

VOLUME 1
~~DRAFT~~ FINAL ENVIRONMENTAL
IMPACT STATEMENT
FOR
PI'ILANI PROMENADE
FEIS, FIGURES & APPENDICES A - D2

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<u>Appendix D-2</u>	<u>Air Quality Study Update dated February 2, 2017</u>

Applicant:
 Pi'ilani Promenade North LLC. & Pi'ilani Promenade South LLC.
 c/o Sarofim Realty Advisors,
 Mr. Robert Poynor, Vice President
 8115 Preston Road, Ste. 400
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Planning Consultant:
 Chris Hart & Partners, Inc.
 115 North Market Street
 Wailuku, Hawaii, 96793-1717

June 2017
~~August 2014~~



Pi'ilani Promenade

Final Environmental Impact Statement

TMKs (2) 3-9-001: 016, 170, 171 (developable lots)
TMKs (2) 3-9-001: 172, 173, 174 (roadway widening lots)
TMKs (2) 3-9-001: Portion (Por.) 148 and Por. 169 (offsite improvements)
TMK (2) 3-9-048: Por. 122 (offsite improvements)
TMK (2) 2-2-002: 077 (water tank site)
TMKs (2) 2-2-002: Por. 016 and Por. 082 (offsite improvements)
Kihei, Maui, Hawaii

Prepared for:
The Accepting Authority,
State Land Use Commission
&
Sarofim Realty Advisors (Applicant)

Prepared by:
Chris Hart and Partners, Inc. (Planning Consultant)

This Environmental Impact Statement and all ancillary documents were prepared under our direction or supervision and that the information submitted, to the best of our knowledge fully addresses document content requirements as set forth in sections 11-200-17 and 11-200-18, Hawaii Administrative Rules.


PIILANI PROMENADE NORTH, LLC

By: Sarofim Realty Advisors, Its

Authorized Agent



Robert Poynor, Vice President



Jordan Hart, President

Chris Hart and Partners, Inc.

June 2017


PIILANI PROMENADE SOUTH, LLC

By: Sarofim Realty Advisors, Its

Authorized Agent



Robert Poynor, Vice President



Jordan Hart, President

Chris Hart and Partners, Inc.

June 2017

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Accepting Authority:
Land Use Commission
Department of Business, Economic Development & Tourism
State of Hawaii

June 2017
~~August 2014~~



OVERVIEW

<i>Project Name:</i>	Pi'ilani Promenade
<i>Type of Document:</i>	Draft <u>Final</u> Environmental Impact Statement
<i>Applicable Chapter 343 Review "Trigger":</i>	Use of State land for Roadway widening purposes (HRS sec. 343-5(a)(1))
<i>Approving Agency:</i>	Hawaii State Land Use Commission Department of Business, Economic Development & Tourism State of Hawaii P.O. Box 2359, Honolulu, Hawaii 96804-2359 Contact: Mr. Daniel Orodener, Executive Officer (808.587.3822)
<i>Applicant:</i>	Pi'ilani Promenade North LLC. and Pi'ilani Promenade South LLC. c/o Sarofim Realty Advisors 8115 Preston Road, Ste. 400, Dallas, Texas, 75225 Contact: Mr. Robert Poynor, Vice President (214.692.4227)
<i>Consultant:</i>	Chris Hart & Partners, Inc. 115 North Market Street, Wailuku, Hawaii 96753 Contact: Mr. Jordan E. Hart, President (808.242.1955)
<i>Property:</i>	Kihei, Maui TMKs (2) 3-9-001: 016, 170, 171 (developable lots) TMKs (2) 3-9-001: 172, 173, 174 (roadway widening lots) TMKs (2) 3-9-001: Portion (Por.) 148 and Por. 169 (offsite improvements) TMK (2) 3-9-048: Por. 122 (offsite improvements) TMK (2) 2-2-002: 077 (water tank site) TMKs (2) 2-2-002: Por. 016 and Por. 082 (offsite improvements)
<i>Land Use Controls:</i>	State Land Use: Urban Community Plan: Light Industrial (LI) County Zoning: M-1 Light Industrial
<i>Project Summary:</i>	The proposed project involves the development of Light Industrial, Business/Commercial, and Multi-Family land uses on approximately 75 acres of land in North Kihei. The project will include associated onsite and offsite infrastructure improvements including but not limited to water, sewer, roads, drainage, electrical. <u>Amenities will include</u> bicycle, and pedestrian pathways, and landscaping. A Maui Electric Company (MECO) substation is also proposed on the project site.

Onsite and Offsite improvements include re-routing the County's existing 36-inch high pressure water main which traverses the property, installing a 1.0 million gallon drinking water tank and water transmission lines, and providing utility system connections and an access easement *mauka* and to the north of the project site. This easement ~~which~~ will also provide access for ~~future~~ maintenance and construction vehicles, and future pedestrians and bicycles ~~access and~~ with connectivity to Ohukai Road. The project will also provide road-widening along Pi'ilani Highway lots and improve the intersection of Pi'ilani Highway at Kaonoulu Street.

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Pi'ilani Promenade



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ACRONYMS AND ABBREVIATIONS

AAQS	Ambient Air Quality Standards
ALISH	Agricultural Lands of Importance to the State of Hawai'i
AMSL	<u>Above Mean Sea Level</u>
BMP	Best Management Practices
BWS	Board of Water Supply (County of Maui)
CATV	<u>Cable Television</u>
CDP	Census Defined Place
CIA	Cultural Impact Assessment
CPLU	<u>Community Plan Land Use</u>
<u>County</u>	<u>Maui County</u>
CWS	<u>Water System (County of Maui)</u>
CWRM	Commission on Water Resource Management
CZM	Coastal Zone Management
DBEDT	Department of Business, Economic Development and Tourism (State of Hawai'i)
DEM	Department of Environmental Management (County of Maui)
DHHC	<u>Department of Housing and Human Concerns (County of Maui)</u>
DLNR	Department of Land and Natural Resources (State of Hawai'i)
DOE	Department of Education (State of Hawai'i)
DOH	Department of Health (State of Hawai'i)
DOT	Department of Transportation (State of Hawai'i)
DPW	Department of Public Works (County of Maui)
DWS	Department of Water Supply (County of Maui)
DEIS	Draft Environmental Impact Statement
EISPN	Environment Impact Statement Preparation Notice
ESA	Environmental Site Assessment
FEA	<u>Final Environmental Assessment</u>
FEIS	Final Environmental Impact Statement
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
GPD	Gallons per day
GPM	Gallons per minute
HPL	<u>Honua'ula Partners LLC</u>



HRS	Hawaii Revised Statutes
HT	Hawaiian Telcom
KCA	Kihei Community Association
KMCP	<u>Kihei-Makena Community Plan</u>
KUH	Kihei Upcountry Highway
KWWTF	Kihei Wastewater Treatment Facility
kV	Kilovolt
kVa	<u>Kilovolt Ampere</u>
Leq	<u>Equivalent Sound Level</u>
LI	<u>Light Industrial</u>
LOS	Level of Service
LSB	Land Study Bureau
LUC	Land Use Commission (State of Hawai'i)
MCC	<u>Maui County Code</u>
MECO	Maui Electric Company
MG	Million gallons
MGD	Million gallons per day
MMA	Maui Market Area
MRTP	<u>Maui Research and Technology Park</u>
MSL	Mean Sea Level
NPDES	National Pollutant Discharge Elimination System
NFIP	National Flood Insurance Program
Oceanic	Oceanic Time Warner Cable
OEQC	Office of Environmental Quality Control (State of Hawai'i)
OHA	Office of Hawaiian Affairs
OSDS	<u>Onsite Disposal Systems</u>
Ppm	Parts Per Million
PV	Photovoltaic
ROW	Right-of-Way
SF	Square Feet
SHPD	State Historic Preservation Division (Hawai'i)
SHWS	State Hazardous Waste Sites
SIHP	<u>State Inventory of Historic Places</u>
SMA	Special Management Area
State	State of Hawai'i
TMK	Tax Map Key
TSS	<u>Total Suspended Solid</u>



UBC	Uniform Building Code
UGB	Urban Growth Boundary
UST	Underground Storage Tank Site
V/C	<u>Volume to Capacity Ratio</u>
WWRF	Wastewater Reclamation Facility



I. PROJECT SUMMARY

A. BRIEF DESCRIPTION OF THE ACTION

The proposed project is referred to as the “Pi’ilani Promenade” or as the “Project”, which is a conceptual development plan that includes a mixed-used project consisting of retail, office, business/commercial development limited to 530,000 square feet, 58,000 square feet of light industrial space, 226 multi-family apartment units, and public/quasi-public (Maui Electric Company (MECO) substation) uses. The Pi’ilani Promenade will include associated onsite and offsite infrastructure improvements including but not limited to water, sewer, roads, drainage, and electrical improvements. Amenities will include bicycle and pedestrian pathways, public park area, and landscaping.

Onsite and Offsite improvements include re-routing the County’s existing 36-inch high pressure water main which traverses the property, installing a 1.0 million gallon (MG) drinking water tank and water transmission lines, and providing utility system connections and an access easement *mauka* and to the north of the Project site. This access easement will also provide access for maintenance and construction vehicles, and future pedestrians and bicycles with connectivity to Ohukai Road. The Project will also provide road-widening along Piilani Highway lots and improve the intersection of Pi’ilani Highway at Kaonoulu Street.

B. SIGNIFICANT BENEFICIAL AND ADVERSE IMPACTS WITH MITIGATION MEASURES (INCLUDING CUMULATIVE IMPACTS AND SECONDARY IMPACTS)

The beneficial impacts of the Project are:

- Providing greater diversity and flexibility of business/commercial space to attract small and large-scale employers;
- Providing light industrial space for south Maui business;
- Providing restaurants, shops and other retail services to the local residents and visitors;
- Creating Jobs;



- Increasing tax revenue to State of Hawaii and Maui County;
- Providing much needed residential rental housing in south Maui;
- Providing housing within walking distance of employment;
- Reducing the Project's energy demand through conservation and energy efficient design; and
- Construction of significant public infrastructure improvements, such as the initial increment of the Kihei/upcountry highway, and domestic water infrastructure improvements, which will serve south Maui at no cost to the public.

The potential adverse impacts of the Project with mitigation measures are:

1. TOPOGRAPHY AND SOILS

Potential Impact: Potential impacts to the land form include routing a small unregulated drainageway (Drainageway "A") to the future East Kaonoulu Street right of way as part of the overall drainage system. Additional impacts may include soil erosion and the generation of dust during construction. Clearing and grubbing activities will temporarily disturb the soil retention values of the existing vegetation and expose soils to erosion forces. Some wind erosion of soils could occur without a proper watering and re-vegetation program.

Mitigation Measures: As part of the overall drainage master plan, Drainageway "A" will be routed to the East Kaonoulu Street right of way with no increase in flow and will terminate at the existing culverts routing the system under and *makai* of the Pi'ilani Highway. This change will not increase the quantity of drainage water traveling through this system or downstream.

During site preparation, storm runoff from the site will be controlled in accordance with the County's "Soil Erosion and Sediment Control Standards". Typical mitigation measures include appropriately stockpiling materials on the site to prevent runoff, temporary detention, and commencing building construction and/or establishing landscaping as early as possible in order to minimize the length of exposure of disturbed soils. After construction, the establishment of a permanent stormwater system and landscaping will provide additional long-term erosion control.

Why Mitigation Measures were selected: Drainageway "A" is proposed to be routed underground to the East Kaonoulu right of way as part of the drainage system improvements in order to accommodate the grade changes necessary for East Kaonoulu Street and develop the property as proposed. Maui County's "Soil Erosion and Sediment Control Standards" are



the recommended mitigation measures for site preparation and stormwater runoff prevention.

2. NOISE QUALITY

Potential Impact: The Acoustic Study reports that the proposed extension of Kaonoulu Street mauka of Piilani Highway will increase the existing background ambient noise levels along the center portion of the Project site. Through project build-out in CY 2032, noise levels at the Project's planned residential buildings fronting Kaonoulu Street should not exceed the 65 DNL federal standard or the State DOT 66 Leq noise abatement criteria, as long as the residential buildings are located at least 51 feet from the centerline of Kaonoulu Street.

Mitigation Measures: Based on the best available traffic forecasts available for future conditions following completion of the Upcountry Highway, a setback distance of 70 feet from the centerline of Kaonoulu Street is required for 65 DNL and 66 Leq to not be exceeded at these residential buildings. The Project site will be designed such that rental residential uses within the Project are located at adequate setback distances from the future Kihei Upcountry Highway to eliminate the need for traffic noise mitigation measures. The Applicant will inform future residents of the potential for high noise levels due to existing light industrial activities adjacent to the northern corner of the Project site.

Why Mitigation Measures were selected: This mitigation measure of providing an ample setback from the roadway was selected in lieu of constructing a sound attenuating wall along the Kihei Upcountry Highway to reduce noise impacts to residences.

3. ARCHAEOLOGICAL RESOURCES

Potential Impact: Loss of historical sites identified on the property.

Mitigation Measures: Preparation of an Archaeological Data Recovery Plan and Archaeological Monitoring Plan.

Why Mitigation Measures were selected: The plans were recommended by the SHPD.



4. GROUNDWATER RESOURCES

Potential Impact: Hydrologic impact to the Iao Aquifer from withdrawal of 171,000 gpd of drinking water and impact to the Kamaole Aquifer from withdrawal of 81,000 gpd of non-drinking water for irrigation.

Mitigation Measures: The CWRM estimates that 0.421 MGD of groundwater can be allocated within the Iao Aquifer System. The Piilani Promenade drinking water demand is expected to withdraw 171,000 gpd, and can be accommodated within the remaining 0.421 MGD of available groundwater. This limited amount of water is not anticipated to significantly impact the Iao Aquifer from recharging.

The CWRM approved an irrigation well permit for a well built in 2011 at a wellhead elevation of 118 feet. The well has the capacity to produce 216,000 gpd of non-drinking water from the Kamaole Aquifer, and a permanent pump with an additional capacity of 150 gpm has since been installed, but is not currently in use. In addition, the Applicant is required to provide for a future connection to the County reclaimed water system that would eliminate the need for the brackish irrigation well.

Why Mitigation Measures were selected: Three 3-inch domestic water meters have been approved by the County DWS and are available for the Project. The issuance of water meters for the Project by the DWS carries the implicit approval by the DWS of Piilani Promenade's use of the Iao Aquifer System for drinking water.

The irrigation well was approved, and when the Maui County reclaimed water system is expanded to the Project site, the Applicant will connect to the system in compliance with the condition imposed by the County in connection with obtaining the current zoning designation.

5. RECREATION FACILITIES

Potential Impact: Incremental impact that new development places upon the region's park facilities.

Mitigation Measures: The Pi'ilani Promenade is anticipated to positively impact recreational facilities by providing an approximately 2-acre park site adjacent to the proposed 226 apartments.

The Applicant met with the County Department of Parks & Recreation on March 13, 2015 to discuss how the parks and playgrounds assessment requirements for the proposed Project can be satisfied in accordance with MCC Section 18.16.320. As a result of the meeting, the Applicant is proposing the following general changes to the on-site park space:



1. Inclusion of active play space and facilities within the park areas;
2. Inclusion of parking for park users; and
3. Possible reconfiguration of the park acreage to create a more contiguous park area.

Additionally, improvements are being made to accommodate pedestrian and bicycle travel adjacent to and within the Project. Recognizing that the availability of existing off-street pedestrian and bike pathways is limited in south Maui, and that there is a need for projects to offer options other than vehicular access, the Pi'ilani Promenade includes a pedestrian and bike pathway system adjacent to and within the Project site, as shown in Figure 15 "Conceptual Circulation Plan". The red bike lane shown in Figure 15 is located within the Pi'ilani Highway right of way. The blue system shown provides for a series of pedestrian and bike pathways with the Project site and East Kaonoulu Road allowing for safe off street interconnectivity for the public using the various components of the land plan and providing for future connectivity to the areas north, south and east of the Project site.

Why Mitigation Measures were selected: The requirements for Parks and Playgrounds, pursuant to MCC Section 18.16.320, are required by the County of Maui.

6. SCHOOLS

Potential Impact: Increase in student population

Mitigation Measures: Payment of the DOE school impact fee to contribute to future South Maui school facilities.

Why Mitigation Measures were selected: The Project site is not a preferred location for a school site, therefore the contribution of a fee is anticipated.

