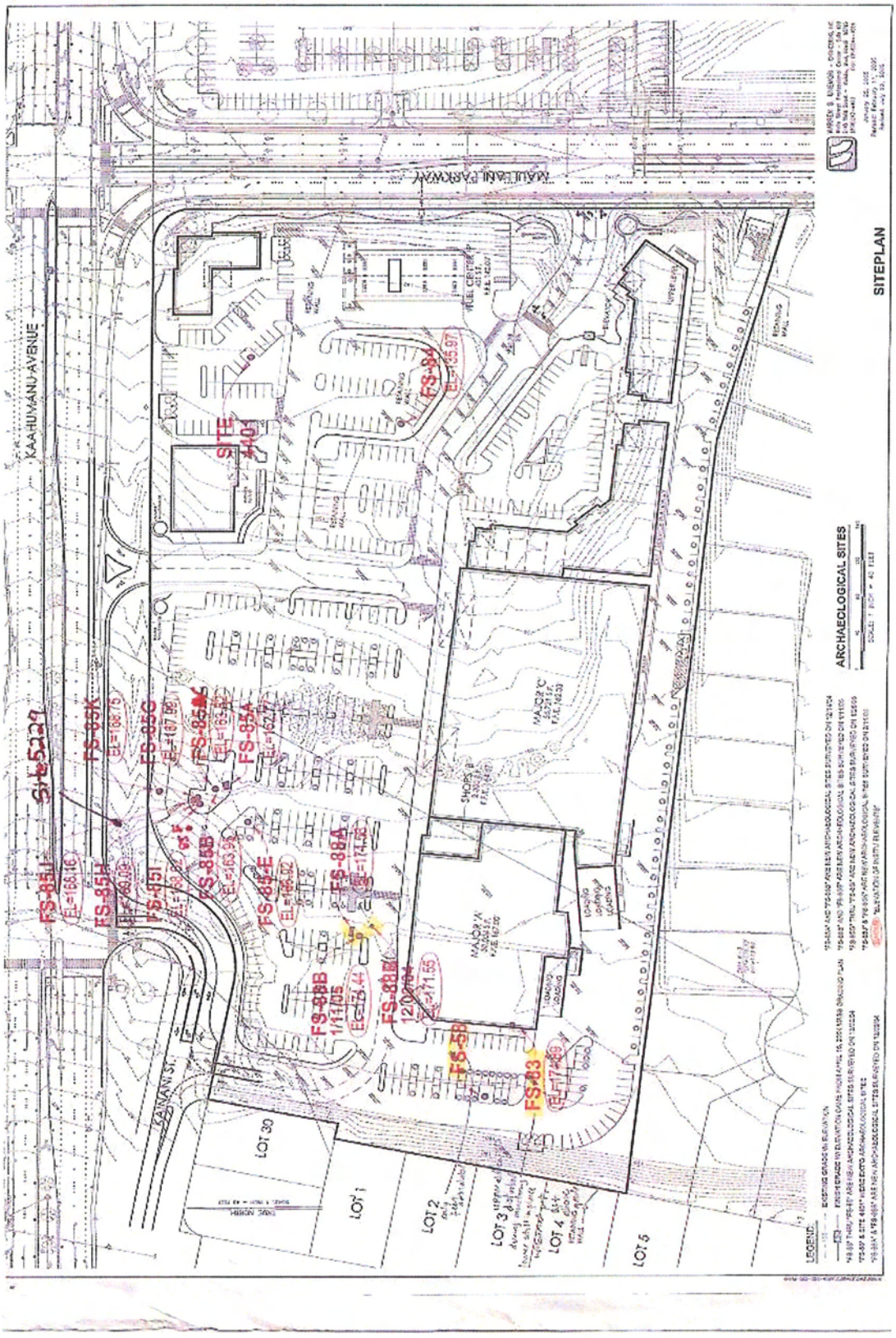


Figure 3. Plan View Map of Project Area (2005 Proposed Commercial Site Plan)

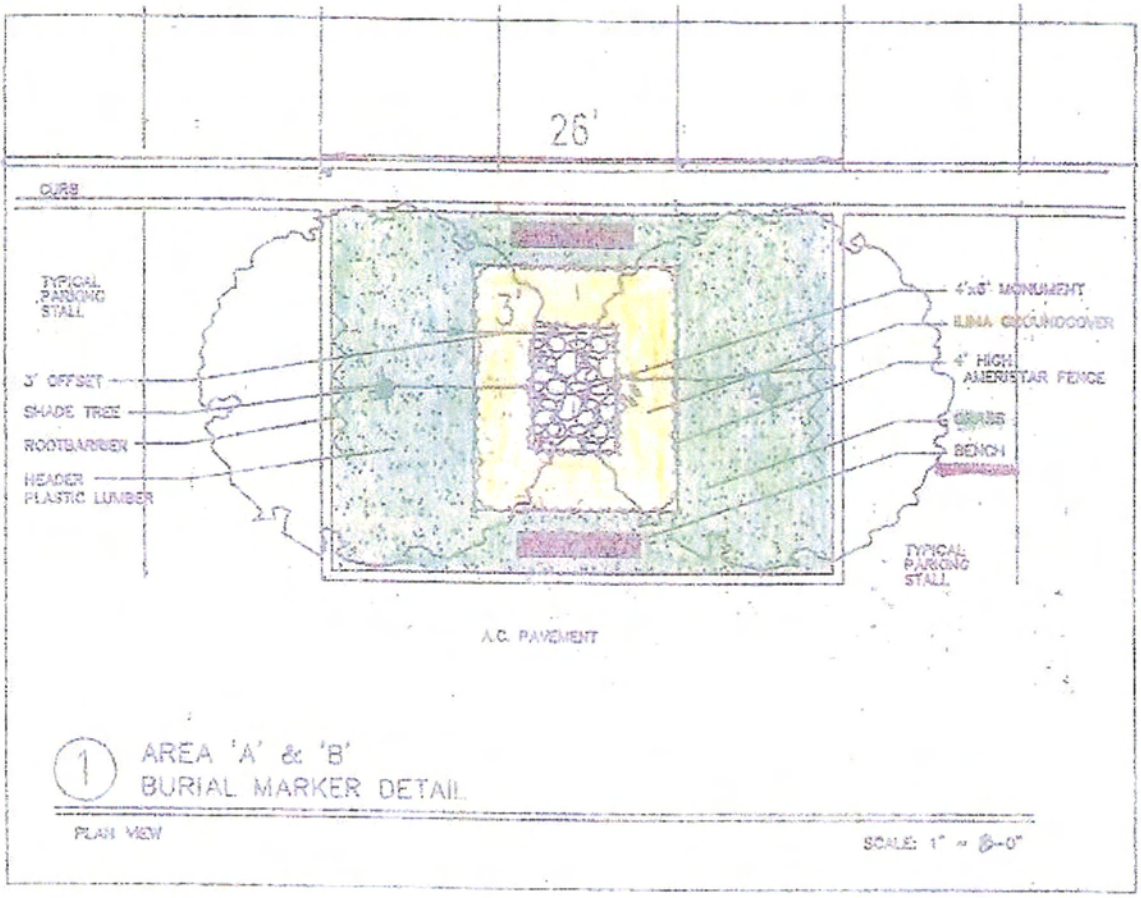


Figure 4. Plan View Map of Preservation Area for Site 4401

DESCRIPTION OF INADVERTENT BURIAL FEATURES

Site 5236 Feature 2 (FS 83)

Site 5236 Feature 2 was identified near Site 5236 Feature 1 (FS 58) on 22 November 2004 within the southwestern corner of the proposed parking lot (Figure 3). After the discovery of disturbed skeletal remains, mechanical excavations were terminated and hand excavations consisting of a 1.0 by 1.0 m test unit were initiated. The testing recovered displaced remains as well as a partial *in situ* burial of an adult male. Feature 2 was disturbed during grading however the lower extremities and portions of the right hand were still articulated within a burial pit. It was located approximately 8.0 ft. above the planned grade, and relocation with Feature 1 Site 5236 interment site was proposed. The proposal was accepted at the July 2005 MLIBC meeting.

Site 6569 (FS 84)

Site 6569 was identified on 6 December 2004 and consisted of a solitary partial *in situ* burial of an adult. This burial feature was located within the upper north central portion of the future parking lot (Figure 3). This feature will be preserved in place under approximately 12.0 ft of fill and will contain the same surface markers and protective measures as Site 4401 (see Figure 4).

Site 6571 Features 1-4 (FS 88a-d)

Site 6571 was first observed on 10 December 2004 and consisted of three locations which contained disturbed burial features. During grading within the west central portion of the project area (see Figure 3), displaced human skeletal remains were noted within a confined area. Upon the discovery of the human remains, all mechanical activity ceased in the immediate area, and manual excavations were implemented. A total of ten test units, which covered 16.0 sq. meters (sixteen-1.0 by 1.0 m test units), were excavated and resulted in the documentation of four individuals.

Feature 1 (FS 88a) testing recovered displaced human skeletal remains and a partial *in situ* burial feature of a mid-adult male. The burial was severely disturbed and crushed where only the feet, sacrum and a portion of a hand was articulated within a burial pit. Within Feature 2 (FS 88b) a 1.5 by 1.0 m test unit (STU 1) was placed over a concentration of crushed skeletal remains. Several displaced remains were collected; however a patella, hand, tibia, crushed femur and humerus were documented within a burial pit and belonged to a mid-adult female. At Feature 3 (FS 88c) the remains of a mid-adult female were recovered after a series several test units (two-1.0 by 1.0 m and a 2.5 by 1.0 m) units were excavated. Testing documented that the burial was previously disturbed but articulation was still noted in the lower extremities. After performing the burial inventory, extraneous remains (humerus, femur, and cranial fragments) from a child (2 yrs +/-4 mos) was identified in the lab. This individual was assigned Feature 4 (FS 88d). These burial features were primarily disturbed from previously activities, however some disturbance likely occurred during the recent grading activities.

Site 6570 Features 1-12 (FS 85 a-l)

Site 6570 (FS 85) is a complex of burial features which consist of displaced human skeletal remains (Feature 1-FS 85a, Feature 4-FS 85 d and Feature 12-FS 85 l) as well as *in situ* burials (Feature 2-FS 85 b, Feature 3-FS 85c, and Features 5-11-FS 85e-k). This site was initially found when skeletal remains were displaced by mechanical grading activities. Upon identification of the

scattered remains, hand testing was initiated. A total of 36-2.0 by 2.0 meter test units were excavated which documented (Features 2-3, 5, and 7-10). After the hand testing was exhausted. Backhoe testing was initiated outside of the complex to ascertain the extent of the burial site. The backhoe testing also identified *in situ* burial features 6, 11 and 12.

Features 1 and 4 (FS 85a and d)

Features 1 and 4 of Site 6570 are scatters of human skeletal remains with no *in situ* component. Feature 1 remains are from an adult male. Recovered remains consisted primarily of the upper torso (rt. arm and ribs, portions of the rt. mandible and cranium, left humeri), innonimate and femur as well as portions of both feet. Feature 4 also primarily of the upper torso (ribs, both clavicle, both humeri, femur, tibia and fibula fragments, as well as portions of both feet. The collected displaced remains from Features 1 and 4 will reinterred within the preservation area for Site 6570.

Features 2 and 3 (85 b and c)

Features 2 and 3 are partial *in situ* burials which were found adjacent to each other during manual test excavations. Feature 2 was a mid-adult female whose vertebral column and skeletal remains from the right side, though disturbed, were in an anatomically correct position for a flexed burial. These anatomically correct remains were within a defined burial pit. Disturbance occurred to Feature 4 along the right arm, leg bones and cranium. Feature 3 was an undisturbed infant 1+/- 4 yrs old. These burials are slated to be preserved in place within a large preservation area in the northwestern portion of the project area.

Feature 5 (FS 85e)

Feature 5 is a partial *in situ* burial also identified during manual excavations. This burial feature was placed on its right side, where the left side was completely displaced during grading activities. Feature 5 is an adult male which shall be preserved in place.

Feature 6 (FS 85f)

Feature 6 was discovered during backhoe trenching and consisted of previously and recently disturbed skeletal remains of a child. Recovered remains from the child were comprised of the leg bones, several vertebrae and ribs, as well as the innonimate. Six-2.0 by 2.0 m test units were excavated around the disturbed remains to hopefully identify an *in situ* component of FS 85F. No

additional human remains were noted during the testing. Feature 6 will be reinterred in the area from which it was found.

Feature 7 (FS 85g)

Feature 7 is a partial *in situ* burial of an adult female identified during manual excavations. This burial appears to have been previously and recently disturbed. Displaced remains consisted of the left innonimate, a vertebrae, and portions of the feet. Articulated within a pit was the rt. innonimate, the lower lumbar vertebrae and portions of the right foot. This burial will be preserved in place within the preservation area.

Features 8 and 9 (FS 85h and i)

Features 8 and 9 are *in situ* burial features identified within the same burial pit. Feature 8 is an adult male and Feature 9 is an adult female. Feature 8 was disturbed in a cultural context, as it appears that Feature 9 was interred after Feature 8. These burials will be preserved in place within the preservation area.

Feature 10 (FS 85 J)

Feature 10 was identified while testing around Features 8 and 9. The cranium and cervical vertebrae were articulated within a distinct burial pit. Due to this features location within a complex of other burial sites, no further testing was warranted. Feature 10 will be preserved in place.

Feature 11 (FS 85k)

Feature 11 is a partial *in situ* burial of an adult female. This burial was identified within backhoe trench 11. The majority of the burial was articulated however portions of legs, right foot and the cranium were disturbed. This feature is located at the extreme northern portion of the property line and shall be preserved *in situ*.

Feature 12 (FS 85l)

Feature 12 is extraneous remains of an infant 1 yr +/- 4 mos that were recovered from the Feature 5 area.

Table I. Summary of Identified Burial Features at Sites 4401, 5229, 5236, 6569-6571

SIHP SITE	ASH TEMP. SITE #	IDENTIFIED DURING	TOTAL OF INDIVIDUALS	ELEVATION	CURRENT DISPOSITION	FINAL / PROPOSED DISPOSITION
4401	Xamanek Researches	Inventory Survey	1		Partial Insitu	Preserved in Place
5229	Ka'ahumanu	Monitoring	1		Previous Disturbance	Reinterred with 5236
5236 Fe. 1	58	Monitoring	1		Previous Disturbance Feet Insitu	Reinterred in Lower Elevation
5236 Fe. 2	83	Monitoring	1 (Adult) Male	174.89 AMSL	Partial Insitu	Relocate with (FS58) 5236 per MLIBC/ SHPD July 05
6569	84	Monitoring	1 (Adult)	135.97 AMSL	Partial Insitu	Preserved in Place
6570 Fe. 1	85A	Monitoring	Isolated Find #1 1 (Adult) Male	163.52 AMSL	Displaced	Relocate with 85
6570 Fe. 2	85B	Monitoring	1 (Adult) Male	163.95 AMSL	Partial Insitu	Preserved in Place
6570 Fe. 3	85C	Monitoring	1 (Subadult)	163.88 AMSL	Partial Insitu	Preserved in Place
6570 Fe. 4	85D	Monitoring and Testing	Isolated Find #3 1 (Adult) Female		Displaced	Relocate with 85
6570 Fe. 5	85E	Monitoring	1 (Adult) Female	168.92 AMSL	Partial Insitu	Preserved in Place
6570 Fe. 6	85F	Monitoring	1 (Subadult)	172.09 AMSL	Displaced	Relocate with 85
6570 Fe. 7	85G	Monitoring	1 (Adult) Female	167.99 AMSL	Partial Insitu	Preserved in Place
6570 Fe. 8	85H	Monitoring	1 (Adult) Female	169.09 AMSL	Multiple / Partial Insitu	Preserved in Place
6570 Fe. 9	85I	Monitoring and Testing	1 (Adult) Male	168.62 AMSL	Multiple / Partial Insitu	Preserved in Place
6570 Fe. 10	85J	Monitoring and Testing	1 (Adult)	168.16	Insitu	Preserved in Place
6570 Fe. 11	85K	Monitoring and Testing	1 (Adult)	168.75	Partial Insitu	Preserved in Place
6570 Fe. 12	85L	Testing	Isolated Find #2 1 (Subadult)	168.16 AMSL	Previously Disturbance	Preserved in Place
6571 Fe.1	88A	Monitoring	1 (Adult) Male	174.58 AMSL	Previous Disturbed / Partial	Removed per July 2005 MLIBC/SHPD Relocate with 85
6571 Fe. 2	88B	Monitoring	1 (Adult) Female	171.55 AMSL	Partial Insitu	Removed per July 2005 MLIBC/SHPD Relocate with 85
6571 Fe. 3	88C	Monitoring	1 Subadult	174.44 AMSL	Partial Insitu/Removed 11 April 2006	Removed per July 2005 MLIBC/SHPD Relocate with 85
6571 Fe. 4	88D	Testing	Isolated Find #4 1 (Subadult)	-	Displaced	

DISCUSSION

Based on the findings of the most recent phase of monitoring, and through consultation with the State Historic Preservation Division, and the Maui Lana`i Islands Burial Council (MLIBC), the following is the proposed treatment for the recent findings. At the MLIBC meeting in July 2005, Site 5236 Feature 2 was proposed to be relocated with Site 5236 Feature 1. This proposal was accepted. Sites 6569 and 6570 Features 1-12 shall be preserved in place. A large preservation area has been established in the northwest portion of the project area for this significant historic property, Site 6570 (Figure 5). Previous plans which consisted of a building and parking stalls within the northwest quadrant have been deleted from the design. Site 6571 Features 1-3, consisting of partial *in situ* burials and Feature 4, extraneous remains from a child with no *in situ* component were situated within the driving lane of the parking lot, approximately 5.0 ft. above proposed grade. Due to the location of these partial *in situ* burials within the driving lane, and 5.0 ft. above proposed grade, the landowner repsectfully requested relocation. At the July 2005 meeting, the MLIBC recommended that Site 6571 be relocated to the large preservation area established for Site 6570. A Preservation Plan shall be prepared in consultation with SHPD and the MLIBC for the aforementioned inadvertent burial sites.

In summary, Sites 6569 and 6570 Features 1-12 shall be preserved in place. A burial component of a Preservation Plan will be submitted to SHPD for review and acceptance. Sites 5236 Feature 2 and Site 6571 Features 1-4 shall be relocated. A burial component of a data recovery plan will be prepared and submitted to SHPD for Sites 5236 Feature 2 and Site 6571.

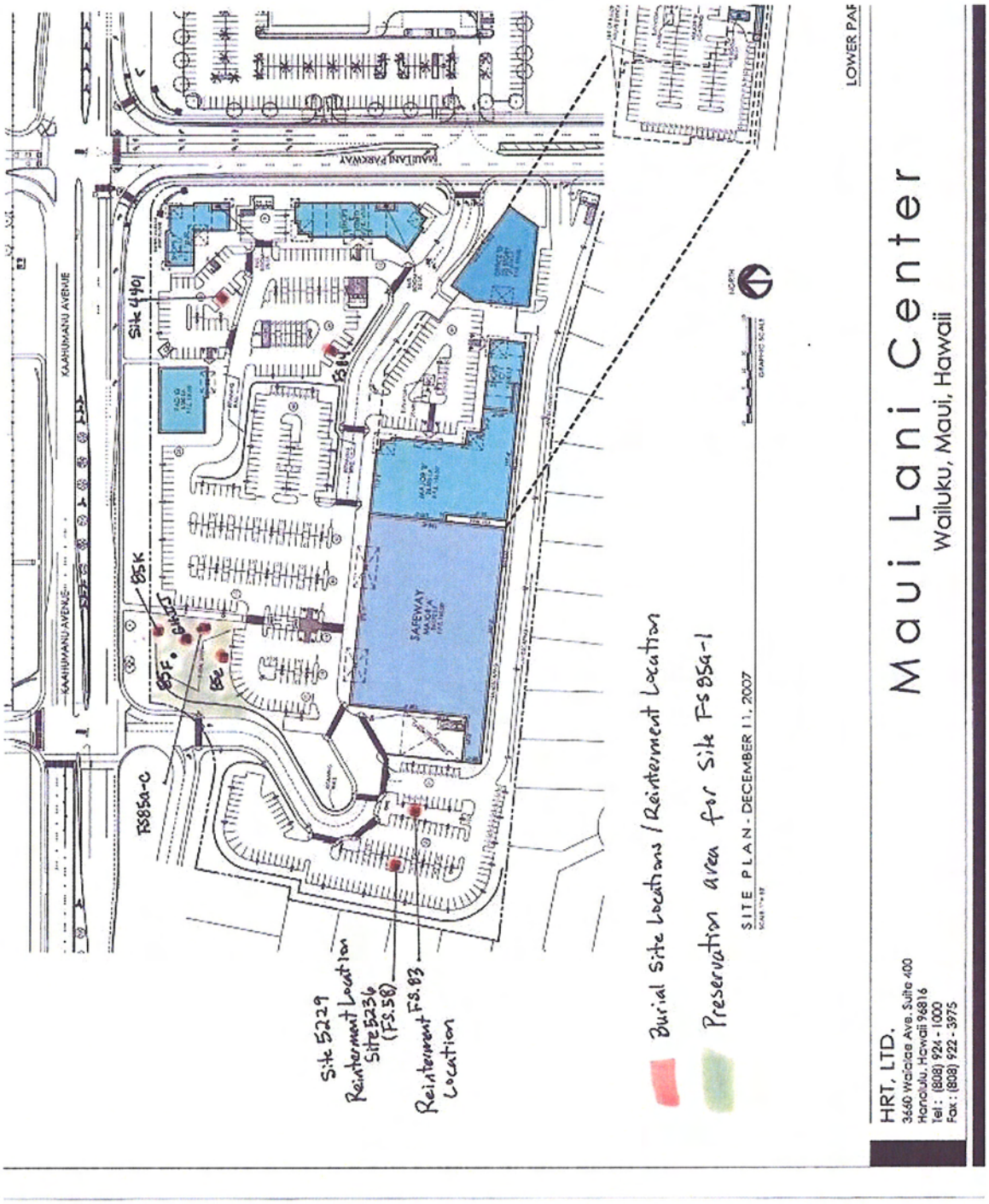


Figure 5. Project Area Map Showing Preservation Areas and Re-Design (2007)

APPENDIX K.

Burial Preservation Plan Prepared by Archaeological Services Hawaii, LLC

BURIAL TREATMENT AND PRESERVATION PLAN FOR PREVIOUSLY IDENTIFIED BURIAL SITE 50-50-04-4401, AND INADVERTENT BURIALSITES 50-50-04-5236 & 5229

LOCATED IN THE HRT COMMERCIAL SITE AT TMK:3-8-07:121 PORS. WAILUKU *AHUPUA'A;* WAILUKU DISTRICT; ISLAND OF MAUI

Prepared For: HRT, LTD. & MAUI LANI DEVELOPMENT

BY: Lisa J. Rotunno-Hazuka, And Jeffrey Pantaleo (MA)

JULY 2003

ARCHAEOLOGICAL SERVICES HAWAII, LLC.
16 S. Market St. Suite G
Wailuku, HI 96793

INTRODUCTION

Under contract to HRT, Ltd., at 3660 Waialae Suite 400, Honolulu, HI 96816, and per Hawaii Administrative Rules (HAR) 13-300-31, Archaeological Services Hawaii, LLC (ASH) proposes this burial treatment and preservation plan for previously identified burial site, SIHP 50-50-04-4401, and for inadvertent burial sites 5229 (skeletal scatter), and 5236 (formerly F.S. 58) a partial *in situ* burial. A burial notice was published in the Maui News and the Honolulu Advertiser on 29 Sept –1 Oct 2002 (Appendix A) where no responses, beyond advising of a typographical error were received. These burial sites are located within a portion of TMK 3-8-7: 121 (Lot 11-A-1-A), Wailuku District and *ahupua'a*, and were identified on three separate occasions (Fig. 1).

Site 4401 is a previously identified in *situ* burial that will be preserved in place. Site 5236 is an inadvertent burial find, which consists of the articulated *in situ* remains of the left foot and displaced skeletal remains associated with the same individual. The articulated foot is located approximately 10 ft. above proposed grade for the HRT Commercial Site. This burial will be reinterred at a lower depth. Site 5229 is an inadvertent discovery of disturbed skeletal elements found along Ka'ahumanu Avenue. These remains will be reinterred with Site 5236 adjacent to one of the proposed commercial buildings.

The project area is situated adjacent to Ka'ahumanu Avenue across from Baldwin High School. The proposed development plans consist of a Medical Plaza, Shopping Center and associated parking. Due to these plans, ground-altering activities will be implemented which may adversely impact these significant historic properties. As such, this plan is being prepared as a mitigation measure to ensure the perpetual protection and preservation of the burial features.

Project Area Description

The project area is composed of approximately 14.7 acres which are situated at the intersection of Ka'ahumanu Avenue along the west side of Maui Lani Parkway (Fig. 2). The parcel is bounded on the west by the Sand Hills Subdivision, and to the south by

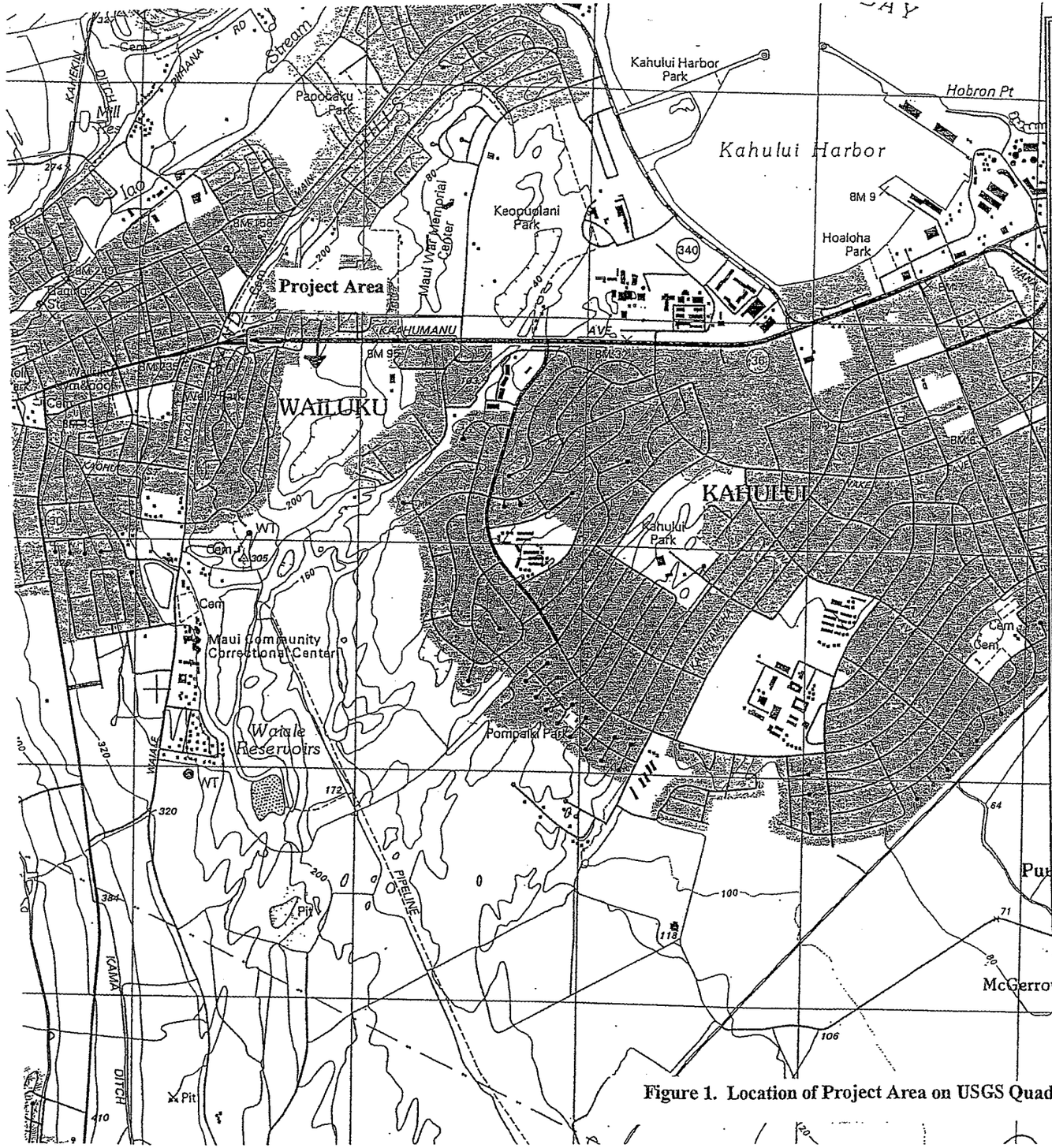
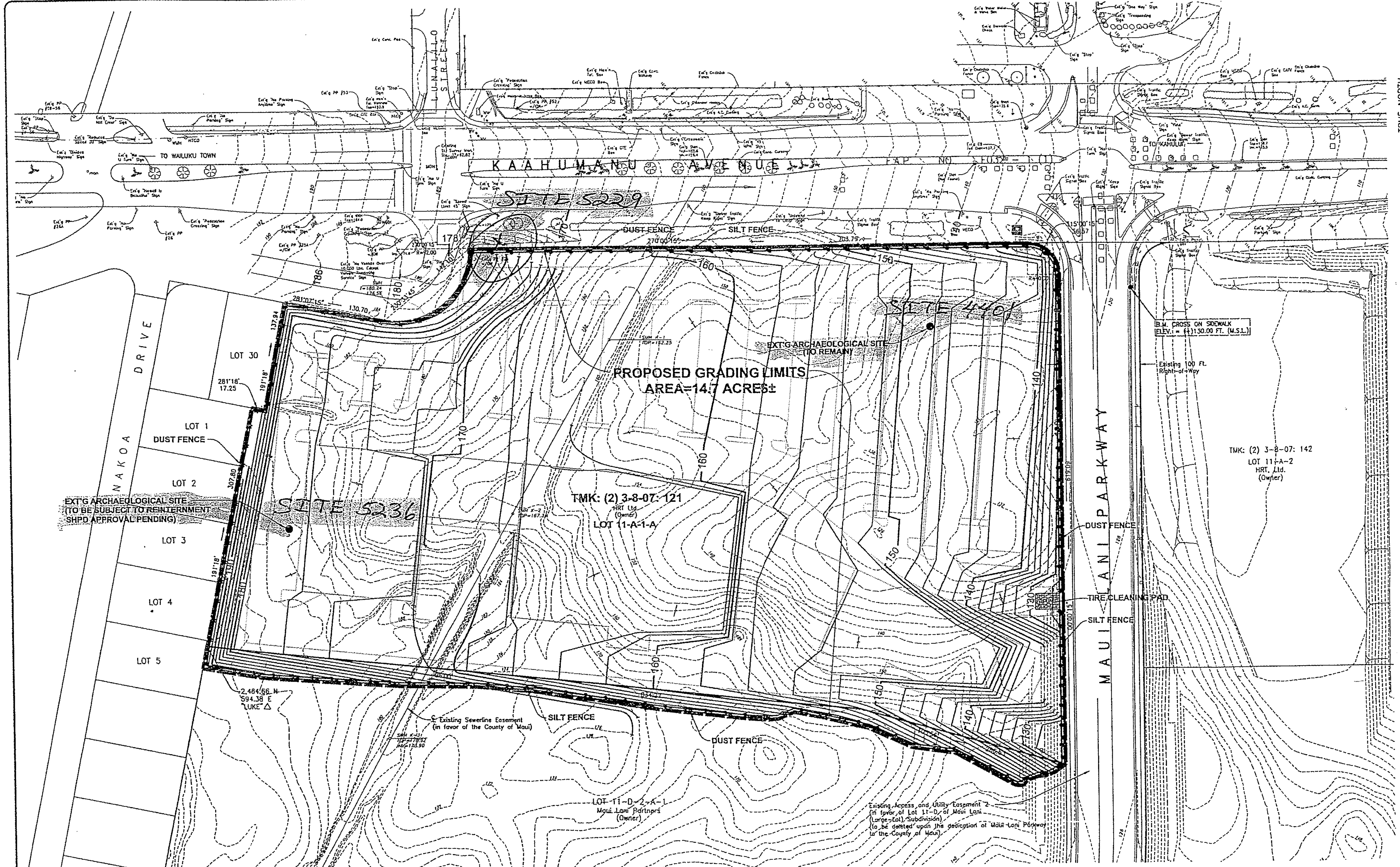


Figure 1. Location of Project Area on USGS Quadrangle

Figure 1a. LOCATION MAP
SCALE: 1 IN. = 1000 FT.



GRADING:

1. The Contractor shall obtain a "Grading Permit" from the Division of Land Use and Codes Administration, Dept. of Public Works, four (4) weeks prior to commencement of any clearing and grubbing. A satisfactory dust and erosion control plan shall be submitted by the Contrator for approval prior to issuance of the grading permit.
2. The Contractor shall remove all silt and debris resulting from his work and deposited in drainage facilities, roadways and other areas. The cost incurred for any necessary remedial action by the Director of Public Works, Chief Sanitorian (Department of Health) shall be borne by the Contractor.
3. The Contractor, at his own expense, shall keep the project area and surrounding areas free from dust nuisance. The work shall be in conformance with the Air Pollution Control Standards and Regulations of the State Dept. of Health.
4. All grading operations shall be performed in conformance with the applicable provisions of the Water Pollution Control and Water Quality Standards of Public Health Regulations, State Dept. of Health and the County Grading Ordinance.
5. Construction debris and wastes shall be deposited at appropriate sites. The disposal site must fulfill the requirements of the Grading Ordinance.
6. The Contractor shall be responsible for all construction stakeout.
8. If The Contractor is not able to satisfactorily control dust emissions from the project site, all construction work shall cease except for watering and other stabilization efforts.
9. Prior to issuance of the grading permit, the contractor shall meet with the Land Use and Codes Administration and provide information on the source of water for dust control, and justify the number of water trucks to be used for the clearing, grubbing, and loading operations.

The earthwork quantities shown are in place volume. The Contractor shall verify quantities and shall be responsible for providing materials to complete grading and embankment as per the Grading Plan.

AREA OF GRASSING: 14.7 ACRES

NOTE:

SHOULD HISTORIC SITES SUCH AS WALLS, PLATFORMS, PAVEMENTS AND MOUNDS, OR REMAINS SUCH AS ARTIFACTS, BURIALS, CONCENTRATION OF CHARCOAL OR SHELLS ARE ENCOUNTERED DURING CONSTRUCTION WORK, WORK SHALL CEASE IN THE IMMEDIATE VICINITY OF THE FIND AND THE FIND SHALL BE PROTECTED FROM FURTHER DAMAGE. THE CONTRACTOR SHALL IMMEDIATELY CONTACT THE STATE HISTORIC PRESERVATION DIVISION (808-692-8023), WHICH WILL ASSESS THE SIGNIFICANCE OF THE FIND AND RECOMMEND AN APPROPRIATE MITIGATION MEASURE, IF NECESSARY.

EARTHWORK QUANTITIES:

EXCAVATION = 54,460 C.Y.
EMBANKMENT = 159,890 C.Y.

LEGEND:

- FINISH GRADE W/ ELEVATION
- EXISTING GRADE W/ ELEVATION
- SILT FENCE (SEE DET. SHT. C-3)
- DUST FENCE (SEE DET. SHT. C-3)
- CONTAINMENT BERM (SEE DET. SHT. C-3)
- TIRE CLEANING PAD (SEE DET. SHT. C-3)
- FUTURE SITE IMPROVEMENTS
- PROPOSED GRADING LIMITS

Figure 2. Proposed Construction Plans Showing Burial Locations

SUEDA & ASSOCIATES, INC.
ARCHITECTURE PLANNING INTERIORS
905 MAKAHIKI WAY, MAUKA SUITE
HONOLULU, HAWAII 96826 (808) 949-6644

WARREN S. UNEMORI ENGINEERING, INC.
CIVIL & STRUCTURAL ENGINEERS/LAND SURVEYORS
2154 WELL STREET - SUITE 403
WAILUKU, MAUI, HAWAII 96793

REED M. ARIYOSHI
LICENSED PROFESSIONAL ENGINEER
NO. 5465-C
HAWAII, U.S.A.

SIGNATURE DATE

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION "AS DEFINED IN SECTION 16-115-2 OF THE HAWAII ADMINISTRATIVE RULES FOR PROFESSIONAL ENGINEERS, ARCHITECTS, LAND SURVEYORS AND LANDSCAPE ARCHITECTS"

GENERAL NOTES

CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS AND CONDITIONS AT THE JOBSITE BEFORE PROCEEDING WITH THE WORK AND NOTIFY ARCHITECT OF ANY DISCREPANCIES FOR RESOLUTION

REVISION MARK • DATE • DESCRIPTION

PROJECT

MASS GRADING
FOR
MAUI LANI COMMERCIAL CENTER

WAILUKU, MAUI, HAWAII

T.M.K. # (2) 3-8-07 : POR. 121

SHEET TITLE

MASS GRADING AND
EROSION CONTROL PLAN

JOB NO. 01088
DRAWN WSK
CHECKED WSU
DATE APRIL 18, 2003

DRAWING NO. C-2

SHEET OF

undeveloped land owned by Maui Lani Partners. Most of the project area is densely covered in grasses and kiawe trees and is composed of Puuone and Jaucus sands (Foote et. al). The topography is undulating with elevations ranging from approximately 130 to 180 amsl.

This project is part of a multi-phased plan involving the development of medical facilities and a shopping center on three parcels adjacent to Maui Lani Parkway (TMK3-8-7:121 pors, 3-8-7:143 and 140). Portions of these parcels have undergone archaeological investigations, hence the identification of the aforementioned burial sites.

Two Land Commission Awards (LCA) and one grant have been identified within and surrounding the project area. LCA 7713 to Princess Victoria Kamamalu is located along the south side of Ka'ahumanu Avenue. To the north *(makai)* of Ka'ahumanu Avenue is LCA 420 to Kuihelani. Grant 3343 to Claus Spreckles is located further south of LCA 7713 (Fig. 3).

PREVIOUS ARCHAEOLOGY AND RESULTS

Previously Identified Burial Site 4401

In 1997 Xamanek Researches conducted an inventory survey for the project area and the proposed Maui Lani Parkway. This survey identified Site 4401as an *in situ* burial of a robust adult male, which is located in the northeast quadrant of the project area (Figure 3).

> Site 4401, an *in situ* burial was located in the afternoon of 10 February 1997 after BT 41 and had been completed. The trench was unstable, and so an access ramp was excavated in order to more safely inspect it. The human remains were encountered in the unfinished ramp between c. 70 and 80 cmbs. The burial was in flexed position, but a burial pit was not apparent. Work was halted immediately and Dana Naone Hall, Chair, Maui and Lana'i Burial Council, was notified. Ms. Hall visited the site the same day, and requested that the burial be stabilized and reinterred on the same day. The sand with the inadvertently disturbed remains was sifted through 1/8 inch mesh screen. The recovered remains, along with associated cultural items were placed with the *in situ* portion of the burial. Screened sand was then placed over the remains and the location was marked in the field. Subsequently, Site 4401 was plotted in by representatives of Newcomer-Lee Land Surveyors, Inc (Fredericksen, 1997:26).

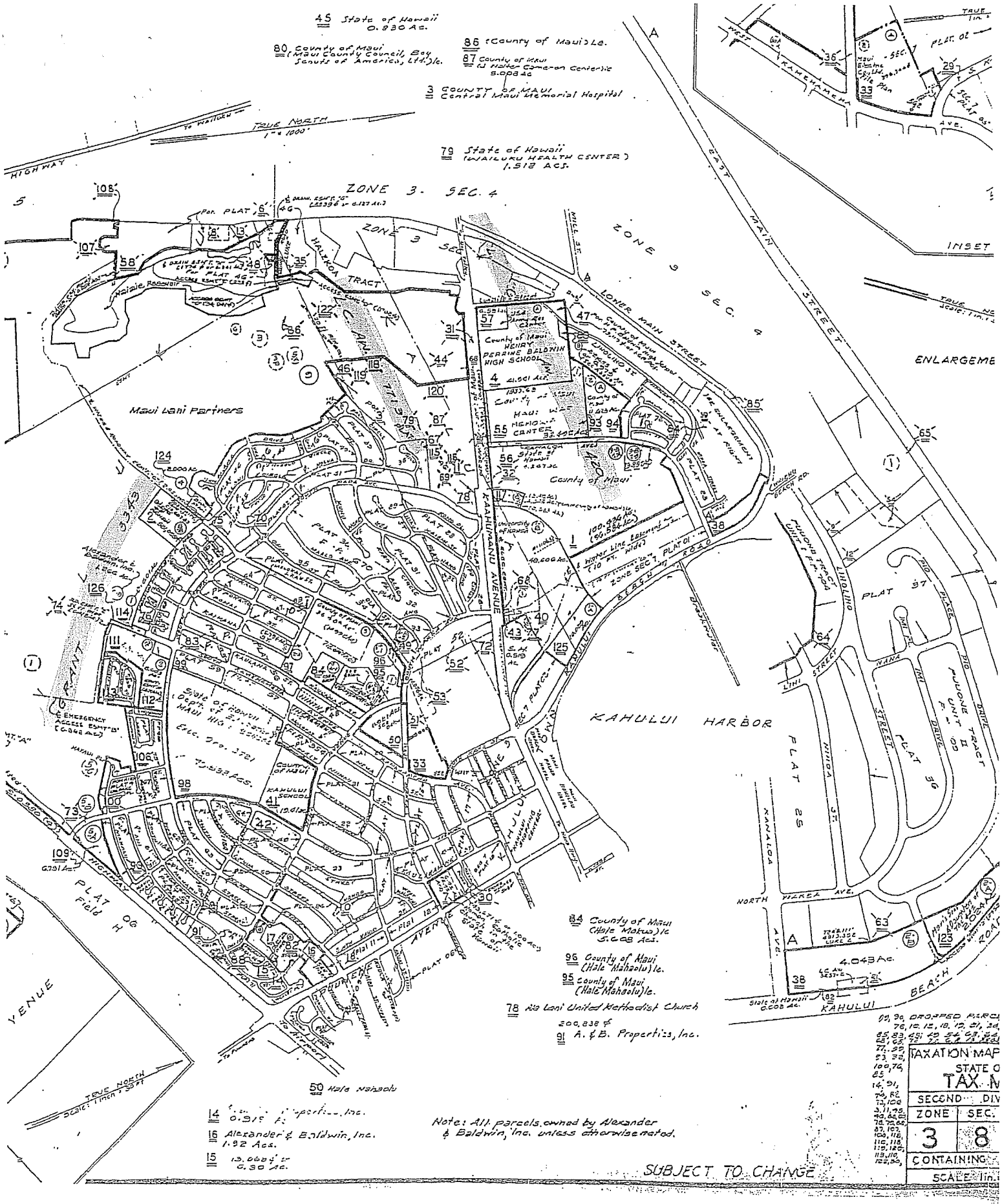


Figure 3. Location of LCA and Grant on Tax Map Key 3-8-07

Currently this burial feature is not capped with concrete but remains protected under approximately 3 ft. of sand, and is marked on the surface by pink flagging and a wooden stake.

Inadvertent Finds Sites 5236 and 5231

In September 1999, the removal of vegetation along the property boundary line between Maui Lani and the Sand Hills residential subdivision was performed. The purpose of this vegetation removal was to create a firebreak between the undeveloped and developed properties. The vegetation grubbing was monitored by Archaeological Services Hawaii, LLC and at that time no human remains were identified. During a site inspection on 26 November 99 of the above previously grubbed area, Site 5236 (F.S.58), a partially intact burial was identified. This site consists of the articulated, *in situ* remains of a left foot and displaced skeletal remains from the same individual. Disturbance to this feature occurred during the monitoring; however, this burial site had also been previously disturbed prior to the monitoring program. Soil profiles in the test units of Site 5236 clearly indicated two episodes of previous disturbances. Several phases of recovery and testing (mapping, raking, screening, shovel scraping, and blade testing), were instituted at this site to ascertain the aforementioned information. Approximately 50% of the displaced human remains of Site 5236 have been collected and are curated at the Maui Lani Facility.

Site 5229 was identified during a field inspection of a previously graded area for a proposed sidewalk along Ka'ahumanu Avenue. The remains were collected and are curated at the Maui Lani Facility. Upon identification of fragmented human remains within the proposed sidewalk, the area was inspected to determine the extent of the scatter. The same aforementioned procedures of mapping, raking and testing were employed. No *in situ* portion of this individual could be identified and only portions of the hands were retrieved. In summary, Site 4401 is a primary (*in situ*) burial. Site 5236 is a partial *in situ* burial consisting of portions of the left foot, and Site 5229 consists of rib, vertebrae and metatarsal fragments from one individual.

PROPOSED TREATMENT AND PRESERVATION

Previously Identified Burial Site 4401 Short-Term Measures

The treatment for Site 4401, a previously identified burial, is to preserve in place. During the interim period (prior to and during construction), short-term protective measures for this burial will be implemented to protect and preserve the burial feature. These measures are as follows:

1. A layer of clean sand, approximately 12 inches thick, will cover the skeletal remains.
2. A concrete cap will be placed over the burial area measuring 4.0 by 4.0 ft. and 4 inches in thickness. The cap will be inscribed with "KAPU-Site 4401-Burial" and all preparations will be monitored and documented by the archaeologist.
3. Once the concrete has cured, the four corners of the cap will marked by PVC pipe.
4. Orange construction fencing will be erected around the perimeter of the burial site creating a 30 ft. protective buffer zone (60 ft. diameter) around the burial. The installation of the construction fencing will be monitored by archaeological personnel and documented through photographs. The archaeological supervisor will notify all pertinent parties (including but not limited to Mr. Kanai Kapeliela-Burial Sites Program, Mr. Charles Maxwell, Ms. Dana Naone Hall, Mr. Leslie Kuloloio-Burial Council Members, and Dr. Melissa Kirkendall-SHPD staff archaeologist) that the short-term measures are complete and construction may commence upon their approval.
5. The fencing will be erected prior to vegetation grubbing, however beca8use this area will eventually be filled with18 ft. of sand, the fencing will need to be taken down during the embankment (fill) process. This fencing may not be altered without the archaeological monitor's approval, and the alterations must be monitored by archaeological personnel. Prior to filling, PVC pipes shall be placed at the four corners.
6. During the pre-construction briefing, all construction personnel will be apprised of this burial feature and the purpose for the orange construction fencing.
7. Temporary access to the burial feature will need to be coordinated through the archaeologist and construction personnel during construction activities.

Previously Identified Burial Site 4401 Long-Term Measures

1. **Buffer Zone**- The final buffer zone will be established to ensure protection and preservation of this significant historic property within the proposed parking lot. The buffer zone is a no build zone where only activities such as landscaping and irrigation are allowed. Neither parking, nor utilities may encroach into the buffer zone. The buffer zone will measure from the corners of the burial platform approximately 11.5 ft. to the north and south, and 6 ft. to the east and west. The platform measures 4.0 by 6.0 ft. and with the buffer zone, it creates a preservation area that measures 26 by 18 ft. A vertical buffer consisting of 18 ft. of fill will be placed over the burial area. The preservation area and the perimeter will be demarcated by concrete curbing as shown on Figure 4.
2. **Surface Demarcation**- A platform demarcating the burial area will be constructed over Site 4401. The platform will measure 6.0 by 4.0 by 1.0-1.5 ft. high and will be composed of water worn cobbles where the interior is secured with concrete to give the burial platform a dry stacked appearance. Approximately 3.0 ft. away from the platform, a 4 ft. high black metal fence will be erected to protect the platform from vehicular and foot traffic. An entry gate will be located on the southeast corner. The gate will be necessary to maintain the platform and landscaping around it. The area inside and outside the fencing shall be landscaped, the details of which are presented in item #4.
3. **Signage**-Signage will consist of a bronze plaque to be affixed to the black fencing along the east and west sides facing the benches (See Figure 4). The plaque will measure approximately 18 by 18 inches and shall be inscribed with "Native Hawaiian Burial Site 50-50-04-4401, Please Respect this Area".
4. **Landscaping**-The area inside the fencing adjacent to the platform will be planted with a native ground cover possibly consisting of 'ilima and lau'ae fern. The area outside the fencing will be planted with grass. Two native shade trees will be planted along the north and south sides of the preservation area, and two benches installed along the east and west sides of the preservation area.
5. **Recordation**- The preservation area shall be surveyed with a metes and bounds description and this preservation area will be recorded with the Bureau of Conveyances within 90-days after receiving written approval of this Burial Treatment and Preservation Plan from the State DLNR-Historic Preservation Division.

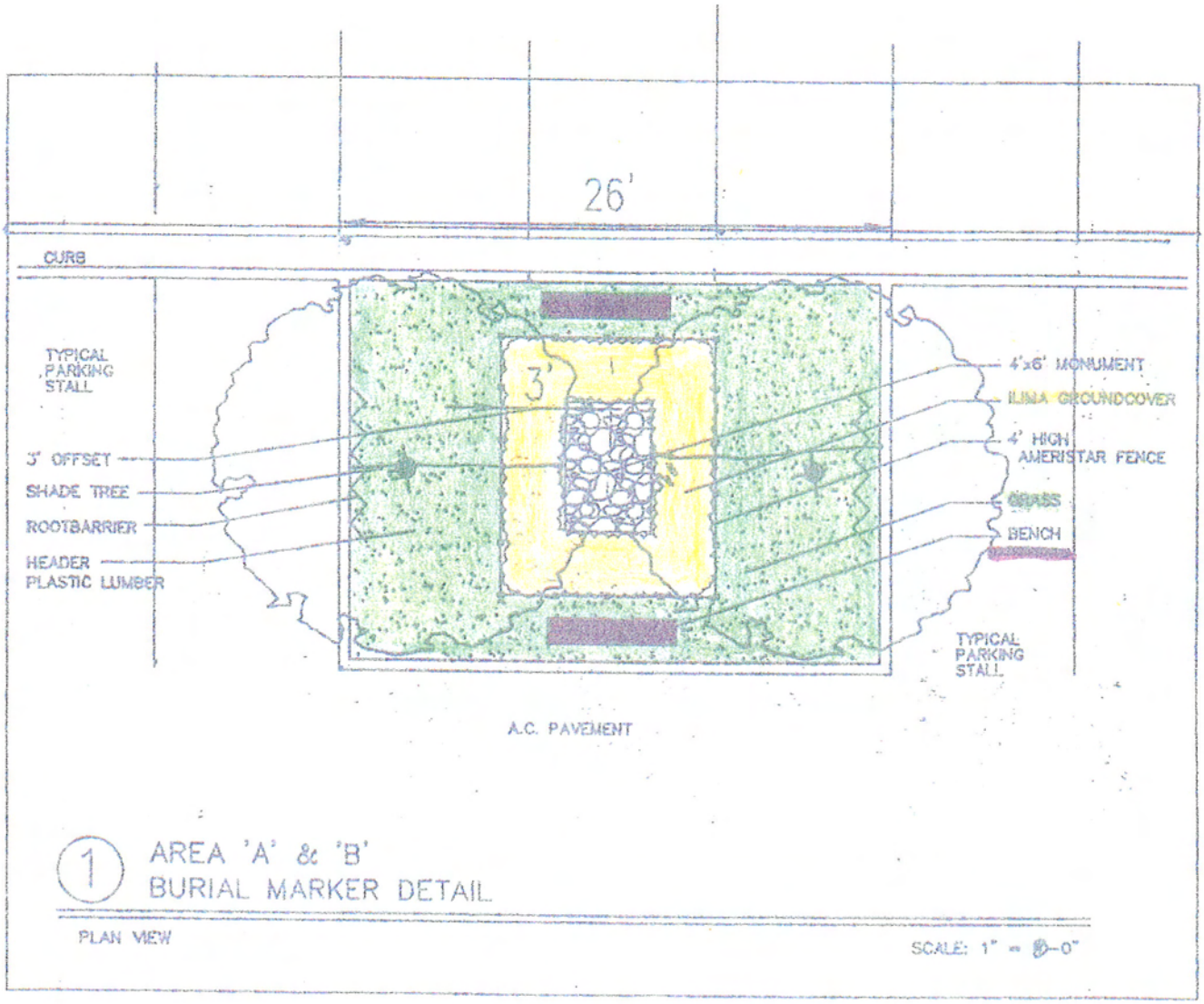


Figure 4. Proposed Surface Treatment for Burial Preservation Area

Inadvertent Burial Sites 5236 and 5229 Short-Term Preservation Measures

Site 5236 was identified during monitoring procedures, and consists of a partially articulated left foot associated with displaced remains. This burial feature will be relocated at a deeper elevation in the same horizontal location. The procedures for this feature consist of the following:

1. The articulated portion will be excavated utilizing standard methods and procedures, and curated with the previously collected displaced remains at the Maui Lani Facility.
2. All the skeletal remains collected from SIHP 5236 will be prepared by members of the MLIBC for reinterment. The reinterment pit will be excavated by the archaeologist, and the dimensions shall be 3.0 by 3.0 by 5.0 ft. deep.
3. Site 5229 will be prepared and placed inside the same reinterment pit as Site 5236. The reinterments will be covered with approximately 5.0 ft. of sand and a concrete cap will be constructed over them.
4. Orange construction fencing will be erected around the perimeter of the burial site creating a 30 ft. protective buffer zone (60 ft. diameter) around the burial. The installation of the construction fencing will be monitored by archaeological personnel and documented through photographs. The archaeological supervisor will notify all pertinent parties (including but not limited to Mr. Kanai Kapeliela-Burial Sites Program, Mr. Charles Maxwell, Ms. Dana Naone Hall, Mr. Leslie Kuloloio-Burial Council Members, and Dr. Melissa Kirkendall-SHPD staff archaeologist) that the short-term measures are complete and construction may commence upon their approval. At no time may the fencing be altered without prior consent by the archaeologist. The archaeologist must monitor any alterations to the fencing.
5. Temporary access to the burial feature will need to be coordinated through the archaeologist and construction personnel during construction activities.

Inadvertent Burial Sites 5236 and 5229 Long-Term Preservation Measures

1. **Buffer Zone**- The final buffer zone will be established to ensure protection and preservation of this significant historic property within the proposed parking lot. The buffer zone is a no build zone where only activities such as landscaping and irrigation are allowed. Neither parking, nor utilities may encroach into the buffer zone. The buffer zone will measure from the corners of the burial platform approximately 11.5 ft. to the north and south, and 6 ft. to the east and west. The platform measures 4.0 by 6.0 ft. and with the buffer zone, it creates a preservation area that measures 26 by 18 ft. A vertical buffer consisting of ~~18~~ 5.0 ft. of fill will be placed over the burial area. The preservation area and the perimeter will be demarcated by concrete curbing as shown on Figure 4.
2. **Surface Demarcation**- A platform demarcating the burial area will be constructed over Site 4401. The platform will measure 6.0 by 4.0 by 1.0-1.5 ft. high and will be composed of water worn cobbles where the interior is secured with concrete to give the burial platform a dry stacked appearance. Approximately 3.0 ft. away from the platform, a 4 ft. high black metal fence will be erected to protect the platform from vehicular and foot traffic. An entry gate will be located on the southeast corner. The gate will be necessary to maintain the platform and landscaping around it. The area inside and outside the fencing shall be landscaped, the details of which are presented in item #4.
3. **Signage**-Signage will consist of a bronze plaque to be affixed to the black fencing along the east and west sides facing the benches (See Figure 4. The plaque will measure approximately 18 by 18 inches and shall be inscribed with "Native Hawaiian Burial Sites 50-50-04-5236 and 5229, Please Respect this Area".
4. **Landscaping**- The area inside the fencing adjacent to the platform will be planted with native ground cover possibly consisting of 'ilima and lau'ae fern. the area outside the fencing will be planted with grass. Two native shade trees will be planted along the north and south sides of the preservation area, and two benches installed along the east and west sides of the preservation area.
5. **Recordation**- The preservation area shall be surveyed with a metes and bounds description and this preservation area will be recorded with the Bureau of Conveyances within 90-days after receiving written approval of this Burial Treatment and Preservation Plan from the State DLNR-Historic Preservation Division.

DISCUSSION

Both burial platforms will be recorded with the bureau of conveyances, and will be maintained by landscape or maintenance personnel. If the bronze plaque, burial platform, or fence should be damaged over time, it will be replaced by the landowner. Access to these sites will be through the entrances to the parking lot, as both burial preservation areas are located within the parking lot.

Finally, during the course of the monitoring program, if any disturbed human remains are recovered during the monitoring procedures, the preservation area established at Site 4401 may be utilized as a reinterment location. However this decision will be subject to consultation with the landowner, SHPD and the MLIBC.

APPENDIX A

AFFIDAVIT OF PUBLICATION

STATE OF HAWAII, }
County of Maui. } ss.

Aaron T. Viela being duly sworn deposes and says, that he is Advertising Sales of the Maui Publishing Co., Ltd., publishers of the MAUI NEWS, a newspaper published in Wailuku, County of Maui, State of Hawaii; that the ordered publication as to

NOTICE IS HEREBY GIVEN

of which the annexed is a true and corrected printed notice, was published 4 times in the MAUI NEWS, aforesaid, commencing on the 29th day of September, 2002, and ending on the 2nd day of October, 2002, (both days inclusive), to-wit:

September 29, 30; October 1, 2, 2002

and that affiant is not a party to or in any way interested in the above entitled matter.

Aaron T. Viela

Subscribed and sworn to before me this 2nd day of October A.D. 2002.

VALERIE VIERRA NOTARY PUBLIC STATE OF HAWAII

Valerie Vierra
Notary Public, Second Judicial Circuit, State of Hawaii.

VALERIE VIERRA
My commission expires June 18, 2005

NOTICE IS HEREBY GIVEN that Archaeological Services Hawaii, LLC, representing HRT Ltd at 3660 Waialae Ste. 400, Honolulu, HI 96716 for the proposed Medical and Shopping Center Plaza along Ka'ahumanu Avenue at TMK 3-8-7-121, Wailuku, *ahupua'a*, Wailuku District, Island of Maui, has identified two burial sites, Site 4401 and 5236 (formerly F.S. 58), and one surface scatter of human remains, Site 5229, at TMK 3-8-7: pors. 121.

The human remains are traditional Native Hawaiian burial sites and proper treatment shall occur in accordance with Chapter 6E, Hawai'i Revised Statutes, Section 43.5 regarding unmarked burial sites. A Burial Treatment and Preservation Plan is being developed by Archaeological Services Hawaii to identify short-term and long-term preservation measures for the human remains.

Two Land Commission Awards (LCA) have been identified within and surrounding the area. LCA 7713 to Victoria Kamamalu and LCA to Kuihelani. We are requesting descendents of known families in the area or persons with information about families from the area to immediately contact Ms. Lisa J. Rotunno-Hazuka at Archaeological Services Hawaii at 16 S. Market St. Ste. G, Wailuku, HI 96793; 244-2012 (ph) or 244-9592 (fax) or Mr. Kana'i Kapeliela, Cultural Historian, at the State Historic Preservation Division located at Kakuhihewa Building, Kamokila Boulevard, Kapolei, Hawai'i 96707; 808/692-8037 ph 808/692-8020, to present information regarding these traditional Native Hawaiian burials. Please respond within 30 days.

(MN: Sept. 29, 30; Oct. 1, 2, 2002)

APPENDIX L.

Cultural Impact Assessment Report Prepared by Hana Pono, LLC

Maui Lani Shopping Center
FINAL REPORT
TMK: 3 - 8 - 07

Prepared for:

HRT LTD

906 Makahiki Way

Honolulu, Hi. 96826

Lolyd T. Sueda, President

Ph: (808) 924-1000

Fax: (808) 922-3975

Prepared by:

Hana Pono, LLC

Keli'i Tau'ā

2275 Apala Pl.

Haiku, HI 96708

Keli'i Tau'ā & Kimokeo Kapahulehua

Kimokeo Cell: (808) 276-7219

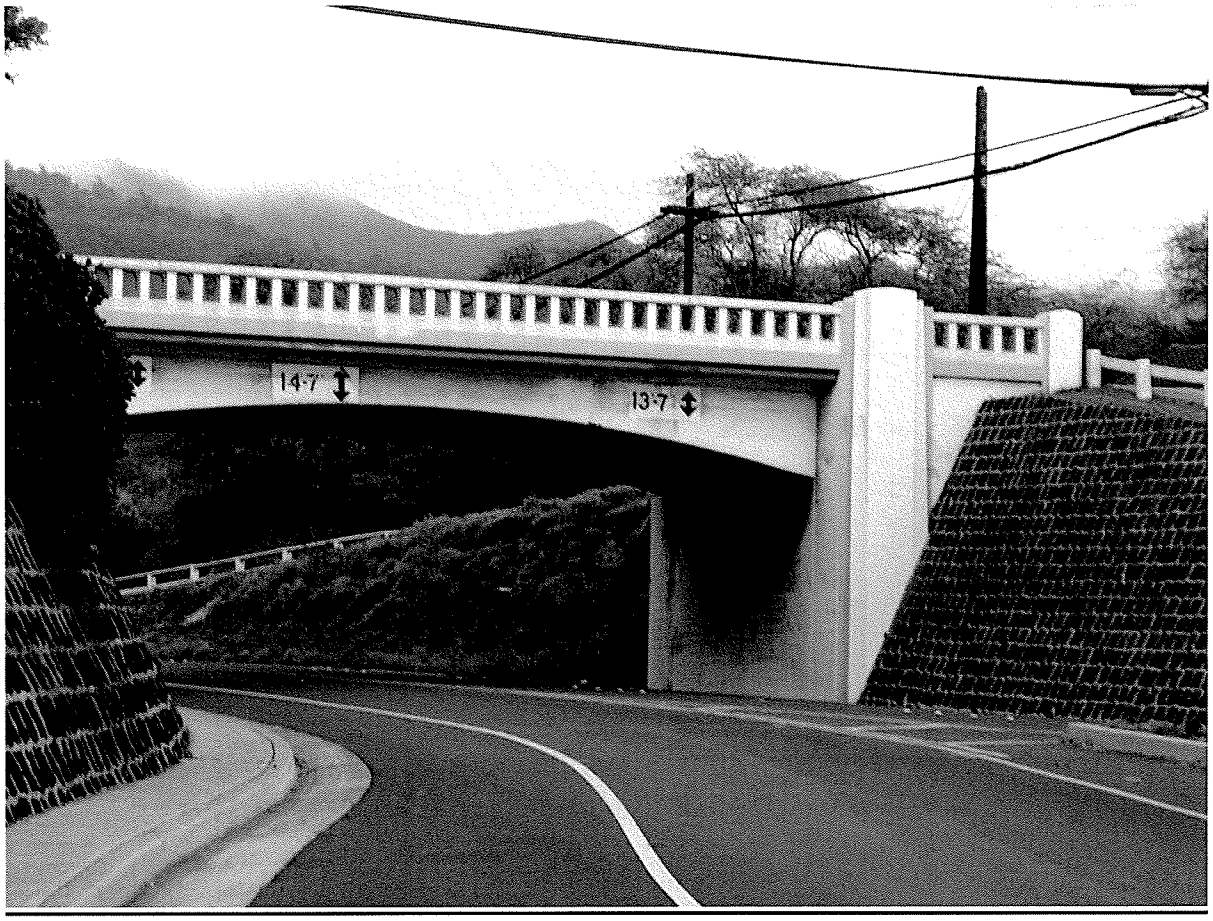
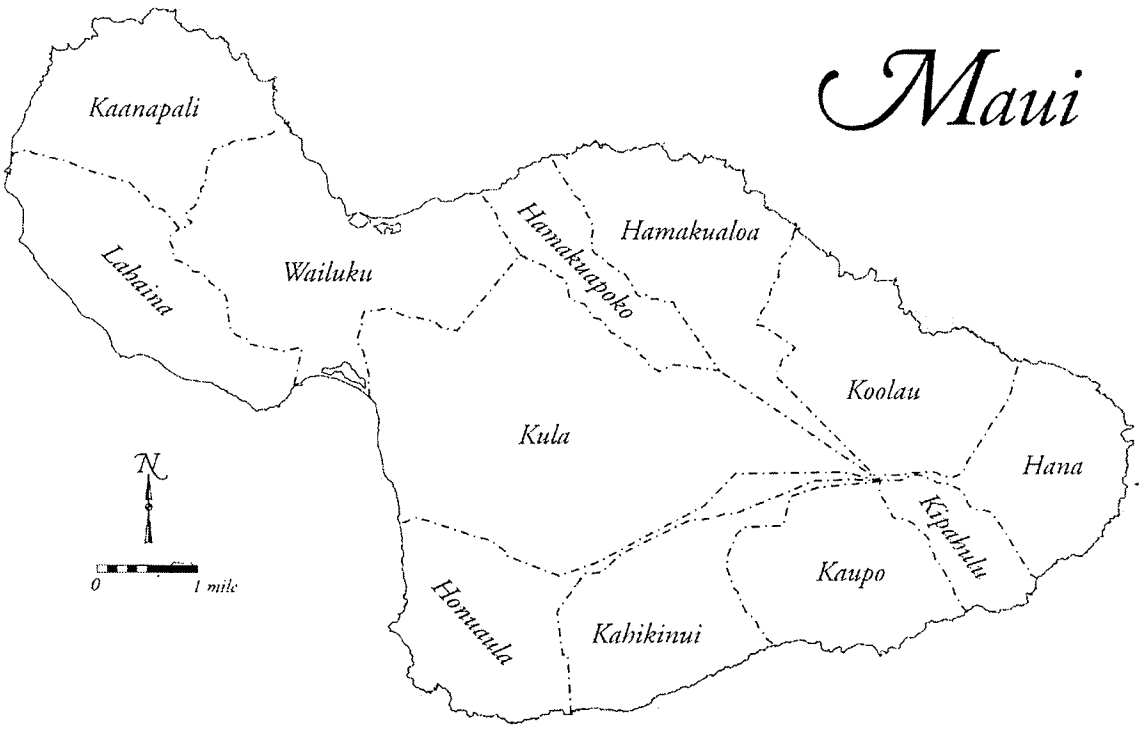


Table of Contents

Scope

The scope of this project will be to compile various historical, cultural and topographical accounts and facts of the moku of Wailuku District where this project named The Maui Lani Shopping Center will be built. Today, the Wailuku District is broken down to smaller areas with Kahului on the bottom, Waikapu and Ma'alae'a on the opposite side, Pu'unënë occupies the Kula portion and Wai'ehu, Waihe'e and Wailuku completes the circle that surrounds the target area. Waikapu, Wailuku, Wai'ehu and Waihe'e are referred to as Nā Wai 'Ehā.



Introduction

This proposal is in response to a request from Lloyd T. Sueda of Sueda and Associates Inc. Lloyd T. Sueda, President for the following services: Cultural Impact Study [CIS] for TMK: 3-8-07, 121 lot 11-A-1-A. This Cultural Impact Assessment Study will be conducted in accordance with the State of Hawai'i Office of Environmental Quality Control {OEQC} Guidelines for Assessing Cultural Impacts (1997). This study is in compliance with Act 50 SLH 2000 (HB 28 H.D.I.) as it amends the State of Hawai'i Environmental Impact Statement Law {Chapter 343, HRS}.

The CIA was conducted according with the State of Hawai'i Office of Environmental Quality Control (OEQC) Guidelines for Assessing Cultural Impacts {1997} and includes oral interviews with local island consultants about Wailuku and its surrounding areas such as Ma'alae'a, Waikapu, Wai'ehu, Waihe'e and Kahului. The report will also include archival research.

The location of our study, the Maui Lani Shopping Center, is located at the starting point of the daily Northeast trade winds kicking up regularly from North Maliko seaside to Kahului gaining momentum as it crawls up to Wailuku winding through the funnel embankment of Ka Mauna Kahalawai and Haleakalā until it touches all the significant landmarks south passing

through the 'āina (land) on its way to visit the other side of the Pacific Ocean. The Northeast trade winds changes the complexity of the land daily as it sweeps through the area described above. Historians of old referred to Wailuku as the source of the flying clouds.

We begin our cultural assessment by describing the four centers of population on Maui to give the readers an idea of how we came to be where we are today. We discuss important topics relating to the centers of population such as loko i`a (fishponds), use of the `āina (land), the Great Mahele (land division) as well as the importance of fresh water sources. We will tell our tale always keeping the target area of Maui Lani Shopping Center in our vision.

Maui's Four Centers of Population

A brief synopsis of the island-wide community layout for Maui will assist in the explanation of our Wailuku target area along with its neighboring community centers. We start at home first with the famous ʻĪao Needle at the center of Nā Wai 'Ehā (The Four Waters) in the Wailuku ahupua'a.

Kahakuloa and Nā Wai Ehā

Maui entertained four centers of population starting with Kahakuloa, an isolated valley on the northwest coast of West Maui deeply rooted in the staple lo'i kalo (wet taro plant). The next location was at the southeast and east part of West Maui, known in present day as Wailuku and Kahului. The area housed four deep valley streams which watered four areas of taro land spreading fanwise to seaward: Nā Wai 'Ehā were famed in song and story—Waikapu, Wailuku, Wai'ehu and Waihe'e. Eventually as we move to the modern era, sugar cane took over the former taro lands and the same waterways that were once used to irrigate the taro were used to water the sugar plants. The famous name song for the area that is very popular and sung throughout the islands is provided below.

SONG: **'INIKI MĀLIE –Gentle Pinches**

The winds & waters of Nā-wai-'ehā

Wai-kapū makani kokololio	Wai-kapū skin-stinging wind
Makani houhou 'ili	wind in gusts
'Iinikiniki mālie	Gently pinching
Wai-luku makani lawe mālie	Wai-luku, wind becoming gentle
Makani houhou 'ili	wind in gusts
'Inikiniki mālie	gently pinching
Wai-ehu makani hō'eha 'ili	Wai-ehu, wind paining skin
Makani houhou 'ili	wind in gusts
'Inikiniki mālie	gently pinching
Wai-he'e makani kili'o'opu	Wai-he'e, wind graceful
Makani houhou 'ili	wind in gusts
'Inikiniki mālie	gently pinching
Hā'ina mai ana kapuana	Thus ends the story
Makani houhou 'ili	Skin-stinging wind
'Inikiniki mālie	Gently pinching

(Elbert and Mahoe, 56)

Another way of looking at Nā Wai 'Ehā is to associate their names with the events of warfare and more significantly possibly battles that occurred in succession starting with

Waikapu (Wai-water; ka-the; pu-conch blowing) meaning the waters where the conches were blown and the engagement began. Traditionally, conch shells were and are still blown when significant Hawaiian events occur. **Wai'ehu** was the location where the warriors were actively fighting causing much perspiration and sweat which is referred to as (Wai-water; 'ehu-spray, foam, mist). At **Wailuku**, (Wai-water; luku-destruction, slaughter) this event occurred. In the Battle of Kepaniwai, Wailuku, there was so much killing that the stream was full of dead bodies stacked up on one another to create a human dam causing the stream to stop flowing (Kepaniwai=The pani –closing of the wai= water). Finally, **Waihe'e,** (Wai-water; he'e-slip away) where Maui's warriors came under total defeat and literally slipped away (he'e).

