

5.0 ASSESSMENT OF EXISTING HUMAN ENVIRONMENT, POTENTIAL IMPACTS, AND MITIGATION MEASURES

This section describes the existing conditions of the human environment, potential impacts of the proposed Līhu'è Civic Center Site Improvements and mitigation measures proposed to minimize any impacts.

5.1 ARCHAEOLOGICAL, CULTURAL AND HISTORIC RESOURCES

5.1.1 Existing Conditions

Līhu'è is located on the southeastern side of Kaua'i in the ahupua'a of Kalapakī. It was established in 1825 by Governor Kaikio'ewa, who was the first governor of Kaua'i under Kamehameha. According to Wichman (1998), he named this area, Līhu'è, in memory of his earlier home on O'ahu. The name, Līhu'è, was unknown on the island before then. The ancient name for this area was Kala'iamea, "calm reddish brown place."

The governor found the area's soils and rainfall suitable for growing sugarcane, and eventually much of Līhu'è was planted with sugarcane fields. By the early 1900s, Līhu'è Plantation and Grove Farm Plantation had established Līhu'è as a profitable sugarcane production area. The Līhu'è Mill was one of the longest sugar mills in service in the state. It started operations in 1849 and finally shut its doors in 2000. Nāwiliwili Harbor became the main port for shipping on the island and the Historic County Building was built in 1912, literally cementing Līhu'è as the civic seat of the island. It remains the longest operational county building in the State of Hawai'i.

Since then, the surroundings have changed dramatically, undergoing a series of transformations as a community and civic center have developed around it.

Despite the changes over time, there are still several historic buildings and a historic district within and near the Līhu'è Civic Center. Within the project site, the Līhu'è Civic Center Historic District is listed on the State and National Registers of Historic Places (Site Number 30-11-9351). It comprises all but the State Office Building on the eastern block of the project site. The Historic County Building, built in 1912, and the County Annex Building, built in the 1930s, are included within this Historic District. The Historic District also encompasses the County Lawn and its double row of royal palms as well as the State Courthouse.

Also listed on the State and National Registers but is not located within the project site is the Kaua'i Museum's Albert Spencer Wilcox Building (Site Number 30-11-9344). It was added to the two lists in 1979. The Līhu'è Post Office, located across Rice Street from the Civic Center, was included on the National Register in 1989 and

is listed as Site Number 30-11-9342. The historic properties are identified in yellow in Figure 1 and Figure 5.

No archaeological surveys were performed on the site as the project area is located in an existing urbanized area. The entire site has been previously disturbed during historic and modern ground-altering activity. This includes agricultural activity that once occurred on the site as well as the construction of previous residential structures, and more modern retail and office buildings including the existing Civic Center.

5.1.2 Potential Impacts and Mitigation Measures

Major site work including grading and excavation will be necessary to construct the underground parking lots. However, the rest of the proposed improvements will require minor grading only. Should any historic remains, such as artifacts, burials, concentrations of shell or charcoal be encountered during construction, all work in the immediate vicinity of the find will cease and the State Historic Preservation Division will be contacted for appropriate action and mitigation in accordance with Chapter 6E, Hawai'i Revised Statutes, as necessary.

The proposed changes within the Līhu'e Civic Center Historic District are minor and are not expected to negatively impact the historic or cultural resources. No changes are proposed for any of the historic buildings. The improvements involve mainly landscaping, parking and pathway improvements. The proposed site improvements are intended to enhance the historic resources in and around the area by restoring historic elements and providing better pedestrian access, landscaping, and signage. For example, one of the proposed master plan recommendations is to replace the missing royal palms in front of the Historic County Building.

The proposed Līhu'e Civic Center Site Improvements are not expected to adversely impact to cultural resources. The improvements will not affect Native Hawaiian gathering rights or traditional practices. The improvements are intended to preserve and accentuate the historic buildings, enhance cultural awareness of Līhu'e's history and provide the community with the opportunity to engage in the Civic Center area.

5.2 NOISE

5.2.1 Existing Conditions

The predominant sources of noise in the vicinity of the property stem from traffic traveling along the surrounding streets and the neighboring commercial uses to the south and north of the project site. Other sources of noise include aircraft flyovers due to the site's proximity to the Līhu'e Airport and natural sources, such as wind and rain.

5.2.2 Potential Impacts and Mitigation Measures

As the Lihū'e Civic Center Site Improvements Master Plan does not change its current use, no long-term noise impacts are expected due to the proposed improvements. The plan does include the closure of 'Eiwa Street which would actually reduce traffic noise within the center of the Civic Center. The proposed increase in vegetation and open space in and around the Civic Center would also help buffer traffic noise heard within the Civic Center.

During project construction phases, there will likely be noise impacts associated with the operation of construction machinery, excavation and grading equipment and material transport vehicles. However, the impact will be temporary. Noise levels from typical construction equipment range between 70 and 95 decibels (dBA). To mitigate construction noise levels, the County of Kaua'i will work with the contractor to ensure adherence with State Department of Health (DOH) regulations, use of proper equipment and regular vehicle maintenance. Equipment mufflers or other noise attenuating equipment may also be employed as required. All construction activities will be limited to daylight work hours. In the event that construction noise levels are expected to exceed permissible levels, a permit would be obtained from the DOH. Time restrictions on when noise levels are allowed to exceed permissible levels are typically included in the permit. It is expected that after the proposed construction is complete, ongoing generating activities will be similar to existing conditions.

5.3 AIR QUALITY

5.3.1 Existing Conditions

Regional and local climate, together with the amount and type of activity generally determine the air quality of a given location. At the project site, winds are predominantly trade winds. During winter, storms may bring Kona winds for brief periods. When the trade winds or Kona winds are weak or absent, landbreeze-seabreeze circulations may develop.

Generally, air quality in the project vicinity is good and meets state and federal air quality standards. There are no point sources of airborne emission within proximity of the project site. Pollutants that exist may be attributable to a variety of sources, including traffic traversing neighboring roadways. Emissions from such sources are intermittent and minimal and are quickly dispersed by prevailing trade winds.

5.3.2 Potential Impacts and Mitigation Measures

Emission derived from operation of construction equipment and other vehicles involved in construction activities may temporarily affect the ambient air quality in the immediate vicinity. However, these effects will be minimized through proper maintenance of construction equipment and vehicles. In addition, there may be a temporary adverse impact on air quality attributable to dust generated during

project construction, particularly earthmoving activity, including excavating, trenching and filling.

It is anticipated that no State or Federal air quality standards will be violated during or after the creation of the proposed improvements. A dust control plan will be implemented during all phases of development. All construction activities will comply with the provisions of Chapter 11-60.1-33, Hawai'i Administrative Rules on fugitive dust. Measures to control dust during various phases of construction will include:

- Planning phases of construction to minimize the amount of dust-generating materials and activities, centralizing onsite vehicular traffic routes, and locating potential dust-generating equipment in areas of least impact;
- Providing an adequate water source at the site prior to start-up construction activities;
- Landscaping and rapid covering of bare areas, including slopes, starting from the initial grading phase;
- Minimizing dust from unpaved areas or roads during grading activities;
- Providing adequate dust control measures during weekends, after hours and before daily start-up of construction activities; and
- Controlling dust from debris by adequately covering it when hauled away from the project site.