7. ROADWAYS

Potential Impact: The Project will generate 564 new trips during the morning peak hour, 2,482 new trips during the afternoon peak hour and 2,651 new trips during the Saturday peak hour.

Mitigation Measures: Consistent with previously approved subdivision plans for the Project site, the TIAR recommends the following mitigation measures to be constructed by the Applicant at the intersection of Piilani Highway and Kaonoulu Street as part of the Piilani Promenade:

- Install traffic signals and striped pedestrian crosswalks across Pi'ilani Highway.



- Southbound approach will have double left turn lanes, two through lanes, and a channelized right turn lane.
- Northbound approach will have a dedicated left turn lane, two through lanes, and a channelized right turn lane.
- Eastbound approach will have a left turn lane, a through lane, and a channelized right turn lane.
- Westbound approach will have dual left turn lanes, a through lane and channelized right turn lane with an acceleration lane.
- The Project also includes the construction of a shared-use pedestrian and bike path along the mauka-side of Pi'ilani Highway, adjacent to the Project and within the Project site, in addition to bike lanes on Pi'ilani Highway.

Why Mitigation Measures were selected: Recommendations of the TIAR.

8. DRAINAGE

Potential Impact: Hydrologic impact on downstream properties.

Mitigation Measures: Surface runoff generated by Pi'ilani Promenade's buildings and pavement will be directed to drain inlets located throughout the development and then conveyed to stormwater detention facilities (by underground drainlines) in order to provide peak flow mitigation. Underground detention chambers located on the southern portion of the Project site and an open detention pond located in the northern portion of the Project site will provide a combined storage capacity of 7.6 acre-feet and will limit downstream stormwater discharges to a peak flow rate that does not exceed pre-development levels. Once the stormwater detention facilities are in place, the hydrologic impact on downstream properties resulting from the proposed development of Pi'ilani Promenade will be negligible because the pre-development peak flow is the same as the post-development peak flow.

Why Mitigation Measures were selected: Compliance with County engineering standards and the recommendation of the Project Civil Engineering Preliminary Drainage Report.

9. WATER

Potential Impact: The Project is estimated to consume on average of 252,000 gpd at full build-out, including 171,000 gpd of drinking water for domestic uses.

Mitigation Measures: The proposed Project will connect to the existing County water system for drinking water. At the request of the DWS, the Applicant agreed to construct a 1.0 MG



water storage tank to serve the future needs of the Project and South Maui. Three 3-inch domestic water meters have been approved and are available for the Project. The combined flow capacity of these meters is 1,050 gpm, which exceeds the approximately 600 gpm of required flow capacity for the Project. Therefore, there will be adequate flow capacity to build out the Project. Consequently, no additional drinking water sources beyond the County-issued water meters are anticipated in order to construct and operate the Pi'ilani Promenade.

Why Mitigation Measures were selected: Consultation with DWS led to the request for construction of the 1.0 MG water tank as an alternative to source development. Additionally, the 1.0 MG water tank is part of the previously approved subdivision plans.

10. RELOCATION OF COUNTY WATERLINE

Potential Impact: Relocating the 36-inch diameter high pressure waterline could disrupt water service during improvement work.

Mitigation Measures: Previously approved DWS construction plans for the relocation work include a bypass line, comprehensive site preparation work, and disconnect/connection during non-peak hours.

Why Mitigation Measures were selected: The current location of the County line crosses diagonally through Project site, restricting use of land over water line alignment. The proposed high pressure waterline relocation was coordinated with the DWS and the construction plans have been approved.

11. SOLID WASTE

Potential Impact: Solid Waste generated from the Project will contribute towards the use of the Central Maui Landfill.

Mitigation Measures: A solid waste management plan will be coordinated with the County Solid Waste Division for the disposal of onsite and construction-related waste material. The Applicant will work with the Project contractor to minimize the amount of solid waste generated during construction. In addition, the Project will provide on-site recycling opportunities in an effort to reduce solid waste entering the landfill. The County Solid Waste Division anticipates that additional phases of the Central Maui Landfill will be developed as needed to accommodate future waste, including waste generated by the Project.



Why Mitigation Measures were selected: A solid waste management plan is the recommended for construction projects. Providing the on-site recycling opportunities within the Pi'ilani Promenade site is a measure that will support waste diversion.

12. WASTEWATER

Potential Impact: Development of the Project will generate 114,000 gpd of wastewater.

Mitigation Measures: The Applicant will pay the Regional Wastewater Treatment System Facility Expansion Assessment Fee for treatment plant expansion, which is currently assessed at \$4.65 per gallon of Project flow. The Pi'ilani Promenade will be assessed approximately \$530,100 for the 114,000 gpd of anticipated wastewater flow. The Project will connect to the existing County sewer system.

Why Mitigation Measures were selected: The Regional Wastewater Treatment System Facility Expansion Assessment Fee is required by the Department of Environmental Management.

13. ELECTRICAL

Potential Impact: MECO has advised that the existing 12 kV system, based on current electrical use growth projections, does not have sufficient spare capacity to accommodate the estimated 6,250 kVA of load required by the current Pi'ilani Promenade development plan.

Mitigation Measures: MECO is planning a new substation to provide the additional capacity needed to accommodate further growth in the Kihei and South Maui area.

Why Mitigation Measures were selected: The need for a substation in this area of Kihei was a requirement of MECO to continue to provide electrical needs the growth in the Kihei and south Maui areas.

The potential secondary and cumulative impacts are:

The build-out of the Project is likely to affect the businesses and residents of Kihei. Implementation of the Project, when added to other adopted and proposed projects, may have a significant effect on a regional scale. The potential secondary and cumulative impacts that may result from the development of the Pi'ilani Promenade are:

Impacts to Natural and Environmental Resources. Assuming all BMPs and mitigation measures documented in this FEIS are implemented and all requirements imposed under



applicable permits and/or approvals are complied with; no adverse, cumulative or secondary impacts are anticipated on the natural environment.

Flora and Fauna. As documented in Section III.A.5 of the FEIS, the Project will not impact rare or endangered flora and fauna species. In consideration of existing State and Federal regulations to protect rare and endangered species, there should be no significant cumulative and/or secondary impacts to flora and fauna resources arising from planned growth in the area.

Coastal Water Quality. Development of the Pi'ilani Promenade, together with other area projects, could have significant cumulative impacts to coastal water quality if BMPs are not strictly adhered to. During the construction phase, BMPs must be implemented to mitigate runoff of bare soils and other construction contaminants into drainage ways and culverts. If not properly mitigated, the cumulative impact of these contaminants could impact coastal water quality.

The Applicant retained Marine Research Consultants, Inc. to prepare a Baseline Assessment of Marine Water Chemistry and Marine Biotic Communities. The purpose of the Baseline Assessment was to assess potential impacts to groundwater and the marine environment as a result of the proposed Project. In connection with this work, water quality testing was conducted and the underwater biotic composition along the Kihei coastline was analyzed.

The findings of the Baseline Assessment indicate that the proposed Project will not have any significant negative effect on water quality. (See: Appendix J, "Baseline Assessment of Marine Water Chemistry and Marine Biotic Communities Report.")

During the Project's operation phase, any increase in runoff will be retained on site as required by the County's drainage rules. (See: Section III.D.3). Retaining the additional increment of runoff on-site, together with filtration of contaminants from runoff, will mitigate the Project's impact to coastal waters. Likewise, other future developments in the area will be required to implement similar mitigation measures as part of their operation phase BMPs. Therefore, the Project, together with other planned projects in the area, should not have a significant cumulative impact on coastal water quality if construction and operation phase BMPs are strictly adhered to.



Agricultural Lands. As documented in Section III.A.11 of the FEIS, the Pi'ilani Promenade is located on State designated urban land, therefore, the Project is not expected to have a significant cumulative impact upon the long-term viability or growth of agriculture on Maui.

The establishment of Urban Growth Boundaries in the Maui Island Plan create more predictable development patterns and create more certainty in the urban and agricultural land markets, thereby mitigating the escalation of agricultural land values. HRS Chapter 165, the "Hawaii Right to Farm Act," protects farmers from frivolous lawsuits in which a farming operation is alleged to be a nuisance. In addition, the Pi'ilani Promenade will incorporate landscape planting around the perimeter of the property with a buffer to mitigate potential agricultural use conflicts.

Drinking Water Resources. The development of the Pi'ilani Promenade, together with other area projects, will increase the demand for drinking water. The Applicant is constructing a 1.0 MG water tank and supporting infrastructure to provide water storage for the Project (only requiring 171,000 gpd), with the remaining capacity available for future south Maui water customers. The development of the 1.0 MG water tank will help support the drinking water needs for the future planned growth of south Maui. With these measures in place, significant cumulative and/or secondary impacts are not anticipated to threaten the long-term sustainability of the County's water resources.

Air Quality. The cumulative impact of the build-out of the Pi'ilani Promenade, together with other developments in Kihei, will increase the amount of pollutants entering the atmosphere. These pollutants will be generated by an increase in demand for energy in the form of transportation fuels for automobiles, and carbon-based fuels to power the Ma'alaea Power Plant. It is the opinion of the air quality consultant that re-analysis of the Project air quality impacts due to Project traffic would not yield significantly different results and the conclusions stated in the air quality study of August 2014 remain valid. (See: Appendix D-2 "Air Quality Report Update dated February 2, 2017.")

Socio-Cultural Environment. The development of the Pi'ilani Promenade, together with other developments in Kihei, will increase population, create jobs, and generate tax revenues. Together, these projects will also increase the demand for housing and place increasing demands on infrastructure and public facility systems both locally and island-wide.

According to the Maui Island Plan, there will be a demand for an additional 34,637 housing units on Maui through 2030. The County of Maui's Land Use Forecast (November 2006)



forecasted that there will be a demand for an additional 9,735 units in Kihei-Makena through 2030. The 226 units proposed at the Project are approximately 2% of the forecasted Kihei-Makena demand. The proposed Project together with other planned projects in Kihei, are a necessary source of housing to accommodate the forecasted population growth.

The continued build-out of Kihei will also change the area's urban design character and sense of place. Today, Kihei is a developing community with a number of undeveloped infill parcels intermixed with lower and medium-density residential, strip commercial, industrial, resort and public facility uses. In the coming years, pursuant to the land-use policies contained in the Maui Island Plan and Kihei-Makena Community Plan, Kihei will evolve to become a more unified and cohesive urban settlement. An increase in population, including population created by the Pi'ilani Promenade, may increase demand for coastal and inland active and passive recreation lands. MCC Section 18.16.320 requires a park land dedication, or cash-in-lieu fee, to mitigate the impact of growth on park and recreation facilities.

With regard to the concern relative to sprawl, the proposed Project is located immediately adjacent to an extensive and larger light industrial complex which is adjacent to a significant residential area in north Kihei. Immediately to the south of the proposed Project is the proposed Kihei High School for which the State has acquired the land and is now in the process of design. The amount of residential or apartment zoned land in south Maui available for residential and especially apartment development is limited. The Project site is County zoned Light Industrial and Apartments are a permitted use. This mixed-use project will include light industrial, business /commercial and residential uses, active park space, pedestrian and bicycle connectivity within the site and along the frontage portions of the Kihei Upcountry Highway and Pi'ilani Highway to promote smart growth and less dependence on the automobile. In addition, the Project will provide an easement for pedestrian and bicycle connectivity from Ohukai Road to the mauka portion of the Project site and the Applicant anticipates that there will be opportunities for future connection along Pi'ilani Highway with the Kihei High School, once the school is built. The onsite pedestrian oriented improvements will reduce the need for the automobile and create a healthier lifestyle for those who live there and the offsite easement will expand the regional non-vehicular transportation network.

Infrastructure and Public Facilities The build-out of the Pi'ilani Promenade, together with other developments in Kihei, will increase population; thereby, increasing the demand for infrastructure and public facility systems, including water, wastewater, and roadways; solid waste, schools, and parks; and medical facilities, public transit and government offices. The County's Infrastructure and Public Facilities Issue Paper (September 2007) documents the



impact of projected population growth on the County's infrastructure and public facility systems by region and identifies associated capital improvement projects to support this growth.

As documented in Section III.D of the FEIS, the Pi'ilani Promenade will mitigate its impact on infrastructure and public facility systems through a variety of on and off-site infrastructure and public facility counter-measures. One such counter measure, as documented in Section III.D.1 of the FEIS, is the development of a 1.0 MG drinking water storage tank to provide drinking water storage to accommodate the cumulative impact of Pi'ilani Projected population growth. Property taxes generated by the development, together with other planned projects in the area, will help fund County operations and capital improvement projects.

Secondary impacts could also result from investments into infrastructure and public facility improvements to support the Project. For example, development of the KUH could induce further growth mauka of Pi'ilani Highway. As documented in Section III.D.1 of the FEIS, development mauka of Pi'ilani Highway is supported by the Maui Island Plan. The future growth of the KUH outside of the Project site is unknown at this time.

C. ALTERNATIVES CONSIDERED

No Action

Under the no action alternative, existing entitlements would remain and the property could be developed as a 123-lot commercial and light industrial subdivision within the Petition Area (as such a term is defined in Section II.A). Under the no action alternative, there would be no affordable rental workforce housing, no on-site recreational amenities, no opportunity to provide additional commercial and office space for south Maui, and it is likely the land would not be developed as a 123 lot development is not feasible and therefore the infrastructure improvements would not be built.

No Residential Use

An alternative to the proposed Project (Preferred Alternative) could be to not allow rental residential uses. This alternative could reduce the impact to water usage, solid waste, schools and public facilities, and allow for the development of light industrial and business/commercial uses, but would eliminate the opportunity to develop a true mixed use



project providing for housing (including affordable housing), employment within close proximity and a new 2-acre park for the area. Under this alternative, business, retail and commercial uses, and support services, would be provided.

Alternative Site

This option would require that the Applicant acquire and develop another entitled property of a comparable size and location. The proposed Project is located centrally within Kihei to provide jobs, services and housing to the existing and future residents of Kihei. If the Project were relocated, the residents of Kihei would not benefit from the infrastructure improvements and the opportunity to stay within Kihei rather than driving to Kahului. Also, this alternative is not in line with the Maui Island Plan for the future growth of commercial and residential development in the Kihei area.

D. UNRESOLVED ISSUES

The table below provides the list of unresolved issues associated with the Project. A detailed description of each issue is provided in *Section V.D. Unresolved Issues* section of this FEIS.

<u>Issue</u>	<u>Parties Involved</u>	<u>Estimated Resolution</u>
<u>1. Motion for Order Amending the Findings of Fact, Conclusions of Law, and Decision and Order dated February 10, 1995</u>	<u>Applicant, LUC, Office of State Planning</u>	<u>2017</u>
<u>2. Compliance with the Kihei-Makena Community Plan</u>	<u>Applicant, County of Maui, Department of Planning</u>	<u>2017</u>
<u>3. Preservation of Archaeological Sites</u>	<u>Applicant, SHPD</u>	<u>2017</u>
<u>4. Future location of Wastewater Pump Station</u>	<u>Applicant, County of Maui, Department of Environmental Management</u>	<u>Unknown: The wastewater pump station construction timeline is to be determined by the</u>



<u>Issue</u>	<u>Parties Involved</u>	<u>Estimated Resolution</u>
		<u>County of Maui</u> <u>Department of</u> <u>Environmental</u> <u>Management</u>
<u>5. Pedestrian Connectivity to the Kihei High School</u>	<u>Applicant, DOE, various private land owners</u>	<u>Unknown:</u> <u>establishing</u> <u>connectivity from</u> <u>the Project to the</u> <u>future high school</u> <u>is to be coordinated</u> <u>with the DOE, DOT</u> <u>and other private</u> <u>landowners</u>
<u>6. Army Corps of Engineers Jurisdictional Determination</u>	<u>Applicant, Army</u>	<u>2017</u>
<u>7. Impact Fee Agreement</u>	<u>Applicant, DOE</u>	<u>Prior to</u> <u>construction of the</u> <u>Project</u> <u>infrastructure,</u> <u>which is estimated</u> <u>to happen in 2018.</u>



E. COMPATIBILITY WITH LAND USE PLANS AND POLICIES, AND LISTING OF PERMITS OR APPROVALS

State Land Use

The Project is located within the Urban District; therefore the Pi'ilani Promenade is in compliance with section 15-15-24 HAR.

Maui Island Plan

The Project is located within the Urban growth Boundary identified in the Maui Island Plan and therefore in compliance with the Plan objectives and policies.

Maui County Zoning

The Project is located in the M-1 Light Industrial District. The proposed Light Industrial, Commercial and Multi-family uses are permitted within the M-1 Light Industrial District.