In the middle of Nā Wai 'Ehā is the sacred valley of 'Īao located in the Wailuku District. There, chiefs and chiefess's from throughout the Hawaiian Archipelago, after living their earthly lives, requested that they be secretly laid to rest somewhere in the valley. This area funnels moisture-laden clouds onto Pu'u Kukui which sits above Mauna Kahalawai (West Maui Mountains) making it the second wettest spot in the Hawaiian Islands with 400 inches of rain a year falling on the peak. (Roelofs, 12)

The lands of Waikapu and Wailuku appropriated almost the whole isthmus so as to cut off half of the lands in the district of Kula from access to the sea. These two ahupua'as, together with Wai'ehu and Waihe'e were called Nā Poko and have been formed into a district in modern times.

There were several pu'uhonua (refuge) found in Nā Wai 'Ehā built at different times which was dependent upon the desire of the ruling chief. Therefore, some might not have been simultaneously in existence. Pu'uhonua could be defined as a place of refuge or sanctuary, some place that provided peace and safety. The pu'uhonua names cited in Nā Wai 'Ehā were Kukuipuka, Waihe'e; Poaiwa, Wai'ehu; and Po'opu'upa'a, Waihe'e.

Also found in Nā Wai 'Ehā were Pohaku o Kane Pu'uhonua. It was referred to as the "gate to heaven" – puka no ka lani. It was the kuahu (alter; sacred location) for individuals where men talked to the family gods, where men were freed from defilement and wrong doing; a place at which to ask the gods for blessings. A Stone of Kane was a stone pointed out by the god, not one just set by men. The god indicated the individual pohaku, perhaps through dreams or in visions and led such dreamers to the rock.

The location of Wailuku as part of Nā Wai 'Ehā and 'Īao Valley served as the center for Maui's spiritual awakening with the flow of the early morning Haleakalā sun filling the entire valleys of Nā Wai Ehā with its warmth. The path from the ocean to the mountain cut through in to the target area to get to 'Īao Valley. Another trail ran along the stream from Wai'ehu Beach pass the Hale Ki'i Heiau moving up to Wailuku and into the valley.

Olowalu through Lahaina

Another populated area was at the southwest coast of west Maui beginning at Olowalu and continuing through Launiupoko, Laupakanui, Waine'e and Lahaina and on to the small terraced valleys of Honokowai and Honokohau where taro lands were irrigated from streams out of Mauna Kahalwai. Lahaina, flanked by excellent fishing grounds, was the primary seat of the chiefs of West Maui.

Ke'anae through Hana

The northeast flank of the great dome of Haleakalā roughly opposite the more sheltered shore line of Mākena are the two adjacent areas of Ke'anae and Wailuanui which comprise the next chief center on the rugged east coast. It supported intensive and extensive wet-taro

cultivation. Further eastward down the coastline is the isolated but popular town of Hana. It is a region famous in legend and history although it was supported chiefly by fields of mulched (dry) taro cultivation and sweet potato, the small steep-valley called Wailua being almost the only area of wet taro nearby. The popularity of this district was based upon the relationship of neighboring Hawai'i island and its close proximity.

Kula to 'Ulupalakua

The last major district, from Kula to 'Ulupalakua, was a consistently dry and lava-strewn country. Included in this area was the now popular Mākena and Ke'oneo'io which is noted for good fishing, calm sandy shores and pleasingly warm weather and sunshine. These favorable conditions attracted temporary settlers to live next to the shorelines and close inland. There were some patches of dry land taro but there was a notable area for 'uala (sweet potato) which, combined with the fishing, must have supported a sizable but transient population.

By the brief explanation of the four large settlement districts of Maui, the reader of this report can draw their own conclusions that the ancient settlers were attracted to the lands that could provide their wet taro crops with a constant flow of water. Although the area of research carries the prefix "wai" meaning water as in Waiohuli (Water that turns) and Wailuku/Kula, (Water that destroys - in Kula), the flow of water in this area were found a short distance above the target area of study and therefore made little effect or any significant impact to create a fertile land base. The sandy dry conditions left this section of land with a few or no settlers in the middle section of the ahupua'a in ancient times such as the target area. Most of the settlers were at the mouth of the large gulches, at beachside and or the fertile valley of ʻĪao where the ocean could be seen.

In the Beginning—Pele and Maui

Perhaps we jumped ahead by talking about where the people settled before discussing the mythical tales of how the Hawaiian Islands came to be. Go back with us to the stories of a demigod fire goddess named Pele and another demigod fisherman named Maui. Let's start with Pele and her young sister Hi'iaka. During the early stages of Pele's arrival in Hawai'i, we find her island hopping seeking for a home and finally ending her search at Kilauea on the island of Hawai'i where she resides today. Along her journey, she stumbles across a handsome chiefly warrior on Kaua'i named Lohi'au with whom she madly falls in love. While residing on the island of Hawai'i, Pele sends her young sister Hi'iaka to fetch Lohi'au. Hi'iaka follows the path of the ko'olau (a description referring to wet mountainous areas). The area of Nā Wai Ehā is the ko'olau of Maui. This chant describes Hi'iaka's travels throughout the island chain in the mauka areas of the ko'olau(s).

A Ko'olau wau 'ike i ka ua	Advancing in columns, dashing along.
e ko-kolo la-lepo mai ana ka ua	The rain, it sighs in the forest,
E ka'i ku ana, ka'i mai ana ka ua	the rain, it beats and whelms, like the surf;
e nu mai ana ka ua i ke kuahiwi	it comes with lifting and tossing of dust
E po'i ana ka ua me he nalu ala	It smites, it smites now the land
e puka, a puka mai ka ua la	Pasty the earth from the stamping rain
Waliwali ke one i ka hehi'a e ka ua	Full runs the streams, a rushing flood
ua holo-wai na kaha-wai	The mountain walls leap with the rain
ua ko-ke wale nā pali	The mountain walls leap with the rain
Aia ka wai la i ka ilina he ilio	See the waters chaffing its bounds like a dog,

he ilio hae, ke nahu nei e puka	Twas in Ko'olau I met with the rain, a raging dog, gnawing its way to pass out. Emerson p.59

In another chant in Emerson's (p.85-87) concerning Pele, the chant describes Pele's works on each of the major islands starting with her arrival from Hikina (East), the land of her birth then runs through the Hawaiian Island Chain starting with Ni'ihau and ending at Hu'ehu'e, Hawai'i. In this chant Pele is searching for a home and is digging in each of the islands, Father Wakea is trying to keep Pele in check.

AI-HA'A

He lua i ka Hikina	A pit lies far to the East
Ua ena e Pele	Pit red-hot by the fire goddess Pele
Ke hā'olo'olo e lā ke ao	light bursting forth by day
Ke lele la i-luna, i-lalo;	flying up & down
Kawewe ka 'ō'ō i-lalo i akea;	the thud of the pick is heard in the ground
A nīnau o Wakea,	Wakea asks,
'O wai nei Akua e eli nei?	What God is digging?
'O wau nō, o Pele,	It is I, it is Pele,
Nana i eli aku ka lua i Ni'ihau a a.	Who dug Ni'ihau deep down till it burned,
He lua i Ni'ihau, ua ena e Pele	Dug fire-pit red-heated by Pele
Ke hā'olo'olo e lā ke ao,	light bursting forth by day
Ke lele la i-luna, i-lalo;	flying up & down
Kawewe ka 'ō'ō i-lalo i akea;	the thud of the pick is heard in the ground
A nīnau o Wakea,	Wakea asks,
'O wai nei Akua e eli nei?	What God is digging?
'O wau nō, o Pele,	It is I, it is Pele,
Nana i eli aku ka lua i Kaua'i a a.	Who dug Kaua'i deep down till it burned,
He lua i Kaua'i, ua ena e Pele	A pit at Kaua'i, red-hot by Pele
Ke hā'olo'olo e lā ke ao,	light bursting forth by day
Ke lele la i-luna. i-lalo;	flying up and down
Kawewe ka 'ō'ō i-lalo i akea;	the thud of the pick is heard in the ground
A nīnau o Wakea,	Wakea asks,
'O wai nei Akua e eli nei?	What God is digging?
'O wau nō, o Pele,	It is I, it is Pele
Nana i eli aku ka lua i O'ahu a a.	Who dug O'ahu deep down till it burned
He lua i O'ahu, ua ena e Pele	A pit at O'ahu, red-hot by Pele
Ke hā'olo'olo e lā ke ao	light bursting forth by day
Ke lele la i-luna i-lalo	flying up and down
Kawewe ka 'ō'ō i-lalo i akea	the thud of the pick is heard in the ground
A nīnau o Wakea,	Wakea asks,
'O wai nei Akua e eli nei?	What God is digging?
'Owau nō, o Pele,	It is I, it is Pele,

Nana i eli aku ka lua i Moloka'i a a	Who dug Moloka'i deep down till it burned
He lua i Moloka'i, ua ena e Pele	A pit at Moloka'i, red-hot by Pele
Ke hā'olo'olo e lā ke ao	light bursting forth by day
Ke lele la i-luna i-lalo	flying up and down
Kawewe ka 'ō'ō i-lalo i akea	the thud of the pick is heard in the ground
A nīnau o Wakea,	Wakea asks,
'O wai nei Akua e eli nei?	What God is digging?
'Owau nō, o Pele,	It is I, it is Pele,
Nana i eli aku ka lua i Lana'i a a	Who dug Lana'i deep down till it burned
He lua i Lana'i, ua ena e Pele	A pit at Lana'i, red-hot by Pele
Ke hā'olo'olo e lā ke ao	light bursting forth by day
Ke lele la i-luna i-lalo	flying up and down
Kawewe ka 'ō'ō i-lalo i akea	the thud of the pick is heard in the ground
A nīnau o Wakea,	Wakea asks,
'O wai nei Akua e eli nei?	What God is digging?
'Owau nō, o Pele,	It is I, it is Pele,
Nana i eli aku ka lua i Maui a a	Who dug Maui deep down till it burned
He lua i Maui, ua ena e Pele	A pit at Maui, red-hot by Pele
Ke hā'olo'olo e lā ke ao	light bursting forth by day
Ke lele la i-luna i-lalo	flying up and down
Kawewe ka 'ō'ō i-lalo i akea	the thud of the pick is heard in the ground
A nīnau o Wakea,	Wakea asks,
'O wai nei Akua e eli nei?	What God is digging?
'Owau nō, o Pele,	It is I, it is Pele,
Nana i eli aku ka lua i Hu'ehu'e a a	Who dug Hu'ehu'e deep down till it burned
He lua i Hu'ehu'e, ua ena e Pele	A pit at Hu'ehu'e, red-hot by Pele
Ke hā'olo'olo e lā ke ao	light bursting forth by day
Ke lele la i-luna i-lalo	flying up and down
Kawewe ka 'ō'ō i-lalo i akea	the thud of the pick is heard in the ground
Eli-eli kau mai!	This chant is anchored in reverence

MAUI THE DEMIGOD

The mythological story of Maui the Demigod is very well-known throughout the Polynesian Islands He is recognized and revered as a super hero. There were four brothers: Maui Mua –Maui the first; Maui Iki –Small Maui; Maui Waena –Maui in between; and finally Maui Akamai –Smart Maui.

Among the four brothers, the last Maui was the smartest and most kolohe (rascal) who enjoyed playing tricks on others. He was big and strong which enabled him to pull off super human feats. He showed much compassion for his elders, especially his kupuna wahine (grandmother) by addressing her major need which was to have sufficient amount of sun in a normal day to dry her laundered kapa (tapa). He devised a plan to capture the sun with his rope

Kupuna wahine Hina was sad because it rained every day. Maui decided to help kupuna wahine by hiding with some rope in back of the rocks up at Haleakala in order to catch the sun. When the sun appears from under the ground, he catches the sun and quickly ties the sun with a big rope so that he could slow it down a little in order for kupuna wahine to dry her kapa (tapa).

Maui carries on with his mischievous ways by inviting his three siblings on a fishing trip on their canoe. His one request was that they do not ever look back as he steers their canoe on their adventurous trip. As they are paddling on the ocean deep, their fishing hooks got caught on the bottom of the ocean preventing them from moving forward. In their excitement, all three siblings turned around to give their young brother some help forgetting the first request not to turn around by Maui Akamai. As they kept paddling without any movement, Maui Akamai shouted loudly, "E Ku Mau Mau!" the equivalent of give it all you got. To their astonishment, they started moving forward and as they glanced back to their surprise, they saw the islands rising from the ocean deep attached to their line and fishing hook (Manaiakalani).

Pueo

Those who have resided in the Wailuku area for a long period of time can perhaps share stories with Hawaiian characters and animals. One ancient animal mentioned by our consultant Mrs. Nacua in her interview is the story of the pueo (Hawaiian short-eared owl) that occupied the target Maui Lani land. The pueo may have resided in that area since the beginning of time. The pueo takes us back to Hina, the mother of Maui who gave birth to a second child in the form of the pueo. Later, when the brave demi-god Maui was taken prisoner by enemies and held for sacrifice, brother pueo rescued Maui and led him to safety.

Taking the knowledge from the chants and mythical stories of Hawai'i, we can transition back to the specific area of Wailuku using Hina's second child, the pueo, as the bridge.

The word "pueo" is used in `Olelo No`eau to denote a taro variety, the staff of the Hawaiian life. Other definitions of "pueo" include shortness, the shroud of a canoe, and the rocking of a child. Then there are the many expressions that use the word pueo, such as *keiki a ka pueo*, "child of an owl, whose father is not known", or, *ka pueo kani kaua*, "the owl who sings of war, the owl as a protector in battle". *A no lani, a no honua*, this saying states, "the guardian owl belongs to heaven and earth". Throughout Hawaii, streets, areas, and valleys bear the owl's name, with many such places having an interesting legend attached to them.

The pueo, unlike most owls, is often active during the day and loves to fly at high altitude above open, grassy areas. The pueo feels at home at sea level as well as in the higher mountains. A while back when I was teaching at Baldwin High School across our target area, I would see a pueo across campus from early morning when I entered the school through the day and into the evening as I periodically left campus after evening activities.

Today, although still found on most islands, the numbers are declining due to urban development taking away the quiet environment it craves. There are no statistics on the pueo's population numbers. Considered endangered on Oahu, pueo has become a candidate for threatened status throughout the island chain. The pueo's modern diet consists of introduced rodents, rats, mice, and small mongooses which were abundant in the thick kiawe (algaroba tree) in the researched Wailuku area. Prior to the abundance of the aforementioned rodents, it was believed that the pueo lived on the small Hawaiian rail, a flightless bird that is now extinct.

The Wailuku area provided the pueo enough trees and grassy areas to nest making its home environment moderately secure except for feral cats and mongooses destroying its nest and eating its eggs. Today, the pueo is threatened by man's guns or through stress caused by construction and development.

On a more esoteric level the pueo is a bird that flew over the islands well before the first Hawaiians sailed in and is among the oldest physical manifestations of the Hawaiian family protectors, the ancestral guardians, the aumakua. My family aumakua are the pueo and mano (shark). It was believed that after the death of an ancestor, the spirit could still protect and influence the remaining family acting through a body such as that of the owl, the shark, the turtle, or even the centipede. Each species channeling the ancestor held unique strengths.

My first family pueo story has to do with my grandma. On one of grandpa's drinking sessions, she noticed that grandpa was starting to become verbally abusive to her and started threatening her. She excused herself from the room to go into the kitchen where there was a back door to escape. Her idea was to retreat so that she could remove herself from grandpa's presence to remain safe. Luckily she did so because as soon as she stepped out of the house and started running down the pathway, she heard the rifle shot ring out into the valley. She kept running as fast as she could without looking back for one moment even though the sound of echoing hoof beats appeared to be climbing on her back. With the force of two claws clinging to her back and guiding her into the nearby ditch the pueo, our family aumakua, shielded and protected grandma from her husband who had too much okolehau (strong Hawaiian drink). Mahalo (thank you) pueo.

The more contemporary pueo story in my family has to do with my son born twenty years ago at Maui Memorial Hospital next door to the Maui Lani target area. During the time of his mother's pregnancy with him, a pueo visited us daily at our Haiku house. After his birth in the morning in Wailuku, he had several of them circling the hospital area in Wailuku and upon

arriving home in the mid-morning, several sat on the roadway fence hooting a welcome home song. On special occasions, the pueo has shown up when my son and I were in the middle of blessing a canoe, blessing a home or just enjoying a nice family outing. From Wailuku to Haiku, Lahaina to Kahikinui and beyond, we are alert and desirous to see that the home of the pueo still be considered a part of the Hawaiian life. E ola mau nā pueo o Hawai'i nei (Long live the Hawaiian owl).

Fishponds (Loko i'a), and Wetlands

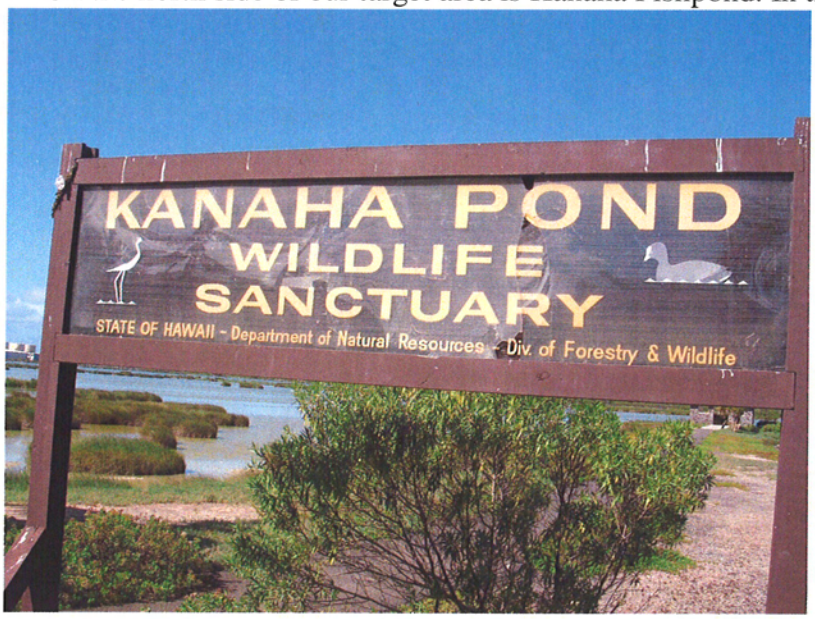
It has been said by the people of old that the measure of an ahupua'a's wealth and power was determined by the amount of functional heiau (temple) and loko i'a (fishponds) that existed within its boundaries. Shorelines had abundant marine life that served as a source of sustenance for many people in the past. Loko i'a served as liquid refrigerators or food storage. There, people could fetch a fresh variety of fish especially those cruising along in schools like mullet, moi, weke, aholehole and numerous other varieties. The other food delicacies such as crab, octopus, seaweed and the like were raised in these ponds. South of our target area lay Kealia Fishpond close to Ma'alae'aand beyond is Ko'ie'ie along with Kalepolepo in South Kihei. Wetland areas such as Ma'alaea mud flats served as other natural inlets to house the various marine life that the Hawaiians could use. Loko I'a was not limited only to the shoreline but on occasion could be found mauka (upland) as part of the lo'i kalo (taro farming). The construction of such a loko i'a in the mauka area were located in the valleys that had a constant flow of water such as the Nā Wai Ehā valleys on Maui and other ko'olau districts.

Ku-Makena and 'Ahihi bays each had their fish ponds. The one at Keone'o'io was very large stocked with favorite fish such as 'Ama'ama, Awa, and 'Oi'o. At certain times the spirits of the dead chiefs are heard and sometimes seen in these areas. A procession of these spirits is called 'oi'o or as huaka'i-po, the Marchers of the Night. The two main ponds are named Halua and Kauhioaiakini and here dwell the mermaids and the benign sharks, such as Kamo'oali'i and Kaneikokala, their spirit mates of the sea. Even today, such encounters are experienced in Hawai'i nei.

Many a time, fishpond builders were inspired by an ali'i who wanted the convenience of having fish readily available for themselves or their guests. An example of such a pond is Lahaina, where the capital on Maui existed anciently and housed the large loko i'a Mokuhinia which fed the ali'i whose residence was at Moku'ula, Lahaina.

I was raised listening to my mother telling us of our father's experiences with wahine hi'u i'a (mermaids) and huaka'i-po. In my dad's younger years, he was raised in Kuau and Huelo so he was accustomed to experiencing these spiritual encounters at places such as Twin Falls with the mermaids and other waterways at Ko'olauloa and Ko'olaupoko. It was an experience for me as a young boy to be with him at the shores of Honua'ula and have the huaka'i-po literally lift our truck off the King's trail and set it down in the opposite direction.

On the north side of our target area is Kanaha Fishpond. In the early 18th century, King Kapi'ioho'okalani, the King of Maui, ordered that the island's royal fishponds be created. King Kamehameha later named the ponds after the daughters of Kapi'ioko'okalani, and soon it became clear that the variety of the waterfowl the pond attracted was one of the most astonishing features of the place. So the Kanaha Pond Bird Sanctuary, once a royal fishpond, is now a 143-acre preserve and for several endangered species of birds. Here winding paths border the wetlands where many migratory and resident birds stop and nest such as the endangered ae'o (Hawaiian Stilt), the 'alaekea (Hawaiian Coot), the koloa maoli (Hawaiian Duck), and the Sphinx Moth. Visitor birds such as the Canadian Geese make their annual visit enjoying the Hawaiian hospitality. Along with the fishpond was included wetlands filled with fresh spring water as well as ocean water.



Down the west coast of Central Wailuku is Waihe`e coastal dunes and wetlands presently consisting of 24 acres of coastal, spring-fed wetland, 103 acres of dune ecosystem, over 7000 feet of marine shoreline and more than 8 acres of riparian habitat for the recovery of native birds and native vegetation. In recent years, at least six endangered plants and animals, including the Hawaiian Stilt and Coot, two endangered plants and two endangered insects have been reported from the site with its (loko i'a)-fishpond. As cited at other fishponds, here too is the possibility of losing several Hawaiian indigenous species

The old fishing village, heiau, and extensive burial sites have only been partly delineated, but appear to be one of the most productive sites remaining on Maui. Permanent protection of the site provides the opportunity for careful planning and appropriate preservation and/or restoration with the partnership of all interested cultural and community groups.

Today, I realize that the spirits of the huaka'i-po we encountered periodically were not from our district. We were the mālihini (new comer) in their ahupua'a and disturbed their habitat.

The other measurement as earlier mentioned of an ahupua'a's richness was the amount of agriculture heiau (temples) that were found in

respective land districts. Yes, it might impress the mālihini to claim that they have a large heiau on their ahupua'a but after all that have been said about the make-up of the Hawaiian lifestyle and the importance of plants in the Hawaiian society, one could determine that more agriculture heiau rather than one large luakini (sacrificial temple) would show the richness of their ahupua'a community. There still exist on Hawaiian family lands the structures of agricultural heiau that people don't recognize today because it hasn't been used for years.

Use of the 'Āina

An abundance of old kukui trees found in a given area today indicated that there existed a good size community in ancient times. Communities of ancient Hawai'i needed many candle nuts to light their homes which were made by stacking four to six nuts on a coconut mid-rib stick and have it burn up to four to six minutes. If a family or community wanted light, they would need a whole forest of trees to harvest the nuts. Most all of the valleys of Nā Wai Ehā are still entertaining an abundance of kukui trees along the ridges of each valley. Other uses of kukui were: charcoal, infusion used to soak fish line fibers, medicine, staining, leis, nut oil and of course the many different uses of the wood. There are kukui trees scattered here and there at target area, but grew more profusely in higher elevations in Wailuku.

In more recent times, other trees growing the target area have held a significant role. One of our consultants described her father to have had many occupations but one term new to our ears was that he was a logger. Upon questioning her about what her father logged anticipating that it would be koa (acacia) or ili'ahi (sandalwood), to our surprise she mentioned kiawe (algaroba). Why not I ask myself? Waiohuli and Wailuku/Kula have been literally overrun by the kiawe forest replacing the Hawaiian forest trees such as the koa, sandalwood, kukui, Hala, Wiliwili, 'ākia, 'āla'a and many others.

Her father logged these trees to sell to ranchers for poles to build their barbed wire fences. The wood was logged to make charcoal. I have overheard locals say they would never barbeque their food on any other charcoal except kiawe. Youngsters would spend after school and summer time hours to collect the seeds which were sold to pig farmers and others who cooked the seed to feed their animals. During times of famine, the locals have also eaten the seeds, a legume which is sweet to the taste.

The kiawe, a legume, was imported from Peru in 1828 to Hawai'i by missionaries who first planted it in downtown Honolulu next to the Catholic Church. The conditions in Hawai'i are so attractive to this tree that it presently grows on every island especially in hot and dry areas of the islands like our designated area of study. From Kahului, Wailuku all the way up to Kula, Ulupalakua and Kanaio, the kiawe grows so prominently in these lands that one could call it the kiawe forest.

Kamehameha III (Kauikea'ōuli) & the Great Mahele

Up until the rule of King Kamehameha III (Kauikea'ōuli) 1848, the Hawaiian people's fundamental conception of property and law was based on water rights rather than land use and possession. Actually there was no conception of ownership of water and land, but only the use of water and land.

These fundamental concepts made drastic changes by King Kamehameha III with the implementation of the Great Mahele (division of land) between the king and the ali'i (chiefs) and konohiki (headman of an ahupua'a) and the kuleana 'aina (owned land) to the hoa'aina (tenants) of the ahupua'a. The King came under pressure from foreigners who were used to owning land in fee simple title in their homelands, and he desired to free his lands from the burden of being considered public domain, and as such, subjected to the danger of confiscation in the event of the Hawaiian Islands was to be seized by a foreign power. He also wanted to enjoy complete control of his property and his use of water for the continuous growth of taro, the favorite staple food.

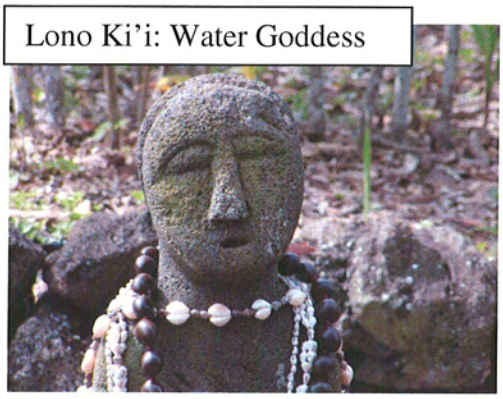
Wai and Waiwai

The fact that 400 inches of rain fall on Mauna Kahalawai provide a good indication of much erosion that we can visually see for each of the valleys of Nā Wai 'Ehā starting from the beginning of time on Maui. With the consistent rain falling in these ahupua'as, we can enjoy the lush green valleys that surround this area along with running streams that create ponds large and deep enough to swim. The name itself Mauna Kahalawai or the "mountain of passing waters" explain the deep indentations of each of the four valleys on the east. The same characteristics can also be found on the West with water flowing down the valley such as Northwest Kukuipuka, Kahakuloa and west Maui's Honokohau, Honolua, Honokahua, and Honokowai. These valleys on the Lahaina side starting with Hono were referred to as Nā Hono a Pi'ilani. On the opposite side of Mauna Kahalawai was known as the valleys of Pi'ikea (Pi'ilani's sister) referring to Nā Wai 'Ehā or Waikapu, Wailuku, Wai'ehu and Waihe'e. Wailuku with its definition being "destructive waters" continue to provide continuous stream water through Wailuku running down the valley to the fertile ocean of Kahului and Wai'ehu.

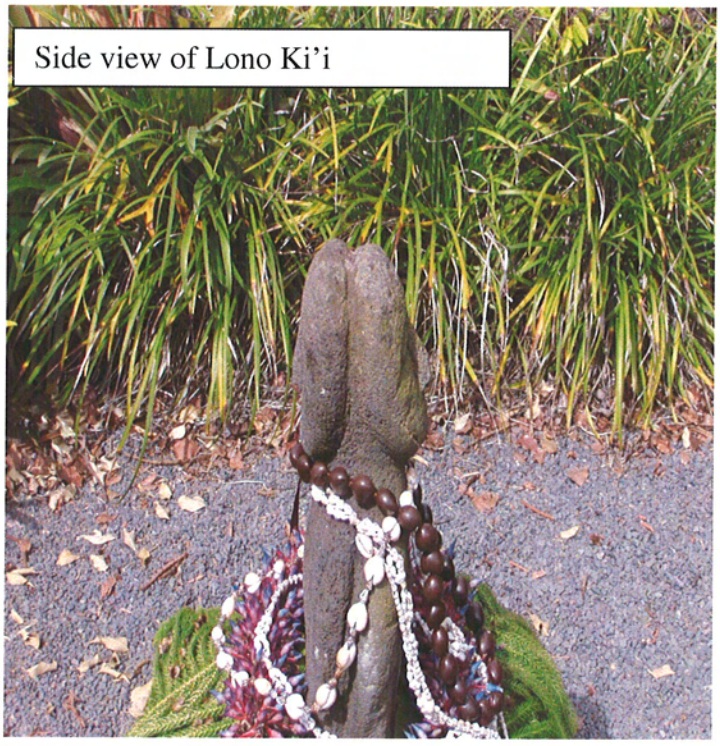
The popular 'ōlelo no'eau (Hawaiian saying)

"Uwe ka lani, ola ka honua – When it rains, the earth lives." did not have major impact in the targeted area of our research but when it did rain, it floods the lower areas of Kahului, Wai'ehu and Waihe'e filling many wetland areas still existing today. Nā Kupuna have many life stories living in the lowland areas next to the ocean. They tell of incidents when it rained throughout the night while quietly sleeping, a wife would turn to her husband and say, " 'I smell mountain ferns.' then go back to sleep." When they awoke the next day to their surprise, they would find the water up to their front door decorated with all the branches, flowers, seeds and various other items from the mountain including the fragrant palapalai ferns scattered around the yard as makana (gifts) from Mauna Kahalawai (West Maui Mountains). Even today, I have experienced the same phenomena of rain water pushing plants from mauka (upland) down through the lowlands.

Lono Ki'i: Water Goddess



Side view of Lono Ki'i



Wai (water) duplicates to waiwai (wealth). The thinking behind this is that when a person has a lot of water, they are truly wealthy. In real life, we are continuously brought to the realization that water is the key element in developing new communities while sustaining the old. In 1869, Samuel Alexander and Henry Baldwin formed (A & B) Alexander and Baldwin to grow sugar and East Maui Irrigation Company (EMI) to irrigate the crops. The partners in 1876 first formed the Hāmākua Ditch Company and completed the construction in 1878. During the ensuing decade Alexander and Baldwin's plantation was incorporated as the Pā'ia Plantation and included Hāli'imaile Plantation (Grove Ranch), East Maui Plantation, and Seaside Farm. The two partners gained control of Hawaiian Commercial and Sugar Company (HC&S) in October 1898 and immediately started building the Lowrie Ditch also known as the Lowrie Canal which started in the rain forest of Kailua in the Makawao District. The ditches two main sources were a reservoir at Pāpa'a'ea and the Kailua Stream.

Maui Agricultural Company was formed in 1921 by the merging of seven small East Maui plantations: Ha'ikū Sugar Company, Pā'ia Plantation, Kailua Plantation, Kula Plantation, Makawao Plantation, Pūlehu Plantation, and Kālialinui Plantation. HC&S, anchored in Pu'unënë, and Maui Agricultural Company based in Pā'ia merged in 1948, at which time

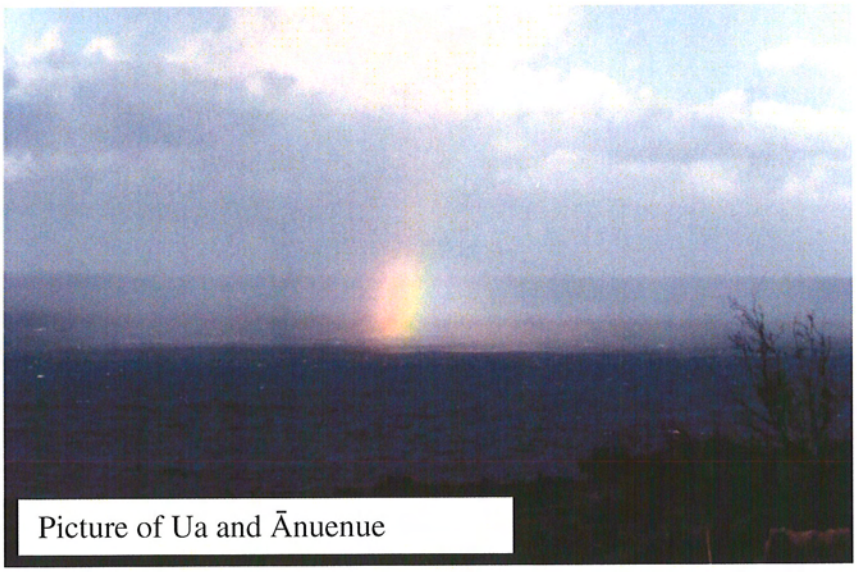
Alexander & Baldwin owned about 35 percent of the stock of each of the companies. This merger consolidated all of A&B's sugar plantations on Maui under HC&S. In 1962, HC&S merged with and became a division of Alexander & Baldwin, and EMI became a subsidiary of A&B.

It is said that EMI is the largest water company in the United States perhaps in the world. Luckily for Maui county residents, EMI supplies between 850 million and 1 billion gallons of water per year for domestic purposes.

As pointed out, there was much water flowing in the Nā Wai 'Ehā area so the valleys were rich with wet land taro, the preferred taro crop in comparison to the dry land taro. Interestingly, the irrigation ditches created by the early Hawaiians cut across their ahupua'a rather than mauka – makai (mountain to ocean). Even today, the same ditches now solidified by cement still exist and were used by the sugar plantations. However, as of recent times, the sugar plantations have been shutting down and many of the old ditches('auwai) and reservoir (luawai) are not being used by the big plantations. Recent interest in reverting back to wet land taro provides a reason to keep the 'auwai flowing.

. Research from other sources such as the Archaeology of Kula, Maui along with the Archaeological Inventory Survey of Waiohuli and Wailuku/Kula point out other findings such as ahu(s) (boundary markers or temporary worshipping sites) and cave dwellings.

Planting Brings Makani, Ua, Ānuenue



Picture of Ua and Ānuenue

In ancient times, kupuna said, "Ke kanu nei au, aia ia 'oe ka ulu meaning simply, I plant and the growth is yours". This saying by our wise ancestors point out that they knew the effects of planting upon the makani (wind), ua (rain), and the blessings of the ānuenue (rainbow).

In Kamakau's "Ruling Chiefs of Hawai'i", he tells of the of humble beginning of Maui's famous and legendary chief Kiha-a-Pi'ilani and wife who lived on the charity of others in the boundaries of Honua'ula with the papa winds and Kula winds at a place named Ke'eke'e. Later, they depart from Honua'ula with the inviting kehau winds of Kula and met the 'Ūkiukiu winds of Makawao along with the Ualena winds of Pi'iholo. During the time of their visit the area was addressing a serious famine so they resorted to living on the laulele, pualele, popolo and other weeds.

One night, Kiha-a-Pi'ilani went to clear a patch of ferns to plant sweet potatoes from slips he had collected from Hāmākuapoko and Hāli'imaile. As he traveled through these areas, the sunshine beat down on his back and intense heat reflected from the 'ulei vines. Meanwhile, one kupuna (elder) remarked to another, "There must be a chief near by for this is the first time that a rainbow is spread before the trees" (Kamakau, 24). Even today, we are regularly blessed

by the rainbow of Kiha-a-Pi'ilani spreading over the skyline of Makawao pouring bucketfuls of rain from ka lani (the heaven).

The kupuna had discovered the chief's secret identity. He now felt prompted to rush back to Kula so he could plant his huli (sweet potato shoots). As soon as he had completed the planting, a rain shower fell, blessing the land that was once in draught. The arid area of Wailuku had residential sweet potato plantings included in the target area before it was grubbed.

In Hawaiian Planters by E.S.C. Handy, it is cited that on the northeast coast of western Maui only the shores and adjacent flatlands below the taro terraces of Waihe'e and Wai'ehu were favorable for planting and fishing. The flat north coasts, eastward from Wailuku, had fishing settlements scattered throughout the lower section of the various ahupua'a in ancient times with sweet potato plantations. On the opposite side of our study from lower Wailuku to Waikapu on to Ma'alae'a and Kihei on one side and along the pali coastline to Olowalu on the other side supported neighborhood sweet potato planting. The Nā Wai 'Ehā area however, were supported by the rich lo'i (taro) patches so their sweet potato planting were limited in comparison to other parts of Maui where taro was not as abundant.

'Āina Momona

The people of old referred to ahupua'a with fishponds as fat lands known as 'āina momona. The idea of calling land fat alluded to the ahupua'a being rich with fish that could conveniently serve the ruling chief and his people.

This idea can continue into the fact that Hawai'i as a whole is truly 'āina momona and Maui can accept the adage that it is "No ka 'oi" meaning the best, as proclaimed by people of old. The round-a-bout way of describing our report on Wailuku is a device to showcase the entire island of Maui providing a glimpse of our precious island while leading to this following summary which is based on the principles taught to me by my elders. The one principle that stands out when I think of the land we are reporting on is that it has the foundation of beauty, grace and charm and the time of its recognition will surface as time goes on. It already hosts many quality organizations. Maui has always attracted newcomers from all over the world and the different ahupua'a has had its strong attractive points. It is now time for the quiet land of Wailuku to take its place in Maui's great legacy by hosting the next shopping center for its surrounding community and visitors alike.

Summary

In summary, the large Wailuku ahupua'a covering a land area from ʻĪao valley to the Kahului ocean from the beginning of its occupancy in early Hawai'i was very rich at its shores with an abundance of marine life. That includes deep and shoreline fishing and all the animals like squid, octopus, crab, and shell fish with an abundance of various seaweeds consumed by the native peoples. Eventually, Kahului Harbor became the major port for supply ships and in recent times large passenger ships. The Wailuku District was able to participate in both the wet land activities such as the planting of taro in the mauka sections of its ahupua'a and sweet potato in its lower dryer section like our target area.

Kimokeo Kapahulehua and I (Keli'i Tau'ā) as Hawaiian practitioners send our Mahalo Akua, Nā Aumakua, Nā Kupuna (Thank God, Ancestral Gods, and our Elders) for inspiring us to provide this sincere and honest cultural report.

We hope the developers will tread with as much care as they have shown during the planning process. Also, we desire that the native plants can be kept in tact as much as possible to retain

the ahupua'a's unique identity. Lastly, we desire that the ala i ke kai (pathway to the ocean) and the ala i ke kula (pathway to the uplands) will always be recognized as part of the law decreeing that one should respect Hawai'i's gathering rights (passage to fishing at the ocean and streams or gathering native plants in the mountain). By saying those things, we now can close this report me ke aloha pumehana (our fondest love and support) and the wisdom of our kupuna who said, "E ho'olohe i ka leo o ka 'aina" (Listen to the voice of the land).

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Interviews:

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William Kanekoa	September 21, 2007
John Mahi Jr.	September 28, 2007

Interview: Wayne Bechert

By Keli'i Tau'a/ Kimokeo Kapahulehua

September 21, 2007

KT- Keli'i Tau'a
KK- Kimokeo Kapahulehua
WB- Consultant

KK- So Wayne, the interview we going do is about you- a little bit about you and a little bit about this project we call Maui Lani where they going make Safeway. The mana'o is, in 1993 the State requires everybody who develops their land that there is a cultural assessment on the land. They give you a history of the land, you can get that through archival work through either Bishop Museum or we get 'em through chants and oli's or ahupua'a studies. Then we go on to talk to a few individuals about what they've seen over the years that time. So, first some personal questions; Do you speak Hawaiian?
WB- No.
KK- You no speak Hawaiian. Did your parents ever speak Hawaiian?
WB- They did but I didn't speak or learn.
KK- Is that your dad and mom?
WB- Yeah.
KK- What is your dad's name?
WB- Frederick Angus Bechert.
KK- And then your mom?
WB- Eloise Claire Kailimai.
KK- Were they from here?
WB- My dad is from Kahana, Maui. My mom is from Wahiawa, Oahu.
KK- Do you think that it's important that we speak Hawaiian?
WB- Sure. Yes, I do.
KK- What is your full name?
WB- Wayne Bechert but they use the H for the middle Homer. It's just a Christian name that was given to me when I was blessed. It was never on my birth certificate.
KK- And what is your birthplace?
WB- Wahiawa, Oahu.
KK- Where were you raised, in Oahu?
WB- For a year and a half I was raised on Oahu, in Wahiawa then after that I was raised in Kahana in Lahaina side at the old homestead. Then from there in 1953 we moved over here to Kahului, Dream City.
KK- Which is just below Sand Hills?
WB- No, first increment.
KK- First increment is way down by the Home Depot area.
WB- Yeah.
KK- That's the one makai side of Puunene.
WB- Yes.
KK- So that was '53 born?

WB- No, '44.
KK- So, '44 born you was two years old when the tidal wave went come over here.
WB- Yeah.
KK- So you must have been through several tidal waves when you was a young boy?
WB- Well two yeah-one in Lahaina and one in Kahului. The one in Lahaina took out part of our house in the Kahana area.
KK- Wow.
WB- Then the one over here in Kahului came all the way up to where the Hongwanji is and our house just after that but it stopped.
KK- So what year was that you guys was in Dream City?
WB- From '53 on.
KK- So you was like 9 or 8.
WB- Yeah.
KK- Oh, so you must recollect about this area about Kahului, Wailuku, Waihe'e, Waiehu, so this is the area you was hanging around, right?
WB- Yes.
KK- Can you tell us a little bit about your upbringing here in Dream City and in this area around here.
WB- Well…
KK- What did you do as a young boy?
WB- Well, we lived on Kuula Street and as a young boy I used to go out and deliver like the Star Bulletin and the Maui News just to do work and then clean yard here and there. Then later on when I went to High School I went over to pick pineapple over in Lanai. Then I came back here and just before being a senior I was working in the cannery, American Can Company, for about two years but that was summer work. Other than that I was going to school and playing football.
KK- What school was that you went to?
WB- Baldwin High.
KK- I guess Baldwin was the main school at that time.
WB- Yeah, Baldwin as well as St. Anthony and Lahainaluna but in this area here was Baldwin and St. Anthony.
KK- Baldwin is, right now, across the project area that they call Maui Lani. One of these portions of the project is about the shopping center area called Safeway, I guess, where they're talking about. When you went to school at Baldwin did you guys go across that area playing in the sand dunes or kiawe area?
WB- Well, we played more on the opposite where Apana was throughout that sand where the prison is. There were big ditches over there that's why that's where we went in the punawai's and all that throughout. But that area, no we never got into that because it was never open to go in. No roads or anything at the time.
KK- Oh, just bushes?
WB- Yeah.
KK- Did you ever see when was young time was just oasis, just sand whatever or kiawe trees?
WB- Kiawe, kiawe trees all over. That's about it.
KK- Did you know of any friends or relatives that owned land around there?
WB- Well, just above that is called Sand Hills where the Bellnap's used to live. I know of the Soon family and the Plunkett's or Ng- Lulu Ng and Hollace (he works at Maui Community College right now). The Arnee family and there were other families that lived there too that I

knew of. The Bringau's lived on the opposite side and Ralph Gima folks lived in one part of the valley and then right by the graveside of course Larry Wada. All in that area.
KK- So these are all original families that lived in that area?
WB- Yeah, and one of my school teachers lived over there, Mrs. Su Lay (?). Oh, what was her name, from grade school she was my teacher then.
KK- Was that an elite kind of area for Wailuku? Seems to me that it was a prized area to be in with the best view of Kahului area and the ocean and Haleakala, every time I drive up there it seems so, I'm just awed by the view you have from up there.
WB- Yeah and one of the homes up there was one of my school teachers like I was saying, Mrs. Cockett and I used to love going over there because there was a second floor that you go up and you can view all that like you just mentioned and I just love that!
KK- Can you remember about any ancient sites or plants in that area during your upbringing there was any cultural sites like any heiau's or things like that in that area?
WB- No, not that I knew of or whatever was told of.
KK- Where did people get most of their food like vegetables and sweet potatoes and kalo? Was there things like that up in that area or more up Iao.
WB- Well for me in Kahului we used to have this man come around in the truck, vegetable man we used to call him. But he got all his vegetables from out Waihe'e side, Pakukalo like peanuts and eggplant and all kind of. And sometimes he used to go to Ooka or AhFook's and deliver there. That was his means of making money so we used to buy off of there, pineapple and everything else.
KK- Ooka and AhFook's was the neighborhood store for everybody?
WB- Mmhmm and Noda market too.
KK- Oh yeah I remember that by Kahului Shopping Center, went burn down though.
WB- Yeah.
KK- Did you ever fish in that area like Pakukalo or Kahului Harbor or Kamehameha Lodge area like Kanaha?
WB- Well, my fishing area when I was growing up was Kahului Harbor and doing surfing in there, I used to do long board surfing. They had canoeing and I used to dive inside of there for tako as well as others but laying nets in there too. As far as going the other side, the Naska side or even Pakukalo side, later years I went out there, yeah.
KK- So, what type of fishing was that? Lay net, or surround net, diving, fishing?
WB- Well, laying net and throwing net. Lay net you lay it out and other times I had the surround net. That's when I used to have the youth with me when I was working with them growing up. But when I was younger, my uncle folks used to go out and lay net or paipai.
KK- What kind of fish did you guys bring home?
WB- Well, some of it was like awa or veke. Other times throwing net or fishing you catch the halalu or opelu that we used to fish and pole fish for right off of the harbor. I used to go underneath the harbor and dive for tako, that was beautiful! Both sides, you know on the Young Brother side as well as the Matson side. And the Matson side was my place for lobster.
KK- I remember on Kauai, when I was young, about getting fish aweweo 11:28 So did you guys have aweweo season, moi season, a'ama season, of course you mentioned akuli, halalu, opelu, did you guys have that over there?
WB- Oh yeah, we had seasons. Especially in the Kahului Harbor was more the akuli that come in and the opelu. They have a place that they call the raw fish camp and that's where Harbor Lights is as well as the Cultural Center is now. All along there was housing called the raw fish

camp and that's all they did was go out and they lay their nets and then bring 'em in. It was all sandy areas; nothing like it is now with rocks. It was beautiful, the water was clean and diving for tako was beautiful on the dikes over there.
KK- I think Pakukalo area and that right next to the harbor I know people always used to bring tako when I used to just come in the '70's. I was amazed at the size that used to come out and the length of time wasn't such a long time they just went in and out and come up with their huluhulu bag with the tako or whatever they went in for.
WB- But as far as moi is concerned it was more outside along the dikes with the tips they have it over there. But before in the harbor where Maui Hukilau, they used to call it, right outside there they used to have moi too. Then they started building all these dikes and everything and we lost 'em.
KK- Went away, probably took the hale away from the moi.
WB-Yup, then the papio's started coming around and the veke now I don't know.
KK- What about the train? Since you was up at Dream City, did the train ever come your place or pass by you? I see down in Puunene get that maintenance area for the train, so you knew the train at that time for the upbringing as a child?
WB- Yeah. On our street, Kuula Street, where Mrs. Harriet Teshima and Nouchi's lived and Mrs. Dang and all of them right in the back was the railroad track. We used to run from there and jump right on top and then go down-it didn't go fast so we would go down to the harbor. But if we were to go, you know if the train was going the other way we would catch it part of the way and then jump off in the cane fields. That's where we would ride the flumes; they had water flumes going through there. Then in later years they got rid of the flumes of course but the train ride was fun. I knew people working on it like Kanekoa's and Cumming's and all the different families.
KK- So, where's the farthest area you took the train from where you lived and where you went?
WB- Just down to the harbor, I never had the chance like others, you know, riding from they had a Wailuku area that they would come down from there and go to where raw fish camp was and they would come through there and then they go up to the harbor. Then they would either go through the cane or go all the way up to the Haiku area and that was for transportation for the school kids going to Catholic School or going to or they lived Upcountry so they used to catch that train going that way.
KK- Did they have to pay for the train?
WB- I don't know.
KK-What about Wailuku, by Sand Hills, I see there is a bridge up there.
WB- Mmhmm.
KK- Did the train go over the bridge or by the bridge or go Wailuku area?
WB- Oh, I don't know. All I know is who helped build the bridge and all, that was long ago.
KK- And who did that?
WB- Uh, cutting the rocks was our neighbor Mr. Tempo, Richard Tempo and he was the one that cut all the rocks and set it; he did a lot of work.
KK- What years was that bridge made over there?
WB- Was in the 40's.
KK- Oh, so he helped build that bridge.
WB- Yeah, I used to go talk story all time and he would tell me all about what he was doing and in front of his yard he had some of that done; square, some of them at an angle, all different.

KK- Must have been quite a project to see going up and must have been a real huge project. It seemed to me, maybe not now but I bet it was a huge project for the community to look this thing come up.
WB- Oh, yeah. The train may have gone underneath that bridge but most of the time I saw sugar cane trucks go through there when hauled it from Waikapu area down to the Wailuku Sugar Mill.
KK- Did you go past Wailuku, Iao and Waihe'e and Waiehu and see sweet potato or taro patches growing in that area? Do you remember seeing taro patches around there?
WB- My parents used to live up Waiehu so when I used to travel up through there, the Brown family (you know Harry Brown) they had their patches down below, the loi's and then my parents had theirs up. Then Kia used to hire my mom to pull the taro so we used to go through and I used to help my mom with the taro, pulling taro and I learned a lot from her as well as Mr. Kia, Joe Kia. Joe used to work with the plantation too. Now he had several patches, loi's, throughout the Waiehu area upper Waiehu and also Nakama did. But as far as sweet potatoes and all that it was more the as you go up upper Waiehu you pass the Brown's place you go by the Owan's house on the left hand side then you come down to Iwamasa all down that area, yeah. They grew sweet potatoes, ti leaves, all their fruits and their vegetables in that area; Japanese families, Chinese, Korean.
KK- So, in the 40's, 50's and even the 60's people had dig gardens around their places.
WB- Oh yeah.
KK- Everybody pretty much had their own food what they grow how they harvest, what they harvest, when they harvest and most of that was for family use?
WB- Yes. Then later on the person that went around getting all the vegetables and selling it, he'd buy it from them and then he would sell or they would exchange- yeah exchange fruits and vegetables and stuff.
KK- Did you guys, maybe with your vegetables, did you raise animals or animals at home?
WB- Oh yeah. Yeah, they had a lot of pigs and a lot of chicken, rabbits and my father had two cows, every time they slaughter they get another one but always for the family use. You know, they have Christmas or they have holidays or they give it out to the family. See, my dad folks out in Kahana they used to raise pigs as well as horses and other animals and vegetables and chickens and so on. So he continued on when he went to live in the upper Waiehu area.
KK- Did they do any of that in the Dream City house? Garden or…
WB- Well, there's this guy Wayne Bechert he had his own yard and he had some chickens in there, maybe about 50 or more chickens and rabbits. We were raising them and I raised them to eat and used to put them in the imu or sometimes give them away. Then there were two Shetland ponies, ducks, geese, and so on that we had in the yard. Dog's with it and we grew vegetables as well as fruits then the mango tree over there, Hayden mangoes.
KK- In the Sand Hills area did you notice anybody having animals and plants like this where the target area is where they're talking about the new Safeway?
WB- Well, the homes in the back side, they had some. They were raising chickens and pigeons and other animals. I hardly got to see the back part. I only know of when I lived over there at Jaz Belnap's house and talked with the neighbors they had all these animals in their yards too. Unfortunately they gave up on it eventually.
KK- You know all those families that you mentioned to me, what did they do as a community? It seems like they've been there a long, long time so they must have been plantation people; family gatherings and making luaus and everything. So where did they do most of their community gatherings, the Sand Hills people?

WB- I don't really know but each individual they had jobs like I know Coach Sugino lived there for Baldwin High School football. I knew the Meyer's that lived there, Henry Meyers that lived there for entertainment and he was a bus driver. Then Belnap's they were retiree's but they went out and did community work for different churches and as well as the community itself. But where they met and what they did, no.
KK- Today if you had to give advice to our young people, you know young Hawaiians or young people around today; what kind of advice would you give to our young people about the old and new and what's to come in the future or any of your own personal advice?
WB- Well, respect your elders and whatever you're taught keep it in to teach others also because it just fades away. I'm glad I kept my learning of the nets from their doing what I felt was good but my dad he taught me of that, he taught me respect and raising animals. Nowadays, respect and honor and obedience to your parents, being obedient, that's the old ways and not give up on your parents because they love you; they respect you for who you are. That's about all I got, probably more but that's about it.
KK- Thank you very much Wayne, mahalo.
WB- You're welcome.

Interview: Lolita Eugino

By Keli'i Tau'a/ Kimokeo Kapahulehua

September28, 2007

KT- Keli'i Tau'a
KK- Kimokeo Kapahulehua
LE- Consultant

KK- What is your name?
LE- Lolita Sevilla Eugenio.
KK- What is your middle name?
LE- Sevilla; born and raised in Maui.
KK- What year was that you born?
LE- 1953.
KK- So Lolita, you speak Hawaiian?
LE- No.
KK- Lolita, you don't speak Hawaiian. Did your parents speak Hawaiian?
LE- No.
KK- They speak Filipino?
LE- Only my dad and my mother spoke Visayan.
KK- What did your dad speak?
LE- Ilocano.
KK- Dad spoke Ilocano, mom spoke Visayan. Do you think it's important to speak the Hawaiian language?
LE- They could communicate by speaking pidgin to most everybody because that's what was the way to communicate to everyone at that time growing up in the plantation days because my father also owned retail business and rentals and he sold kerosene throughout the neighborhoods in Puunene and he went to Lahaina and he vendored all the kerosene to all the homes.

KK- How much did they pay for the kerosene, you know?
LE- About maybe like fifty cents a gallon.
KK- Oh pretty cheap, fifty cents a gallon. Where were you born and where was the birth place and what year was that?
LE- My birthplace? I was born in Wailuku, Maui. Here in Wailuku I was born.
KK- And what year was that?
LE- 1953.
KK- So you were raised in Wailuku then?
LE- Yes.
KK- Where in Wailuku exactly?
LE- We lived in Waiehu, right across the Hawaiian Homestead.
KK- Oh, Paukukalo they call that.
LE- Paukukalo, yeah.
KK- I understand you guys have land over there?
LE- We have land there, about ¾ of an acre and my father had a business over on Vineyard Street and Church Street also.
KK- What kind of business was that?
LE- He owned a store on Vineyard Street and we sold our kerosene through there. We lived on Vineyard Street growing up. He also had a furniture store on Church Street and then on Mill Street he also had a furniture store, retail, groceries, travel agency and he had the rooms upstairs that he had the single old plantation workers living in, they rented.
KK- I understand that you went to school here. What was your grade school and your High School?
LE- I went to St. Anthony grade school from kindergarten through 8th grade then I went to Baldwin High School. I graduated in 1971. I never left Maui.
KK- So you're 54? You never left Maui, you stayed on Maui. You never go college?
LE- No, stayed on Maui, just hung out; worked here with my father, travel business and the store.
KK- What can you share with us about your childhood days?
LE- Childhood days, well we grew up in Paukukalo where we raised our own animals to eat. We raised papaya, we had a papaya farm. We raised taro, watercress, muchoy, we lived off the land. My fathers mentor was Mrs. Kamakawa and she was his mentor on what to do with the land and the taro patches and all that we lived off of. We sold _4:35_ to the Filipinos who loved that as a delicacy and we harvested and sold and we also went to the ocean to pick up the seaweed to sell outside islands.
KK- Limu?
LE- Limu, was plentiful in Naska. We would go at 4 o'clock in the morning and pick all of the ogo and…
KK- When was that, when the tide was low?
LE- When the tide was low, early in the morning all of the kids would go with daddy and pick up like pamper boxes full and still had plenty on the beach.
KK- Who was Kamakawa?
LE- Kamakawa I believe. Yeah, she lived below us on Waiehu Beach Road, yes.
KK- She taught your father about all the Hawaiian things.
LE- She kept him in tune, in sync, on what that place was all about and what to do with the aina and to keep it Hawaiian and…

KK- What is your job?
LE- I work at United Airlines in the evenings and I just started work here at Harley Davidson.
KK- Harley Davidson for Cabebe?
LE- For Joe, yeah sales department.
KK- You do all the paperwork, whatever they sell?
LE- Yes.
KK- Tell me about your marriage with Waikiki because he was a Hawaiian guy, your first husband.
LE- You know I learned many things from him as I moved. I lived with him and the family before when I was nineteen years old. His mother and grandmother and great grand aunty was also healers.
KK- Oh la'au lapa'au.
LE- Yes and they always had people come and together I'd learn how to be humble, how God provides with thirteen people-two cans of corn beef and cabbage and you can feed everybody.
KK- You know they was laau la paau; you know about the native plants they were using then?
LE- Yes they were using awa, of course the ti leaf and they were using some of the plants that were there I'm not sure of the names.
KK- What about awapuhi?
LE- Awapuhi, um…
KK- How about noni.
LE- Noni they used. All of that, the aloe for healing.
KK- They must have found native plants within the ahupua'a area to use.
LE- Yes and they also had it in their yards growing so all of those things were available to them that the Tutu's would plant and the kids not knowing that Tutu planted it. They knew it was for healing when she would ask to gather.
KK- So in your upbringing what was the first job that you had as a teenager? Did you have any job or did you work free?
LE- Well we did as far as being paid I danced.
KK- Hula?
LE- I danced Spanish dancing. It was in the eighth grade and I danced at the hotels as a solo dancer they had their international night and that's when I danced solo Spanish dancing and Filipino dancing. Then after that I also did during that time I was a waitress and I cooked at Hale Lava, I was a cook.
KK- So you know we're interviewing you for the project area at Maui Lani where they're going to build Safeway which I understand that you folks live on Nakoa Road. Is that correct?
LE- Yes.
KK- So that's right below you. What do you think about this project right there with Safeway coming up?
LE- Well I think it's going to make our area more busy because of the traffic. The traffic is going to increase totally. Right now it's nice and quite, you can count the cars if anything and you almost know who's passing by and with this it's going to be a big impact on the neighborhood and we have a lot of old folks that live there. It's going to be difficult I think for them to imagine- they have no idea what's going to happen right now. The noise that's going to be involved; I lived on Lower Main Street by the Coca Cola Company next to the industrial area at 2 o'clock in the morning you hear beeps, big trucks reversing in and out and people banging

their doors and these people, it echoes up the hill. It's going to echo and it's not going to be the same; too many lights.
KK- You know the project area has a surrounding ahupua'a such as Waikapu, Waiehu, Waihe'e, Kahului, Puunene, Iao, Kula, Kihei, Maalaea and other surrounding areas. You can remember anything within this area that's culturally archealogical sites or taro or sweet potato or anything that was culturally done in this area?
LE- A lot of it was the farmers had their animals there. Mostly the piggeries and had some that did like mangoes and sweet potatoes. Like even us we grew sweet potato and regular for the peoples because a lot of those things you can't get; Upcountry don't grow those things and it's down below, down in the dry area. Peanuts, even peanuts we grew peanuts, squash but now you don't see a lot of those things anymore.
KK- So you guys own land around the project area, right?
LE- Yes.
KK- Where is that Nakoa Drive?
LE- We don't over there but we have been living there a long time. I grew up there so it's playground for us because when we lived in the store, Mill Street that was all our playground that whole area.
KK- Did you ever play in the sand hill where the project area is going to be?
LE- Yeah all of my friends are from there moved to Baldwin High School so…
KK- So you guys used to play in the trees and the sand hills over there?
LE- Yep.
KK- So you never come across any heiau's or any archealogical sites?
LE- Not necessarily if anything was covered it was more sacred and you could tell by the feeling when you walked through that you don't bother. Certain things it's just upbringing, yeah.
KK- Did kupuna ever tell you about places there that were sacred?
LE- Not necessarily.
KK- Were there any native plants besides what you described earlier laau la paau?
LE- You know there may be but a lot of it has been overgrown and people haven't taken care. But there is one portion that I know the Hawaiian people know of and it's right by- across the prison where that new, that first subdivision they built. There was something, one of the plants there that because of when they built that area they were trying to keep people from cutting or digging up all that plant life. I can't remember the name of it.
KK- When you guys went shopping, where did you guys go shopping for your groceries?
LE- Because we had our own little store it was mostly us. We delivered groceries to people otherwise we would go to Ooka's Supermarket and TK's Supermarket, the small places was just enough because you buy just what you need.
KK- Can you remember your dad and everybody going fishing? You told me about picking up limu and everything.
LE- Yeah.
KK- So where they went fishing?
LE- Waiehu you know down Lower Waiehu then we would go down to Naska that's where we would go all the time. But his friends, he had friends who lived in Kihei and they would stay at their homes and fish there otherwise they would invite us to come.
KK- And what kind fish did he bring home that you remember?
LE- Small kind fish. Opelu, lots of that. Manini, once and a while. Kole we had.
KK- What about Kala?

LE- Once and a while.
KK- Palani?
LE- Palani.
KK- Uhu?
LE- Only if he was lucky.
KK- What about hole hole, moe, aweoweo?
LE- Aweoweo, I remember that.
KK- You remember him going fishing in the Kahului Harbor area?
LE- Oh yes, we all went there, it was just part of what you do and we could walk. I would take my bicycle and…
KK- Yeah, so that was good fishing grounds for your dad guys?
LE- It was clean then.
KK- Clean.
LE- We got picked up by cinders when the volcano erupted. All of us, everybody was out there with the shovels.
KK- Oh, you not going believe that but me and Darren we passed the highway over there fishing the awa. Then your husband just told me there was a sign saying, "No net fishing." Isn't that funny?
LE- Its called survival and you know we do what we have to do to survive to feed our family and ourselves.
KK- Did you know about the railroad system that came to Wailuku?
LE- Oh yeah, it used to go behind our store at Mill Street.
KK- Oh yeah?
LE- Yeah and we used to chase it. We used to make the conductor blow his whistle and he just knew that we would be waiting out there just to get the breeze and the train would go by.
KK- Were you able to catch the train?
LE- No, he wouldn't let us because he couldn't stop he was just right behind.
KK- So where did the train go?
LE- It went to the harbor. It took all the cane from Wailuku Sugar and then he would take it down to the harbor. We looked forward to that train every day especially summertime.
KK- So you're a Baldwin High School student?
LE- Yeah.
KK- So I already asked you about you playing in that area and you guys used to play a lot and there were no archealogical findings. Your family lived in the Wailuku area?
LE- Yes.
KK- Where is that?
LE- The same place; our family still lives in Waiehu Beach Road. Dad is gone but my mom is still around, yeah. We only knew about the heiau above Hawaiian Homes we played there too.
KK- Do you know if there were taro patches in Waihee, Waiehu, or Iao?
LE- Oh yes, lots of them.
KK- A lot of taro patches?
LE- Oh yeah because we shared, yeah, what we had too.
KK- Oh mahele.
LE- Yeah, we would share and that was part of what we did. We'd even have Mr. Tavares come down to give us cabbage and lettuce and in turn we'd give him bananas and watercress. You know those things and we did it up till the time he was still Mayor.

KK- Hannibal?
LE- He would stop by…
KK- The daughter is the mayor now. Isn't that pretty cool to have the generation pass down the father to the daughter?
LE- It's almost inevitable because she followed suit; he instilled all of that into their children.
KK- So you spoke about the sweet potato and other plants in the area, so everybody had a farm in their yard?
LE- Pretty much and you know especially where we lived. Still today if you look in Kahului the Filipino people will try to raise some plants that- actually we all share everybody's plants, food.
KK- I don't know if this is the right time but I would like to ask you about the Waikiki family.

KK- What would you recommend to the young people today; what would be your advice to the young people?
LE- Today is respect. Respect one another and also be humble and give not only take. Give of your time to the community. Help somebody that you see might need help even if it's just a few kind words to somebody and it makes good sense to smile.
KK- Well Lolita me and Kumu are doing Hana Pono LLC. and doing this cultural assessment we really appreciate talking to the people because we really get to know the people about the place, what they've done and what they're doing now versus what they did before and what they wish our young kids to do. So it's really important that talking to you folks we definitely want to preserve the culture.
LE- I wouldn't mind mentioning that my father was an immigrant and we also made fun of the people with accents and things. He would remind us to remember now when you're speaking to someone with an accent that means they can speak more than one language and they are from somewhere else, where your father was from or may have been other somebody coming here as a stranger. They didn't come- they came because they needed to to survive for a better life and apparently it's here in Hawaii so we need to help them be part of learning our culture. The culture that I, myself, was brought up but also learn my fathers'- our background. And I think because of us learning both and intertwining and not letting him- and him allowing us, him and my mother allowing us to learn the hula, the Hawaiian language if we could I think all of that is important so we need to be all one and learn to interact together and that makes us one and more close together.
KK- For me I brought up in Kauai, I was brought up in the camp. I had a real close buddy with fourteen kids in the family so it was enriching for us to know they could speak the language. Unfortunately for us Hawaiians we do not speak our language fluent like the Filipinos, Spanish so I think the language is the key to your culture.
LE- But again my father had a radio station for forty-six years because my mother spoke Visayan and my father Ilocano. He said we never learned Ilocano or Visayan he said I came to America to raise American citizens so they speak English.
KK- I think all of our parents wanted us to speak English to better ourselves.
LE- Yeah but he was real strict. If we spoke pidgin to him he wouldn't answer so we had to speak proper English which was cool because you learned to turn it on and off. We have people come and other Filipino people come and talk to us because they wanted to hear how well we spoke.
KK- So you would recommend to the young people to speak their language?

LE- Speak the language if you can even if it's conversational it's good for you and it's good to know. Just learn your culture even now you can get into the internet and find out what it's all about. Be proud of who you are because no matter what you were born Filipino nationality that will never go away, that will never change so be proud of who you are and then you'll be a better person overall.
KK- That's great. Mahalo Lolita, I appreciate.

Interview: Harold Haupu

By Keli'i Tau'a/ Kimokeo Kapahulehua

September 27, 2007

KT- Keli'i Tau'a
KK- Kimokeo Kapahulehua
HH- Consultant

KK- What is your name?
HH- My name is Harold Haupu.
KK- Harold Haupu; how do you spell Haupu?
HH- H-a-u-p-u. With that okina.
KK- Are you a Hawaiian, pure Hawaiian?
HH- I'm pure Hawaiian.
KK- And your father is, what is his name?
HH- Peter Haupu.
KK- And your mom?
HH- Helen Camilla Haupu.
KK- And where are you from originally?
HH- I'm from Kaupo.
KK- Oh from Kaupo, right now you stay Wailuku by Sand Hills right?
HH- Right.
KK- How long you live at Sand Hills?
HH- Sand Hills is 1958.
KK- From 1958.
HH- Yeah we had moved out from Hana to Paukukalo.
KK- Oh Paukukalo, so you pretty much-when you was born uncle?
HH- December 15, 1932.
KK- You not gonna believe this; I was born December 15, 1947. Fifteen years after you so you're seventy-five.
HH- Mmhmm, yes.
KK- Or you make 76?
HH- I will make 75 this year.
KK- This year. How is that, I'm talking to you and you have same birthday as me; December 15, 1947 and you born December 15, 1932. You know Haupu, what is the meaning of the name, Haupu?
HH- It means memory.
KK- Memory?
HH- Memory.
KK- Kaupo only had one trail or road?
HH- Yeah was a trail where people could travel. Charlie Keau taught me a lot of the King's Trail.
KK- Of Kaupo?
HH- The trail there because it would lead into the mountains.

KK- The Kahakai Trail, the one the Ali'i's…
HH- Say from Kaupo to Kipahulu.
KK- The trail?
HH- Yeah. At one time when he told me the trail lead to Kipahulu, the trail came right in the back of the place where we lived out there. We go out there every time, yeah. But the trail is, because of the lack of people the old kupuna's all gone already and nobody using that trail anymore.
KK- So everything overgrown.
HH- I know yeah.
KK- Maybe the pigs and the goats using 'em, I think so the animals using 'em.
HH- Yes.
KK- So, Uncle can you tell me… So what was, you speak Hawaiian Uncle?
HH- No.
KK- No.
HH- Because my mom had died during my early childhood so nobody taught us Hawaiian.
KK- Nobody taught you Hawaiian.
HH- Until I met Mary.
KK- She speak Hawaiian?
HH- The grandma talk Hawaiian so that's how I…
KK- This is your wife Mary?
HH- Yes.
KK- And she's from where?
HH- She's from Hana.
KK- What her maiden name was?
HH- Villiaremo
KK- Is that Filipino?
HH- Yeah.
KK- And how did you meet your wife?
HH- I met my wife through fishing. I think she loved fishing, yeah she was a good fisherman.
KK- Oh, that's one of the protein in your guys diet, fishing?
HH- Fishing.
KK- Shoreline fishing?
HH- Shoreline, pole fishing.
KK- I can remember when I was growing up my father and my uncles used to do fishing with the poles. Moe, aweweo, and I remember mempachi, ennenue, halalu, opelu and akuli. So I miss all that too because now I think because the water change yeah. Before when I went fishing no had problem. We put the pole, we go there we fish, we going catch. Now we get all kind of no good water and changed.
HH- I think it's not only the water, I think it's the restriction. Hotel's being built where they lock the property where we walked down, yeah.
KK- Before we kapu because it was a sacred thing, today it's not kapu for sacred. Today it's not kapu for sacred, just kick people off your land.
HH- Yeah.
KK- Kapu was about the fish is small, no take 'em now. But today the kapu is the people no come on my land.
HH- Too much money involved.