After construction, the proposed site improvements are not expected negatively impact air quality. In fact, the increase in landscaping and plant material would probably improve air quality by increasing absorption of carbon dioxide and filtering particles generated by the traffic on the surrounding roadways.

5.4 VISUAL RESOURCES

5.4.1 Existing Conditions

The existing site and surrounding areas are heavily urbanized. They are comprised of commercial businesses, public and civic uses, and residential communities. Distant views of the Hā'upu Range to the south and Wai'ale'ale to the west can be seen from the Civic Center.

According to the Kaua'i General Plan Heritage Resource Map, there are scenic roadway corridors along Kaunuaui'i and Kapule Highways (Figure 9). However, neither is visible from the project site and will not be affected by the proposed site improvements.

5.4.2 Potential Impacts and Mitigation Measures

The proposed Līhu'e Civic Center Site Improvements will be compatible with the existing visual environment and are intended to enhance the scenic qualities of the

area. The proposed improvements do not involve construction of any building or vertical above grade structures that will obstruct view planes or visual resources. If the parking structures are pursued, they will be located underground. All other parking lots will be at grade. The surrounding commercial businesses, public, civic and residential uses, as well as distant mountain views will still be visible from the project site. Proposed street trees along commercial areas will be trimmed so their lowest branches are roughly twelve to fifteen feet high to avoid blocking storefronts and signs.

5.5 SOCIO-ECONOMIC CHARACTERISTICS

5.5.1 Community Character

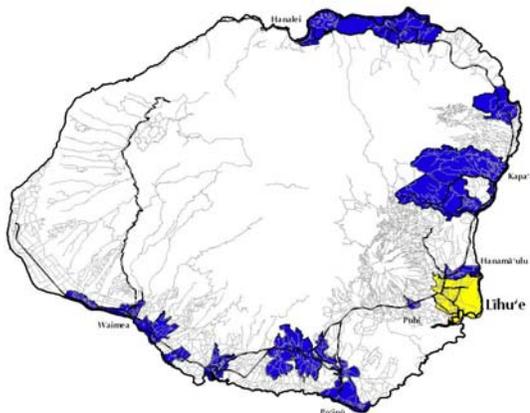
5.5.1.1 Existing Conditions

Although Līhu'e is the seat of government, the center of transportation, and home to most of the commercial business establishments on Kaua'i, it has retained a small town feel. There are several residential communities in and around the Civic Center with schools and parks nearby. Most buildings are still one to two stories and distant views of the surrounding mountains are prevalent.

The project site itself feels unfinished. Parking lots dominate the view of the western block and 'Eiwa Street splits the Civic Center into two separate pieces. There are no clear pedestrian walkways and many people rather drive than walk within the Civic Center. Besides the County Lawn, landscaping is minimal and the area is uncomfortable due to the heat reflecting off the asphalt.

5.5.1.2 Potential Impacts and Mitigation Measures

The proposed site improvements will enhance the character of the Civic Center through landscape and pedestrian improvements at the town's core. Much of the parking will be located in underground parking structures so that more open space can be provided for public enjoyment. Cars will no longer dominate the Civic Center as they do now. The improvements are intended to revitalize the Civic Center and create a landscaped campus-like gathering place for the community.



5.5.2 Population

5.5.2.1 Existing Conditions

According to the 2000 United States Census, the population of Kaua'i County was 58,463 persons. For the Līhu'e Census Designated Place (Līhu'e CDP, highlighted to the left), the population was 5,674, or roughly ten percent of the resident population of the island.

The median age of Līhu'e residents in 2000 was 44 while Kaua'i's as a whole was 38. Within the immediate area bounded by Rice Street, Kūhiō Highway, Ahukini Road and Kapule Highway (the town core), it was even higher at 47 years of age. Nearly a quarter of the Līhu'e CDP's population was over 65 (22.4 percent) and nearly another quarter is 17 years of age or younger (22.8 percent).

Of the 2,178 households within the Līhu'e CDP, 30.4 percent (663 households) had children under the age of 18 years and nearly 40 percent (863 households) had individuals 65 years or older. 16.1 percent of households consisted of individuals living alone who were over the age of 65 (350 households). Within the Līhu'e town core, the percentage of individuals over the age of 65 living alone is even higher at 17.4 percent (69 households). In comparison, only 7.7 percent of Kaua'i County households consisted of individuals over the age of 65 living alone and 27.7 percent of households had individuals over the age of 65. This indicates that there are proportionally more Līhu'e households with elderly persons than Kaua'i as a whole. There are also quite a few Līhu'e households with children, however, proportionally less than the Kaua'i average for households.

Government workers represented 18.3 percent of all civilian employed residents in the Līhu'e CDP and they comprised an even higher proportion within the town core at 24.2 percent. This indicates that a relatively high number of government workers lived near the Civic Center in 2000.

5.5.2.2 Potential Impacts and Mitigation Measures

The proposed Līhu'e Civic Center site improvements will not have an impact on resident population growth since the land uses within the project site will remain the same. The proposed improvements will, however, improve pedestrian accessibility and safety and encourage people to use the outdoor areas of the Civic Center. This could have a positive impact on those who cannot drive such as seniors and children. Seniors over the age of 65 and children under 18 comprise nearly half the resident population in the Līhu'e CDP and will benefit from the proposed improvements since walking in and around the Civic Center will be easier and safer. The proposed site improvements will also benefit government workers and visitors to the Civic Center by providing comfortable outdoor places to sit and gather for lunch and increase the opportunities to meet informally as they walk between buildings. Improved sidewalks and transit and bicycle facilities may also encourage people to use different modes of transportation to access the Civic Center and get more exercise. The proposed site improvements could improve the quality of life for those who use the Civic Center.

5.5.3 Economy

5.5.3.1 Existing Conditions

Līhu'ē is the second largest town in Kaua'i and is the government, business and transportation hub of the island. There are roughly 800 government employees working in Līhu'ē and about half of Kaua'i's businesses have a Līhu'ē zip code (96766). The nearby port at Nāwiliwili Harbor and the Līhu'ē Airport indicate that most goods and people coming to or leaving Kaua'i must pass through Līhu'ē. However, in certain portions of Līhu'ē, such as along Rice Street, there are intermittent vacant commercial spaces and small businesses frequently turn over.

Although Hurricane 'Iniki brought soaring unemployment to Kaua'i during the 1990s, the unemployment rate has steadily declined and has caught up and surpassed the State's current low rate of 2.4 percent. Kaua'i's unemployment rate was 2.2 percent in April 2007.