Kihei-Makena Community Plan

Although the County has determined that the Project complies with the KMCP, the Applicant recognizes that certain parties have asserted that an amendment to the KMCP is necessary for development of the Project to proceed. This is further discussed in the Unresolved Issues section of this document.

Below is a list of permits and approvals:

<u>Permit / Approval Required</u>	<u>Responsible Authority</u>	<u>Projected Submittal Date</u>
<u>Order Granting Motion for Order Amending the Findings of Fact, Conclusions of Law, and Decision and Order dated February 10, 1995</u>	<u>LUC</u>	<u>Pending</u>
<u>HRS Chapter 343 Compliance, Approval of FEIS</u>	<u>LUC</u>	<u>June 2017: Approval July 2017</u>
<u>Jurisdictional Determination</u>	<u>Army Corps of Engineers</u>	<u>2017</u>
<u>Grading and Grubbing Permit</u>	<u>Maui County, Public Works, Development Services Administration</u>	<u>2017</u>



<u>Permit / Approval Required</u>	<u>Responsible Authority</u>	<u>Projected Submittal Date</u>
<u>NPDES Permit</u>	<u>State of Hawaii, DOH</u>	<u>2017</u>
<u>Air Pollution Control Permit</u>	<u>State of Hawaii, DOH</u>	<u>2017</u>
<u>Community Noise Permit</u>	<u>State of Hawaii, DOH</u>	<u>2017</u>
<u>Drainage Approval</u>	<u>DPW Engineering Division, and State DOT</u>	<u>2017</u>
<u>Permit to Perform Work Within the State ROW</u>	<u>State DOT</u>	<u>2017</u>
<u>Easements for Utilities and Roadways</u>	<u>Various</u>	<u>2017</u>
<u>Wastewater Discharge (Hookup) Permit</u>	<u>Maui County, Department of Environmental Management, Wastewater Division</u>	<u>2017</u>
<u>Building Permits</u>	<u>Maui County, Public Works, Development Services Administration</u>	<u>2017-2018</u>



II. PROJECT DESCRIPTION

A. PROPERTY LOCATION

The proposed 74.871 acre project site is located in Kihei, *mauka* of the intersection of Kaonoulu Road and Pi'ilani Highway. The project boundary is adjacent to the Kihei Commercial Center to the North, Kulanihakoi Gulch to the South, Pi'ilani Highway to the West, and ranch land to the East extending up to Kula. (See: Figure No. 1 "Regional Location Map" and Figure No. 1A "Aerial Property Map")

The project site is comprised of TMK's (2) 3-9-001:016, 170-174. Parcels 16, 170 & 171 are developable parcels. Parcel 172 is a roadway lot for the future East Kaonoulu Street which is the first segment of the future Kihei Upcountry Highway (KUH). Parcels 173 and 174 are roadway widening lots to improve the intersection of Kaonoulu Street at Pi'ilani Highway. The proposed 74.871 acre project site is the petition area in the pending motion to amend before the State Land Use Commission, which is discussed in more detail in Section II.C. herein.

There are several off-site improvements that are located in close proximity to the developable parcels, however they are owned by others including road widening lots for intersection improvements at Kaonoulu Street and Pi'ilani Highway, an easement for utilities and roadway, an irrigation well with pump for landscaping and a 1 acre lot for a 1.0 million gallon water tank. (See: Figure Nos. 2 "Tax Map Key", 3 "Conceptual Site Plan", 4 "Offsite Improvement Plan", 8 "Site Photographs" and 8A "Site Photographs")



B. LAND OWNERSHIP AND PROJECT APPLICANT

Except for the offsite parcels, the Applicant is the owner of the parcels comprising the project. The land ownership is provided below in Table 1: Land Ownership.

Table 1: Land Ownership			
TMK	OWNERSHIP	Description	Acreage
LAND OWNED BY PPN/PPS			
Development Parcels			
(2) 3-9-01:016*	PPN/PPS	Development Parcel Phase 1	30.132
(2) 3-9-01:170	PPN/PPS	Development Parcel Phase 2	18.519
(2) 3-9-01:171	PPN/PPS	Development Parcel Phase 2	19.539
(*) TMK (2) 3-9-01:016 will be subdivided, and an approx. 0.981 acre lot will be conveyed to MECO for construction of a MECO substation			
Kihei Upcountry Highway Lot Lots			
(2) 3-9-01:172	PPN/PPS	Roadway Widening Lot (Kihei Upcountry Highway)	4.898
Pi'ilani Highway Widening Lots			
(2) 3-9-01:173	PPN/PPS	Pi'ilani HWY widening lot	0.924
(2) 3-9-01:174	PPN/PPS	Pi'ilani HWY widening lot	0.859
			74.871 total
LAND NOT OWNED BY PPN/PPS			
Pi'ilani Highway Widening Lots			
(2) 3-9-048:122	KENRANES LTD.	Pi'ilani HWY widening lot	0.332
(2) 3-9-01:148	Pacific West Communities Inc.	Pi'ilani HWY widening lot	0.407
Offsite Easements			
(2) 2-2-02:082 (portion)	Kaonoulu Ranch LLLP	1.0 MG Water Tank transmission line easement	10.646
(2) 2-2-02:016 (portion)	Haleakala Ranch Company	Roadway and utility easement	1.119
(2) 3-9-01:169 (portion)	Honua'ula Partners	Landscape Irrigation Well	0.135
Offsite Water Tank Lot			
(2) 2-2-02:077	Kaonoulu Ranch LLLP	1.0 MG Water Tank site	1.154
			13.793 total
Land Not Part of Pi'ilani Promenade Project			
Offsite Multi-family			
(2) 3-9-01:169	Honua'ula Partners	Future affordable Multi-family development	13.129



C. PROJECT BACKGROUND

On July 6, 1994, Kaonoulu Ranch filed a Petition for a Land Use District Boundary Amendment with the Land Use Commission (Docket No. A94-706). Kaonoulu Ranch's Petition encompassed approximately 88 acres of land located at Kaonoulu, Makawao-Wailuku (the "Petition Area"), including the entire ~~75~~74.871 acres comprising the project site. Kaonoulu Ranch proposed to develop a 123-lot commercial and light industrial subdivision within the Petition Area. In the Petition, the Kaonoulu Ranch sought an amendment of the land use district boundary to effect reclassification from the Agricultural District to the Urban District.

On February 10, 1995, the ~~LUC Land Use Commission~~ ("the Commission") issued its Findings of Fact, Conclusions of Law, Decision and Order for Docket No. A94-706 (the "1995 Decision and Order"). The 1995 Decision and Order reclassified the Petition Area from the State Agricultural District to the State Urban District subject to conditions specified therein.

On March 6, 1998 the Kihei-Makena Community Plan was adopted by Ordinance No. 2641, and the Petition Area was designated as "LI" Light Industrial.

In 1998, the Kaonoulu Ranch applied to the County of Maui for a change in the zoning of the Petition Area from Agricultural to M-1 Light Industrial, as required by Condition 1 of the 1995 Decision and Order. In 1999, County of Maui Ordinance No. 2772 was passed, granting the change in zoning application with no limitations on the types of uses permitted within the Project area. After obtaining the change in the zoning of the Petition Area to M-1 light industrial, the Kaonoulu Ranch applied for ~~and obtained from the County of Maui final~~ approval for a large lot subdivision for the 88 acre Petition Area in 2001, and subsequently a large lot subdivision consisting of four (4) lots, for which preliminary approval was granted in 2003.

In 2005, Kaonoulu Ranch sold the lands comprising the Petition Area to Maui Industrial Partners, LLC, which worked with various consultants and State and County agencies, to obtain final approval of a ~~further~~ large lot subdivision of the Petition Area. On August 14, 2009, the County of Maui approved the subdivision of the Petition Area into seven (7) lots, six (6) of which are affected by this ~~FEIS Motion~~. The final subdivision map was issued by the County after the provision of a \$22 million dollar bond guaranteeing the construction of the civil improvements for the subdivision. (See: Appendix O "Final Subdivision Approval Letter.")

On August 20, 2009, Maui Industrial Partners, LLC sold one parcel of the Petition Area identified by Tax Map Key No. (2)3-9-001:169, comprising approximately 13 acres and located on the northeast corner of the Petition Area, to Honua'ula Partners, LLC (the "Honua'ula Parcel"). Honua'ula Partners, LLC is the current owner of the 13- acre



Honua'ula Parcel. Honua'ula Partners, LLC is not related or in any way connected to Applicant, and does not share any common ownership, members, shareholders, or control with Applicant. The 13-acre Honua'ula Parcel is not the subject matter of this Environmental Impact Statement. However, the impact of the proposed development of the Honua'ula Parcel was considered in some of the technical reports, including the TIAR update, the Cultural Impact Assessment, the Archaeological Inventory Survey, the Air Quality Study, and the Acoustical Study in included as necessary background information. The Pi'ilani Promenade and the development of the Honua'ula Parcel are not phases or increments of a larger total undertaking; neither development is a necessary precedent for the other project; neither development represents a commitment to proceed with the other development; and the two developments are not identical to each other. While the development of the Honua'ula Parcel must, by condition, provide a 2-acre park in connection with the 250 affordable housing units provided, and the Pi'ilani Promenade similarly proposes a 2-acre park in connection with the 226 apartment units, these parks are separate and distinct parks that support separate development projects.

It is the Applicant's understanding that HPL is in the process of developing documentation necessary to address the requirements of HRS Chapter 343, and is contracting with the technical consultants needed for the preparation of a full-scope of environmental and technical reports.

On September 10, 2010, Maui Industrial Partners, LLC sold the project parcels – TMK's (2) 3-9-001:016, 170-174 - to the Applicant. The project parcels comprise approximately 75 of the 88 acres contained within the Petition Area (hereinafter "the Pi'ilani Parcels"). Ownership of the Project parcels have been established through the title insurance policy (See: Appendix V, Deeds and Policies of Title Insurance).

Applicant, through Eclipse Development Company, LLC, originally planned to develop a shopping complex known as "Pi'ilani Promenade" on the Pi'ilani Parcels. On April 11, 2012 and April 18, 2012, Maui County issued to Applicant two grading permits, placing Applicant in a position to begin construction of on-site and off-site infrastructure for the Pi'ilani Parcels. However, on May 23, 2012, Maui Tomorrow Foundation, Inc., South Maui Citizens for Responsible Growth, and Daniel Kanahale filed a Motion for a Hearing, Issuance of Order to Show Cause, and Other Relief with the LUC Commission, which was granted on September 10, 2012 (the "Order to Show Cause").

On November 1, 2, 15 and 16, 2012, the LUC Commission heard evidence and arguments in the first of two phases of the Order to Show Cause proceeding. At a meeting on February 7, 2013, a majority of the members of the LUC Commission determined by oral vote that Applicant's proposed use of the Pi'ilani Parcels and Honua'ula Partner, LLC's proposed use of the Honua'ula Parcel would violate Conditions 5 and 15 of the 1995 Decision and Order, and that Condition 17 had also been violated. No written order regarding the foregoing has been entered.



On April 18, 2013, Applicant filed a Motion to Stay Phase II of the Order to Show Cause Proceeding. Applicant represented in said Motion that Applicant intended to file a motion to amend the 1995 Decision and Order (the "Motion to Amend") to allow Applicant to develop a project different from that originally presented to the Commission when the 1995 Decision and Order was issued. Applicant requested that the LUC Commission stay the Order to Show Cause Proceeding to allow the LUC Commission to consider the Motion to Amend. On June 27, 2013, the LUC Commission granted the Motion to Stay the Order to Show Cause Proceeding, and ordered that further proceedings on the Order to Show Cause would be stayed on the condition that Applicant file this Motion to Amend before December 31, 2013, and that no construction of the proposed project or infrastructure will commence on the Property occur during the stay.

In December 2013, the Applicant filed a Motion to Amend the 1995 Decision and Order with the Commission in order to facilitate the development of the proposed project which is described in greater detail below. The Environmental Impact Statement which has been prepared for the proposed project will be submitted to the Land Use Commission for processing in connection with their review of the Motion to Amend.

The DEIS was published by the OEQC on August 23, 2014 and the 45-day public comment deadline was October 7, 2014.

The EISPN was published by the OEQC on September 23, 2013 and the 30-day public comment deadline was October 23, 2013.

D. PROPOSED PROJECT OBJECTIVES

The objectives of the Project are rooted in the desire to create a vibrant regional and sub-regional shopping experience for local residents and visitors, to contribute to the County and State economies, and to create employment opportunities. The Project will also foster a small residential community with connectivity to adjacent existing and future neighborhoods while contributing to Maui's economic diversity and social fabric.

The objectives of the Project are to:

- Provide much needed residential rental housing in south Maui;
- Provide greater diversity and flexibility of business/commercial space to attract small and large-scale employers;
- Provide light industrial space for south Maui business;
- Provide restaurants, shops and other retail services to the local residents and visitors;
- Create jobs;
- Increase tax revenue to State and County;



- Provide housing within walking distance of employment; and
- Reduce the project's energy demand through conservation and energy efficient design.

E. PROPOSED PROJECT DESCRIPTION

The proposed project is a conceptual plan that has evolved since the original development plan proposed for the Project site, which was developed by Eclipse Development for the Applicant (the "Eclipse Development Plan") in 2011. The Eclipse Development Plan was based on the highest and best use for the Project site based on the land use and zoning designations, but was not developed with any input by the Kihei community.

The original Eclipse Development Plan proposed approximately 695,000 SF of retail space with approximately 3,700 parking stalls, with development concentrated in two major commercial development areas with substantial paved parking lots separating them. In contrast to the current plan, the Eclipse Development Plan did not include any light industrial uses or a multi-family rental housing, pedestrian and bicycle access and a park component.

The community was critical of the Eclipse Development Plan, and criticism prompted Applicant to revise the development plans for the Project site. The current Project conceptual plans were developed after a series of discussions with the community. The changes made to the original Eclipse Development Plan were largely in response to comments received from the south Maui community, and in response to findings from an updated economic analysis prepared for the Project. Eclipse Development is no longer involved. The proposed Project will involve the development of a mixed-used project consisting of retail, office, business/commercial, light industrial, multi-family (226 apartment units), and public/quasi-public (park, MECO substation) uses. The proposed uses are permitted by M-1, Light Industrial zoning which is codified by in Chapter 19.24 of the Maui County Code. A network of vehicular roadways, bicycle and pedestrian pathways will establish connectivity throughout the project and will provide opportunities for connection with adjoining properties along Pi'ilani Highway. In addition the proposed project will include the construction of a portion of the future Kaonoulu Street Extension which will become the KUH and two (2) Pi'ilani Highway road-widening lots. (See: Figure 3 "Conceptual Site Plan")

The current Project conceptual plan responds to input from the south Maui community, as well as the market and demand for housing in Maui County. The current Project conceptual plan includes the development of a mixed-used project consisting of approximately 530,000 square feet of retail, office, business/commercial development, 58,000 square feet light industrial space, 226 multi-family apartment units, and public/quasi-public (park, MECO substation) uses. The estimated 1,609 required parking stalls required under the current Project conceptual plan is substantially less than the 3,700 stalls proposed by the prior Eclipse Development Plan.



The proposed uses are permitted by M-1, Light Industrial zoning which is codified in Chapter 19.24 of the Maui County Code. A network of vehicular roadways, bicycle and pedestrian pathways will establish connectivity throughout the project and will provide opportunities for connection with adjoining properties along Pi'ilani Highway. In addition the proposed project will include the construction of a portion of the future Kaonoulu Street Extension which will become the KUH and two (2) Pi'ilani Highway road-widening lots.

In response to comments received on the DEIS, at the public meeting on November 3, 2013, Mr. Charlie Jencks, who serves as the lead Project consultant, represented that, in his estimation, a 25% reduction in traffic from the Eclipse Development Plan would be possible with the traffic study being prepared for the DEIS. Mr. Jencks also stated that the roadway and highway infrastructure previously proposed would not be changed to reflect the reduction in total traffic generated. The Eclipse Development Plan proposed development of approximately 700,000 square feet of retail, office, business/commercial uses, while the current conceptual Pi'ilani Promenade plan proposes approximately 530,000 square feet of retail, office, business/commercial uses. Further, the current proposed Pi'ilani Promenade project includes apartment buildings, light industrial uses as well as business/commercial uses, in contrast to the Eclipse Development Plan which was entirely commercial.