KK- I think one of the questions they asked me is: What is the difference of yesterday and today? Yesterday our sustainability on food like fish and limu; it wasn't for the kala. We never go sell 'em we took from one house to another house for mahele and so we never take for go to sell. And so what happened, the money threw everything out of the ocean, even the small guy.
HH- Yeah.
KK- Enjoy so much out of the ocean, now no more.
HH- We had our own rules during the days that you take only what you need.
KK- Yeah, you can explain to us Uncle some of the limu you used to pick up with Aunty Mary and some of the other stuff, all the other stuff you guys used to pick up from the ocean?
HH- Well, as far as the limu we had picked up the limu ele ele, the limu pahakai which we call the limu kohu.
KK- And of course had opihi yeah?
HH- Opihi, then the shells and pipipi.
KK- Kupe'e.
HH- Kupe'e.
KK- Pupawa.
HH- Yeah, right.
KK- People are surprised about the things I remember when my tutu man and father used to get, you know; Kupe'e, pipipi, pupuawa, lehu.
HH- Lehu, and I think the best time to pick them is full moon.
KK- Yeah, they come out, same with the hi'iwai.
HH- Yeah.
KK- So this would be all the things that we ate that was protein to our body.
HH- Yes.
KK- The limu, the lo'i
HH- The loli yeah. What's the other loli?
KK- Okole?
HH- Okala.
KK- I still eat that once and a while when I go by, not by Kahikinui but by Honokahau. Honokahau get fat ones now.
HH- Yeah the season is June, July, August fat.
KK- So you know this, you think that it's important for the people to speak Hawaiian, to learn Hawaiian?
HH- I think so, otherwise we lose it.
KK- Yeah we lose our culture without it. Once we start losing some of the things you speak about, you know, the aweoweo; because the aweoweo we used to have season but I never see aweoweo season since I've been here for long time. I can remember Opalu.
HH- Opalu.
KK- So same like that, if we don't use it or we don't culture it or preserve it we not going have it so it is important to speak Hawaiian.
HH- Opupalu, there's still a lot of Opupalu over there.
KK- What was you job, what was your occupation?
HH- Here?
KK- Yeah, when you started working what was your job?
HH- Well, I started work at the Hotel Hana Ranch at the Hotel as dishwasher. That's how I started.

KK- Dishwasher out there?
HH- Mmhmm.
KK- So how long you work for Hana Ranch?
HH- Was about 7-8 years, I think.
KK- But now you been out in Sand Hills how long, Wailuku area?
HH- This location here with my daughter is going on three years.
KK- Three years.
HH- Yeah because we needed her help for mama.
KK- So you guys moved from Kaupo here?
HH- No from…
KK- From Paukukalo?
HH- No…
KK- Oh, from Hawaiian Homes?
HH- Yeah, we have our youngest son living in our home.
KK- Over there?
HH- Yeah.
KK- But you know of this area, Sand Hills?
HH- A little bit, yes.
KK- You remember anything about cultural sites or heiau's or any ancient or historical things about this here, Sand Hills?
HH- Well, to me a lot of things were restored out here, a lot of changes.
KK- Hard to find?
HH- Yeah well you take that area where the Cultural Center is…
KK- Oh, Maui Arts and Cultural Center which is right below here.
HH- There used to be a marine camp there. Then on the left of that used to be a camp there, people used to live there.
KK- What they call fish camp or something like that.
HH- Something like that, raw fish camp. Then used to live before that even on the hotel side there were all the homes there.
KK- Maui Beach. You remember any fishing stories or fishing in Kahului Harbor, was that a good fishing area?
HH- It was. A lot of akule came over there and that was a good diving ground for tako, he'e and fish.
KK- And fish. What about the, up here the mountain area; what about the native or medicinal plants or native plants in this area?
HH- You mean in the mountain?
KK- In the mountain.
HH- Was, I did a lot of pig hunting up in the mountains up here.
KK- Iao?
HH- Iao and Waihe'e. We came across very few of maile.
KK- Uh huh, but there was maile.
HH- Yeah there was maile but poor I guess, not as healthy as Kahakuloa. Kahakuloa get plenty.
KK- What about palapalai up there?
HH- Palapalai had very few.
KK- Very few. What about the trees?
HH- The trees we had more of the, we had guava.

KK- What about any native trees up there like Lama, Ohia, Koa?
HH- No, none.
KK- No.
HH- I guess it's too close to civilization, yeah.
KK- You remember any sweet potato or taro patches around this area?
HH- Yeah.
KK- Yeah, you remember seeing taro patches?
HH- Well, up- way inside of Waikapu I used to hunt out there too, there were taro patches enclosed by heavy brush. From the outside you couldn't see the taro patches but as you go in, big taro patch field up there and I think today it's still up there.
KK- Yeah, I think Waikapu get taro patches.
HH- Plenty taro patches up there. Banana trees, yeah.
KK- So that would be one of the protein foods too, the taro, the uala-the sweet potato.
HH- Papaya, yeah all up there.
KK- Banana. So what was it like in your younger age for fun what did you do?
HH- Fun, well those days you couldn't buy toys. Toys wasn't like today, you know this young generation they're lucky, we made our own toys. We made our own games like we made our own sling shots. We made our own telephone, we made our own shoes on stilts, we made our own tops, we made a lot of things.
KK- Yourself, yeah?
HH- Yeah, then that's how we would challenge each other, marbles.
KK- Any Hawaiian games you guys played like the ulu maika, the he'e?
HH- We used to ulumaika.
KK- And what they call that, the spears?
HH- Not much, not really, not much. I guess there was nobody that was there to teach, yeah.
KK- Any relatives that live here in this area besides you in this Sand Hills area?
HH- No.
KK- No, just you guys and your younger daughter; your son lives in Paukukalo.
HH- Then I have a daughter live in, my children are scattered all over.
KK- All over!
HH- They're all over; Kula, Kahului, Wailuku, Paukukalo, Waiehu, Waihe'e, they're scattered all over the place.
KK- What about the train, do you remember about the train they used to have?
HH- Yes, the train used to stop at the location of where is that First Hawaiian Bank, the left turn there, right on the right corner. There's a building there that sells furniture?
KK- Right.
HH- Okay, the train station used to be right there and then the train traveled from here all the way to Libby Cannery.
KK- Where is that, Libby Cannery?
HH- Haiku.
KK- Oh, Haiku.
HH- Yeah, then the people used to go back and forth because they used to pick up cans from American Can. I used to work there, we bring the cans and it goes to Maui Pine and be filled with pineapple then shipped out. So the pineapples from Libby come down too. The cans go up there, the empty cans to be filled.
KK- So later you went work in the cannery, the pineapple field?

HH- It was called American Can Company.
KK- American Can Company so you did the canning for the pineapple.
HH- Yeah. So where Kaahumanu Shopping Center is, that was the Can Company from the beginning to the end.
KK- Oh, so that's why Maui Land and Pine stay in the back there, the cannery.
HH- Yes, yes.
KK- So from American Can probably merge together or something.
HH- Right.
KK- But now they closed that canner down.
HH- It is closed.
KK- They're doing only fresh fruits.
HH- Yeah because...
KK- What year was that you worked in the cannery?
HH- That was in 1958.
KK- Oh, American Can?
HH- Yeah but that Can Company was working before that.
KK- So the train main station was right by First Hawaiian Bank, right across by the Harbor get the new furniture store get the train station?
HH- The train station?
KK- The train used to go Haiku?
HH- Right.
KK- And what the train used to go Wailuku?
HH- I don't remember Wailuku, I don't remember.
KK- Did you ever ride the train?
HH- Yes when it went up to Haiku, yes.
KK- Really, how long was the ride?
HH- About one hour.
KK- One hour, long ride yeah?
HH- Yeah because kinda far yeah.
KK- You ever look back in the train or look back in Sand Hills- because Sand Hills was pretty much kiawe bush, yeah?
HH- All kiawe bush.
KK- Did you ever go play in the Sand Hills up in the kiawe bush there?
HH- Yeah, we used to play soilder. You know small kids that play cowboy and Indian.
KK- What school you went to Uncle?
HH- I started at St. Anthony then I ended at Hana High School.
KK- You graduated Hana, oh must not have that many students that time?
HH- Well, there were what, ten of us.
KK- Ten of you?
HH- Yup.
KK- Any of them now live this side or only just you?
HH- A lot of them now I think passed away.
KK- Passed away.
HH- Yeah I think very few but not much on Maui but we get to meet once and a while.
KK- You remember any people in '58 or the 60's around here in Sand Hills that you used to play with or work with down here?

HH- Yes, a lot of them are gone.
KK- Gone now, they're hala?
HH- Lot of them gone, no more, I hardly see anymore.
KK- Yeah, too bad.
HH- So many changes.
KK- How many in your family?
HH- My family?
KK- Your brother sister, your own family; I mean this your family now but from your dad and mom.
HH- Okay, I had three sisters and with myself three brothers.
KK- Oh six.
HH- Yeah six.
KK- So what did your dad do? What kind of job did he have?
HH- Well, he was working for the County, yeah. When we were living out in Kaupo.
KK- Oh, the Soon's own the Kaupo store?
HH- Yes.
KK- So the Soon's had one car over there.
HH- I think one of the daughters still live Maui.
KK- Mary?
HH- I think so.
KK- Yeah, I remember stopping at the store and seeing some history on them. That used to be a harbor down by the church.
HH- Right.
KK- Must have been a pretty rough harbor for any boat come inside there. Were there any, what was the harbor like down here in Kahului? So, it must have been not like now today?
HH- No.
KK- Was small?
HH- Yeah, was small. Then Kahului had all their store houses where the Hawaiian Canoe club is.
KK- Yeah, used to be Kahului Canoe Club. Did you ever paddle with any of the clubs Uncle?
HH- No.
KK- No. So in your upbringing around here must have had a lot of Chinese, Japanese and Filipino people.
HH- Hana had a lot of them.
KK- Lot of them.
HH- Plenty Filipino, Chinese, Hawaiians, Filipinos plenty because they had the cane field growing out there. And they had a mill out there too where they make their own sugar.
KK- So this bridge up here by Sand Hills, what was the bridge for, the train? You remember?
HH- No because I had work on the beginning of that highway over there with Akiona Contractors it was all kiawe trees. Yeah, but the bridge was there already.
KK- Was there already. Well, I appreciate you sharing the mana'o Uncle. Where you went High School?
HH- Hana High School, I graduated from there.
KK- I asked you that before.
HH- Yeah I met Mary there and we got married out there.
KK- Thank you so much, mahalo.

HH- That's all I remember.
KK- Well, she's very lucky she likes fishing.
HH- I tell people about her, I don't know if you know the family- I don't think you know but if you see them, you'll know. Me and my brother-in-law Bernie we go lobster night time I catch the first lobster, my brother-in-law catch the second, she catch the third; she catch the fourth; the catch the fifth; she catch the sixth, the seventh the eighth, the ninth, the tenth, eleventh, twelfth, thirteen, fourteen, fifteen, sixteen, seventeen, eighteen.
KK- Lobster; you catch one, she catch the rest.
HH- What we do is we just put bait and one open the lobster, I put the bait.
KK- What kind bait you used for catch the lobster?
HH- Fish bait.
KK- Fish bait on the hook?
HH- Yeah, eighteen lobster; that's why I tell, "You guys like lobster fisherman, there."
KK- What about the A'ama, you guys used to catch the A'ama and the kohono?
HH- Yeah, for put the crab yeah?
KK- Yeah.
HH- Go put the bucket or go with the pole with the what you call, the coconut?
KK- Prawn yeah.
HH- Catch with the crab net. Or with the bucket, yeah we put 'em on the side.
KK- What about Mary used to go catch the he'e?
HH- Her, she's scared the he'e.
KK- She's scared? What about the puhi?
HH- She's scared puhi but we go torching together night time.
KK- So when you guys go torching what you guys looking for?
HH- Uha, more for puhi uha.
KK- Oh the white one.
HH- That's the one with the stripe, we use that for teriyaki.
KK- Oh, the puhi uha that's the brown and white one; white stripe with the brown?
HH- Right.
KK- Big that one come but the bugga fight hard.
HH- Yeah, well we go with the knife.
KK- Cut 'em then the thing stop?
HH- Cut 'em in half..
KK- So when you used to go torching what kind lamp you used to use? The kukui ele ____
HH- No we use that _____.
KK- Oh for the gas go up.
HH- The burlap bag; put kersone inside the tube and you put your burlap bag she soak through.
KK- Maka'ala yeah.
HH- Yeah but when the flashlight came out, more easy.
KK- And what was the last job you had?
HH- The last job I had was with the State Highways here.
KK- So you worked on the Queen Kaahumanu Highway with the County?
HH- State Highway.
KK- So how long were you working on Kaahumanu Avenue?

HH- Well, the sixes were divided into different supervisors; we had Kaahumanu which included Kaahumanu, Wailuku, Lahaina, Honokahau and then I think I heard that they were going to take out Kahakuloa too.
KK- Oh, the back side.
HH- The back side. Then we had another supervisor that took care of Pukalani, Kula Highway and part of Hana Highway.
KK- Lucky you guys went work on the highways. If we never have the highways we no could go nowhere.
HH- Then we had another supervisor that took care of Paia to Hana.
KK- In the highway work you guys found any artifacts or any archeological sites when they were making the highway, when they were digging up the road?
HH- Well we heard about skeletons and artifacts that were found but we weren't around there.
KK- You weren't in that area?
HH- We don't come in contact with those things.
KK- Oh.
HH- Except the contractors and I think they called Kahu Kalakea, yeah.
KK- Oh, Kaalakea; Kawika.
HH- Yeah he used to go out there.
KK- Oh, so you can remember that they used to find things and they call Kahu Kaalakea.
HH- Yeah and Charlie, he would go out.
KK- Thank you so much okay, mahalo.
HH- You welcome.

Interview: William Kanekoa

By Keli'i Tau'a/ Kimokeo Kapahulehua

September 21, 2007

KT- Keli'i Tau'a
KK- Kimokeo Kapahulehua
WK- Consultant

KK- Do you speak Hawaiian.
WK- Some, a little bit. Not a whole bunch.
KK- Did your parents speak Hawaiian.
WK- Yeah, mom and dad and grandparents, yeah they both speak Hawaiian.
KK- Do you think that this is important that they speak Hawaiian?
WK- Yes, I do.
KK- Why is that?
WK- Well I think as far as Hawaiian people go, since we live here on the islands we should learn the language of the people and more than that. The aina and everything is connected with the language. The names of the place, the name of the elements, the plants and animals are all Hawaiian names. By learning about them in Hawaiian we understand the Hawaiian culture behind them and there's some have a meaning, why the Hawaiians named it this way. But for us

we live here in the islands and there's only one Hawaii and I know we should learn the Hawaiian language.
KK- Oh that's great, I think it's important also. What's your full name and can you spell that?
WK- My name is William Kealoha Kanekoa Jr.
KK- What is the meaning of Kanekoa?
WK- Kanekoa has two meanings; One it could be man, koa is solider-warrior so man warrior. Or the Hawaiian Gods Kane Kulono Kanaloa could be the god, the warrior god or Kane koa.
KK- What does Kealoha mean?
WK- Kealoha means with love, with feeling, like the word aloha and so Kealoha, William Kealoha Kanekoa it means a person with love, feeling, that attitude of aloha in the name and in the person.
KK- Where is your birth and place where you were raised?
WK- I was born in Puunene, Maui; there was a hospital there on November 1, 1946. I was raised here in the Kahului area however I spent most of my summers in elementary school and in high school after school was over for the summer months from June, July, August I spent my time in Hana with my grandparents who lived across the old Hasegawa Store.
KK- So your growing up was in Hana but you were raised in Puunene. What years did you spend in this area? You must have spent some time in this area.
WK- Yes, born in Puunene we lived in the railroad camp where today is Harbor Lights. It used to be a railroad camp there and I grew up there in the railroad camp and I believe in 1955 the railroad offered the camp people a new housing area which is where I'm at here in Kahului on Lono Avenue. They offered at $6,000.00 a home and lot offered to the railroad employees and my father took it, the package and we moved here to what is now Dream City.

KK- Wow, that's awesome! So, in that railroad camp by Lower Beach Road or what we call by the Maui Beach Hotel is you spent some childhood days there. Can you talk about your childhood days and what you remember around that area?
WK- Okay, I grew up there it was raw fish camp at one time- raw fish because it was totally hundred percent Hawaiians. Then later on as the different races came in worked with the railroad and the stevedores other groups moved into raw fish camp. It came to be known as the break water camp. As a young kid I grew up there and I remember the different nationalities that lived there. The railroad went in back of our home, the train, and so my father would come by and have lunch. The steam engine would park behind the house and he would come and have lunch. The steam engine would go out to a a storage area for many companies. The most stand out thing growing up in my days was the tidal waves! We've had, just when I was a kid living there prior to 1955-56 we had about 2 or 3 tidal waves a year. As a kid I remember going up (maybe 6 years old) going up to the breakwater, the road, that highway today and there was another one in front of it towards the ocean and when I was a kid we had a tidal wave. The water went out beyond the breakwater and then came rushing in. All the camp people were out there catching, picking up fish that were right there on the ground jumping around and the people took them to eat. And as I stood there watching them the water came rushing in and they all ran away. I held on to the dress of an old Japanese lady, my neighbor, Mrs. Okazaki, and followed here and held on her dress while the water was coming down following us and we moved up to what is known today MCC. There was a little miniature mound there and we all sat on the mound, the whole camp did.
KK- Wow, that's pretty far.

WK- Yeah.
KK- On that note, you talked earlier that there was a fish pond in front Maui Beach Hotel.
WK- Exactly. There was a place called Kolo and I remember as a kid we used to go swimming in front Maui Beach Hotel and there was some glass but a beautiful fish pond and there were some of the Hawaiians there. This person named Matthew Hono lived here, he passed away. I remember they and his family would go down there and they kind of like, to cure the pond, I used to see him there he was there most of the time and he had the throw net. An old Hawaiian gentleman and just make sure that we kids didn't abuse the pond or do anything to damage the pond, make it dirty or move the rocks.
KK- So, you know, did they do akule fishing, halalu, opelu outside there in that area?
WK- There was a lot of fish. The Hawaiians would go there. My father would go there they would catch different fish, they would go fishing. There used to be some turtle when there was a big strike during that period of time there was a soup kitchen and the soup they got was turtle soup. Kahului Harbor, there was a lot of turtle and back then was legal to go and get them and there was a lot of turtle in Kahului. So a lot of people went out there got turtle, we had a lot of fish in there. The breakwater was, my dad would go on the breakwater all the way up to the front, it was spooky because the water would go over the breakwater and they would go fishing. A lot of fish: akule, halalu, there was a lot.
KK- Did you guys ever went from like you say on the tidal wave you went up to the mound at Maui Community College; you know the project is right across Baldwin High School where they're gonna, right by Kaiser Hospital area. You guys ever went walk that area to go to Iao Valley or visit up Wailuku Town like that? Walking or riding...
WK- The only thing I can remember is that as kids we used to go here in the and it was just kiawe trees and I remember a lot of mounds a lot of things back there. People had raised cows and it was a beautiful site but back then a lot of kiawe trees. I remember watching the TV some years ago on one of the plantation workers, his dad came from Japan and they landed in Maalaea plantation workers. They lived with a Hawaiian family in a grass shack and after that they went to Paia to work in the Paia Mill. He said they had to cross what he believed to be the great Kahului desert which was between central Maui was just a desert. According to his father it was just blowing sand and no trees no nothing here which I believe to be Kahului. He called it the Kahului desert.
KK- Wow.
WK- So it was a desert area. According to my parents, Hawaiians buried in this sand area, there was a lot of burial grounds.
KK- Lot of burial grounds; did the train that you talked about called fisherman camp, the railroad company, did that train go up to Wailuku?
WK- Yes, when I was a kid when I was a child I remember my parents talking there was a depot in Wailuku, there was a depot in Kahului where today stands the First Hawaiian Bank across it not by Burger King but nearby there was a train depot that picked up the people there. It would go to Wailuku, there was another depot and then also from Kahului that depot went up to Upcountry or Haiku.
KK- Wow, that's a long ride.
WK- Yeah, it was. It brought people from Maui; from Haiku there was the Maui High School area it brought people from all the way up there to Kahului, they went shopping. From Kahului the depot also went to Wailuku, people could go shop there and visit. And I believe there was a railroad track to Kihei.

KK- Did you ride the train at any time?
WK- Yes I did. When I remember the train we had one steam engine, a big steam engine and the rest were diesels. I rode the steam engine train and the diesel train. We had a train ride from Kahului that went up to the cannery in Haiku, and when I was in high school even when I graduated the railroad company, the Kahului Railroad Company took tours all the way to Hasrot Cannery or Haiku. Scouts, Girl Scouts, groups, they had open seating. I guess there was one open seating arrangement where the train would push them up and the steam engine or diesel trains would take the people on Saturday for a trip up to Haiku and back.
KK- What high school did you attend?
WK- I attended Baldwin High School. That was the only high school besides St. Anthony in the central area. The rest were in Lahaina and one in Launi'upoko and I believe that was the Maui High School.
KK- So, when you guys was at Baldwin High School did you guys hear the train go by?
WK- Oh yes! We heard the train loud and clear. In fact one year we had a cannery we had a strike in my summer time working at the, actually I was working for American Can Company next to the cannery. We supplied the cans for the pineapple. We had a strike, everybody walked out and I didn't have a ride home so my father pulled in with the train. I told him, "Hey we're not working anymore because everybody walked out." And I caught the train and it dropped me in the front here by what is now Kitagawa's Gas Station across the Hukilau where Maui Beach is at the train stopped there. My father dropped me off and I walked from there to my house there on Lono Avenue.
KK- Your dad was employed by the railroad company?
WK- Yeah, my dad was an engineer on the railroad company. He started when he was about 18 years old in the boiler room with the steam engine. Then my father went to WWII and when he came back he finished up in the railway and then finally towards maybe 1960 thereabouts my dad became an engineer for the railroad and he had his own train. That was one of the jobs he had until A&B stopped the railroad in 1966.
KK- What's your dad's name?
WK- My dad, same like mine: William Kealoha Kanekoa Sr. that's my dad.
KK- And your mom's name?
WK- Rachel Moiha Kanekoa. Both of them are from the Hana area.
KK- Where was she when dad worked on the railroads?
WK- Mom worked for the laundry, I believe Snow White Laundry across by what is now used to be an old bowling alley, Aloha Lanes.
KK- Oh yeah, yeah.
WK- Yeah, that's where. Right next to it was Snow White Laundry and she worked for the laundry company.
KK- So your first occupation was working for the packers or Pineapple Company?
WK- Yeah, I worked for Maui Pine which has just gone off maybe about a month or so ago. I worked for Maui Pine in the cooking department for the cannery.
KK- What is cooking department?
WK- Cooking is after the pineapple gets cut and put into the can, the cooking department would put the syrup in and can 'em. We would put different types of pineapple cuts and then we just put the syrup. There was about 8 machines, I think 8 machines I'm not sure but I believe there's two other machines over at Maui Pine. And so my job was to work in the cooking department, we put the trays onto the conveyor.

KK- I don't think people know today what is cooking department in Maui Land and Pine.
WK- Exactly, we had cooking and from there I went to the brand department where we took off the skin off the pineapple and it's mixed with sugar and they cook it and it's given to the farmers, people who have ranches and then they take it for the cows. So we would bag about 25-50 pounds (I'm not sure) there was a bagging area where they bagged all the cooked pineapple bran, they call 'em and we would stack 'em there and we would give it to the farmers as they stopped by. So every part of the pineapple was used!
KK- So that was your high school days working in the pineapple and as you progressed you and I went to school at Church College of Hawaii. So what was your job after that?
WK- After Church College?
KK- Before then going to college.
WK- Before college, again, I spent most of my time with pineapple. I went from the cooking and I also worked in the bran room, then after that going to school at the Church College in Laie.
KK- And today?
WK- Today I work with Loss Prevention a security office; I work at the Westin Kaanapali.
KK- That's the hotel one.
WK- We have two. We have a hotel and we also have a resort which is further down the road by the old airport.
KK- So, you know any mana'o about the area project? Anything around that area, did you spend any time in Waikapu, Waihe'e, Wailuku, Kahului; anything in the surrounding area as a child or adult that you remember around the project area of Maui Lani?
WK- The only thing I can remember is that as a student going to Baldwin High School; as a student I noticed that it was an area that a lot of people as a scenic spot it was a beautiful place. I think right now it's a choice area, I think it has a good feeling about it. Like the Hawaiians say pono, the aina there is good and my firm belief is that that center will do well. I know just that the mana there is great.
KK- Awesome! Did you have any family besides you guys that lived around that area that you know of that you visited when you were younger?
WK- Over there?
KK- Yeah.
WK- Yeah, yeah in that area actually friends that lived right above it like Lulu Ng whose son in law is Billy Plunkett and the wife Larrie. They are from that area and in fact Billy lives there.
KK- They live above the hill?
WK- Yeah, right above the hill, Sand Hills. I know the Plunkett's, Lulu Ng, that family and the Mary Soon family lives in that area and of course one famous Mauian Jazz Belnap who passed away. Jazz Belnap lives right above there and he just loved it! He used to be the town crier for Maui News but Jazz Belnap a wonderful man. In fact he is the father of our Halloween event over Lahaina. He's the one that started the Whaling Spree prior to that.
KK- Oh, in the sixties.
WK- Right, it was started by Jazz Belnap and that's where he lived. When I went to visit him maybe in the early seventies, that man had a lot of wood carvings he collected a lot. It was a beautiful home but he remembered saying that this was a beautiful spot that this whole area was great and that he could paint, he could draw and he believed it came from that area. Now the same area where you going have this shopping mall he loved it and he was one of the great assets to Maui and of course the Maui News where we got all of his as we call the town crier. But I believe that area just developed that energy.

KK- Does Mary Soon live up there?
WK- Yes. She lives not too far up there right above the Belnap family. Belnap's not there anymore but Mary Soon is there, yes. And Lulu Ng still lives there too.
KK- Oh, maybe I should go see them, then.
WK- Oh yeah, you should go see them and I think Ralph Gima, he's up there and the last one is Misao Wada she lives right up the end of the hill. Yeah, they live there, they're still going.
KK- I'll go see Lulu.
WK- Lulu is home, she's babysitting her mo'opuna's so she's home Lulu. Yeah, she's a great asset.
KK- Oh that's great that you know all the family that live in that area.
WK- Yeah Lulu Ng, they're nice people. All these families, I want to say so much energy came out of them and all these families are very creative in that area. Mary Soon worked a lot with, I guess back in the Maui News she did a lot of community work. Ralph Gima is a painter and Larry Wada and Misao there's just so many good things coming there so I just believe that whole Sand Hills area right down to where the police station is and all there is a choice spot there's a lot of mana there.
KK- So then your family got fish for protein and seaweed and limu and all that.
WK- Right.
KK- Did other families do a similar thing about using cultural sustainability getting taro or sweet potato?
WK- Oh yeah, there was a lot of the Hawaiians that lived there. They went fishing, they gathered crab and I think they were salt people. My parents, where we have Kanaha, used to be a big Hawaiian Camp so a lot of the Hawaiians picked up limu up there, they went fishing and this whole area Hawaiians were mostly fisherman out there on the ocean. So a lot of our food that we got came from the ocean be it crabs, in fact we have out here by the breakwater, we have the blue lobster. That's all I know – I haven't seen one but I heard it's famous for Blue Lobster.
KK- What about, since Iao Valley's close by do you remember about the family getting o'opu, opai, hiiwai from this area?
WK- Yes, I John Mahi who still lives there he makes kulolo presently, but I remember back in the sixties I worked with John back in the valley beautiful opai. I hate to say but it was the size of a cockroach; but we went back this area and what we did was we catch opai with a net and what we did we went by the side of the pond and dug a hole and put all the opai over there and I never saw the opai that color. It was an almost see through clear with black dots, beautiful opai. But according to him the family had oopu and opai and they would go into the valley so the Mahi family lived there for hundreds of years, I believe so he- we are related, my dad is related to the Mahi's so as a child we would go there when I was small and visit all the kupuna's over there. We would talk story with them, the Mahi clan.
KK- I'm going to go see John Mahi this afternoon.
WK- Oh perfect, perfect, what a wonderful place to see John! John is very good, very knowledgeable about the whole Iao Valley.
KK- Any cultural significant thing besides the fish pond in this area that you have knowledge of past history like the heiau's or…
WK- I know from my parents that there is a big boulder in Kahului Harbor. Many years ago when they were trying to dredge it the little sand bar area where they have now the off ramp for the boats they tried to remove a huge boulder in there. The Hawaiians told them to stop because that's the Hawaiian (and I believe that's my own personal opinion that's a fishing stone) right in

central Kahului they were trying to dig it up. That boulder would not budge so I believe that our Hawaiians left it there to my opinion to bring in fish for the fish pond there we call Kolu. The Hawaiians have a lot of fish in there coming because of the rock. So it's a beautiful spot and the breakwater, there's more towards the, it used to be, that's all I know about that area. It's a beautiful spot but the Hawaiians believe that there's something sacred, that Bay. You cannont go there when you have your ma'i, your period time-it's dangerous the pond area and the rock building over there. It's all significant, they put up the breakwater but according to Hawaiians that place has a special significance. I'm not too sure more about it other than that it was a special place for the Hawaiian people. My thoughts fishing because a lot of fishing, when I was a kid a lot of Hawaiian fisherman in that area, plenty!
KK- Plenty mana!
WK- Plenty mana, fishing was great!
KK- What about when you was a student; did you guys ever go across and play in the sand dunes over there across Baldwin High School that target area?
WK- As a kid I believe we journeyed that way and one thing I must tell you that I noticed in the back there Sand Dunes area and Maui Lani and all that; it's a special place. I can't explain it, but all I know is I walked through there and there's a special feeling about it. A special feeling of peace, well-being and I was going to investigate it more but because of my job I ran out of time. My father went there and my son and I went in there just because we felt something special about it and it's interesting we found a whole bunch of cases of old bottles which were collectors pieces that we found sticking out of the sand. I don't know, it's just one of those things that we just picked up and we brought it home and we have today some of those old rare bottles that was found in that area. Now to us that's special because you don't find rare bottles in the sand sticking out. So we found some there and another kid, my son's classmate went there and found a whole bunch of marbles and gave my son one and it's kind of rare.
KK- Had company names on the soda bottles or beer bottles or...
WK- You know that it was just an inverted bottom, it was one of those real brown ones. They were big bottles, looked like wine bottles but according to my dad and I talked to some collectors, they're all collectors pieces, in fact one guy came over here and my dad gave him some. He was so happy, pleased with the bottle. But that area is special because it just has a good feeling about it.
KK- Was there any taro patches in the near area that you remember about this area?
WK- You know it's possible that the Hawaiians cleared- there was a big population in this area. I don't know much more than that, just that there was a lot of fishing. But, according to my mom, there was some taro patches in this Kahului area, there was taro growing. The extent, I don't know the extent but when I was a small kid there was a lot of Hawaiian people and they remember growing taro in this area.
KK- Did they also grow sweet potato in this area that you know about?
WK- Yeah, taro and sweet potato went together; where you see taro, sweet potato nearby.
KK- Were there any animals that you guys raised in your upbrining?
WK- Yeah, when I was a kid we had everything. We had chickens, turkey, rabbits, I'm not sure we had goats but we had most of the farm animals. In fact most of the Hawaiians back then were self-sufficient so we had a garden and we had animals and we had chickens and everything. Majority of the people that lived next to me, in fact even the Japanese neighbors, everybody had a garden. So most people just went to the garden and that's where we cooked.

KK- If you had anything to share with the younger Hawaiian people, what would you say to the younger Hawaiian people today about anything; about the culture, about the area?
WK- If I were to tell the Hawaiian kids anything I think it's to go to the culture and find some kupuna's that are willing to talk about the Hawaiian culture. But I think above all is aloha and haoli. I think a lot of the things that Hawaiian's have here, and it's dying off, is the love for everybody. And I'm not saying for only Hawaiians but all nationalities. But when I was a kid, and I grew up with my grandparents, my grandparents loved life. And so she said, "It doesn't matter how much you have, with or without but as long as you have aloha because aloha is the great love and keeps you happy even in time of stress, depression, with or without, you get mad hoo-hoo, it's what you call aloha kekahi kekahi: love one another. But I can stretch it out aloha kekahi kekahi, love one another; love the plants, the animals, the land that you live on. Or aloha aina and I think King Kamehameha III did say it the best: Ua mau ke ea o ka aina i ka pono. If we are not pono, the land won't become pono. So you see a lot of things happening, if we become pono, the land, so the land is dependent upon we being pono. And one of the main things about pono is what I call hauoli, if you're not hauoli-hauoli is accepting yourself for who you are. Win or lose, failure, you just be happy what you are. So when I was a kid all the Hawaiians were happy, in Hana, in Kahului in fact we had a lot of homeless guys in Kahului with ukulele, you don't see them today just sitting down by the tree playing the ukulele spoke fluent Hawaiian. And I went there and he was happy and I talked to the old guys and the basic thing is: be happy what you got and that's it. Life goes around happiness, you know that's the Hawaiian culture; that what we have to give to them and I think we're slowly seeing that pass away because we're getting too much mixed up in life's problems and we have a hard time dealing with it. But if we aloha kekahi kekahi and you study the things of Ke Akua in the Bible or wherever you find Ke Akua. You have Ke Akua, you hauoli, that's all you need the Hawaiian-fish and poi. (Laughter)
KK- Mahalo, mahalo.

Interview: John Mahi Jr.

By Keli'i Tau'a/ Kimokeo Kapahulehua

September28, 2007

KT- Keli'i Tau'a
KK- Kimokeo Kapahulehua
JM- Consultant

KK- Today is September 28th and we're at Lower Beach Road and we're talking to John Mahi, right? Your name is?
JM- John Kaipo Mahi Helelima Mahi Junior.
KK- John, are you Hawaiian?
JM- Yes I am.
KK- Are you full blooded Hawaiian?
JM- Unfortunately I'm not; I got a little Chinese.
KK- Oh, who have the Chinese in your family?
JM- My mother.

KK- Oh, can you tell me John, when were you born?
JM- May 19, 1946.
KK- Eh, he's born one year after me in 1946; oh you born one year before me, I'm born in 1947 so that makes you 61 years old.
JM- Correct.
KK- And where do you live at this time?
JM- Iao Valley.
KK- And how long have you been living up in Iao Valley?
JM- Sixty-one years.
KK- John lived in Iao Valley for sixty-one years so John is again- John what is your dad, full blooded Hawaiian?
JM- My father is full blooded Hawaiian, correct.
KK- And what is his name?
JM- His name is John Mahi Helelima Mahi Sr.
KK- And so he's the one the full blooded Hawaiian; what about your mom, what is your mom's maiden name?
JM- My mom's maiden name is Hiona; Rose Loke Hiona.
KK- And since your dad is full blooded, what nationality is your mom?
JM- Hawaiian-Chinese.
KK- So can you tell me a little bit about your background since you're sixty-one years old where were you living all this time and what were you doing?
JM- Well, I born in Iao Valley; my mom did midwife me and my younger sister was born right in our home. I moved away for High School, I went to Kauai and graduated from Kapa'a High School. Later on I went to Church College of Hawaii and joined the service in 1968; came back, found my dear wife and got married. We had three children and we lived on Hawaiian Homes but I was one of those that didn't pay our mortgage, thought we all need to have things free which I believe the State of Hawaii is an entity that is not taking care of us as Hawaiians. So that was my belief and I lost our lease there and I'm back in where I sold out back in Iao Valley.
KK- John, I think that many of us have the same belief and unfortunately, like you said, the State of Hawaii is an entity that has a law above what our belief is and unfortunately for all of us that we're facing all of those challenges every day.
JM- Yeah but you know life goes on but I cannot look at it as a big loss; I mean it is a big loss you know because they had that DHHL for Hawaiians in which they did wrong in 1893. We know that was all an illegal overthrow but like you mentioned this is the State of Hawaii now. My father didn't believe in the State of Hawaii. In 1959 they made Hawaii a state he was fully objective to that and of course he was working for the County as a fireman engineer.
KK- John, we're interviewing you because there's a project in Sand Hills, right below Sand Hills that project is called Maui Lani. Within the project they're going to be building a Safeway, we're interviewing on this project. Can you give us a background on any cultural or historical background; what you know about this area in your upbringing?
JM- Well all I know about that are is they call it Sand Hills and basically when I was growing up I thought that anybody that lived in Sand Hills was all the wealthy guys there. But, I don't know too much about the place but I know traffic is going to be hectic if they bring that Safeway to that Wailuku area because as we all know Maui there's only roads in and the same road you get out. You know I object to having that Safeway up there because it's just going to congest the area of Wailuku and right now it's bad already. You go there right now around 11:00 and that

place is bumper to bumper coming down or going up. You know like I said, I don't know much about that area; as we were growing up we just knew that that area was basically for people that had money.
KK- So you know that project area, you know around this project area; I know you know in Iao Valley about the taro patches and come cultural things that was done back there; so can you explain about in your upbringing where the taro patches was besides Iao Valley. Was there taro patches in Waihe'e, Waikapu and all these other areas?
JM- I know in Waikapu that valley had a lot of taro patches because I used to go with my father. We used to go up and catch opai and once and a while we would go to Waikapu and they have the lo'is there although it's overgrown. But you know, big Hawaiian village there. In Iao Valley; from top to bottom the whole place was with taro. Even where we're at and unfortunately there's not enough water; we fighting the water issue to have water restored back into the stream because the o'opu and the opai cannot get down to the ocean, they need the ocean to spawn. They cannot get back up after they hanau down in the mouth of the river. I know as a young boy we used to see o'opu and opai we didn't have to go all the way up inside. I mean, in front of our home below where we were living they had a Chinese Camp and had a lot of taro patches. They were growing watercress, Chinese lily; but I know was back in 1916 when they had that big flood in Iao Valley, I think that's when they had about 13 Chinese that got killed in that big flood during that year. Right now I'm trying to restore some taro lo'is where we live so that we can get the water coming back into the aina where we're living.
KK- What about, can you share with us any of your fishing; was there a lot of fishing around here like in Kahului area?
JM- Right here where we're standing, this used to be Raw Fish Camp on Lower Beach Road. As I look right here, right here used to be a good Akule; the old timers they used to bring the net up and invite everybody to come and get whatever you can eat. Back then they only took what they could eat; the rest they hamo and then let 'em go. Maalaea was another area that my family used to have their canoes down there and we used to go out and do bottom fishing past the Kaunoa place they call the flats; yeah they had a lot of good fishing area. In fact all over, Waihe'e was good for he'e. My father was one of the best he'e man with the best he'e eye. He could go any time of the day and he would bring home enough to feed his family and make a little living because back in those days working with the County as a road sweeper he didn't make that much money but things didn't cost that much either.
KK- You know, you was brought up in this area; What kind of job that you had around this area that you went do as a younger boy in Kahului, Wailuku, Iao area?
JM- Well, I know my first job was shoe shine boy back in Wailuku. At that time they had the Navy come in here almost every week and they would walk through town we would call them milk bottles because they looked like milk bottles; everything was white and the black cap looked like a milk bottle. So we identified them as milk bottles but then my first job was shining shoes for fifteen cents. Later on I worked picking up pineapple, working in the cannery and of course construction came along and I went in construction field.
KK- So in the construction was little different pay then; what kind of pay did you guys receive in construction then?
JM- Back in the early sixties $3.65 was big money; labor job but was big money. I mean you know you could make a living.
KK- Besides Raw Fish Camp you know any other camps when you was up bringing any other places called camps around this area?

JM- Well in Waihe'e we used to go to this place called Kapoi Channel. It's right next to the Waihe'e Park, they have a channel there and that's where old man Danny Kapoi used to live; he had his fishing house out there and that's how I knew the name of Kapoi Channel. Further on down by the dairy they had another small Chinese camp I can't think of the name right now. But down towards this side they had Raw Fish Camp, Kapoi Channel was another place we used to go down catch fish, pick fish and down in Waihe'e dairy area.
KK- What about, do you ever remember the train going around this area and when you was coming up you ever see the train coming around?
JM- Yeah we used to ride the train as a little kid growing up because I used to go church and we had primary and we used to catch the train from Wailuku Sugar all the way up to Haiku; the train used to run all the way up to Haiku.
KK- Do you remember if you had to pay for the train or you ride free?
JM- It was free; we just had to get down to the mill and register and it would let all of us get on and pack our lunch and we all went up and came back in the afternoon.
KK- I know you talked about Iao Valley; you were born in the Valley and your family there. I know I talked to you one time about- can you tell the people about the different native plants that you know about the valley and whether or not we still have them around in these areas?
JM- Basically, my father he was almost like a- I guess the word would be lapa'au. He did a lot of Hawaiian medicinal plants and I know of several and I don't see it. I know when we always had colds my father used to give us this; it may sound like a real different name: Kukaipua and we used to chew that grass and would help our coughing or any what they would call it today strep throat. Basically the noni plant and we used to even use the banana old leaves for boils. Noni leaves was another part of it and I'm sure there's many other more herb plants that are in the valley.
KK- Yeah the plants are probably more in the forest area but in the dry area like Kahului where Maui Lani is across Baldwin I guess not too many plants because the area was dry and pretty sandy.
JM- Yeah the only ones I could see down there was the uhaloa because uhaloa grows basically on the sandy area and the kaunoa plant.
KK- We just wait, we get one bruddah over here he like buy one kululo. We're at Lower Beach Road; this is where John Mahi comes on Fridays and sells his kulolo. He makes his own kulolo in Iao Valley so one of the traditions that are still carried on by John Mahi. I was just telling everybody John that one of the traditions is still carried on by you by making the kulolo because this is one of our foods that we have and a lot of people like kulolo. Is that right John?
JM- Yeah, those that know me I learned this technique from my father. Back in the days you only watch, you never ask questions. So when my father left I decided to try and you try and miss and try and miss until you get it and I've been doing this for over thirty years now.
KK- Can you tell the people what the kulolo is made of John?
JM- The kulolo is basically made of: Taro, raw sugar and coconut milk. You bake it in the imu or steam it for several hours and it's like a dessert. When you go to a luau you may find kulolo and haupia and other desserts they got.
KK- John is out here on Fridays at the Lower Beach Road. We're talking at the beach so we stopped by and made reservations for a party that we have. I'm going to ask John now about the limu, if he knows any thing about the limu and what they area and what they use it for.
JM- Well, right here where we're standing there's ogo to my right; there's uluhuli waena that's the ones that they use for put in the opihi; and ogo well, you know people can just eat it like that

and there's wai wai and once and a while the lipepe comes on shore too. You can find 'em too and the lipepe is a real good iron limu that you can eat. Basically that's what they have in here, they may have others that I'm not aware of.
KK- You remember any tidal waves in this area, John?
JM- Yeah, back in 19- I think was 52 or early fifties, April Fool's Day we were up at Kula Sands visiting my aunty she was there and we had a tidal wave warning and everybody thought it was April Fool's and it came in. From Kula Sands we could see the harbor bare, I mean the water went out; it receded all the way out and when we came down and by the old fair grounds by Puunene Ave. the water was all the way back to where Kmart's at now. That's how far the water came back, kinda wipe out the whole Kahului town during that time.
KK- Well we appreciate all the information you shared with us. We think that it's really important how the local style of life and local seaweed; local plants; the taro and most importantly the water that you discussed earlier, John, you know so that's really important. We appreciate you sharing your mana'o with us John.
JM- All right Bully, thank you very much. I hope this can be something that you guys can use in the future to get all that we Hawaiians need to get back.
KK- Thank you.

Agreement to Participate

I, WAYNE BECHERT, understand that Kimokeo Kapahulehua and Keli'i Tau'ä, independent investigators contracted by HRT LIMITED Sueda and Associates will be conducting oral history interviews with individuals (kupuna/makua) knowledgeable about the land area currently across Baldwin High School mauka of the Maui Kaiser Health Center in Wailuku, Maui. The oral history interviews are being conducted in order to collect information on possible pre-historic and or historical cultural resources associated with these lands, as well as traditional cultural practices.

I understand I will be provided the opportunity to review my interview to ensure that it accurately depicts what I meant to say about any of these lands. I also understand that if I don't return the revised transcripts after two weeks from the date of receipt, my signature below will indicate my release of information for the CIS report. I also understand that I will still have the opportunity to make revisions during the report review process.

Please check the bottom:

✓ I am willing to participate

____I am willing to participate under certain conditions.

Consultant:

Date:_____

Name_____

Investigators:

Date 11/14/07

Name Wayne Bechert

MAHALO NUI LOA.

Agreement to Participate

I, Lolita Eugenio, understand that Kimokeo Kapahulehua and Keli'i Tau'ā, independent investigators contracted by Dowling Company Incorporated will be conducting oral history interviews with individuals (kupuna/makua) knowledgeable about Makena, Maui. The oral history interviews are being conducted in order to collect information on possible pre-historic and or historical cultural resources associated with this school, its history as well as its traditional cultural practices.

I understand I will be provided the opportunity to review my interview to ensure that it accurately depicts what I meant to say about any of these lands. I also understand that if I don't return the revised transcripts after two weeks from the date of receipt, my signature below will indicate my release of information for the CIS/A report. I also understand that I will still have the opportunity to make revisions during the report review process.

Please check the bottom:

✓ I am willing to participate

____ I am willing to participate under certain conditions.

Consultant:

Date: 11-15-07

Name Lolita M.S. Eugenio

Investigators:

Date 11/15/2007

Name Kimokeo Kapahulehua

MAHALO NUI LOA.

Agreement to Participate

I, Harold Haupu Sr., understand that Kimokeo Kapahulehua and Keli'i Tau'ā, independent investigators contracted by HRT LIMITED Sueda and Associates will be conducting oral history interviews with individuals (kupuna/makua) knowledgeable about the land area currently across Baldwin High School mauka of the Maui Kaiser Health Center in Wailuku, Maui. The oral history interviews are being conducted in order to collect information on possible pre-historic and or historical cultural resources associated with these lands, as well as traditional cultural practices.

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Please check the bottom:

✓ I am willing to participate

____I am willing to participate under certain conditions.

Consultant:

Date: 9/26/07

Name Harold Haupu Sr.

Investigators:

Date 9/26/07

Name KIMOKEO KAPAHULEHUA

MAHALO NUI LOA.

Agreement to Participate

I, William K. Kawelo Jr, understand that Kimokeo Kapahulehua and Keli'i Tau'ä, independent investigators contracted by HRT LIMITED Sueda and Associates will be conducting oral history interviews with individuals (kupuna/makua) knowledgeable about the land area currently across Baldwin High School mauka of the Maui Kaiser Health Center in Wailuku, Maui. The oral history interviews are being conducted in order to collect information on possible pre-historic and or historical cultural resources associated with these lands, as well as traditional cultural practices.

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Please check the bottom:

✓ I am willing to participate

____I am willing to participate under certain conditions.

Consultant:

Date: 9/20/07

Name William K. Kawelo Jr

Investigators:

Date 9/20/07

Name Leonard Kimokeo Kapahulehua

MAHALO NUI LOA.

Agreement to Participate

I, John M Matt Jr., understand that Kimokeo Kapahulehua and Keli'i Tau'ä, independent investigators contracted by HRT LIMITED Sueda and Associates will be conducting oral history interviews with individuals (kupuna/makua) knowledgeable about the land area currently across Baldwin High School mauka of the Maui Kaiser Health Center in Wailuku, Maui. The oral history interviews are being conducted in order to collect information on possible pre-historic and or historical cultural resources associated with these lands, as well as traditional cultural practices.

I understand I will be provided the opportunity to review my interview to ensure that it accurately depicts what I meant to say about any of these lands. I also understand that if I don't return the revised transcripts after two weeks from the date of receipt, my signature below will indicate my release of information for the CIS report. I also understand that I will still have the opportunity to make revisions during the report review process.

Please check the bottom:

____I am willing to participate

____I am willing to participate under certain conditions.

Consultant:

Date: 9/28/07

Name John Mahuhekahiwa Matt Jr.

Investigators:

Date 9/28/07

Name KIMOKEO KAPAHULEHUA

MAHALO NUI LOA.

Native and Polynesian plants for Maui County

Information gathered from the Maui County Department of Water Supply

Type: F=Fern Tr=Tree G=Grass V=Vine Gr=Ground Cover Sh=Shrub P=Palm S=Sedge

Type	Scientific Name	Common Name	Height	Spread	Elevation	Water Req.
F	Psilotum nudum	Moa, moa kula	1'	1'	Sea to 3,000'	Dry to Wet
F	Sadieria cyatheoides	'ama'u, ama'uma'u				
G	Colubrina asiatica	'anapanapa	3'	10'	Sea to 1,000'	Dry to Wet
G	Eragrostis monticola	Kalamalo	1'	2'	Sea to 3,000'	Dry to Medium
G	Eragrostis variabilis	'emo-loa	1'	2'	Sea to 3,000'	Dry to Medium
G	Fimbrisylis cymosa ssp. Spathacea	Mau'uaki'aki fimbristylis	.5'	1'	Sea to 1,000'	Dry to Medium
G	Boerhavia repens	Alena	.5'	4'	Sea to 1,000'	Dry to Medium
Gr	Chamaesyce celastroides var. laehiensis	'akoko	2'	3'	Sea to 1,000'	Dry to Medium
Gr	Cressa truxillensis	Cressa	.5'	1'	Sea to 1,000'	Dry to Medium
Gr	Heliotropium anomalum var. argenteum	Hinahina ku kahakai	1'	2'	Sea to 1,000'	Dry to Medium
Gr	Ipomoea tuboides	Hawaiian moon lfower, 'uala	1'	10'	Sea to 3,000'	Dry to Medium
Gr	Jacquemontia ovalifolia ssp. Sandwicensis	Pa'u o hi'iaka	.5'	6'	Sea to 1,000'	Dry to Medium
Gr	Lipochaeta integrifolia	Nehe	1'	5'	Sea to 1,000'	Dry to Medium
Gr	Peperomia leptostachya	'ala'ala-wai-nui	1'	1'	Sea to 3,000'	Dry to Medium
Gr	Plumbago zeylanica	'ilie'e	1'			
Gr	Sesuvium portulacastrum	'akulikuli, sea-purslane	.5'	3'	Sea to 1,000'	Dry to Wet
Gr	Sida fallax	'ilima	.5'	3'	Sea to 1,000'	Dry to Medium
Gr	Tephrosia purpurea var. purpurea	'auhuhu	2'	2'	Sea to 1,000'	Dry to Medium
Gr-Sh	Hibiscus calyphyllus	Ma'o hau hele, Rock's hibiscus	3'	2'	Sea to 3,000'	Dry to Medium
Gr-Sh	Lipochaeta rockii	Nehe	2'	2'	Sea to 3,000'	Dry to Medium

Type	Scientific Name	Common Name	Height	Spread	Elevation	Water Req.
Gr-Sh	Lipochaeta succulenta	Nehe	2'	5'	Sea to 1,000'	Dry to Wet
Gr-Sh	Lycium sandwicense	'ohelo-kai, 'ae'ae	2'	2'	Sea to 1,000'	Dry to Medium
P	Cocos mucifera	Coconut, niu	100'	30'	Sea to 1,000'	Dry to Wet
P	Pritchardia arecina	Lo'ulu, hawane	40'	10'	1,000 to 3,000'	Dry to Wet
P	Pritchardia forbesiana	Lo'ulu	15'			
P	Pritchardia hillebrandii	Lo'ulu, fan palm	25'	15'	Sea to 1,000'	Dry to Wet
S	Mariscus javanicus	March cypress, 'ahu'awa	.5'	.5'	Sea to 1,000'	Dry to Medium
Sh	Argemone glauca var. decipiens	Pua kala	3'	2'	Sea to 3,000'	Dry to Medium
Sh	Bidens mauiensis	Ko'oko'olau	1'	3'	Sea to 1,000'	Dry to Medium
Sh	Bidens menziesii ssp. Menziesii	Ko'oko'olau	1'	3'		
Sh	Bidens micrantha ssp. Micrantha	Ko'oko'olau	1'	3'		
Sh	Chenopodium oahuense	'aheahea, 'aweoweo	6'		Sea to higher	Dry to Medium
Sh	Dianella sandwicensis	'uki	2'	2'	1,000' to higher	Dry to Medium
Sh	Gossypium tomentosum	Mao, Hawaiian cotton	5'	8'	Sea to 1,000'	Dry to Medium
Sh	Hedyotis spp.	Au, pilo	3'	2'	1,000' to 3,000'	Dry to Wet
Sh	Lipochaeta lavarum	Nehe	3'	3'	Sea to 3,000'	Dry to Medium
Sh	Osteomeles anthyllidifolia	'ulei, eluehe	4'	6'	Sea to 3,000'	Dry to Medium
Sh	Scaevola sericea	Naupaka, naupaka-kahakai	6'	8'	Sea to 1,000'	Dry to Medium
Sh	Senna gaudichaudii	Kolomana	5'	5'	Sea to 3,000'	Dry to Medium
Sh	Solanum nelsonii	'akia, beach solanum	3'	3'	Sea to 1,000'	Dry to Medium
Sh	Styphelia tamelameiae	Pukiawe	6'	6'	1,000' to hgher	Dry to Medium
Sh	Vitex rotundifolia	Pohinahina	3'	4'	Sea to 1,000'	Dry to Medium
Sh	Wikstroemia uva-ursi kauaiensis kauaiensis	'akia, Molokai osmanthus				
Sh-Tr	Broussonetia papyrifera	Wauke, paper mulberry	8'	6'	Sea to 1,000'	Dry to Medium
Sh-Tr	Myoporum sandwicense	Naio, false sandalwood	10'	10'	Sea to higher	Dry to Medium
Sh-Tr	Nototrichium sandwicense	Kulu'i	8'	8'	Sea to 3,000'	Dry to Medium
Sh-Tr	Dodonaea viscose	'a'ali'i	6'	8'	Sea to higher	Dry to Medium
Tr	Acacia koa	Koa	50'-100'	40'-80'	1,500' to 4,000'	Dry to Medium

Type	Scientific Name	Common Name	Height	Spread	Elevation	Water Req.
Tr	Aleurites moluccana	Candlenut, kukui	50'	50'	Sea to 3,000'	Medium to Wet
Tr	Calophyllum inophyllum	Kamani, Alexandrian laurel	60'	40'	Sea to 3,000'	Medium to Wet
Tr	Canthium odoratum	Alahe'e, 'ohe'e, walahe'e	12'	8'	Sea to 3,000'	Dry to Medium
Tr	Cordial subcordata	Kou	30'	25'	Sea to 1,000'	Dry to Wet
Tr	Diospyros sandwicensis	Lama	12'	15'	Sea to 3,000'	Dry to Medium
Tr	Erythrina sandwicensis	Wiliwili	20'	20'	Sea to 1,000'	Dry
Tr	Metrosideros polymorpha var. macrophylla	Ohi'a lehua	25'	25'	Sea to 1,000'	Dry to Wet
Tr	Morinda citrifolia	Indian mulberry, noni	20'	15'	Sea to 1,000'	Dry to Wet
Tr	Nesoluma polynesicum	Keahi	15'	15'	Sea to 3,000'	Dry
Tr	Nestegis sandwicensis	Olopua	15'	15'	1,000' to 3,000'	Dry to Medium
Tr	Pandanus tectorius	Hala, puhala (halelist)	35'	25'	Sea to 1,000'	Dry to Wet
Tr	Pleomele auwahiensis	Halapepe	20'			
Tr	Rauvolfia sandwicensis	Hao	20'	15'	Sea to 3,000'	Dry to Medium
Tr	Reynoldsia sandwicensis	'ohe makai	20'	20'	1,000' to 3,000'	Dry
Tr	Santalum ellipticum	Coastal sandalwood, 'ili-ahi	8'	8'	Sea to 3,000'	Dry to Medium
Tr	Sophora chrysophylia	Mamane	15'	15'	1,000' to 3,000'	Medium
Tr	Thespesia populnea	Milo	30'	30'	Sea to 3,000'	Dry to Wet
V	Alyxia oliviformis	Maile	Vine		Sea to 6,000'	Medium to Wet

APPENDIX M.

Noise Report Prepared by Y. Ebisu & Associates

Y. Ebisu & Associates
Acoustical and Electronic Engineers

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YEA Job #45.051
January 15, 2010

Sueda and Associates, Inc.
905 Makahiki Way
Honolulu, Hawaii 96826

Attention: Mr. Lloyd Sueda, AIA

Subject: Results of Baseline Noise Study for Maui Lani Shopping Center

Dear Mr. Sueda:

Purpose. A baseline noise study was conducted to determine the potential increases in sound levels along the west and south boundaries of the proposed Maui Lani Shopping Center, where existing and future single family residences are located.

Methodology. In order to determine the potential increases in sound levels along the west and south boundaries, background ambient noise measurements were obtained at eight locations near the west and south boundaries. The eight locations are shown as "W1" through "W4" and "S1" through "S4" in Figure 1. The background ambient noise measurements at the eight locations were used to establish the baseline levels of noise at existing and future residences during the daytime and nighttime periods.

Measurements of noise emissions during receiving and unloading operations obtained at retail stores on Oahu were used to model the potential noise emissions from the two proposed loading dock areas of the Maui Lani Shopping Center. These measurements were used to establish the potential sound levels from the various noise sources associated with receiving and container unloading operations, and to project these sound levels to the closest residences along the west and south boundaries of the shopping center.

Following these evaluations, recommendations were provided for minimizing potential noise impacts from receiving and unloading operations during the daytime, nighttime, and early morning periods at the proposed shopping center.

Background Ambient Noise Levels. Measured background ambient noise levels at the eight measurement locations were controlled by traffic noise from Kaahumanu Avenue and are summarized in Tables 1 through 8. Figures 2 and 3 depict the measured variations in equivalent (or average) sound levels with time of day and

measurement location. Figures 4 through 8 depict typical strip charts of the measured background ambient noise levels at Locations "W1" through "W4".

Referring to Figures 2 and 3, the hour-by-hour variations in background noise levels reflect the variations in traffic volume along Kaahumanu Avenue, being lowest during the nighttime and early morning hours, and being highest during the daytime and peak traffic hours. An 11 to 14 dBA difference in background noise levels between the noisier daytime and quieter nighttime periods was measured, which is a typical result.

From Tables 1 through 8 and Figures 4 through 8, it was concluded that the maximum noise levels were typically 10 to 15 dBA greater than the Equivalent (or average) levels shown in Figures 2 and 3. These maximum noise level events were typically caused by the louder trucks, buses, and motorcycles on Kaahumanu Avenue, emergency sirens, and overhead helicopters. The minimum background ambient noise levels at the eight measurement locations were typically between 5 to 10 dBA lower than the Equivalent (or average) levels shown in Figures 2 and 3. Therefore, the noise emissions from the proposed Maui Lani Shopping Center would need to be 5 to 10 dBA less than the Equivalent (or average) levels shown in Figures 2 and 3 in order to present minimal risks of possible noise impacts at the existing and future residences to the west and south of the shopping center.

Local Noise Standards. The State Department of Health (DOH) has promulgated noise limits for fixed machinery such as air conditioning equipment, fans, compressors, etc. (Hawaii Administrative Rules, Title 11, Department of Health, Chapter 46, Community Noise Control, September 12, 1996). For lands zoned for commercial or business use, these limits are 60 dBA during the daytime hours of 7:00 am to 10:00 pm, and 50 dBA during the nighttime hours of 10:00 pm to 7:00 am. By the DOH rules, these noise limits cannot be exceeded more than 10 percent of the time during any 20 minute interval. These noise limits are not applied to mobile equipment, such as automobiles, trucks, or portable equipment. In addition, for impulsive noise, the applicable noise limits increase to 70 dBA during the daytime and to 60 dBA during the nighttime periods, but the total time allowed above these limits remain the same at 2 minutes in any 20 minute interval. For the Maui Lani Shopping Center, the DOH 60 dBA (daytime) and 50 dBA (nighttime) noise limits could be enforced if the buildings' fixed machinery, such as air conditioners, condensers, compressors, fans, etc. exceeded those limits at or beyond the project's property boundaries. The DOH would not be able to apply their noise limits to mobile equipment or boisterous individuals, and complaints regarding these noise sources would probably be handled by the County Police, shopping center management, or the County Liquor Control.

Noise Emissions During Receiving and Unloading Operations. The noise emissions during container docking and truck delivery operations are a source of concern due to the relatively high levels of noise associated with these operations, and due to the relatively small buffer distances between the loading docks and the neighboring residences. A summary of measured noise levels at 50 feet from the typical noise sources is shown in Table 9. Figure 9 depicts the measured sound levels at 50 feet from a tractor truck during a container docking operation. The loudest noise sources were an intermittent air (brake) release and the back-up alarm. In general, the noise emissions during receiving of containers at the shopping center can be expected to exceed 80 dBA at 50 feet from the tractor truck, with noise levels also exceeding 90 dBA intermittently during air (brake) releases.

The noise emissions during container or delivery truck unloading operations may include an electric fork lift to unload pallets from the container. Impulsive banging noise between 85 to 93 dBA (see Figure 10) at 50 feet may occur from the metal ramp which connects the dock to the container. This noise is associated with the impact of the metal ramp with the container floor and the impact of the fork lift hard rubber tires with the metal ramp.

Container unloading operations may also occur by manually dropping the cartons onto an expandable metal roller (or conveyor) assembly. Thumping noise is possible during the manual unloading operations. The thumping noise is relatively low (60 dBA at 50 feet) while the rear of the full container is being unloaded, but increases to 80 dBA as the front end of the nearly empty container is being unloaded. A histogram of the measured thumping noise during manual unloading operations is shown as Figure 11. At the end and beginning of container unloading operations, loud (80 dBA at 50 feet) banging noise may also occur with the relocation of the ramp or movement of manual lifts within an empty container.

Predicted Receiving and Unloading Noise at Closest Residences. The closest residences west of the proposed Safeway loading area are located approximately 290 feet to the west. The closest future residences south of the proposed Major "B" and Shops "C" loading areas may be located approximately 60 and 55 feet to the south. At these separation distances of 290 and 55 to 60 feet, the 50 foot sound levels shown in Table 9 and Figures 9 through 11 are predicted to be reduced by 15 dBA and 1 to 2 dBA, respectively, due to distance effects. Additional sound attenuation of the receiving and unloading noise will be required to reduce these levels to the measured daytime and nighttime background noise levels along the west and south property boundaries. An additional 12 to 19 dBA of sound attenuation is required toward the west boundary during the daytime, and an additional 26 to 33 dBA of sound attenuation is required

toward the west boundary during the nighttime. The daytime sound attenuation requirement may be met with sound barriers, but the nighttime requirement will be difficult to achieve with only sound barriers.

Along the south boundary, the sound attenuation required to reduce receiving and unloading noise to existing background noise levels are more severe due to the relatively short buffer distance of the Major "B" and Shops "C" loading areas from the south boundary. An additional 34 to 39 dBA of sound attenuation is required toward the south boundary during the daytime, and an additional 48 to 53 dBA of sound attenuation is required toward the south boundary during the nighttime. These sound attenuation requirements along the south boundary will be difficult to achieve, and will require the use of sound barriers located at the loading areas as well as along the south boundary line.

Conclusions. So, in summary, the buffer distances from the three proposed loading areas to the west and south boundaries are not sufficient to reduce receiving and unloading noise to existing background noise levels. With the addition of sound attenuating walls and partial enclosure of the Safeway loading area, most of the receiving and unloading noise levels may be reduced to daytime background noise levels along the west boundary. Complete sound attenuation of the backup alarm and air brake noise may not be possible due to difficulties in completely shielding the trucks from the west boundary with sound attenuating walls. Along the south boundary, it will be possible to reduce receiving and unloading noise levels to the daytime background noise levels, but will be difficult to reduce receiving and unloading noise levels to the nighttime background noise levels.

Recommendations. Compliance with the 60 dBA (daytime) and 50 dBA (nighttime) noise limits of the DOH by all fixed machinery (refrigeration, air conditioning, ventilation, and transformers) will be required. The use of sound enclosures and roof parapet walls are recommended for attenuating rooftop mechanical and electrical equipment to comply with the DOH noise limits.

While the noise from delivery trucks and receiving and unloading operations are not regulated by the DOH noise rules, the DOH noise limits of 70 dBA (daytime) and 60 dBA (nighttime) for impulsive noise sources were used as noise abatement criteria levels for this project. In other words, the DOH noise limits of 70 dBA and 60 dBA for impulsive noise from fixed machinery were applied to project noise sources emanating from mobile sources in order to minimize potential noise impacts on neighboring properties. While adherence to these limits are not mandatory under the DOH rules, they are being used as noise abatement design goals for this project.

The use of sound attenuating walls along the project's west and south property

lines, plus the use of sound attenuating walls at the three loading areas, and partial enclosure of the Safeway loading area are recommended to attenuate the noise associated with receiving and unloading operations at the Safeway, Major "B", and Shops "C" buildings. The addition of a continuous, 6 foot high sound attenuation wall is recommended along the west property line at the existing homes west of the project site. This 6 foot high wall along the west property boundary should reduce the impulsive noise from delivery and unloading operations at Safeway to levels below the daytime 70 dBA design goal. However, without the partially enclosed loading area at Safeway, impulsive noise from the tractor trucks and from unloading operations will exceed the nighttime 60 dBA design goal. Therefore, the inclusion of the 15.3 feet high wall along the west side and roof over the Safeway loading area should provide an additional 11 to 30 dBA of sound attenuation whenever the mobile equipment are located within the loading area. So the impulsive noise levels from mobile equipment located within the Safeway loading area should be less than the nighttime 60 dBA design goal and no higher than the measured daytime background ambient noise levels along the west boundary. When the mobile vehicles are not shielded by the Safeway loading area wall, their impulsive noise levels (from back-up alarm and air brakes) are predicted to exceed the nighttime 60 dBA design goal. So, for this reason, it is recommended that delivery truck movements at Safeway be limited to the DOH defined daytime hours of 7:00 am to 10:00 pm.

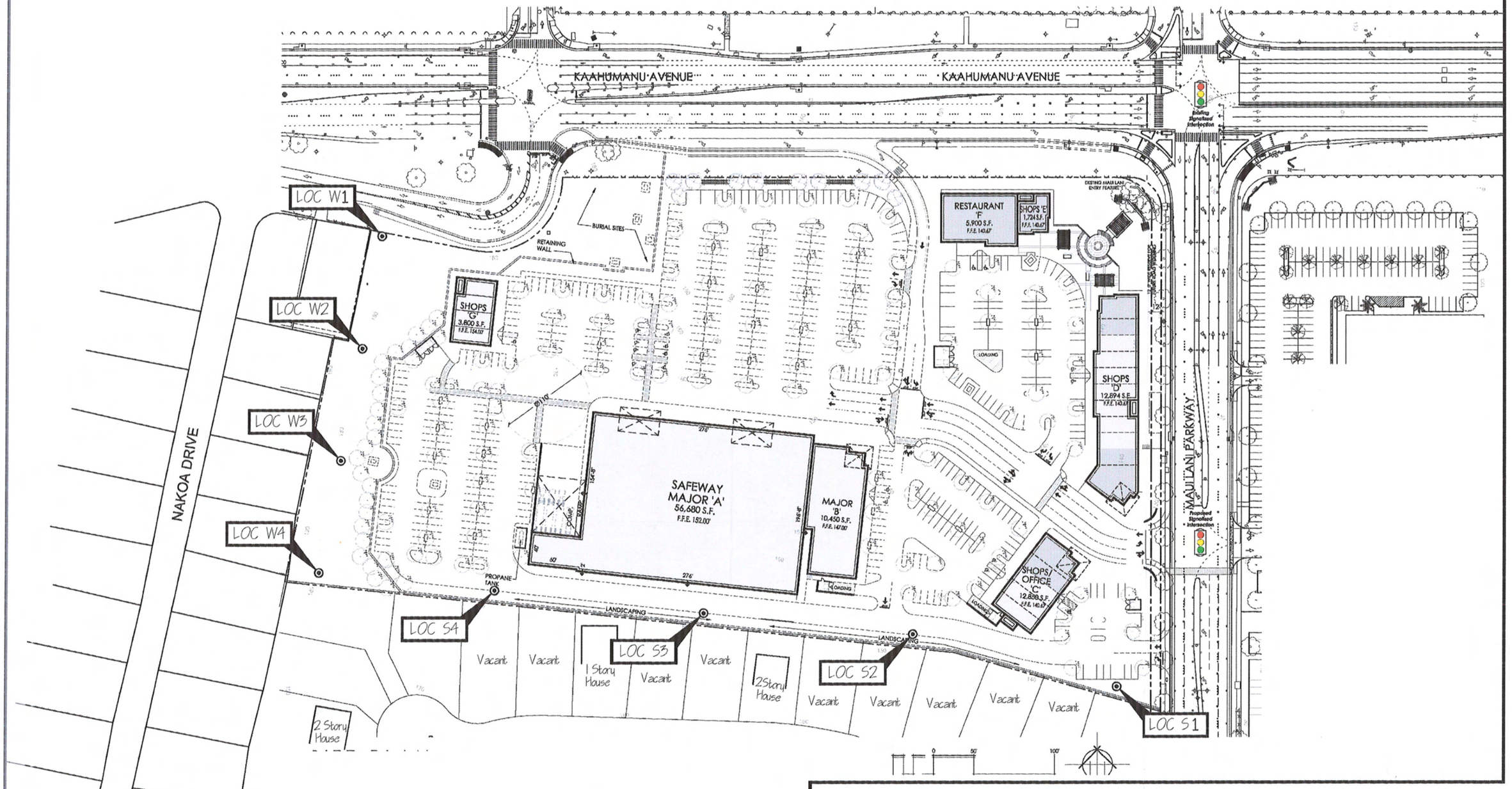
Reduction of the noise during receiving and unloading operations at the Major "B" and Shops "C" loading areas so as to not exceed the measured daytime background noise levels along the south boundary will not be possible. However, the addition of a 6 foot high wall along the south property line can reduce the impulsive noise levels during receiving and unloading operations at the Major "B" and Shops "C" loading areas below the 70 dBA daytime design goal at ground floor receptors to the south. For this reason, the construction of a 6 foot high wall along the south property boundary and at the top of the slope is recommended.

Because of the presence of two story homes along the south property line, the 6 foot high wall will not provide sound attenuation at the upper floors of these homes. Therefore, the addition of L-shaped sound walls at the Major "B" and Shops "C" loading areas is also recommended to meet the 70 dBA daytime design goal when the delivery vehicles are located within their respective loading areas. The recommended wall height is 15.3 feet at each loading area.

Sincerely,

Yoichi Ebisu, P.E.

encl.