5.5.3.2 Potential Impacts and Mitigation Measures

The proposed Līhu'ē Civic Center site improvements will become an integral part of the Līhu'ē and indirectly provide economic benefits through the potential draw of people to the area and the encouragement of reinvestment in the surrounding areas. The improvements will not have a significant direct impact on the economy; however, they will benefit the economy through creation of construction and landscaping related job opportunities and construction expenditures. Installation of the improvements will generate additional tax revenue to the State through general excise taxes on development expenses. However, the proposed site improvements will not generate significant direct tax revenues for the County of Kaua'i since County revenues are primarily limited to tax revenues on privately-owned property and improvements.

5.6 INFRASTRUCTURE

5.6.1 Roadways and Traffic

5.6.1.1 Existing Conditions

Roadway access to the Līhu'ē Civic Center is by Kūhiō and Kaumuali'i Highways from the north and west, respectively. Access from the southeast is by Rice Street, which also serves as the main road through Līhu'ē Town. Kūhiō and Kaumuali'i Highways meet at the signalized intersection with Rice Street. Kaumuali'i technically terminates at the Rice Street and Halekō Road intersection. These roadways, together with Hardy Street on the north and 'Umi Street on the east, form the borders of the project area. 'Eiwa Street bisects the Civic Center into an east block that includes the Historic County Building and State buildings, and a west block with the renovated County buildings, Hawaiian Telcom, and Big Save.

Kūhiō Highway is a four-lane highway north of Rice Street. Kaumuali'i Highway is a two-lane highway south of the intersection with Rice Street. The two highways provide regional north-south access to, from and through Līhu'e from the rest of the island. There is no on-street parking permitted on either highway within the project area. At the time of this report, the State Department of Transportation (DOT) was in the design stage to widen Kaumuali'i Highway to four lanes between Līhu'e and Puihi. Construction is estimated to commence in 2008. Kūhiō Highway has a narrow sidewalk on the west side of the highway that terminates at the intersection of Rice Hardy Street. On the east side, the sidewalk is narrow, but the existing landscaping provides some buffer for pedestrian from the passing cars.

Rice Street was recently widened to a four-lane roadway providing east-west access on the southern boundary of the Civic Center. Between Halekō Road and 'Umi Street, there are a total of nine parallel parking stalls in the eastbound direction. Six of them are inset from the curb and do not block traffic flow. However, the three parallel stalls between 'Eiwa Street and 'Umi Street do block one lane of traffic when parking is allowed. In the westbound direction, there are six on-street parallel parking stalls west of 'Eiwa Street. Street parking is permitted during off-peak traffic periods effectively limiting Rice Street to two lanes, one lane in each direction. Peak parking bans are in effect from 7:00 to 9:00 A.M. and from 3:00 to 5:00 P.M. During the parking bans, traffic flows in all four lanes- two lanes of travel in each direction.

The popular crosswalk in front of the Līhu'e Post Office was removed several years ago and replacement crosswalks were added by 'Eiwa Street and Halekō Road. Neither of these added crosswalks are easy to cross. The topography at Halekō Road limits driver and pedestrian sight distances and the 'Eiwa Street intersection has complicated vehicle turning movements due to the offset intersections and multiple driveways. Although unsafe, many people are known to jaywalk where the original crosswalk was located near Kele Street in front of the post office.



Elderly pedestrian jaywalking across Rice Street near Kele Street and the Līhu'e Post Office

Plastic traffic delineators were placed on the center line of Rice Street between 'Eiwa Street and Halekō Street in early October 2003. The delineators block left turns from Rice Street into the County driveway and Kele Street. On the portion of Rice Street between Kūhiō Highway and 'Eiwa Street, the sidewalks on the north side of the street are very narrow and the kou trees located in the planting strip between the parking lot and roadway crowd pedestrians toward the travel lanes. The sidewalks on the south side of Rice Street vary in width. There are no sidewalks or curbs along portions of the Halekō Shops and a narrow sidewalk in front of the Isenberg

Memorial and Bank of Hawai'i. Further east, the sidewalk opens up in front of the Post Office and remains relatively wide (over ten feet) up to and beyond 'Umi Street. However, portions of the sidewalks cross-sections are uneven and sloping.



View of Hardy Street near the bus stop. There are no curbs or sidewalks on the Civic Center side of the street. The area tends to puddle when it rains.

Hardy Street is a two-lane roadway that provides east-west access on the north side of the Civic Center. On-street parking is permitted on both sides of the street. There is also a bus stop shelter on the Civic Center side of Hardy Street. Hardy Street has sidewalks on the north side but none on the Civic Center side of the street. Drainage is poor on the south side of Hardy Street since there are no curbs or gutters. The area often puddles when it rains, particularly near the bus stop.

Hardy Street is a two-lane roadway that provides east-west access on the north side of the Civic Center. On-street parking is permitted on both sides of the street. There is also a bus stop shelter on the Civic Center side of Hardy Street. Hardy Street has sidewalks on the north

'Umi Street is a two-lane road that provides local north-south access between Rice Street and Hardy Street. Parallel parking is permitted on both sides of 'Umi Street but there are no sidewalks on the Civic Center side of 'Umi Street. There are sidewalks only on the eastern side of the road. Due to the bend in Hardy Street, the intersection of 'Umi Street and Hardy Street has wide distances between curbs. Pedestrian crossing is not recommended except on the north leg of 'Umi Street.

'Eiwa Street is a two-lane road that cuts through the center of the Civic Center. It has a 60 foot right-of-way and the entire width of the roadway is paved with asphalt. There are no sidewalks; only a painted pedestrian route with plastic delineators on the eastern side of the street. This was installed as ADA improvements in 2001 but is not a comfortable pedestrian environment. On the western side of the street, parallel parking runs almost the entire length. There are no curbs on the western side. On the eastern side there are curbs around the planting areas but no sidewalks. The street narrows to 40 feet near the intersection of Rice Street and forms an offset intersection with Wa'a Street. On the north end, 'Eiwa does not line up with 'Akahi or 'Elua Streets forming another set of offset intersections. These offset intersections complicate turning movements for drivers since oncoming cars are entering the area from multiple directions.