Subsequent to a meeting held with the Kihei Community Association in the fall of 2013, a Traffic Impact Assessment Report (TIAR) was prepared by Phillip Rowell and Associates in June 2014 for the DEIS. Once the DEIS was published for comment, due to severe medical complications, Mr. Rowell was physically unable to complete his analysis and respond to the comments received on the DEIS and the Applicant elected to engage another consultant with the task of fully updating the TIAR and assisting with the responses to comments. The TIAR was updated in December 2016 by a new transportation consultant, SSFM International, which included revised estimated automobile trips generated by the project utilizing current traffic count data, input from the State DOT, and a further analysis of other proposed projects in south Maui.

The Project differs significantly from the Eclipse Development Plan, and is intended to create a vibrant regional and sub-regional center providing residential, light industrial, and commercial opportunities for local residents and visitors. Revenues generated by the Project will positively contribute to the County and State economies, and the Project will create employment opportunities.

The Project will provide a mix of uses permitted by the light industrial zoning, which are needed to address past and current growth trends in south Maui. Other examples on Maui of projects with similar community plan and zoning designations and similar uses include the Maui Marketplace, the Maui Business Park Phases I and II, the Kahului Industrial Complex, the Lahaina Business Park, the Lahaina Gateway, the Wailuku Industrial Park, and the Millyard industrial area in Wailuku. The Project site is zoned light industrial and



the proposed light industrial, business commercial and apartment uses are permitted uses within this designation.

The Project site is located within the KMCP plan area, and is designated for Light Industrial Use under the KMCP. Community plan land use (CPLU) designations are intended to depict what types of land uses are envisioned during the duration of the community plan. CPLU designations are intended to guide decision-making for changes in zoning, subdivisions, budgeting and capital improvements, and developments in the community plan area. CPLU designations do not provide, nor are they intended to provide an exclusive or complete lists of land uses allowed, nor do they provide specific development standards. On the other hand, zoning designations regulate land use, and zoning designations provide exclusive and complete lists of land uses and specific development standards.

Light Industrial is described in the KMCP as “warehousing, light assembly, service and craft-type industrial operations.” Although the KMCP describes light industrial in this manner, the County Planning Department has stated that “the County’s M-1 Light Industrial District is a tiered system allowing for businesses uses *in addition to light industrial uses.*” In support of this conclusion, the Planning Department issued a letter dated April 13, 2012, which provides direction as to the acceptability of the proposed uses for the Project. (See: Appendix S, “Dept. of Planning Letter dated April 13, 2012”)

In Appendix T of the FEIS a letter addressed to Mr. Charles Jencks from then Director of Planning Michael Foley addressing the question as to how transient accommodations with kitchens are found to be consistent with the relevant Community Plan land use designation of Hotel. This question was asked as it specifically related to the acquisition of land in Kaanapali upon which the Honua Kai project was constructed and completed. This letter from Mr. Foley restates the direction provided within Part I, Section A of the KMCP referenced above and expands the explanation as to community plan interpretation for permitted uses as follows:

“The community plan is a planning document which provides guidance for government actions and decision making. In addition, implementation of the goals, objectives and policies within a community plan are effectuated by various processes including zoning. Therefore, transient vacation uses with kitchens, i.e. single family dwellings, apartments, and apartment hotels, within the hotel zoning district are considered consistent with the community plan.” (See: Appendix T, “Dept. of Planning Letter dated July 18, 2003”)

In addition to the letter from Director Foley, please see the Deposition of Mr. Jeffrey Hunt, Director of the Department of Planning, dated January 23, 2007, in Appendix U of the FEIS. Mr. Hunt’s deposition references the previously mentioned letter from Director Foley specifically addressing the appropriate approach to interpreting community plans. (See: Appendix U, “Declaration of Director of Planning dated January 23, 2007”)



Project Parcels Owned by PPN/PPS

Parcel 16 is the northern portion of the project site and is 30.132 acres in size and is proposed for the conceptual plan reflects a mixture of uses including approximately 100,000 square feet of business commercial uses, 57,558 approximately 58,000 square feet of light industrial use, and multi-family, and public/quasi-public activities. Approximately 20 acres of Parcel 16 are proposed as shows a mix of light Industrial, business/commercial uses. This portion of the project will also provide vehicular, bicycle, and pedestrian connectivity within the project site and with neighboring parcels along Pi'ilani highway. The remaining acreage will be allocated for multi-family use and a MECO substation.

The proposed multi-family component ~~will consist of~~ reflects approximately 226 rental units with an approximately 2-acre private park space and necessary support infrastructure including, but not limited to, off-street parking, sewer, water, roadways, and sidewalks. The units will be a mix of one and two bedroom units, of which a portion will be rented at an affordable rate in compliance with the Maui County Residential Workforce Housing Ordinance.

The MECO substation will be located near the project boundary north of the multi-family housing component, in the northern sector of Parcel 16. (See: Figure 3 "Conceptual Site Plan")

Parcels 170 and 171 have a combined area of approximately 38 acres and make up the southern portion of the project site. The conceptual plan for this area will consist of reflects approximately 430,000 square feet of business/commercial uses including but not limited to retail, restaurants, and office space. This portion of the project will also provide vehicular, bicycle, and pedestrian connectivity within the project site and with neighboring parcels along Pi'ilani highway.

For the purposes of quantifying the potential impacts of development on these parcels, the conceptual project assumes 530,000 total square feet of business/commercial, 58,000 square feet of light industrial, and 226 apartment units to analyze the impacts. Actual future uses and locations of structures could vary, and occupants could be a variety of possible stores and users.

Development of the Pi'ilani Promenade is subject to MCC Chapter 19.36A, Off-street parking and loading, therefore the Applicant is required to provide adequate parking on-site in appropriate locations. The proposed apartments units will require a total of 2 parking stalls per unit to be located in close proximity to the units. The light industrial portion of the Project will require one parking stall for every 600 square feet of building, or 25% of the total lot coverage, whichever is greater. The business/commercial portion of the Pi'ilani Promenade will require one parking stall for every 500 square feet of building. This parking ratio could change due to the nature of a specific use, such as a restaurant which will require one parking stall for every 100 square feet of building. The



exact number of parking stalls for the project is unknown until the Applicant applies for building permits and a parking analysis is completed by the Zoning Administration and Enforcement Division to determine the required amount of parking stalls.

The Applicant will submit a comprehensive parking analysis to the Maui County Planning Department for review and approval upon acceptance by the LUC of this FEIS, upon issuance by the LUC of an order granting the Motion to Amend by the LUC, and upon the issuance of amended Findings of Fact, Conclusions of Law, and Decision and Order for the Project site.

Parcel 172 is the new East Kaonoulu Street (*aka*, Kaonoulu Street Extension, the first segment of the future Kihei Upcountry Highway) which will be constructed as a four (4) lane divided roadway providing access to the project from Pi'ilani Highway. The design of this roadway ~~will~~ includes designated bicycle lanes and pedestrian walkways which are separated from the street. (See: Figure 14 "Kaonoulu Street Section")

Currently, the re-routed Central Maui Water Transmission System waterline crosses Parcel 172 diagonally. In order to develop Parcel 172 as proposed, the Applicant proposes to re-route the waterline along the eastern property boundary of the Honua'ula Parcel and Parcel 172, where the waterline will make a ninety-degree turn and a new waterline will carry water under East Kaonoulu Street to Pi'ilani Highway, where it will connect with the existing system. (See: Appendix L "Preliminary Engineering Report")

Parcels 173 & 174 are road-widening lots along the *mauka* side Pi'ilani Highway, which are being provided for the construction of intersection improvements at Kaonoulu Street and Pi'ilani Highway.

Off-site Improvements (On parcels not owned by PPN/PPS)

Offsite infrastructure improvements include construction of a 1.0 million gallon, above-ground drinking water storage tank and transmission lines located *mauka* of the project site. Identified by TMK (2) 2-2-02: 077, the tank site is located on a 1.154 acre parcel owned by Kaonoulu Ranch and will be dedicated to the County of Maui upon completion. The transmission lines connecting the drinking water storage tank to the public water system will require an easement on Parcel (2) 2-2-02: portion of 082 which is owned by Kaonoulu Ranch.

A water well and storage tank for landscape irrigation will be constructed *mauka* of the project site. The offsite irrigation well and storage tank will require an easement of approximately 0.135 acres on TMK (2) 3-9-01: portion of 169 which is owned by Honua'ula Partners. (See: Figure 4 "Offsite Improvement Plan")



Portions of **Parcels 122 and 148** are road-widening lots along the *makai* side of Pi'ilani Highway, which are being provided for the construction of intersection improvements at Kaonoulu Street and Pi'ilani Highway.

Off-site Easements

In addition to the water tank transmission line easement, a 44-foot wide (1.119 acre) access and utility easement will be provided on the north and *mauka* side of the project site on TMK (2) 2-2-02: portion of 016 which is owned by Haleakala Ranch. The access easement ~~will~~ allows for utilities, vehicles and ~~future~~ bicycle and pedestrian connectivity from Ohukai Road to a point located to the north of the project site. (See: Figure 4 "Offsite Improvement Plan")

All known easements necessary for the on- and off-site improvements needed for the Project have been secured and finalized through the large lot subdivision process.

The current Project plan includes off-road pedestrian and bicycle routes along both East Kaonoulu Street as well as through an access easement from Ohukai Street to East Kaonoulu Street. Additionally, the Project includes a separate pedestrian/bicycle pathway running parallel to the Pi'ilani right of way within the project property as a preferred and safe route for south Maui residents traveling to and from the project area. With regard to the Kulanihakoi Gulch crossing, the project owner has offered to assist the State DOT in the design of a separate crossing facility located within the right of way and outside the roadway section for pedestrian and bicycle safety. All of the above proposed improvements are intended to facilitate safe walking and bicycling and to reduce the requirement for automobile use in order to access the development. (See: Figures 14 A "Piilani Hwy Existing Street Section" and 14B "Piilani Hwy Proposed Street Section")

F. DEVELOPMENT PHASING

It is anticipated that the Pi'ilani Promenade project will be constructed in ~~two (2)~~ three (3) phases upon receipt of LUC approval and as market conditions warrant.

~~Phase one is the Pi'ilani Promenade North development will include development of the northern developable lot (Parcel 16) which will include 100,000 square feet of business commercial uses, 226 rental apartment uses and 57,558 square feet of light industrial use.~~

Phase one (1) includes over \$22 million dollars in infrastructure improvements including construction of the future Kihei Upcountry Highway (KUH) through the project area, (Parcel 172) and improving the intersection of Kaonoulu and Pi'ilani Highway which provides access to the project. Phase one also includes construction of the 1.0 MG drinking



water tank, the relocation of the Maui County high pressure drinking water line, the irrigation (non-drinking water) well with pump and related utility and offsite easements.

Phase two (2) is the development of the northern developable lot (Parcel 16) which will include approximately 100,000 square feet of business commercial uses, 226 rental apartment uses and approximately 58,000 square feet of light industrial use development under roof on 5 acres of land.

Phase ~~two~~ three (3) is the development of the 2 southern parcels (Parcels 170 and 171) that will consist of 430,000 square feet of business commercial.

It is anticipated that all of the necessary entitlements to fully implement the Pi'ilani Promenade will be obtained ~~by~~ in the second quarter of 2016/2017 and construction for Phase 1 ~~and 2~~ is expected to be completed in 2018. Phase 2 and Phase 3 developments are market driven and the exact timing is unknown, however estimated full buildout of the proposed project by 2031 - 2032.

As requested by the LUC and the Office of Planning, Table 1.a below provides an estimated timeline for development and estimated construction cost for the proposed project. The estimated construction costs will be privately paid for by the Applicant, no public funds are being used to construct the proposed project.



Table No. 1a
Development Phasing Timeline with Cost Estimate

<u>Project</u>	<u>Estimated Cost</u>	<u>Estimated Start Date</u>	<u>Estimated Completion Date</u>
Phase 1			
<u>Site work Improvements</u>	<u>\$1,256,710.00</u>	<u>Upon approval of the Motion to Amend by the LUC</u>	<u>16 months after approval of the Motion to Amend by the LUC</u>
<u>East Kaonoulu Street Improvements</u>	<u>\$2,299,046.00</u>	"	"
<u>Pi'ilani Highway Widening Improvements</u>	<u>\$1,411,106.00</u>	"	"
<u>Access Road and Swales</u>	<u>\$1,771,330.00</u>	"	"
<u>Sewer System/Revisions</u>	<u>\$712,592.00</u>	"	"
<u>Storm Drainage System/Revisions</u>	<u>\$2,895,052.00</u>	"	"
<u>Onsite Water System</u>	<u>\$834,700.00</u>	"	"
<u>12" Offsite Water/1MG Water Tank</u>	<u>\$4,802,784.00</u>	"	"
<u>36" Water Main/Water/Misc. Revisions</u>	<u>\$2,444,940.00</u>	"	"
<u>Electrical</u>	<u>\$885,566.00</u>	"	"
<u>Traffic Signal Improvements</u>	<u>\$643,000.00</u>	"	"
<u>Landscape/Irrigation</u>	<u>\$1,202,000.00</u>	"	"
<u>CRM Walls</u>	<u>\$900,000.00</u>	"	"
Phase 2			
<u>Light Industrial</u>	<u>\$13,000,000</u>	<u>Prior to completion of Phase 1</u>	<u>15-16 months after commencing work</u>
<u>Business/Commercial</u>	<u>\$27,500,000</u>	"	"
<u>Apartments</u>	<u>\$33,500,000</u>	"	<u>12 to 13 months after commencing work</u>
Phase 3			
<u>Business/Commercial</u>	<u>\$118,250,000</u>	<u>Prior to completion of Phase 2, this portion of development is market driven</u>	<u>15-16 months after commencing work</u>



1. Alternatives

Under HAR Title 11, DOH, Chapter 200, EIS Rules, ~~Section 11-200-17(F)~~, a ~~Draft~~ Final EIS must contain a section discussing alternatives that could attain the project objectives, regardless of cost, in sufficient detail to explain why the specific alternative was rejected. Alternatives to the preferred Pi'ilani Promenade plan, along with reasons why each alternative was rejected, are described below.

Pi'ilani Promenade Objectives – Objectives of the Pi'ilani Promenade project are rooted in the desire to create a vibrant regional and sub-regional shopping experience for local residents and visitors, contribute to the Maui and State economies and ~~by~~ create employment opportunities. The proposed development plan will also foster a small residential community with connectivity to adjacent existing and future neighborhoods while contributing to Maui's economic diversity and social fabric.

The objectives of the project are to:

- Provide much needed residential rental housing in south Maui,
- Provide greater diversity and flexibility of business/commercial space to attract ~~both very~~ small and large-scale employers;
- Provide light industrial space for south Maui business,
- Provide restaurants, shops and other retail services to the local residents and visitors;
- Create jobs;
- Increase tax revenue to State and County;
- Provide housing within walking distance of employment; and
- Reduce the project's energy demand through conservation and energy efficient design.

Three (3) alternatives to the Preferred Alternative (Proposed Plan) were considered. These alternatives are discussed below.

2. No Action Alternative

Under the no action alternative, existing entitlements would remain and the property could be developed as a 123-lot commercial and light industrial subdivision within the Petition Area. Additionally, according to the Maui Island Plan, residential and commercial land uses are predominately segregated within the Kihei-Makena Community plan region. Mixed-use neighborhoods centers are needed to provide services and jobs within close proximity to where people live and provide a more efficient



land use pattern.¹ Under this alternative, the project would not satisfy the Maui Island Plan. The Applicant has determined that, based on current market conditions, the development of a 123-lot commercial and light industrial subdivision would not be economically feasible, and therefore, there exists a significant chance that the land would remain undeveloped under this alternative.

Under the no action alternative, there would be no rental ~~workforce~~-housing, including affordable units, infrastructure improvements, on-site recreational amenities, or opportunity to provide additional commercial ~~and office space in advance of demand~~ for south Maui as follows:

- ***Rental housing opportunities.*** The project will bring 226 multi-family rental units. Pricing for rental units is expected to be ~~largely~~ affordable for Maui Island residents in a market that is limited in supply of rental units.
- ***Opportunity to live within walking/biking distance of jobs, parks, shopping and schools.*** At build-out the Project will be located in close proximity to the future Kihei High School. The proposed residential units will be within a short 5-minute walk from on-site commercial uses and employment. The commercial uses will be easily accessible and the site will be designed to incorporate walking and bicycling connection to the existing residential neighborhood surrounding Ohukai Street. The proposed non-vehicular circulation at the proposed project site is in accordance with the goals and objectives of the Maui Island Plan.
- ***Parks and open space.*** The site plan proposes a 2 acre park and open space will be provided throughout the site between buildings including bicycle and pedestrian pathways. These areas will be accessible to the public in a manner that is not possible in the currently undeveloped condition.
- ***Infrastructure Improvements.*** Phase 1 of the proposed project will include constructing a portion of the KUH through the project area. The portion provided by the Applicant will included pedestrian and bicycle pathways separated from the roadway. In addition the project proposes constructing a 1.0 MG public water tank and providing land for a future MECO substation that will provide services to provide electricity for the project and future surrounding planned development. The access easement allows for utilities, vehicular and future bicycle and pedestrian connectivity from Ohukai Road to a point located to the north of the project site. In addition the project is providing an easement for future vehicular access to Ohukai Road to increase connectivity mauka of Pi'ilani Highway.