PROJECT SITE MAP AND NOISE MEASUREMENT LOCATIONS

FIGURE 1

FIGURE 2
MEASURED BACKGROUND NOISE LEVELS ALONG WEST SIDE OF MAUI LANI SHOPPING CENTER SITE (NOVEMBER 14 - 15, 2007)

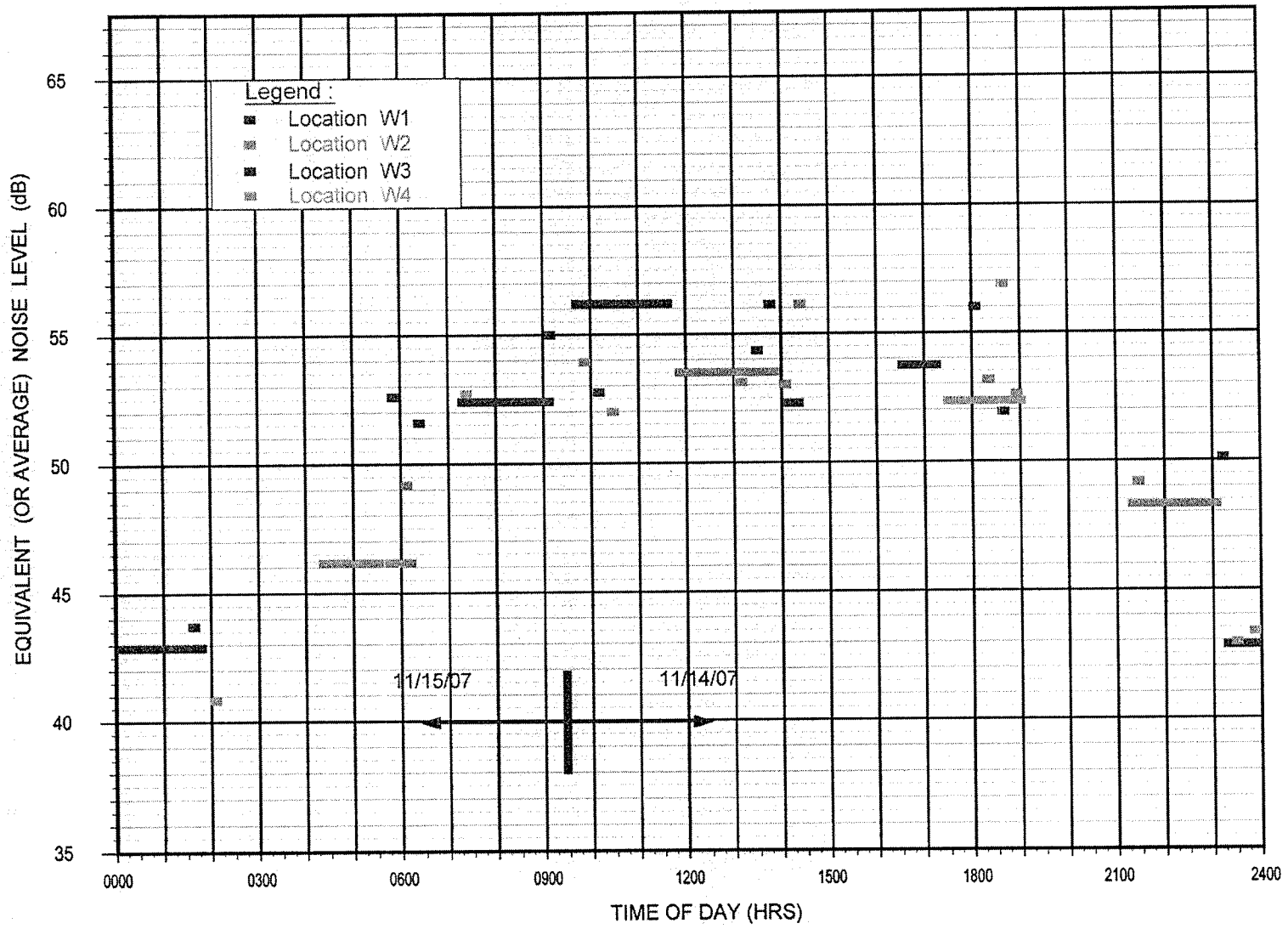
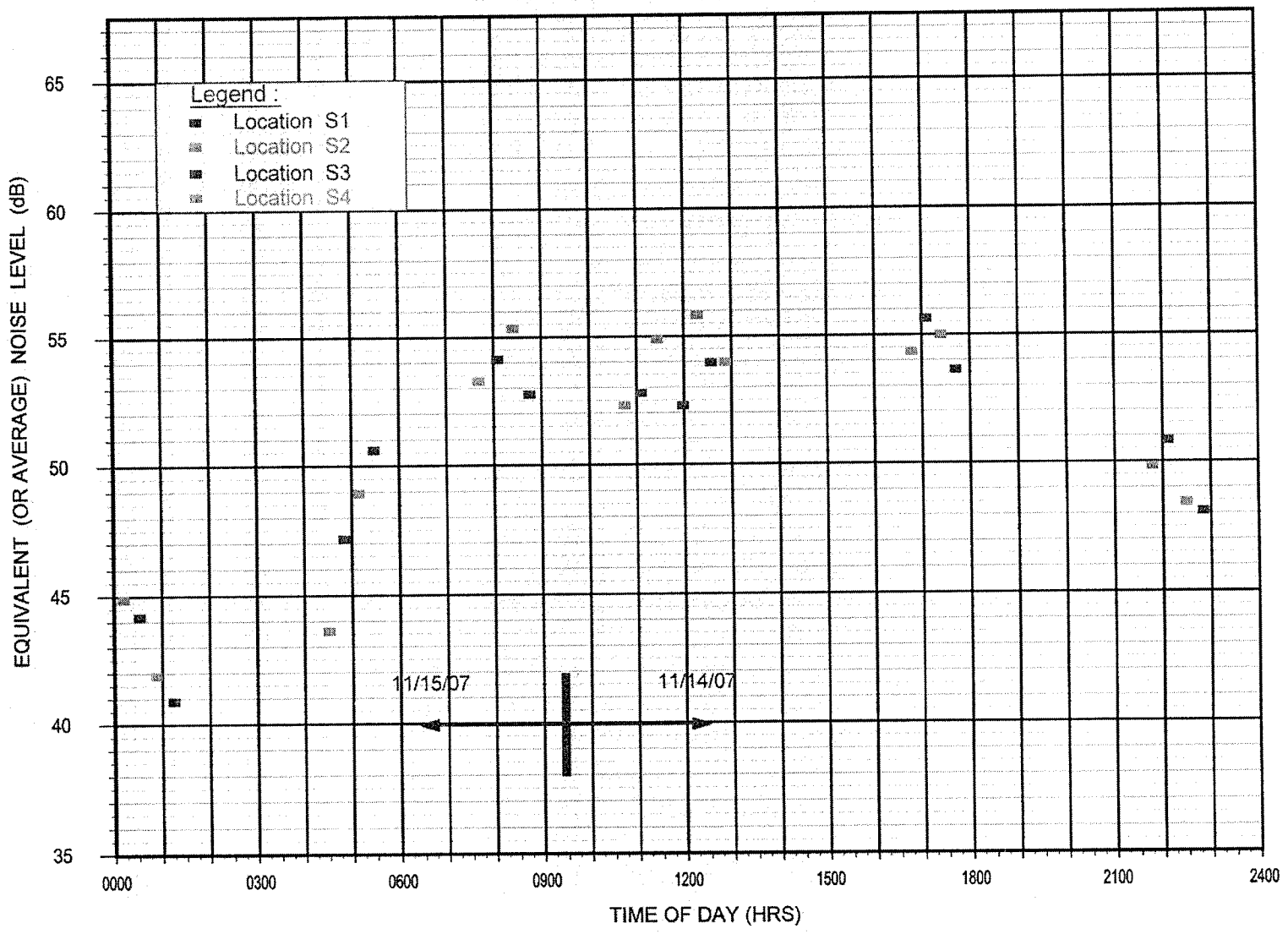
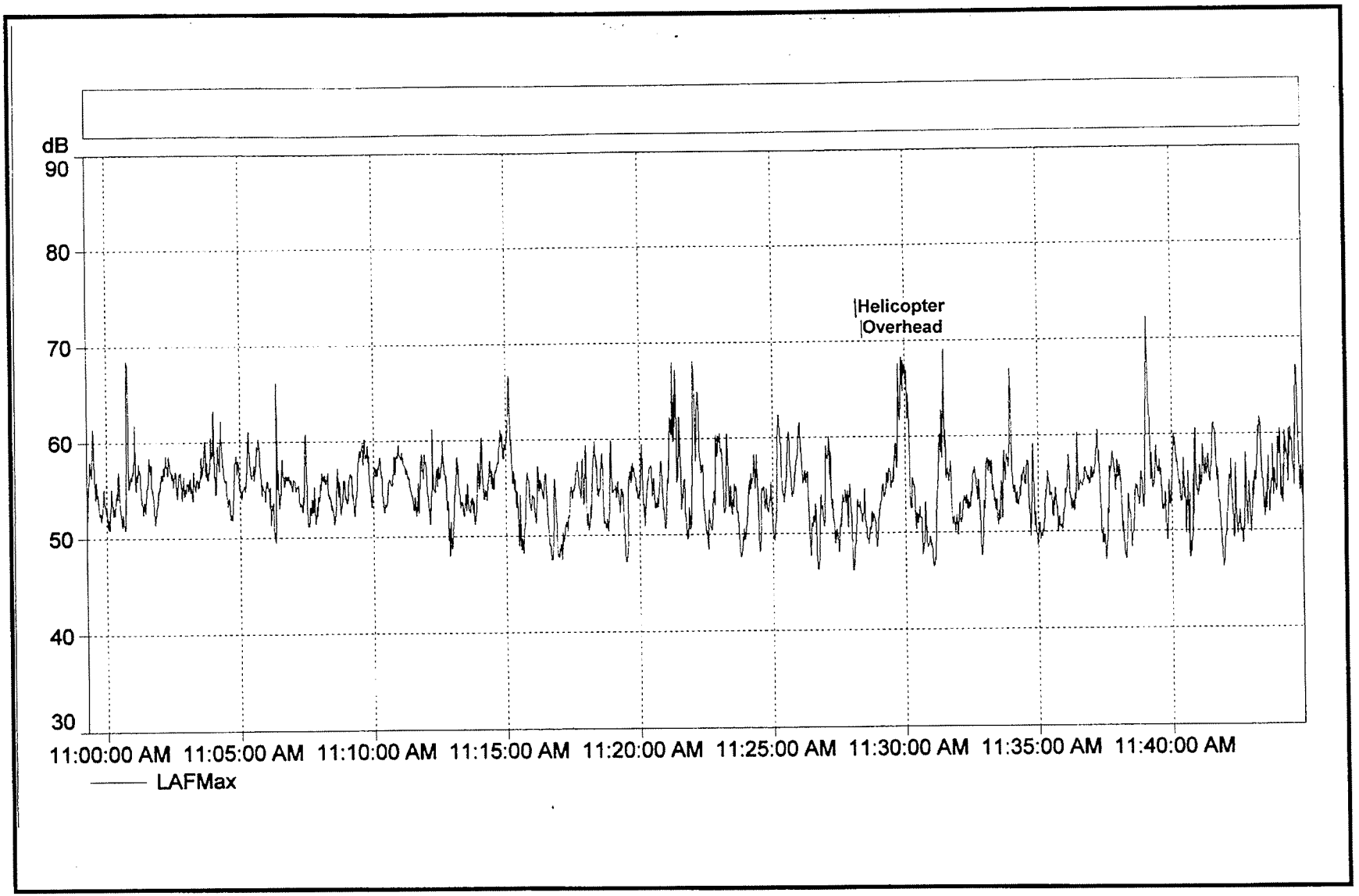


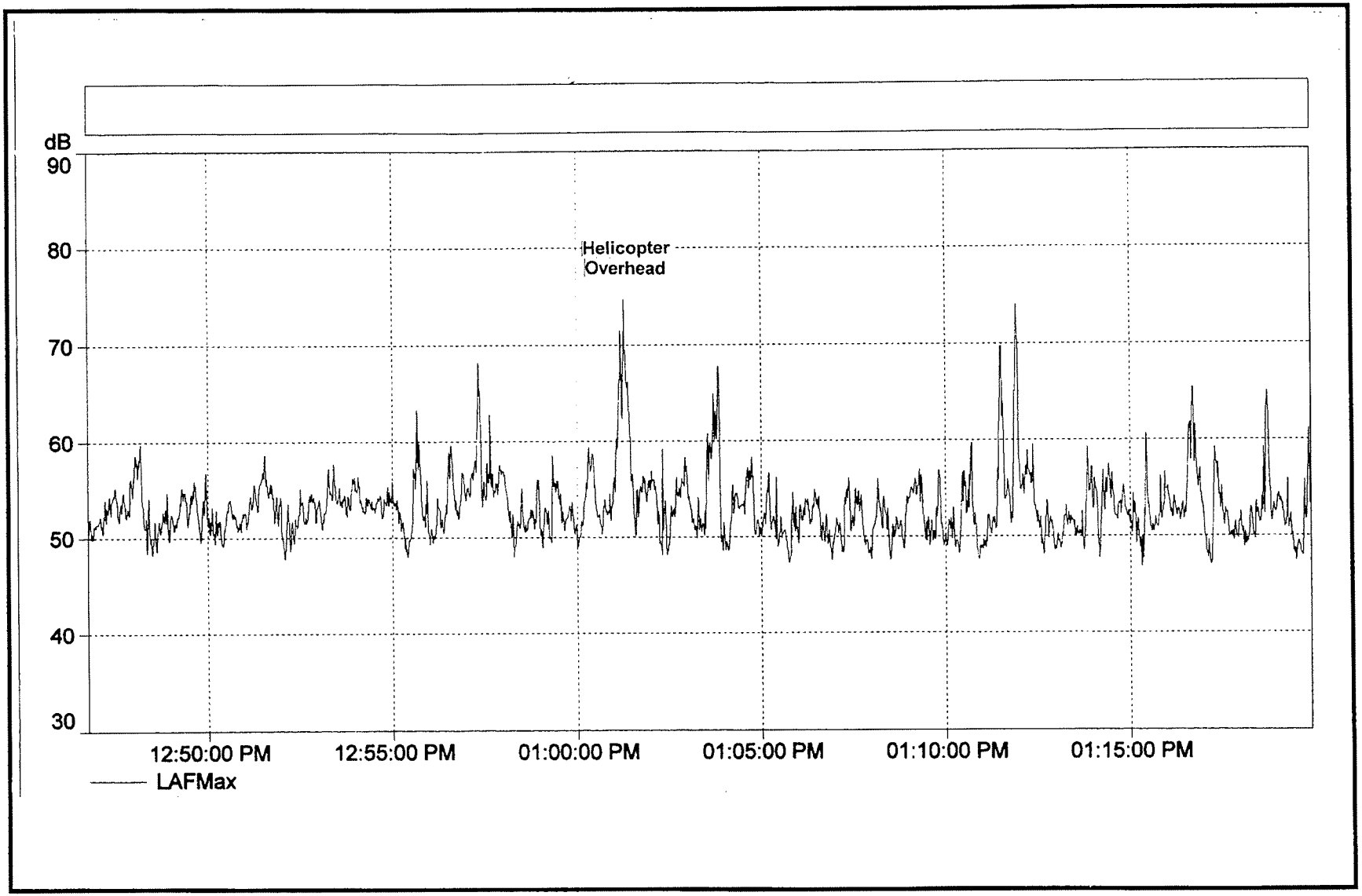
FIGURE 3
MEASURED BACKGROUND NOISE LEVELS ALONG SOUTH SIDE OF MAUI LANI SHOPPING CENTER SITE (NOVEMBER 14 - 15, 2007)





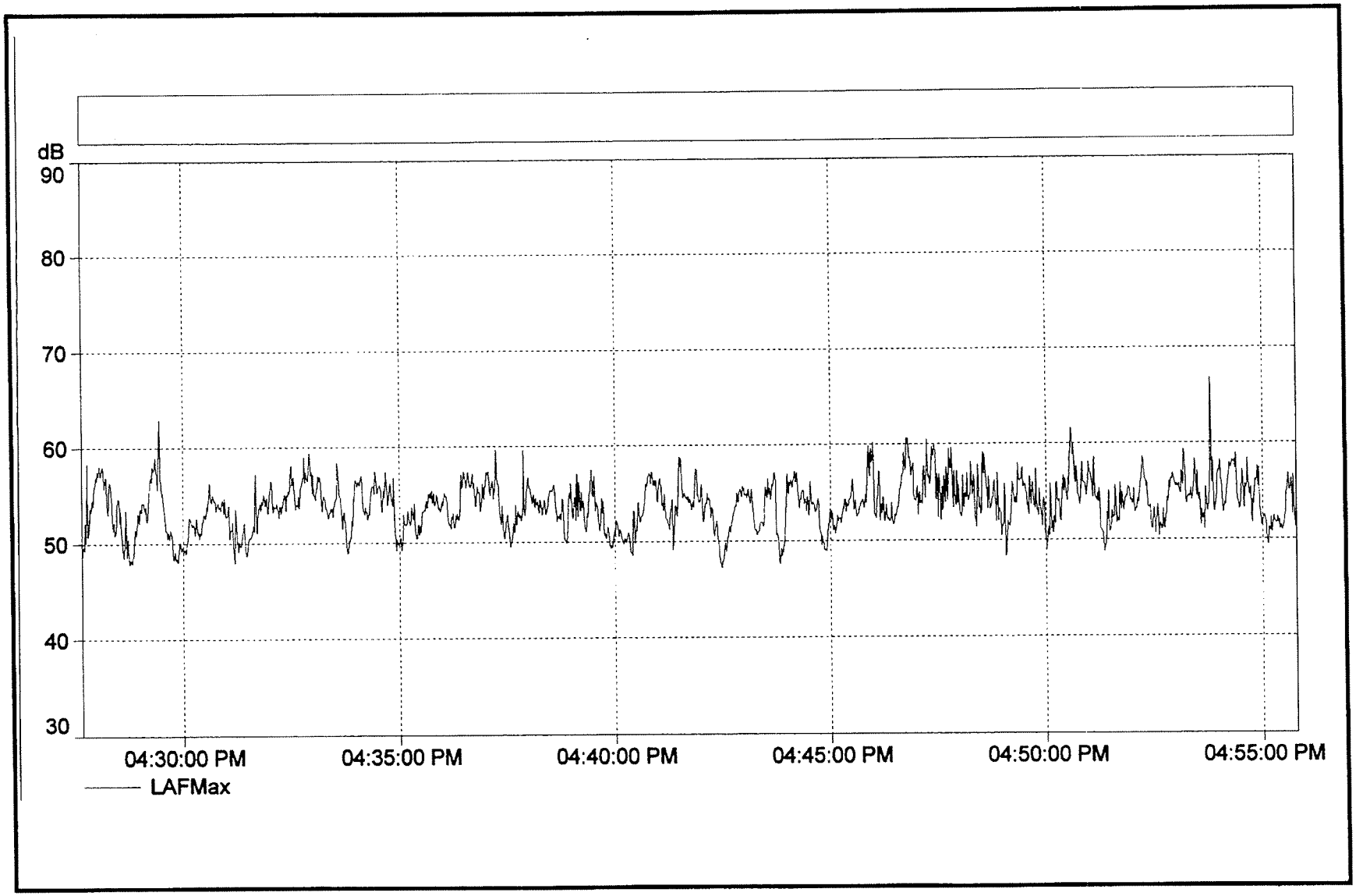
MEASURED DAYTIME BACKGROUND NOISE LEVELS AT LOCATION W1 (NOVEMBER 14, 2007)

FIGURE 4



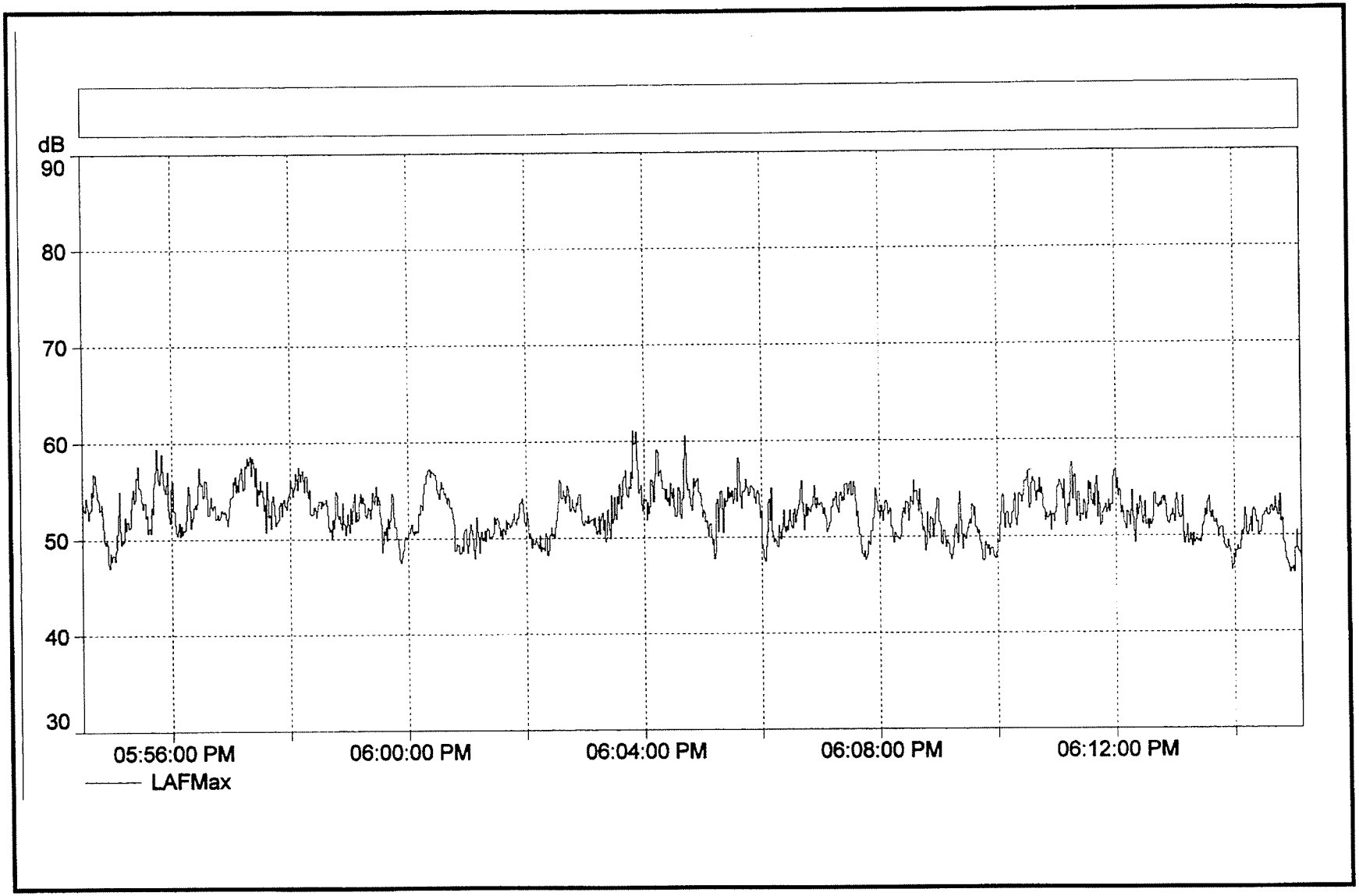
MEASURED DAYTIME BACKGROUND NOISE LEVELS AT LOCATION W2 (NOVEMBER 14, 2007)

FIGURE 5



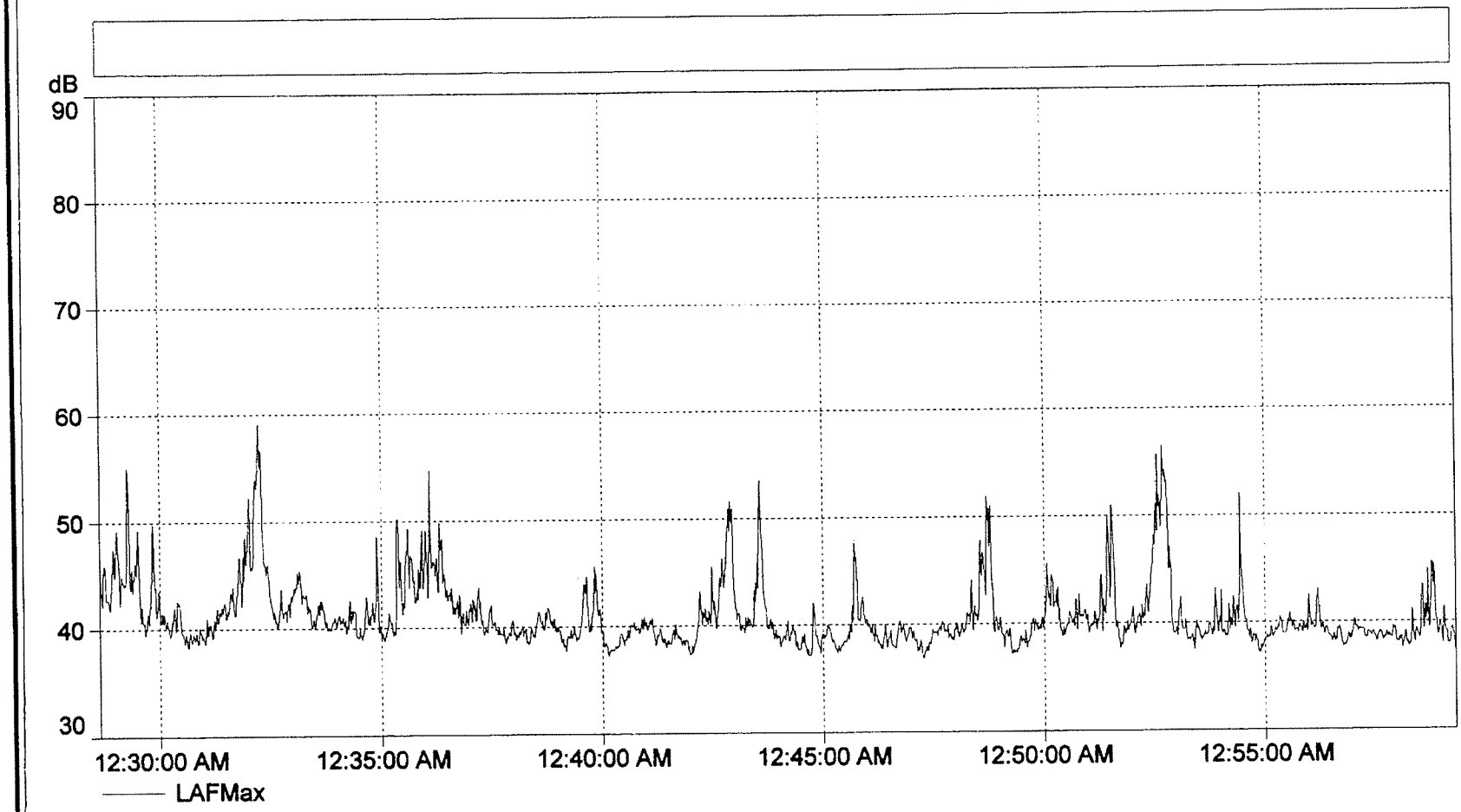
MEASURED DAYTIME BACKGROUND NOISE LEVELS AT LOCATION W3 (NOVEMBER 14, 2007)

FIGURE 6



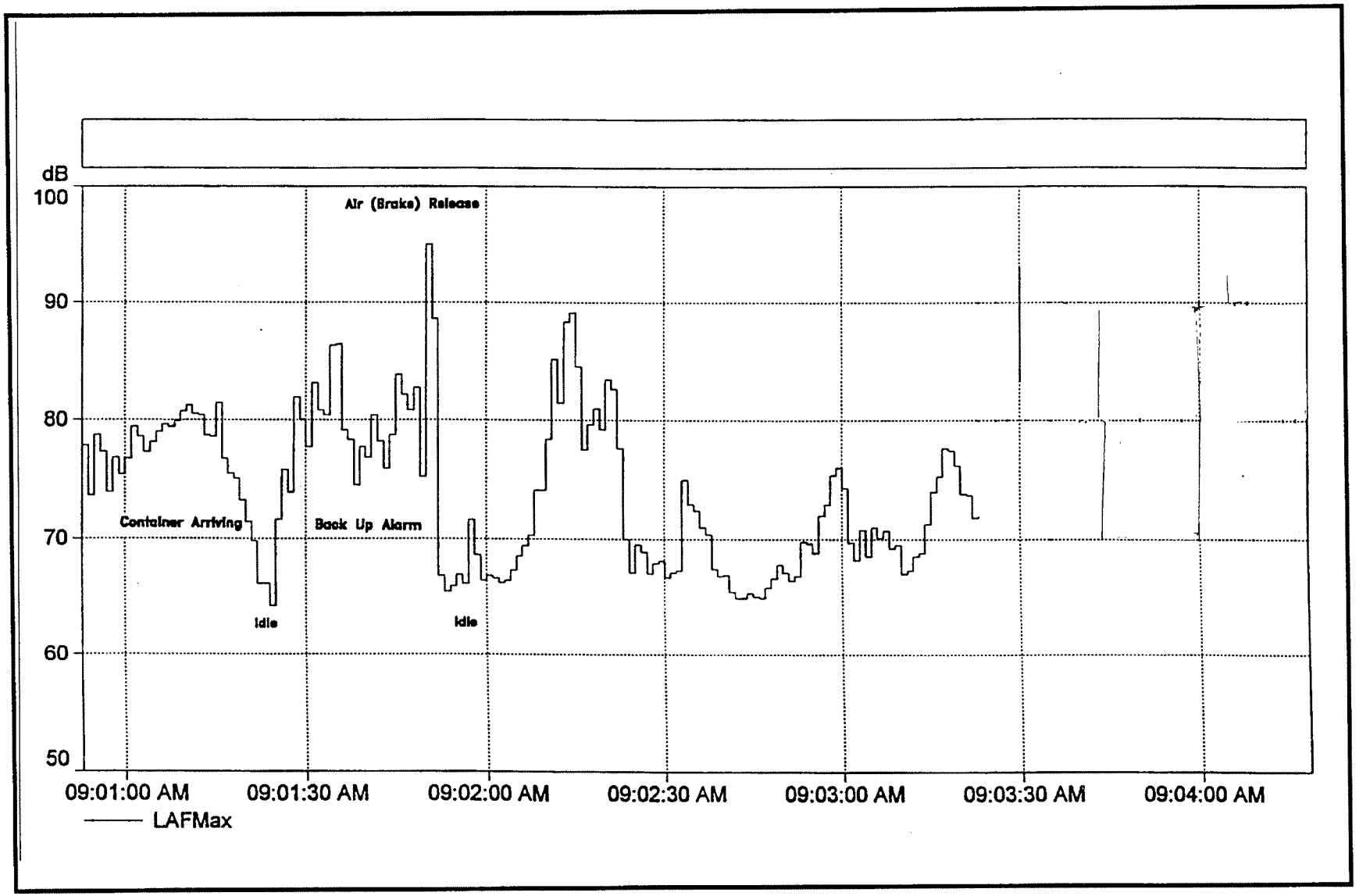
MEASURED DAYTIME BACKGROUND NOISE LEVELS AT LOCATION W4 (NOVEMBER 14, 2007)

FIGURE 7



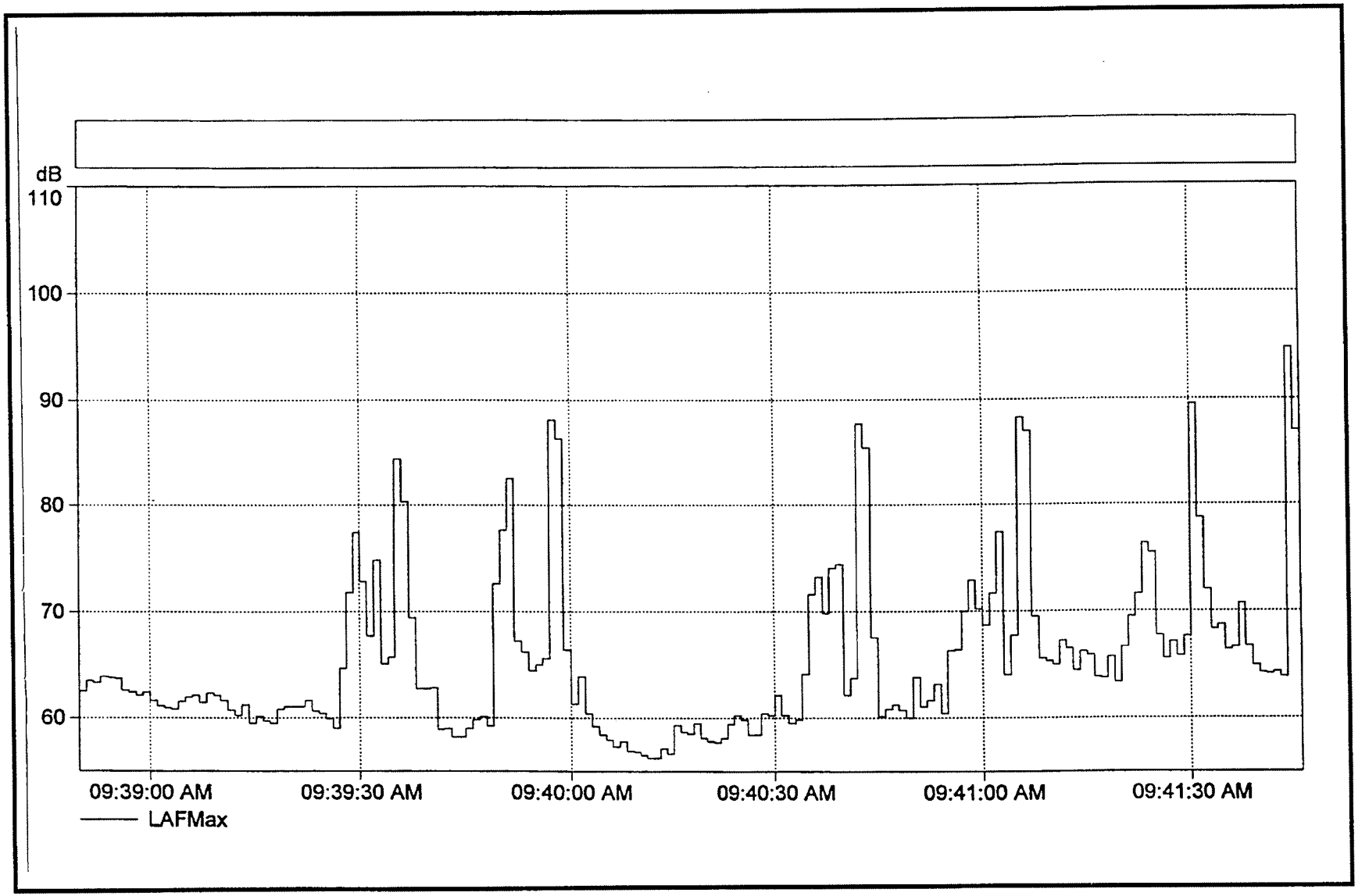
MEASURED DAYTIME BACKGROUND NOISE LEVELS AT LOCATION W3 (NOVEMBER 15, 2007)

FIGURE 8



DBA VS. TIME HISTORY OF CONTAINER DOCKING OPERATION AT 50 FT.

FIGURE 9



DBA VS. TIME HISTORY OF RAMP IMPACT NOISE DURING UNLOADING OF CONTAINER WITH ELECTRIC FORK LIFT

FIGURE 10

FIGURE 11
HISTOGRAM OF THUMPING SOUND LEVELS DURING UNLOADING OF CONTAINER WITH ROLLER CONVEYOR (35 FEET FROM FRONT END)

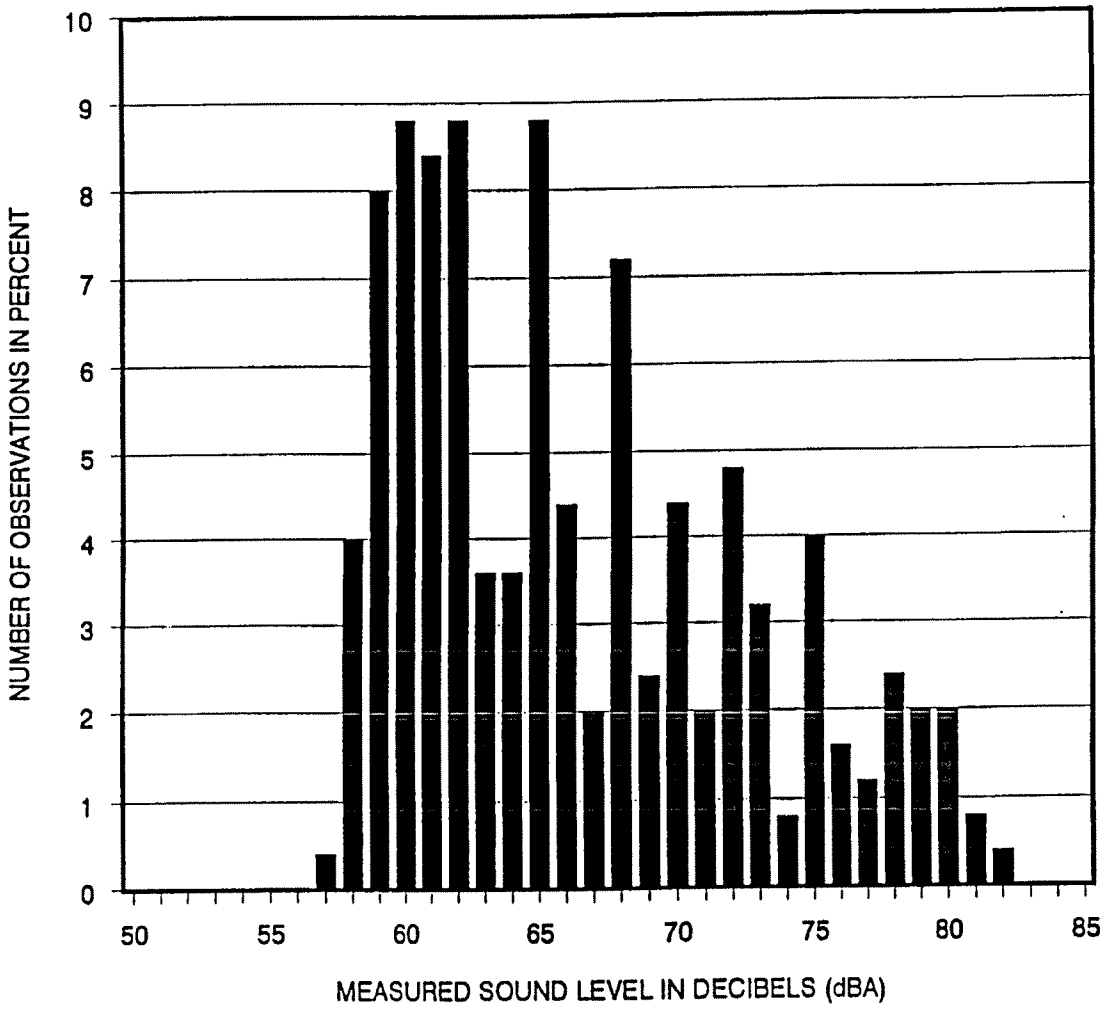


TABLE 1. MEASURED BACKGROUND NOISE LEVELS AT LOCATION "W1"

LOCATION "W1"
DATE: November 14-15, 2007

Start Time	End Time	SEL	Leq	Lmax	Lmin	L1	L10	L50	L90	L99	Event Description
09:36:53	11:44:54	92.7	56.2	81.0	45.3	64.3	58.0	54.3	50.1	47.0	
13:41:17	13:56:17	85.6	56.1	68.1	45.1	63.6	59.1	54.6	50.1	47.6	11:29 - Helo Overhead
17:57:19	18:12:19	85.5	56.0	66.1	48.5	61.6	58.6	55.1	51.6	50.1	18:03:45 Jet A/C Noise
23:06:43	23:21:43	79.7	50.2	70.2	37.0	63.1	51.1	44.1	39.1	38.1	
01:30:44	01:45:44	73.1	43.7	61.6	35.6	54.6	46.6	39.6	37.1	36.6	
05:43:31	05:58:31	82.0	52.6	68.0	37.8	64.1	55.6	49.1	40.0	38.6	
09:01:30	09:16:30	84.4	55.0	68.6	41.9	62.6	57.6	53.6	49.1	44.1	

Notes:

a. Leq = Average A-Weighted Sound Level (in dBA)
b. Lmax = Maximum A-Weighted Sound Level (in dBA)
c. Lmin = Minimum A-Weighted Sound Level (in dBA)
d. SEL = A-Weighted Sound Exposure Level (in dBA)
e. L10 = A-Weighted Sound Level (in dBA) which was exceeded 10 percent of the time.
f. Lxx = A-Weighted Sound Level (in dBA) which was exceeded xx percent of the time.

TABLE 2. MEASURED BACKGROUND NOISE LEVELS AT LOCATION "W2"

LOCATION "W2"
DATE: November 14-15, 2007

Start Time	End Time	SEL	Leq	Lmax	Lmin	L1	L10	L50	L90	L99	Event Description
09:45:18	10:00:18		53.9	67.5	47.4	60.6	55.6	53.1	50.6	48.6	10:00 - Helo Overhead
11:46:31	13:58:25	88.8	53.5	85.8	43.7	61.1	55.3	51.5	48.4	46.4	
13:59:12	14:14:12	82.5	53.0	66.6	45.6	59.1	55.6	52.1	48.6	46.6	
18:14:39	18:29:39	93.3	63.8	88.4	43.4	74.6	54.6	51.1	47.6	45.1	53.1 Leq without Car Horn
18:48:54	19:03:54	86.0	56.7	79.4	43.8	69.6	55.6	50.6	47.1	44.6	18:57:26, Long Siren, 52.6 Leq without Siren
21:14:28	23:11:12	85.0	48.3	67.3	37.8	56.7	51.4	46.3	41.4	38.8	
23:23:47	23:38:47	72.3	42.9	58.9	35.3	50.6	46.1	40.6	38.1	36.1	
01:57:47	02:12:47	70.3	40.8	54.9	35.9	48.1	43.1	39.6	38.1	37.1	
06:00:08	06:15:08	78.6	49.2	65.4	37.6	58.6	52.1	46.6	41.6	39.1	06:08 - Jet T/O; 06:06 - Motorcycle

Notes:

a. Leq = Average A-Weighted Sound Level (in dBA)
b. Lmax = Maximum A-Weighted Sound Level (in dBA)
c. Lmin = Minimum A-Weighted Sound Level (in dBA)
d. SEL = A-Weighted Sound Exposure Level (in dBA)
e. L10 = A-Weighted Sound Level (in dBA) which was exceeded 10 percent of the time.
f. Lxx = A-Weighted Sound Level (in dBA) which was exceeded xx percent of the time.

TABLE 3. MEASURED BACKGROUND NOISE LEVELS AT LOCATION "W3"

LOCATION "W3"
DATE: November 14-15, 2007

Start Time	End Time	SEL	Leq	Lmax	Lmin	L1	L10	L50	L90	L99	Event Description
10:03:10	10:18:10	82.2	52.8	65.5	44.7	58.1	55.6	52.1	48.6	46.1	Traffic Noise
13:23:16	13:38:16	83.7	54.3	67.5	45.6	60.6	57.1	53.1	49.6	48.1	
14:00:34	14:27:32	84.5	52.4	67.1	45.7	58.2	55.1	51.4	48.4	46.5	
16:27:34	17:22:35	88.9	53.7	69.3	45.8	59.8	56.0	52.9	49.5	47.5	
18:31:53	18:46:53	81.4	51.9	59.8	44.5	57.1	55.1	50.6	47.6	46.1	
23:12:45	01:53:50	79.1	42.9	64.4	35.2	52.5	45.5	39.7	37.3	36.0	
06:16:35	06:31:35	81.0	51.6	66.5	39.0	60.6	54.6	49.1	44.1	40.1	
07:12:34	09:13:19	88.7	52.4	69.1	43.8	58.8	55.3	51.2	47.6	45.3	

Notes:

a. Leq = Average A-Weighted Sound Level (in dBA)
b. Lmax = Maximum A-Weighted Sound Level (in dBA)
c. Lmin = Minimum A-Weighted Sound Level (in dBA)
d. SEL = A-Weighted Sound Exposure Level (in dBA)
e. L10 = A-Weighted Sound Level (in dBA) which was exceeded 10 percent of the time.
f. Lxx = A-Weighted Sound Level (in dBA) which was exceeded xx percent of the time.

TABLE 4. MEASURED BACKGROUND NOISE LEVELS AT LOCATION "W4"

LOCATION "W4"
DATE: November 14-15, 2007

Start Time	End Time	SEL	Leq	Lmax	Lmin	L1	L10	L50	L90	L99	Event Description
10:20:44	10:35:44	81.3	52.0	61.7	45.1	56.6	54.1	51.6	48.6	46.6	Traffic Audible (Kaahumanu)
13:03:00	13:18:00	82.5	53.1	70.6	45.2	62.1	55.1	51.1	48.1	46.6	13:19 - Motorcycle
14:17:40	14:32:40	85.7	56.2	73.4	47.5	61.6	58.6	55.6	51.6	49.1	
17:24:12	19:08:20	87.8	52.3	78.5	43.0	58.5	54.4	50.9	47.5	45.0	
21:20:00	21:35:00	78.6	49.2	61.2	39.2	56.1	52.6	47.6	43.1	40.6	
23:45:10	00:00:10	72.9	43.4	58.3	35.3	53.1	46.6	40.1	37.1	36.1	23:51 - Jet T/O
04:16:34	06:19:18		46.2	63.0	34.6	58.1	55.1	52.1	49.1	47.1	
07:15:17	07:30:17	82.1	52.7	65.8	45.1	58.1	55.1	52.1	49.1	47.1	

Notes:

a. Leq = Average A-Weighted Sound Level (in dBA)
b. Lmax = Maximum A-Weighted Sound Level (in dBA)
c. Lmin = Minimum A-Weighted Sound Level (in dBA)
d. SEL = A-Weighted Sound Exposure Level (in dBA)
e. L10 = A-Weighted Sound Level (in dBA) which was exceeded 10 percent of the time.
f. Lxx = A-Weighted Sound Level (in dBA) which was exceeded xx percent of the time.

TABLE 5. MEASURED BACKGROUND NOISE LEVELS AT LOCATION "S1"

LOCATION "S1"
DATE: November 14-15, 2007

Start Time	End Time	SEL	Leq	Lmax	Lmin	L1	L10	L50	L90	L99	Event Description
11:52:00	12:07:00	81.7	52.3	67.9	46.1	60.1	54.6	51.1	48.6	47.6	Pavement Pressure Washer Across Maui Lani Pkwy
17:35:00	17:50:00	83.8	53.6	67.3	47.5	62.1	56.1	51.6	49.6	48.6	
22:42:56	22:57:56	77.4	48.1	71.1	38.5	57.6	49.1	43.1	40.6	39.6	
01:07:12	01:22:12	70.3	40.9	56.0	35.7	49.6	42.1	39.1	37.6	36.6	
05:21:00	05:36:00	80.1	50.6	66.1	39.1	60.6	54.1	47.1	43.1	40.6	05:30 Back-up Alarm, Refuse Truck @ Kaiser Permanente
08:38:05	08:53:05	82.2	52.7	66.8	45.5	62.1	55.6	50.1	47.6	46.1	

Notes:

a. Leq = Average A-Weighted Sound Level (in dBA)
b. Lmax = Maximum A-Weighted Sound Level (in dBA)
c. Lmin = Minimum A-Weighted Sound Level (in dBA)
d. SEL = A-Weighted Sound Exposure Level (in dBA)
e. L10 = A-Weighted Sound Level (in dBA) which was exceeded 10 percent of the time.
f. Lxx = A-Weighted Sound Level (in dBA) which was exceeded xx percent of the time.

TABLE 6. MEASURED BACKGROUND NOISE LEVELS AT LOCATION "S2"

LOCATION "S2"
DATE: November 14-15, 2007

Start Time	End Time	SEL	Leq	Lmax	Lmin	L1	L10	L50	L90	L99	Event Description
11:19:14	11:34:14	84.3	54.9	68.8	47.9	63.6	56.6	53.6	51.1	49.1	
12:10:29	12:25:29	85.3	55.8	75.4	46.0	67.1	56.6	53.6	50.6	48.6	Kaahumanu Traffic
17:17:55	17:32:55	84.5	55.0	69.1	48.4	60.6	57.1	54.1	51.6	50.6	
22:22:35	22:37:35	77.9	48.4	59.2	39.5	54.1	51.1	47.6	43.1	40.6	
00:46:43	01:01:43	71.4	41.9	52.8	37.8	49.6	44.1	40.6	39.1	38.6	
05:02:43	05:17:43	77.9	48.9	65.4	40.1	56.6	52.1	47.1	42.6	41.1	
08:17:58	08:32:58	84.7	55.3	67.5	47.6	60.6	57.1	54.1	51.6	49.1	08:32 Bus & Motorcycle on Kaahumanu

Notes:

a. Leq = Average A-Weighted Sound Level (in dBA)
b. Lmax = Maximum A-Weighted Sound Level (in dBA)
c. Lmin = Minimum A-Weighted Sound Level (in dBA)
d. SEL = A-Weighted Sound Exposure Level (in dBA)
e. L10 = A-Weighted Sound Level (in dBA) which was exceeded 10 percent of the time.
f. Lxx = A-Weighted Sound Level (in dBA) which was exceeded xx percent of the time.

TABLE 7. MEASURED BACKGROUND NOISE LEVELS AT LOCATION "S3"

LOCATION "S3"
DATE: November 14-15, 2007

Start Time	End Time	SEL	Leq	Lmax	Lmin	L1	L10	L50	L90	L99	Event Description
10:59:33	11:14:33	82.2	52.8	62.2	47.0	57.1	55.1	52.1	50.1	48.6	
12:27:34	12:42:34	83.3	53.9	70.6	46.2	60.6	56.1	53.1	50.1	47.6	
16:58:30	17:13:30	85.1	55.6	73.1	48.1	62.6	57.6	54.6	52.1	50.1	17:02 - Jet A/C Noise
21:59:50	22:14:50	80.3	50.8	63.2	40.4	58.1	54.1	49.1	45.6	42.1	22:01 - Jet T/O, 22:11 - Jet T/O
00:25:42	00:40:42	73.6	44.2	58.6	37.7	52.6	47.6	41.6	39.6	38.6	
04:43:25	04:58:25	76.6	47.2	63.5	37.4	56.6	50.1	43.6	40.1	38.6	04:52 - Heavy Truck Backing
											04:57-Noisy Car
07:58:14	08:13:14	83.6	54.1	65.7	46.8	59.1	56.6	53.6	50.1	48.6	

Notes:

a. Leq = Average A-Weighted Sound Level (in dBA)
b. Lmax = Maximum A-Weighted Sound Level (in dBA)
c. Lmin = Minimum A-Weighted Sound Level (in dBA)
d. SEL = A-Weighted Sound Exposure Level (in dBA)
e. L10 = A-Weighted Sound Level (in dBA) which was exceeded 10 percent of the time.
f. Lxx = A-Weighted Sound Level (in dBA) which was exceeded xx percent of the time.

TABLE 8. MEASURED BACKGROUND NOISE LEVELS AT LOCATION "S4"

LOCATION "S4"
DATE: November 14-15, 2007

Start Time	End Time	SEL	Leq	Lmax	Lmin	L1	L10	L50	L90	L99	Event Description
10:38:00	10:53:00	81.8	52.3	69.2	44.8	57.6	54.6	51.6	48.6	46.1	Traffic Noise 10-15 MPH
12:45:22	13:00:19	83.4	54.0	68.6	46.8	60.6	56.1	53.1	50.1	48.6	13:01 Helo Overhead
16:40:19	16:55:19	83.8	54.3	63.2	47.8	58.6	56.1	54.1	51.1	49.6	
21:40:09	21:55:09	79.2	49.8	64.7	41.8	58.6	52.6	47.6	44.1	42.6	21:42-Jet T/O, 21:45-Jet T/O
											21:48 - Weak Siren
00:05:58	00:20:58	74.3	44.9	69.3	35.8	54.1	46.6	41.1	38.1	36.6	00:12:12 - Squeaking Tires
04:23:00	04:38:00	73.0	43.6	55.6	36.1	50.6	46.1	42.1	39.1	37.6	
07:34:56	07:49:56	82.6	53.3	64.0	47.7	58.1	55.6	52.6	50.1	48.6	

Notes:

a. Leq = Average A-Weighted Sound Level (in dBA)
b. Lmax = Maximum A-Weighted Sound Level (in dBA)
c. Lmin = Minimum A-Weighted Sound Level (in dBA)
d. SEL = A-Weighted Sound Exposure Level (in dBA)
e. L10 = A-Weighted Sound Level (in dBA) which was exceeded 10 percent of the time.
f. Lxx = A-Weighted Sound Level (in dBA) which was exceeded xx percent of the time.

TABLE 9
SUMMARY OF EQUIPMENT NOISE LEVELS

VEHICLE OR NOISE SOURCE	SOUND LEVEL AT 50 FEET
Back-Up Alarm of Tractor Truck	87 dBA
Air Brake of Tractor Truck	93 dBA
Tractor Truck Moving in Loading Area	81 dBA
Bang During Hitching to Container	86 dBA
Noisy Container Jack	89 dBA
Propane Fork Lift	76 dBA
36 Volt Electric Fork Lift	74 dBA
Banging During Unloading Container	60-82 dBA

APPENDIX N.

Letter Dated June 24, 2009 to Baldwin High School from Munekiyo & Hiraga, Inc.

MUNEKIYO & HIRAGA, INC.

MICHAEL T. MUNEKIYO
GWEN OHASHI HIRAGA
MITSURU "MICH" HIRANO
KARLYNN FUKUDA

MARK ALEXANDER ROY

June 24, 2009

Ms. Natalie Gonsalves
Principal
H.P. Baldwin High School
1650 Ka`ahumanu Avenue
Wailuku, Hawai`i 96793

SUBJECT: Meeting of June 19, 2009 Regarding Traffic Comments

Dear Ms. Gonsalves:

We appreciated the opportunity of meeting with you, Ms. Jo Ann Shibuya and Mr. Ferdinand Cajigal on June 19th to discuss concerns and comments regarding traffic circulation as it affects Baldwin High School (BHS). Attached for your review and comment is our memorandum which summarizes key discussion points from the meeting.

To recap, we understand the following to be the important traffic related issues affecting the school.

1. Students have a tendency to disregard traffic signals and cross Ka`ahumanu Avenue and Maui Lani Parkway outside of marked crosswalks and against traffic signal directions.

2. West-bound vehicles on Ka`ahumanu Avenue utilize the BHS Entry Drive intersection to circumvent the red light cycle at the Ka`ahumanu Avenue-Maui Lani Parkway-BHS Entry Drive intersection.

3. The speed limit along the segment of Ka`ahumanu Avenue fronting BHS is 45 miles per hour. Consideration should be given to reducing the speed limit in this vicinity.

4. The before-school and after-school traffic at the BHS Entry Drive intersection is heavily congested.

While the vehicle circulation and pedestrian safety concerns are currently existing, you noted that the implementation of the proposed Maui Lani Shopping Center will increase

pedestrian traffic crossing Ka`ahumanu Avenue and will increase traffic volumes at the Ka`ahumanu Avenue-Maui Lani Parkway-BHS Entry Drive intersection.

Mr. Lloyd Sueda, representing HRT, Ltd., the owner of the property, acknowledged your concerns and expressed the need to ensure that solutions advanced for the intersection must be fair and reasonable to all parties. Notwithstanding, HRT, Ltd. has agreed to fund a traffic study to analyze current operations at the BHS Entry Drive intersection and to identify recommendations which may aid in relieving congestion and safety concerns for vehicles and pedestrians entering and exiting the school during morning and after-school periods.

Moreover, HRT, Ltd. is willing to work with the BHS administration and State DOT to discuss the recommendations and identify reasonable action steps to improve conditions at the Entry Drive intersection.

With this in mind, we would appreciate receiving your written confirmation that the foregoing traffic study approach is acceptable. Upon receipt of your written confirmation, HRT, Ltd. will issue a notice to proceed to Parsons Brinckerhoff, the project's traffic engineer, to initiate the traffic study.

Thank you again for taking the time to meet with us to discuss your concerns regarding BHS traffic conditions.

Very truly yours,

Michael Munekiyo, AICP
Principal

MM:lh
Attachment
Cc: Lloyd Sueda, Representing HRT, Ltd. (w/attachment)
Jo Ann Shibuya, Baldwin High School (w/attachment)
Ferdinand Cajigal, Department of Transportation (w/attachment)
Phillip Matsunaga, Parsons Brinckerhoff (w/attachment)
Darren Unemori, Warren S. Unemori Engineering, Inc. (w/attachment)
Jeff Benner, Benner Stange Associates Architect, Inc. (w/attachment)
F:\Sueda\MauiLaniCtr\NGonsalvesltr.doc

MUNEKIYO HIRAGA, INC.

MICHAEL T. MUNEKIYO
GWEN OHASHI HIRAGA
MITSURU "MICH" HIRANO
KARLYNN KAWAHARA

MARK ALEXANDER ROY

June 24, 2009

MEETING MEMORANDUM

Date: June 19, 2009

Participants: Natalie Gonsalves, *Baldwin High School (BHS)*
Jo Ann Shibuya, *BHS*
Ferdinand Cajigal, *State Department of Transportation*
Lloyd Sueda, *Representing HRT, Ltd.*
Darren Unemori, *Warren S. Unemori Engineering, Inc.*
Phillip Matsunaga, *Parsons Brinckerhoff*
Michael Munekiyo, *Munekiyo & Hiraga, Inc.*

From: Michael Munekiyo, Principal

Subject: Maui Lani Shopping Center

The purpose of this meeting was to discuss the Maui Lani Shopping Center's improvements proposed for the Ka`ahumanu Avenue-Maui Lani Parkway-BHS Entry Drive intersection, and to receive comments from BHS representatives regarding traffic issues affecting the school. Key meeting discussion items are summarized below.

1. An overview of the proposed Maui Lani Shopping Center project was provided by L. Sueda. D. Unemori followed with an explanation of shopping center-related improvements to the Ka`ahumanu Avenue-Maui Lani Parkway-BHS Entry Drive intersection. A copy of the conceptual plan for the proposed improvements was provided to N. Gonsalves.

2. N. Gonsalves explained that the school has the following concerns regarding the intersection operations.

    a. There is a jaywalking problem, with students crossing Ka`ahumanu Avenue and Maui Lani Parkway outside of marked crosswalks and against traffic signal directions. The proposed shopping center will attract a greater number of students crossing Ka`ahumanu Avenue.

    b. West-bound vehicles on Ka`ahumanu Avenue enter BHS property and use the entry drive to circumvent the red light cycle at the Ka`ahumanu Avenue-Maui Lani Parkway-BHS Entry Drive intersection.

c. The speed limit on Ka`ahumanu Avenue fronting the school is 45 miles per hour. This speed limit is not compatible with the school use.

d. The Ka`ahumanu Avenue- Maui Lani Parkway-BHS Entry Drive intersection is heavily congested before school and when school ends.

3. With regard to the jaywalking concern, meeting participants agreed that students' roadway crossing behavior is prevalent at all high schools. Solutions for managing this problem may be difficult without enforcement presence.

4. With respect to west-bound traffic circumventing the red light signal, F. Cajigal felt that this concern will be mitigated to some extent with the addition of a second left-turn lane on Ka`ahumanu Avenue (to Maui Lani Parkway). He noted that when the existing single left-turn lane is backed up, drivers have a greater tendency to use the BHS entry drive intersection to bypass the congestion.

5. F. Cajigal stated that the 45 mph speed limit may be reduced, but implementation of such a reduction involves analysis and modification to signal timing along Ka`ahumanu Avenue (i.e., this is a system modification as opposed to a local speed limit adjustment).

6. In discussing traffic congestion at the BHS Entry Drive intersection, J. Shibuya suggested that a separate right-turn exit be provided closer to the armory property. A separate exit would relieve congestion at the BHS Entry Drive intersection.

7. N. Gonsalves and J. Shibuya explained that the County of Maui is prepared to execute a memorandum of agreement which will enable the closure of Halia Nakoa Street during school hours. Eliminating traffic on Halia Nakoa Street during school hours will improve pedestrian safety for students accessing the BHS gymnasium facility.

8. J. Shibuya asked about the viability of utilizing a diagonal crosswalk on Ka`ahumanu Avenue to facilitate pedestrian crossing. F. Cajigal explained that diagonal crosswalks adversely affects signal timing and vehicle progression, and are therefore not used on Maui.

9. N. Gonsalves noted that once the shopping center is completed, some students may be attracted to the center during school hours. She explained that cooperation between the shopping center's security department and the BHS security personnel will be needed to ensure that students are on school premises during school hours. L. Sueda stated that details of this type of cooperation will be worked out with the school.

10. J. Shibuya reported that BHS has submitted a request to DOE to conduct a traffic study to address congestion at the BHS Entry Drive intersection. However, given

the current state of the economy and budget limitations, it is unlikely that such a study will occur in the near term. Both J. Shibuya and N. Gonsalves reiterated the need to address the congestion problem.

11. L. Sueda indicated that HRT, Ltd. may be able to fund the BHS Entry Drive intersection traffic study. Such a study would address existing conditions and operational constraints, and identify solutions which may be implemented to better manage traffic flow at the Entry Drive intersection.

12. L. Sueda stated that if fair and reasonable solutions are identified which will help to address the problem, HRT, Ltd. may be able to work with BHS and DOT to implement the needed action steps. The benefit of a more efficiently operating entry drive will not only relieve congestion, but also improve traffic conditions affecting pedestrian safety.

13. L. Sueda will work with HRT, Ltd. and P. Matsunaga to define requirements for a traffic study proposal.

Meeting participants subsequently visited the intersection site to further discuss points raised in the meeting. The meeting was adjourned following the site visit.

Michael Munekiyo, AICP
Principal

MM:lh
cc: Natalie Gonsalves and Jo Ann Shibuya, Baldwin High School
Ferdinand Cajigal, State Department of Transportation
Lloyd Sueda, Representing HRT, Ltd.
Darren Unemori, Warren S. Unemori Engineering, Inc.
Phillip Matsunaga, Parsons Brinckerhoff
F:\DATA\Sueda\MauiLaniCtr\061909BHSmemomtg.wpd

APPENDIX O.

Letter Dated July 17, 2009 to Munekiyo & Hiraga, Inc. from Baldwin High School

JUL 2 0 2009

LINDA LINGLE
GOVERNOR

PATRICIA HAMAMOTO
SUPERINTENDENT

STATE OF HAWAI'I
DEPARTMENT OF EDUCATION
H.P. BALDWIN HIGH SCHOOL
1650 KAAHUMANU AVENUE
WAILUKU, HAWAI'I 96793

July 17, 2009

Michael Munekiyo
Munekiyo & Hiraga, Inc.
305 High Street, Suite 104
Wailuku, HI 96793

Dear Mr. Munekiyo:

Mahalo for meeting with the school and inquiring of the school's concern on the traffic impact of the proposed Maui Lani Shopping Center development. We appreciated the sincere support extended to the school during this meeting by the representative of the Maui Lani Shopping Center and Mr. Ferdinand Cajigal, Department of Transportation.

The school accepts the proposed approach for a traffic study, but the study should do more than analyze and identify recommendations for the current traffic situation at the Maui Lani Parkway-Kaahumanu Avenue-H.P. Baldwin High School (BHS) intersection. The study must also analyze and identify recommendations to mitigate the impact of Maui Lani developments on the intersection, including impacts to BHS, and the school's traffic flow, both vehicles and pedestrians. It is hoped that the traffic study also includes recommendations to alleviate current traffic congestion during school peak hours.

The proposed plan presented by D. Unemori highlighted significant improvements on Kaahumanu Avenue and Maui Lani Parkway, but excluded the traffic pattern of BHS and the public access road on school property aka Hali'a Nakoa by the County of Maui. Maui Lani Parkway north-south bound traffic lanes disjointedly connect to this intersection of State and school properties and county public access road.

The FEA on the Maui Lani Land Use Plan dated February 2005 indicated "finding of no significant impact" as the Papa/Kamehameha intersection that experienced the greatest delay and traffic volumes would be alleviated when Papa Avenue connection to Kuihelani Highway is opened to traffic. The second most impacted intersection was Maui Lani Parkway/Kaahumanu, which the FEA cited as operating "acceptably for urban peak hour conditions". However, a projected level of service analysis "with the project" was absent. The issue was not referenced in the summary of analysis and no roadway improvements were recommended. Further development at Maui Lani, Sandhills and Maui Lani Center will increase both vehicle and pedestrian traffic from Maui Lani Parkway to BHS campus during school peak hours and to the public access road onto the War Memorial Complex and/or Kanaloa Avenue.

We look forward to continuing our discussion of traffic mitigations at the completion of the traffic study including, but not limited to,

- acknowledging the school zone on Kaahumanu Avenue by reducing the speed limit,
- developing a crosswalk pattern that discourages jaywalking,
- preventing public thru-access on BHS driveway,
- developing a traffic pattern that discourages vehicles to circumvent the red light cycle or no-U-turns at the intersection and
- developing a traffic pattern conducive to the traffic congestion during school peak hours.

If you have any questions, please call me at 984-5656, X231 or Joanne Shibuya, X226.

Mahalo for your support in ensuring the safety of our children commuting to and from our school campus, families visiting our campus and community in the surrounding areas.

Sincerely,

Natalie Gonsalves
Principal

cc: Ferdinand Cajigal
Phillip Matsunaga
Joanne Shibuya
Lloyd Sueda
Darren Unemori

APPENDIX P.

Traffic Evaluation Study for Baldwin High School prepared by PB Americas, Inc.

TRAFFIC EVALUATION

Baldwin High School

WAILUKU/KAHULUI, MAUI, HAWAII

February 2010

PB Americas, Inc.

Over a Century of Engineering Excellence

Traffic Evaluation

Baldwin High School

Wailuku/Kahului, Maui, Hawaii

February 2010

Prepared For:

Sueda & Associates, Inc. AIA
905 Makahiki Way
Honolulu, Hawaii 96826

Prepared By:
PB Americas, Inc.
American Savings Bank Tower - Suite 2400
1001 Bishop Street
Honolulu, HI 96813
(808) 531-7094

PBQD Reference Number:

16419C

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I. INTRODUCTION

HRT, Ltd. is proposing to develop a retail shopping center in Wailuku, Maui, Hawaii. The proposed development site is located adjacent to and south of Kaahumanu Avenue between Kainani Street and Maui Lani Parkway. The development will be approximately 98,500 SF and will consist of retail commercial. Figure 1 illustrates the project location. Figure 2 shows the Maui Lani Commercial site plan.

The Maui Lani Commercial Development has committed to the following short-range improvements in the vicinity of the Kaahumanu Avenue/Maui Lani Parkway intersection:

- Monitor the Kaiser/Maui Lani Commercial Development access intersection and install a traffic signal when warranted.

- The Kainani/Kaahumanu intersection should be reconfigured to formalize the exclusive right-turn on the Kainani approach. This should include a pedestrian island on the southeast corner which would channelize the northbound Kainani right turn while also preventing vehicles from making through movements from the eastbound Kaahumanu Avenue right turn lane.

- Construct an auxiliary lane between Kainani Street and Maui Lani Parkway.

- Construct a right-in only shopping center access on Kaahumanu Avenue. Provide a deceleration lane. Configure the interior of the project site to provide sufficient storage space to prevent vehicles from spilling onto Kaahumanu Avenue.

- Investigate the feasibility of a physical barrier on the Kaahumanu Avenue median between Kainani Street and Maui Lani Parkway to prevent jaywalking.

Furthermore, Maui Lani Commercial Development has committed to the following long-range improvements:

- Construct a second left turn lane on the westbound approach at the Kaahumanu Avenue and Maui Lani Parkway intersection. Modify the southbound departure to two lanes to accommodate the double left turning movement.

- Provide Right of Way on the western edge of Maui Lani Parkway south of the Kaahumanu Avenue/Maui Lani Parkway intersection for the eventual widening of the Maui Lani approach to accommodate double northbound left turn lanes.

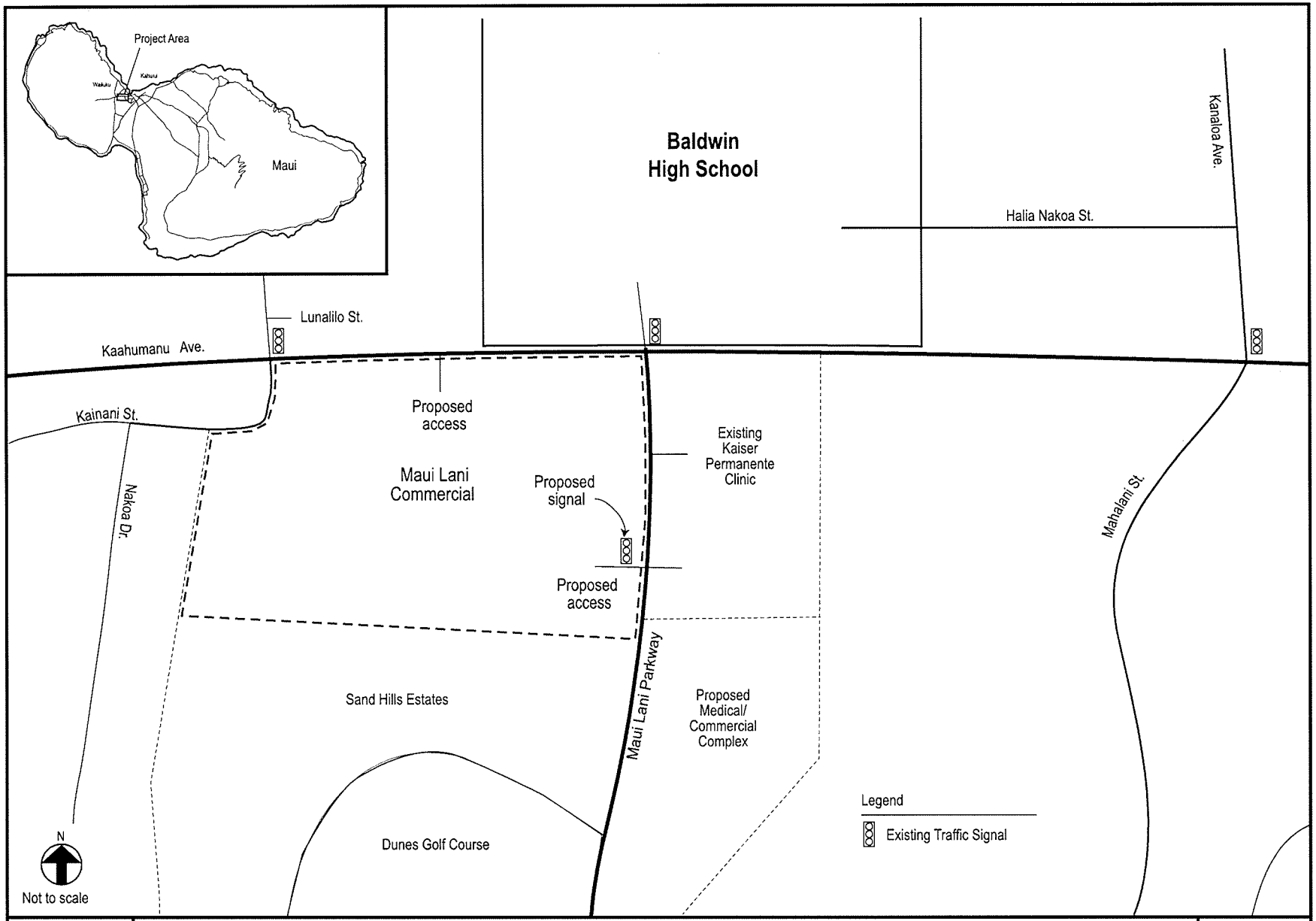
A Traffic Impact Analysis Report dated August 2009 has been submitted by PB and is currently being reviewed by HDOT.