5.6.1.2 Existing Traffic Conditions

M&E Pacific, Inc. prepared a traffic study for the proposed site improvements and it is attached its entirety as Appendix A. Existing traffic conditions were included in their analysis. Traffic counts were taken at all major and most minor intersections

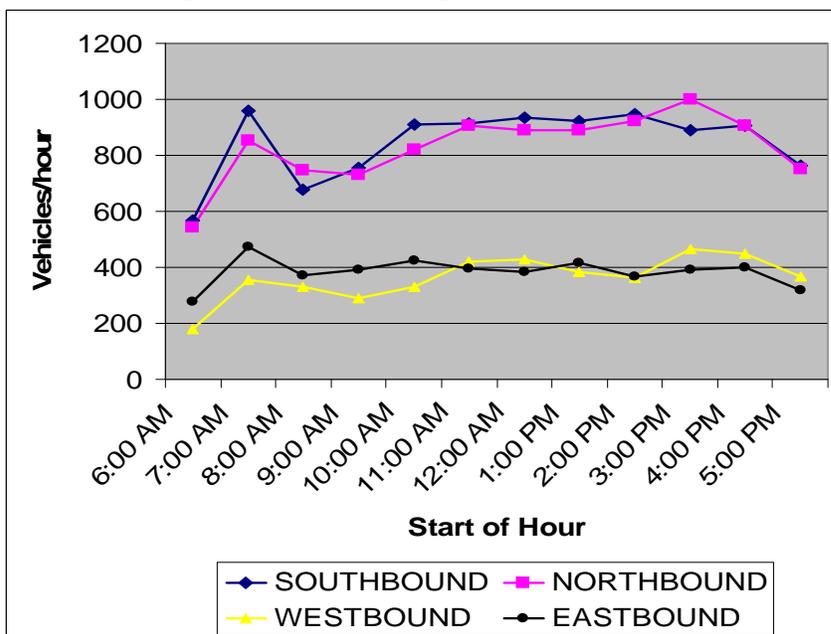
and driveways around the project site in late September to mid-October 2003. The study analyzed existing traffic as well as ten-year projections to the year 2015. It projected traffic counts both with and without the proposed master plan improvements and provided recommendations to accommodate vehicular traffic while balancing pedestrian safety and community concerns.

According to the traffic study, the morning peak hour of Civic Center traffic occurs between 7:15 and 8:15 AM and the afternoon peak hour occurs between 4:00 and 5:00 PM. The highest volumes occurred between 7:30-7:45 AM and 4:30-4:45 PM, which coincide with the County’s official workday start and finish times.

There are other portions of the day when traffic volumes are relatively high within the Civic Center. The following graphic shows the hourly traffic counts throughout the day as measured by the State of Hawai’i Department of Transportation (DOT) in 2001 and summarized by M&E Pacific.

Hourly Traffic on Kūhiō/Kaumuali’i Highway and Rice Street (M&E Pacific, State DOT)

Traffic tends to increase around 10:00 AM and remains relatively steady through the afternoon peak hour. However, the peak hours are used in the traffic study as the basis of analysis since they represent the worst case scenarios.



As an aside, because traffic is relatively steady during the day from about 10:00 AM till 5:00 PM on Rice Street, the County should consider revising the hours of the parking ban on Rice Street. This decision should be weighed against the impact of losing those stalls to nearby businesses that may need them for customer parking. They should consider the businesses’ hours of operation and apply the parking ban only to those stalls that block traffic lanes. The six stalls in front of the Post Office and First Hawaiian Bank that do not block any travel lanes should not be included in the parking ban.

Level of Service (LOS)

The Transportation Research Board (TRB) has developed procedures to quantify the quality of traffic flow on roadways based on a comparison of the roadway’s capacity to traffic volume. This measure is called level of service (LOS) and is graded on a scale from A to F. LOS A is the best traffic conditions with average delays less than 10 seconds for unsignalized intersections and 20 seconds for signalized intersections.

F is the worst with average delays longer than 50 seconds for unsignalized intersections and 80 seconds for signalized intersections. LOS can be assigned to any movement through a signalized or unsignalized intersection, including turning movements. However, an overall intersection LOS is only given to signalized intersections.

The existing LOS at the intersections around the project site and key movements through the intersections are summarized in the table below. The movements with relatively long delays during the peak hours of traffic (LOS E or F) are italicized.

Table 5: Existing Traffic Conditions

		AM PEAK		PM PEAK	
APPROACH*		LOS	Delay	LOS	Delay
SIGNALIZED INTERSECTION ANALYSES					
Rice Street/Kūhiō Highway		B	13.9	B	17.3
	Rice St WB	D	36.9	D	45.7
	Kūhiō Highway SB	A	8.6	A	9.4
	Kaumuali'i Hwy NB	B	13.4	B	15.3
Rice Street/'Umi Street		B	11.2	B	12.8
	Rice St EB	A	9.4	A	9.5
	Rice St WB	A	8.4	A	8.8
	'Umi St NB	B	18.1	C	21.4
	'Umi St SB	C	24.6	C	24.7
UNSIGNALIZED INTERSECTION ANALYSES					
Rice Street/Halekō Road					
	Halekō Rd NB right	<i>E</i>	<i>39.6</i>	<i>E</i>	<i>38.1</i>
	Rice St WB left	B	10.5	C	15.3
Rice Street/'Eiwa Street					
	'Eiwa St SB	C	17.3	C	24.3
	'Eiwa St SB right	B	12.8	C	16.6
	'Eiwa St SB left	<i>E</i>	<i>45.7</i>	<i>F</i>	<i>90.1</i>
	Rice St EB left	B	10.1	B	11.8
Rice Street/Kele Street					
	Kele St NB	C	22.2	<i>F</i>	<i>78.3</i>
	Rice St WB left	A	9.8	A	9.8
Hardy Street/Kūhiō Highway					
	Hardy St WB	<i>F</i>	<i>100+</i>	<i>F</i>	<i>100+</i>
	Hardy St WB right	C	16.9	D	31.7
	Hardy St WB left	<i>F</i>	<i>100+</i>	<i>F</i>	<i>100+</i>
	Kūhiō Hwy SB left	C	15.1	B	14.4
Hardy Street/'Akahi Street					
	'Akahi St SB	B	10.0	B	10.8

APPROACH*	AM PEAK		PM PEAK	
	LOS	Delay	LOS	Delay
Hardy St EB left	A	8.1	A	8.2
Hardy Street/‘Eiwa Street				
‘Eiwa St NB	B	14.5	B	13.9
Hardy St WB left	A	9.8	A	8.9
Hardy Street/‘Umi Street				
‘Umi St NB	<i>F</i>	<i>54.7</i>	<i>E</i>	<i>45.4</i>
‘Umi St NB right	B	11.1	B	10.3
‘Umi St NB left & through	<i>F</i>	<i>78.2</i>	<i>F</i>	<i>54.4</i>
‘Umi St SB	C	25.0	D	25.6
Hardy St EB left	A	7.8	A	8.0
Hardy St WB left	A	8.5	A	8.2
CIVIC CENTER DRIVEWAYS				
Rice Street/County Driveway				
County Driveway SB	B	11.0	B	13.0
Rice St EB left (eliminated 10/9/03)	A	9.6	B	10.4
Hardy Street/County-Big Save Driveway				
County-Big Save Driveway NB	C	16.2	C	19.0
Hardy St WB left	A	8.9	A	8.4
‘Umi Street/County-State Driveway				
Driveway EB	B	10.5	B	10.1
*Abbreviations: NB = Northbound; SB = Southbound; WB = Westbound; EB = Eastbound				

Several existing left turn movements have LOS F indicating long delays and the possible need for mitigation. These movements include southbound ‘Eiwa Street onto Rice Street, westbound Hardy Street onto Kūhiō Highway, and northbound ‘Umi Street onto Hardy Street. The left turn from Hardy Street onto Kūhiō Highway is particularly difficult to make and is characterized by delays of over 100 seconds (1.7 minutes). The left turns from ‘Umi Street onto Hardy Street are made into congested local traffic. Drivers on Hardy Street often let ‘Umi Street drivers make the left turn so their wait time may not be as long as the calculations indicate.