¹ Maui County General Plan 2030, Directed Growth Plan, 8-27.



- The Hallstrom Group completed an Economic Study with inventory of the Kihei Retail market and found that about ten percent of the total floor area in the community was vacant. However, the vacancies were either restaurant spaces (the least stable sector of the market) or in uncompetitive projects or locations (such as along Lipoa Road). All of the quality/competitive spaces along S. Kihei Road or in newer, modern centers were occupied. Over the past year numerous new leases have been signed and the vacancy rate in Kihei has dropped below seven percent. The economic report found that there is a lack of quality, modern, well-located inventory. Overall the Kihei retail market is strong, and performed better during the recession and recovery than most neighbor island sectors.
- The Maui Island Plan calls for the development of thousands of residential dwelling units in Kihei planned growth areas to address future demand for housing. Associated with that growth will be the need for light industrial space for future small businesses, commercial and office space to address this future growth.

The no action alternative would also deprive the State, County and general public of the significant economic benefits associated with the Pi'ilani Promenade, including an estimated:

- \$212 million in direct capital investment in the Maui economy during the build-out period;
- 878 "worker years" of direct on-site employment and \$66.5 million in total wages over a 12-15 year absorption period;
- 1,210 permanent jobs after build-out with an annual payroll of about \$36.6 million.
- \$2.3 billion base economic impact during build-out and \$348.7 million annually upon stabilization.
- \$210.7 million in net tax revenue (profit) during development and \$26 million per year to the State of Hawaii on an annualized basis thereafter.
- \$25.9 million in net tax revenue (profit) during the build-out period and \$2.2 million in annual net tax revenue (profit) to the County of Maui after the build-out period.
- Financing and Construction of a portion of the Kihei Upcountry Highway
- Financing and Construction of a 1.0 MG water tank

Potential benefits of the no action alternative would include: 1) no short-term construction-related impacts (such as construction noise, construction equipment exhaust emissions and fugitive dust); 2) avoidance of additional infrastructure demands (water, wastewater flows, and solid waste disposal); 3) ~~no~~ less increased Pi'ilani Highway traffic



impacts as a result of the project and associated infrastructure costs; and 4) less demand upon the region's coastal and inland parks and recreation facilities. The no action alternative would not add to regional population increases, or require any public services, such as parks and schools, to accommodate an increased population in the area.

For the following reasons, the no action alternative was rejected:

- Does not meet the objectives of the Maui Island Plan
- Would not address the current and future demand for residential, commercial, ~~office~~ and light industrial space needed for the future planned growth of south Maui;
- Would not provide local south Maui jobs, (temporary construction and permanent employees.)
- Would not provide south Maui residents with the opportunity for affordable rental housing.
- The 1.0 MG water tank and park would not be provided.
- Would not provide the first segment of the Kihei Upcountry Highway (KUH) and improvements to the intersection of Pi'ilani Highway and Kaonoulu Street.
- Would deny the entire region of many substantive benefits that would be implemented under the plan; and
- Would not provide the State, County and general public the significant economic benefits (tax revenue) associated with the implementation of the Pi'ilani Promenade.
- Does not meet the objectives of the Pi'ilani Promenade ownership;

In summary, the benefits associated with the no action alternative are far outweighed by the benefits to the community that the Proposed Project (Preferred Alternative) would bring.

3. No Residential Uses Alternative

An alternative to the proposed project (Preferred Alternative) could be to not allow rental residential uses in the Pi'ilani Promenade. However, this alternative would allow for the development of ~~additional~~ light industrial and business/commercial uses but eliminate ~~and foreclose on~~ the opportunity to develop a true mixed use project providing for housing and employment within close proximity. Under this alternative, business, retail and commercial uses, and support services, would be permitted.



Research of successful employment centers in other locations has shown that businesses and industries are attracted to locations offering a mix of uses, including commercial and residential and ~~workforce housing~~ opportunities. Rental residential development is an important component of the mixed use, complete community concept, and the Pi'ilani Promenade may not be as attractive to ~~future users or~~ investors without the rental units housing options proposed. Under this alternative, no affordable housing will be provided to address a critical demand for rental product on Maui or within walking and biking distance of employment, thus not utilizing "smart growth" and "neo-traditional" planning principles. With no residential component, there would be no proposed park space and there will be less construction ~~phase~~ employment associated with the development of the project Pi'ilani Promenade, providing fewer economic benefits to the region and Maui at large. Additionally, there could be less long-term employment should the project Pi'ilani Promenade be less successful than it would otherwise be with the residential component.

Potential benefits of the no residential alternative would include: 1) ~~avoidance~~ reduction of additional infrastructure demands (water, wastewater flows, and solid waste disposal); 2) ~~less~~ minimal demand upon the region's coastal and inland parks and recreation facilities. The no residential alternative would not add to regional population increases, or require public services, such as parks and schools, to accommodate ~~an increased~~ the small increase to population in the area.

For the following reasons, the no residential uses alternative was rejected:

- Would not provide a mixed-use type project.
- Would deny the entire region of many substantive infrastructure benefits including a park that would be implemented under the preferred alternative; and
- Would not provide Maui residents with the opportunity for affordable rental housing.
- Does not meet the objectives of the ownership Pi'ilani Promenade and Maui Island Plan;

In summary, the benefits associated with the no residential component alternative are far outweighed by the benefits to the community that the Proposed Project (Preferred Alternative) would bring.



4. Alternative Site

The final alternative considered is the Alternative Site option. This option would require that the owner/applicant find and develop another entitled property of a comparable size and location.

The positive impacts of the alternative site option are that in the short term ~~the existing project site would remain vacant and open and~~ the impacts of development will be felt in another location on Maui.

Potential benefits of the alternative site outside of Kihei including Wailea and Makena would include: 1) avoidance of additional infrastructure demands (water, wastewater flows, and solid waste disposal in Kihei); 2) slight reduction of future Kihei Upcountry Highway traffic impacts; and 3) less demand upon ~~the region's~~ Kihei's coastal and inland parks and recreation facilities. Depending upon location outside of south Maui, the alternative site option would not add to ~~regional~~ Kihei population increases, or require public services, such as parks and schools.

In the last few decades Kihei has become a significant urban center on the island of Maui; however a majority of businesses and retail services are located approximately 8 miles away in Kahului. Growth is planned for the Kihei area including a new high school and substantial residential development that will create need for jobs, services and retail/dining options for local residents and visitors, which the Pi'ilani Promenade could provide. The proposed project is located centrally within Kihei to provide jobs, services and housing to the existing and future residents and visitors of Kihei. If the project was relocated the residents of Kihei would not benefit from the opportunity to stay within Kihei rather than driving to Kahului.

For the following reasons, the alternative site option was rejected:

- Demand for police, fire, electrical and water services and roadway infrastructure would not change.
- Would not provide local south Maui jobs, (temporary construction and permanent employees.)
- Would not provide south Maui residents with the opportunity for affordable rental housing or local commercial and dining options.
- The 1.0 MG water tank, park and MECO substation would not be provided.
- Would not provide the first segment of the Kihei Upcountry Highway (KUH) and improvements to the intersection of Pi'ilani Highway and Kaonoulu Street.



- Does not meet the objectives of the ownership Pi'ilani Promenade and Maui Island Plan;

In summary, the benefits associated with the alternative site option are far outweighed by the benefits to the community that the Proposed Project (Preferred Alternative) would bring.

As requested by the Land Use Commission and the Office of Planning the table below provides an estimated timeline for Entitlements and other permit approvals in order to construct the proposed project.

G. ENTITLEMENTS AND APPROVALS

Table No. 1b Estimated Entitlements and Approvals

<u>Permit / Approval Required</u>	<u>Responsible Authority</u>	<u>Projected Submittal Date</u>
<u>Order Granting Motion for Order Amending the Findings of Fact, Conclusions of Law, and Decision and Order dated February 10, 1995</u>	<u>LUC</u>	<u>Pending</u>
<u>HRS Chapter 343 Compliance, Approval of FEIS</u>	<u>LUC</u>	<u>June 2017; Approval July 2017</u>
<u>Jurisdictional Determination</u>	<u>Army Corps of Engineers</u>	<u>2017</u>
<u>Grading and Grubbing Permit</u>	<u>Maui County, Public Works, Development Services Administration</u>	<u>2017</u>
<u>NPDES Permit</u>	<u>State of Hawaii, DOH</u>	<u>2017</u>
<u>Air Pollution Control Permit</u>	<u>State of Hawaii, DOH</u>	<u>2017</u>
<u>Community Noise Permit</u>	<u>State of Hawaii, DOH</u>	<u>2017</u>



<u>Permit / Approval Required</u>	<u>Responsible Authority</u>	<u>Projected Submittal Date</u>
<u>Drainage Approval</u>	<u>DPW Engineering Division, and State DOT</u>	<u>2017</u>
<u>Permit to Perform Work Within the State ROW</u>	<u>State DOT</u>	<u>2017</u>
<u>Easements for Utilities and Roadways</u>	<u>Various</u>	<u>2017</u>
<u>Wastewater Discharge (Hookup) Permit</u>	<u>Maui County, Department of Environmental Management, Wastewater Division</u>	<u>2017</u>
<u>Building Permits</u>	<u>Maui County, Public Works, Development Services Administration</u>	<u>2017-2018</u>

H. POTENTIAL IMPACTS AND MITIGATION MEASURES

At the request of the LUC, the following section has been provided to identify the potential impact and the corresponding mitigation measure(s). The basis for why a particular measure was selected and the timing of its implementation in the process should be described here as should the proposed provisions to ensure that each measure will be undertaken.



1. TOPOGRAPHY AND SOILS

Potential Impact: Potential impacts to the land form include routing Drainageway "A" to the future East Kaonoulu Street right of way as part of the overall drainage system. Additional impacts may include soil erosion and the generation of dust during construction. Clearing and grubbing activities will temporarily disturb the soil retention values of the existing vegetation and expose soils to erosion forces. Some wind erosion of soils could occur without a proper watering and re-vegetation program.

Mitigation Measures: As part of the overall drainage master plan, Drainageway "A" will be routed to the East Kaonoulu Street right of way with no increase in flow and will terminate at the existing culverts routing the system under and *makai* of the Pi'ilani Highway. This change will not increase the quantity of drainage water traveling through this system or downstream.

During site preparation, storm runoff from the site will be controlled in accordance with the County's "Soil Erosion and Sediment Control Standards". Typical mitigation measures include appropriately stockpiling materials on the site to prevent runoff, temporary detention, and commencing building construction and/or establishing landscaping as early as possible in order to minimize the length of exposure of disturbed soils. After construction, the establishment of a permanent stormwater system and landscaping will provide additional long-term erosion control.

Why Mitigation Measures were selected: Drainageway "A" is proposed to be routed underground to the East Kaonoulu right of way as part of the drainage system improvements in order to accommodate the grade changes necessary for East Kaonoulu Street and develop the property as proposed. Maui County's "Soil Erosion and Sediment Control Standards" are the recommended mitigation measures for site preparation and stormwater runoff prevention.

Timing of Implementing Mitigation Measures: The proposed mitigation measures will be implemented during Phase 1 site work which will begin upon approval of the Motion to Amend by the LUC.

Provision to ensure that each measure will be undertaken: Construction activities on the property will comply with all applicable Federal, State, and County regulations and rules for erosion and sediment control. Prior to the issuance of a grading permit, a final erosion control plan and best management practices will be submitted to the County of Maui for review and approval. All construction activities will comply with the provisions of Chapter 11-60.1, Hawaii Administrative Rules (HAR), Section 11-60.1-33, pertaining to Fugitive Dust.



2. NOISE QUALITY

Potential Impact: The Acoustic Study reports that the proposed extension of Kaonoulu Street mauka of Piilani Highway will increase the existing background ambient noise levels along the center portion of the Project site. Through project build-out in CY 2032, noise levels at the Project's planned residential buildings fronting Kaonoulu Street should not exceed the 65 DNL federal standard or the State DOT 66 Leq noise abatement criteria, as long as the residential buildings are located at least 51 feet from the centerline of Kaonoulu Street.

Mitigation Measures: Based on the best available traffic forecasts available for future conditions following completion of the Upcountry Highway, a setback distance of 70 feet from the centerline of Kaonoulu Street is required for 65 DNL and 66 Leq to not be exceeded at these residential buildings. The Project site will be designed such that rental residential uses within the Project are located at adequate setback distances from the future Kihei Upcountry Highway to eliminate the need for traffic noise mitigation measures. The Applicant will inform future residents of the potential for high noise levels due to existing light industrial activities adjacent to the northern corner of the Project site.

Why Mitigation Measures were selected: This mitigation measure of providing an ample setback from the roadway was selected in lieu of constructing a sound attenuating wall along the Kihei Upcountry Highway to reduce noise impacts to residences.

Timing of Implementing Mitigation Measures: DOH Community Noise Permit will be applied for upon approval of the Motion to Amend by the LUC and prior to the start of Phase 1 site work. The construction of the residential units is proposed as part of Phase 2.

Provision to ensure that each measure will be undertaken: The project will comply with State Department of Health noise regulations for construction activities. As stipulated by DOH permit requirements, noise-generating construction activities are not allowed on Sundays and holidays, during the early morning, and during the late evening and nighttime periods.

3. ARCHAEOLOGICAL RESOURCES

Potential Impact: Loss of historical sites identified on the property.

Mitigation Measures: Preparation of an Archaeological Data Recovery Plan and Archaeological Monitoring Plan.

Why Mitigation Measures were selected: The plans were recommended by the SHPD.



Timing of Implementing Mitigation Measures: The Archaeological Data Recovery Plan was received by the SHPD on June 17, 2016 and is under review. Prior to ground disturbing activities a project specific Archaeological Monitoring Plan will be prepared following the results of SHPD's review of the Data Recovery Plan.

Provision to ensure that each measure will be undertaken: DLNR, SHPD has required a preservation plan and Archeological monitoring plan per the AIS acceptance letter dated January 6, 2016.

4. GROUNDWATER RESOURCES

Potential Impact: Hydrologic impact to the Iao Aquifer from withdrawal of 171,000 gpd of drinking water and impact to the Kamaole Aquifer from withdrawal of 81,000 gpd of non-drinking water for irrigation.

Mitigation Measures: The CWRM estimates that 0.421 MGD of groundwater can be allocated within the Iao Aquifer System. The Piilani Promenade drinking water demand is expected to withdraw 171,000 gpd, and can be accommodated within the remaining 0.421 MGD of available groundwater. This limited amount of water is not anticipated to significantly impact the Iao Aquifer from recharging.

The CWRM approved an irrigation well permit for a well built in 2011 at a wellhead elevation of 118 feet. The well has the capacity to produce 216,000 gpd of non-drinking water from the Kamaole Aquifer, and a permanent pump with an additional capacity of 150 gpm has since been installed, but is not currently in use. In addition, the Applicant is required to provide for a future connection to the County reclaimed water system that would eliminate the need for the brackish irrigation well.

Why Mitigation Measures were selected: Three 3-inch domestic water meters have been approved by the County DWS and are available for the Project. The issuance of water meters for the Project by the DWS carries the implicit approval by the DWS of Piilani Promenade's use of the Iao Aquifer System for drinking water.

The irrigation well was approved, and when the Maui County reclaimed water system is expanded to the Project site, the Applicant will connect to the system in compliance with the condition imposed by the County in connection with obtaining the current zoning designation.

Timing of Implementing Mitigation Measures: The domestic water meters will connect to the County water system during Phase 1. The irrigation well will be utilized during Phase 1 site work and there is no established timetable for connection to the County reclaimed water system.