Baldwin High School is located on the north side of Kaahumanu Avenue, directly opposite Maui Lani Parkway. Baldwin High School serves the Baldwin complex, which includes Wailuku and parts of Kahului, stretching north to Waiehu and Waihee and as far south as Maalaea. 1,800 students are currently enrolled at Baldwin. The school location is shown in Figure 3.

After meeting with the school in September 2008 and in June 2009, Baldwin High School has raised some concerns, including the following:

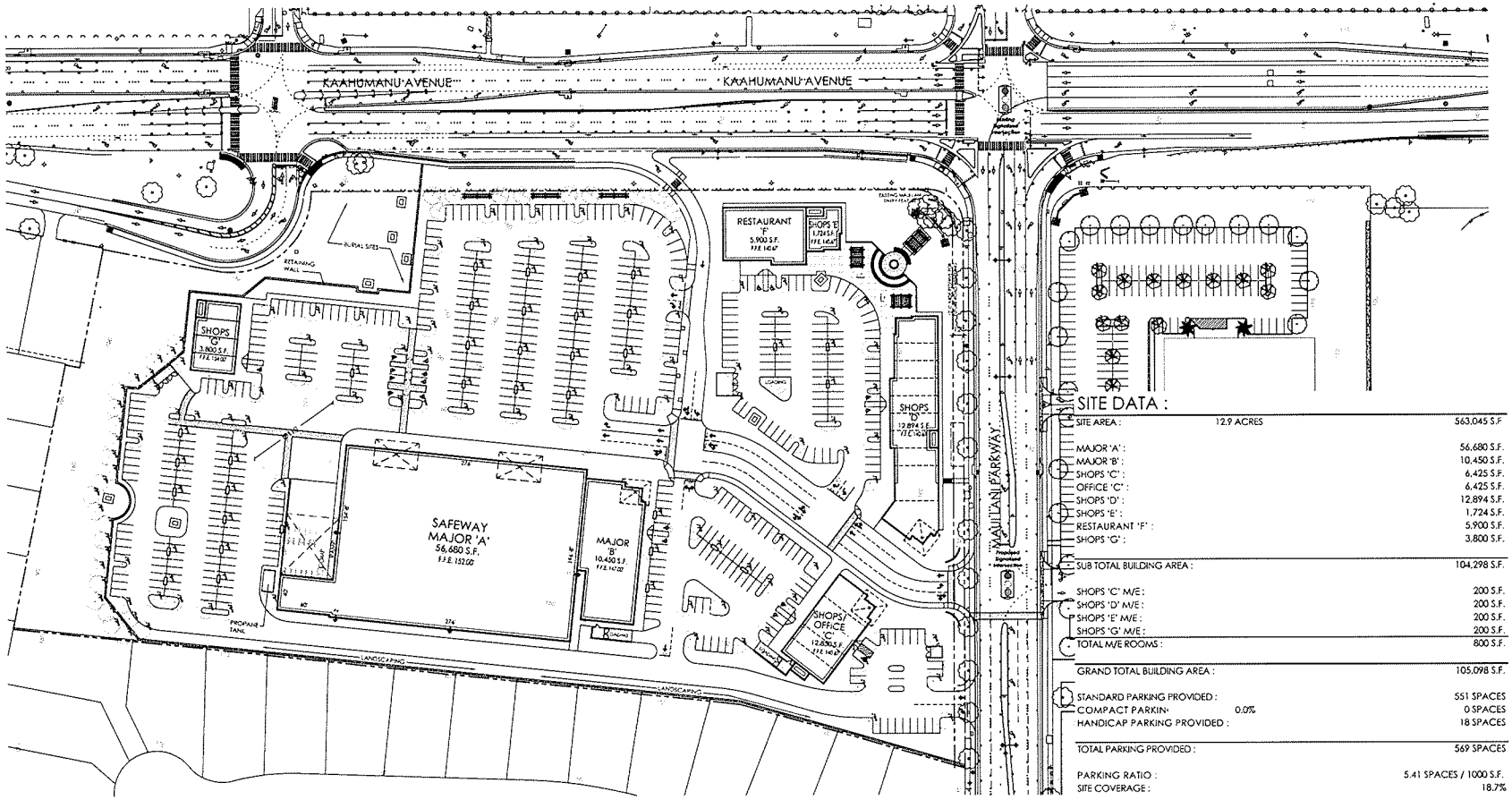
- Traffic operations at the intersection of Kaahumanu Avenue and Maui Lani Parkway.
- Pedestrian flow to and from the commercial site. In particular, increased pedestrian traffic and the potential for jaywalking.

The purpose of this report is to document the existing circulation conditions within Baldwin High School and develop potential mitigation for existing issues as well as to devise potential improvements. This report is part of continuing efforts to work closely with the school and community and manage any impact on the adjacent roadway network and neighboring landowners. The intent of this report is to provide conclusions and recommendations to help mitigate existing issues as well as potential future issues.



Project Location Map

Figure 1



SITE DATA :

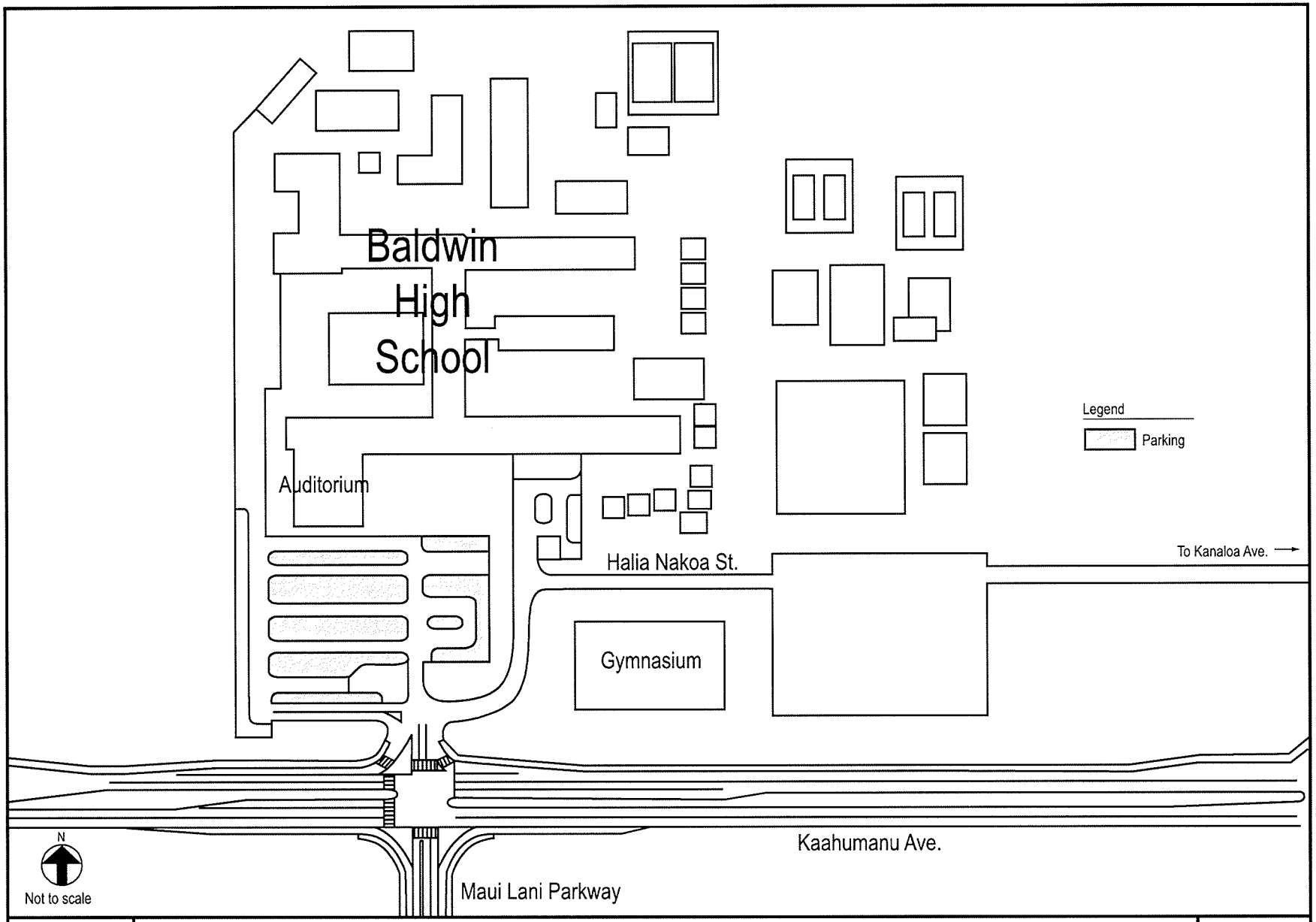
SITE AREA :	12.9 ACRES	563,045 S.F.
MAJOR 'A' :		56,680 S.F.
MAJOR 'B' :		10,450 S.F.
SHOPS 'C' :		6,425 S.F.
OFFICE 'C' :		6,425 S.F.
SHOPS 'D' :		12,894 S.F.
SHOPS 'E' :		1,724 S.F.
RESTAURANT 'F' :		5,900 S.F.
SHOPS 'G' :		3,800 S.F.
SUB TOTAL BUILDING AREA :		104,298 S.F.
SHOPS 'C' M/E :		200 S.F.
SHOPS 'D' M/E :		200 S.F.
SHOPS 'E' M/E :		200 S.F.
SHOPS 'G' M/E :		200 S.F.
TOTAL M/E ROOMS :		800 S.F.
GRAND TOTAL BUILDING AREA :		105,098 S.F.
STANDARD PARKING PROVIDED :		551 SPACES
COMPACT PARKIN	0.0%	0 SPACES
HANDICAP PARKING PROVIDED :		18 SPACES
TOTAL PARKING PROVIDED :		569 SPACES
PARKING RATIO :		5.41 SPACES / 1000 S.F.
SITE COVERAGE :		18.7%

N

Not to scale

Proposed Site Plan

Figure 2



Baldwin High School Site

Figure 3

II. EXISTING CONDITIONS

A data collection effort was conducted on November 17, 2009. The primary focus of the data collection was to observe the internal Baldwin High School vehicular operations as well as the student pick up and drop off patterns.

A. Circulation

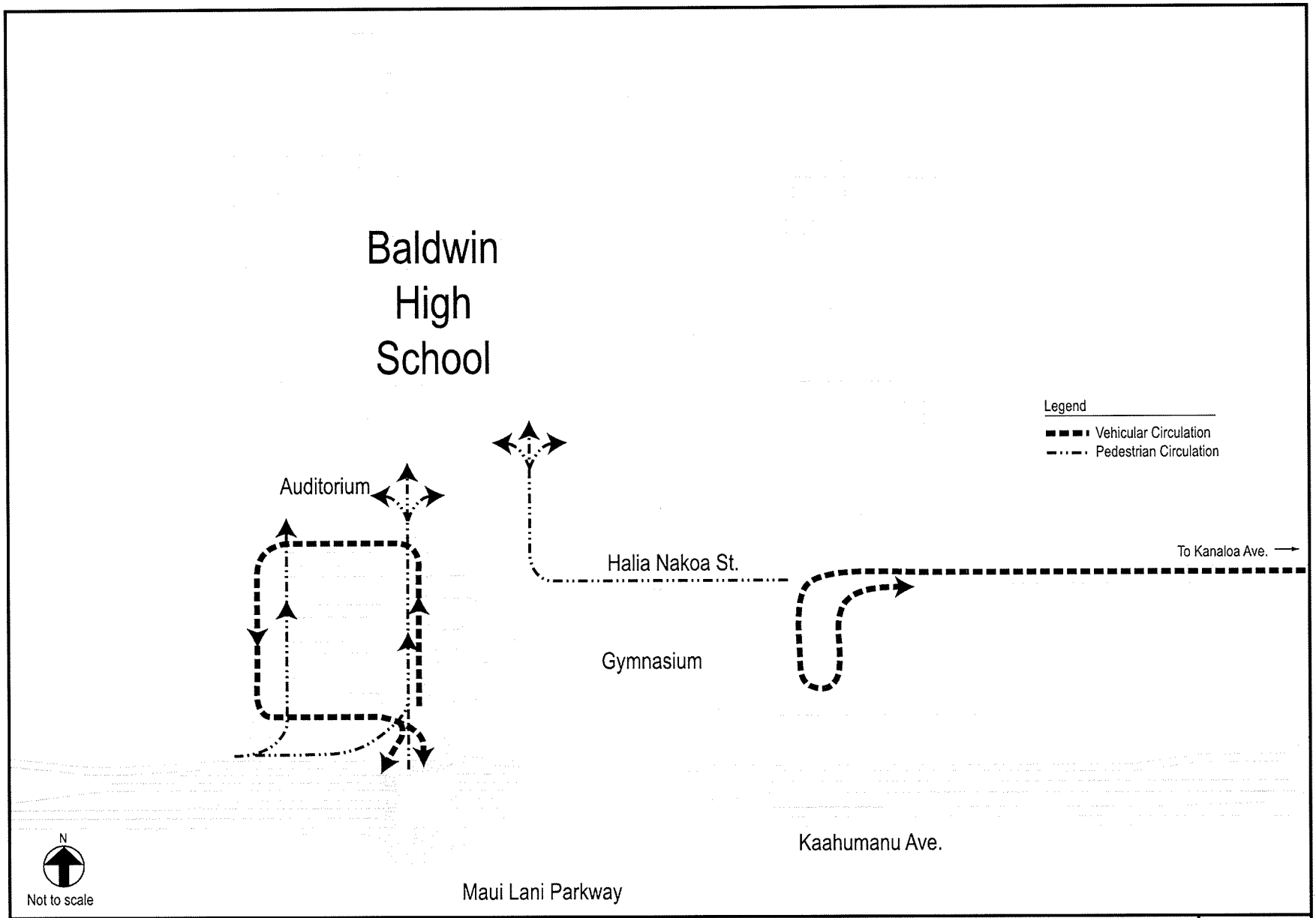
The existing vehicular and pedestrian traffic circulation patterns are shown in Figure 4.

1. Vehicular Circulation

As of October 2009, the circulation pattern is one-way, counterclockwise. Two lanes are provided and are separated by traffic cones. The outer lane, nearest to the school buildings, is used by buses and automobiles while the inner lane is used by automobiles only. Volunteers provide assistance, directing traffic and helping students navigate through the traffic. Previously, the inner road in the vicinity of Halia Nakoa allowed for two-way traffic. This was changed recently to reduce congestion on school grounds. The two lanes continue counterclockwise around the student parking area. The left lane feeds into the southbound left and through lanes at the intersection of Kaahumanu Avenue and Maui Lani Parkway. The right lane feeds directly into the southbound right turn lane.

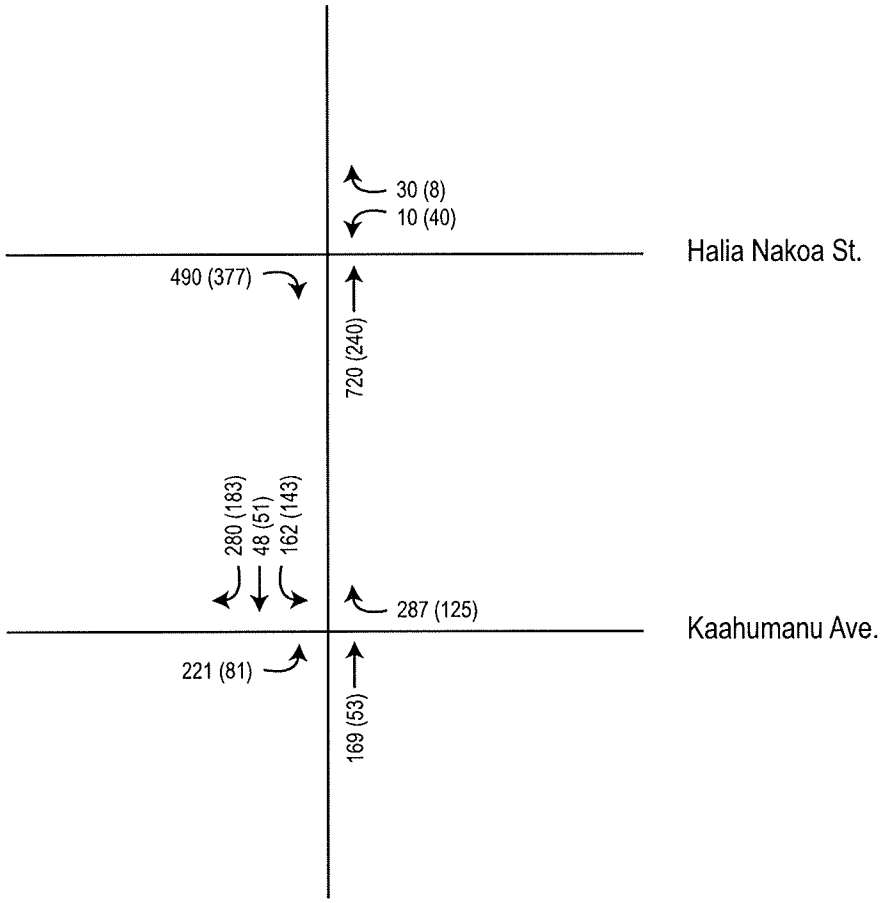
The existing hourly traffic volumes are shown in Figure 5. Halia Nakoa Street is a county street and is open to public traffic. As of October 2009, a portion of Halia Nakoa within Baldwin property is closed at approximately 7:30 AM. The gate at the west end at the main Baldwin entrance is left half closed, allowing vehicular traffic from the main Baldwin entrance to access the staff parking lots adjacent to the school. The east gate in the vicinity of the gym is shut entirely, preventing any access from the Kanaloa Avenue side.

The internal intersection was evaluated using the methodologies for unsignalized and signalized intersections outlined in the *2000 Highway Capacity Manual (HCM)*. Operating conditions at an intersection can be expressed as a qualitative index known as Level of Service (LOS) with letter designations ranging from A through F. LOS A represents operating conditions resulting in low vehicle delay while LOS F represents operating conditions with very long delays. Level of Service criteria is described in Appendix B. Synchro analysis worksheets are included in Appendix C. The existing LOS is shown in Table 1.



Existing Circulation Pattern

Figure 4



N

Not to scale

Legend

XXX (XXX) - AM (Afternoon) Hourly Traffic Turning Movements

Existing Traffic Turning Movements

Figure 5

Table 1 Existing LOS

	AM		Afternoon	
	LOS	Delay	LOS	Delay
Internal Baldwin Intersection	**Unsignalized**			
Circulator Road EB right	A	9.5	A	9.2
Halia Nakoa WB left	D	30.0	C	15.1
Halia Nakoa WB right	B	11.1	A	9.1
Kaahumanu Ave/Maui Lani Pkwy	**D**	**35.8**	**C**	**28.4**
Kaahumanu Ave EB Left	E	72.5	E	69.1
Kaahumanu Ave EB Through	C	24.5	C	25.4
Kaahumanu Ave EB Right	A	0.0	A	0.0
Kaahumanu Ave WB Left	E	73.4	E	74.1
Kaahumanu Ave WB Through	C	30.7	B	15.6
Kaahumanu Ave WB Right	A	0.1	A	0.0
Maui Lani Pkwy NB Left	E	76.0	E	72.4
Maui Lani Pkwy NB Through	E	66.9	E	73.5
Maui Lani Pkwy NB Right	A	0.1	A	0.1
Baldwin SB Left	E	78.0	E	75.0
Baldwin SB Through	D	47.0	E	64.1
Baldwin SB Right	A	0.1	A	0.1

Delay is expressed in seconds per vehicle

As shown in Table 1, the existing operations internally appear to operate at an acceptable LOS. However, the LOS and delays do not take loading and unloading into consideration within the school. In addition, vehicles tend to enter the school in platoons resulting in short bursts of congestion. Table 1 also includes analysis results from an April 2008 data collection.

During the AM peak period, the Kaahumanu/Maui Lani intersection operates at LOS D. The east and westbound left turns operate at an acceptable LOS E, which is acceptable for a peak hour movement with a 150 second cycle length. Regarding the turn movements into the school, even though for the most part vehicles were not restricted from accessing the school due to congestion, queues were still observed. The eastbound Kaahumanu left turn was observed to queue out of its left turn storage lane and reached approximately 30 vehicles between 7:15 AM and 7:45 AM. At one point, this movement was restricted from entering the school for a period of several seconds. The northbound Maui Lani through movement was observed to reach a queue of approximately 20-25 vehicles around 7:30 AM. The westbound Kaahumanu right turn into Baldwin was

observed to reach 10-12 vehicles around 7:30 AM. The lane feeding into the southbound left and through was observed to reach a queue of approximately 12-15 vehicles.

The afternoon peak coincides with adjournment of school and is characterized by a sharp spike in traffic volumes. The intersection operates at LOS C, with heavy movements in and out of Baldwin. During the afternoon peak hour, queuing for movements attempting to enter the school was minimal. However, the queue for the main on-campus circulator road was observed to queue clockwise all the way back to the auditorium. This appears to be due to demand for the southbound left and through lanes.

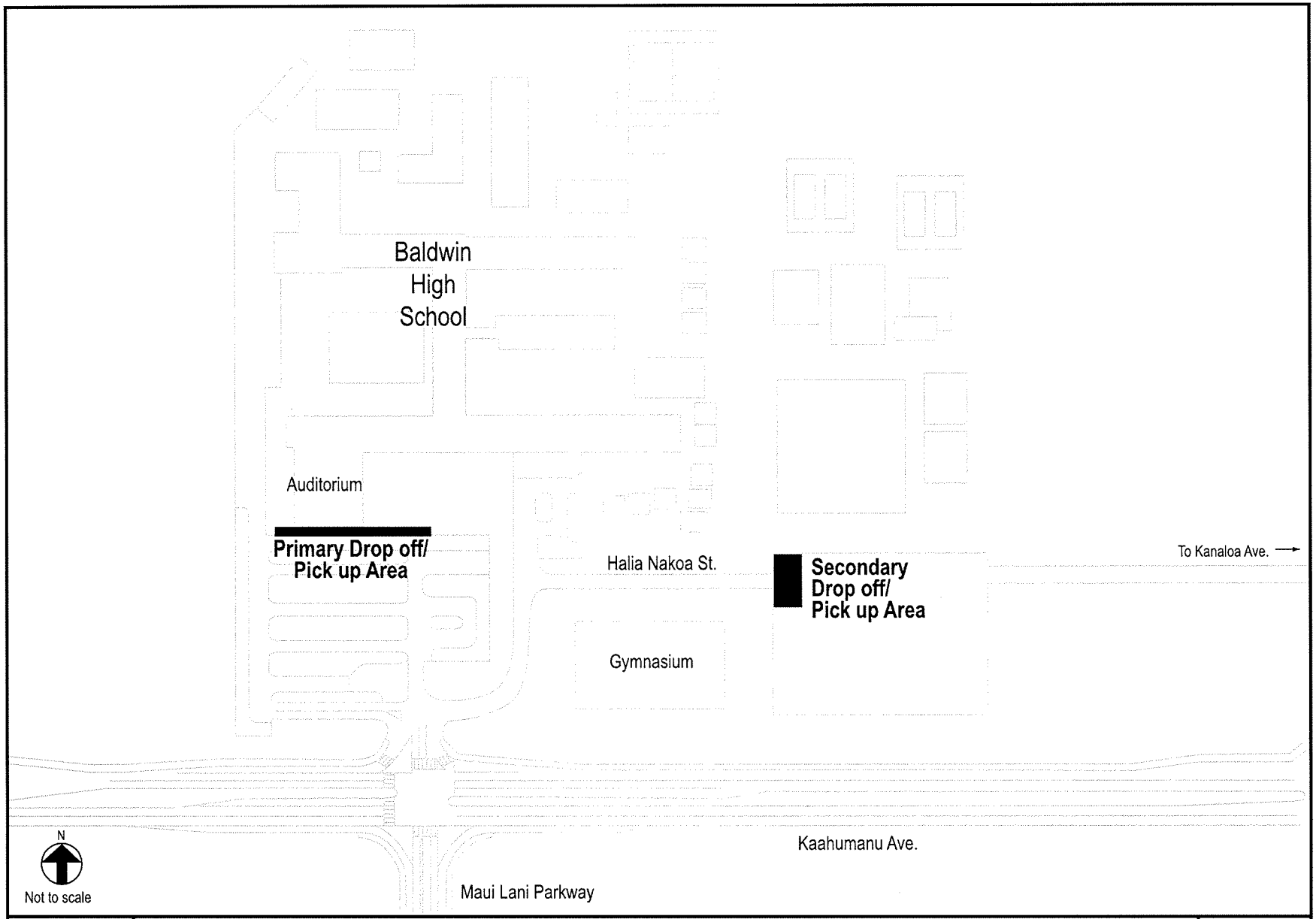
2. Pedestrian Circulation

There is currently a single crosswalk across Kaahumanu Avenue at the intersection of Kaahumanu Avenue and Maui Lani Parkway on the west Kaahumanu leg of the intersection. The crosswalk feeds into a pedestrian island on the northwest corner. From there, pedestrians may continue through the main Baldwin entrance toward the school with inbound traffic on their right (east) side. There is currently no formal walkway for students to use, so they head straight north adjacent to the traffic flow as shown in Figure 3. Students tend to use this path when alone or in small groups. A large group of approximately 25 students was observed to use this circulation route when the Maui Bus arrived at 7:35 AM. April 2008 data shows that approximately 65 students cross Kaahumanu Avenue to Baldwin High School during the AM peak hour and approximately 40 students cross in the opposite direction during the afternoon peak hour.

Students arriving from the secondary drop off area (discussed later) use the route as shown in Figure 3. There is no formal sidewalk here, so students use a 4'-wide walkway striped on the pavement. As discussed earlier, the east end of Halia Nakoa Street on Baldwin property is closed at approximately 7:30.

B. Drop Off/Pick Up

Baldwin High School provides two major locations for student drop off and pick up. The primary location is in front of the school's auditorium as shown in Figure 6. The secondary location is near the county and public parking lot just down the hill from the gym.



Existing Drop off/Pick up Areas

Figure 6

In addition to traffic turning movement data, drop off and pick up data was also obtained during the November 17 data collection. The hourly results are shown in Table 2. The AM peak hour was 7:00 AM to 8:00 AM. The afternoon peak hour was 2:00 PM to 3:00 PM.

Table 2 Dropoff/Pickup Data

	AM Peak		Afternoon Peak	
	Auditorium	Gym	Auditorium	Gym
Bus	7	2	3	0
Automobile	400	160	278	130

Hourly vehicular total shown

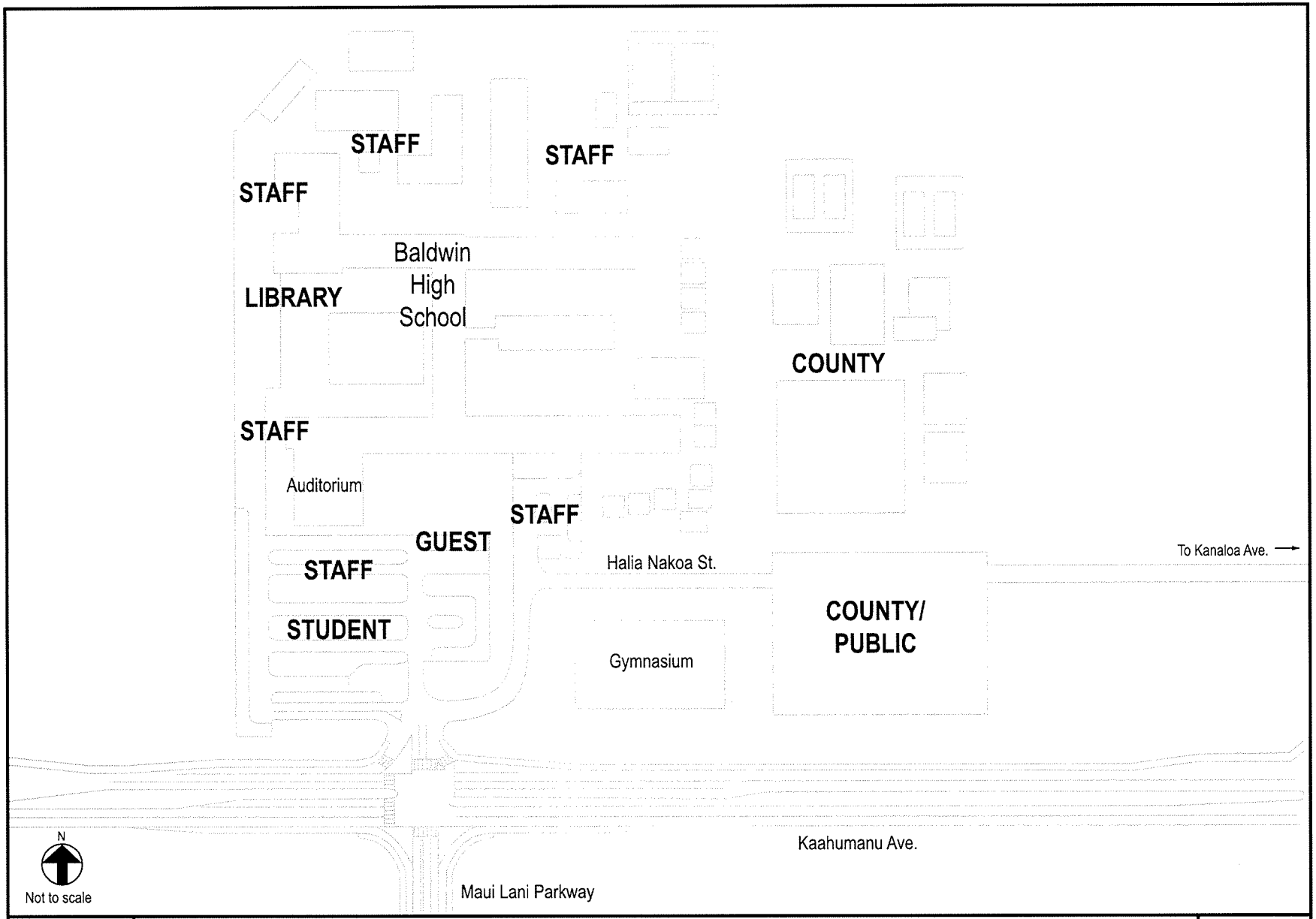
As shown in Table 2, the primary drop off/pick up area at the auditorium processes a little over twice as many vehicles as the secondary drop off/pick up during the periods of high AM and afternoon activity.

1. Auditorium Drop Off/Pick Up Area

The Baldwin Auditorium is the primary location of pick up and drop off. It processes 400 vehicles and 7 buses during the AM peak hour. The buses are unloaded adjacent to the auditorium while automobiles are typically unloaded at any point after the northbound left turn toward the auditorium. During the afternoon peak hour, this pick up area processes 278 automobiles and 3 buses.

2. Gym Drop Off/Pick Up Area

The gym area is the secondary drop off/pick up area. Drop off and pick up are processed in the public parking lot just down the hill from the gym and to the east of the Baldwin Gym is used. While this area is not as popular as the primary Baldwin student loading area, it does process a significant amount of students. During the AM peak hour, the drop off area processes 160 automobiles and 2 buses. During the afternoon peak hour, the pick up area processes 130 automobiles.



Existing Parking Areas

Figure 7

C. Parking

The Baldwin High School parking lots are divided up into student and faculty lots. The lots are shown in Figure 7. Student parking is limited to the main school parking lot. An aisle of parking is provided for faculty directly in front of the auditorium. Parking for guests is available directly in front of the administrative office. The remainder of the parking is restricted to staff.

The student parking lot was observed to be at 100% occupancy during the day. The public parking lot near the gym was observed to be at less that 50% occupancy.

III. SUMMARY AND RECOMMENDATIONS

A. Summary

Overall the circulation within the school is improved due to the implementation of one-way traffic and the closure of Halia Nakoa Street during school hours. One-way circulation within the main parking lot allows the drop off and pick up to occur much more smoothly. In general, while vehicles were observed to queue trying to enter the school during the AM peak hour, vehicles were not restricted from entering the school by internal queuing. During the PM peak hour, vehicles were observed to queue past the auditorium when trying to exit the school using the main access. The ratio of the auditorium and gym drop off/pick up area usage was approximately 2:1.

B. Recommendations

Based on the data and observations obtained from data collection effort, the following is recommended for consideration on the Baldwin High School campus and are shown in Figure 8:

1) Improve the safety of the pedestrian interface with the Maui Lani Commercial site:
    a) Make the fencing between Baldwin High School and Kaahumanu Avenue continuous. There is currently a gap in the fence near the southwest corner of the main parking lot. Closing the gap would discourage mid-block jaywalking. Another alternative is to plant a low-profile hedge on DOE property fronting Kaahumanu Avenue.
    b) Ensure that the pedestrian signal at the Kaahumanu/Maui Lani intersection is adequate for crossing.
2) Regarding pedestrian safety within Baldwin High School, consider the following:
    a) Relocate some student parking to the library area and shifting the row of faculty parking south to provide a second curb area for loading and unloading students.
    b) Redo the striping for the middle student parking aisle. Diagonal parking stalls are provided which were previously oriented such that eastbound vehicles would be able to park headfirst. The traffic flow has since been reversed to be one way in

the westbound direction. This requires vehicles to back into stalls rather than enter headfirst. Assuming that the one-way circulation is permanent, re-striping the parking lot would help to keep the parking aisles clear, particularly for student drivers.

3) Improve the internal congestion within the main Baldwin High School parking lot:

   a) Modify the signal timing at the Kaahumanu Avenue/Maui Lani Parkway intersection to provide more green time for the eastbound Kaahumanu Avenue left turn into Baldwin High School during the AM school peak hour.

   b) Construct a raised median at the Baldwin leg of the Kaahumanu/Maui Lani intersection to discourage motorists from using the main school entrance to bypass the traffic signal.

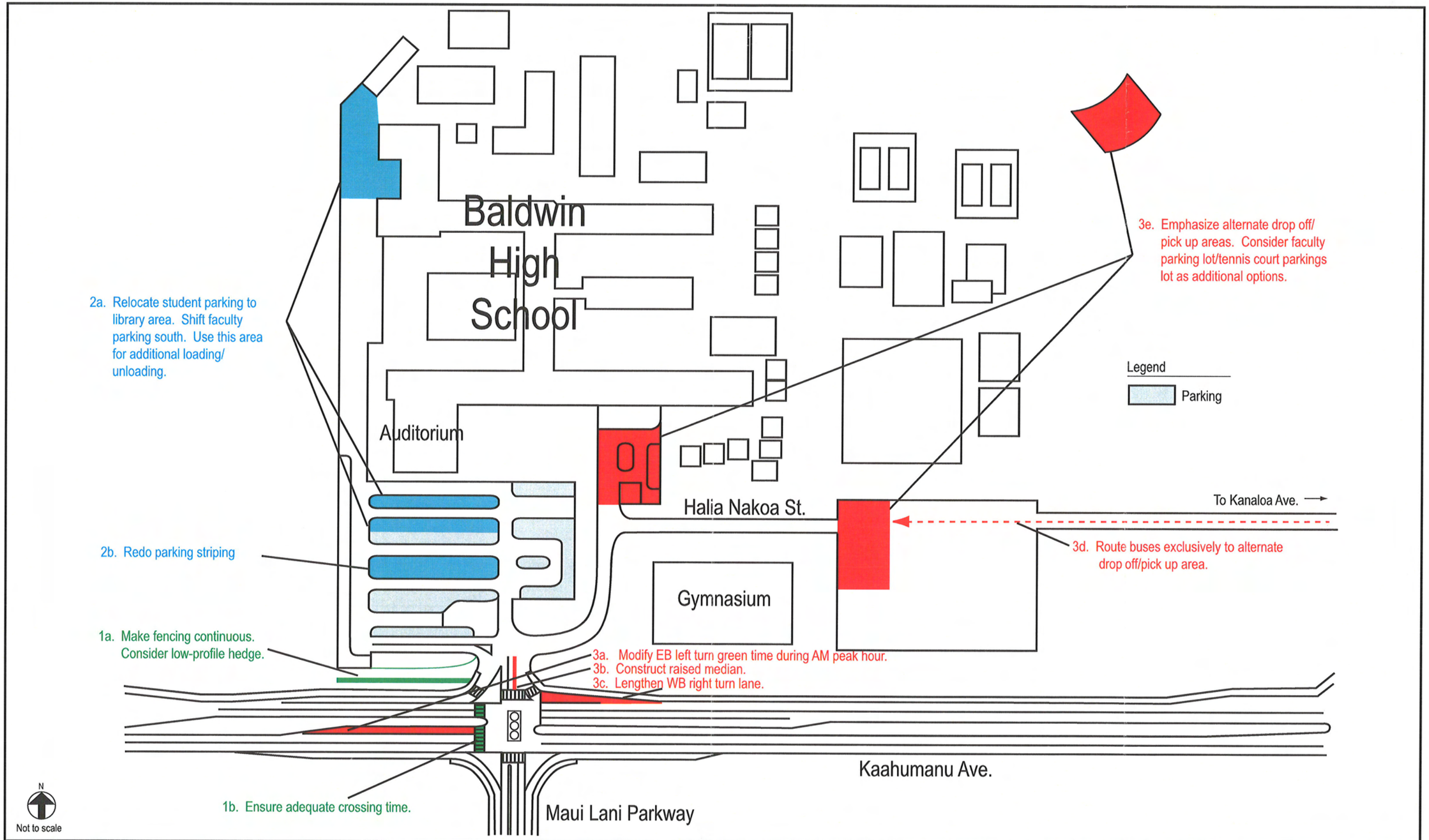
   c) Lengthen the westbound Kaahumanu right turn lane at the Kaahumanu Avenue/Maui Lani Parkway intersection to approximately 300' as shown in the site plan in Figure 2.

   d) Route school bus traffic exclusively to secondary drop off/pick up area via Kanaloa Avenue using the route shown in Figure 8.

   e) Emphasize and advertise secondary drop off/pick up areas as an alternative to main Baldwin entrance. Consider the following locations for alternate drop off/pick up areas:

      i) Use the faculty parking area located off Halia Nakoa Street as an alternate drop off/pick up area. In conjunction with this, close the west terminus of Halia Nakoa Street completely, thereby forcing motorists to access this drop off/pick up area from Kanaloa Avenue only.

      ii) Use the tennis court parking lots (accessible from Kanaloa Avenue via the stadium parking lot) as an alternate drop off/pick up area



Recommendations

Figure 8

Appendix A Data Collection

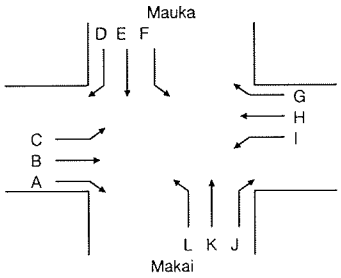
AM COUNT SHEET

Intersection: Baldwin - Halia Nakoa

Date: 11/17/2009, Tuesday

By: Phil Matsunaga & Shenghong Li

Weather: Sunny



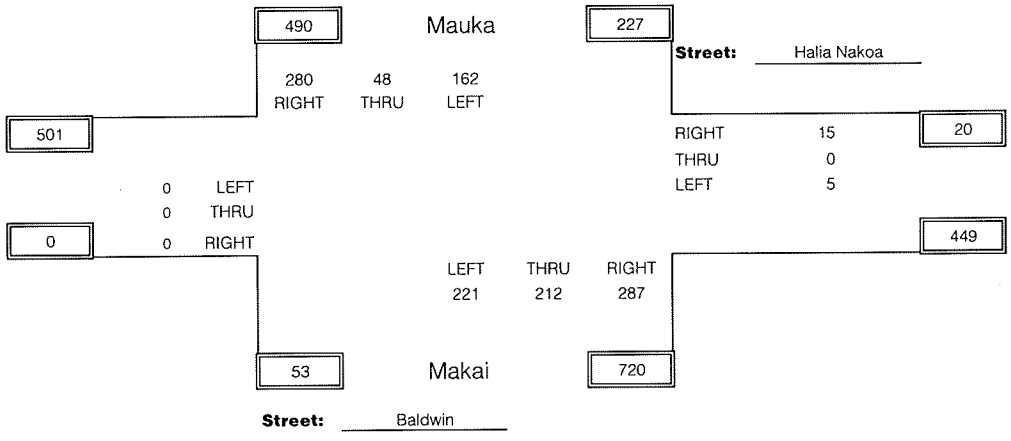
Street: Halia Nakoa

Street: Baldwin

TIME	EBR	EBT	EBL	SBR	SBT	SBL	WBR	WBT	WBL	NBR	NBT	NBL	Total Mvmt	Total Hour
6:30 AM - 6:45 AM	0	0	0	9	2	7	2	0	1	14	1	15	51	729
6:45 AM - 7:00 AM	0	0	0	34	5	19	9	0	15	29	17	32	160	1099
7:00 AM - 7:15 AM	0	0	0	46	9	28	9	0	1	50	21	34	198	1230
7:15 AM - 7:30 AM	0	0	0	73	6	33	4	0	2	75	64	63	320	1078
7:30 AM - 7:45 AM	0	0	0	98	19	51	2	0	2	99	80	70	421	
7:45 AM - 8:00 AM	0	0	0	63	14	50	0	0	0	63	47	54	291	
8:00 AM - 8:15 AM	0	0	0	7	0	11	0	0	2	12	7	7	46	
8:15 AM - 8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	
Phf	#DIV/0!	#DIV/0!	#DIV/0!	0.714	0.632	0.794	0.417	#DIV/0!	0.625	0.725	0.663	0.789	Peak	Phf
7:00 AM - 8:00 AM	0	0	0	280	48	162	15	0	5	287	212	221	1230	0.730

Peak Hour

7:00 AM - 8:00 AM



PARSONS BRINCKERHOFF

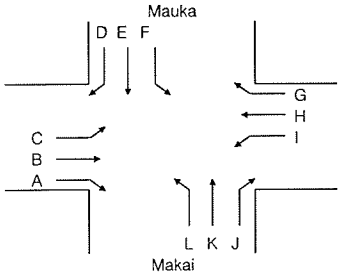
PM COUNT SHEET

Intersection: Baldwin - Halia Nakoa

Date: 11/17/2009, Tuesday

By: Phil Matsunaga & Shenghong Li

Weather: Sunny



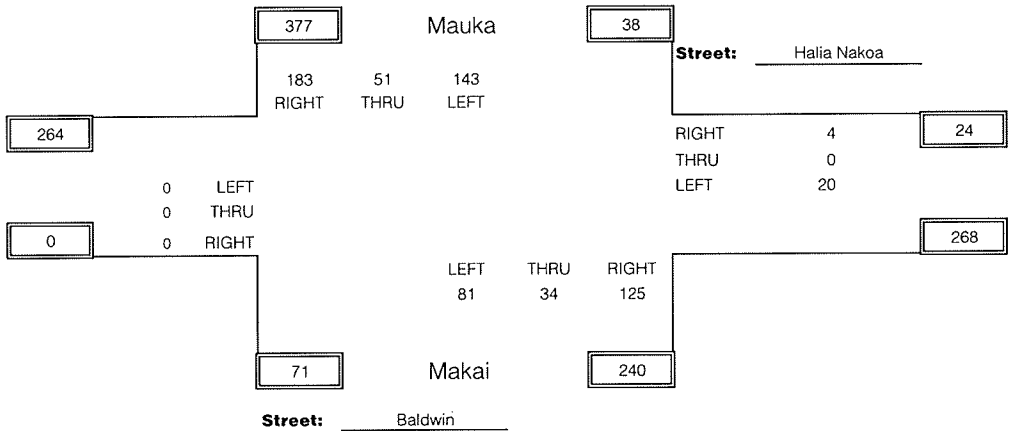
Street: Halia Nakoa

Street: Baldwin

TIME	EBR	EBT	EBL	SBR	SBT	SBL	WBR	WBT	WBL	NBR	NBT	NBL	Total Mvmt	Total Hour
1:45 PM - 2:00 PM	0	0	0	7	1	20	0	0	1	22	7	10	68	640
2:00 PM - 2:15 PM	0	0	0	106	23	59	0	0	1	47	11	25	272	641
2:15 PM - 2:30 PM	0	0	0	45	11	46	0	0	7	38	11	25	183	
2:30 PM - 2:45 PM	0	0	0	22	10	24	4	0	6	28	7	16	117	
2:45 PM - 3:00 PM	0	0	0	10	7	14	0	0	6	12	5	15	69	
3:00 PM - 3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	
3:15 PM - 3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	
3:30 PM - 3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	
3:45 PM - 4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:00 PM - 4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0		
Phf	#DIV/0!	#DIV/0!	#DIV/0!	0.432	0.554	0.606	0.250	#DIV/0!	0.714	0.665	0.773	0.810	Peak	Phf
2:00 PM - 3:00 PM	0	0	0	183	51	143	4	0	20	125	34	81	641	2.322

Peak Hour

2:00 PM - 3:00 PM



PARSONS BRINCKERHOFF

	Bus	Automobile	Students (approx)
AM Peak	7	400	525
	2	160	229
AF Peak	3	278	232
	0	130	173

	AM Peak		Afternoon Peak	
	Auditorium	Gym	Auditorium	Gym
Bus	7	2	3	0
Automobile	400	160	278	130

Name: Lynn Perry

Location: Baldwin Main Auditorium

Date: 11/17/09

Weather:

AM Peak Hour

	Bus	Cars Unloading	Students
6:30 AM - 6:45 AM	0	12	16
6:45 AM - 7:00 AM	1	37	64
7:00 AM - 7:15 AM	2	83	144
7:15 AM - 7:30 AM	3	114	168
7:30 AM - 7:45 AM	2	107	115
7:45 AM - 8:00 AM	0	96	98
8:00 AM - 8:15 AM	0	13	14
8:15 AM - 8:30 AM			

AM Peak Hour

	Bus	Cars Unloading	Students
6:30 AM - 7:30 AM	6	246	392
6:45 AM - 7:45 AM	8	341	491
7:00 AM - 8:00 AM	7	400	525
7:15 AM - 8:15 AM	5	330	395
7:30 AM - 8:30 AM			

Name: Lynn Perry

Location: Baldwin Main Auditorium

Date: 11/17/09

Weather:

Afternoon Peak Hour

	Bus	Cars Unloading	Students
1:30 PM - 1:45 PM	3	3	2
1:45 PM - 2:00 PM	1	9	9
2:00 PM - 2:15 PM	0	187	69
2:15 PM - 2:30 PM	3	56	120
2:30 PM - 2:45 PM	0	18	23
2:45 PM - 3:00 PM	0	17	20
3:00 PM - 3:15 PM	0	6	7
3:15 PM - 3:30 PM			

Afternoon Peak Hour

	Bus	Cars Unloading	Students
1:30 PM - 2:30 PM	7	255	200
1:45 PM - 2:45 PM	4	270	221
2:00 PM - 3:00 PM	3	278	232
2:15 PM - 3:15 PM	3	97	170
2:30 PM - 3:30 PM			

Name:

Location: Gym

Date: 11/17/09

Weather:

AM Peak Hour

	Bus	Cars Unloading	Students
6:30 AM - 6:45 AM	0	7	7
6:45 AM - 7:00 AM	1	25	30
7:00 AM - 7:15 AM	0	18	23
7:15 AM - 7:30 AM	0	44	55
7:30 AM - 7:45 AM	2	67	109
7:45 AM - 8:00 AM	0	31	42
8:00 AM - 8:15 AM	0	3	3
8:15 AM - 8:30 AM			

AM Peak Hour

	Bus	Cars Unloading	Students
6:30 AM - 7:30 AM	1	94	115
6:45 AM - 7:45 AM	3	154	217
7:00 AM - 8:00 AM	2	160	229
7:15 AM - 8:15 AM	2	145	209
7:30 AM - 8:30 AM			

Name:

Location: Gym

Date: 11/17/09

Weather:

Afternoon Peak Hour

	Bus	Cars Unloading	Students
1:30 PM - 1:45 PM	0	0	0
1:45 PM - 2:00 PM	0	0	0
2:00 PM - 2:15 PM	0	46	68
2:15 PM - 2:30 PM	0	35	42
2:30 PM - 2:45 PM	0	39	51
2:45 PM - 3:00 PM	0	10	12
3:00 PM - 3:15 PM			
3:15 PM - 3:30 PM			

Afternoon Peak Hour

	Bus	Cars Unloading	Students
1:30 PM - 2:30 PM	0	81	110
1:45 PM - 2:45 PM	0	120	161
2:00 PM - 3:00 PM	0	130	173
2:15 PM - 3:15 PM			
2:30 PM - 3:30 PM			

Appendix B Level of Service Definitions

The *Highway Capacity Manual* defines six Intersection Levels of Service (LOS), labeled A through F, from free flow to congested conditions.

Levels of Service for signalized intersections is defined in terms of control delay, which is a measure of driver discomfort, frustration, fuel consumption, and increased travel time. The delay experienced by a motorist is made up of a number of factors that relate to control, geometrics, traffic, and incidents. Total delay is the difference between the travel time actually experienced and the reference travel time that would result during base conditions: in the absence of traffic control, geometric delay, any incidents, and any other vehicles. Specifically, LOS criteria for traffic signals are stated in terms of the average control delay per vehicle, typically for a 15-minute analysis period. Delay is a complex measure and depends on a number of variables, including the quality of progression, the cycle length, the green ratio, and the v/c ratio for the lane group.

LEVEL-OF-SERVICE A: Low control delay, up to 10 s/veh. This LOS occurs when progression is extremely favorable and most vehicles arrive during the green phase. Many vehicles do not stop at all. Short cycle lengths may tend to contribute to low delay values.

LEVEL-OF-SERVICE B: Control delay greater than 10 and up to 20 s/veh. This level generally occurs with good progression, short cycle lengths, or both. More vehicles stop than with LOS A, causing higher levels of delay.

LEVEL-OF-SERVICE C: Control delay greater than 20 and up to 35 s/veh. These higher delays may result from only fair progression, longer cycle lengths, or both. Individual cycle failures may begin to appear at this level. Cycle failure occurs when a given green phase does not serve queued vehicles, and overflows occur. The number of vehicles stopping is significant at this level, though many still pass through the intersection without stopping.

LEVEL-OF-SERVICE D: Control delay greater than 35 and up to 55 s/veh. At LOS D, the influence of congestion becomes more noticeable. Longer delays may result from

some combination of unfavorable progression, long cycle lengths, and high v/c ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.

LEVEL-OF-SERVICE E: Control delay greater than 55 and up to 80 s/veh. These high delay values generally indicate poor progression, long cycle lengths, and high v/c ratios. Individual cycle failures are frequent.

LEVEL-OF-SERVICE F: Control delay in excess of 80 s/veh. This level, considered unacceptable to most drivers, often occurs with oversaturation, that is when arrival flow rates exceed the capacity of lane groups. It may also occur at high v/c ratios with many individual cycle failures. Poor progression and long cycle lengths may also contribute significantly to high delay levels.

For unsignalized intersections, the *Highway Capacity Manual* evaluates gaps in the major street traffic flow and calculates available gaps for left-turns across oncoming traffic and for the left and right-turns onto the major roadway from the minor street. Average control delay, based on these factors, is still used to define the levels of service.

LEVEL-OF-SERVICE A: Low control delay, up to 10 s/veh.

LEVEL-OF-SERVICE B: Control delay greater than 10 and up to 15 s/veh.

LEVEL-OF-SERVICE C: Control delay greater than 15 and up to 25 s/veh.

LEVEL-OF-SERVICE D: Control delay greater than 25 and up to 35 s/veh.

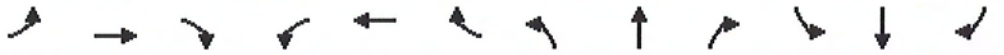
LEVEL-OF-SERVICE E: Control delay greater than 35 and up to 50 s/veh.

LEVEL-OF-SERVICE F: Control delay in excess of 50 s/veh.

Appendix C Synchro Reports

HCM Unsignalized Intersection Capacity Analysis
3: Halia Nakoa & Baldwin

1/9/2010



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	5	210	10	0	30	0	720	5	0	0	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	5	228	11	0	33	0	783	5	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	424	788	0	1016	785	394	0			788		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	424	788	0	1016	785	394	0			788		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	98	79	93	100	95	100			100		
cM capacity (veh/h)	486	322	1084	150	323	605	1622			827		

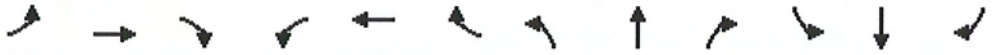
Direction, Lane #	EB 1	WB 1	WB 2	NB 1	NB 2
Volume Total	234	11	33	522	266
Volume Left	0	11	0	0	0
Volume Right	228	0	33	0	5
cSH	1028	150	605	1700	1700
Volume to Capacity	0.23	0.07	0.05	0.31	0.16
Queue Length 95th (ft)	22	6	4	0	0
Control Delay (s)	9.5	30.9	11.3	0.0	0.0
Lane LOS	A	D	B		
Approach Delay (s)	9.5	16.2		0.0	
Approach LOS	A	C			

Intersection Summary				
Average Delay	2.8			
Intersection Capacity Utilization	40.0%	ICU Level of Service	A	
Analysis Period (min)	15			

Intersection Sign configuration not allowed in HCM analysis.

HCM Unsignalized Intersection Capacity Analysis
3: Halia Nakoa & Baldwin

1/9/2010



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	5	194	40	0	8	0	240	5	0	0	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	5	211	43	0	9	0	261	5	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	139	266	0	477	264	133	0			266		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	139	266	0	477	264	133	0			266		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	99	81	88	100	99	100			100		
cM capacity (veh/h)	809	638	1084	377	640	891	1622			1295		

Direction, Lane #	EB 1	WB 1	WB 2	NB 1	NB 2
Volume Total	216	43	9	174	92
Volume Left	0	43	0	0	0
Volume Right	211	0	9	0	5
cSH	1066	377	891	1700	1700
Volume to Capacity	0.20	0.12	0.01	0.10	0.05
Queue Length 95th (ft)	19	10	1	0	0
Control Delay (s)	9.2	15.8	9.1	0.0	0.0
Lane LOS	A	C	A		
Approach Delay (s)	9.2	14.7		0.0	
Approach LOS	A	B			

Intersection Summary				
Average Delay	5.2			
Intersection Capacity Utilization	32.4%	ICU Level of Service	A	
Analysis Period (min)	15			

Intersection Sign configuration not allowed in HCM analysis.

APPENDIX Q.

Preliminary Engineering Report Prepared by Warren S. Unemori Engineering, Inc.

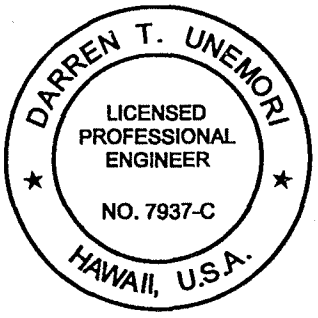
Established 1969

Preliminary Engineering Report for

MAUI LANI COMMERCIAL CENTER

Wailuku, Maui, Hawaii
TMK: (2) 3-8-07:121

Prepared For: HRT Realty, LLC
Honolulu, Hawaii



Date: March 2010

WARREN S. UNEMORI ENGINEERING, INC.
Civil and Structural Engineers - Land Surveyors
Wells Street Professional Center - Suite 403
2145 Wells Street
Wailuku, Maui, Hawaii 96793

TABLE OF CONTENTS

Preliminary Engineering Report
for
Maui Lani Commercial Center

I. Project Location

The project site is located in Wailuku, Maui, on the southwest corner of the Kaahumanu Avenue/Maui Lani Parkway intersection. Hale Koa Subdivision is located along the western boundary of the project site and Sandhills Estates Subdivision abuts it to the south.

II. Project Description

The Maui Lani Commercial Center will be a commercial building complex with 105,098 square feet of floor area occupied by a supermarket, retail shops, offices and a restaurant. Site improvements will consist of approximately 569 parking spaces, concrete curbs, walkways, and underground drainage, sewer, water, electrical power and communication systems. Retaining walls may be required along the boundaries of the project site to accommodate significant elevation differences between adjoining properties and finish grades within the site.

III. Infrastructure Assessment

1. Roadway Access

1.1 Existing Roads

Kaahumanu Avenue, which is located along the northerly boundary of the project, is a divided, multi-lane State highway with limited access. Maui Lani Parkway is a divided, multi-lane collector roadway constructed by the applicant to provide access to the project site. It is still privately owned, but is intended to be dedicated to the County of Maui. Kainani Street is a two lane roadway located at the northwest corner of the project site which provides access to the adjoining Hale Koa residential subdivision.

1.2 Access Improvements

The primary access driveway into the shopping center will located on Maui Lani Parkway approximately 500 feet south of the signalized Kaahumanu Ave./Maui Lani Parkway intersection, directly opposite the main driveway into the Kaiser Medical Clinic. Other access improvements will include:

- A right-turn-in/out-only service vehicle driveway on Maui Lani Parkway located approximately 130 feet south of the main customer access driveway.

- A right-turn-entrance-only driveway located mid-way along the Kaahumanu Avenue frontage of the project site which will provide an auxiliary entrance for eastbound vehicles on Kaahumanu Avenue.
- A second westbound left-turn lane will be added on Kaahumanu Avenue to better accommodate traffic turning left from Kaahumanu Avenue onto Maui Lani Parkway.

A thorough discussion of roadway improvements can be found in the *Traffic Evaluation*[1] for this project

2. Drainage

2.1 Existing Drainage Condition

Onsite runoff generated by the undeveloped project parcel, along with offsite runoff from a portion of the adjacent Hale Koa Subdivision which now drains onto the project parcel, currently sheet flows across the project site onto Maui Lani Parkway, where it is captured by the Parkway's underground storm drain system and conveyed by underground drainline to a storm water retention basin located at Fairways 10 and 11 within the Dunes at Maui Lani Golf Course.

---

[1] Parsons Brinkerhoff Quade & Douglas, Inc., *Traffic Evaluation for Maui Lani Commercial*, March 2009.

Storm runoff flowing onto Kaahumanu Avenue from adjoining lands is currently captured by Kaahumanu Avenue's underground storm drainage system and conveyed to an existing retention basin in Keopuolani Park.

2.2 Drainage Improvements

An underground storm drain system will be constructed within the Commercial Center's parking lot to capture both the onsite runoff generated by the developed project site and the offsite runoff draining onto the site from adjoining Hale Koa Subdivision. The Commercial Center's storm drain system will discharge into the Maui Lani Parkway storm drain system, which will, in turn, convey the runoff to the retention basins within the Maui Lani Golf Course for disposal. The existing retention basin within the Golf Course has sufficient capacity to fully mitigate the additional runoff generated by the development of the proposed Commercial Center; however, a second drainline will be installed on Maui Lani Parkway to provide the additional capacity needed by the Parkway's storm drain system to convey the increased runoff from the Commercial Center to the Golf Course. Figure 1 illustrates the proposed configuration of these drainage improvements.

Concrete curbs and gutters, catch basins and underground drainlines will be installed along the Kainani Street and Kaahumanu Avenue frontages

TRUE NORTH

SCALE: 1 INCH = 150 FEET

KAAHUMANU AVENUE

KAINANI STREET

NAKOA DRIVE

HALE KOA SUBDIVISION

SANDHILL ESTATES

MAUI LANI PARKWAY

MAUI LANI COMMERCIAL CENTER

SAFEWAY MAJOR 'A' 56,680 S.F. F.F.E. 152.00

MAJOR 'B' 10,450 S.F. F.F.E. 147.50

RESTAURANT F 5,900 S.F. F.F.E. 140.00

SHOPS E 1,274 S.F. F.F.E. 140.50

SHOPS D 12,894 S.F. F.F.E. 141.00

SHOPS/OFFICE C 17,858 S.F. F.F.E. 141.00

KAISER MEDICAL CLINIC

MAUI LANI MEDICAL CENTER (BUILDINGS 1-4)

DUNES AT MAUI LANI GOLF COURSE RETENTION BASIN

TO KEOPUOLANI PARK RETENTION BASIN

NEW CB

NEW CURB & GUTTER

NEW GICB

NEW CURB & GUTTER

TO ONSITE DRAINAGE SYSTEM

Ext'g GICB

Ext'g CB

Ext'g Swale

CONNECT TO EXT'G GICB

Offsite Runoff

NEW GICB

TO ONSITE DRAINAGE SYSTEM

NEW GICB

CONNECT TO EXT'G DRAINAGE SYSTEM

Offsite & Onsite Runoff

NEW 24" DRAINLINE

Offsite Runoff

Ext'g CB

Ext'g GICB

EXT'G 36" DRAINLINE (TO BE REPLACED W/ 42" HDPE DRAINLINE)

CONNECT TO EXT'G DRAINAGE SYSTEM

Offsite Runoff

Ext'g CB

Ext'g CB

Offsite Runoff

Ext'g CB

LEGEND:

- ED24" — EXISTING DRAINAGE SYSTEM
- D24" — PROPOSED DRAINAGE IMPROVEMENTS
- FLOW ARROWS
- DRAIN MANHOLES
- CATCH BASIN

FIGURE 1

Drainage Improvements

LUNALILO AVENUE

ARMY RESERVE

BALDWIN HIGH SCHOOL

KAAHUMANU AVENUE

EXISTING 12" WATER MAIN FROM IAO TANK

EXISTING PRV

TRUE NORTH

SCALE: 1 INCH = 100 FEET

NAKOA DRIVE

SHOPS 'G' 3,800 S.F. F.F.E. 151.00

RESTAURANT 'F' 5,900 S.F. F.F.E. 140.67

SHOPS 'E' 1,724 S.F. F.F.E. 140.67

SHOPS 'D' 12,894 S.F. F.F.E. 140.67

SAFEWAY MAJOR 'A' 56,680 S.F. F.F.E. 152.00

MAJOR 'B' 10,450 S.F. F.F.E. 147.00

SHOPS/ OFFICE 'C' 12,856 S.F. F.F.E. 140.67

EXISTING MAUI LANI ENTRY FEATURE

12'-0" WIDE RESERVE FOR FUTURE ROAD WIDENING

MAUI LANI PARKWAY

EXISTING WATER SERVICE LATERAL

3" DOMESTIC WATER METER

KAISER CLINIC

NEW 12" FIRE LINE CONNECTION TO EXT'G 12" WATER MAIN

TO MAUI LANI

LEGEND:

- FH — Fire Hydrant
- W10" — New Fire Protection Waterline
- W4" — New Domestic Waterline
- EW12" — Existing Waterline

FIGURE 2

Water Improvements

LUNALILO AVENUE

ARMY RESERVE

BALDWIN HIGH SCHOOL

KAAHUMANU AVENUE

TO KAHULUI WWTF

TRUE NORTH

SCALE: 1 INCH = 100 FEET

KAINANI STREET

NAKOA DRIVE

SHOPS 'G' 3,800 S.F. F.F.E. 154.00

RESTAURANT 'F' 5,900 S.F. F.F.E. 140.67

SHOPS 'E' 1,724 S.F. F.F.E. 140.67

EXISTING MAUI LANI ENTRY FEATURE

12'-0" WIDE RESERVE FOR FUTURE ROAD WIDENING

SHOPS 'D' 12,894 S.F. F.F.E. 140.67

SAFEWAY MAJOR 'A' 56,680 S.F. F.F.E. 152.00

MAJOR 'B' 10,450 S.F. F.F.E. 147.00

SHOPS/ OFFICE 'C' 12,858 S.F. F.F.E. 140.67

LOADING

COND.

RAMP

MAUI LANI PARKWAY

KAISER CLINIC

NEW CONNECTION TO EXISTING 8" GRAVITY SEWER MAIN

FROM MAUI LANI

LEGEND:

- New Sewer Manhole
- Existing Sewer Manhole
- S8" — Sewerline to be Installed
- ES8" — Existing Sewerline to Remain

FIGURE 3

Sewer Improvements

to facilitate the control and capture of storm runoff along the State Highway. These improvements will be configured to avoid increasing the amount of post-development runoff discharged into the Keopuolani Park retention basin.

A thorough discussion of the proposed drainage plan can be found in the *Preliminary Drainage Report*[2] for this project.

3. Water System

3.1 Existing Water Infrastructure

Potable water for the Commercial Center will be provided from the public water system operated by the Maui County Department of Water Supply. The primary sources of water supplying the service area in which the project parcel is located are the Iao tunnel and Kepaniwai Well, supplemented by treatment of surface water from Wailuku Water Company's Iao/Waikapu Ditch. Groundwater drawn from the Iao aquifer via Shaft 33 in Kehalani is also used to supply water to the area.

Storage is provided by the existing 3.0 MG Iao tank located near the junction of Iao Valley and Alu Roads. The Dept. of Water Supply is planning to construct a new 2.0 MG storage tank next to the existing 3.0 MG tank to expand the storage capacity available at the Iao tank site.

---

[2]Warren S. Unemori Engineering, Inc., *Preliminary Drainage Report for Maui Lani Commercial Center*, March 2010.

A network of existing 18, 16 and 12-inch diameter water mains extends the County distribution system from the Iao tank site down Main Street and along Kaahumanu Avenue to Maui Lani Parkway, where the project site is located. The project parcel already has an existing water service lateral in place to accept the 3-inch water meter which will soon be installed by the Dept. of Water Supply.

3.2 Water System Improvements

Average daily water consumption by the Maui Lani Commercial Center is projected to be 33,000 gallons per day[3], which the new 3-inch water meter can easily accommodate. A private domestic water distribution system will extend from the 3-inch water meter into the project site to provide potable water to each of the buildings and landscaping. Figure 2 is a schematic plan of the distribution system which will supply water to the project site.

The Commercial Center will also require a fire protection system capable of delivering a fire flow of approximately 2000 gallons per minute[4]. A 12-inch fire line extended into the project site from the 12-inch County distribution main on Maui Lani Parkway will supply each building's fire

---

[3]See Appendix A-1 for Potable Water Demand calculation.

[4]See Appendix A-2 for Fire Flow Demand calculation.

sprinkler system and onsite fire hydrants with sufficient flow and pressure to provide the necessary fire protection. Figure 2 includes a plan of the proposed fire protection water system for the project site.

4. Sewer System

4.1 Existing Sewer Infrastructure

An existing 8-inch County gravity sewer main located under Maui Lani Parkway was installed at the time the Parkway was constructed for the purpose of sewering the project parcel. This 8-inch sewer main connects to other County sewer mains on Kaahumanu Avenue and Kanaloa Avenue which drain to the County sewer pump station in Paukukalo. Wastewater is then pumped through a 24-inch force main to the Kahului Wastewater Reclamation Facility (KWWRF) in Kanaha. According to the County Wastewater Reclamation Division, the KWWRF has a design processing capacity of 7.9 MGD. The total (theoretical) allocation to date for potential new projects is 6.9 MGD; however, current flows are only at 4.9 MGD.

4.2 Sewer Improvements

The developed Commercial Center is expected to generate approximately 13,000 gallons[5] of wastewater per day, which can be accommodated by the existing County wastewater collection and treatment infrastructure. A private gravity sewer system will be constructed on the project site to collect wastewater from all of the buildings and convey it to the existing County sewer main on Maui Lani Parkway. Figure 3 is a schematic plan of the proposed sewer system for the project site.

The applicant will also be assessed the standard $4.57 per gallon County sewer fee per Maui County Code Chapter 14.35.060 to pay the development's pro rata share of the Wailuku/Kahului Wastewater Treatment System Facility Expansion.

5. Electrical Power, Telephone and Cable Television Systems

5.1 Existing Infrastructure

Electrical power, telephone and cable televison service is available from the underground distribution lines located along Maui Lani Parkway under the road shoulder.

[5]See Appendix B for Sewer Demand calculation.

5.2 Utility Improvements

Electrical power, telephone and cable televisions services will be extended into the project site from underground distribution lines on Maui Lani Parkway to each of the buildings within the Commercial Center complex.

IV. Conclusion

The improvements described in this report will make it possible to feasibly develop the proposed Commercial Center without adversely affecting the public and private infrastructure serving the area.

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APPENDIX A

Water Demand Calculations

Appendix A-1

Potable Water Demand

PROJECTED WATER DEMAND

Use	Base Unit		Rate*		Water Demand (gpd)
Commercial Buildings	105,098 s.f.	x	140 gals/1000 s f	==>	14,714
Landscaping	3 Ac.	x	6,000 gals/Acre	==>	18,000
Total					32,714 gpd

**Note:*
Consumption rates taken from Water System Standards, Department of Water Supply, County of Maui, State of Hawaii, 2002, Table 100-18, p. 111-3.

Appendix A-2

Preliminary ISO Fire Flow Demand

PRELIMINARY ISO FIRE FLOW DEMAND[1] CALCULATION FOR MAUI LANI COMMERCIAL CENTER

Required Fire Flow, $F = 18\ C\ A^{0.5}$

Where: C = Construction Type Coefficient
A = Total Floor Area

C = 0.6 (Fire-resistive, reinforced concrete construction)
A = 56,680 sq.ft. (Expanded building complex)
F = $18(0.6)(56{,}680)^{0.5}$
= 2571 gpm ==> 2500 gpm (Rounded to nearest 250 gpm)

CLOSEST BUILDINGS:

150+ ft. to North
70 ft. to South
0 ft. to East
130 ft. to West

ADJUSTMENTS FOR HAZARD AND EXPOSURE:

2500 gpm
\- 0 gpm (No adjustment for Occupancy)
\+ 0 gpm (+0% Building Separation to North)
\+ 250 gpm (+10% Building Separation to South)
\+ 625 gpm (+25% Building Separation to East)
\+ 125 gpm (+5% Building Separation to West)

3500 gpm

[1]Based on Insurance Services Office, "Guide for the Determination of Required Fire Flow", Second Edition, December 1974.