A LOS F not only means long delays but could also indicate a hazardous traffic situation as drivers become impatient, take chances and make turns through smaller than acceptable gaps in the oncoming traffic stream. This is the case with the left turn from Hardy Street onto Kūhiō Highway. To avoid this difficult left, drivers may be taking alternate routes such as ‘Eiwa Street in order to get to a signalized intersection such as Rice Street where left turns could be more safely made.

The Halekō Road right turn movement onto Rice Street shows LOS E for both peak periods. This would indicate current minimally acceptable conditions that could require mitigation in the future as traffic on Rice Street increases.

LOS alone is not sufficient to evaluate the efficiency of left turn movements from major streets, especially when the movement is made from a shared traffic lane. As an example, traffic backups often occur on Rice Street due to vehicles making left turns into 'Eiwa Street and various businesses' driveways. The LOS for the left turn movement from Rice Street into Halekō Road were B and C, which would normally be considered acceptable but does not indicate the traffic queuing that was taking place.

Other Traffic Trends

In addition to the traffic study, the State DOT-Highways takes biannual traffic counts at the Kūhiō Highway and Rice Street intersection. M&E Pacific, Inc. also tabulated this information and found that between 1991 and 2003 a proportionate amount of traffic seemed to be shifting from Rice Street to Kūhiō Highway indicating that traffic may be taking alternate east-west routes from Kūhiō/Kaumuali'i Highways such as Ahukini Road or Nāwiliwili Road rather than Rice Street (see Table 6). This may be a result of the DOT's improvements at Kūhiō Highway and Rice Street that reoriented traffic flow at this three-way intersection. Prior to 1991, traffic flow moved directly between Kaumuali'i Highway and Rice Street with Kūhiō Highway intersecting the roads at a T-intersection. Then the DOT changed the traffic flow so that Rice Street T's into Kaumuali'i/Kūhiō Highways.

Table 6: Daily Traffic Volumes at Kūhiō Highway and Rice Street

YEAR	DAILY TRAFFIC VOLUMES		ANNUAL % GROWTH FROM 1991	
	KŪHIŌ HIGHWAY	RICE STREET	KŪHIŌ HIGHWAY	RICE STREET
OCT 91	19833	15146	--	--
OCT 93	20726	15135	2.3	0.0
JUNE 95	22084	13087	2.8	-3.4
JULY 97	21324	13185	1.3	-2.2
AUG 99	21956	12871	1.3	-1.9
OCT 01	24512	10763	2.4	-2.9
AUG 03	24919	11613	2.0	-2.3

Source: M&E Pacific, Inc., State DOT-Highways

The DOT currently has plans to do similar improvements to the intersection of Rice Street and Kapule Highway further east of the project site. It is projected that this may have a similar effect of further reducing daily traffic on Rice Street. At the time of this report, the DOT was in the design phase for this project. The DOT also has

plans to widen Kaumuali'i Highway south of Rice Street to four lanes. They are also in the design phase for this project.

5.6.1.3 Potential Impacts and Mitigation Measures

The proposed improvements are not expected to generate additional traffic since the uses will remain the same. However, the proposed improvements will shift traffic patterns due to the relocation of two County driveways, new internal circulation patterns, the location of the proposed parking structures, and the elimination of 'Eiwa Street.

The following sections describe recommendations from the traffic study and the proposed designs incorporated into the master plan. It includes the rationale the traffic engineers used for the proposed improvements which attempt to balance vehicle, pedestrian and community concerns.

Rice Street

The traffic volumes forecasted for the street do not allow Rice Street to be narrowed back to a two-lane road with center turn lane. The four-lane design will be sufficient for projected traffic, but permitting of on-street parking during the day would need to be more closely examined.

The master plan proposes to relocate the County driveway westward to align it directly across Kele Street. Traffic signals are barely warranted with the forecast traffic volumes but pedestrian crossings would become safer with traffic signals.

The left eastbound lane of Rice Street at 'Umi Street should be converted into an exclusive left turn lane through restriping. A three-phase signal with a leading left turn and through phase for eastbound traffic should be created. It may require installation of new traffic signals to provide the mastarms required for leading turn phases. It would also eliminate the onstreet parking in the right eastbound lane near this intersection.

The Rice Street/'Eiwa Street intersection should be eliminated because if left unchanged, the only way to mitigate projected traffic problems at this intersection would be to install traffic signals. A new signal would cause a major change in the traffic patterns and would be very close to the signals at Kele and 'Umi Streets which may not be desirable.

Halekō Road

Projected traffic would require widening Halekō Road to four lanes. However, due to the historic importance of Halekō Road, community members have voiced opposition to widening it four lanes. The need to widen Halekō Road is also minimized by the State DOT's plans to widen Kaumuali'i Highway to four lanes in this area. If Halekō Road is not widened as proposed in the master plan, the Rice Street intersection should be left unsignalized and restricted to right turn in, right

turn out only to minimize the traffic volumes on Halekō Road. Eastbound traffic would be diverted to Kaumuali'i Highway. The left turn from Rice Street onto Kaumuali'i Highway would have to be made into two lanes to accommodate the additional traffic. This widening should be coordinated with the planned widening of Kaumuali'i Highway to four lanes.

Rice Street/Kūhiō Highway/Kaumuali'i Highway Intersection

The traffic signal timing at this intersection should be adjusted as growth occurs. If Halekō Road is not widened to four lanes, a second left-turn lane from Rice Street should be added. This should be coordinated with the State DOT and their plans to widen Kaumuali'i Highway west of Rice Street.

Hardy Street

Hardy Street should be able to operate as a two-lane roadway with the projected traffic growth, although it could operate at LOS D or worse during some time periods.

Kūhiō Highway/Hardy Street Intersection

The Kūhiō Highway/Hardy Street intersection should be signalized. Even without the closure of 'Eiwa Street, traffic signals are warranted to meet the existing latent demand at this intersection. Existing conditions for the left turn movement from Hardy Street westbound onto Kūhiō Highway are already operating at LOS F in both peak periods. Based on the pattern of traffic volumes, it is believed many drivers are using 'Eiwa Street as a shortcut to make a right turn onto Rice Street and make a left turn onto Kaumuali'i Highway rather than make the left at Hardy Street. The traffic study recommends signalizing the intersection with a leading phase for the Kūhiō Highway southbound left turn movement. The intersection is forecast to operate at LOS B in the morning peak and C in the afternoon peak with signalization.