Provision to ensure that each measure will be undertaken: The Applicant is required to provide for a future connection to the County reclaimed water system is a condition of County zoning for



this project (Ordinance 2772, May 25, 1999). In the future, connecting the Project to the reclaimed water system will eliminate the need for the brackish irrigation well.

5. RECREATION FACILITIES

Potential Impact: Incremental impact that new development places upon the region's park facilities.

Mitigation Measures: The Pi'ilani Promenade is anticipated to positively impact recreational facilities by providing an approximately 2-acre park site adjacent to the proposed 226 apartments.

The Applicant met with the County Department of Parks & Recreation on March 13, 2015 to discuss how the parks and playgrounds assessment requirements for the proposed Pi'ilani Promenade can be satisfied in accordance with MCC Section 18.16.320. As a result of the meeting, the Applicant is proposing the following general changes to the on-site park space:

1. Inclusion of active play space and facilities within the park areas;
2. Inclusion of parking for park users; and
3. Possible reconfiguration of the park acreage to create a more contiguous park area.

Additionally, improvements are being made to accommodate pedestrian and bicycle travel adjacent to and within the Project. Recognizing that the availability of existing off-street pedestrian and bike pathways is limited in south Maui, and that there is a need for projects to offer options other than vehicular access, the Pi'ilani Promenade includes a pedestrian and bike pathway system adjacent to and within the Project site, as shown in Figure 15 "Conceptual Circulation Plan". The red bike lane shown in Figure 15 is located within the Pi'ilani Highway right of way. The blue system shown provides for a series of pedestrian and bike pathways with the Project site and East Kaonoulu Road allowing for safe off street interconnectivity for the public using the various components of the land plan and providing for future connectivity to the areas north, south and east of the Project site.

Why Mitigation Measures were selected: The requirements for Parks and Playgrounds, pursuant to MCC Section 18.16.320, are required by the County of Maui.

Timing of Implementing Mitigation Measures: The Applicant proposes to construct the park space in conjunction with the multi-family units as part of Phase 2 development.

Provision to ensure that each measure will be undertaken: The Applicant will comply with the requirements for Parks and Playgrounds, pursuant to MCC Section 18.16.320. The park assessment requirements are designed to mitigate the incremental impact that new development places upon the region's park facilities.



6. SCHOOLS

Potential Impact: Increase in student population

Mitigation Measures: Payment of the DOE school impact fee to contribute to future South Maui school facilities.

Why Mitigation Measures were selected: The Project site is not a preferred location for a school site, therefore the contribution of a fee is anticipated.

Timing of Implementing Mitigation Measures: Upon approval of the Motion to Amend by the LUC and prior to grading or building permits for Phase 2 and 3 developments.

Provision to ensure that each measure will be undertaken: In 2007, the Hawaii Legislature enacted Act 245 as Section 302A, HRS, "School Impact Fees".

7. ROADWAYS

Potential Impact: The Project will generate 564 new trips during the morning peak hour, 2,482 new trips during the afternoon peak hour and 2,651 new trips during the Saturday peak hour.

Mitigation Measures: Consistent with previously approved subdivision plans for the Project site, the TIAR recommends the following mitigation measures to be constructed by the Applicant at the intersection of Piilani Highway and Kaonoulu Street as part of the Piilani Promenade:

- Install traffic signals and striped pedestrian crosswalks across Pi'ilani Highway.
- Southbound approach will have double left turn lanes, two through lanes, and a channelized right turn lane.
- Northbound approach will have a dedicated left turn lane, two through lanes, and a channelized right turn lane.
- Eastbound approach will have a left turn lane, a through lane, and a channelized right turn lane.
- Westbound approach will have dual left turn lanes, a through lane and channelized right turn lane with an acceleration lane.
- The Project also includes the construction of a shared-use pedestrian and bike path along the mauka-side of Pi'ilani Highway, adjacent to the Project and within the Project site, in addition to bike lanes on Pi'ilani Highway.

Why Mitigation Measures were selected: Recommendations of the TIAR.

Timing of Implementing Mitigation Measures: Upon approval of the Motion to Amend by the LUC.



Provision to ensure that each measure will be undertaken: TIAR with mitigations will be approved by the DOT.

8. DRAINAGE

Potential Impact: Hydrologic impact on downstream properties.

Mitigation Measures: Surface runoff generated by Pi'ilani Promenade's buildings and pavement will be directed to drain inlets located throughout the development and then conveyed to stormwater detention facilities (by underground drainlines) in order to provide peak flow mitigation. Underground detention chambers located on the southern portion of the Project site and an open detention pond located in the northern portion of the Project site will provide a combined storage capacity of 7.6 acre-feet and will limit downstream stormwater discharges to a peak flow rate that does not exceed pre-development levels. Once the stormwater detention facilities are in place, the hydrologic impact on downstream properties resulting from the proposed development of Pi'ilani Promenade will be negligible because the pre-development peak flow is the same as the post-development peak flow.

Why Mitigation Measures were selected: Compliance with County engineering standards and the recommendation of the Project Civil Engineering Preliminary Drainage Report.

Timing of Implementing Mitigation Measures: Upon approval of the Motion to Amend by the LUC.

Provision to ensure that each measure will be undertaken: The drainage system is required to be built in compliance with Maui County's Drainage Rules.

9. WATER

Potential Impact: The Project is estimated to consume on average of 252,000 gpd at full build-out, including 171,000 gpd of drinking water for domestic uses.

Mitigation Measures: The proposed Project will connect to the existing County water system for drinking water. At the request of the DWS, the Applicant agreed to construct a 1.0 MG water storage tank to serve the future needs of the Project and South Maui. Three 3-inch domestic water meters have been approved and are available for the Project. The combined flow capacity of these meters is 1,050 gpm, which exceeds the approximately 600 gpm of required flow capacity for the Project. Therefore, there will be adequate flow capacity to build out the Project. Consequently, no additional drinking water sources beyond the County-issued water meters are anticipated in order to construct and operate the Pi'ilani Promenade.



Why Mitigation Measures were selected: Consultation with DWS led to the request for construction of the 1.0 MG water tank as an alternative to source development. Additionally, the 1.0 MG water tank is part of the previously approved subdivision plans.

Timing of Implementing Mitigation Measures: 1 MG water tank and other water related infrastructure will occur during Phase 1 upon approval of the Motion to Amend by the LUC.

Provision to ensure that each measure will be undertaken: As part of the final subdivision approval for the project site the required drinking water improvements are listed.

10. RELOCATION OF COUNTY WATERLINE

Potential Impact: Relocating the 36-inch diameter high pressure waterline could disrupt water service during improvement work.

Mitigation Measures: Previously approved DWS construction plans for the relocation work include a bypass line, comprehensive site preparation work, and disconnect/connection during non-peak hours.

Why Mitigation Measures were selected: The current location of the County line crosses diagonally through Project site, restricting use of land over water line alignment. The proposed high pressure waterline relocation was coordinated with the DWS and the construction plans have been approved.

Timing of Implementing Mitigation Measures: Waterline relocation will occur in Phase 1, upon approval of the Motion to Amend by the LUC.

Provision to ensure that each measure will be undertaken: The proposed high pressure waterline relocation has been approved by the Department of Water Supply (DWS) and will be constructed in accordance with the rules and regulation of the department.

11. SOLID WASTE

Potential Impact: Solid Waste generated from the Project will contribute towards the use of the Central Maui Landfill.

Mitigation Measures: A solid waste management plan will be coordinated with the County Solid Waste Division for the disposal of onsite and construction-related waste material. The Applicant will work with the Project contractor to minimize the amount of solid waste generated during construction. In addition, the Project will provide on-site recycling opportunities in an effort to reduce solid waste entering the landfill. The County Solid Waste Division anticipates that



additional phases of the Central Maui Landfill will be developed as needed to accommodate future waste, including waste generated by the Project.

Why Mitigation Measures were selected: A solid waste management plan is the recommended for construction projects. Providing the on-site recycling opportunities within the Pi'ilani Promenade site is a measure that will support waste diversion.

Timing of Implementing Mitigation Measures: Solid waste will be an ongoing impact of the project and the solid waste management plan will be implanted at the start of construction which is expected to begin upon approval of the Motion to Amend by the LUC.

Provision to ensure that each measure will be undertaken: The Applicant is required to comply with the rules of the County of Maui Department of the Environmental Management as it relates to solid waste.

12. WASTE WATER

Potential Impact: Development of the Project will generate 114,000 gpd of wastewater.

Mitigation Measures: The Applicant will pay the Regional Wastewater Treatment System Facility Expansion Assessment Fee for treatment plant expansion, which is currently assessed at \$4.65 per gallon of Project flow. The Pi'ilani Promenade will be assessed approximately \$530,100 for the 114,000 gpd of anticipated wastewater flow. The Project will connect to the existing County sewer system.

Why Mitigation Measures were selected: The Regional Wastewater Treatment System Facility Expansion Assessment Fee is required by the Department of Environmental Management.

Timing of Implementing Mitigation Measures: Sewer systems improvements are proposed as part of Phase 1 and would start upon approval of the Motion to Amend by the LUC.

Provision to ensure that each measure will be undertaken: The Wastewater Reclamation Division of the Maui Department of Environmental Management reports that available capacity at the KWWR is approximately 4.6 million-gallons-per-day (mgd) of out 8.0 mgd total treatment capacity based on measured average daily flows. As such, there should be ample treatment capacity available to accommodate the 114,000 gallon (0.1 mgd) daily wastewater flow which the Pi'ilani Promenade project is expected to generate at full development.



13. ELECTRICAL

Potential Impact: MECO has advised that the existing 12 kV system, based on current electrical use growth projections, does not have sufficient spare capacity to accommodate the estimated 6,250 kVA of load required by the current Pi'ilani Promenade development plan.

Mitigation Measures: MECO is planning a new substation to provide the additional capacity needed to accommodate further growth in the Kihei and South Maui area.

Why Mitigation Measures were selected: The need for a substation in this area of Kihei was a requirement of MECO to continue to provide electrical needs the growth in the Kihei and south Maui areas.

Timing of Implementing Mitigation Measures: MECO plans to have the substation built by the fall of 2017.

Provision to ensure that each measure will be undertaken: MECO is moving forward to construct the substation and has informed the LUC that MECO intends to apply for and obtain all necessary permits to complete the substation by the fall of 2017.



III. AFFECTED ENVIRONMENT, POTENTIAL IMPACTS AND MITIGATION MEASURES

A. PHYSICAL ENVIRONMENT

1. Surrounding Land Uses

Existing Conditions. The project area is located in the State Urban District (See: Figure 5. "State Land Use Map") and is zoned for M-1, Light Industrial uses (See: Figure 6 "Maui County Zoning Map"). The site is designated for Light Industrial (LI) purposes by the Kihei-Makena Community Plan (See: Figure 7, "Kihei-Makena Community Plan Map") and is intended for future urban development.

The project site is proximate to existing urban development in the area including a light industrial-zoned complex situated on State Urban District lands to the north of the site which include uses predominately commercial in nature, including includes a self-storage facility, a gasoline filling stations, and an automobile sales lot. ~~business/commercial enterprises.~~

On the *mauka* or eastern side of the property are commercial agricultural uses and ranch lands which extend to Lower Kula. Kulanihakoi Gulch, a vacant parcel, and the future Kihei High School lie to the south of the project site. Lands *makai* (west) of the project site include Pi'ilani Highway, the Kaonoulu Estates residential subdivision, the Maui Lu Resort, and South Kihei Road.

In addition to land uses adjacent to the site, their State land use, zoning, and community plan designations are summarized below:

North:	<u>Community Plan:</u> Light Industrial, Rural, Single Family and Agriculture <u>State Land Use:</u> Urban <u>Zoning:</u> Light Industrial, Agricultural <u>Maui Island Plan:</u> Urban Growth Boundary <u>Existing Uses:</u> Predominately commercial uses, including a Gasoline Station, and an automobile sales lot Light Industrial/commercial
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South:	<u>Community Plan:</u> Agriculture, <u>Public- Quasi-Public</u> <u>State Land Use:</u> Agricultural, Urban <u>Zoning:</u> Agricultural <u>Maui Island Plan:</u> <u>Urban Growth Boundary</u> Existing Uses: Kulanihakoi Gulch, <u>proposed</u> Kihei High School site
East:	<u>Community Plan:</u> Agriculture <u>State Land Use:</u> Agricultural <u>Zoning:</u> Agricultural <u>Maui Island Plan:</u> <u>Urban Growth Boundary</u> Existing Uses: Commercial agricultural uses and Kaonoulu Ranch Lands
West:	<u>Community Plan:</u> Single-Family, Business and Multi-Family <u>State Land Use:</u> Urban <u>Zoning:</u> A-1 Apartment, R-1 & R-2 Residential <u>Maui Island Plan:</u> <u>Urban Growth Boundary</u> Existing Uses: Kaonoulu Estates Single-Family Residential subdivision <u>and future Kenolio Apartments</u>

Potential Impacts and Mitigation Measures. The project area is designated for M-1, Light Industrial uses and Light Industrial (LI) purposes by Maui County zoning code and the Kihei-Makena Community Plan, respectively, and has thus been designated for future urban development.

To the east or *mauka* of the site lie Kaonoulu Ranch lands which are currently used for grazing purposes. Proper livestock fencing along the property boundary will ensure that grazing animals are kept separate from the site. The development of the Pi'ilani Promenade will include the construction of a 1.0 MG water tank on approximately one (1) acre of land that will require use of existing Kaonoulu Ranch lands. The water tank will be fenced and will not impact mauka grazing lands.

The proposed conceptual development ~~would~~ will include a variety of uses including light industrial, multi-family housing, ~~commercial~~, office, retail and restaurants.



The development of the site is not expected to have a significant impact on the existing land uses adjacent to and *makai* of the site.

The proposed development will not ~~impact or~~ increase discharge of stormwater runoff into the Kulanihakoi Gulch. The proposed drainage system will retain any increase in runoff as a result of the proposed development. ~~and~~ The Project would provide additional multi-family housing in close proximity to the planned Kihei High School. The Project is also providing land for a MECO substation and the 1.0 MG water storage tank.

As previously mentioned the lands *makai* and across the highway from the project site include Kaonoulu Estates, a mixture of single and multi-family residential development. The Pi'ilani Promenade will help achieve and sustain the County's goal of creating greater economic diversification while ensuring that housing and support services are in close proximity to jobs. The uses proposed for the Pi'ilani Promenade are compatible with other lands uses within the State Urban District.

2. Topography and Soils

Existing Conditions. The project site is *mauka* of Pi'ilani Highway and lies in an area of Kihei that is currently undeveloped and is characterized by pasture land with ~~minimal~~ seasonal vegetation.

Elevations across the project area range from approximately 123 feet above Mean Sea Level (MSL) at the mauka (East) property boundary to approximately 30 feet MSL along the property's Pi'ilani Highway frontage. The project site has an average slope of 4 percent and includes an unnamed natural drainageway (Drainageway "A") that runs in a northeast-to-southwest direction across the site before converging with the main stem of Kulanihakoi Gulch *makai* of Pi'ilani Highway. The offsite 1.0 MG water tank is located 234 feet above Mean Sea Level (MSL). The Applicant received comments on the DEIS incorrectly stating that Drainageway "A" is named the "Ka`ono`ulu Gulch". While there is a Ka`ono`ulu Gulch on the Island of Maui, it is located significantly mauka and south of the Project site. (See: Figures 20 & 21, "USGS MAP 1923" & "USGS MAP 1983").

As described in the *Soil Survey of the Islands of Kauai, Oahu, Maui, Molokai, and Lanai, State of Hawaii*, two (2) different soil types underlie the subject property (See: Figure 9, "Soils Map"). "Waiakoa extremely stony silty clay loam", 3 to 25 percent slopes, eroded (WID2), is characterized by medium runoff and severe erosion hazard if left exposed, with at least half the surface layer eroded in most areas. The southwestern portion of the property may contain Alae sandy loam, 3 to 7 percent slopes (AaB). Alae Series soil consists of



excessively drained soils on alluvial fans on the island of Maui. These soils developed in volcanic ash and recent alluvium derived from basic igneous rock. Runoff is slow and the erosion hazard is slight.

Potential Impacts and Mitigation Measures. The development of the Pi'ilani Promenade will require site grading for the project's buildings and infrastructure and to create a roadway for the future KUH. The project Civil Engineer will update the grading plan for the ~~project~~ building sites as the conceptual site plans are ~~is~~ refined and building pad locations are identified.