ADJUSTMENT FOR AUTOMATIC SPRINKLER PROTECTION:

	3500 gpm	
-	2100 gpm	(-60% Reduction for Automatic Fire Sprinklers)
+	400 gpm	(Estimated flow demand from fire sprinklers)
+	250 gpm	(Additional hose streams)
	2050 gpm	==> 2000 gpm (Rounded to nearest 250 gpm)

March 24, 2010

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APPENDIX B

Sewer Demand Calculations

PROJECTED SEWER DEMAND

Source	Base Unit		No. Persons		Contribution		Sewer Demand (gpd)
Supermarket	56,680 s.f.	÷	200 s.f./person	x	20 gpcpd	==>	5,668
Shops	36,093 s.f.	÷	200 s.f./person	x	20 gpcpd	==>	3,609
Office	6,425 s.f.	÷	200 s.f./person	x	20 gpcpd	==>	643
Restaurant	5,900 s.f.	÷	200 s.f./person	x	100 gpcpd	==>	2,950
Total	105,098 s.f.					Total	12,870 gpd

**Note:*
Contribution rates taken from County of Maui, Wastewater Reclamation Division, "Wastewater Flow Standards," February 2, 2000.

APPENDIX R.

Preliminary Drainage Report Prepared by Warren S. Unemori Engineering, Inc.

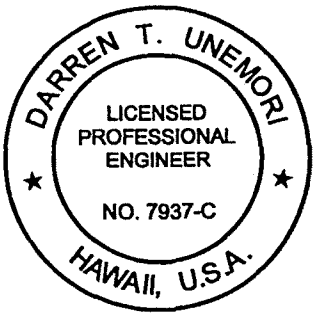
Established 1969

Preliminary Drainage Report for

MAUI LANI COMMERCIAL CENTER

Wailuku, Maui, Hawaii
TMK: (2) 3-8-07: 121

Prepared For: HRT Ltd.
Honolulu, Hawaii



Date: March 2010

WARREN S. UNEMORI ENGINEERING, INC.
Civil and Structural Engineers - Land Surveyors
Wells Street Professional Center - Suite 403
2145 Wells Street
Wailuku, Maui, Hawaii 96793

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TABLE OF CONTENTS

Preliminary Drainage Report for
Maui Lani Commercial Center

I. INTRODUCTION

This report has been prepared to examine both the existing drainage conditions and the proposed drainage plan for the development of the subject project.

II. PROPOSED PROJECT

A. Site Location:

The project site is located in Wailuku, on the island of Maui, and in the State of Hawaii. The project parcel is Lot 11-A-1-A of the Maui Lani (Large-Lot) Subdivision, which encompasses approximately 12.926 acres. It is located immediately south of Kaahumanu Avenue, west of Maui Lani Parkway, and east of the Hale Koa Subdivision.

B. Project Description:

The site improvements will consist of grading, installation of water, sewer, drainage and electrical systems, asphalt-paved roads and parking lots, sidewalks, and landscaping with an irrigation system. Structural improvements will consist of multiple commercial buildings located throughout the site, and retaining walls along the perimeter

Offsite improvements will consist of roadway improvements at the Maui Lani Parkway/Kaahumanu Avenue intersection, roadway and shoulder improvements along Kaahumanu Avenue and Kainani Street, and drainage improvements along Kaahumanu Avenue and Maui Lani Parkway.

III. EXISTING CONDITIONS:

A. Topography and Soil Conditions:

The project site is currently undeveloped and not being used for any particular purpose. The site generally slopes from an elevation of approximately (+) 192± feet M.S.L. to approximately (+) 128± feet M.S.L. in a westerly to easterly direction. The project site has been cleared, grubbed, and partially mass-graded to identify archaeological sites, as well as bring the grades closer to the future finish grades.

The soil classification found on the project site is a Puuone Series type soil, more specifically, the Puuone sand, 7 to 30 percent slopes (PZUE)[1]. The Puuone sand is classified as having slow runoff and a moderate to severe wind erosion hazard (See Exhibit 1).

B. Flood and Tsunami Zone:

The project site is situated within Zone X, which is classified as an area of minimal flooding[2] (See Exhibit 2).

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[1]United States Department of Agriculture, Soil Conservation Service, *Soil Survey of Islands of Kauai, Oahu, Maui, Molokai, and Lanai, State of Hawaii,* 1972. (P. 117 & Sht. 99)

[2]U.S. Department of Homeland Security, Federal Emergency Management Agency, *Flood Insurance Rate Map, Maui County, Hawaii.* Community-Panel Number 150003-0391E. September 25, 2009.

Source:
U.S. Department of Agriculture, Soil Conservation Service, "Soil Survey of Islands of Kauai, Oahu, Maui, Molokai and Lanai, State of Hawaii", 1972

EXHIBIT 1
SITE SPECIFIC SOIL SURVEY MAP

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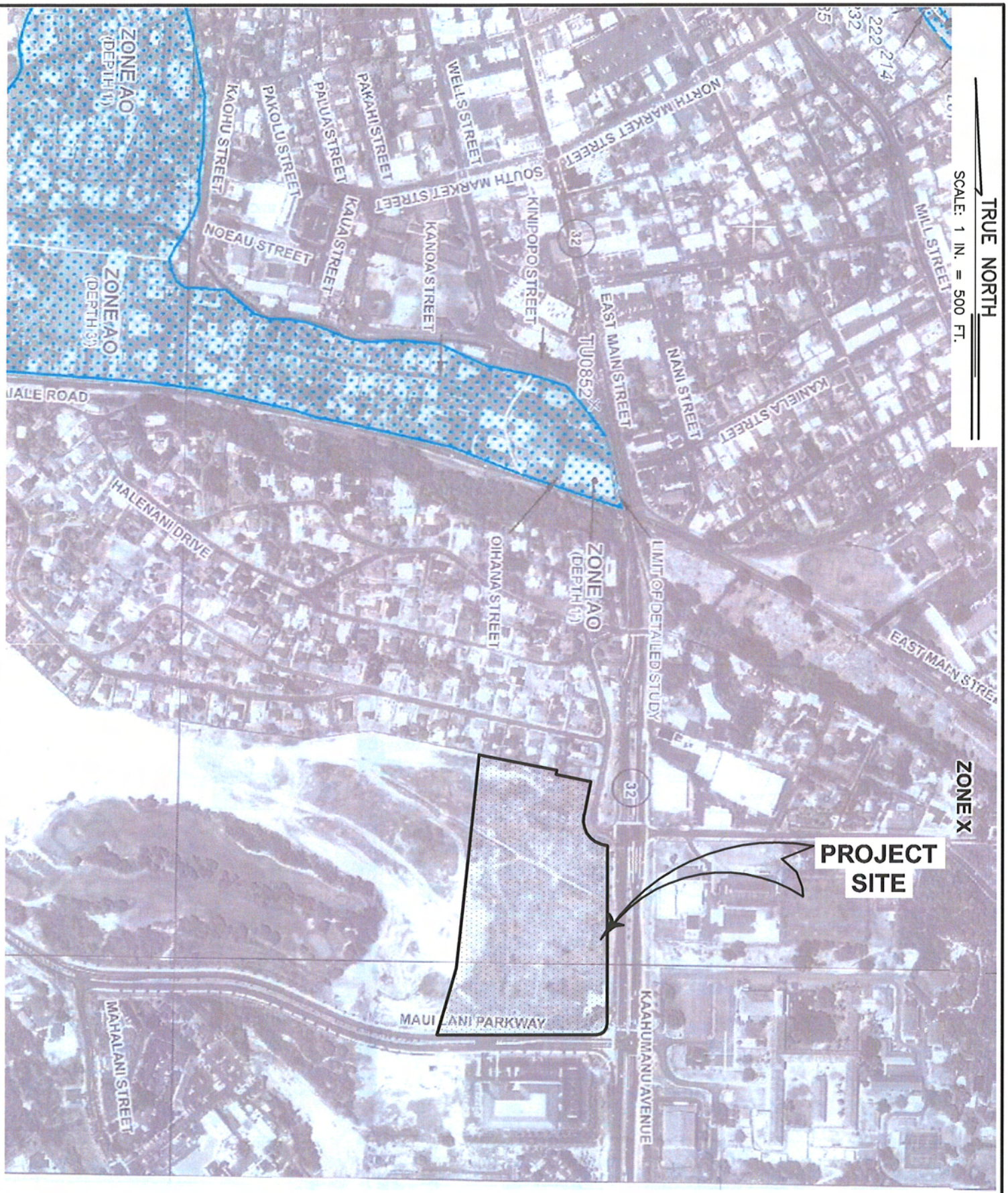

Source:
U.S. Department of Homeland Security, Federal Emergency Management Agency, "Flood Insurance Rate Map, Maui County, Hawaii", Map Number 1500030391E, September 25, 2009.

EXHIBIT 2
FLOOD INSURANCE RATE MAP

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C. Drainage:

1. Onsite:

The project site currently generates approximately 9 cfs of surface runoff based on a 10-year recurrence interval, 1-hour duration storm (See Appendix A-1). The onsite surface runoff currently sheet flows in an easterly direction across the project site, where it is intercepted by catch basins along Maui Lani Parkway. The underground drainage system beneath Maui Lani Parkway conveys and eventually discharges the surface runoff into fairways 10 and 11 of the Dunes at Maui Lani Golf Course, which serves as a retention basin for the Maui Lani Project District[3]. See Exhibit 3 for the existing onsite drainage pattern and Maui Lani Parkway drainage system.

2. Offsite:

The runoff from the Hale Koa Subdivision is intercepted by two grated inlet catch basins along Nakoa Drive and is conveyed into the project site via 24-inch drainline. Approximately 7 cfs of offsite surface runoff discharges into the project site based on a 10-year recurrence interval, 1-hour duration (See Appendix A-2). Similar to the onsite surface runoff, the offsite runoff enters the Maui Lani Parkway drainage system and discharges into the golf course retention basin.

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[3]Sato and Associates Inc., *Drainage Report, Maui Lani Golf Course*, 1995.

LUNALILO AVENUE

ARMY RESERVE

BALDWIN HIGH SCHOOL

KAAHUMANU AVENUE DRAINAGE SYSTEM

Ext'g Swale

Ext'g Swale

KAAHUMANU AVENUE

Ext'g CB

TO KEOPUOLANI PARK RETENTION BASIN

KAINANI STREET

Ext'g GICB

Ext'g. Outlet

Ext'g. Outlet

Ext'g. GICB

Ext'g. Outlet

Ext'g Swale

TRUE NORTH

SCALE: 1 INCH = 200 FEET

MAUI LANI COMMERCIAL CENTER

Ext'g. GICB

Ext'g. Outlet

Ext'g. CB

MAUI LANI PARKWAY

KAISER MEDICAL CLINIC

Ext'g. CB

MAUI LANI PARKWAY DRAINAGE SYSTEM

NAMILOA DRIVE

HALENANI DRIVE

NAKOA DRIVE

HALE KOA SUBDIVISION

SANDHILL ESTATES

Ext'g. CB

MAUI LANI MEDICAL CENTER (BUILDINGS 1-4)

Ext'g. CB

DUNES AT MAUI LANI GOLF COURSE RETENTION BASIN

LEGEND:

ED24"	EXISTING DRAINAGE SYSTEM DISCHARGING INTO MAUI LANI GOLF COURSE RETENTION BASIN
ED24"	EXISTING DRAINAGE SYSTEM DISCHARGING INTO KEOPUOLANI PARK RETENTION BASIN
	EXISTING AREA DISCHARGING INTO MAUI LANI RETENTION BASIN
	EXISTING AREA DISCHARGING INTO KAAHUMANU AVENUE DRAINAGE SYSTEM
	FLOW ARROWS

DRAINAGE AREA	AREA	PEAK RUNOFF
	19 ACS.	14 CFS
	6.7 ACS.	10 CFS

EXHIBIT 3

PRE-DEVELOPMENT DRAINAGE PATTERN

Approximately 10 cfs of runoff is generated by the Kainani St. and Kaahumanu Ave. drainage area, affected by the project site (See Appendix A-4). The runoff generated in the Kainani Street right-of-way is collected in roadside swales, where it connects to swales located along the Kaahumanu Avenue shoulder. The runoff generated along Kaahumanu Avenue, immediately north of the project site, is collected in a series of swales, grated and curbed inlet type catch basins, and underground drainlines along Kaahumanu Ave. The runoff from the roadway and shoulder of both Kaahumanu Ave. and Kainani Street is conveyed to the Keopulani Park retention basin via an aboveground and underground drainage system along Kaahumanu Ave. See Exhibit 3 for the pre-development offsite drainage areas and flow patterns.

IV. DRAINAGE PLAN

A. General:

The onsite and offsite drainage improvements for the proposed project will maintain the existing drainage pattern in order to avoid creating an adverse impact to the downstream properties. The runoff from the project site, and the offsite runoff from the Hale Koa Subdivision, will be directed to fairways 10 and 11 of the Dunes at Maui Lani Golf Course in accordance with the Maui Lani drainage master plan. The offsite runoff from Kainani St. and Kaahumanu Ave. will be captured and conveyed to the Keopulani Park retention basin as it is currently doing. See Exhibit 4 for the post-development drainage areas discharging into each basin.

LUNALILO AVENUE
ARMY RESERVE
BALDWIN HIGH SCHOOL
Ext'g. Outlet
Ext'g. GICB
Ext'g Swale
NEW CB
KAAHUMANU AVENUE DRAINAGE SYSTEM
Ext'g Swale
KAAHUMANU AVENUE
Ext'g CB
TO KEOPUOLANI PARK RETENTION BASIN
KAINANI STREET
Ext'g. GICB
Ext'g. Outlet
MAUI LANI COMMERCIAL CENTER
Ext'g. CB
MAUI LANI PARKWAY
Ext'g. Outlet
Ext'g Swale
KAISER MEDICAL CLINIC
Ext'g. CB
MAUI LANI PARKWAY DRAINAGE SYSTEM
NAMILOA DRIVE
HALENANI DRIVE
NAKOA DRIVE
HALE KOA SUBDIVISION
SANDHILL ESTATES
Ext'g. CB
MAUI LANI MEDICAL CENTER (BUILDINGS 1-4)
Ext'g. CB
DUNES AT MAUI LANI GOLF COURSE RETENTION BASIN

TRUE NORTH

SCALE: 1 INCH = 200 FEET

LEGEND:

		DRAINAGE AREA	AREA	PEAK RUNOFF
ED24"	EXISTING DRAINAGE SYSTEM DISCHARGING INTO MAUI LANI GOLF COURSE RETENTION BASIN		20 ACS.	37 CFS
ED24"	EXISTING DRAINAGE SYSTEM DISCHARGING INTO KEOPUOLANI PARK RETENTION BASIN		6 ACS.	9 CFS
	EXISTING AREA DISCHARGING INTO MAUI LANI RETENTION BASIN			
	EXISTING AREA DISCHARGING INTO KAAHUMANU AVENUE DRAINAGE SYSTEM			
	FLOW ARROWS			

EXHIBIT 4

POST-DEVELOPMENT DRAINAGE PATTERN

1. Onsite:

The post development onsite surface runoff generated from the project site is expected to be approximately 34 cfs based on a 10-year recurrence interval, 1-hour duration storm (See Appendix A-1). Therefore, a net increase of approximately 25 cfs is expected to be generated by the development of the site.

Post-development runoff from the roofs, roads, parking lot and landscaped areas will be captured by a new drainage system, consisting of catch basins, manholes, and underground drainlines. This drainage system will connect to the existing drainage system beneath Maui Lani Parkway. Portions of the existing 36-inch drainline beneath Maui Lani Parkway do not have the capacity to accommodate the additional runoff. Therefore, a new 24-inch drainline may be installed, in parallel, for a portion of the drainage system. Furthermore, a portion of the existing 36-inch drainage system will need to be up-sized to a 42-inch drainline to increase the drainage system's capacity. This drainage system will continue to discharge into fairways 10 and 11of the Dunes at Maui Lani Golf Course as it is presently doing. See Exhibit 5 for the proposed drainage improvements along Maui Lani Parkway.

TRUE NORTH

SCALE: 1 INCH = 150 FEET

KAAHUMANU AVENUE

TO KEOPUOLANI PARK RETENTION BASIN

NEW CB

NEW CURB & GUTTER

NEW CB

NEW CURB & GUTTER

Ext'g CB

Ext'g CB

TO KEOPUOLANI PARK RETENTION BASIN

Ext'g GICB

KAINANI STREET

Ext'g CB

Ext'g Swale

CONNECT TO EXT'G GICB

NEW GICB

TO ONSITE DRAINAGE SYSTEM

Ext'g GICB

NEW CURB & GUTTER

Ext'g GICB

Offsite Runoff

NEW GICB

TO ONSITE DRAINAGE SYSTEM

MAUI LANI COMMERCIAL CENTER

KAISER MEDICAL CLINIC

Ext'g CB

NAKOA DRIVE

HALE KOA SUBDIVISION

SAFEWAY MAJOR 'A' 56,680 S.F. F.F.E. 157.00

MAJOR 'B' 10,450 S.F. F.F.E. 147.50

CONNECT TO EXT'G DRAINAGE SYSTEM

Offsite & Onsite Runoff

NEW GICB

MAUI LANI PARKWAY

Offsite Runoff

NEW 24" DRAINLINE

MAUI LANI MEDICAL CENTER (BUILDINGS 1-4)

Ext'g CB

Ext'g GICB

SANDHILL ESTATES

Offsite Runoff

EXT'G 36" DRAINLINE (TO BE REPLACED W/ 42" HDPE DRAINLINE)

CONNECT TO EXT'G DRAINAGE SYSTEM

Ext'g CB

Offsite Runoff

Ext'g CB

Ext'g CB

DUNES AT MAUI LANI GOLF COURSE RETENTION BASIN

Offsite Runoff

Ext'g CB

LEGEND:

- ED24" — EXISTING DRAINAGE SYSTEM
- D24" — PROPOSED DRAINAGE IMPROVEMENTS
- FLOW ARROWS
- DRAIN MANHOLES
- CATCH BASIN

EXHIBIT 5

DRAINAGE IMPROVEMENTS

2. Offsite:

The offsite runoff from the existing Hale Koa Subdivision will be conveyed to the Maui Lani Parkway drainage system by means of the project site's onsite drainage system. The runoff will continue to discharge into the golf course retention basin as it is presently doing.

New curb and gutter, and curbed-inlet type catch basins will be constructed along the northbound lane of Kainani St. and eastbound lane of Kaahumanu Ave., adjacent to the boundary of the project site. Runoff along Kainani St. and Kaahumanu Ave. will be expected to increase due to the pavement widening and shoulder improvements. Approximately 9 cfs of surface runoff is generated from the Kainani St. and Kaahumanu Ave. roadway and shoulder based on a 10-year recurrence interval, 1-hour duration storm event (See Appendix A-4). The runoff is intercepted by new and existing catch basins, conveyed to the existing drainage system along Kaahumanu Ave., and will continue to discharge into the retention basin in Keopulani Park as it is presently doing. A new catch basin at the entrance to the project site will capture a portion of the runoff from Kaahumanu Ave. and convey it into the project site, such that the post-development runoff in the Kaahumanu Ave. system will not be greater than pre-development conditions. See Exhibit 5 for the drainage improvements along Kaahumanu Ave. and Kainani St.

A summary of the pre-development and post-development surface runoff is shown in the table below:

Table 1 - Pre/Post Development Runoff Summary

Drainage Area	Discharge Location	Pre Dev. Q (cfs)	Post Dev. Q (cfs)	Increase (cfs)
Project Site	Maui Lani Golf Course Basin	9	34	25
Hale Koa Sub'd	Maui Lani Golf Course Basin	7	7	0
Kainani St. & Kaahumanu Ave.	Keopulani Park Basin	10	<10	0

V. CONCLUSION

The increase in surface runoff due to the development of the project site will be fully mitigated at the existing retention basin at Fairways 10 and 11 of the Dunes at Maui Lani Golf Course in accordance with the drainage master plan for Maui Lani. Drainage improvements along Maui Lani Parkway will increase the capacity of the existing drainage system to convey runoff from the project site and adjacent drainage areas to the retention basin. Roadway and drainage improvements along Kaahumanu Ave. and Kainani St. will continue to convey runoff to Keopulani Park as it is presently doing, at a rate no greater than pre-development conditions. Therefore, it is our professional opinion that there will be no significant adverse impact to downstream properties or drainage facilities.

APPENDIX A

HYDROLOGIC CALCULATIONS

Hydrologic Calculations:

The hydrologic calculations are based on the "Rules for the Design of Storm Drainage Facilities in the County of Maui", Title MC-15, Chapter 4 and the "Rainfall Frequency Atlas of the Hawaiian Islands", Technical Paper No. 43, U.S. Department of Commerce, Weather Bureau. The design storm for the project site is a 10-year recurrence interval, 1-hour duration storm, and an approximate precipitation of 2.00 inches is used in the calculations.

Rational Formula used:

$$Q = CIA$$

Where

Q	=	Rate of Flow (cfs)
C	=	Runoff Coefficient
I	=	Rainfall Intensity (inch/hour)
A	=	Area (Acre)

APPENDIX A-1

PRE/POST DEVELOPMENT ONSITE RUNOFF CALCULATIONS

Warren S. Unemori Engineering, Inc.
Wells Street Professional Center
2145 Wells Street , Suite 403
Wailuku, Maui , Hawaii 96793

Date: February, 2010

HYDROLOGIC CALCULATIONS: PRE-DEVELOPMENT

Objective: To determine the pre-development surface runoff for the proposed project site.

I. 10-Yr. - 1 Hr. Rainfall:

From "Rainfall Frequency Atlas of the Hawaiian Islands", for Wailuku, Maui,
R(10 Yr.-1Hr.) = 2.00 inches

2. Total Area:

Area (Ac.):		12.92

3. Runoff Coefficents:

Infiltration:	High	0.00
Relief:	Rolling (5-15%)	0.03
Vegetal Cover:	Good (10-50%)	0.03
Development Type:	Agricultural	0.15
Runoff Coeff't., C:		0.21

4. Time of Concentration:

Approx. Elev. Diff'l. (ft.):		64
Higher Elev. (ft.):	192	
Lower Elev. (ft.):	128	
Approx. Runoff Length (ft.):		1,100
Average Slope:		5.82%
Time of Concentration (min.):		20

5. Intensity:

Intensity (in./hr.):	3.3

6. Total Runoff:

Q = C x I x A (cfs):	**8.95**

Warren S. Unemori Engineering, Inc.
Wells Street Professional Center
2145 Wells Street , Suite 403
Wailuku, Maui , Hawaii 96793

Date: February, 2010

HYDROLOGIC CALCULATIONS: POST-DEVELOPMENT

Objective: To determine the post-development runoff for the proposed Maui Lani Commercial Center project site.

I. 10-Yr. - 1 Hr. Rainfall:

From "Rainfall Frequency Atlas of the Hawaiian Islands", for Wailuku, Maui,
R(10 Yr.-1Hr.) = 2.00 inches

2. Total Area:

Area (Ac.):	12.92

3. Runoff Coefficent:

Commercial Area (Ac.):		11.57
Minimum Runoff Coeff't., C, for Business Areas*:		0.80
Undeveloped Area (Ac.):		1.35
Runoff Coeff't., C, for Undeveloped Areas:		0.18
Weighted Runoff Coeff't.:		0.74

4. Time of Concentration:

Overland Flow:		
Approx. Elev. Diff'l. (ft.):		3
Higher Elev. (ft.):	177	
Lower Elev. (ft.):	174	
Approx. Runoff Length (ft.):		150
Average Slope:		2.00%
T_1(min.):		15
Piped Flow:		
Approx.Length (ft.):		1,100
Average Slope:		3.00%
Average Flow (cfs.):		20
Average Vecolity (ft/s):		12.0
T_2(min.):		1.5
Tc (min):		16.5

5. Intensity:

Intensity (in./hr.):	3.58

6. Total Runoff:

Q = C x I x A (cfs):	**34.01**

APPENDIX A-2

EXISTING OFFSITE RUNOFF CALCULATION (HALE KOA SUBDIVISION)

Warren S. Unemori Engineering, Inc.
Wells Street Professional Center
2145 Wells Street , Suite 403
Wailuku, Maui , Hawaii 96793

Date: February, 2010

HYDROLOGIC CALCULATIONS: EXISTING OFFSITE SURFACE RUNOFF

Objective: To determine the offsite surface runoff from the existing Hale Koa Subdivision discharging into the Maui Lani Commercial Center project site.

I. 10-Yr. - 1 Hr. Rainfall:

From "Rainfall Frequency Atlas of the Hawaiian Islands", for Wailuku, Maui,
R(10 Yr.-1Hr.) = 2.00 inches

2. Total Area:

Area (Ac.):	6.08

3. Runoff Coefficent:

Grassed Area (Ac.):		3.90
Runoff Coeff't., C, for Grassed Area on Sandy Soil :		0.18
Paved Area (Ac.):		0.88
Runoff Coeff't., C, for Paved Areas:		0.95
House Area (Ac.):		1.03
Runoff Coeff't., C, for Undeveloped Areas:		0.95
Weighted Runoff Coeff't.:		0.41

4. Time of Concentration:

Approx. Elev. Diff'l. (ft.):		23
Higher Elev. (ft.):	215	
Lower Elev. (ft.):	192	
Approx. Runoff Length (ft.):		940
Average Slope:		2.45%
Time of Concentration (min.):		28.5

5. Intensity:

Intensity (in./hr.):	2.88

6. Total Offsite Runoff:

Q = C x I x A (cfs):	**7.25**

APPENDIX A-3

PRE/POST DEVELOPMENT RUNOFF CALCULATION

TO MAUI LANI GOLF COURSE BASIN

Warren S. Unemori Engineering, Inc.
Wells Street Professional Center
2145 Wells Street , Suite 403
Wailuku, Maui , Hawaii 96793

Date: February, 2010

HYDROLOGIC CALCULATIONS: EXISTING ONSITE AND OFFSITE SURFACE RUNOFF

Objective: To determine the pre-development onsite and offsite surface runoff discharging into the Dunes at Maui Lani Golf Course retention basin.

I. 10-Yr. - 1 Hr. Rainfall:

From "Rainfall Frequency Atlas of the Hawaiian Islands", for Wailuku, Maui,
R(10 Yr.-1Hr.) = 2.00 inches

2. Total Area:

Area (Ac.):	18.73

3. Runoff Coefficent:

Grassed Area (Ac.):	16.82
Runoff Coeff't., C, for Grassed Area on Sandy Soil :	0.21
Paved Area (Ac.):	0.88
Runoff Coeff't., C, for Paved Areas:	0.95
House Area (Ac.):	1.03
Runoff Coeff't., C, for Undeveloped Areas:	0.95
Weighted Runoff Coeff't.:	0.29

4. Time of Concentration:

Overland Flow:

Approx. Elev. Diff'l. (ft.):	75
Approx. Runoff Length (ft.):	1,980
Average Slope:	3.79%
Time of Concentration (min.):	35

5. Intensity:

Intensity (in./hr.):	2.65

6. Total Offsite Runoff:

Q = C x I x A (cfs):	**14.17**

Warren S. Unemori Engineering, Inc.
Wells Street Professional Center
2145 Wells Street , Suite 403
Wailuku, Maui , Hawaii 96793

Date: February, 2010

HYDROLOGIC CALCULATIONS: EXISTING ONSITE AND OFFSITE SURFACE RUNOFF

Objective: To determine the post-development onsite and offsite surface runoff discharging into the Dunes at Maui Lani Golf Course retention basin.

I. 10-Yr. - 1 Hr. Rainfall:

From "Rainfall Frequency Atlas of the Hawaiian Islands", for Wailuku, Maui,
R(10 Yr.-1Hr.) = 2.00 inches

2. Total Area:

Area (Ac.):	20.11

3. Runoff Coefficent:

Grassed Area (Ac.):	5.55
Runoff Coeff't., C, for Grassed Area on Sandy Soil :	0.18
Paved Area (Ac.):	1.94
Runoff Coeff't., C, for Paved Areas:	0.95
House Area (Ac.):	1.03
Runoff Coeff't., C, for Undeveloped Areas:	0.95
Commercial Area (Ac.):	11.57
Runoff Coeff't., C, for Business Areas:	0.80
Weighted Runoff Coeff't.:	0.65

4. Time of Concentration:

Overland Flow:

Approx. Elev. Diff'l. (ft.):	23
Approx. Runoff Length (ft.):	940
Average Slope:	2.45%

Piped Flow:

Approx. Elev. Diff'l. (ft.):	32
Approx. Runoff Length (ft.):	1,050
Average Slope:	3.00%
Time of Concentration (min.):	30

5. Intensity:

Intensity (in./hr.):	2.8

6. Total Offsite Runoff:

Q = C x I x A (cfs):	**36.61**

APPENDIX A-4

PRE/POST DEVELOPMENT RUNOFF CALCULATION

TO KEOPULANI PARK BASIN

Warren S. Unemori Engineering, Inc.
Wells Street Professional Center
2145 Wells Street , Suite 403
Wailuku, Maui , Hawaii 96793

Date: February, 2010

HYDROLOGIC CALCULATIONS: EXISTING OFFSITE SURFACE RUNOFF

Objective: To determine the post-development offsite surface runoff discharging into the Keopulani Park retention basin.

I. 10-Yr. - 1 Hr. Rainfall:

From "Rainfall Frequency Atlas of the Hawaiian Islands", for Wailuku, Maui,
R(10 Yr.-1Hr.) = 2.00 inches

2. Total Area:

Area (Ac.):	5.48

3. Runoff Coefficent:

Grassed Area (Ac.):	2.65
Runoff Coeff't., C, for Grassed Area on Sandy Soil :	0.18
Paved Area (Ac.):	2.83
Runoff Coeff't., C, for Paved Areas:	0.95
Weighted Runoff Coeff't.:	0.58

4. Time of Concentration:

Overland Flow:

Approx. Elev. Diff'l. (ft.):	86
Approx. Runoff Length (ft.):	1,222
Average Slope:	7.04%

Piped Flow:

Approx. Elev. Diff'l. (ft.):	93
Approx. Runoff Length (ft.):	2500±
Average Slope:	3.72%
Time of Concentration (min.):	29

5. Intensity:

Intensity (in./hr.):	2.85

6. Total Offsite Runoff:

Q = C x I x A (cfs):	**9.02**

Warren S. Unemori Engineering, Inc.
Wells Street Professional Center
2145 Wells Street , Suite 403
Wailuku, Maui , Hawaii 96793

Date: February, 2010

HYDROLOGIC CALCULATIONS: EXISTING OFFSITE SURFACE RUNOFF

Objective: To determine the pre-development offsite surface runoff discharging into the Keopulani Park retention basin.

I. 10-Yr. - 1 Hr. Rainfall:

From "Rainfall Frequency Atlas of the Hawaiian Islands", for Wailuku, Maui,
R(10 Yr.-1Hr.) = 2.00 inches

2. Total Area:

Area (Ac.):	6.53

3. Runoff Coefficent:

Grassed Area (Ac.):	3.20
Runoff Coeff't., C, for Grassed Area on Sandy Soil :	0.18
Paved Area (Ac.):	2.87
Runoff Coeff't., C, for Paved Areas:	0.95
House Area (Ac.):	0.46
Runoff Coeff't., C, for Undeveloped Areas:	0.95
Weighted Runoff Coeff't.:	0.57

4. Time of Concentration:

Overland Flow:

Approx. Elev. Diff'l. (ft.):	129
Approx. Runoff Length (ft.):	1,920
Average Slope:	6.72%

Piped Flow:

Approx. Elev. Diff'l. (ft.):	34
Approx. Runoff Length (ft.):	1,500
Average Slope:	2.27%
Time of Concentration (min.):	33

5. Intensity:

Intensity (in./hr.):	2.72

6. Total Offsite Runoff:

Q = C x I x A (cfs):	**10.17**

APPENDIX S.

Letter Dated February 2, 2006 from Department of Transportation

LINDA LINGLE
GOVERNOR

RODNEY K. HARAGA
DIRECTOR

Deputy Directors
BRUCE Y. MATSUI
BARRY FUKUNAGA
BRENNON T. MORIOKA
BRIAN H. SEKIGUCHI

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
869 PUNCHBOWL STREET
HONOLULU, HAWAII 96813-5097

'06 FEB -6 P2:08

DEPT OF PLANNING
COUNTY OF MAUI
RECEIVED

FEB - 2 2006

IN REPLY REFER TO:

HWY-PS
2.0004

Mr. Michael W. Foley
Director
Department of Planning
County of Maui
250 South High Street
Wailuku, Hawaii 96793

Dear Mr. Foley:

Subject: Maui Lani Shopping Center Application for Project District Phase II (PH2 2005/7), Wailuku, TMK: 3-8-7:121

Thank you for requesting our review of the subject application. We have the following comments:

1. Due to traffic operational and access concerns, we will not allow direct vehicular access on Kaahumanu Avenue between Kainani Street and Maui Lani Parkway. Last year, after we informed the developer's consultants of our decision, they asked to meet with our staff to present supplemental traffic analysis and alternatives. This meeting was held on January 17, 2006. However, the additional information presented was not sufficient to address our safety concerns.

2. The developer's May 2005 Maui Lani Commercial Traffic Evaluation incorrectly assumes that we will allow right-turn-in right-turn-out access between Kaahumanu Avenue and the proposed shopping center. The project Traffic Evaluation should be revised to redistribute project-generated trips and reevaluate the need for traffic mitigation measures.

3. The developer should modify their site plan to reserve sufficient space to accommodate intersection improvements which would be required if an eastbound lane were added through Kaahumanu Avenue's intersection with the Maui Lani Parkway. The developer's 2020 traffic projections suggest that such improvements may eventually be desirable.

EXHIBIT 2

If you have any questions, please contact Ronald Tsuzuki, Head Planning Engineer, Highways Division, at 587-1830.

Very truly yours,

BRENNON T. MORIOKA
Deputy Director - Highways

c: Lloyd Sueda (Sueda & Associates)
Wayne Yoshioka (Parsons Brinckerhoff Quade & Douglas, Inc.)

APPENDIX T.

Letter Dated December 7, 2007 from Munekiyo & Hiraga, Inc. to Residents of Sandhills

MUNEKIYO & HIRAGA, INC.

December 7, 2007

TO: SANDHILLS RESIDENT

SUBJECT: Information Supplement for December 13, 2007 Community Meeting on Proposed Maui Lani Shopping Center Project

Dear Resident:

Enclosed for your review (see back of this page) is the updated schematic plan for the Kainani Street access point for the proposed Maui Lani Shopping Center. You may recall that at our previous community meeting on October 16th, the traffic engineer described the concept for the "straight-in/straight-out" alternative for Kainani Street. The enclosed plan reflects this concept and indicates the turning movements and stop sign locations at the intersection. In summary, under the proposed configuration shown on the map, there will be no right-turns permitted into the shopping center from Kainani, and there will be no left-turns permitted from the shopping center onto Kainani. The intent of this configuration is to eliminate shopping center-related "cut-through" traffic in the Sandhills' neighborhood.

A representative of PB Americas, Inc., the project's traffic consultant will be at the next community meeting to further discuss this alternative and to answer any questions you may have. In addition, other project consultants will be at the meeting to discuss refinements to the overall site plan and to respond to other project-related questions.

As a reminder, the community meeting is scheduled as follows:

Date:	Thursday, December 13, 2007
Place:	Wailuku Hongwanji Social Hall
Address:	1828 Vineyard Street, Wailuku
Time:	5:30 p.m.

If there are any questions about the project or the meeting, please feel free to contact me at (808)244-2015.

Very truly yours,

Erin Mukai, Planner

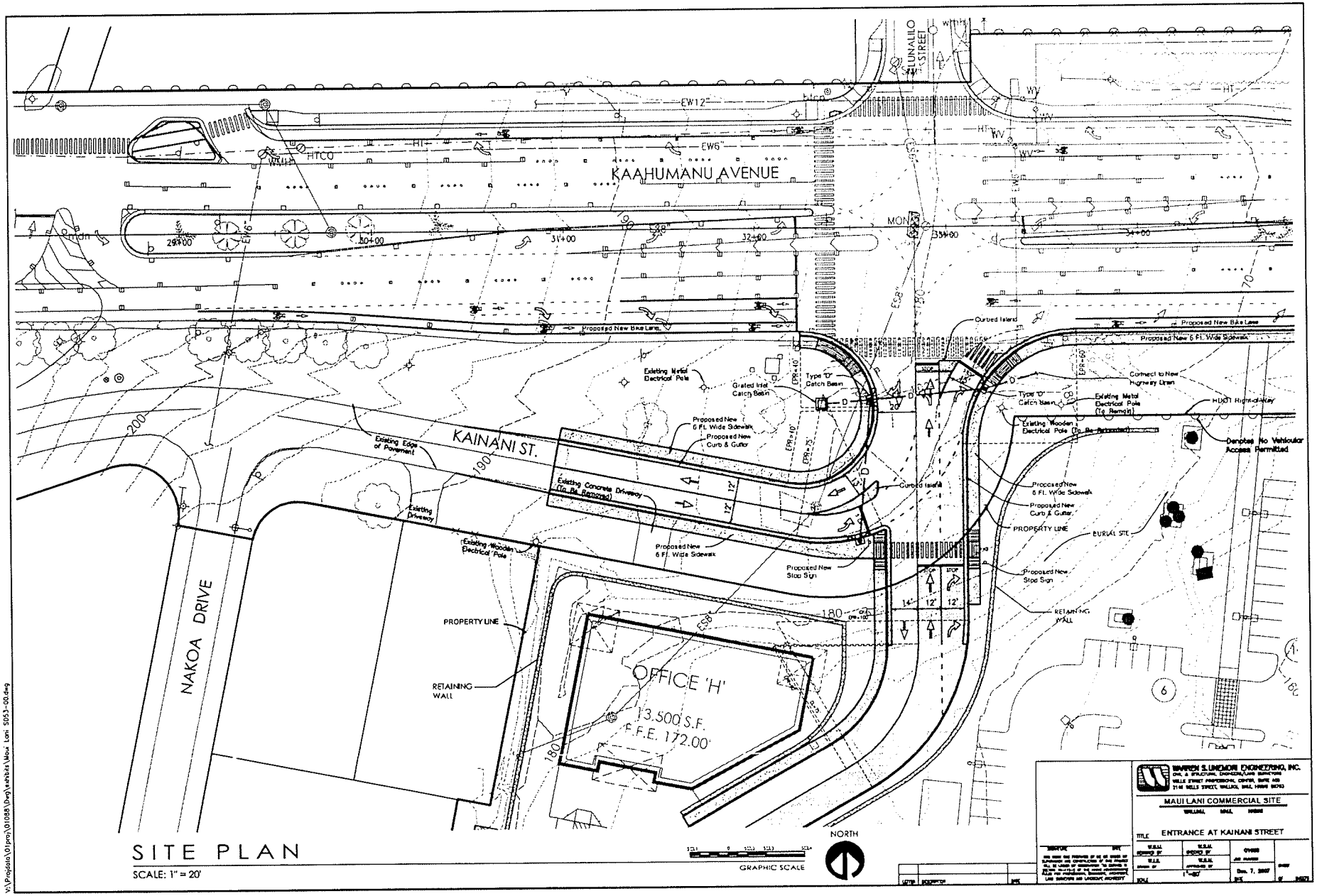
EM:lh

cc: Lloyd Sueda, Sueda & Associates, Inc.
Phillip Matsunaga, PB Americas
Clifford Mukai, Warren S. Unemori Engineering, Inc.
Lisa Rotunno-Hazuka, Archaeological Services Hawaii
Jeff Benner, Benner Stange Associates Architects, Inc.

F:\DATA\Sueda\MauiLaniCtr\2ndInformationalmtgsupplement.ltr.frm

environment planning

305 High Street, Suite 104 · Wailuku, Hawaii 96793 · ph: (808)244-2015 · fax: (808)244-8729 · planning@mhinconline.com



V:\Projects\01proj\01088\Dwg\exhibits\Maui Lani 5053-00.dwg

PRELIMINARY (SUBJECT TO CHANGE)

APPENDIX U.

Letter Dated October 30, 2008 from the Department of Transportation

ĒINDA LINGLE
GOVERNOR

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
869 PUNCHBOWL STREET
HONOLULU, HAWAII 96813-5097

BRENNON T. MORIOKA
DIRECTOR

Deputy Directors
MICHAEL D. FORMBY
FRANCIS PAUL KEENO
BRIAN H. SEKIGUCHI
JIRO A. SUMADA

IN REPLY REFER TO:

HWY-PS
2.9602

October 30, 2008

Mr. Jeffrey S. Hunt, AICP, Director
Planning Department
County of Maui
200 South High Street
Wailuku, Maui, Hawaii 96793

Dear Mr. Hunt:

Subject: Maui Lani Shopping Center
Project District Phase II Application (PH 2 2005/2007)
Maui, Wailuku District, Wailuku, TMK: (2) 3-8-7: 121

This letter supersedes our attached HWY-PS 2.4257 dated May 23, 2007.

The Department of Transportation (DOT) understands that the developer is no longer proposing unrestricted shopping center ingress and egress at Kainani Street. Although details need to be resolved through DOT review of construction drawings, the concept proposed in the attached March 11, 2008 site plan (egress to Kaahumanu Avenue via northbound Kainani Street, ingress from eastbound Kaahumanu Avenue, and various required improvements to both Kainani Street and Kaahumanu Avenue) is acceptable to the DOT.

The DOT requests the following conditions for County approval of the shopping center Project District Phase II application.

1. The developer shall execute a "grant of limited access rights" document allowing egress from a shopping center driveway onto northbound Kainani Street, allowing ingress from eastbound Kaahumanu Avenue into another shopping center driveway, and restricting vehicular access along the remainder of the development's State highway frontage.
2. The developer shall pay the DOT fair market consideration for access rights to the State highway.
3. At no cost to the State, based on submittals approved by the DOT, the developer shall widen and construct sidewalks on northbound Kainani Street and eastbound Kaahumanu Avenue in the vicinity of the shopping center, construct a bulb-out to replace a right-turn acceleration lane from northbound Kainani Street onto eastbound Kaahumanu Avenue, construct a right-turn deceleration lane on eastbound Kaahumanu Avenue to the proposed

shopping center driveway between Kainani Street and Maui Lani Parkway, construct a second westbound left-turn lane at Kaahumanu Avenue's intersection with Maui Lani Parkway, construct a wire signal interconnect along Kaahumanu Avenue between Kainani Street and Maui Lani Parkway, and modify various lane markings, crosswalks, signage, and sidewalks within the vicinity of the shopping center as required by the DOT.

4. The developer shall retain a traffic consultant at least once every two years to monitor whether signals are warranted at Maui Lani Parkway's intersection with a proposed shopping center driveway. The developer shall also obtain County and Maui District approval of plans to install and link these signals to existing signals at Maui Lani Parkway's intersection with Kaahumanu Avenue. When signal warrants are satisfied and required permits obtained, the developer shall construct planned signal improvements and submit a traffic signal timing study for review by the County and Maui District.
5. The developer shall consult Baldwin High School officials, obtain required approvals, and then install low-maintenance landscaping and/or minor improvements along the high school's Kaahumanu Avenue frontage to encourage use of cross-walks and to discourage students from jay-walking to the shopping center.

All required improvements must be constructed at no cost to the State. Plans for driveways to the State highway right-of-way, plans for work within the State highway right-of-way, and plans for improvements and right-of-way to be dedicated to the DOT must be submitted to Maui District for review and approval.

In response to Maui Council Resolution No. 08-73, the DOT agrees that it would be desirable for the County to restrict shopping center traffic from using the residential portion of Kainani Street under County jurisdiction. However, we object to County restrictions on egress of shopping center traffic to Kaahumanu Avenue over northbound Kainani Street (which is under State jurisdiction). Forcing all shopping center traffic to exit onto Maui Lani Parkway would significantly increase existing and projected left-turns from northbound Maui Lani Parkway onto Kaahumau Avenue. It would not be acceptable to adjust signal timing to provide more green time for northbound left turns because this would increase delay for through-traffic on Kaahumanu Avenue and could adversely affect signal coordination

If you have any questions, please contact Ken Tatsuguchi, Head Planning Engineer, Highways Division, at (808) 587-1830. Please reference Planning Branch file review number 08-362.

Very truly yours,

BRENNON T. MORIOKA, Ph.D., P.E.
Director of Transportation

Attachments

c: Hong Li (PB)

LINDA LINGLE
GOVERNOR

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
869 PUNCHBOWL STREET
HONOLULU, HAWAII 96813-5097

BARRY FUKUNAGA
DIRECTOR

Deputy Directors
FRANCIS PAUL KEENO
BRENNON T. MORIOKA
BRIAN H. SEKIGUCHI

IN REPLY REFER TO:

HWY-PS
2.4527

MAY 2 3 2007

Mr. Jeff S. Hunt, AICP, Director
Planning Department
County of Maui
200 South High Street
Wailuku, Maui, Hawaii 96793

Dear Mr. Hunt:

Subject: Maui Lani Shopping Center Project District Phase II Application (PH 2 2005/2007), Wailuku, TMK: 3-8-7: 121

This letter supplements the Department of Transportation's (DOT's) attached previous comments, STP 8.2267, dated September 13, 2007.

On April 9, 2007, the developer provided us with modified proposals for vehicular, bicycle, and pedestrian improvements, supplemental traffic analysis, and direct responses to our questions and concerns. Based on this submittal, subject to the following conditions, we have no objection to County approval of the Project District Phase II application.

1. The developer shall construct a sidewalk and an eastbound auxiliary lane along the development's Kaahumanu Avenue frontage between Kainani Street and Maui Lani Parkway.

2. The developer shall relocate the existing eastbound Kaahumanu Avenue bicycle lane as proposed in their April 9, 2007 submittal.

3. The developer shall widen Kainani Street and install appropriate lane markings, crosswalks, and signage based on their April 9, 2007 submittal. Kainani Street signage shall indicate that trucks are prohibited from using Kainani Street.

4. The developer shall pay fair market consideration for access rights to the State highway.

5. The developer shall execute a "grant of limited access rights" document allowing vehicular access from a shopping center driveway to Kainani Street and restricting vehicular access along the remainder of the development's State highway frontage.

6. Highway access rights may be reassessed in the event that use of the Kainani Street driveway significantly intensifies as the result of "cut-through" traffic that is not generated by the shopping center or in the event DOT Highways Division Maui District

(Maui District) requires modification of the Kainani Street driveway intersection to mitigate left-turn queues on Kainani Street's westbound approach.

7. The developer shall retain a traffic consultant at least once every two years to monitor whether signals are warranted at Maui Lani Parkway's intersection with a proposed shopping center driveway. The developer shall also obtain County and Maui District approval of plans to install and link these signals to existing signals at Maui Lani Parkway's intersection with Kaahumanu Avenue. When signal warrants are satisfied and required permits obtained, the developer shall construct planned signal improvements and submit a traffic signal timing study for review by the County and Maui District.

8. The developer shall retain a traffic consultant to take baseline counts of weekday and weekend "cut-through" traffic on Kainani Street before the shopping center opens. After the shopping center opens, and every two years for the next ten years, the developer shall retain a traffic consultant to monitor and recommend mitigation measures for shopping center traffic impacts on Kainani Street, Kaahumanu Avenue's intersection with Kainani Street, and Kaahumanu Avenue's intersection with Maui Lani Parkway.

9. If Maui District determines that it is necessary to mitigate left-turn queues on Kainani Street's westbound approach to the shopping center driveway, the developer shall modify the Kainani Street driveway intersection as directed by Maui District. If requested by the Maui Planning Department to address resident concerns about "cut-through" traffic on Kainani Street, the developer shall install additional traffic calming improvements on County roads.

Plans for work within the State highway right-of-way and plans for the proposed driveway to Kainani Street must be submitted to Maui District for review and approval. All improvements must be constructed at no cost to the State.

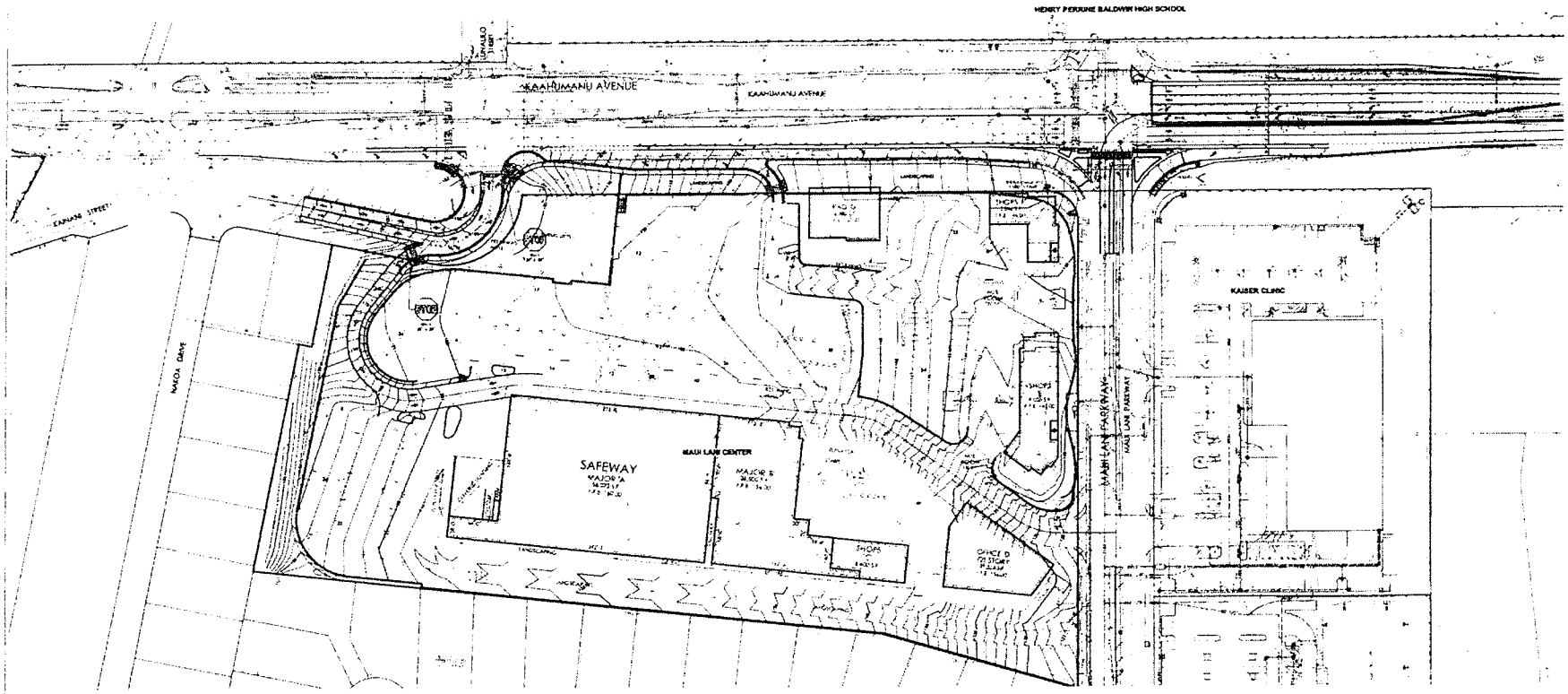
If there are any questions, please contact Ronald Tsuzuki, Head Planning Engineer, Highways Division at (808) 587-1830.

Very truly yours,

BRENNON T. MORIOKA, Ph.D., P.E.
Deputy Director - Highways

Attachment

c: Lloyd Sueda, Wayne Yoshioka



SITE PLAN - MARCH 11, 2008

SCALE: 1" = 50'

NORTH

APPROXIMATE EARTHWORK QUANTITIES
(Includes Lower Level Parking)
EXCAVATION - 80,208 CU YD.
EMBANKMENT - 20,208 CU YD.

LOWER PARKING LEVEL

March 11, 2008

HRT, LTD.
3660 Waialae Ave. Suite 400
Honolulu, Hawaii 96816
Tel : (808) 924 - 1000
Fax : (808) 922 - 3975

Maui Lani Center

Wailuku, Maui, Hawaii

BENNER STANGE ASSOCIATES
ARCHITECTS, INC
5000 S.W. MEADOWS RD.
SUITE 430
LAKE OSWEGO, OR. 97035
(503) 670-0234
FAX (503) 670-0235
bsa@bsaarch.com
BSAA
ARCHITECTURE & PLANNING

APPENDIX V.

Memorandum dated August 5, 2008 from the Department of the Corporation Counsel

PWF-71 SJ

CHARMAINE TAVARES
Mayor

BRIAN T. MOTO
Corporation Counsel

DEPARTMENT OF THE CORPORATION COUNSEL
COUNTY OF MAUI
200 SOUTH HIGH STREET
WAILUKU, MAUI, HAWAII 96793
TELEPHONE: (808) 270-7740

MEMORANDUM

T O: Bill Kauakea Medeiros, Co-Chair
Michael P. Victorino, Co-Chair
Public Works and Facilities Committee

F R O M: David A. Galazin DAG
Deputy Corporation Counsel

D A T E: August 5, 2008

SUBJECT: **MAUI LANI PROJECT DISTRICT IMPACT ON KAINANI STREET TRAFFIC** (PWF-71/PAF 08-146)

In response to your memorandum of August 5, 2008, enclosed please find the proposed Resolution entitled "REFERRING TO THE MAUI PLANNING COMMISSION A DRAFT BILL AMENDING SECTION 19.78.070, MAUI COUNTY CODE, TO PROHIBIT TRAFFIC INGRESS AND EGRESS ON KAINANI STREET TO AND FROM THE DEVELOPMENT WITHIN THE MAUI LANI PROJECT DISTRICT", revised and approved as to form and legality.

If you have any questions or concerns, please do not hesitate to contact me.

DAG:nng
Enclosure

Resolution

No. _____

REFERRING TO THE MAUI PLANNING COMMISSION A DRAFT BILL AMENDING SECTION 19.78.070, MAUI COUNTY CODE, TO PROHIBIT TRAFFIC INGRESS AND EGRESS ON KAINANI STREET TO AND FROM THE DEVELOPMENT WITHIN THE MAUI LANI PROJECT DISTRICT

WHEREAS, the Council of the County of Maui is considering a draft bill entitled "A BILL FOR AN ORDINANCE AMENDING SECTION 19.78.070, MAUI COUNTY CODE, TO PROHIBIT TRAFFIC INGRESS AND EGRESS ON KAINANI STREET TO AND FROM THE DEVELOPMENT WITHIN THE MAUI LANI PROJECT DISTRICT"; and

WHEREAS, Sections 8-8.4 and 8-8.6 of the Revised Charter of the County of Maui (1983), as amended, requires the Council to transmit proposed land use ordinances and amendments to the appropriate planning commission for review and comment; now, therefore,

BE IT RESOLVED by the Council of the County of Maui:

1. That it hereby transmits a draft bill, entitled "A BILL FOR AN ORDINANCE AMENDING SECTION 19.78.070, MAUI COUNTY CODE, TO PROHIBIT TRAFFIC INGRESS AND EGRESS ON KAINANI STREET TO AND FROM THE DEVELOPMENT WITHIN THE MAUI LANI PROJECT DISTRICT", a copy of which is attached hereto as Exhibit "A" and made a part hereof, to the Maui Planning Commission, for appropriate action;

2. That the Maui Planning Commission is respectfully requested to provide its well-considered findings and recommendations to the Council as expeditiously as possible; and

3. That certified copies of this resolution be transmitted to the Mayor; the Planning Director; the Corporation Counsel; and the Maui Planning Commission.

APPROVED AS TO FORM
AND LEGALITY:

DAVID A. GALAZIN
Deputy Corporation Counsel
County of Maui
S:\ALL\DAG\RESO\Council\Kainani 08-146b.doc

ORDINANCE NO. _____

BILL NO. _____ (2008)

A BILL FOR AN ORDINANCE AMENDING SECTION 19.78.070, MAUI COUNTY CODE, TO PROHIBIT TRAFFIC INGRESS AND EGRESS ON KAINANI STREET TO AND FROM THE DEVELOPMENT WITHIN THE MAUI LANI PROJECT DISTRICT

BE IT ORDAINED BY THE PEOPLE OF THE COUNTY OF MAUI:

SECTION 1. Section 19.78.070, Maui County Code, is amended by amending subsection C to read as follows:

"C. Infrastructure.

1. The development shall not burden governmental agencies to provide substantial infrastructure improvements; [and]

2. Individual residential lots shall not have direct access onto major arterials (minimum eighty-foot right-of-way) and shall be minimized on major streets (minimum fifty-six- foot right-of-way); and

3. The development shall not connect to or utilize Kainani Street, Wailuku, Maui, Hawaii as an ingress or egress into any part of the development."

SECTION 2. Material to be repealed is bracketed. New material is underscored. In printing this bill, the County Clerk need not include the brackets, bracketed material, or underscoring.

SECTION 3. This ordinance shall take effect upon its approval.

APPROVED AS TO FORM AND LEGALITY:

_____

Department of the Corporation Counsel
County of Maui

paf:kmh:08-146a

EXHIBIT " A "

APPENDIX W.

Letter Dated February 10, 2009 from the Department of Planning

CHARMAINE TAVARES
Mayor

JEFFREY S. HUNT
Director

KATHLEEN ROSS AOKI
Deputy Director

FEB 27 2009

RECEIVED
2009 FEB 10 PM 12:29
OFFICE OF THE MAYOR
COUNTY OF MAUI

DEPARTMENT OF PLANNING

February 10, 2009

RECEIVED
2009 FEB 11 AM 11:40
OFFICE OF THE
COUNTY CLERK

APPROVAL FOR TRANSMITTAL

Mayor Date 2/11/09

Honorable Charmaine Tavares
Mayor, County of Maui
200 South High Street
Wailuku, Hawaii 96793

For Transmittal to:

Honorable Danny A. Mateo, Chair
and Members of the Maui County Council
200 South High Street
Wailuku, Hawaii 96793

Dear Chair Mateo and Members:

SUBJECT: RESOLUTION NO. 08-73, REFERRING TO THE MAUI PLANNING COMMISSION A DRAFT BILL AMENDING SECTION 19.78.070, MAUI COUNTY CODE, TO PROHIBIT TRAFFIC INGRESS AND EGRESS ON KAINANI STREET TO AND FROM THE DEVELOPMENT WITHIN THE MAUI LANI PROJECT DISTRICT (PH1 2008/0001)

The Department of Planning (Department) is transmitting recommendations from the Maui Planning Commission (Commission) on the draft bill amending Section 19.78.070, Maui Country Code (MCC), to prohibit traffic ingress and egress on Kainani Street, to and from the development limits, within the Maui Lani Project District.

The Commission conducted a public hearing on November 25, 2008. Eight (8) individuals testified in support, and four (4) individuals testified in opposition to the draft bill.

The Department recommended disapproval of the resolution and suggested that ingress only be prohibited from Kainani Street, but that egress from the proposed development in the Maui Lani Project District be permitted. The Department's recommendation was based on agency comments and an updated site plan for the commercial project, which includes right-turn-out only onto Kainani Street.

The Commission did not agree with the Department and recommended approval of the resolution to restrict ingress and egress from Kainani Street.

COUNTY COMMUNICATION NO. 09-65

Inasmuch as the Maui County Council approval is required for the amendment to the Maui Lani Project District Ordinance, the Department respectfully transmits the following documents for your review:

1. Department's Report and Recommendation to the Commission, dated November 25, 2008, including agency comments;

2. Adopted Minutes of the November 25, 2008 Commission meeting;

3. Letter from Lee Ohigashi, dated November 24, 2008, stating his objection to discussion of the Maui Lani Commercial Project that adjoins Kainani Street, for the November 25, 2008 Commission meeting;

4. Letter from Lee Ohigashi, dated November 24, 2008, supporting the resolution;

5. Letter from David Kingdon, dated November 24, 2008, supporting the proposed resolution; and

6. Letter from Derrick Hatada, dated November 3, 2008, opposing the proposed resolution.

Thank you for your attention to this matter. Should further clarification be necessary, please contact Current Planning Supervisor Ann Cua at Ext. 7521.

Sincerely,

JEFFREY S. HUNT
Planning Director

Attachments

xc: Maui Planning Commission Members
Clayton I. Yoshida, Planning Program Administrator
Ann T. Cua, Current Planning Supervisor
Michael Munekiyo, Munekiyo & Hiraga, Inc.
Lloyd Sueda, Sueda & Associates, Inc.

JSH:ATC:vb

Project File
General File

K:\WP_DOCS\PLANNING\PH1\2008\KainaniStReso0873\CouncilTrans.doc

BEFORE THE MAUI PLANNING COMMISSION

COUNTY OF MAUI

STATE OF HAWAII

In The Matter Of The Application Of The Maui County Council Resolution No. 08-73 To Amend Section 19.78, Maui County Code, Wailuku-Kahului Project District 1 (Maui Lani) to Prohibit Traffic Ingress and Egress on Kainani Street to and from the Development within the Maui Lani Project District at Maui Tax Map Key 3-8-007, Wailuku, Maui, Hawaii	DOCKET NO. PH1 2008/0001 Maui County Council (ATC)

K:\WP_DOCS\PLANNING\PH1\2008\KainaniStReso0873\KainaniStResolusionRpt.doc

MAUI PLANNING DEPARTMENT'S REPORT AND RECOMMENDATION
TO THE MAUI PLANNING COMMISSION
NOVEMBER 25, 2008 MEETING

DEPARTMENT OF PLANNING
COUNTY OF MAUI
250 S. HIGH STREET
WAILUKU, MAUI, HAWAII 96793

PH1 2008/0001

BEFORE THE MAUI PLANNING COMMISSION

COUNTY OF MAUI

STATE OF HAWAII

In The Matter Of The Application Of The Maui County Council Resolution No. 08-73 To Amend Section 19.78, Maui County Code, Wailuku-Kahului Project District 1 (Maui Lani) to Prohibit Traffic Ingress and Egress on Kainani Street to and from the Development within the Maui Lani Project District at Maui Tax Map Key 3-8-007, Wailuku, Maui, Hawaii	DOCKET NO. PH1 2008/0001 Maui County Council (ATC)

THE APPLICATION

This matter arises from Maui County Council Resolution No. 08-73 (Resolution) adopted by the Council of the County of Maui (Applicant) on August 22, 2008 and received by the Maui Planning Department (Department) on August 28, 2008. The Resolution was adopted and transmitted to the Department pursuant to Section 8-8.4 and 8-8.6 of the Revised Charter of the County of Maui for land situated in the State Urban District, Wailuku, Island of Maui and County of Maui, identified at Maui Tax Map Key 3-008-007.

PURPOSE OF THE APPLICATION

The Resolution is requesting Amendment to Section 19.78, Wailuku-Kahului Project District 1 (Maui Lani), Maui County Code in order to prohibit traffic ingress and egress on Kainani Street to and from the Development within the Maui Lani Project District. (Exhibit 1)

APPLICABLE REGULATIONS

REVISED CHARTER OF THE COUNTY OF MAUI

Pursuant to Section 8-8-4(3) Planning Commission on the Maui County Charter, the planning commission shall review other proposed land use ordinances and amendments thereto prepared by the director or council and after public hearings, transmit such ordinances with its findings and recommendations thereon to the council for consideration or action no later than one hundred twenty (120) days after the final public hearing.

Also, pursuant to Section 8-8-6(2) Adoption of General Plan and Other land Use Ordinances, any revisions of the general plan, zoning ordinance or other land use ordinance may be proposed by the council and shall be reviewed by the appropriate planning commission as if prepared by the planning department. Any such revisions shall be referred to the appropriate planning commission by resolution. If the planning commission disapproves the proposed revisions or recommends modification thereof, not accepted by the council, or fails to make its report within a period of the one hundred twenty (120) days after receipt of the referral,

the council may nevertheless pass such revision, but only by the affirmation vote of at least two thirds of the council's entire membership.

Project District Phase I Approval

A Project District Phase I Approval is reviewed pursuant to Title 19 Zoning, Chapter 19.45 Project District Processing Regulations, Section 19.45.050 Processing procedures; Maui County Code, 1980, as amended. The developer of land designated as a project district on an adopted community plan may initiate a project district development of part or all of the project district. After receiving an application, the planning director shall submit to the planning commission one or more proposed project district ordinances. The ordinance shall include project district zoning district standards identifying permitted land uses, accessory uses, densities, heights, setbacks, and lot dimensions.

PROCEDURAL MATTERS

1. On October 3, 2008, the Planning Department notified the Council's Public Works and Facilities Committee about the scheduled public hearing with the Maui Planning commission on County Resolution 08-73.

2. On October 24, 2008, a notice of the public hearing on the resolution was published in the Maui News by the Maui Planning Department.

3. The 120 day deadline to transmit findings and recommendations to the Council on the Resolution is March 26, 2008. (120 days after the November 25, 2008 public hearing)

4. The subject action does not involve an action that triggers compliance to Chapter 343, Hawaii Revised Statutes, relating to Environmental Impact Statements.

GENERAL DESCRIPTION

Description of Kainani Street

1. Kainani Street is a two lane, undivided collector roadway providing access to Kaahumanu Avenue from existing residential areas located primarily south of Kaahumanu Avenue and east of Waiale Road. Kainani Street intersects with Kaahumanu Avenue opposite Lunalilo Street which provides access to Kaahumanu Avenue for the Kanaloa Houselots Subdivision. The portion of Kainani Street from its intersection with Kaahumanu Avenue, past Nakoa Drive to an area before Halenani Drive is under the State jurisdiction. (Exhibit 3a) From that point, the remainder of the roadway is under the County's jurisdiction.

BACKGROUND INFORMATION

The Planning Commission is in the process of reviewing a Project District Phase II application for the Maui Lani Commercial Project at TMK 3-8-7:121 on 12.926 acres. **(Exhibits 2 and 3)** The matter has been deferred to allow for the preparation of an Environmental Assessment which has been triggered by the proposed improvements to Kainani Street as well from the use of other State and/or County lands for infrastructural improvements.

The project when originally submitted to the Planning Department proposed a secondary access to the commercial center at Kaahumanu Avenue. The primary access is from Maui Lani Parkway. The applicant was not able to obtain the approval from the State DOT to allow access onto Kaahumanu Avenue and, as such, pursued alternatives for secondary access to the project. Kainani Street became that proposed secondary access which caused strong neighborhood opposition.

Since that time, the applicant has revised the site plan for the Commercial project and is no longer pursuing unrestricted shopping center ingress and egress at Kainani Street. The site plan now proposes a right turn only out of Kainani Street and a right turn only from Kaahumanu Avenue into the development along with a six foot sidewalk on northbound Kainani Street and eastbound Kaahumanu Avenue in the vicinity of the shopping center along with other roadway improvements.

DESCRIPTION OF THE PROJECT

The Maui County Council is considering an amendment to Section 19.78.070 C, Maui County Code, Wailuku-Kahului Project District 1 (Maui Lani), in order to prohibit traffic ingress and egress on Kainani Street to and from the Development within the Maui Lani Project District.

REVIEWING AGENCIES

1. Department of Public Works – Memo dated October 23, 2008 (Exhibit 4)

2. Police Department – Memo dated October 9, 2008 (Exhibit 5)

3. Department of Fire and Public Safety – Letter dated October 3, 2008 (Exhibit 6)

4. Department of Transportation – Letter dated October 30, 2008 (Exhibit 7)

5. State Department of Health – Letter dated July 29, 2008 (Exhibit 9)

6. State Department of Transportation – Letter dated July 25, 2008 (Exhibit 10)

ANALYSIS

1. The proposed resolution would prohibit ingress and egress from Kainani Street. Although this prohibition would be placed in the Maui Lani Project District Ordinance, it would affect only the development of the 12.296 acre parcel at TMK 3-8-7:121.

2. The proposed Resolution was transmitted to various State and County agencies for comment.

3. The Department of Public Works (DPW) by memo dated October 23, 2008 (Exhibit 4) comments that they understand the community's concern, however they believe that limiting access to a major shopping center to just one street (Maui Lani Parkway) will result in traffic congestion of the Maui Lani Parkway, as well as the intersection of Kaahumanu Avenue/Baldwin High School/MauiLani Parkway; the intersection of Maui Lani Parkway/Mahalani Street and the intersection of Wailnu Street and Waiale Drive. Traffic congestion of Maui Lani Parkway/Mahalani Street and Wailnu Street/Waiale Drive is especially problematic given that these intersections provide alternate access to Maui Memorial Medical Center (hospital). Traffic congestion of Maui Lani Parkway may also be problematic for the Kaiser medical facility and the St. Francis Dialysis Center.

4. The Police Department in a memo dated October 9, 2008 (Exhibit 5) indicates that they have no comments regarding Council Resolution 08-73 at this time. Relative to the Maui Lani commercial development, the Department states that the prohibition of the ingress and egress point on Kainani Street will likely require an updated traffic study due to the fact that the only remaining ingress and egress points for the development will be from Maui Lani Parkway.

5. The Department of Fire and Public Safety by letter dated October 3, 2008 (Exhibit 6) comments that they would prefer to see two distal entrances to the shopping center but it is not an absolute requirement. The Department would like to take a look at the new development plan if the use of Kainani Street will be prohibited.

6. The State Department of Transportation (DOT) by letter dated October 30, 2008 (**Exhibit 7**) commented on both a revised site plan for the Maui Lani Shopping Center as well as Council Resolution 08-73.

In response to Council Resolution 08-73, the DOT agrees that it would be desirable for the County to restrict shopping center traffic from using the residential portion of Kainani Street under County jurisdiction. However, they object to County restrictions on egress of shopping center traffic to Kaahumanu Avenue over northbound Kainani Street (which is under State jurisdiction). Forcing all shopping center traffic to exit onto Maui Lani Parkway would significantly increase existing and projected left-turns from northbound Maui Lani Parkway onto Kaahumanu Avenue. DOT further states that it would not be acceptable to adjust signal timing

to provide more green time for northbound left turns because this would increase delay for through-traffic on Kaahumanu Avenue and could adversely affect signal coordination.

DOT has reviewed the revised site plan for the Maui Lani Shopping Center project dated March 11, 2008 (**Exhibit 7a**) which includes construction of the following:

a. A right turn only out of the shopping center project onto Kainani Street;

b. A six foot sidewalk on northbound Kainani Street and eastbound Kaahumanu Avenue in the vicinity of the shopping center;

c. A bulb-out to replace a right-turn acceleration lane from northbound Kainani Street onto eastbound Kaahumanu Avenue;

d. A right-turn deceleration lane on eastbound Kaahumanu Avenue to the proposed shopping center driveway between Kainani Street and Maui Lani Parkway;

e. A second west-bound left -turn lane at Kaahumanu Avenue's intersection with Maui Lani Parkway;

f. A wire signal interconnect along Kaahumanu Avenue between Kainani Street and Maui Lani Parkway;

g. Modification of various lane markings, crosswalks, signage and sidewalks within the vicinity of the shopping center as required by DOT.