Hardy Street/'Akahi Street/County Driveway Intersection

The proposed Hardy Street/'Akahi Street/County Driveway intersection shifts the existing access at 'Eiwa Street so that lines up directly with 'Akahi Street. The second County driveway closer to Kūhiō Highway will be maintained so the total number of access points on Hardy Street remains the same. The new Hardy Street/'Akahi Street/County Driveway intersection should be signalized when warranted in the future. Traffic signals are minimally warranted with the forecast traffic volumes but signals will make left turns and pedestrian crossings easier. The current two-lane roadway design of Hardy Street would be sufficient. However, the addition of left-turn queue lanes on the Hardy Street approaches would allow traffic to safely pass cars queuing to turn left.

As a side note, if 'Eiwa Street were to remain in this area, the only way to mitigate forecasted traffic conditions would be to signalize the intersection at Hardy Street. With the proposed closure, the "zigzag" movement currently required to cross Hardy Street from 'Akahi and 'Elua Streets will be eliminated.

Hardy Street/'Umi Street Intersection

The northbound approach of 'Umi Street is currently operating at level of service F in the A.M. peak and E in the P.M. peak. The master plan proposes a traffic roundabout as one means to mitigate the problem. Traffic roundabouts were thought to be a better solution than traffic signals due to the unique geometry of this intersection. As an alternative, if traffic signals were installed to mitigate projected traffic, it would probably require split phasing which would reduce the green time for Hardy Street traffic. There is sufficient land to install a traffic roundabout. Additionally, a traffic roundabout would be less expensive to install and easier to maintain than a traffic signal. A four-way stop would not be feasible due to the much higher traffic volumes on the east approach.

The analysis for traffic roundabouts does not calculate a level of service value due to the limited US experience with roundabouts. The Highway Capacity Software (HCS) methodology for traffic roundabouts calculates only a volume to capacity (v/c) ratio.¹ The roundabout's eastbound approach on Hardy Street is forecast to have the highest v/c ratio of the four approaches, ranging from 0.61 in the morning peak to 0.70 in the afternoon.

'Umi Street

Large traffic increases are not forecast for 'Umi Street. Therefore, major traffic improvements are not required. The current two-lane roadway design is sufficient. Assuming there are no major land use changes for the State properties on 'Umi Street, including the vacant Police Building, the current roadway design is sufficient. Major changes by the State would require re-examination of street design.

Table 7 summarizes the projected traffic conditions without the proposed master plan improvements. This provides a baseline for 2015 traffic, showing what future traffic conditions would be like if no improvements are constructed. Table 8 summarizes the projected traffic conditions with the proposed master plan improvements.

Other Factors

Improved sidewalks, transit and bicycle facilities may also encourage people to use different modes of transportation to access the Civic Center. This would reduce the number of driving trips, particularly the short trips within the Civic Center as well as the need for vehicle parking space.

¹ When v/c ratios exceed 1.0, this means the volume of traffic is exceeding the capacity of the design. If v/c ratios are less than 1.0, then the proposed design is able to accommodate projected traffic.

Table 7: Projected Traffic Conditions without the Proposed Improvements (Ambient Scenario 1)

APPROACH*		AM PEAK		PM PEAK	
		LOS	Delay	LOS	Delay
SIGNALIZED INTERSECTION ANALYSES					
Rice Street/Kūhiō Highway		B	17.7	C	24.0
	Rice St WB	D	42.7	D	41.4
	Kūhiō Highway SB	B	13.8	B	17.2
	Kūhiō Highway SB left	D	36.8	D	48.6
	Kaumuali'i Hwy NB	B	14.7	C	24.6
Rice Street/'Umi Street		B	12.2	B	14.2
	Rice St EB	B	10.9	B	10.9
	Rice St WB	A	8.8	A	9.5
	'Umi St NB	B	18.3	C	24.1
	'Umi St SB	C	26.6	C	27.5
UNSIGNALIZED INTERSECTION ANALYSES					
Rice Street/Halekō Road					
	Halekō Rd NB right	<i>F</i>	100+	<i>F</i>	100+
	Rice St WB left	B	12.2	D	25.1
Rice Street/Kele Street					
	Rice St WB left	B	10.4	B	10.5
	Kele St NB	D	29.2	<i>F</i>	100+
Rice Street/'Eiwa Street					
	'Eiwa St SB	C	21.5	<i>E</i>	41.1
	'Eiwa St SB right	B	14.6	C	22.1
	'Eiwa St SB left	<i>F</i>	72.8	<i>F</i>	100+
	Rice St EB left	B	11.0	B	13.2
Hardy Street/Kūhiō Highway					
	Hardy St WB	<i>F</i>	100+	<i>F</i>	100+
	Hardy St WB right	C	21.9	<i>E</i>	49.5
	Hardy St WB left	<i>F</i>	100+	<i>F</i>	100+
	Kūhiō Hwy SB left	C	15.1	C	18.7
Hardy Street/'Akahi Street					
	Hardy St EB left	A	8.2	A	8.3
	'Akahi St SB	D	29.5	<i>F</i>	57.0
Hardy Street/'Eiwa Street					
	'Eiwa St NB	<i>F</i>	100+	<i>F</i>	100+
	Hardy St WB left	B	10.8	A	9.7

LIHUE CIVIC CENTER SITE IMPROVEMENTS

DRAFT ENVIRONMENTAL ASSESSMENT

APPROACH*	AM PEAK		PM PEAK	
	LOS	Delay	LOS	Delay
Hardy Street/Umi Street				
Hardy St EB left	A	8.0	A	8.2
Hardy St WB left	A	8.9	A	8.5
'Umi St NB	<i>F</i>	100+	<i>F</i>	100+
'Umi St NB right	B	12.2	B	11.3
'Umi St NB left	<i>F</i>	100+	<i>F</i>	100+
'Umi St SB	<i>F</i>	96.6	<i>E</i>	39.3
*Abbreviations: NB = Northbound; SB = Southbound; WB = Westbound; EB = Eastbound				