Drainageway "A" will be routed to the East Kaonoulu Street right of way with no increase in downstream flow and will terminate at the existing culverts routing the system under and makai of the Pi'ilani Highway. This change will not increase the quantity of drainage water traveling through this system or downstream.

The Army Corps of Engineers conducted a site visit in January 2017 and staff is currently reviewing site plans to provide a jurisdictional determination to determine that there are no waters of the U.S. located on the Project site. The Applicant expects this determination in 2017.

During site preparation, storm runoff from the site will be controlled in accordance with the County's "Soil Erosion and Sediment Control Standards". Typical mitigation measures include appropriately stockpiling materials on the site to prevent runoff, and commencing building construction and/or establishing landscaping as early as possible in order to minimize the length of exposure of disturbed soils.

Potential impacts to the land form include ~~the~~ soil erosion and the generation of dust during construction. Clearing and grubbing activities will temporarily disturb the soil retention values of the existing vegetation and expose soils to erosion forces. Some wind erosion of soils could occur without a proper watering and re-vegetation program.

Measures taken to control erosion during the site development period may include, but are not limited to:

- Minimizing the time of construction;
- Retaining existing ground cover as long as possible;
- Constructing drainage control features early, such as silt screens, temporary berms and cut-off ditches;
- Using temporary area sprinklers in non-active construction areas when ground cover is removed;



- Providing a water truck on-site during the construction period to provide for immediate sprinkling as needed;
- Using temporary berms and cut-off ditches, where needed, for control of erosion;
- Watering graded areas when construction activity for each day has ceased;
- Grassing or planting all cut and fill slopes immediately after grading work has been completed; and
- Installing silt screens where appropriate.

Construction activities on the property will comply with all applicable Federal, State, and County regulations and rules for erosion and sediment control. Prior to the issuance of a grading permit, a final erosion control plan and best management practices will be submitted to the County of Maui for review and approval. All construction activities will comply with the provisions of Chapter 11-60.1, Hawaii Administrative Rules (HAR), Section 11-60.1-33, pertaining to Fugitive Dust.

After construction, the establishment of a permanent stormwater system and landscaping will provide additional long-term erosion control. The existing irrigation water well will provide irrigation water for landscaping. In the future the project site will have access to the Maui County reclaimed water line to provide landscape irrigation.

The Hawaii CZM Program and the DOH developed the Hawai'i Watershed Guidance (the "Guidance"), which contains guidelines to facilitate watershed management. The Guidance includes management measures designed to control runoff from six main sources, including urban areas. The Project site is designated "Urban" on the State Land Use Classification map, and thus, the urban area management measures are applicable to the development of the Project.

Chapter 5.3 of the Guidance identifies twelve (12) management measures that apply to urban areas. These management measures are applied to control urban runoff and treat associated pollutants generated from new development, redevelopment, and new and relocated roads, highways and bridges.

1. New Development
2. Watershed Protection
3. Site Development
4. Existing Development
5. New Onsite disposal systems
6. Operating Onsite disposal system
7. Pollution Prevention
8. Golf Course maintenance
9. Planning, Siting and Development of Roads and Highways
10. Bridges
11. Operation and Maintenance, Roads and Highways



12. Runoff systems for Roads, Highways and Bridges

1. New Development

Management Measure 1. “By design or performance: (a) construction has been completed and the site is permanently stabilized, to reduce the average annual total suspended solid (TSS) loadings by 80%. For the purposes of this measure, an 80% TSS reduction is to be determined on an average annual basis, or (b) reduce the post development loadings of TSS so that the average annual TSS loadings are no greater than predevelopment loadings.”

Analysis: In addition to the foregoing management measure, the County also requires the implementation of water quality control measures to reduce water pollution from stormwater runoff. In satisfaction of the Guidance management measures and the County requirements, the Project design incorporates both “flow through” and “detention based” treatments to mitigate stormwater-related water pollution associated with the Project site. “Flow through” treatment will be achieved by outfitting parking lot drain inlets with filters capable of removing up to 80 percent of Total Suspended Solids. “Detention based” treatment will be provided by providing additional storage volume in the subsurface detention chambers and surface detention pond to facilitate sediment removal in addition to peak flow mitigation.

Management Measure 2. “To the extent practicable, maintain post development peak runoff rate and average volume at levels that are similar to predevelopment levels.”

Analysis: Warren S. Unemori Engineering, Inc. has prepared a drainage plan to mitigate surface runoff caused by seasonal storm events, and which will ensure that, to the extent practicable, the post development peak runoff rate and average storm flow volume generated at the Project site, after mitigation measures are implemented, will be maintained at levels that are similar to predevelopment levels, which are equal to or less than 85 cfs. The Project site will be designed retain any increase, if any, in post development runoff generated by development, consistent with County of Maui regulations.

2. Watershed Protection

Management Measure. “Develop a watershed protection program to: 1. Avoid conversion, to the extent practicable, of areas that are particularly susceptible to erosion and sediment loss; 2. Preserve areas that provide important water quality benefits and/or are necessary to maintain riparian and aquatic biota; and 3. Site development, including roads, highways, and bridges, to protect to the extent practicable the natural integrity of waterbodies and natural drainage systems.

Analysis: As noted in the “Description” discussion of this management measure, “[t]his measure is intended to provide general goals for States and local governments to use in



developing comprehensive programs for guiding future development and land use activities in a manner that will prevent and mitigate the effects of non-point pollution.” Because the Applicant is not a State or local government entity, this management measure is inapplicable. However, the Applicant supports the goals of reducing the generation of nonpoint source pollutants and mitigating the impacts of urban runoff and associated pollutants that result from new development.

3. Site Development

Management Measure. “Plan, design, and develop sites to: 1. Protect areas that provide important water quality benefits and/or are particularly susceptible to erosion and sediment loss; 2. Limit increases of impervious areas, except where necessary; 3. Limit land disturbance activities such as clearing and grading, and cut and fill to reduce erosion and sediment loss; and 4. Limit disturbance of natural drainage features and vegetation.”

Analysis: The Project has been designed to incorporate a permanent stormwater system that will include onsite surface and subsurface drainage basins or chambers. In addition, to protect the Project site, the Project design will incorporate landscaping to provide long-term erosion control.

Construction activities on the Project site will comply with all applicable Federal, State, and County regulations and rules for erosion and sediment control. Prior to the issuance of a grading permit, a final erosion control plan and best management practices will be submitted to the County for review and approval.

In addition, development of the Project will comply with the condition of the 1995 Decision and Order, which requires that the Applicant fund the design and construction of its pro-rata share of drainage improvements required as a result of the development of the Project site, including oil water separators and other filters as appropriate, and other BMPs as necessary to minimize non-point source pollution. The Applicant understands that all Project-related water discharges must comply with the State’s Water Quality Standards, which are set forth in Chapter 11-54, HAR.

BMPs prepared in accordance with MCC Chapter 20.08 (*Soil Erosion and Sedimentation Control*) will be submitted to the DPW for review and approval prior to the issuance of grubbing and grading permits. In addition, an NPDES permit will be obtained from the DOH’s Clean Water Branch for the discharge of storm water associated with construction activities. The Applicant will meet all of the requirements set forth by the DOH’s Clean Water Branch.



4. Existing Development

Management Measure. “Develop and implement watershed management programs to reduce runoff pollutant concentrations and volumes from existing development: 1. Identify priority local and/or regional watershed pollutant reduction opportunities, e.g., improvements to existing urban runoff control structures; 2. Contain a schedule for implementing appropriate controls; 3. Limit destruction of natural conveyance systems; and 4. Where appropriate, preserve, enhance, or establish buffers along surface waterbodies and their tributaries.”

Analysis: There is no existing development on the Project site; thus, this management measure is not applicable to the Project. However, as part of the development plans, the Project site will be designed to contain drain inlets, stormwater detention facilities, and underground drain lines to provide peak flow mitigation. These drainage systems present reduction opportunities and appropriate controls to reduce runoff pollutant concentrations and volumes from the proposed development.

5. New Onsite Disposal Systems

Management Measure 1. “Ensure that new Onsite Disposal Systems (OSDS) are located, designed, installed, operated, inspected, and maintained to prevent the discharge of pollutants to the surface of the ground and to the extent practicable reduce the discharge of pollutants into ground waters that are closely hydrologically connected to surface waters. Where necessary to meet these objectives: (a) discourage the installation of garbage disposals to reduce hydraulic and nutrient loadings; and (b) where low-volume plumbing fixtures have not been installed in new developments or redevelopments, reduce total hydraulic loadings to the OSDS by 25%. Implement OSDS inspection schedules for preconstruction, construction, and post-construction.

Management Measure 2. “Direct placement of OSDS away from unsuitable areas. Where OSDS placement away from unsuitable areas is not practicable, ensure that the OSDS is designed or sited at a density so as not to adversely affect surface waters or ground water that is closely hydrologically connected to surface water. Unsuitable areas include, but are not limited to, areas with poorly or excessively drained soils; areas with shallow water tables or areas with high seasonal water tables; areas overlaying fractured bedrock that drain directly to ground water; areas within floodplains; or areas where nutrient and/or pathogen concentrations in the effluent cannot be sufficiently treated or reduced before the effluent reaches sensitive waterbodies.”

Management Measure 3. “Establish protective setbacks from surface waters, wetlands, and floodplains for conventional as well as alternative OSDS. The lateral setbacks should be based on soil type, slope, hydrologic factors, and type of OSDS. Where uniform protective setbacks cannot be achieved, site development with OSDS so as not to adversely affect waterbodies and/or contribute to a public health nuisance.”



Management Measure 4. “Establish protective separation distances between OSDS system components and groundwater which is closely hydrologically connected to surface waters. The separation distances should be based on soil type, distance to ground water, hydrologic factors, and type of OSDS.”

Management Measure 5. “Where conditions indicate that nitrogen-limited surface waters may be adversely affected by excess nitrogen loadings from ground water, require the installation of OSDS that reduce total nitrogen loadings by 50% to groundwater that is closely hydrologically connected to surface water.”

Analysis: As noted in the “Applicability” discussion of this management measure, “[t]his management measure applies to all new onsite disposal systems including package plants and small scale or regional treatment facilities not covered by NPDES regulations, in order to manage the siting, design, installation, and operation and maintenance of all such onsite disposal systems.” Because the Project does not incorporate onsite disposal systems, and because development of the Project site is subject to NPDES regulations, this management measure is not applicable.

6. **Operating Onsite Disposal System**

Management Measure 1. “Establish and implement policies and systems to ensure that existing OSDS are operated and maintained to prevent the discharge of pollutants to the surface of the ground and to the extent practicable reduce the discharge of pollutants into ground waters that are closely hydrologically connected to surface waters. Where necessary to meet these objectives, encourage the reduced use of garbage disposals, encourage the use of low-volume plumbing fixtures, and reduce total phosphorus loadings to the OSDS by 15% (if the use of low-level phosphate detergents has not been required or widely adopted by OSDS users). Establish and implement policies that require an OSDS to be repaired, replaced, or modified where the OSDS fails, or threatens or impairs surface waters.”

Management Measure 2. “Inspect OSDS at a frequency adequate to ascertain whether OSDS are failing.”

Management Measure 3. “Consider replacing or upgrading OSDS to treat influent so that total nitrogen loadings in the effluent are reduced by 50%. This provision applies only: a. where conditions indicate that nitrogen-limited surface waters may be adversely affected by significant groundwater nitrogen loadings from OSDS, and b. where nitrogen loadings from OSDS are delivered to groundwater that is closely hydrologically connected to surface water.

Analysis: As noted in the “Applicability” discussion of this management measure, “[t]his management measure applies to all operating onsite disposal systems.” Because the



Project site is undeveloped, there are no operating onsite disposal systems on the Project site. Accordingly, this management measure is not applicable.

7. Pollution Prevention

Management Measure. “Implement pollution prevention and education programs to reduce nonpoint source pollutants generated from the following activities, where applicable: a. The improper storage, use, and disposal of household hazardous chemicals, including automobile fluids, pesticides, paints, solvents, etc.; b. Lawn and garden activities, including the application and disposal of lawn and garden care products, and the improper disposal of leaves and yard trimmings; c. Turf management on golf courses, parks, and recreational areas; d. Improper operation and maintenance of onsite disposal systems; e. Discharge of pollutants into storm drains including floatables, waste oil, and litter; f. Commercial activities including parking lots, gas stations, and other entities not under NPDES purview; and g. Improper disposal of pet excrement.”

Analysis: The Applicant intends to implement a solid waste management plan to prevent and reduce nonpoint source pollutants generated during construction and operation of the Project. The solid waste management plan will be coordinated with the County Solid Waste Division, and will regulate the disposal of onsite and construction-related waste material. The Applicant will work with the Project contractor to minimize the amount of solid waste generated during construction. In addition, the Project will provide on-site recycling opportunities in an effort to reduce solid waste entering the landfill.

The Project will comply with the 1995 Decision and Order, which requires that the Applicant fund the design and construction of its pro-rata share of drainage improvements required as a result of the development of the Project site, including oil water separators and other filters as appropriate, and other BMPs as necessary to minimize non-point source pollution. The Applicant understands that all Project-related water discharges must comply with the State’s Water Quality Standards, which are set forth in Chapter 11-54, HAR.

BMPs prepared in accordance with MCC Chapter 20.08 (*Soil Erosion and Sedimentation Control*) will be submitted to the DPW for review and approval prior to the issuance of grubbing and grading permits. In addition, an NPDES will be obtained from the DOH’s Clean Water Branch for the discharge of storm water associated with construction activities. The Applicant will meet all of the requirements set forth by the DOH’s Clean Water Branch.

Low-impact development strategies, including a series of strategically located drainage retention basins and channels, are designed to mitigate downstream impacts to *makai* landowners. A Drainage Master Plan was designed to County standards, and includes measures that mitigate the increase in runoff generated from the development of



impervious surfaces. On-site runoff will be collected by catch basins located at appropriate intervals along the interior roadways and landscaped area. Drain lines from the catch basins will convey the runoff to onsite detention basins or underground subsurface drainage systems.

The onsite drainage system will provide storage for the increase in stormwater runoff from a 50 -year, 1 -hour storm. The drainage system will be designed in compliance with Chapter 4 "Rules for the Design of Storm Drainage Facilities in the County of Maui" and Chapter 15-11 "Rules for the Design of Storm Water Treatment Best Management Practices."

8. Golf Course Maintenance

Management Measure 1. "Develop and implement grading and site preparation plans to:
a. Design and install a combination of management and physical practices to settle solids and associated pollutants in runoff from heavy rains and/or from wind; b. Prevent erosion and retain sediment, to the extent practicable, onsite during and after construction; c. Protect areas that provide important water quality benefits and/or are environmentally sensitive ecosystems; d. Avoid construction, to the extent practicable, in areas that are susceptible to erosion and sediment loss; e. Protect the natural integrity of waterbodies and natural drainage systems by establishing streamside buffers; and f. Follow, to the extent practicable, the amended U.S. Golfing Association (USGA) guidelines for the construction of greens."

Management Measure 2. "Develop nutrient management guidelines appropriate to Hawaii for qualified superintendents to implement so that nutrients are applied at rates necessary to establish and maintain vegetation without causing leaching into ground and surface waters."

Management Measure 3. "Develop and implement an integrated pest management plan. Follow EPA guidelines for the proper storage and disposal of pesticides."

Management Measure 4. "Develop and implement irrigation management practices to match the water needs of the turf."

Analysis: As noted in the "Applicability" discussion of this management measure, "[t]his management measure applies to all golf courses in Hawaii that are in operation, under construction or to be built in the future." Because the Project will not include a golf course, this management measure is not applicable.



9. Planning, Siting, and Developing Roads and Highways

Management Measure. “Plan, site, and develop roads and highways to: 1. Protect areas that provide important water quality benefits or are particularly susceptible to erosion or sediment loss; 2. Limit land disturbance such as clearing, grading and cut and fill to reduce erosion and sediment loss; and 3. Limit disturbance of natural drainage features and vegetation.”

Analysis: The Project is located in an arid region of Kihei mauka of Piilani Highway and will not impact land areas that provide important water quality benefits. The property has not experienced significant erosion or sediment loss.

The Applicant will limit grading at the site to reduce erosion and sediment loss and implement BMPs to ensure sediment loss and erosion are mitigated during construction. BMPs prepared in accordance with MCC Chapter 20.08 (*Soil Erosion and Sedimentation Control*) will be submitted to the DPW for review and approval prior to the issuance of grubbing and grading permits.