A detailed map of the improvements proposed for the Kainani Street area illustrating the above mentioned improvements is attached as "**Exhibit 8**".

TESTIMONY

As of November 3, 2008, the Planning Department has received no letters in support of or in opposition to the proposed resolution.

CONCLUSION

Based on the new proposed site plan for the Maui Lani Shopping Center project to include right turn out only on to Kainani Street and comments from State and County agencies, the Planning Department concludes that County Resolution 08-73 to prohibit traffic ingress and egress on Kainani Street to and from development within the Maui Lani Project District is not in the best interest of traffic safety and sound planning principles. In addition, the amended site plan requires Project District Phase II approval from the Maui Planning Commission and this issue of Kainani Street will be subject to public testimony and discussion by the Commission.

RECOMMENTATION

The Planning Department recommends disapproval of the resolution to amend the Wailuku-Kahului Project District 1 (Maui Lani) ordinance to prohibit traffic ingress and egress on Kainani Street to and from development within the Maui Lani Project District. If the County Council wishes to pursue an amendment to the ordinance, we suggest that ingress only from

Kainani Street to proposed development in the Maui Lani Project District be prohibited and egress from proposed development in the Maui Lani Project to Kainani Street be permitted,

In consideration of the foregoing , the Planning Department recommends that the Maui Planning Commission adopt the Planning Department's Report and Recommendation prepared for the November 25, 2008 meeting as its Findings of Fact and Conclusions of Law and authorize the Director of Planning to transmit said Findings and Conclusions on behalf of the Commission.

APPROVED:

JEFFREY S. HUNT, AICP
Planning Director

Resolution

No. 08-73

REFERRING TO THE MAUI PLANNING COMMISSION A DRAFT BILL AMENDING SECTION 19.78.070, MAUI COUNTY CODE, TO PROHIBIT TRAFFIC INGRESS AND EGRESS ON KAINANI STREET TO AND FROM THE DEVELOPMENT WITHIN THE MAUI LANI PROJECT DISTRICT

WHEREAS, the Council of the County of Maui is considering a draft bill entitled "A BILL FOR AN ORDINANCE AMENDING SECTION 19.78.070, MAUI COUNTY CODE, TO PROHIBIT TRAFFIC INGRESS AND EGRESS ON KAINANI STREET TO AND FROM THE DEVELOPMENT WITHIN THE MAUI LANI PROJECT DISTRICT"; and

WHEREAS, Sections 8-8.4 and 8-8.6 of the Revised Charter of the County of Maui (1983), as amended, requires the Council to transmit proposed land use ordinances and amendments to the appropriate planning commission for review and comment; now, therefore,

BE IT RESOLVED by the Council of the County of Maui:

1. That it hereby transmits a draft bill, entitled "A BILL FOR AN ORDINANCE AMENDING SECTION 19.78.070, MAUI COUNTY CODE, TO PROHIBIT TRAFFIC INGRESS AND EGRESS ON KAINANI STREET TO AND FROM THE DEVELOPMENT WITHIN THE MAUI LANI PROJECT DISTRICT", a copy of which is attached hereto as Exhibit "A" and made a part hereof, to the Maui Planning Commission, for appropriate action;

2. That the Maui Planning Commission is respectfully requested to provide its well-considered findings and recommendations to the Council as expeditiously as possible; and

3. That certified copies of this resolution be transmitted to the Mayor; the Planning Director; the Corporation Counsel; and the Maui Planning Commission.

APPROVED AS TO FORM
AND LEGALITY:

DAVID A. GALAZIN
Deputy Corporation Counsel
County of Maui
S:\ALL\DAG\RESO\Council\Kainani 08-146b.doc

EXHIBIT 1

ORDINANCE NO. _____

BILL NO. _____ (2008)

A BILL FOR AN ORDINANCE AMENDING SECTION 19.78.070, MAUI COUNTY CODE, TO PROHIBIT TRAFFIC INGRESS AND EGRESS ON KAINANI STREET TO AND FROM THE DEVELOPMENT WITHIN THE MAUI LANI PROJECT DISTRICT

BE IT ORDAINED BY THE PEOPLE OF THE COUNTY OF MAUI:

SECTION 1. Section 19.78.070, Maui County Code, is amended by amending subsection C to read as follows:

"C. Infrastructure.

1. The development shall not burden governmental agencies to provide substantial infrastructure improvements; [and]

2. Individual residential lots shall not have direct access onto major arterials (minimum eighty-foot right-of-way) and shall be minimized on major streets (minimum fifty-six- foot right-of-way); and

3. The development shall not connect to or utilize Kainani Street, Wailuku, Maui, Hawaii as an ingress or egress into any part of the development."

SECTION 2. Material to be repealed is bracketed. New material is underscored. In printing this bill, the County Clerk need not include the brackets, bracketed material, or underscoring.

SECTION 3. This ordinance shall take effect upon its approval.

APPROVED AS TO FORM AND LEGALITY:

Department of the Corporation Counsel
County of Maui

paf:kmh:08-146a

EXHIBIT "A"

COUNCIL OF THE COUNTY OF MAUI

WAILUKU, HAWAII 96793

CERTIFICATION OF ADOPTION

It is HEREBY CERTIFIED that RESOLUTION NO. 08-73 was adopted by the Council of the County of Maui, State of Hawaii, on the 22nd day of August, 2008, by the following vote:

MEMBERS	G. Riki HOKAMA Chair	Dennis A. MATEO Vice-Chair	Michelle ANDERSON	Gladys C. BAISA	Jo Anne JOHNSON	William J. MEDEIROS	Michael J. MOLINA	Joseph PONTANILLA	Michael P. VICTORINO
ROLL CALL	Aye	Aye	Excused	Aye	Aye	Aye	Aye	Aye	Aye

COUNTY CLERK

COUNCIL OF THE COUNTY OF MAUI

PUBLIC WORKS AND FACILITIES COMMITTEE

August 22, 2008

Committee Report No. 08-104

Honorable Chair and Members
of the County Council
County of Maui
Wailuku, Maui, Hawaii

Chair and Members:

Your Public Works and Facilities Committee, having met on March 12, 2008, and August 6, 2008, makes reference to County Communication No. 08-64, from the Council Chair, relating to the matter of residential issues and concerns regarding the Maui Lani Project District, specifically the traffic situation on Kainani Street.

By correspondence dated March 7, 2008, the Council Chair transmitted the following: (1) correspondence dated January 27, 2008, from Elsie Furtado, expressing opposition to the Maui Lani Shopping Center development for safety reasons; (2) correspondence dated January 17, 2008, from Norman and Lauren Chun, requesting that the entrance/exit for the Maui Lani Shopping Center be moved from Kainani Street to the Maui Lani Parkway; and (3) correspondence dated January 28, 2008, from Lee and Stephanie Ohigashi, requesting an amendment to the Maui Lani Project District Ordinance to prevent the use of Kainani Street as an entrance/exit for the Maui Lani Shopping Center, and attaching various supporting documents.

By correspondence dated March 10, 2008, Nadine Gomes transmitted testimony on behalf of Bernice Takaki, Patience Kahula, and herself, in opposition to using Kainani Street as an entrance/exit for the Maui Lani Shopping Center.

At its meeting of March 12, 2008, your Committee met with the Director of Public Works and a Deputy Corporation Counsel.

Your Committee received oral testimony from ten members of the public who spoke in opposition to any plan to use Kainani Street as an entrance/exit for the Maui Lani Shopping Center. Five testifiers submitted written testimony in conjunction with their oral testimony. One testifier submitted a petition containing 138 signatures in opposition to the use of Kainani Street as an entrance/exit for the Maui Lani Shopping Center.

Your Committee received additional written testimony from four members of the public in opposition to the use of Kainani Street as an entrance/exit for the Maui Lani Shopping Center. Testimony included concerns regarding safety as well as a desire to protect the character of the neighborhood. Testimony also noted that the substandard streets are not designed to carry increased traffic.

A Co-Chair of your Committee stated his intention to inform the Maui Planning Commission of the testimony received.

Your Committee deferred consideration of the matter pending further discussion.

By correspondence dated March 18, 2008, the Director of Public Works informed your Committee that the Department would not be sending a representative to the April 9, 2008 community meeting regarding the Maui Lani Shopping Center. The Director stated that Kainani Street is a State roadway, and only the State has jurisdiction over the use of Kainani Street. He further stated that the property owner is currently preparing an environmental assessment for the Maui Lani Project District, and the use of Kainani Street has not yet been determined.

By correspondence dated May 2, 2008, the Co-Chairs of your Committee informed the Maui Planning Commission of testimony received in opposition to any modification to the Maui Lani Project District, which would allow Kainani Street to be used as an entrance/exit for the Maui Lani Shopping Center. The Co-Chairs stated your Committee's intention to meet again on this matter.

By correspondence dated June 30, 2008, a Co-Chair of your Committee transmitted a draft bill, entitled "A BILL FOR AN ORDINANCE AMENDING SECTION 19.78.070, MAUI COUNTY CODE, TO PROHIBIT TRAFFIC INGRESS AND EGRESS ON KAINANI STREET TO AND FROM THE DEVELOPMENT WITHIN THE MAUI LANI PROJECT DISTRICT", and a draft resolution, entitled "REFERRING TO THE MAUI PLANNING COMMISSION A DRAFT BILL AMENDING SECTION 19.78.070, MAUI COUNTY CODE, TO PROHIBIT TRAFFIC INGRESS AND EGRESS ON KAINANI STREET TO AND FROM THE DEVELOPMENT WITHIN THE MAUI LANI PROJECT DISTRICT".

The purpose of the draft bill is to amend the Maui Lani Project District Ordinance to prohibit traffic ingress and egress on Kainani Street to and from the development. The purpose of the draft resolution is to refer the draft bill to the Maui Planning Commission pursuant to Sections 8-8.4 and 8-8.6 of the Revised Charter of the County of Maui (1983), as amended, for review and comment.

By correspondence dated August 5, 2008, the Co-Chairs of your Committee requested that the Department of the Corporation Counsel review the draft resolution and, if appropriate, transmit a proposed resolution, approved as to form and legality.

By correspondence dated August 5, 2008, the Department of the Corporation Counsel transmitted a proposed resolution, entitled "REFERRING TO THE MAUI PLANNING COMMISSION A DRAFT BILL AMENDING SECTION 19.78.070, MAUI COUNTY CODE, TO PROHIBIT TRAFFIC INGRESS AND EGRESS ON KAINANI STREET TO AND FROM THE DEVELOPMENT WITHIN THE MAUI LANI PROJECT DISTRICT".

At its meeting of August 6, 2008, your Committee met with the Director of Public Works and a Deputy Corporation Counsel.

Your Committee received oral and written testimony from Michael T. Munekiyo, Project Manager, Munekiyo & Hiraga, Inc. Mr. Munekiyo provided background information on the Maui Lani Project District on behalf of the owner of the site for the proposed Maui Lani Shopping Center, and suggested that ongoing efforts to resolve the residents' concerns may be preferable to the proposed resolution and draft bill. Mr. Munekiyo described the progressive changes made by the project team in response to traffic studies and residents' concerns. The most recent proposal prevents ingress to the shopping center from Kainani Street, and limits egress to a right turn only. He further stated that the State Department of Transportation is currently reviewing this modified proposal.

The Director stated that the Department is awaiting receipt of the environmental assessment, which will provide detailed traffic studies for the Department's review. He indicated that the Department has seen some preliminary traffic studies, but not the most recent studies.

Your Committee discussed the alternatives under consideration, and the value in having all of these alternatives presented to the Maui Planning Commission prior to further approvals. Your Committee questioned whether State legislation has passed that gives the County any authority over State roadways, similar to the authority granted to the counties to regulate downhill bike tours on State highways.

The Deputy Corporation Counsel clarified that while the County does not have jurisdiction over Kainani Street, it does have jurisdiction to amend the Maui Lani Project District Ordinance.

Your Committee voted to recommend adoption of the proposed resolution and filing of the communication.

Your Public Works and Facilities Committee RECOMMENDS the following:

1. That Resolution No. 08-73, attached hereto, entitled "REFERRING TO THE MAUI PLANNING COMMISSION A DRAFT BILL AMENDING SECTION 19.78.070, MAUI COUNTY CODE, TO PROHIBIT TRAFFIC INGRESS AND EGRESS ON KAINANI STREET TO AND FROM THE DEVELOPMENT WITHIN THE MAUI LANI PROJECT DISTRICT", be ADOPTED; and

2. That County Communication No. 08-64 be FILED.

Adoption of this report is respectfully requested.

pwf:cr:08071aa:scj

COUNCIL OF THE COUNTY OF MAUI

PUBLIC WORKS AND FACILITIES COMMITTEE

Committee Report No. 08-104

BILL KAUAKEA MEDEIROS — Co-Chair

DANNY A. MATEO — Member

MICHAEL P. VICTORINO — Co-Chair

JOSEPH PONTANILLA — Member

G. RIKI HOKAMA — Member

COUNCIL OF THE COUNTY OF MAUI

WAILUKU, HAWAII 96793

CERTIFICATION OF ADOPTION

It is HEREBY CERTIFIED that COMMITTEE REPORT NO. 08-104 was adopted by the Council of the County of Maui, State of Hawaii, on the 22nd day of August, 2008, by the following vote:

MEMBERS	G. Riki HOKAMA Chair	Dennis A. MATEO Vice-Chair	Michelle ANDERSON	Gladys C. BAISA	Jo Anne JOHNSON	William J. MEDEIROS	Michael J. MOLINA	Joseph PONTANILLA	Michael P. VICTORINO
ROLL CALL	Aye	Aye	Excused	Aye	Aye	Aye	Aye	Aye	Aye

COUNTY CLERK

Council Resolution 08-73

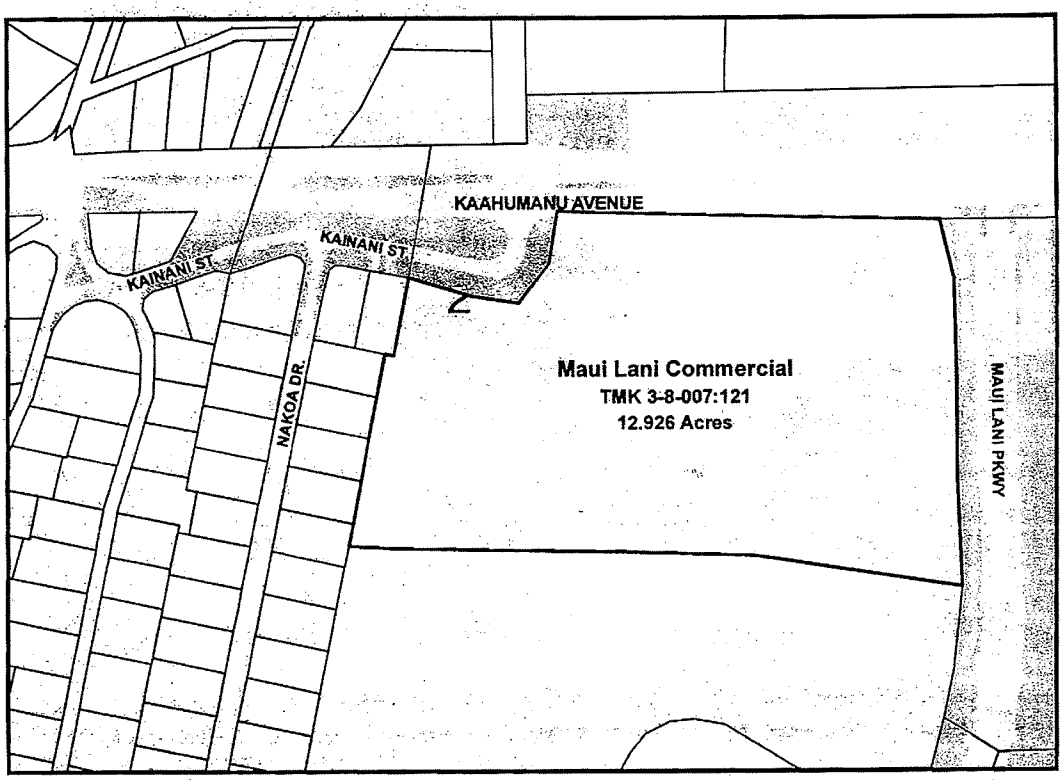


Exhibit 2

Council Resolution 08-73

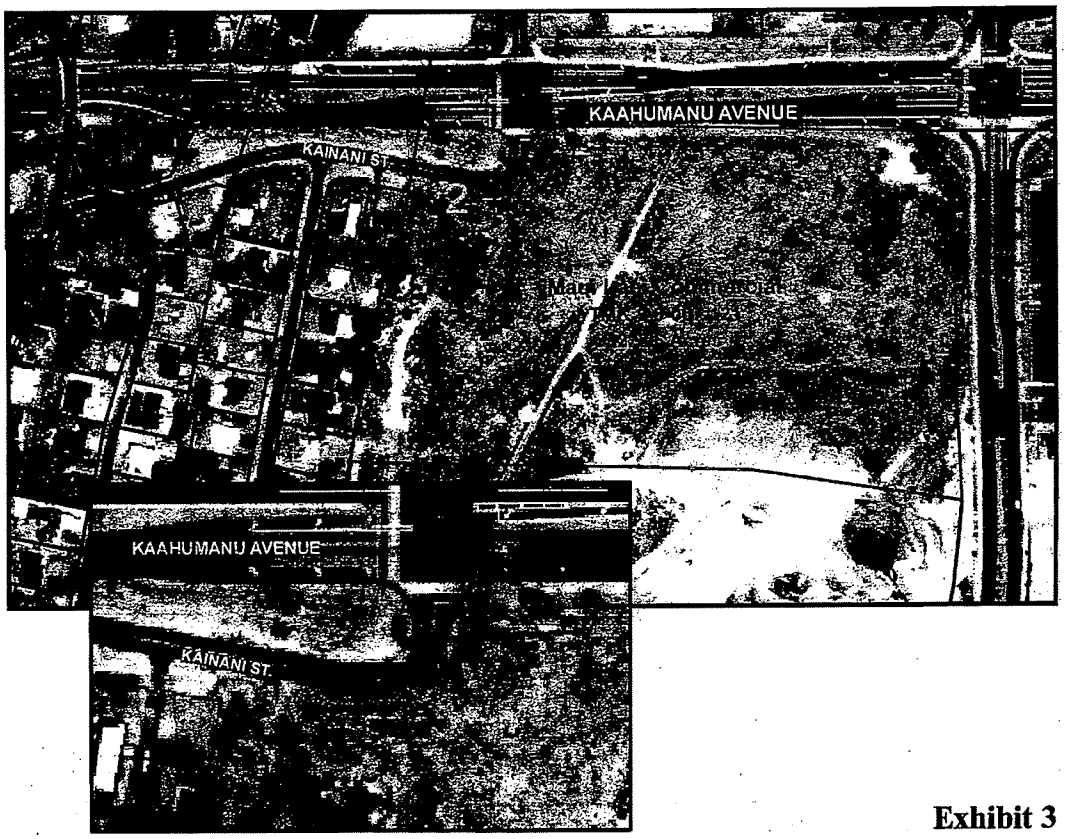
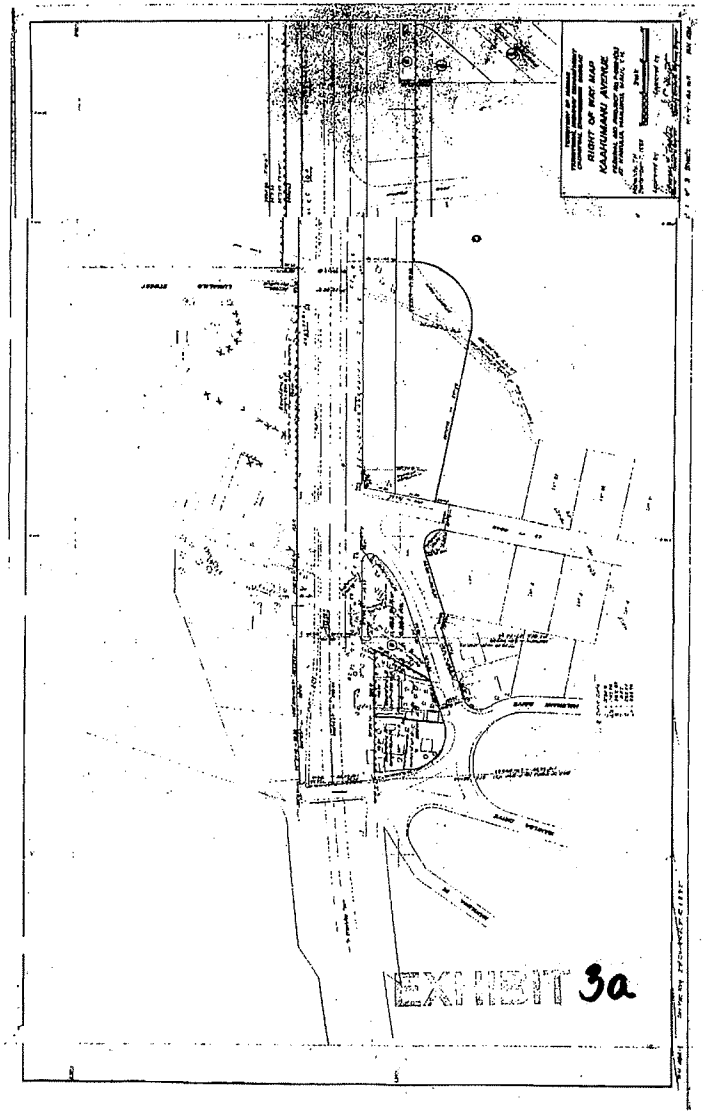


Exhibit 3



CHARMAINE TAVARES
Mayor

MILTON M. ARAKAWA, A.I.C.P.
Director

MICHAEL M. MIYAMOTO
Deputy Director

Telephone: (808) 270-7845
Fax: (808) 270-7955

RALPH NAGAMINE, L.S., P.E.
Development Services Administration

CARY YAMASHITA, P.E.
Engineering Division

BRIAN HASHIRO, P.E.
Highways Division

COUNTY OF MAUI
DEPARTMENT OF PUBLIC WORKS
200 SOUTH HIGH STREET, ROOM NO. 434
WAILUKU, MAUI, HAWAII 96793

October 23, 2008

MEMO TO: JEFFREY S. HUNT, A.I.C.P., PLANNING DIRECTOR

FROM: MILTON M. ARAKAWA, A.I.C.P., DIRECTOR OF PUBLIC WORKS

SUBJECT: **COUNCIL RESOLUTION 08-73 REFERRING TO THE MAUI PLANNING COMMISSION A DRAFT BILL AMENDING SECTION 19.78.070, MAUI COUNTY CODE, TO PROHIBIT TRAFFIC INGRESS AND EGRESS ON KAINANI STREET TO AND FROM THE DEVELOPMENT WITHIN THE MAUI LANI PROJECT DISTRICT (TMK: [2] 3-8-007:121)**

We reviewed the subject application and have the following comments:

1. While we understand the community's concern, it is our opinion that limiting access to a major shopping center to just one street (Maui Lani Parkway) will result in traffic congestion of Maui Lani Parkway, as well as the intersection of Kaahumanu Avenue/Baldwin High School/Maui Lani Parkway; intersection of Maui Lani Parkway/Mahalani Street and Intersection of Wainu Street and Waiale Drive. Traffic congestion of Maui Lani Parkway/Mahalani Street and Wainu Street/Waiale Drive is especially problematic given that these intersections provide alternate access to Maui Memorial Medical Center (hospital). Traffic congestion of Maui Lani Parkway may also be problematic for the Kaiser medical facility and the St. Francis Dialysis Center.

If you have any questions regarding this memorandum, please call Michael Miyamoto at 270-7845.

DEPT OF PLANNING
COUNTY OF MAUI
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MMA:MMM:ls
xc: Highways Division
Engineering Division
S:\LUCA\CZM\Council_Resolution_08-73_38007121_ls.wpd

EXHIBIT 4

CHARMAINE TAVARES
MAYOR

OUR REFERENCE
YOUR REFERENCE

POLICE DEPARTMENT
COUNTY OF MAUI

55 MAHALANI STREET
WAILUKU, HAWAII 96793
(808) 244-6400
FAX (808) 244-6411

THOMAS M. PHILLIPS
CHIEF OF POLICE

GARY A. YABUTA
DEPUTY CHIEF OF POLICE

October 9, 2008

MEMORANDUM

TO: Ann T. Cua, Current Planning Supervisor
Department of Planning

FROM: Thomas M. Phillips, Chief of Police

RE: Council Resolution 08-73, "Referring to the Maui Planning Commission A Draft Bill Amending Section 19.78.070, Maui County Code, to Prohibit Traffic Ingress and Egress on Kainani Street to and from the Development within the Maui Lani Project District" (Proposed Maui Lani Shopping Center, TMK: (2) 3-8-007:121)

We were asked to comment by October 24, 2008, on the above-referenced matter.

Please refer to the enclosed comments from Administrative Sergeant Stephen Orikasa of our Wailuku Patrol Division regarding the ingress and egress point on Kainani Street.

There are no comments regarding Council Resolution 08-73 at this time; however, we would like to review any revisions to the development and traffic impact/mitigation studies.

Thank you for the opportunity to comment on this project.

THOMAS M. PHILLIPS
CHIEF OF POLICE

Enclosure

EXHIBIT 5

Kay - Forward to Planning. DC Gary Yabuta 10/8/08

TO : THOMAS PHILLIPS, CHIEF OF POLICE, COUNTY OF MAUI

VIA : CHANNELS

FROM : STEPHEN ORIKASA, ADMINISTRATIVE SERGEANT, WAILUKU PATROL DIVISION

SUBJECT : RESPONSE TO A REQUEST FOR COMMENTS REGARDING COUNCIL RESOLUTION 08-73

Concur with Sgt. Orikasa. AC Wayne 10/7/08

This communication is submitted as a response to a request for comments by County of Maui, Department of Planning, Current Planning Supervisor Ann T. Cua in regards to the following;

SUBJECT : COUNCIL RESOLUTION 08-73, "REFERRING TO THE MAUI PLANNING COMMISION A DRAFT BILL AMENDING SECTION 19.78.070, MAUI COUNTY CODE, TO PROHIBIT TRAFFIC INGRESS AND EGRESS ON KAINANI STREET TO AND FROM THE DEVELOPMENT WITHIN THE MAUI LANI PROJECT

TMK : (This request pertains to the proposed Maui Lani Shopping Center at (2) 3-8-007:121)

RESPONSE:

By prohibiting the ingress and egress point on Kainani Street, for the proposed Maui Lani Shopping Center, will likely require an updated traffic impact/mitigation study. This is due to the primary ingress and egress points only locations to be onto Maui Lani Parkway. This directly impacts police (emergency) services to the area, although to what extent cannot currently be projected.

CONCLUSION:

There are no comments regarding Council Resolution 08-73 at this time. Although any revisions to the development and traffic impact/mitigation studies would like to be reviewed by this department.

Respectfully submitted for your review and approval.

Stephen T. Orikasa E#716
Administrative Sergeant/Wailuku Patrol Division
10/03/08 @ 0930 Hours

CHARMAINE TAVARES
MAYOR

JEFFREY A. MURRAY
CHIEF

ROBERT M. SHIMADA
DEPUTY CHIEF

COUNTY OF MAUI
DEPARTMENT OF FIRE AND PUBLIC SAFETY
FIRE PREVENTION BUREAU

780 ALUA STREET
WAILUKU, HAWAII 96793
(808) 244-9161
FAX (808) 244-1363

October 3, 2008

Ms. Ann T. Cua
Department of Planning
250 South High street
Wailuku, Hawaii 96793

SUBJECT: COUNCIL RESOLUTION 08-73, MAUI LANI SHOPPING CENTER
TMK (2)3-8-007:121

Dear Ms. Cua,

I have received your request for comments concerning the proposed resolution. Our Department would prefer to see two distal entrances to the shopping center but it is not an absolute requirement. We are interested in taking a look at a new plan if the use of Kainani Street will be prohibited. We will also take a look at the details of the project during the building permit process, if approved.

Sincerely,

Valeriano F. Martin
Captain
Fire Prevention Bureau

DEPT OF PLANNING
COUNTY OF MAUI
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'08 OCT -6 A11:37

EXHIBIT 6

LINDA LINGLE
GOVERNOR

BRENNON T. MORIOKA
DIRECTOR

Deputy Directors
MICHAEL D. FORMBY
FRANCIS PAUL KEENO
BRIAN H. SEKIGUCHI
JIRO A. SUMADA

IN REPLY REFER TO:

HWY-PS
2.9602

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
869 PUNCHBOWL STREET
HONOLULU, HAWAII 96813-5097

October 30, 2008

Mr. Jeffrey S. Hunt, AICP, Director
Planning Department
County of Maui
200 South High Street
Wailuku, Maui, Hawaii 96793

Dear Mr. Hunt:

Subject: Maui Lani Shopping Center
Project District Phase II Application (PH 2 2005/2007)
Maui, Wailuku District, Wailuku, TMK: (2) 3-8-7: 121

This letter supersedes our attached HWY-PS 2.4257 dated May 23, 2007.

The Department of Transportation (DOT) understands that the developer is no longer proposing unrestricted shopping center ingress and egress at Kainani Street. Although details need to be resolved through DOT review of construction drawings, the concept proposed in the attached March 11, 2008 site plan (egress to Kaahumanu Avenue via northbound Kainani Street, ingress from eastbound Kaahumanu Avenue, and various required improvements to both Kainani Street and Kaahumanu Avenue) is acceptable to the DOT.

The DOT requests the following conditions for County approval of the shopping center Project District Phase II application.

1. The developer shall execute a "grant of limited access rights" document allowing egress from a shopping center driveway onto northbound Kainani Street, allowing ingress from eastbound Kaahumanu Avenue into another shopping center driveway, and restricting vehicular access along the remainder of the development's State highway frontage.
2. The developer shall pay the DOT fair market consideration for access rights to the State highway.
3. At no cost to the State, based on submittals approved by the DOT, the developer shall widen and construct sidewalks on northbound Kainani Street and eastbound Kaahumanu Avenue in the vicinity of the shopping center, construct a bulb-out to replace a right-turn acceleration lane from northbound Kainani Street onto eastbound Kaahumanu Avenue, construct a right-turn deceleration lane on eastbound Kaahumanu Avenue to the proposed

EXHIBIT 7

shopping center driveway between Kainani Street and Maui Lani Parkway, construct a second westbound left-turn lane at Kaahumanu Avenue's intersection with Maui Lani Parkway, construct a wire signal interconnect along Kaahumanu Avenue between Kainani Street and Maui Lani Parkway, and modify various lane markings, crosswalks, signage, and sidewalks within the vicinity of the shopping center as required by the DOT.

4. The developer shall retain a traffic consultant at least once every two years to monitor whether signals are warranted at Maui Lani Parkway's intersection with a proposed shopping center driveway. The developer shall also obtain County and Maui District approval of plans to install and link these signals to existing signals at Maui Lani Parkway's intersection with Kaahumanu Avenue. When signal warrants are satisfied and required permits obtained, the developer shall construct planned signal improvements and submit a traffic signal timing study for review by the County and Maui District.
5. The developer shall consult Baldwin High School officials, obtain required approvals, and then install low-maintenance landscaping and/or minor improvements along the high school's Kaahumanu Avenue frontage to encourage use of cross-walks and to discourage students from jay-walking to the shopping center.

All required improvements must be constructed at no cost to the State. Plans for driveways to the State highway right-of-way, plans for work within the State highway right-of-way, and plans for improvements and right-of-way to be dedicated to the DOT must be submitted to Maui District for review and approval.

In response to Maui Council Resolution No. 08-73, the DOT agrees that it would be desirable for the County to restrict shopping center traffic from using the residential portion of Kainani Street under County jurisdiction. However, we object to County restrictions on egress of shopping center traffic to Kaahumanu Avenue over northbound Kainani Street (which is under State jurisdiction). Forcing all shopping center traffic to exit onto Maui Lani Parkway would significantly increase existing and projected left-turns from northbound Maui Lani Parkway onto Kaahumau Avenue. It would not be acceptable to adjust signal timing to provide more green time for northbound left turns because this would increase delay for through-traffic on Kaahumanu Avenue and could adversely affect signal coordination

If you have any questions, please contact Ken Tatsuguchi, Head Planning Engineer, Highways Division, at (808) 587-1830. Please reference Planning Branch file review number 08-362.

Very truly yours,

BRENNON T. MORIOKA, Ph.D., P.E.
Director of Transportation

Attachments

c: Hong Li (PB)

LINDA LINGLE
GOVERNOR

BARRY FUKUNAGA
DIRECTOR

Deputy Directors
FRANCIS PAUL KEENO
BRENNON T. MORIOKA
BRIAN H. SEKIGUCHI

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
869 PUNCHBOWL STREET
HONOLULU, HAWAII 96813-5097

MAY 2 3 2007

IN REPLY REFER TO:

HWY-PS
2.4527

Mr. Jeff S. Hunt, AICP, Director
Planning Department
County of Maui
200 South High Street
Wailuku, Maui, Hawaii 96793

Dear Mr. Hunt:

Subject: Maui Lani Shopping Center Project District Phase II Application (PH 2 2005/2007), Wailuku, TMK: 3-8-7: 121

This letter supplements the Department of Transportation's (DOT's) attached previous comments, STP 8.2267, dated September 13, 2007.

On April 9, 2007, the developer provided us with modified proposals for vehicular, bicycle, and pedestrian improvements, supplemental traffic analysis, and direct responses to our questions and concerns. Based on this submittal, subject to the following conditions, we have no objection to County approval of the Project District Phase II application.

1. The developer shall construct a sidewalk and an eastbound auxiliary lane along the development's Kaahumanu Avenue frontage between Kainani Street and Maui Lani Parkway.

2. The developer shall relocate the existing eastbound Kaahumanu Avenue bicycle lane as proposed in their April 9, 2007 submittal.

3. The developer shall widen Kainani Street and install appropriate lane markings, crosswalks, and signage based on their April 9, 2007 submittal. Kainani Street signage shall indicate that trucks are prohibited from using Kainani Street.

4. The developer shall pay fair market consideration for access rights to the State highway.

5. The developer shall execute a "grant of limited access rights" document allowing vehicular access from a shopping center driveway to Kainani Street and restricting vehicular access along the remainder of the development's State highway frontage.

6. Highway access rights may be reassessed in the event that use of the Kainani Street driveway significantly intensifies as the result of "cut-through" traffic that is not generated by the shopping center or in the event DOT Highways Division Maui District

(Maui District) requires modification of the Kainani Street driveway intersection to mitigate left-turn queues on Kainani Street's westbound approach.

7. The developer shall retain a traffic consultant at least once every two years to monitor whether signals are warranted at Maui Lani Parkway's intersection with a proposed shopping center driveway. The developer shall also obtain County and Maui District approval of plans to install and link these signals to existing signals at Maui Lani Parkway's intersection with Kaahumanu Avenue. When signal warrants are satisfied and required permits obtained, the developer shall construct planned signal improvements and submit a traffic signal timing study for review by the County and Maui District.

8. The developer shall retain a traffic consultant to take baseline counts of weekday and weekend "cut-through" traffic on Kainani Street before the shopping center opens. After the shopping center opens, and every two years for the next ten years, the developer shall retain a traffic consultant to monitor and recommend mitigation measures for shopping center traffic impacts on Kainani Street, Kaahumanu Avenue's intersection with Kainani Street, and Kaahumanu Avenue's intersection with Maui Lani Parkway.

9. If Maui District determines that it is necessary to mitigate left-turn queues on Kainani Street's westbound approach to the shopping center driveway, the developer shall modify the Kainani Street driveway intersection as directed by Maui District. If requested by the Maui Planning Department to address resident concerns about "cut-through" traffic on Kainani Street, the developer shall install additional traffic calming improvements on County roads.

Plans for work within the State highway right-of-way and plans for the proposed driveway to Kainani Street must be submitted to Maui District for review and approval. All improvements must be constructed at no cost to the State.

If there are any questions, please contact Ronald Tsuzuki, Head Planning Engineer, Highways Division at (808) 587-1830.

Very truly yours,

BRENNON T. MORIOKA, Ph.D., P.E.
Deputy Director - Highways

Attachment

c: Lloyd Sueda, Wayne Yoshioka

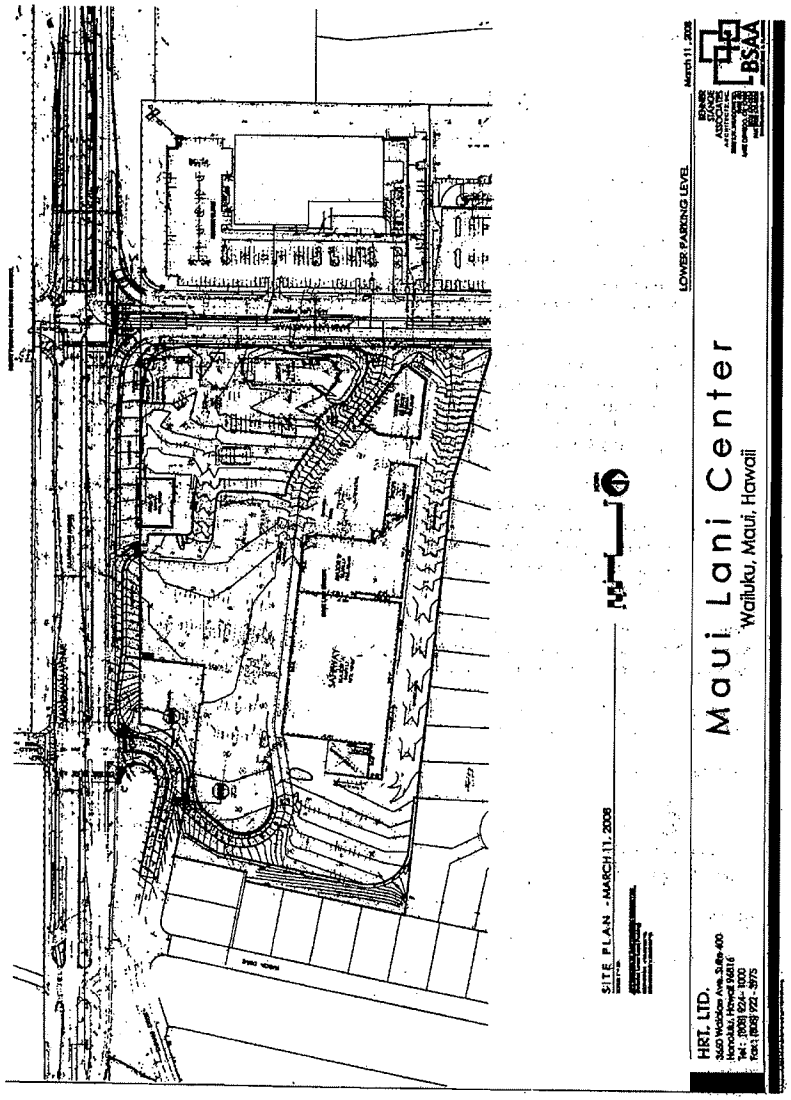
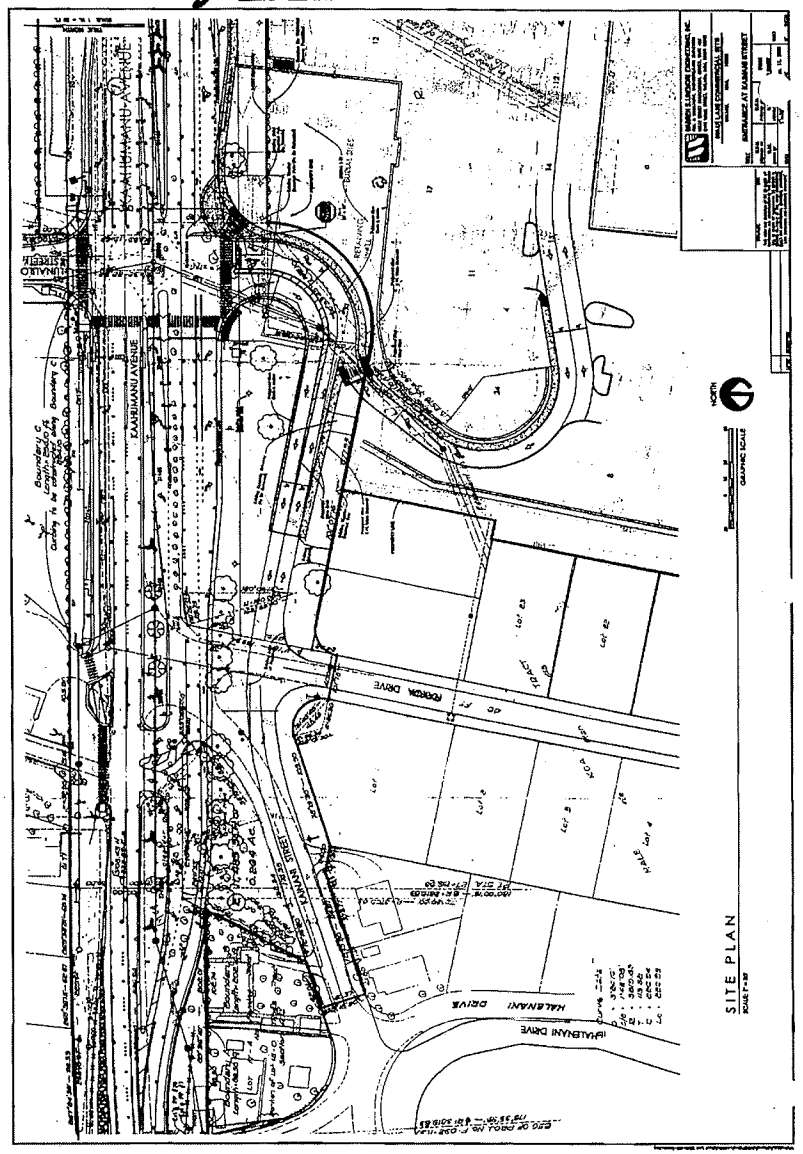


EXHIBIT 7a

EXHIBIT 8



APPROVED 1/13/09
Date

Mr. Starr: The meeting of November 25th is back in session. As we discussed early this morning, we had an item that was specifically agendaed for 1:00 p.m. We have people from off island fly in for this, so if any of the commissioners would like to make a motion to move that item which is item E1 up next on the agenda we could handle that. Commissioner U'u.

Mr. U'u: Motion to move item E1 up to the 1:00 p.m.

Mr. Iaconetti: Second.

Mr. Starr: Okay we have a motion by Commissioner U'u, seconded by Commissioner Dr. Iaconetti to move up item E1 on our agenda, all in favor please raise your hand, all opposed? Okay, we have unanimous six to nothing.

It as moved by Mr. U'u, seconded by Mr. Iaconetti, then

VOTED: **To Move Item E1 Up on the Agenda.**
(Assenting - B. U'u, W. Iaconetti, K. Hiranaga, W. Mardfin, W. Hedani, J. Starr)
(Excused - D. Domingo)
(Absent - J. Guard)

Mr. Starr: So we're going to have item E1 which is Director Jeff Hunt who is going to be transmitting this so I turn it over with all due ...(inaudible).. and respect to Planning Director Jeff Hunt.

Mr. Hunt: This item involves the Planning Department transmitting Council Resolution No. 08-73 containing a draft bill amending Section 19.78.070 of the Maui County Code to prohibit traffic ingress and egress on Kainani Street to and from the development within the Maui Lani Project District to the Maui Planning Commission. The file number is PH1 2008/0001 and the planner assigned to this is Ann Cua.

E. PUBLIC HEARINGS (Action to be taken after each public hearing item.)

1. **MR. JEFFREY HUNT, Planning Director transmitting Council Resolution No. 08-73containing A Draft Bill amending Section 19.78.070, Maui County Code, to prohibit traffic ingress and egress on Kainani Street to and from the Development within the Maui Lani Project District to the Maui Planning Commission. (PH1 2008/0001) (A. Cua)** (Commission to take item up at 1:00 p.m.)

Ms. Ann Cua: Mr. Chairman, Members of the Commission, this matter arises from the Council Resolution 08-73 and it was adopted by the Council on August 22, 2008 and received by the Planning Department on August 28th. As Jeff mentioned the resolution is requesting an amendment to the project district ordinance for Maui Lani to prohibit traffic ingress and egress on Kainani Street from the development within the Maui Lani project district.

I do want to speak a little bit about what the Charter provides. Section 88-82 regarding adoption of General Plan and other land use ordinances. "Any revisions to the General Plan, zoning

ordinance or other land use ordinances may be proposed by the Council and shall be reviewed by the appropriate planning commission as if prepared by the Planning Department. Any such revision shall be referred to the appropriate planning commission by resolution." And that's what brings us here today.

I've discussed with you before the project district processing regulations and this resolution will effect the or affect the Project District Phase 1 or the ordinance itself. And so I've outlined on page 3, how that process works and so basically it's processed quite similar to a change in zoning application where you have to meet certain requirements and it has to have a public hearing and adoption by the Council.

In terms of procedural matters, on October 3rd, the Planning Department notified the Council's Public Works and Facilities Committee about this scheduled public hearing with you. On October 24th, the notice of the public hearing on the resolution was published in the Maui News by the Planning Department. And the 120-day deadline to transmit findings and recommendations by this commission to the Council on the resolution is March 26, 2008.

Mr. Starr: 2008?

Ms. Cua: I'm sorry, 2009. So in terms of some background information, the planning commission right now is in the process of reviewing a Project District Phase 2 application for the Maui Lani commercial project at TMK 3-8-7:121 on 12.926 acres. I've attached the site plan just to kind of familiarize you the area. Most of you have reviewed that application.

That matter has been deferred by this commission to allow the preparation of an environmental assessment which has been triggered by proposed improvements to Kaiwahi Street as well as the use of other state or county lands for infrastructural improvements.

The project when it was originally submitted to the Planning Department proposed a secondary access to the commissioner center at Kaahumanu Avenue. The primary access is from Maui Lani Parkway. The applicant at that time was not able to obtain approval from the State Department of Transportation to allow access onto Kaahumanu Avenue and as such pursued alternatives for secondary access to the project and Kaiwahi Street became that proposed secondary access which caused strong neighborhood opposition.

Since that time, the applicant has revised the site plan for the commercial project and is no longer pursuing unrestricted shopping center ingress and egress at Kaiwahi Street. The site plan now proposes a right turn only out of Kaiwahi Street and a right turn only from Kaahumanu Avenue into the development along with a six-foot wide sidewalk on northbound Kaiwahi Street and eastbound Kaahumanu Avenue.

The request before you today as I mentioned is the resolution request by the County Council considering an amendment to the project district ordinance to prohibit traffic ingress and egress on Kaiwahi Street to and from the development within the Maui Lani project district. So although this proposed resolution and amendment to the ordinance would affect the - would apply to the Maui Lani - the entire Maui Lani Project District, it really is going to affect only one property and that's the property that has an application for project district approval before this body.

The Planning Department transmitted this application out, or the resolution out to a number of County agencies and I do want to go over some of the comments.

The Department of Public Works by memo dated October 23rd, commented that they understand the community's concern. However, they believe that limiting access to a major shopping center to just one street which would be Maui Lani Parkway will result in traffic congestion of the Maui Lani Parkway as well as intersection of Kaahumanu Avenue, Baldwin Highway School, Maui Lani Parkway.

The Police Department in their memo dated October 9th, indicates that they had no comments regarding the Council resolution at this time. Relative to the Maui Lani commercial development they feel that the prohibition of ingress and egress on Kaiwahi Street will likely require an updated traffic study due to the fact that the only remaining ingress and egress points for the development will be from Maui Lani Parkway. And again, these departments were not aware that there was a possibility of having access from Kaahumanu Avenue because the latest word, you know, we had before from Department of Transportation was that that was not possible.

The Fire Department in their review commented that they would prefer to see two entrances to the shopping center bit it is not an absolute requirement. They want to take a look at any new development plan if the use of Kaiwahi Street will be prohibited.

And the State Department of Transportation in their letter, they commented on two things. We had sent them two separate submittals. One submittal was asking them for comments on a revised site plan for the Maui Lani shopping center project that would eventually come to you when you take that matter up again. And I want to make it clear that we're not discussing the project district application for the Maui Lani shopping center today. We're discussing the resolution. It just so happens that that resolution directly affects that parcel so we have to get into some of the background information and facts associated with that project.

But the second matter that we sent to Department of Transportation was the resolution itself asking them to comment on that resolution. DOT sent us one comment letter that addressed both things. So, how their letter reads, they say, "in response to Council resolution, DOT agrees that it would be desirable for the County to restrict shopping center traffic from using the residential portion of Kaiwahi Street under the County's jurisdiction. However, they object to County restrictions on egress of shopping center traffic to Kaahumanu Avenue over northbound Kaiwahi Street which is under State's jurisdiction." "Forcing all shopping center traffic to exit onto Maui Lani Parkway would significantly increase existing and projected left turns from northbound Maui Lani Parkway onto Kaahumanu Avenue." They further state, "that it would not be acceptable to adjust signal timing to provide more green time for northbound left turns because this would increase the delay for through traffic on Kaahumanu Avenue and could adversely affect signal coordination." That was just their comment on the resolution.

The also commented on the revised site plan for the Maui Lani shopping center and I won't go through that in detail but on page 6, items A through G, they reiterate the changes that are going to be made to Kaiwahi street. If you want me to go through them, I can. You want me to? Okay. So what they reviewed, what DOT reviewed and what the applicant will propose for the shopping center project as it relates to Kaiwahi Street is a right turn only out of the shopping center project

onto Kainani Street. A six-foot sidewalk on northbound Kainani Street and eastbound Kaahumanu Avenue. And just so you can follow along, I have a Exhibit No. 3, 2 and 3 basically shows where Kainani Street is in relation to Nakoa Drive, the Sandhills Subdivision, it shows its relation to Kaahumanu Avenue. This is Exhibit No. 2, and then it shows Kainani Street's relation to the Maui Lani commercial shopping center site.

In Exhibit 3, it's just another detail showing the existing roadway. Again, the existing Kainani Street and commercial, the proposed commercial development that will again, come before you at a different time.

And then if you go into Exhibits 7A and Exhibit 8, these were maps that were attached to Department of Transportation's letter and it shows you the proposed, the newly proposed improvements for Kainani Street. The latest proposal from the commercial project. And Exhibit 8, shows you a detail that you can see a lot clearer than in Exhibit 7A. So as I'm going through the list maybe you can refer to that Exhibit 8. So again, a right turn only out of the shopping center project onto Kainani Street. A six-foot sidewalk on the northbound Kainani Street and eastbound Kaahumanu Avenue in vicinity of the shopping center. A bulb out to replace a right turn acceleration lane from northbound Kainani Street onto eastbound Kaahumanu Avenue. A right turn deceleration lane on eastbound Kaahumanu Avenue to the proposed shopping center driveway between Kainani Street and Maui Lani Parkway. A second westbound left turn lane at Kaahumanu Avenue's intersection with Maui Lani Parkway. A wire signal interconnect along Kaahumanu Avenue between Kainani Street and Maui Lani Parkway and modification of various lane markings, crosswalks, signage and sidewalks within the vicinity of the shopping center as required by Department of Transportation.

As of today's meeting we did receive some correspondence and I believe it's been passed out to you. Yesterday we received a letter from Mr. Lee Ohigashi and that was passed out ...(inaudible - changing of tape)... the green folders and blue folders and that was I believe also given to us this morning by Mr. Lee Ohigashi and he is today and I'm sure we'll address that. So at this point, before I go into conclusion and recommendations, I would ask if you have any questions or if you want to take public testimony.

Mr. Starr: Before we get to that, the original proposal of having ingress and egress by Kainani Street I understand that's off the table and what is under discussion is purely egress with right turn only and if that's the case, did the developer take it off the table or was that DOT. What got us to that point?

Ms. Cua: You are correct in that first part of your statement. And I believe what's happened is, you know, since - from the very beginning, from when this project started, the applicant has been meeting with Department of Transportation, Public Works to try and respond to various comments issued by the agencies and the most familiar comment at the beginning of this project was that they would not be allowed access on Kaahumanu Avenue. So they had to amend their traffic report to deal with how are they going to get traffic in and out of the development. And so you've heard various testimony and presentations on different iterations of how Kainani Street could look and it actually got quite intensive in terms of how much construction could go on in that area and all the different turning lanes and to be able to accommodate ingress and egress. But I guess the community concern in the applicant's attempt to try and accommodate community concern and

work with the Department of Transportation I believe this latest arrangement is an attempt to try and do that. To try and provide a secondary access. They have also been talking to Department of Transportation and from what we hear they've been able to secure a very limited access off of Kaahumanu Avenue which is different from anything we've seen before and so now what they're proposing, what they will be proposing when they come before you is right turn only out of Kainani, a right turn from Kaahumanu into the project, sidewalks, some turning lanes and then their primary access ingress and egress out of Maui Lani Parkway.

Mr. Starr: Is DOT here? Are there any other resources here?

Ms. Cua: No. DOT is not here, no.

Mr. Starr: What I'd like if it's acceptable to the other commissioners, I see Ms. Ohigashi is here and I know she represents the councilmember's office who initiated this and I was going to give her or her able spokesperson an opportunity to speak because I know that's where this resolution originated. So if they want the opportunity to lead off, I'll allow that. Just keep it brief because we really have a full agenda. Lee.

Mr. Lee Ohigashi: Are you doing testimony or do you want me to come up and -

Mr. Starr: You want to speak for the resolution because it originated from you guys, right?

Ms. Cua: Well, the resolution originated from the County Council. And I don't know if they're here to speak on behalf of the County.

Mr. Ohigashi: We're not speaking on behalf of the County. We're speaking on ...(inaudible - not speaking into a microphone.)... County Council.

Mr. Starr: Okay, so you're just testifying. Then you'll have an opportunity to testify in a few minutes. Okay, before we get to testimony, members? Commissioner Hedani.

Mr. Hedani: Ann, if I understand this correctly, The County Council took it upon themselves to create a resolution to prohibit access onto Kainani Street? In spite of that in the department's recommendation is to allow access onto Kainani Street for egress?

Ms. Cua: Okay, we did an analysis that included agency comments that addressed the resolution which prohibits ingress and egress, both. And we're - I mean, we haven't gotten to the recommendation yet, but basically our conclusion is that we didn't feel it was in the best interest to prohibit all access. We think that very limited access would be more proper. But again, we're asking - we're being asked to comment on the resolution which proposes no access, ingress or egress.

Mr. Hedani: Just a follow up. So the only action that we're being asked to take today is provide comments on the resolution?

Ms. Cua: Correct.

Mr. Starr: Just for clarification of process, we're not here to vote up or down on a recommendation or just to comment on it or are we - is our process to recommend approval of the resolution or changes?

Ms. Cua: Actually you are - sorry I need to clarify, you are recommending either approval or disapproval of the resolution and providing you know, you're comments on it.

Mr. Starr: Or alteration, or alteration right?

Ms. Cua: Right.

Mr. Starr: Okay, Commissioner Mardfin, I think I saw you first.

Mr. Mardfin: I'm still a little confused because normally we would have a map up there.

Ms. Cua: I know, sorry -

Mr. Mardfin: And we don't seem to have that.

Ms. Cua: Yeah, I wasn't able to get that together.

Mr. Mardfin: Then I will go to Exhibit 8 which is the one you directed us to, and the problem with 8 is I'm trying to understand what I'm reading. The problem with 8 is it shows Kaahumanu Avenue, it shows Kainani Street. It doesn't show Maui Lani Highway which I presume is about three inches to the right.

Ms. Cua: Correct.

Mr. Mardfin: Okay, and I see I'm looking at that little, see where it says that little north arrow?

Ms. Cua: Yes.

Mr. Mardfin: I'm looking one inch above that and I see what appears to me to be a road maybe and with some arrows going around in a clockwise direction and I see something that I don't know where it starts from but some counter arrows going in a counter clockwise or at least a east direction and I'm trying to figure out how this hooks up to Kainani Street.

Ms. Cua: Okay, well, if you could look up. You're looking at Exhibit 8, correct?

Mr. Mardfin: Yes.

Ms. Cua: Okay. This is Kaahumanu Avenue and you can see the labeling of Kainani Street here.

Mr. Mardfin: Right.

Ms. Cua: Where it goes into Kaahumanu Avenue. Now this portion here this is where I believe you're referring to because here's the north arrow.

Mr. Mardfin: Right, right.

Ms. Cua: This is within that project, that commercial project site that is actually not before you but it's directly affected by this resolution.

Mr. Mardfin: Okay. And where does it hit the road?

Ms. Cua: Right here. This is Kainani Street. Which road are you speaking of?

Mr. Mardfin: Yeah, that's the one I was looking at. And the Kainani Street is accurate the way it currently is? I mean, you're not widening Kainani Street or doing anything else at this stage?

Ms. Cua: When you say at this stage, that's being proposed? Yeah, they are proposing as I went over they're proposing to put sidewalks, to put deceleration lanes.

Mr. Mardfin: And so that would be - can you tell me what currently - what currently exists Kainani Street is a two-way road?

Ms. Cua: Yes. Yes.

Mr. Mardfin: And it bends, is coming up and turning northward.

Ms. Cua: Actually if you look at Exhibit 3A.

Mr. Mardfin: See I can't - mine is so faint I can't make out what's on 3A.

Ms. Cua: Oh, okay.

Mr. Mardfin: I can look at 3 make sense of 3.

Mr. Hiranaga: Mr. Chair?

Mr. Starr: Yeah, Commissioner Hiranaga.

Mr. Hiranaga: I'm very familiar with this intersection because my parents have lived on Nakoa Drive since 1960. I think it's a big disservice to the commission that we're looking at this exhibit in this scale. It's kind of a waste of time in my opinion. I think we should get a better exhibit because it is extremely complicated intersection that at some point I will express my opinions, but the other commissioners trying to decipher this exhibit, it's really a disservice in my opinion.

Mr. Starr: Yeah, I agree. I'm trying to - I think there's a snooker lane and I'm trying to understand what that -

Mr. Hiranaga: There's all kinds of stuff there.

Ms. Cua: I do have some -

Mr. Starr: Is there a larger one we can pass around Ann?

Ms. Cua: I do have.

Mr. Starr: Lets pass that around at least. Short recess, technical.

Ms. Domingo was in attendance at 1:24 p.m.

A recess was called at 1:26 p.m., and the meeting was reconvened at 1:28 p.m.

Mr. Starr: I understand we have an illustration on the screen and there's something that will be passed around that may be a little bit better. Please continue with our questioning. You know, obviously if members feel that there's not enough information we could defer it because we do have time. But lets at least get through public testimony if that is the case. But in any case, lets ask our questions now as best we can. Commissioner Mardfin.

Mr. Mardfin: Ann, with the diagram that's on there.

Ms. Cua: Yes.

Mr. Mardfin: Do you have the red pointer? May I go up to the - maybe it's easier if I - may I go up there anyway?

Mr. Starr: Mike can you help with this? Are you involved with this Mike? No, this isn't a county -

Ms. Cua: So this is Kaahumanu Avenue -

Mr. Mardfin: Mr. Chairman, may I go up and -

Mr. Starr: Yeah, go ahead approach whatever you want to approach for. Yeah, please proceed Commissioner Mardfin.

Mr. Mardfin: What I'm trying to do, I'm not making arguments one way or the other. I just want to get a clear understanding of what's going on. Currently no change. Current situation, people can - this doesn't exist. People live up this road. There's no road here. People go down there.

Ms. Cua: Correct.

Mr. Mardfin: This is Kainani.

Ms. Cua: Correct.

Mr. Mardfin: Some people turn right.

Ms. Cua: Right.

Mr. Mardfin: Go out here.

Ms. Cua: Yes.

Mr. Mardfin: Can turn right.

Ms. Cua: Yes.

Mr. Mardfin: Can go across the street.

Ms. Cua: Yep.

Mr. Mardfin: And turn left.

Ms. Cua: Yep.

Mr. Mardfin: They can go out the other side.

Ms. Cua: Correct.

Mr. Mardfin: They can turn right, they can go across the street and turn left.

Ms. Cua: Correct.

Mr. Hiranaga: Wrong.

Mr. Starr: No.

Mr. Hiranaga: ...(inaudible)...

Ms. Cua: They can go on the bridge.

Mr. Hiranaga: Only go west. Can't go east.

Mr. Mardfin: They can't go right.

Ms. Cua: Can't go on the bridge.

Mr. Hiranaga: There's no road.

Mr. Starr: Lets turn to Commissioner Hiranaga as a - why don't you go up there with Commissioner Mardfin.

Mr. Hiranaga: I can explain it from here. If you make a left turn out of Nakoa Drive onto Kainani, you end up on the white bridge which is the entrance to Wailuku Town.

Mr. Mardfin: Oh, the one that goes over the main road.

Mr. Hiranaga: So you can only go west. You can't go east on Kaahumanu. The bridge does not

allow you to come back onto Kaahumanu.

Mr. Mardfin: Okay, so if I go this way, I'll go to Kaahumanu. I go this way to get on the bridge to go across and then come down toward Wailuku Town.

Ms. Cua: But you can turn right to get on the bridge.

Mr. Hiranaga: Right. But there's no -

Ms. Cua: Okay, I thought the question was that you could -

Mr. Mardfin: Well, I meant - he had what I was after. I wanted to know if you could go right and get on Kaahumanu.

Ms. Cua: Oh no.

Mr. Mardfin: So the only way to go onto Kaahumanu going toward Kahului is to go out this way. And if you're going to go to Wailuku you have two choices you can go up to the bridge, cross the bridge, come down or you can go out here cross the road here and there's a stop light here I'm trusting.

Mr. Hiranaga: Traffic.

Ms. Cua: Traffic light.

Mr. Mardfin: Traffic light. If you come down here, this doesn't exist. There's no dakine in here.

Ms. Cua: No. No.

Mr. Mardfin: But you can come down there. You can go up or down Maui Lani.

Ms. Cua: Correct, presently.

Mr. Mardfin: If I was coming this direction from Kahului and I wanted to go up this road, no point in going here because that won't get me there, go across here, go to the stop light, traffic light. It turns -

Ms. Cua: Left.

Mr. Mardfin: Is there a turn signal? Or you just take your chances?

Mr. Hiranaga: There's an arrow.

Mr. Mardfin: Is there a left turn only signal.

Mr. Hiranaga: Yes. Left turn.

Mr. Mardfin: Left turn only signal. So I wait for the left turn only - I'm in this lane, I wait for the left turn only, I go into here.

Ms. Cua: Correct.

Mr. Mardfin: If I go this way there's no way I can get onto this road. If I'm coming from Wailuku, how do I get in here?

Ms. Cua: You turn right off of Kaahumanu Avenue.

Mr. Mardfin: Up here I turn right and I'm on -

Ms. Cua: No, you come down -

Mr. Mardfin: Oh, I come down there and come in there.

Ms. Cua: Right. Yes.

Mr. Mardfin: I can't -

Ms. Cua: You could go up the bridge if you wanted to.

Mr. Mardfin: I could go up the bridge and then make a right and come down here.

Mr. Starr: I want to give one person at a time talking and if anyone else wants to speak. I've got to recognize them because we do have to have a record of this.

Mr. Mardfin: Okay, I'm just trying to -

Mr. Starr: Yeah, keep going.

Mr. Mardfin: I want to get the traffic pattern down at least in my own head and so, okay. If I'm coming from Kahului, there are two - there's only entrance. Basically I have to go to this - what's the name of this road going across.

Mr. Starr: Commissioner Hiranaga, you're our resource person today.

Mr. Hiranaga: I believe the north side is Liholiho.

Ms. Cua: Liholiho.

Mr. Mardfin: Liholiho.

Ms. Cua: Yeah.

Mr. Mardfin: So I make a left here and that's the only way in if I'm coming from there. If I'm coming from Wailuku there are two - which way is the most people do it? They go up to the bridge turn right

and then kind of swoop down to the left and come in. The road out here we don't see on the map, but where this comes in is there any connecting - there's another road that comes down this way somewhere? This road leads to what? Just housing?

Ms. Cua: Residential uses.

Mr. Mardfin: Residential area. There's no through way to get to Lahaina or anything else or something silly, Kihei or -

Ms. Cua: Well, it takes you to other roadways.

Mr. Mardfin: Oh, it does. This does connect with something.

Mr. Hiranaga: It connects to Waiale Road which you can then connect - Waiale's been extended beyond the homeless shelter and connects to the road to go up to Wailuku Heights. That's the proposed new entrance to the Maui Lani District.

Mr. Mardfin: But there are other ways to get to those places so -

Mr. Hiranaga: Well, people have used Nakoa Drive and Naniloa and Halenani Drive as a short cut coming off of Waiale and that's the concern on the neighborhood.

Mr. Mardfin: And this is a two-lane road?

Mr. Hiranaga: No sidewalks.

Mr. Mardfin: No sidewalks.

Mr. Hiranaga: No gutters, no curbs.

Mr. Mardfin: Okay, and down here same thing, no sidewalks and so that's why we got the testimony that's a little dangerous and it takes you 20 minutes to go down to here to get - this is the entrance to Baldwin Highway I take it? And Maui Lani, Kaiser is located here. Okay, thank you. At least it's clear in my mind. Thank you very much for all of you.

Mr. Starr: Okay. Ms. Cua. I'm a little confused about sidewalks. Right now it's very difficult to walk from Wailuku. Say someone wanted to walk from Wailuku to Kaahumanu Center. It's almost - well you have to cross back and forth several times.

Ms. Cua: Yes.

Mr. Starr: It looks like there's a sidewalk on this but I'm not sure.

Ms. Cua: Yes, my understanding and maybe the - Mike Munekiyo is here who's actually the planning firm that's taking care of the shopping center project but has had obviously more intimate conversations with the DOT than I have. But I understand that there's going to be a six-foot sidewalk on Kainani Street and on Kaahumanu Avenue in the vicinity of the shopping center. I'm

not sure it if - I know it goes here and here. And I don't know if it goes down to here too. I think maybe just to here.

Mr. Starr: Yeah, Mike Munekiyo, can I call you up to mike and tell us about sidewalks and bikeways? It looks like there's --

Mr. Michael Munekiyo: Thank you Mr. Chair, Commissioners. My name is Mike Munekiyo. I thought perhaps this might just clarify for the commission some of the regional elements of the roadway system and before I talk about sidewalks if that's okay Mr. Chair?

Mr. Starr: Why don't you answer the question first.

Mr. Munekiyo: Okay, lets get to the next slide, then yes. There would be sidewalks along the property frontage here, down through here and down through here to connect to the existing sidewalk system. So there would be sidewalks along the entire property frontage along Kaahumanu Avenue.

Mr. Starr: And is there a sidewalk on the Wailuku side of Kainani Street currently that will.

Mr. Munekiyo: I don't believe there's a sidewalk on Kainani Street right now.

Mr. Starr: I believe there's a shoulder there.

Mr. Munekiyo: There is a shoulder, yes, that's correct.

Mr. Starr: So someone walking from Wailuku would chance it going under the overpass and then walk in the shoulder.

Mr. Munekiyo: Right here?

Mr. Starr: Yeah.

Mr. Munekiyo: Yes, right.

Mr. Starr: And then cross Kainani. I assume there's going to be a light at Kainani.

Mr. Munekiyo: That's correct.

Mr. Starr: And then there'll be a sidewalk fronting this property and then they'll cross the Maui Lani Parkway and then what happens to them after they cross Maui Lani Parkway because it looks like on this drawing it says proposed new six-foot wide sidewalk and that's great but it's hard for me to believe that that's going to continue in front of the Police Station.

Mr. Munekiyo: I don't believe it does Mr. Chair.

Mr. Starr: So why is it shown on the drawing.

Mr. Munekiyo: It's along this entire frontage here.

Mr. Starr: No, it's shown on - oh okay, it's not - it's just - in other words, it just goes up to Maui Lani Parkway?

Mr. Munekiyo: That's correct.

Mr. Starr: And then there's no sidewalk after Maui Lani Parkway.

Mr. Munekiyo: I don't believe there is. I think there's a shoulder however. Okay, Commissioner Hiranaga.

Mr. Hiranaga: Actually if you're walking to Kahului from Wailuku what you would do is you'd go up the bridge, cross Kaahumanu using the bridge and you would come down by Stillwell's and there is a sidewalk that goes all the way to Kahului Beach Road on that side of the highway.

Mr. Mardfin: On the makai side.

Mr. Starr: Yeah, so you have to cross. You have to walk up the hill, cross and then walk down on the Baldwin High School side.

Mr. Hiranaga: Yeah, and the sidewalk goes all the way I believe, does it go all the way to Kahului Beach Road or maybe it stops at -

Mr. Munekiyo: Pretty far along, yeah.

Mr. Hiranaga: I know at least to Wakea Avenue. I'm not sure in front of Maui Community College if there's sidewalks. I only drive that about five times a week.

Mr. Starr: This is an item that is coming to us from the Council. It's up to members whether we want presentation from the developer which I guess would be Mike Munekiyo at this point. Whether that's proper or not, I leave that up to members. Commissioner Hiranaga.

Mr. Hiranaga: This is just whether to approve or disapprove a resolution and based upon our determination the Council still has to enact an ordinance and that's when I guess the applicant or the developer would be making a presentation before the Council. Personally I really don't really want to get into a full-blown presentation. I think it's premature for us to be commenting on a project that's not before us. It's really just a resolution regarding Kainani Street.

Mr. Starr: Yeah, and especially the merits of the shopping center are not something that's before us or on our agenda today. Commissioner Mardfin.

Mr. Mardfin: My understanding from the planner is that what we're supposed to do is the Council has passed a resolution. The rules require that or expect us to comment on what they passed before they pass a final resolution and I think that's the process. And so we're supposed to put -

Mr. Giroux: It's an ordinance.

Mr. Mardfin: An ordinance, excuse my language before they pass the ordinance they want input from us. They're asking for our input. That means we have to kind of understand what's going on. And I have - I asked before about questions about what is currently the situation. Now I'd like to ask a series of questions about the proposal and if I can go up there again, I'd like to.

Mr. Starr: Please proceed. I just request that if we go to someone else to answer a question we make it clear who they are and have one person at a time speak, but continue Commissioner Mardfin.

Mr. Mardfin: I get the old situation worked out I know how everything moves. New situation. People that live us here, drive down this road, they turn right to go to Kahului same as they currently do now. They can no longer turn here because they wouldn't be allowed to cross the road and make a left hand turn.

Ms. Cua They have a separate. They have another lane here.

Mr. Mardfin: So they still would be allowed to, well, no this is an incoming lane.

Ms. Cua: Oh, I'm sorry, it's the one -

Mr. Mardfin: Oh, wait, there are two here?

Ms. Cua: Yes, there's two lanes there.