Table 8: Projected Traffic Conditions with the Proposed Improvements

	APPROACH*	AM PEAK		PM PEAK	
		LOS	Delay	LOS	Delay
SIGNALIZED INTERSECTION ANALYSES					
Rice Street/Kūhiō Highway		C	21.4	B	18.0
	Rice St WB	D	40.6	C	33.5
	Kūhiō Highway SB	C	20.8	B	17.4
	Kūhiō Highway SB left	<i>E</i>	69.4	D	51.1
	Kaumuali'i Hwy NB	B	17.7	B	15.5
Rice Street/Kele Street/County Driveway		A	8.4	A	9.3
	Rice St EB	A	8.1	A	7.4
	Rice St WB	A	7.4	A	8.5
	Kele St NB	C	23.3	C	24.7
	County Driveway SB	C	22.7	C	22.9
Rice Street/'Umi Street (3-phase signal)		B	19.9	C	26.4
	Rice St EB	B	19.1	C	25.2
	Rice S EB left	C	33.9	D	51.9
	Rice St WB	B	14.9	B	17.5
	'Umi St NB	C	20.6	C	30.1
	'Umi St SB	C	32.2	D	39.9
Hardy Street/Kūhiō Highway		B	15.2	C	22.3
	Hardy St WB	C	31.9	C	26.5
	Hardy St WB left	C	28.3	C	25.1
	Kūhiō Hwy NB	B	14.1	C	25.0
	Kūhiō Hwy SB	B	11.6	B	18.2
	Kūhiō Hwy SB left	C	32.2	<i>E</i>	57.5
Hardy Street/'Akahi Street/County Driveway		B	12.1	B	15.3
	Hardy St EB	B	11.7	B	10.2
	Hardy St WB	A	8.1	A	7.9
	County Driveway NB	B	18.8	C	29.3
	'Akahi St SB	C	20.6	C	25.5
UNSIGNALIZED INTERSECTION ANALYSES					
Rice Street/Halekō Road					
	Halekō Rd NB right	<i>F</i>	51.4	C	23.2
	Rice St WB left	B	11.1	C	18.6
Hardy Street/'Umi Street Roundabout		Volume to capacity ratios only			
	Hardy St EB left		0.61		0.70
	Hardy St WB left		0.34		0.45
	'Umi St NB		0.43		0.67
	'Umi St SB		0.43		0.18
*Abbreviations: NB = Northbound; SB = Southbound; WB = Westbound; EB = Eastbound					

5.6.2 Water

5.6.2.1 Existing Conditions

The subject property is currently served by the County of Kaua'i Department of Water (DOW). The Puhi-Lihu'e-Hanamā'ulu System transmits water via four major main lines. They are the Kokolau Tunnel Main, Puhi Wells Main, Kilohana Wells Main and the Ma'alu Road Main. Water is transmitted through 8-, 12- or 16-inch pipes along Kaumuali'i Highway, Rice Street, Kūhiō Highway, Ahukini Road, Kapule Highway and Nāwiliwili Road. The existing main lines are adequate to handle peak hour demand for the next 20 years; however, there is inadequate capacity for fire flow in the commercial, school and older residential areas of Lihu'e (*Water Plan 2020, 2001*).

5.6.2.2 Potential Impacts and Mitigation Measures

There will be no adverse impact on transmission and distribution systems. Water consumption at the Civic Center is expected to increase due to the irrigation required for an estimated four acres of proposed landscaping and park improvements. However, the County is investigating the possibility of using non-potable or non-drinking water for irrigation. There are two possible alternatives: installation of a rainwater catchment system or connection to nearby non-potable water resources. For the catchment system, rainwater could be collected through gutters on the County buildings and runoff from parking surfaces could be filtered and collected in a storage cistern. The collected water would then be pumped from the cistern to serve the irrigation system. For the non-potable water resources, the County could purchase non-potable water from Grove Farm. Grove Farm currently supplies non-potable water to the State DOT's irrigation system along Ahukini Road and Kapule Highway. If the County is able to use non-potable water for irrigation, then the use of potable water for irrigation could be reduced or potentially avoided if there is enough non-potable supply. If the catchment system is used, potable water may still be needed to supplement the system when there is insufficient rainfall. However, these potential alternatives would minimize the impact on potable water sources. The County will continue to investigate these alternatives during the engineering and detailed design stages of the project.

Automatic irrigation systems with moisture sensors should also be installed to control the amount of water used for irrigation. The sensors can detect when there is enough moisture in the soil such as after a heavy rainfall and will shut off the irrigation system to avoid overwatering and wasting water. They are able to control the irrigation system with minimal operational intervention.

During construction of the proposed Lihu'e Civic Center Site Improvements, potable water will be required for control of fugitive dust and to establish project landscaping. This water use will be temporary, however, and is not expected to have a significant impact on water usage.

5.6.3 Wastewater

5.6.3.1 Existing Conditions

As a highly urbanized area, Civic Center area proposed for Site Improvements consists of an extensive network of wastewater facilities.

5.6.3.2 Potential Impacts and Mitigation Measures

The proposed site improvements will not require connection to existing wastewater (sewer) facilities. Thus, there should be no increase in demand or impact on wastewater capacity or facilities.

5.6.4 Drainage

5.6.4.1 Existing Conditions

As an existing urbanized area, the Civic Center area contains an extensive storm water drainage system. Within the project area there is a combination of curb and gutter with catch basins drainage systems and swales with drain inlets. Generally, surface runoff sheet flows towards from north to south and east to west over most of the property and drains into inlets throughout the project site. There are curbs, gutters, and catch basins along Rice Street, Kūhiō Highway, and the very southern ends of 'Umi and 'Eiwa Streets near their respective Rice Street intersections. Along a short stretch of Hardy Street on the north side between Kūhiō Highway and 'Akahi Street, there are curbs and inlets draining into a 30- to 36-inch corrugated metal pipe. Along the south side of Hardy Street, there are asphalt swales with a few drainage inlets. It often puddles along this side of the street when it rains. On 'Eiwa Street, there is an asphalt swale on the western side of the street, which drains into the 18-inch lines in Rice Street. Besides the inlets and catch basins at the corners of Rice and Hardy Streets, there are no drainage facilities along the length of 'Umi Street and ponding sometimes occurs when it rains.

5.6.4.2 Potential Impacts and Mitigation Measures

The proposed plan increases the amount of open space and the amount of pervious surfaces by nearly 2.4 acres. This will decrease the amount of stormwater runoff generated at the site and should therefore reduce the impact to existing drainage systems. If rooftop and parking lot catchment systems are installed, this will further reduce the amount of runoff generated at the site. If runoff from parking areas is not collected as part of the irrigation system, the parking areas could also be designed to drain towards landscaped areas with breaks provided in any curbs to help reduce the amount of runoff. These landscaped areas could act as mini detention areas which capture runoff and aid irrigation.

Sidewalks, curbs and gutters are recommended along both sides of Hardy Street and 'Umi Streets to help reduce the ponding that currently occurs when it rains and to

improve pedestrian access. All onsite improvements will be designed to comply with all federal, state, and county laws regarding drainage, erosion control, and non-point source pollution. During construction phases, any possible impact to water quality will be minimized and mitigated by the implementation of appropriate erosion control measures and best management practices (BMPs). Examples include blocking drain and gutter inlets with filtering materials and erecting silt fences.

5.6.5 Electrical and Communication Systems

5.6.5.1 Existing Conditions

The Kaua'i Island Utility Cooperative (KIUC) generates electricity for Kaua'i. Hawaiian TelCom, formerly Verizon Hawai'i, provides telephone and other communications services to Kaua'i. Oceanic Time Warner Cable provides the cable television and internet service for Kaua'i.

5.6.5.2 Potential Impacts and Mitigation Measures

The proposed site improvements require minimal additional electrical service. It would mainly be required for lighting and the automatic irrigation system. No telephone or cable television service will be required for any of the proposed improvements. However, coordination with the various utility companies will be undertaken to ensure that any existing conduits are appropriately relocated during the design and construction of the various site improvements.