Mr. Mardfin: So this one goes right. This one they could go across and make a left.

Ms. Cua: I believe so.

Mr. Mardfin: So existing traffic pattern for these people, I mean, I'm not talking about the number of cars, but the options haven't changed from their point of view.

Ms. Cua: They still are able to turn, but they have now a dedicated right turn lane. Is that correct.

Mr. Mardfin: From here? The right turn lane is what I was asking about. I was about the lane that goes through and turn left to go to Wailuku.

Ms. Cua: They're still able to go through and turn left.

Mr. Mardfin: They'd still be able to do that. Back to this section. You -

Ms. Cua: There's nothing there now.

Mr. Mardfin: There's nothing there but some cars will be manufactured on this place and somehow manage to get on a road that goes this way that come down to here. Can they turn left?

Ms. Cua: No. Right turn only out of the -

Mr. Mardfin: So if they want to go to Kahului, they come out here, they go this way, they swoop into the left lane -

Ms. Cua: The right lane because you said Kahului, yeah.

Mr. Mardfin: I want to get them to Wailuku.

Ms. Cua: Oh, you said Kahului, I'm sorry.

Mr. Mardfin: I'm sorry. They come out of here. They turn right, they swoop in the left lane, they here, they go across, they turn left. The come ouf of here they turn right, they go up to here then they turn right into Kahului.

Ms. Cua: Correct.

Mr. Mardfin: So that's how we're getting out. Getting into this place where there are somehow generating cars by magic they might be able to come in here.

Ms. Cua: They will be able to come in there. Right turn in only.

Mr. Mardfin: But no out.

Ms. Cua: Correct.

Mr. Mardfin: Alternatively people that were going to go to this magic factory would come in here and go in or out here.

Ms. Cua: Correct.

Mr. Mardfin: And the concern of the department is that you'll have a whole lot of traffic here if that's the only place in or out to the magic kingdom.

Ms. Cua: Correct. I mean, you've heard it a previous meeting that from the Police Department that's it's always better to have more access points than –

Mr. Mardfin: And the testimony from the Fire Department is they'd much prefer to have a second in and out too.

Ms. Cua: Right, correct.

Mr. Mardfin: There's nothing coming in or out. Is there things coming in?

Ms. Cua: That's a service access.

Mr. Mardfin: Now, you talked about this bump out. You used a term I wasn't aware of, a bulge or something.

Ms. Cua: Bulb out.

Mr. Mardfin: A bulb out. Okay. So they come out here and instead of turning an immediate right, you have this bulb out so they gotta swing wide and then - does this exist currently before this magic kingdom is built is this - it exists?

Ms. Cua: I believe it does -

Mr. Mardfin: So there's one, two, three lanes currently. So you're cutting off that inner, the mauka most lane I presume for safety of people coming in here or some reason like that. But they swing wide then they either come in here or they stay on here if they want to go up this way.

Ms. Cua: Correct.

Mr. Mardfin: Or they stay in one of these two lanes if they want to go straight.

Ms. Cua: Correct.

Mr. Mardfin: Can you make a U-turn here?

Mr. Starr: Commissioner Hiranaga.

Ms. Cua: I don't believe so.

Mr. Mardfin: Not legally?

Mr. Hiranaga: No.

Mr. Mardfin: Okay. I'm just - I'm really just trying to understand it. I'm not trying to make editorial comments at this point. Okay. And now there is no sidewalk here.

Ms. Cua: Correct.

Mr. Mardfin: When that person testified it took 20 minutes to get to Baldwin that's cause they're dancing all around and worrying about cars and stuff. There's no cross lanes here currently?

Ms. Cua: The person that was speaking was driving to Baldwin High.

Mr. Mardfin: Are there any cross lanes here?

Ms. Cua: Crosswalks?

Mr. Mardfin: Crosswalks. Currently there is.

Ms. Cua: I believe there is.

Mr.Mardfin: On this side only or both sides. I'm getting a signal from my esteemed colleague that

you got one here and you have one here. Okay, thank you.

Mr. Starr: Okay, thank you. Members, how about we go to public testimony at this point? Does that work for everyone?

a) Public Hearing

The following testimony was received at the beginning of the meeting:

Ms. Jackie Medeiros-Carismo: Hello. I'm not a public speaker so this will be very short less than three minutes. My name is Jackie Medeiros-Carismo. I live on Hale Nani Drive on the Sandhills. The home was built in 1950 by my parents and I'm enjoying it now as well as my children. My grandmother did. So it's like four generations there in a very old, old neighborhood and makua.

I'm sorry to see what is happening in a very quiet neighborhood. If this project does go through in regards to the road, we will have a lot of traffic, a lot of traffic there which will not be in my opinion a very good idea. I hope - I'm here to support the people there in the Sandhills the best I can. And I do hope that you will consider that this could be brought to the Council.

I know we do need another little shopping area, but the concern is the traffic. I thank you.

Mr. Starr: Okay, well, thank you very much. Members any questions for the testifier? Seeing none, thank you for joining us today.

Mr. Starr: Thanks for being here. Anthony Edington followed by Zarleen Ogata. Great to see you here Tony, welcome.

Mr. Anthony Edington: Hi, many name is Anthony Edington, I live on Hale Nani and I'm here to address the Resolution 08-73 prohibiting the egress and access on Kainani Drive. It kind of reminds of that Richard Pryor joke that this is a neighborhood not a residential district.

We have actually there quite a few small streets with a lot of people who use them with no sidewalks. And having this access to that shopping center I think would greatly increase our traffic. It also isn't directly related to the neighborhood itself. It's more involved with the Maui Lani subdivision and I think that they should have planned to have their access and egress within that subdivision or off of Kaahumanu Avenue as opposed to into a neighborhood that is fairly quiet and residential I think as our other neighbor mentioned earlier. We have people who have been living there for 30, 40 years and most of the houses have been there for 30, 40 years. And so it wasn't really designed to have people driving through it. And I think that having this set of openings or should I say changes in Kainani would invite additional traffic. And if you look at where the kids are and where the developments are going that's a natural walkway for them to go to Baldwin High and I don't know that kids are that conscious of what's going on around them. I, myself, when I walk down the street I have to look back and forth. A lot of the areas have sidewalks or should I say have no sidewalks and you have people with their walls that are four or five feet high and on both sides so there really is no where to go. So I think it's inviting an accident for us to increase the traffic in that area.

As I said earlier that this neighborhood you live there and it's pretty much quiet by 8:30. Everybody's home, they're doing their thing so when people come driving through it kind of sets up a different feel and I don't want to be sitting there, you know, like on a thoroughfare, that isn't why we bought the house and I don't think anybody there really wanted to have access to major thoroughfares. Those are little connector streets and there are big streets around it so I think we should try to use those as opposed to the smaller street that are there.

And additionally, Kainani which is maybe two blocks long has four intersections on it already. And I think we're just inviting an additional accident. One of them coming off of Ting by the bridge, there's a stop sign with four streets coming right into that and that's I think a logical way of people were able to go into that shopping center that they would come through. I just don't think that the safety of that neighborhood as well as the environment that we've created would be enhanced by this and I'm thinking that the objective of this project is to enhance the quality of life and I don't think that it would do that. Thank you.

Mr. Starr: Okay, members any questions? Okay, thank you very much for coming down today. Next testifier Zarleen Ogata followed by Steve Sutrov. Welcome, Zarleen please introduce yourself.

Ms. Zarleen Ogata: Aloha, my name is Zarleen Ogata. My husband and I, Eddie Ogata, live at 157 Hale Nani Drive. We purchased our home there in 2002 with really, you know, the idea of it's such a nice neighborhood. It's so quiet. Our kids go to Baldwin and you know, they walk to Baldwin. Well, now they drive I should drive I should say. But when we first moved there and my kids starting walking to Baldwin one of the biggest threats was the traffic. And you know, my kids at the time were like freshmen and sophomore and they almost did get banged by cars with that streetlight there. And a lot of times people don't realize that they need to slow down, they need to stop, they try to fight that streetlight. And having that in and out extra traffic exiting out of Kainani will add for us to try and get out to go to the schools and down to the street.

I've taken my kids to school so has my husband. In fact, I argued with my husband because he argued with me. I told him it takes 20 minutes to take my daughter to school. No, it doesn't. I told him, honey, bye, take them. He took our daughter to school, he came back so mad, he couldn't believe how long it took to get to the school and come back because trying to get out Kainani, a cross over into Baldwin area is so hard. And now adding to Kainani for us to get out again, that is just going to make it even worse. Unfortunately you know, there is a lot of changes but some things should be left alone and Kainani is one of them I hope you support. Mahalo.

Mr. Starr: Okay, members? Okay, thank you very much for coming today.

This concludes the testimony received at the beginning of the meeting.

Mr. Starr: Mr. Ohigashi, you are up sir.

Mr. Lee Ohigashi: Do I have to say by this?

Mr. Starr: You can take the handheld mike to introduce yourself.

Mr. Ohigashi: I'm going to be moving to show this.

Mr. Starr: Okay, then take the handheld microphone Lee. As long as you use the mike you're good.

Mr. Ohigashi: Good afternoon Mr. Starr and members of the planning commission. My name is Lee Ohigashi and I'm a resident of Hale Nani Street which although it's not shown in there, it's the next street up and it's three residential streets in a row. I passed out some binders and in those binders are the record that – of the initial letters that were sent to the County Council concerning this matter as well as letters in opposition to use of Kainani Street as well as a petition that indicated at least a hundred residents are against the use of Kainani Street, ingress and egress and those were to support the resolution that was passed. So we ask that that they be accepted as part of the record, at least in this part of the record.

In January 28th I wrote the Council and said, "a we're requesting this action before you because the Planning Department has determined that only phase 2 approval is necessary for that they can use Kainani Street." Our reading of it is that they would have to amend the district or phase 1 application and go through an ordinance procedure and we cited in our letter the reasons why, and I'm going to point to you in our binders the first ordinance that was passed by this Council and it's the yellow tab in our binder. And the yellow tab, attached to the yellow tab is a map and this is the map that is in your - this is the original map that was approved by the Maui County Council. Up here in the blues that I've outlined it's not in yours but in the blue lines that I've outlined is Kaahumanu Avenue. This is an unnamed road but we believe it's Maui Lani Parkway and this here, this little squiggly line here is Kainani Street or is Nakoa Street coming down into Kainani. As you can see in 1989 the Council passed this ordinance saying that, hey we're going to utilize Kainani Street intersection for the purposes of having Maui Lani Parkway ingress and egress. That was the plan.

This, let me show you what I think the next one is the 2003 and it's labeled in pink. And in that section, again the blue lines represent Kaahumanu Avenue, the two blue line. This represents the Maui Lani Parkway and this little squiggly blue line represents where Nakoa Drive and what is it called, Kainani Street is. And if you talk a look at it, again, we have Maui Lani Parkway intersection there. Passed by ordinance in 2003. In 2005, this was attached and passed by ordinance and that's what we have here today. We have Maui Lani Parkway, the intersection is here, we have Kaahumanu Avenue and we have Kainani Street here. There is no connection in 2005 passed by the ordinance to Kainani Street. So we are saying by this ordinance that we should not allow them to connect to Kainani Street without a project 1 district amendment.

Now what is the advantage to a project 1 district amendment? The advantage is every single condition that is placed upon by the DOT would - can be placed as a ordinance and require them to build it. And thy can say lets build this first before you build in there. By law they can do that. They can condition the ordinance.

That is the reason why the County Council should have a say and the only vehicle we have is to ask the County Council to ban and if they want to use it, they should come up before the Council and ask to use it. That way if there are - if the Council as a policy decision agrees with the use of Kainani Street then they can put down specific conditions in the ordinance to enforce. I think that is the cleanest legal way to go. Because right now you have a situation where by ordinance, Kainani Street is not to connect to this project. And that's the reason.

I have a few more comments to make. And it really bothers me, --

Mr. Starr: Yeah, I'm going to have to ask you to wrap up but there'll probably be some questions for you. So wrap it up and then we can ask questions.

Mr. Ohigashi: What the department is recommending I want to put for you, they're recommending some kind of hybrid to amend this ordinance. But what they're really doing is creating an entitlement. If you send out the ordinance as recommended by them to amend it to allow egress only not ingress then what you're saying is the Council has made a decision that this is okay, the use of Kainani Street is okay. It doesn't make sense. Either you go say, we recommend approval of this resolution or recommend down. But to say that you were only half use or it's ...(inaudible)... approval. That constitutes a usable entitlement that the developers can be used in this case and it makes no sense at all. You know, this community has been in existence for like 50, 60 years. We believe that as a policy the County and State has determined that Maui Lani Parkway is the entrance, egress and ingress into Maui Lani, not Kainani Street. They made a decision it's not Kainani Street. You are not policy makers in that regard, the Council Council is the proper person to make that policy. So we're asking that you approve the resolution, send it out, lets get the policy makers who can attach the proper conditions, who can make this thing go correctly to make that decision. If you have any question, I'm available.

Mr. Starr: Thank you Mr. Ohigashi. Questions for the testifer? Yeah, Commissioner Hiranaga.

Mr. Hiranaga: Lee, do you know the approximate distance from the proposed exit to the intersection with Kaahumanu Avenue?

Mr. Ohigashi: Proposed exit, you have to -

Mr. Hiranaga: Their proposed exit-

Mr. Ohigashi: Over here?

Mr. Hiranaga: On Kainani. The distance from that to Kaahumanu Avenue.

Mr. Ohigashi: I don't know the exact distance but you got to think - as proposed their property only goes up to a certain point and they would have to redo parts of the State road to actually reconfigure parts of the road. So the actual question is, you know, I mean, it's very difficult, I don't know the answer anyway.

Mr. Hiranaga: They have to reroute Kainani Road, reconfigure it in order to abut Maui Lani Parkway.

Mr. Ohigashi: What is interesting is that if you notice only that distances is putting up what you call that sidewalks. As a side, if it goes back to the Council, the Council can put on conditions to say hey, you guys in Sandhills you guys are suffering the brunt of this thing so we can do mitigation. We can require you additional, we can require you to extend the sidewalk, we can require you to put in additional sidewalks. We can do all kinds of things because if you take a look at it, we don't have any bargaining chip or we don't have any benefit from this thing. The community should gain

some benefit not suffer the detriment only.

Mr. Starr: Okay, Members any other questions? I have one question for you. I understand the principal behind the jurisdictional principal that you stated, but from a practical point of view I'm trying to understand what is the harm to the community by using the very end of Kainani Street in a newly created lane that will not allow a turn up into Sandhills, what harm will be done to the community. I understood originally when they were going to enter and exit that your community will just get inundated with traffic but this seems like it's not going to really bring any more traffic to the community.

Mr. Ohigashi: Can I approach?

Mr. Starr: Yeah please, but take the mike Lee. You gotta use the mike.

Mr. Ohigashi: You know, everybody says that. The problem is that very few of us lived on this area. We all know from Waiale that we have cross through traffic coming in here. With this development rather than going all around, all what is it the prison view I'd like to call it, but all of the ...(inaudible)... by the prison can utilize this road for purposes of entering into here. The utilization of this area increases the traffic flow. Second thing is that the utilization of this area increases the traffic flow coming from, what is this street, Kaohu Street because Kaohu Street comes up through Hale Nani Street comes around. Third thing is that as you, as pointed out by the commissioner this is a right turn only and this is the only way that these residents have to turn and go to Kahului. The traffic queue that they're so concerned about here will have an inordinate impact on the traffic that is coming from here. Well, the say well it won't because you guys have the right of way but how much of the people coming out of this area is going to back up over here, and even though you have the right of way, what is the real impact of this area on the traffic. The last thing that I can think of is that if you create a road you don't have, you create a situation where you have pedestrian traffic. And if anybody has been down at the Safeway at 12 at night looking at who sticks around there you're creating a pedestrian walkway into our neighborhood. So those are the impact of it. And those are real impacts and those are concerns of all of us.

Mr. Starr: Okay, thank you very much for your good testimony. Next is, oh Commissioner U'u do you have a question?

Mr. U'u: Yes, I have one question. Mr. Ohigashi, on that bulb out that right turn to go onto Kaahumanu, would it be on the arrow or would it be the right, that bulb out that they're claiming to put, would it be on a traffic signal light signaling to turn right on arrow?

Mr. Ohigashi: I have no idea.

Mr. U'u: Because it's no longer a free right turn now.

Mr. Ohigashi: It doesn't seem to be a free right turn, but I'm -

Mr. U'u: So that would generate some traffic also then?

Mr. Ohigashi: I would guess. I want to correct the commissioner, this is only a two-lane highway

not a three-lane highway at point. Down, the road ...(inaudible)... I think up there is still like -

Mr. Starr: Okay thank you very much, intelligent testimony. We now have Stephanie Ohigashi. Come on up, introduce yourself.

Ms. Stephanie Ohigashi: I don't want you to be thinking that I'm the - I am his mate and we do get along most of the time. I was so afraid he was going to hit Ann's head. But anyway thank you, good afternoon, Chairman Starr and Maui Planning Commissioners. It's been a long day for you. I understand you want to go home.

I grew up in this historic neighborhood, nicknamed Sandhills. It has a Hawaiian name, Hale Koa, House of Warriors. There's a lot of history behind this and you'll be hearing this in the future when the project comes before you.

I currently live at 179 Hale Nani, but I did move around this neighborhood quite a bit as a kid. ...(inaudible - changing of tape)... kept calling me back. I raised my three boys there. They made good use of all the streets in Sandhills with their bicycles, skateboard and their motor scooters. I'm still hearing the complaints from the neighbors. But anyway, I am still in the house. I took care of my mom until she passed away in 2006 and now I just take care of wayward dogs and cats. But I love that neighborhood. It's historic, it's quaint. It was built to fit on the grade, the natural grade. We didn't have to fill, we had to build our house on whatever was there. So every neighborhood as a different elevation so it's charming, cute and quaint.

The reason I am here today of course is to support the resolution passed by the Maui County Council on August 22nd. This resolution only asks to prohibit traffic ingress and egress to and from the district like you've been talking about and while I would love to speak about the plans within the project I guess I'm restricted from doing so today.

There are a few commissioners that I didn't have the pleasure of meeting last year. I was 18 months younger then and in case you don't recognize me, I'm the same girl that says, I love shopping. I'm not against development. I am so for shopping centers and would love to see a good well-planned community like it was proposed to be over 20 years ago when Maui Lani was the dream of Maui. When Bill Mills and Everett Dowling proposed this 25 years ago, I was a young mom thinking that I could just go shopping, get my Pampers and all that kind of stuff easily. Of course, it's been 25 years.

But just to clarify, I am not against the shopping center. We need good markets. We need good dry cleaners and we need hint, hint, a good gourmet cheese shop. But with that being said, I've attended several informal meetings held by the consultants. They've been very kind and of course, the Planning staff, has been, you know, very dedicated to this project. I really thank everyone and I was to hear about this development. The only thing I'm concerned about is Kainani Street.

Kainani Street is already an amusement ride. It's some where it's like a dip, you know a roller coaster and to add more to it, is a scary thought. Not for me because I'm a pretty good drifter. I can go scooping in, you know, turning left and getting to Baldwin, but I worry for the many older people that live in this old neighborhood. Over 150 signatures we got from them opposing Kainani Street. More of them are 70 years and older. They're not going to be navigating this bulb out and

this drifting course which has to force them to fight with traffic coming from Wailuku to get to Baldwin or from Lihoiiho to get to Maui Lani Shopping Center. I hope that it's well planned and I hope that the reality will happen soon because we need the jobs.

In closing, the needs of the residents of this older neighborhood was never once considered in the original Maui Lani community master plan. Not one sidewalk, not one tree, not one bench, not one invitation to sit down at the table and discuss this grand master planned community with us. Why? Because Kainani Street and the old Sandhills were never thought of as an important component 20 years ago because they had everything they thought they needed, beautiful designed shopping centers, future planned schools, commercial buildings, and their master roadway plan. They have a master plan and a unilateral agreement and they've named Maui Lani Parkway their needed road for that commercial development. So why is our little road of Kainani such a big factor in this project. Have you ever wondered why? I hope you ask that question. Mahalo and happy Thanksgiving.

Mr. Starr: Okay, Members any questions? Okay, thank you for coming before us and your patience today. I'm not sure who was maybe left before and has come and would like to testify. But if you - who's here to testify on this, just give me an idea? Okay, why don't you. Come on up. You'll be next gentleman in the -- Welcome.

Ms. Claire Apana: Good afternoon Commissioners. Good afternoon. I'm here to speak about Kainani Street and I have - I live in a house that 75 years old in that neighborhood and my name is Claire Apana and I live on Hale Nani Drive and for some two to three years we've been working on this Kai Nani Street project and it's really been a struggle for us as it seems like we don't get our voices heard. And so the resolution in front of you we hope that you will look at the laws and look at what, you know, you can do to support a neighborhood that's this old without sidewalks. And for myself, my interest is in the history of this area and I notice that there was no comment from the State Historic Preservation Department or OHA and this area of this road is a preservation area. It is a site where I was told that they came upon 17 inadvertent burials. I believe there's no reports. I don't know if I'm telling you exactly the right numbers. They came upon 17 burials and decided to stop and preserve so it has not been fully tested in there and we're talking about an exit to a shopping center. This is close to my heart and I don't believe that it would be worth it for me to see this happen for an exit. So I ask you please to support our neighborhood and all the efforts that myself and a lot of neighbors have made in passing out petitions and getting people's opinions and comments over these past years and I have walked those neighborhoods many, many times and spent many hours to do this, to get that information to you. So thank you very for allowing me to speak today.

Mr. Starr: Okay, thank you Claire, any questions? No. Thank you so much for being so patient. And please come up and testify and introduce yourself first.

Mr. David Kingden: Good afternoon, my name is David Kingden. I thank the planning commission for allowing testimony on this. Just a couple disclosures. I'm also a resident of the old Sandhills neighborhood. I also am a paramedic and a consultant in public health and public safety. Today though I'm representing myself and no other agency.

I support the prohibition of traffic ingress and egress on Kainani Street to and from the development

within that Maui Lani project district. Chairman asked earlier about what the remaining impacts would be with this latest proposal and that is what my comments are directed towards.

Kainani Street is an established residential street. It's used by residents and motor vehicles but also by those who are pedestrians and bicyclists. Old Sandhills is a quiet neighborhood and it's currently one of the more walkable communities in Central Maui as many of you know. Substantial number of the residents as mentioned are senior citizens in that neighborhood. And there's also several students who use Kainani Street for pedestrian access toward Baldwin Highway. I think that's an important point. Changing the existing, the today configuration of Kainani Street by adding intersections, bringing in cut through traffic or commercial vehicles could present a safety hazard to this neighborhood. Groups such as the elderly and school aged residents could be a increased risk and there's a lot of national and state traffic safety and injury data that provide evidence for these concerns.

If you'll just humor me I'll summarize a little bit of that for you. While intersections add up to a tine proportion of road mileage in the United States, intersections account for 44% of all reported motor vehicles crashes. Pedestrians and bicyclists are at particular risk. Of the 4,784 pedestrians and 773 bicyclists killed in motor vehicle crashes in 2006, collisions at intersections accounted for 21 to 32% of those fatalities respectively. In addition, this is kind of an important point national crash data have long demonstrated that collisions with pedestrians are much more likely to occur with turning vehicles than with straight through traffic.

Here in Hawaii pedestrians struck by motor vehicles are a leading cause of injury death among residents ages 1 to 14 and then also with those aged 75 older. So these elderly residents, the ones over 75 in Hawaii they accounted for 42% of the pedestrian fatalities in our state.

Here in Maui from 2001 to 2006, 20 pedestrians were killed, 11 of those were in the Wailuku area. Six of those victims were senior citizens. During that same time period there were five bicyclists deaths in Maui, three in the Wailuku area. Intersections themselves were a common site of fatal injuries to both pedestrians and bicyclists in Hawaii about a third of fatalities occurred at intersections.

In addition to just the intersection issue, the volume and type of traffic that's imposed on a residential neighborhood such as this can itself pose a significant hazard to the residents. There's researchers in California that have found that increased traffic in residential areas especially truck traffic raises the risk of pedestrian and bicycle injury and death. There's other researchers that have found that factors such as added traffic volume and right turn lanes contribute to motor vehicle crashes with bicycles. Furthermore the dangers of cut through traffic in residential neighbors they're specifically recognized not just by public health and safety agencies but also by municipal governments and planners across the country such as yourselves. In fact, the United States Conference of Mayors has brought safety concerns specifically just in cut through traffic to the national level.

So in summary, preventing additional ingress and egress on Kainani Street to injury for residents and other users of the neighborhood. Whereas if you were to fail to make that prohibition, that could lead to significant hazards to the public's health and safety due to those specific concerns that I cited. I believe someone was kind enough to provide you with copies of this that will give you

the citations, annotated citations so you can see where some of that data came from and if you do have any questions, I'd be happy to entertain them. Thank you for your time.

Mr. Starr: Thank you for the well-researched testimony. Mr. Munekiyo, you're next.

Mr. Mike Munekiyo: Good morning or good afternoon again Mr. Chair and Commissioners. My name is Mike Munekiyo. I'm here this afternoon on behalf of HRT, they are the property owners and applicant for the proposed Maui Lani Shopping Center. I think the first thing I wanted to say was HRT has been quite sensitive about the concerns raised by the neighbors and we've met with them on a number of occasions. We understand the concerns as it relates to Kainani Street. Over the past several months, since March really, we've been trying to get a solution which we believe would be workable for all stakeholders. We've been working with DOT. And as Ann mentioned, the original plan that DOT or we had advanced was access via Kaahumanu, entry and exit but that was prohibited by DOT and as a result, you know, Kainani was an important alternative because the impacts to Maui Lani Parkway otherwise might be, I guess challenging I guess just from a lay standpoint.

And if I could just real briefly, what needed to be done in terms of a breakthrough in the discussions with DOT was to get access reinstated via Kaahumanu and that is what we were able to do and it was because we were able to offer to DOT that the applicant would construct a fourth auxiliary lane here. This would be a dedicated exit lane only to the shopping center. Right now you've got two through lanes and I think there's that third lane that comes from Kainani goes down all the way to - oh, no I'm sorry, just there's an acceleration lane and decel lane into Maui Lani Parkway but what would happen is the third lane through from Kainani to Maui Lani Parkway would be connected and beyond that there would be that exclusive decel lane. And with that offered, the DOT recognized that that would solve some of their traffic safety concerns at the location and with that, they okayed the entry via Kaahumanu Avenue. So that was really I think a breakthrough solution for all. And that I thought was important to share with you.

I think again what we want to be able to convey is that there is in terms of redundancy in traffic circulation, redundancy that use of Kainani is important. There isn't going to be no traffic generated from the shopping center from Kainani going into the residential area nor any turns into the shopping center from Kainani. So we're hopeful that that type of configuration would be workable for all. And what we're asking commissioner is for your favorable consideration of I think the Planning Department's recommendation. And if not, at least recognize that the right turn in would be something that's workable for all. We think it's helpful and again, it would eliminate the traffic impacts along Maui Lani Parkway as both DOT and Public Works has indicated. Be happy to answer any questions.

Mr. Starr: Okay, thank you. Commissioner Hedani.

Mr. Hedani: Mike, in this particular case the second exit or the second entrance into the commercial property from Kaahumanu Avenue was important for Safeway, right, the tenant?

Mr. Munekiyo: That's correct.

Mr. Hedani: Okay, exit from the shopping center is not as important to the tenant from their

perspective, right?

Mr. Munekiyo: Exit is important from the standpoint of the not necessarily the tenant but the owner, HRT because from the operations of the entire shopping center what would happen is Maui Lani if all of the traffic were routed here, exiting out of - onto Maui Lani Parkway then that would create a back up on the northbound lane and that causes some operational problems at this intersection here. So from a -

Mr. Hedani: Okay, I understand. The point I'm making is that from the standpoint of the residents that live in this particular area the problems of Maui Lani appear to be spilling over into their neighborhood.

Mr. Munekiyo: Right.

Mr. Hedani: It could be that you could get access from Kaahumanu Avenue according to the DOT for the tenant and eliminate the exit onto Kainani Street so that the residents would be protected. It would be a little bit more inconvenient for the shopping center, but the shopping center is Maui Lani's problem, you know, from my perspective. So the question is, once the egress into the commercial site is established from Kaahumanu Avenue is it critical for the tenant and the developer of the shopping center to have an exit onto Kainani Street which is already caused the neighborhood to go get a resolution from the County Council which was unanimously passed with one excused which means whether or not we disapprove it or not, they're going to override our decision because they have a hundred percent of the votes at this point.

Mr. Munekiyo: And if I may, I believe Mr. Benner who's representing Safeway today will be testifying as well and he could probably better respond to the need for that Kainani exit. However, with respect to the resolution itself, that resolution itself, that resolution I believe was passed in August. At that point, we did not have an agreement with DOT and we did indicate to the Council at that point that we were in negotiations with DOT to secure a viable solution for all. Unfortunately we were not able to get that until just about a month ago. And so the timing relative to the resolution and when it is that we were able to finalize our discussions with DOT just didn't work out.

Mr. Starr: Commissioner Hiranaga, please.

Mr. Hiranaga: So the Department of Transportation is opposed to a right turn only exit at your proposed right turn only entrance?

Mr. Munekiyo: Yes.

Mr. Hiranaga: And why is that?

Mr. Munekiyo: I understand that the distance from this - if there were to be an exit and this intersection here if this were an exit you would have traffic weeding out into the two lanes through and traffic weaving in to turn right onto Maui Lani Parkway and that weaving action is what really concerns the department.

Mr. Hiranaga: What if you put a bulb out at the intersection of Kaahumanu and Maui Lani Parkway

so you wouldn't have a decel lane there? Like the bulb out that's proposed at Kainani and Kaahumanu.

Mr. Munekiyo: Oh, right here?

Mr. Hiranaga: Right.

Mr. Munekiyo: Well, right now there's a deceleration lane that allows for exclusive right turns into Maui Lani Parkway and I think that movement needs to be preserved.

Mr. Hiranaga: There is an acceleration lane out of Kainani Road onto Kaahumanu Avenue that you're proposing to remove.

Mr. Munekiyo: That's correct. There will be a bulb out at that location. And again, that was more to address the weaving actions, to eliminate the weaving actions at that location.

Mr. Hiranaga: So you're proposing to put a bulb out at Kainani intersection but you don't want to do it at Maui Lani intersection because it wouldn't be in favor of what the developer wants.

Mr. Munekiyo: You know these solutions that were developed were jointly developed with DOT and DOT's comments were quite important. So again, you know, the original, I believe the original solution didn't show the bulb out but that put in a result of DOT's recommendation at Kainani.

Mr. Hiranaga: Mr. Chair, I don't know if you want me to get into a lengthy discussion about this proposal because I think the agenda item is whether to approve or disapprove the resolution, but I have a lot of thoughts about what's proposed and you know, I moved to Nakoa Drive when I was four years old and lived there for 14 years before I went off to college but I did return intermittently to live with my parents. I do visit them about five times a week so I am pretty familiar with the traffic situation there. I don't know if you want me to get into that.

Mr. Starr: I won't cut you off but you know, if we could move it on it would be preferable.

Mr. Hiranaga: I guess my, okay, the two major concerns I have is with the bulb out right now there is an acceleration lane to go eastbound to Kahului. With the bulb out people making a right turn would have to wait for the traffic signal to turn green in order for them to merge into traffic whereas now it's a stop and proceed with caution. You're going to add traffic coming out of the exit egress onto Kainani, that distance is not very far and it would not take more than several trucks to stack up there where it would create a major stacking problem on that street especially if right turns are only allowed on green lights. So you got someone that either is going to go straight. If they're going to go left to Wailuku, they've got to yield to the traffic going straight off Liholiho and then people making rights can only make rights on green lights. I just - in the morning when you got this traffic trying to get into Baldwin High School with that bulb out people coming out of on Kainani must wait for the green light and then merge across three lanes in order to get to the left turn decel lane to get into Baldwin High School. That's going to be a major nightmare and now you're adding more traffic coming out of that shopping center in the morning with the delivery trucks because that's when they make the most deliveries is in the morning so you're going to be adding a stacking problem on Kainani Street. I just don't see it.

And right now without the bulb, that intersection looks pretty passive but I think if you put that right turn bulb there, just going to have a major stacking problem during the morning hours because the people that just want to go to work in Kahului will have to wait for that green light. There's no longer any stop and proceed with caution and go down the accel lane to get to Kaahumanu. So I just see a big problem with that.

I think if the commissioners have an inkling of disapproving this resolution then they should have site visit at 7:30 a.m. on a school and workday and see what's happening at that intersection right now. They want to put more load on that intersection in the morning, I just don't see it happening. And the accel lane that currently exists onto Kaahumanu probably proceeds about two-fifths of the way and then it merges into Kaahumanu one-fifth of the way, and then two-fifths of the way it's a decel lane into the Maui Lani Parkway. They almost connect, they're probably only like 30 feet apart between the accel and decel lane and you've already got that crisscrossing action. They're going to put a third lane and decel lane which is really four lanes and the bulb there. It's a huge hindrance on and burden on Kainani Street.

Mr. Starr: Commissioner Hedani.

Mr. Hedani: Mike, would the DOT accept the right turn in to the shopping center without bulb?

Mr. Munekiyo: Perhaps Mr. Chair, we have our traffic engineer, I'm not sure if it's appropriate but he could come in as a testifier separately.

Mr. Starr: Yeah, have him come as a testifier but we are kind of running really late. Commissioner Hedani, that okay? Commissioner U'u, you're next.

Mr. U'u: I remember the first time they coming in for this project and saying that well, let us just pass it here and if we run into one problem we can fix it later. I remember that. I don't know what kind of thinking is that but that's bad planning. And we shake the trees, we rattle the trees and we come up with this which is an improvement but still not good enough where you putting the problems on the adjacent property owners which shouldn't have any impact, zero impact. I think it's a case of bad planning and it's an afterthought that somebody of that size of Maui Lani with all their acreage to come in and put the burden on the neighbors. I feel is, I would be unhappy too. And if that was my neighborhood I would be losing my cool probably right now. So I feel it's an injustice and that's where at times people get labeled as bad development and I think this is one of them.

Mr. Starr: Okay, thank you very much Mr. Munekiyo. Who's next? Come up sir. I think I've met you before but I forget your name. Introduce yourself.

Mr. Jeff Benner: Good afternoon Mr. Chairman and Commissioners. My name is Jeff Benner. I'm an architect both for the project as well as representing Safeway. We've had a chance both ourselves, the team and Safeway to you know, review this latest concept which we are part of the creation of this and have reviewed the Department's of Transportation's review and approval of this concept and we would like to just go on record of saying that we concur with the direction that we have at this point. Now I've heard a lot of testimony, some questions and maybe I can kind of help or answer some of the questions that have come up.

Just a moment ago I heard something regarding truck egress from the site using the Kainani Street exit, but that is part of our plan overall not to allow the large vehicles which I think typically come twice weekly to the site. We will not allow those to exit out onto the Kainani Street. We'll actually bring them back from the loading areas which you see to the left of the Safeway Store but also underneath this major B, kind of mid major tenant that we'll exit them back out to the signal at the Maui Lani Parkway. So if there's any concern about large vehicles, the large semis hopefully that answers that particular question.

We've talked in terms or heard discussion about the amount of traffic in the morning hours. Those are typically the low peak hours for this type of retail activity so therefore we're not really introducing many more cars at that particular time of the day as compared possibly to later in the day during the p.m. peak hour which is I believe is 4:30, 5:30 in the afternoon and even at that point, the amount of traffic that we're introducing to Kainani is an egress only out to Kaahumanu Avenue is approximately two maybe two and half cars per minute. So it's not a significant amount of traffic that's being generated on that lets call it roughly 200 feet of Kainani as an egress only.

I would be happy to answer any questions that anybody has.

Mr. Starr: Commissioner Hiranaga.

Mr. Hiranaga: The p.m. traffic lets say between 4:00 and 4:30 p.m., it's not unusual for the traffic to stack now from Maui Lani Parkway beyond Kainani intersection. But you're only going to add two cars per minute which is 60 cars per half an hour.

Mr. Benner: It's about yeah, two, two and half per minute.

Mr. Hiranaga: When the traffic is now stacking beyond Kainani Street from Maui Lani Parkway.

Mr. Benner: Headed eastbound.

Mr. Hiranaga: Right.

Mr. Benner: Yeah. That's a question have to ask our traffic engineer who is here to respond to that. Because I'm just kind of responding to the egress only at this point from the center.

Mr. Hiranaga: So you're saying no large trucks. Are you willing to say absolutely no delivery vehicles?

Mr. Benner: No, I'm not saying that. I'm saying the large trucks. The pop deliveries, the chip deliveries, the Federal Express, those types of small vans possibly might use that particular exit. But it's the large semis that I'm speaking of.

Mr. Starr: Commissioner Hedani.

Mr. Hedani: In my head this is the second strike on Maui Lani. The first strike was Palama Drive where they screwed all the neighbors in that area and sold the property off to somebody said it's not our problem. It's Val Peroff's problem. This particular case, you're dumping a problem that

comes from the commercial side onto a residential neighborhood. It's not their problem, it's HRT's problem. You know, that's the second strike.

In this particular case, they've got a Council resolution that says prohibit all ingress and egress off of Kainani. In this particular case will the tenant be able to operate if he didn't have egress onto Kainani Street?

Mr. Benner: Well, it's a very good question. You know, we have done retail projects you know, in many locations and the success of these types of centers is the convenience for the shoppers. Getting the ingress as well as the egress into and out of the site. I mean, it's simply a function of the way the retail market works.

Mr. Hedani: Okay, I guess my question, you know, the quick answer would be, if you didn't get egress onto Kainani Street is that a deal breaker for the tenant? Personally I don't care, you know, whether or not the tenant is there or not for the subdivision but part of the answer has to be is that a deal breaker for the tenant?

Mr. Benner: Well, I think you know, that's something that I would have to, you know, confer with the tenant. You know, there's been a lot of dialogue. We've worked on this project for many years. I know what the success of these - how these centers work and their successes. I simply would have to speak with the tenant. It may, it may not. Yeah.

Mr. Hedani: Okay and my last comment is that, in the development of this particular shopping center, if Maui Lani was conscientious and considerate of the neighbors that they had to the west, they would have established a connection through their own single family residential subdivision to exit the shopping center rather than dumping the problem on the older neighborhood because they have single family right next to it.

Mr. Benner: Yeah, that's something I was involved it, but I mean, it's a very good point.

Mr. Starr: Okay, let Commissioner Mardfin go then Commissioner Hiranaga.

Mr. Hiranaga: I wanted the consultant to answer my question about the stacking of the p.m. ...(inaudible)... Kainani, he said he would have to talk to his consultant.

Mr. Starr: The traffic engineer will be testifying next I think.

Mr. Hiranaga: If I asked him a question if he was aware that traffic in the p.m. stacks beyond Kainani Street from Maui Lani Parkway and he said he would have to ask his traffic consultant. So I was wondering if he could answer that question by asking his traffic consultant.

Mr. Starr: Well, the traffic consultant is going to testify. So why don't we ask the traffic consultant to answer that when he comes up. Commissioner Mardfin.

Mr. Mardfin: I apologize for being out on part of your testimony but when I came in you were saying things that I was going to ask about. So let me ask a couple of questions. Have you done a study of how many people currently use Kainani?

Mr. Benner: I have not personally, but the traffic consultant.

Mr. Starr: The traffic consultant is coming up.

Mr. Mardfin: I just wanted to ask if it had been done. How many vehicles do you project will be leaving by that exit?

Mr. Benner: We'll clarify that with the traffic engineer but it's my understanding it's worst case, peak time hour it's a 140.

Mr. Mardfin: 140 an hour?

Mr. Benner: For one hour during that 4:30 - 5:30 time period.

Mr. Mardfin: Would you consider putting a speed bump in?

Mr. Benner: On the exit?

Mr. Mardfin: On the exit.

Mr. Benner: It probably won't need a speed bump. Right now the way this is designed we've actually pushed the site downward, as you know, helping with some of the residential neighbor's concerns. Therefore that slope from the center up to Kainani is 10, 11%. It's a fairly steep drive.

Mr. Mardfin: Well, the reason I'm asking is because I'm concerned as some of the residents are with safety and a speed bump might really slow people down going out the exit and make it safe for people to be crossing from left to right. Similarly I thought about an auto gate, one car at a time going out. Has that been considered or would that be considered?

Mr. Benner: We haven't talked about that. I probably would defer that to the traffic consultant.

Mr. Mardfin: I was going to ask about having no trucks but you've already addressed that. Certainly no trucks in the morning.

Mr. Benner: The large trucks. Large container trucks would go back out in front of the stores to Maui Lani Parkway.

Mr. Mardfin: Would you be willing to make it no trucks before 10:00 a.m.?

Mr. Benner: No trucks exiting before 10:00 a.m.?

Mr. Mardfin: Yeah. From that exit.

Mr. Benner: Personally I would not see a problem with that but I would want to confer with the tenant.

Mr. Mardfin: Because that would get them past the morning issue.

Mr. Benner: Yes.

Mr. Mardfin: My colleague was talking about the afternoon and that could be a real problem too. Are you willing to build the sidewalks and the roadwidening before you go ahead with the project cause that way they get a benefit of it for a while anyway? I'm talking about the phasing of the project?

Mr. Benner: You're talking about the Kainani Street improvements there?

Mr. Mardfin: Yeah.

Mr. Benner: I mean I wouldn't have a problem with it. I guess that would be up to HRT in this case.

Mr. Mardfin: So I mean, you put in the sidewalks, you widen the road and then before you start any of the other stuff.

Mr. Benner: Yeah, I personally don't see that as a problem.

Mr. Mardfin: Thank you.

Mr. Starr: Okay, thank you very much. Next testifier please. Who is? Okay, please introduce yourself.

Mr. Phil Matsunaga: Hello, my name is Phil Matsunaga. I'm the traffic engineer consultant to the team. I guess based on what I've heard today there are a couple of things I wanted to touch on. The first one was the actual project related traffic volumes that are going to be coming out of this exit only and what we're talking about in the a.m. is less than one vehicle per minute so that we're talking about 43 vehicles during the a.m. peak hour and the vast majority of them aren't even going to be using that right turn lane. They have another access onto Maui Lani Parkway that they can also use. So they're not - they can spread themselves out between the two accesses. So it's not like they're going to be stacking with that northbound right turn at Kainani which is your primary concern.

In the p.m., we're looking at as Jeff mentioned about 140 vehicles coming out of the shopping center at the Kainani access and like he was saying that comes out to about two and a half vehicles per minute and those too, will be primarily using that left through lane rather than the northbound right turn lane.

So in addition to that, we're looking at something like, one second, have to find it, I had it all here, yes. Okay, so looking at the northbound Kainani approach, in the afternoon, the afternoon peak is 1:45 to 2:45 it's related to the school peak and we're looking at about 150 feet for the northbound left through lane and about 100 feet for the northbound right turn lane and the amount of space given I believe is about 200 feet. So weaving shouldn't be a problem.

During the p.m. peak which is 4:00 to 5:00 we're looking at about 74 feet, 64 feet for those same two lanes. So again, this shouldn't - sorry, this is combined, combining the project and the future traffic coming out of Kainani. So this isn't based off existing. So, there shouldn't be an issue on

being able to get to the right turn lane if you're on Kainani already. And there shouldn't be an issue coming out of the shopping center of getting to the left through lane which is primarily what they're going to want to be doing.

Regarding the bulb out at the Kainani intersection, that was one of the conditions that DOT gave to us. It wasn't our idea at. It was a condition that they gave us in order to approve it. And the right turn on red from what I understand it's not necessarily a bad movement. From what I understand DOT, it's still in discussions with DOT and I don't have any reason to think that they're going to band the right turn on red as of now. From what I understand you could - even though the stop bar is in the same place you can still kind of inch out next to the bulb out and still complete your movement. And the difference is you wouldn't necessarily, as it is now there's an acceleration lane when you make the right onto Kaahumanu from Kainani.

Mr. Starr: Please wrap it up.

Mr. Matsunaga: All right. And basically what it will do is it will encourage people to stop to make a full complete stop, check to make sure there's a gap in traffic before completing their movement. Whereas now, you can kind of just make your movement, check your side view mirror and oh, there's a gap, okay, I'll go in now. It's kind of how it is right now. It's pretty much all I wanted to touch on.

Mr. Starr: Okay Commissioner Hiranaga, you still have any questions?

Mr. Hiranaga: The 140 per hour increase in traffic that's from the entire center to both proposed exits, Maui Lani Parkway and Kainani or is that just Kainani?

Mr. Matsunaga: No, that's only the Kainani.

Mr. Hiranaga: So 140 cars an hour would be added to Kainani during the peak period between 4:00 p.m. and 5:00 p.m.?

Mr. Matsunaga: Right.

Mr. Hiranaga: How many cars - do you agree that during the peak period current conditions cars do stack from Maui Lani Parkway beyond Kainani?

Mr. Matsunaga: I'm not quite aware of it being that bad, but I am aware of it backing up.

Mr. Hiranaga: Okay, it does.

Mr. Matsunaga: Okay, I'll take your word for it.

Mr. Hiranaga: So how many cars can come out during a green light and make a right turn out of Kainani onto Kaahumanu assuming there is no stacking?

Mr. Matsunaga: How many could possibly make it?

Mr. Hiranaga; Right, I don't know what the time interval is for the green light. You know, if you got the green coming out of Kainani how many vehicles do they cycle out?

Mr. Matsunaga: Well, lets see. I'm not quite sure how to answer your question. I can say that there's probably about at minimum about 25 to 30 seconds because of the pedestrian phase for the Kainani approach and the number of right turners in our last traffic count which was in April of this year, we counted 71 vehicles in the morning making that right turn and 61 vehicles in the p.m. making that right turn. So, you get something like a little over one vehicle a minute.

Mr. Hiranaga: No, my question is hypothetically if you got a 140 cars coming out that propose exit and you've got the existing traffic and they're all trying to get through, get onto Kaahumanu Avenue.

Mr. Matsunaga: You're talking about eastbound direction?

Mr. Hiranaga: Right. So the traffic on Kaahumanu is stacked from Maui Lani Parkway all the way up to Kainani so the only way they're going to get onto Kaahumanu is when they got the green light. When they have the green light, how many cars do you think will be passing out through that green light is my question?

Mr. Matsunaga: You're talking about total or just project related?

Mr. Hiranaga: Total cars. During that green light if it's a minute or 90 seconds.

Mr. Matsunaga: It's not going to be that much added from this particular access to that right turn. So it would probably be somewhere on the order of maybe at most two vehicles per cycle and this including the existing.

Mr. Hiranaga: No, no, no, I'm just saying when you got a green light how many cars usually can get out before it turns to yellow or red. Some people I guess go against the red.

Mr. Matsunaga: If you assumed - typically vehicles can be processed about once every two seconds. So with a full green you could process anything up to maybe 10, 12 vehicles maybe a little bit more with a little two second gap at the beginning for people to start up.

Mr. Hiranaga: 10 to 12 vehicles?

Mr. Matsunaga: Yeah, if you had the full green and if you needed that much because otherwise the signal would switch to another movement if there were no cars waiting. But it would stay green if there were still cars processing or if there were a pedestrian phase initiated.

Mr. Hiranaga: I don't want to belabor the point but I guess maybe you should take a closer look to confirm that in fact the traffic does stack from Maui Lani Park beyond Kainani Street in the p.m. hours. Like if you leave today about in an hour or so, you'll see it.

Mr. Matsunaga: Okay, with any luck I'll be out there.

Mr. Starr: Okay, Commissioner Mardfin, lets try to wrap it up though.

Mr. Mardfin: Lets assume that the egress were not allowed for some reason, that traffic would then transfer to the Maui Lani exit?

Mr. Matsunaga: That's correct.

Mr. Mardfin: And so there would be more stack up there. There would be more danger of accidents there?

Mr. Matsunaga: What would happen is the traffic particularly for that - well, okay, at the Maui Lani, the northbound Maui Lani approach the current configuration is a left turn lane, a through lane and a right turn lane. And what would happen is primarily the left turn lane would be impacted greatly by all the traffic that's transferred over. So whereas something like two and a half vehicles per minute, it might not have that much of an impact at Kainani, at a busier intersection it can kind of have a greater impact. So, what would happen if the traffic were transferred to the Maui Lani intersection is that the traffic would stack out of the northbound turning lane and pass the shopping center and Kaiser access which would kind of clog things up, be a safety issue. So that's kind of what would happen if there were no Kainani access.

Mr. Mardfin: Thank you.

Mr. Starr: Okay, thank you very much for testimony, answering questions. Any other members of the public wishing to offer testimony on this item? Not seeing any - oh, please come up, introduce yourself. Welcome.

Mr. Derrick Katada: Hi, my name is Derrick Katada. I'm a resident of Wailuku and I work in Wailuku. I've been to several of the meetings that they introduced this plans and I know at the beginning that probably there was a lot of problems with the egress and ingress from Kainani. I think right now that they do propose a workable solution and I know there's probably a lot of concerns with the traffic and the stacking and all that. And hopefully with traffic lights, timings and stuff like that they can probably overcome that.

You know, since Ooka Super Market closed there's been no major shopping in Wailuku. We do have Sac and Save, Takamiya Super Market, things like that. So I think shopping center is really needed. I spoke to a lot of people and I know they all are in favor of this shopping complex. So I wish you would consider it as they have proposed. I feel kind of awkward coming out now after all the professional testimony but just to let you know, to voice my opinion and those that I have spoken to. Thanks.

Mr. Starr: It's because of members of the public to give them an opportunity to express themselves that were here. So thank you for coming today.

Mr. Katada: Thank you.

Mr. Starr: Any other members wishing to give testimony please. Welcome.

Ms. Jocelyn Costa: Good afternoon. I'm glad that I'm coming towards the ending part so I can hear some of the professionals and their justification on what they're doing and I just want to -

Mr. Starr: Yeah, introduce yourself for the record.

Ms. Costa: I'm sorry, my name is Jocelyn Costa and what this gentleman said about how it would make it convenient because there's a shopping mall that's closer where there's not a Ooka. I live in Haiku and I have no problem driving out to Kahului to do my shopping. I wouldn't want a shopping center in my district. It could pose a lot of problems. And as I stand here as a lay person and I'm trying to hear justification or try to find concerns on where they're proposing to put this exit or whatever, when it comes to Kainani there is no problem. No problem. We can fix it with a bulb, with a blink, with a this, with a that, but the minute you put it into the project all of a sudden all the problems that you guys are pointing out is a problem. Can you imagine that? So why can't they fix it in their project with a bulb and a blink and a that? You know, I'm just a lay person but as I'm standing here listening to the explanations given to you folks from professionals, I wonder how they cannot solve the problem within theirs and yet say that they can solve it outside theirs. Just my manao. Mahalo.

Mr. Starr: Okay, thank you for sharing. Any other members of the public wishing to testify please make yourself known. Not seeing any, public testimony on this item is now closed.

Members, I have a question for the department which is, how is it that if the Maui Lani project in the phase 1 didn't envision using that for an entrance or exit as was testified to us, it can be added on without any process or are we wrong in thinking that it wasn't part of the original process?

Ms. Cua: I can try and answer that as best I could. Well, first of all a map is not normally attached to a project 1, project district process. I believe the only project district that has it is Maui Lani. At that time when roadways are envisioned in a plan they're conceptual roadways. Things changed. The roadways within the Maui Lani project district from what was originally planned 20 years ago changed as a result of burial sites that they found and various other reasons and again, my history doesn't go back 20 years with Maui Lani. But generally what happens in the project district phase 1 process is to establish the standards and the uses within the project district. What happens in the phase 2 process is the site planning, the actual preliminary site plans that come in and they have to go through the planning commission. The planning commission must hold a public hearing in the affected community plan region and that's of a preliminary site plan. And then in the phase 3 project district approval, is when the construction plans come in that is supposed to be in accordance with the preliminary plan that you approved and that allows the Planning Department to grant administrative approval of a phase 3 application. So that is how we see the process.

Mr. Starr: So as I understand it, they've not done phase 2 yet is that correct?

Ms. Cua: You are reviewing the phase 2 application for this particular project, I should say, for the commercial site. It came before you. You held a public hearing. You deferred action and they'll be coming back to you I'm not sure when because they're compiling a environmental assessment at this point in time.

Mr. Starr: So in other words, we would have an option to deal with their ingress and egress and so on as part of the phase 2 if we desire to look into that or to make changes am I correct?

Ms. Cua: Yes. You have already, it has already been before you. You have already seen various

iterations. You have not formally seen this proposal because it was just worked on with the applicant and Department of Transportation but this would be the newest iteration that you would see when it comes before you at some point in the future, but yes, you would have - it's your jurisdiction to approve or deny the project district phase 2 applications and you make conditions which often times deal with traffic.

Mr. Starr: And what are the pros and cons of us dealing with it under the phase 2 versus the Council coming in and dealing with it as an ordinance?

Ms. Cua: How I can respond to that is, in an ordinance in this particular ordinance it would be - the way they propose to have it added it would apply, it appears to apply to the whole project district. But in actuality the only portion of the project district it's going to affect is this particular property. This particular property is within the project district and you are the authority to review and approve the preliminary site plan and the final site plan. So from the department's standpoint, I mean, you are the body that is going to be reviewing all those changes and looking at the impacts and imposing conditions on the project in any way that you see fit that would mitigate any impacts.

Mr. Starr: Okay, any other questions and then we'll go to recommendation. Commissioner Mardfin.

Mr. Mardfin: Let me ask you about what Commissioner Starr asked a minute ago. What's before us today is a recommendation to the Council on their resolution which proposes to pass an ordinance preventing both egress and ingress?

Ms. Cua; Correct.

Mr. Mardfin: If we are mute on or if we approve what they say, then they're likely to pass an ordinance preventing both ingress and egress possible?

Ms. Cua: Possibly. You're going to make a recommendation.

Mr. Mardfin: If we recommend however, that we - and the department's recommendation on this which I know you'll get to in a few minutes is denial of the ordinance, proposed ordinance as written in the resolution. It seems to me that we need - it would be possible for us to approve, recommend the department's approach which is to say okay, no ingress but we could have egress in what the Council passes and then when the project comes to us then we can deal more with the egress issue. But if we don't do anything now and the Council passes a ban on ingress and egress then we're locked out. We can't do anything with the egress is that correct?

Ms. Cua: If the law changes, everybody has to comply with the law. And if there is an ordinance amendment that occurs or that is passed by Council to prohibit ingress and egress, then it will be prohibited and -

Mr. Mardfin: Then this is off the -

Ms. Cua: Whether this developer or any other developer decides for that particular property because again that's really all that would be affected when they decide to do whatever project and come before you in a phase 2 application that would be a restriction that's in the ordinance and

would have to be addressed by everyone.

Mr. Starr: Yeah, Commissioner Mardfin, you'll have an opportunity to make a motion, whatever motion you want.

Mr. Mardfin: I was just trying to clarify what the issue was.

Mr. Starr: Okay, Commissioner Hiranaga.

Mr. Hiranaga: I'm sorry, maybe you're going to have to repeat the process but whatever decision is made by the commission goes to the Council and do they conduct public hearings once more or I mean, because they have to vote on the ordinance. They passed a resolution, they did not pass an ordinance.

Ms. Cua: Correct.

Mr. Hiranaga: So they would have to go through the process of possibly - I don't know if they - you're holding a public hearing. This is a public hearing. I believe they have the discretion to hold another public hearing if they wanted to.

Mr. Starr: I believe this is a full noticed public hearing.

Ms. Cua: This is it.

Mr. Starr: But they will have testimony at first and second reading.

Mr. Hiranaga: Right, so it still has to be voted on by the Council in order to enact to ordinance?

Ms. Cua: Correct.

Mr. Hiranaga: And if they deemed appropriate to amend the ordinance or change the ordinance they can do so.

Ms. Cua: Correct.

Mr. Starr: Okay, can we move along to the recommendation? Okay.

b) Action

Ms. Cua: Based on the new proposed site plan for the Maui Lani Shopping Center project to include right turn out only onto Kainani Street and comments from State and County agencies the Planning Department concludes that County Resolution 08-73 to prohibit traffic ingress and egress on Kainani Street to and from development within the Maui Lani Project District is not in the best interest of traffic safety and sound planning principals.

In addition, the amended site plan requires project district phase 2 approval from Maui Planning Commission and this issue of Kainani Street will be subject to public testimony and discussion by

the commission.

Therefore, the Planning Department is recommending disapproval of the resolution to amend the Wailuku-Kahului Project District 1 Maui Lani Ordinance to prohibit traffic ingress and egress on Kainani Street to and from development within the Maui Lani Project District. If the County Council wishes to pursue an amendment to the ordinance we suggest that ingress only to Kainani Street to proposed development in the Maui Lani Project District be prohibited and egress from the proposed development in the Maui Lani project to Kainani Street be permitted.

In consideration of the foregoing, the department recommends that the commission adopt the Planning Department's report and recommendation prepared for the November 25, 2008 meeting as its findings of fact and conclusions of law and authorize the Director of Planning to transmit said findings and conclusions on behalf of the commission.

Mr. Starr: Okay, Members Chair would very much welcome a motion either to accept or to deny or change.

Mr. Hiranaga: Question for staff?

Mr. Starr: Okay, go ahead.

Mr. Hiranaga: Ann, are you aware that the traffic stacks from Maui Lani Parkway beyond Kainani Street during the p.m. peak hours?

Ms. Cua: No, I'm not.

Mr. Hiranaga: So you do not take Kaahumanu Avenue to go home. I don't know where I live so.

Ms. Cua: Actually I take it home every single day.

Mr. Hiranaga: But not at 4:30 you never see -

Ms. Cua: No, I never leave the office before 4:30.

Mr. Hiranaga: Okay, 5:00 ?

Ms. Cua: Never leave the office before 5:00.

Mr. Hiranaga: That's because you want to avoid the stacking.

Ms. Cua: No, that's because I work till 5:30 to 6:00.

Mr. Starr: It does stack up. I get caught in it. Anyway, members how about a motion? Go ahead Commissioner Mardfin.

Mr. Mardfin: I move that we accept the recommendations of the Maui Planning Department's report and recommendations and the findings of fact and conclusions of law and that they have proposed

in this in effect the report is a recommendation against the ingress in but allowing for egress out.

Mr. Starr: Okay, is there a second? Motion dies for a lack of a second. Do we have a different motion? Commissioner Hiranaga.

Mr. Hiranaga: I'll make a motion to approve the Council resolution.

Mr. Starr: To recommend approval.

Mr. Hiranaga: Recommend approval.

Mr. Iaconetti: Second.

Mr. Hedani: Second.

Mr. Starr: Okay, we have a motion by Commissioner Hiranaga, seconded by Commissioner Dr. Iaconetti. That motion is Director?

Mr. Hunt: To approve the Council Resolution.

Mr. Starr: Okay, I just want to ask Planner Cua whether we need to add any other flowery language to that or if that works?

Ms. Cua: No, that works for me. Your recommendation will be transmitted up.

Mr. Starr: Okay, so we have a motion on the floor. Discussion? Possible amendments? Seeing none, oh, Commissioner Mardfin.

Mr. Mardfin: I'm going to vote against this because I think that at least a potential for egress should be allowable. So I think this is a unwise resolution.

Mr. Starr: Okay, thank you. Commissioner Hedani.

Mr. Hedani: Actually it's the third strike against Maui Lani. The first strike was when they excavated this area and they caused the collapse of some of the walls that were on the neighbors residences on the upper side of the subdivision. The second time was when they filled all of the Palama Street neighborhood and the third time is when they're proposing to go through an area that has burials in it and congestion that backs up for 20 minutes in some cases I heard. And nothing really to benefit the subdivision adjacent to it in order to make things better instead of make things worse. And if that's a deal breaker for the tenant then maybe they have the wrong tenant.

Mr. Starr: Okay, we're ready to call the question? All in favor of the motion please signify by raising your hand? All opposed? Director.

It was moved by Mr. Hiranaga, seconded by Mr. Iaconetti, then

VOTED: To Recommend Approval of the Resolution to the Maui County Council.
(Assenting - K. Hiranaga, W. Iaconetti, B. U'u, D. Domingo, W. Hedani, J. Starr)
(Dissenting - W. Mardfin)
(Absent - J. Guard)

Mr. Hunt: Six in favor. One against.

Mr. Starr: Okay, thank you very much and I want to thank everyone for their patience. It's been a long time. We're going to take a 10-minute recess.

A recess was called at 3:06 p.m., and the meeting was reconvened at 3:16 p.m.

Mr. Starr: Okay, Maui Planning Commission meeting November 25, we are back in session. We're moving back to our schedule agenda. We're moving to Item C-1 which is possible adoption of a written decision and order and it was prepared and modified by our - there really are good lawyers in this world people. So I'm going to turn it over to our legal eagle Mr. James Giroux.

Continuation of:

C. **ADOPTION OF WRITTEN FINDINGS OF FACTS, CONCLUSIONS OF LAW, AND DECISION AND ORDERS** (No public testimony will be taken as the Commission will be completing their adjudicatory function.)

1. **Adoption of Written Decision and Order prepared by BRIAN T. MOTO, Corporation Counsel and JAMES GIROUX, Deputy Corporation Counsel on behalf of the Maui Planning Commission denying the intervention request from LANCE COLLINS, attorney on behalf of LINDA MCDONALD on the request by PINE STATE LIMITED for a State Land Use District Boundary Amendment from Agricultural to Urban for Ke Kani Kai, a proposed 2-lot subdivision and associated infrastructure improvements at Lot 3 Makena, Keoneolo Road, TMK: 2-1-005: 117, Makena, Island of Maui. (DBA 2007/0008) (P. Fasi)** (Action taken at the October 14, 2008 meeting.)

Mr. James Giroux: Yeah, we went back during the break and I took your comments and integrated it into the new draft that's now on your table. So if you want to, I guess if you want to take a vote to adopt it then you can execute this.

Mr. Starr: So this isn't an item that we, you know, it's not a public hearing item. We already did make decision making on this. This is just to finalize and put it in writing. So these are open for discussion or for the - lets do them one at a time. Possible motion to adopt or reject whatever you wish. Commissioner Mardfin.

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November 24, 2008

'08 NOV 24 P2:30

DEPT OF PLANNING
COUNTY OF MAUI
RECEIVED

Maui Planning Commission
200 S. High Street
Wailuku, Hawaii 96793

Re: Maui Lani Project District
Kainani Street

Dear Chairman Star and Members of the Planning Commission:

This letter is to object to the Developer discussing the proposed plans for the entrance and exit of the HRT parcel within the Maui Lani Project District that adjoins Kainani Street, Wailuku, Maui, Hawaii. These proposals were not placed before the Planning Commission in accordance with the notice requirements of Chapters 91 and 92 of the Hawaii Revised Statutes. Their plans for the use of Kainani Street and Kaahumanu Street is not part of the agenda. To address any of their proposals or to question them about any proposal constitutes a violation of the Chapter 91 and 92 of the Hawaii Revised Statutes.

If the Developer will have time to present his plans and his arguments in this matter over the 3 minutes allocated for testimony, I will request the same consideration to present my arguments.

The issue before the Commission is whether the proposed ordinance should be enacted so that the County Council can consider the use of that intersection in relation to the Maui Lani Project District. It is not to determine whether the proposals are good or bad.

If the proposed bill passes the Council, it will require the developer to seek an amendment to the Maui Lani Project District in order to utilize Kainani Street. This will mean that the policy decision of utilizing this intersection is with the County Council not the Planning Commission. The issues of safety and proper traffic flow can then be addressed by the Planning Commission should the Council determine that as a matter of policy that Kanani Street can be used.

Very truly yours,

LEE A. OHIGASHI

LAO:wp

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November 24, 2008

Maui Planning Commission
200 S. High Streeet
Wailuku, Hawaii 96793

Re: Maui Lani Project District
Kainani Street

Dear Chairman Star and Members of the Planning Commission:

This letter is in support of the draft bill to prohibit traffic ingress and egress on Kainani Street, Wailuku, Maui, Hawaii.

This resolution started with the attached letter from me dated January 28, 2008. The crux of our argument is that in order to utilize Kainani Street, the developer should be required to amend by ordinance the Maui Lani Project District. As pointed out in my letter and the attachments, the County of Maui, State of Hawaii and Maui Lani Partners has determined that the entry and exit to the Maui Lani Project District is Maui Lani Parkway and that Kainani Street intersections was not to be utilized.

We have initiated this change of zoning because, the Maui Planning Department has determined that this only requires a Phase II approval by the Maui Planning Commission. We disagree, the we believe that because the use of Kainani Street and adjacent areas will result in a major change in the intersection of Kainani Street and Kaahumanu Avenue, that the approval of the County Council should be required.

I have enclosed copies of our original transmittal to the County Council.

Very truly yours,

LEE A. OHIGASHI

LAO:wp
Enclosures

KINGDON CONSULTING, LLC
Public Health • Public Safety • Emergency Services

24 November 2008

To: Jeffrey Hunt, Maui Planning Director
Jonathan Starr et al., Maui Planning Commission
Brennon Morioka, State of Hawaii Department of Transportation

Re: Council Resolution No. 08-73 containing A Draft Bill amending Section 19.78.070, Maui County Code, *to prohibit traffic ingress and egress on Kainani Street to and from the Development within the Maui Lani Project District*

Disclosures: I (David Kingdon) am a resident of the affected Old Sandhills neighborhood. I am also a paramedic and a consultant in public health and safety. I am representing myself and no other agency. My review of this issue is voluntary; I have not received any fee.

I support the prohibition of traffic ingress and egress on Kainani Street to and from the development within the Maui Lani Project District. Kainani Street is an established residential street, used by residents in motor vehicles as well as pedestrians and bicyclists. Old Sandhills is a quiet neighborhood, and currently one of the more "walkable" communities in central Maui. A substantial number of the neighborhood residents are senior citizens, and several students also use Kainani Street for pedestrian access towards Baldwin High School. Changing the existing configuration of Kainani Street by adding intersections, cut-through traffic, or commercial vehicles could present a safety hazard to this neighborhood. Groups such as the elderly and school-aged residents could be at increased risk. National and state traffic safety and injury data provide evidence for these concerns.

While intersections add up to a tiny proportion of road mileage in the United States, intersections account for 44 percent of all reported motor vehicle crashes.[1,2] Pedestrians and bicyclists are at particular risk. Of the 4,784 pedestrians and 773 bicyclists killed in motor vehicle crashes in 2006, collisions at intersections accounted for 21 to 32 percent of those fatalities, respectively.[3] In addition, national crash data have long demonstrated that collisions with pedestrians are much more likely to occur with turning vehicles than with straight-through traffic.[4]

In Hawaii, pedestrians struck by motor vehicles are a leading cause of injury death among residents aged 1 to 14 and those aged 75 or older (these elderly residents accounted for 42% of the pedestrian fatalities). From 2001 to 2006, 20 pedestrians were killed on Maui. 11 of these were in the Wailuku area; 6 of these victims were senior

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citizens. During the same time period, there were 5 bicyclist deaths on Maui, 3 in the Wailuku area. Intersections were a common site of fatal injuries to both pedestrians and bicyclists in Hawaii, approximately one third of all fatalities.[5]

The volume and type of traffic imposed on a residential neighborhood can itself pose a significant hazard to residents. Researchers in California have found that increased levels of traffic in residential areas, especially truck traffic, raises the risk of pedestrian and bicycle injury and death.[6] Other researchers have found that factors such as added traffic volume and right-turn lanes contribute to motor vehicle crashes with bicycles.[7] Furthermore, the dangers of cut-through traffic in residential neighborhoods are specifically recognized not just by public health and safety agencies, but also by municipal governments and planners across the country. The United States Conference of Mayors has brought safety concerns about cut-through traffic to the national level.[8]

In summary, preventing additional ingress and egress on Kainani Street could reduce the risk of injury to residents and other users of that neighborhood. Conversely, failing to make this prohibition could lead to significant hazards to public health and safety such as the specific concerns I have cited.

Thank you for your consideration.

David Kingdon, Wailuku

[1] Federal Highway Administration, National Agenda for Intersection Safety, May 2002.
[2] Insurance Institute for Highway Safety, Pedestrian Fatality Facts, May 2002.
[3] National Highway Traffic Safety Administration (NHTSA): National Center for Statistics and Analysis
[4] Insurance Institute for Highway Safety, Q&A: Pedestrians, December 2000.
[5] Injuries in Hawaii: 2001-2006. Injury Prevention and Control Program, Hawaii State Department of Health.
[6] University of California Traffic Safety Center Newsletter, Volume 4, No. 4, 2008.
[7] Scoring Intersection Safety. A.H. Do, D. Carter, C.V. Zeeger, W.W. Hunter. Public Roads. Volume 71, No. 5, 2008.
[8] The United States Conference of Mayors. http://usmayors.org

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Derrick Hatada
1728 Wili Pa Loop, Suite 200
Wailuku, Hawaii 96793

November 3, 2008

Jonathan Starr, Chair
Maui Planning Commission
c/o Department of Planning
County of Maui
250 South High Street
Wailuku, Hawai'i 96793

SUBJECT: Resolution No. 08-73; Referring to the Maui Planning Commission A Draft Bill Amending Section 19.78.070, Maui County Code, to Prohibit Traffic Ingress and Egress on Kainani Street to and from the Development Within the Maui Lani Project District

Dear Chair Starr:

I am writing to you today to express my concern regarding Resolution No. 08-73 which proposes to amend Section 19.78.070 of the Maui County Code which I understand will prevent the Maui Lani development from connecting to or utilizing Kainani Street, in Wailuku as an ingress or egress into any part of the development.

I am building a home in the new Sandhills Estates, and have been recently made aware of the proposed Resolution which will be considered by the Maui Planning Commission at its November 25, 2008 meeting. As a neighboring resident, I would like to share my comments on the resolution with the Commission.

I understand that there are proposed plans to construct a shopping center in an adjacent lot to my subdivision by HRT, Ltd. If passed, this Resolution would prevent connection of the shopping center to Kainani Street. I understand that the latest plans for the project does not allow entrance into the shopping center via Kainani Street, but would allow for only right turns out of the shopping center onto Kainani Street. In addition, a new entry point from Ka'ahumanu Avenue is being proposed. I believe that the latest access plan offers a workable solution which will provide for a safe and effective access to the proposed shopping center.

As a neighboring resident, I would also like to note that if the plans to construct the nearby shopping center are approved, the shopping center would provide a much needed, convenient and easily accessible place for the Greater Wailuku residents. I am looking forward to the proposed shopping center in the Maui Lani Project District.

In summary, I support the new access plan proposed by the applicant.

Thank you for allowing me to share my comments with you.

Sincerely,

Derrick Hatada

DH:lh
cc: Riki Hokama, Chair, County Council