The master plan also proposes to relocate existing overhead utility lines underground. Most are located along area roadways and down the center of the Civic Center along 'Eiwa Street. This will clear a wider area on sidewalks for pedestrian uses and street amenities and reduce the danger of toppling during high winds. It will also improve views from and within the Civic Center.

5.6.6 Solid Waste Disposal

5.6.6.1 Existing Conditions

Currently, the County of Kaua'i provides residential and limited commercial solid waste collection service for the island. Collection crews transport the refuse to transfer stations in Hanalei, Kapa'a, Hanapepe and Lihue. The waste is loaded on trailers and delivered to the Kekaha Phase II Landfill. The County also operates a Greenwaste Diversion Program through which residential and commercial green waste is diverted from the landfill and accepts them at four locations on Kaua'i. Green waste is chipped, mulched and reused in landscape applications.

5.6.6.2 Potential Impacts and Mitigation Measures

No long-term increase in solid waste generation is anticipated from the proposed site improvements. During construction, all green waste will be collected for the County's Greenwaste Diversion Program or chipped into mulch for use onsite.

Recyclable construction wastes such as asphalt and concrete will also be reprocessed and reused for repaving parking lots or crushed for fill. All remaining construction waste will be disposed of in compliance with all State and County laws and ordinances.

After construction is completed, the proposed site improvements will generate very little additional solid waste. Green wastes will be the main type of waste generated and these are easily salvaged for mulch.

5.7 PUBLIC SERVICES

5.7.1 Police Protection

5.7.1.1 Existing Conditions

The Kaua'i Police Department has three stations located approximately 25 miles apart. The main station and administrative headquarters are located in Līhu'e at the new County facility off Ka'ana Street near Kapule Highway. Satellite stations are located at Waimea, Hanalei and co-located with fire stations.

5.7.1.2 Potential Impacts and Mitigation Measures

The proposed site improvements are intended to draw residents and visitors to the Civic Center. An anticipated increase of activity and visitors will potentially result in unavoidable demand for police protection services. However, it is anticipated that these needs will be intermittent and not significantly different from existing requirements. Existing police service is anticipated to be sufficient to protect the area. The close proximity of the police headquarters should mitigate any demands on police services and allow for short response times.

5.7.2 Fire Protection

5.7.2.1 Existing Conditions

The Kaua'i Fire Department has a station and administrative headquarters in Līhu'e. There are six additional fire stations around the island.

5.7.2.2 Potential Impacts and Mitigation Measures

All the proposed site improvements will be designed to meet appropriate building codes and safety requirements. Because the proposed site improvements are intended to draw residents and visitors to the Civic Center, the anticipated increase of activity and visitors will potentially result in unavoidable demand for fire protection services. However, it is anticipated that these needs will be intermittent and not significantly different from existing requirements. Existing fire service will be sufficient to protect the area. The close proximity of the Līhu'e Fire Station should provide quick response times to any incidents reported at the project site.

5.7.3 Education

5.7.3.1 Existing Conditions

The project site is located within the State Department of Education (DOE) Lihu'e School District. Within the District, there is one high school, Kaua'i High School (Grades 9-12), one middle school, Kamakahahei Middle School (Grades 6-8), and two elementary schools, Wilcox Elementary School (Pre-Kindergarten to Grade 5) and Kaumuali'i Elementary School (Pre-Kindergarten to Grade 5). There is also one private school, Island School which serves Pre-Kindergarten to Grade 12. The school within the closest proximity to the proposed site improvements is Wilcox Elementary School. It is located one block to the east, across 'Umi Street.

5.7.3.2 Potential Impacts and Mitigation Measures

The proposed site improvements will not increase resident population in the area. Thus, there should be no impact on existing educational services.

The design of the proposed roundabout and splitter islands at the 'Umi and Hardy Street intersection will accommodate Wilcox Elementary School's existing driveways and crosswalks. During peak drop-off and pick-up times, Wilcox Elementary School officials say that the queue of cars entering their parking lots back up on 'Umi Street which may affect operation of the roundabout. This problem did not occur when parents were allowed to use the War Memorial parking lot as a student drop-off/pick-up area. However, due to a conflict in liability issues, the State did not want to continue this arrangement and the County now bans student pick up and drop off in this parking lot. After discussions with both County and Wilcox Elementary School officials, both sides are willing to work together to revisit this option. School officials thought the roundabout was a good idea and liked the design but want to make sure that their operations do not affect the traffic in this area. Further discussions should be held between the County and State to see if reinstating this arrangement would be feasible. It would eliminate the back up of cars queuing along 'Umi Street and provide a safe place for students to be picked up and dropped off.

5.7.4 Health Care Services

5.7.4.1 Existing Conditions

There are three major hospitals on Kaua'i. They are the Kaua'i Veterans Memorial Hospital in Waimea, the Samuel Mahelona Hospital in Kapa'a and the Wilcox Memorial Hospital in Lihu'e. Wilcox Hospital, the closest hospital to the project site, is located less than a half-mile north of the Civic Center. It is a 71-bed facility that provides acute care and emergency services. Within the second and third floors of the hospital is the 110-bed Garden Island Health Care, which provides long-term care. Together, the three hospitals operate four advanced life support ambulances.

5.7.4.2 Potential Impacts and Mitigation Measures

There will be an unavoidable and occasional need for emergency health care services. However, the proposed site improvements are located in close proximity to Wilcox Hospital. Since the proposed uses are essentially the same, no significant increase on existing emergency or health care services are anticipated.

5.7.5 Recreational Facilities

5.7.5.1 Existing Conditions

Within the Līhu'ē District, the County has over 95 acres of parks. In the immediate vicinity of the Civic Center, there are several recreational facilities. They include:

- Līhu'ē Park (little league and pony fields, practice soccer field)
- Līhu'ē County Park (tennis courts)
- Kalena Park (basketball court, playground equipment)
- Isenberg Park (softball, practice football field, playground equipment)
- Molokoa Park (no facilities)
- Vidinha Stadium (Athletic Complex, Baseball Field, Lighted Football Field, Track, 10 Acre Parcel Adjacent to Vidinha Stadium Converted to Soccer Fields)

5.7.5.2 Potential Impacts and Mitigation Measures

The proposed site improvements at the Civic Center are not expected to negatively impact existing recreational facilities. Once completed, it will enhance existing recreational opportunities for residents, workers and visitors in Līhu'ē since it provides a different kind of open space from existing facilities. Most of the existing facilities are for active recreation consisting of playfields and play equipment. In contrast, the proposed master plan creates a campus-like environment within the heart of the Civic Center. It will be an urban recreational facility with formal pedestrian pathways, benches, and shady canopy trees. It will provide a place for more passive activities such as meeting with friends and coworkers for lunch as well as provide event spaces for community festivals and celebrations. The proposed site improvements will have a positive impact by increasing the number and adding variety to Līhu'ē's recreational amenities.

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