The Project includes construction of a portion of the Kihei Upcountry Highway (KUH) in addition to interior roadways and driveways. The KUH was designed by the State of Hawaii and will intersect with Piilani Highway. The planning and siting of this new highway was coordinated by the State of Hawaii Department of Transportation and the alignment is set in order to connect to an existing intersection at Piilani Highway. As part of the construction of the portion KUH, the Applicant is providing subsurface retention underneath the roadway to retain stormwater runoff as result of the roadway and surrounding impervious surfaces. The Project does not propose any channeling or culvert work for Kulanihakoi Gulch. The smaller “Drainageway A” crossing the Project will be diverted to the KUH alignment with a *makai* terminus in the same location as the present.

Modifications to Drainageway “A” are also necessary as part of the engineering design and solution for the KUH as the grades for the roadway are higher than the existing grades within Drainageway “A”, requiring a design solution to allow drainage flow, which is accommodated in the drainage master plan.

A Drainage Master Plan was designed to County standards, and includes measures that mitigate the increase in runoff generated from the development of impervious surfaces. On-site runoff will be collected by catch basins located at appropriate intervals along the interior roadways and landscaped area.

The onsite drainage system will provide storage for the increase in stormwater runoff from a 50 -year, 1 -hour storm. The drainage system will be designed in compliance with Chapter 4 “Rules for the Design of Storm Drainage Facilities in the County of Maui” and



Chapter 15-11 "Rules for the Design of Storm Water Treatment Best Management Practices."

The Project will comply with the 1995 Decision and Order, which requires that the Applicant fund the design and construction of its pro-rata share of drainage improvements required as a result of the development of the Project site, including oil water separators and other filters as appropriate, and other BMPs as necessary to minimize non-point source pollution. The Applicant understands that all Project-related water discharges must comply with the State's Water Quality Standards, which are set forth in Chapter 11-54, HAR.

10. Bridges

Management Measure. "Site, design, and maintain bridge structures so that sensitive and valuable aquatic ecosystems and areas providing important water quality benefits are protected from adverse effects."

Analysis: As noted in the "Applicability" discussion of this management measure, "[t]his management measure applies to new, relocated, and rehabilitated bridge structures in order to control erosion, streambed scouring, and surface runoff from such activities." Because the Project will not include any bridges, this management measure is not applicable.

11. Management Measure for Operation and Maintenance

Management Measure. "Incorporate pollution prevention procedures into the operation and maintenance of roads, highways, and bridges to reduce pollutant loadings to surface waters."

Analysis: As noted in the "Applicability" discussion of this management measure, "[t]his management measure applies to existing, restored, and rehabilitated roads, highways, and bridges." The Project site is vacant, and there are no existing roads, highways, or bridges. Therefore, this management measure is not applicable.

12. Road, Highway, and Bridge Runoff Systems

Management Measure. "Develop and implement runoff management systems for existing roads, highways, and bridges to reduce runoff pollutant concentrations and volumes entering surface waters. 1. Identify priority and watershed pollutant reduction opportunities (e.g., improvements to existing urban runoff control structures); and 2. Establish schedules for implementing appropriate controls."



Analysis: As noted in the "Applicability" discussion of this management measure, "[t]his management measure applies to existing, resurfaced, restored, and rehabilitated roads, highways, and bridges." The Project site is vacant, and there are no existing roads, highways, or bridges. Therefore, this management measure is not applicable.

3. Natural Hazards

Existing Conditions. Natural hazards impacting the Hawaiian Islands include hurricanes, tsunamis, volcanic eruptions, earthquakes, and flooding.

Seismic hazards are those related to ground shaking. Landslides, ground cracks, rock falls, and tsunamis are all seismic hazards. Engineers and other professionals have created a system of classifying seismic hazards on the basis of the expected strength of ground shaking and the probability of the shaking actually occurring within a specified time. The results are included in the Uniform Building Code (UBC) as seismic provisions.

The UBC seismic provisions contain six seismic zones, ranging from 0 (no chance of severe ground shaking) to 4 (10 percent chance of severe shaking in a 50-year interval). Kauai County is located in Zone 1, the City and County of Honolulu is in Zone 2A, the County of Maui is in Zone 2B, and the County of Hawaii is in Zone 4.

In addition to seismic hazards, devastating hurricanes occur and have impacted Hawaii twice since 1980: Hurricane Iwa in 1982 and Hurricane Iniki in 1992. While it is difficult to predict these natural occurrences, it is reasonable to assume that future events could be likely given the recent record.

Tsunamis are large, rapidly moving ocean waves triggered by a major disturbance of the ocean floor, which is usually caused by an earthquake but sometimes can be produced by a submarine landslide or a volcanic eruption. About 50 tsunamis have been reported in the Hawaiian Islands since the early 1800s, including the most recent tsunami as a result of the March 2011 earthquake in Japan. The Pi'ilani Promenade is located beyond the Civil Defense Agency's Tsunami Evacuation Zone.

Volcanic hazards are not a concern in the South Maui area due to the dormant status of Haleakala.

In Hawaii, most earthquakes are linked to volcanic activity, unlike other areas where a shift in tectonic plates is the cause of an earthquake. Each year, thousands of earthquakes



occur in Hawaii, the vast majority of them so small they are detectable only with highly sensitive instruments. On October 16, 2006, a 6.7 magnitude earthquake struck on the underwater segment of the major rift zone of the Hualalai volcano on the northwest side of the Island of Hawaii. The earthquake caused rockslides and some damage to roadways on Maui.

Flood hazards are primarily identified by the Flood Insurance Rate Map (FIRM) prepared by the Federal Emergency Management Agency's (FEMA), National Flood Insurance Program. According to the Federal Insurance Rate Map (FIRM) Panel 1500030580E and 0586E, September 25, 2009 the Pi'ilani Promenade is located in Zone X, which represents an area beyond the limits of a flood hazard (**See: Figure Nos 10, 10A, and 10B, "Flood Hazard Map"**).

Potential Impacts and Mitigation Measures. The project site is located beyond the limits of a flood hazard and is located approximately 0.5 miles from the coastline, therefore the proposed project is not anticipated to be affected by natural hazards such as storms events or tsunamis. The project site is ideally located as a place of refuge or staging area for Kihei residents in the event of an emergency such as a tsunami.

Any structures built within the Pi'ilani Promenade will be constructed in accordance with the Building Code adopted by the County of Maui.

4. Hazardous Substances

Existing Conditions. A Phase I Environmental Site Assessment (ESA) of the Pi'ilani Promenade site was prepared by Malama Environmental, LLC. (MEV) in December 2013 (**See: Appendix B, "Environmental Site Assessment"**). The investigation and report format follows the guidelines of the American Society of Testing and Materials (ASTM) Publication E1527-05, which is recognized by 40 CFR Part 312 as an acceptable guidance document for satisfying the EPA's final "All Appropriate Inquiries" rule.

After a review of records the ESA noted that there were no current investigations of the site under any Federal, State, or local environmental agency. Two (2) potential risk sites, listed as State hazardous Waste Sites (SHWS) were identified within a 1-mile radius of the project site.



1. Selland Construction Inc. located at 454 Ohukai Road had a confirmed diesel fuel and oil release in 1994 due to overfill of maintenance equipment when the area was called "Ohukai Baseyard". This area is now a residential subdivision.
2. Kihei Chevron located at 1281 S. Kihei Road is listed as a SHWS due to a station spill.

The field survey was conducted on July 23, 2013 and focused on identifying physical recognized environmental conditions on the property and assessing the property in relation to surrounding land uses and natural surface features. The following observations were made during the field survey:

- The majority of the subject property was historically used for cattle grazing and ranch land during the ownership of Kaonoulu Ranch.
- The Monsanto Seed Farm is located north east of the proposed utility and waterline easements.
- A small portion of the northwest corner of the site is a gravel staging area, previously used as a construction baseyard for the adjacent gas station and commercial properties.
- Several boulders debris piles were noted near the above mentioned baseyard. No hazardous substances were found.
- No bulk hazardous/regulated substances are currently stored on-site.

Potential Impacts and Mitigation Measures. The ESA found no evidence of recognized environmental conditions in connection with the property. Additionally MEV does not believe the two (2) potential risk sites would have environmentally and adversely affected the subject property due to their distance from the Pi'ilani Promenade site and the down gradient proximity. However, the Shell Station, which was constructed in 2007 and is located immediately adjacent to the northwestern corner of the project site, is not listed as a UST site. Due to the close proximity and slightly higher elevation of the gas station with respect to the survey area, this facility may pose a negative impact to the environmental condition of the subject property if a leak in the underground storage tanks should occur in the future.

The ESA stated that there was no evidence of historic or current significant misuse of hazardous or regulated substances and or petroleum products on the subject property (See: Appendix B, "Environmental Site Assessment").



The Applicant's planning consultant spoke with the Hazard Evaluation and Emergency Response Office and there we no records of hazardous substances or soil contamination on the Project site. The ESA determined that the Project will not impact soil quality at Project site.

The ~~remaining~~ other potential concerns identified by the ESA such as illegal solid waste dumping are limited in scope and will be mitigated prior to or during project development. No impacts from hazardous substances are anticipated at the site based on the conclusions of the Phase I ESA (See: Appendix B, "Environmental Site Assessment"). There has been no activity on the project site or change in the land that would impact the ESA since the July 2013 environmental assessment.

Under ASTM standards, a Phase I Environmental Site Assessment may be considered out of date if not conducted within the prior 180 days. As a result the Applicant requested an update of the ESA. A site visit was conducted by MEV on January 13, 2017, and MEV determined that nothing came to their attention that would cause them to change any matter or opinion set forth in the ESA. Accordingly, MEV issued the Environmental Site Assessment update letter. (See: Appendix B-1, "Environmental Site Assessment update letter dated January 18, 2017").

5. Flora and Fauna

Existing Conditions. Botanical and Faunal Surveys were conducted for the Pi'ilani Promenade site by Mr. Robert W. Hobby in July 2013 (See: Appendix C, "Botanical and Fauna Surveys").

Formerly, the project site was a dry, seasonal pasture situated on gently sloping lands above the coastal plain in north Kihei. For the past 150 years, the area has been grazed by livestock which has resulted in a gradual loss of native plant species and the subsequent growth of hardy pasture grasses and weeds. During the past 40 years introduced axis deer (*Axis axis*) have eliminated native plants and fires have swept through the area as evidenced by charred stumps throughout the property.

The site is now dominated by two (2) non-native species, Kiawe trees (*Prosopis pallida*) and buffelgrass (*Cenchrus ciliaris*). These two (2) species make up more than 95 percent of the plant cover. The Kiawe trees create an open woodland area cross the entire property with denser growth along the rocky gully. The buffelgrass forms an almost uniform grassland



area between and underneath the trees. All other plant species were uncommon on the property. Small parts of the property had bare patches of soil and surface stones.

A total of ten (10) species of plants were recorded during the survey. Of these two (2) were native Hawaiian species, ilima (*Sida fallax*) and uhaloa (*Waltheria indica*). Both are indigenous to Hawaii as well as other countries and both are widespread and of common occurrence in Hawaii.

No federally listed endangered or threatened native plants were encountered during the course of the botanical and fauna survey. No special habitats or rare plant communities were seen on the property.

Four (4) mammalian species, seven (7) non-native bird species, and six (6) insect species were observed. Using sight survey and a bat listening device, the surveys found no evidence of the Hawaiian hoary bat (*Lasiurus cinereus semotus*). The bat is the only land mammal native to the Hawaiian Islands. The report also found no evidence of the Blackburn's sphinx moth (BSM). The BSM (*Manduca blackburni*) is Hawaii's largest native insect.

Potential Impacts and Mitigation Measures. The vegetation is dominated by non-native plants, and no rare or protected species occur on or adjacent to the property. The proposed land uses are not expected to have a significant negative impact on the botanical resources in this part of Maui. The development will incorporate native dry-land plants into the landscape design of the completed project.

The sighting of six (6) endangered Nene geese flying over the project area was recorded in the inventory, but has to be considered tangential in nature and not an indication of use of this habitat by these birds. There are no food or water resources that would lure the birds to feed or rest here.

No Hawaiian bats were recorded on the project area nor were any Blackburn's sphinx moths or their larvae found. The total lack of their required host plant species on the project site effectively prohibits their use of this habitat.

No native birds were found on the property and none are expected in this habitat. ~~However~~ Since birds fly over these lowland areas to burrows higher up the mountain, outdoor lights will be downward directed and shielded as required by the Maui County Code.



The Botanical and Faunal Surveys concluded no other impacts are anticipated on wildlife species on the Project site as a result of the proposed Project.

6. Air Quality

Existing Conditions. An Air Quality Study was prepared by B.D. Neal & Associates which examines the potential short- and long-term air quality impacts that could occur as a result of construction and use of the proposed Project and suggests mitigation measures to reduce any potential air quality impacts where possible and appropriate (**See:** Appendix D, "Air Quality Study" and Appendix D-1 "Air Quality Study Update dated March 11, 2016" and D-2 "Air Quality Study Update dated February 2, 2017").

Regional and local climate together with the amount and type of human activity generally dictate the air quality of a given location. The climate of the project area is very much affected by its elevation near sea level and by nearby mountains.

Haleakala shelters the area from the northeast trade winds, and local winds (such as land/sea breezes and upslope/downslope winds) affect the wind flow in the area much of the time. Temperatures in the project area are generally very consistent and warm with average daily temperatures ranging from about 63 degrees Fahrenheit to 86 degrees Fahrenheit. Rain fall in the project area is minimal with an average of only about 12 inches per year. Except for periodic impacts from volcanic emissions (vog) and possibly occasional localized impacts from traffic congestion and local agricultural sources, the present air quality of the project area is believed to be relatively good. There is very little air quality monitoring data from the Department of Health for the project area, but the limited data that are available suggest that concentrations are generally well within state and national air quality standards (**See:** Appendix D, "Air Quality Study").

Potential Impacts and Mitigation Measures. As part of the Air Quality Study prepared by B.D. Neal & Associates, the following scenarios were analyzed to identify the potential air quality impacts of the proposed project.

After construction, motor vehicles coming to and from the proposed development will result in a long-term increase in air pollution emissions in the project area. To assess the impact of emissions from these vehicles, a computer modeling study was undertaken to estimate current ambient concentrations of carbon monoxide at intersections in the project vicinity and to predict future levels both with and without the proposed project.



For this project three (3) scenarios were selected for the modeling study:

1. Year 2013 with present conditions,
2. Year 2018 without the project, and
3. Year 2018 with the project and including the Honua'ula Project.

The present conditions (year 2013) existing background concentrations of carbon monoxide in the project vicinity are believed to be at low levels. This, background contributions of carbon monoxide from sources or roadways not directly considered in the analysis were accounted for by adding a background concentration of 0.5 ppm to all predicted concentrations for 2013. Although increased traffic is expected to occur within the project area within the next few years with or without the project, background carbon monoxide concentrations may not change significantly since individual emissions from motor vehicles are forecast to decrease with time. The highest estimated 1-hour concentration within the project vicinity was 2.2 parts per million (ppm) and projected to occur during the weekday morning near the intersection of Pi'ilani Highway and Ohukai Street. All predicted worst-case concentrations for the 2013 scenario were within both the National Ambient Air Quality Standards (AAQS) of 35 ppm and the State standard of 9 ppm.

For the Year 2013 scenario, the estimated worst-case 8-hour concentrations ranged from 0.8 to 1.1 ppm during the weekday morning peak traffic hour at the intersection of Pi'ilani Highway and Ohukai Street. The estimated worst case-concentrations for the existing case were well within both the National AAQS limit of 9 ppm and the State standard of 4.4 ppm.

In the year 2018 without the project, the highest worst-case 1-hour concentration was predicted to occur during the weekday morning peak traffic hour at the intersection of Pi'ilani Highway and Kulanihako'i Road. A value of 1.8 ppm was predicted for this time and location. Compared to the existing case, concentrations mostly remained about the same or decreased slightly, and all projected worst-case concentrations for this scenario remained well within state and national standards.

For the Year 2018 without the project scenario, the estimated worst-case 8-hour concentrations generally remained about the same or decreased slightly. All predicted concentrations remained within the National and State standards.

In the year 2018 with the assumption that the pProject and the adjacent with Honua'ula affordable residential project both are fully developed, the highest worst-case 1-hour



concentration was predicted to occur during the weekday morning peak traffic hour at the intersection of Pi'ilani Highway and Kulanihako'i Road and at the intersection of Pi'ilani Highway and Ohukai Street with a value of 1.8 ppm. Compared to the without project scenario, concentrations increased slightly, however all projected worst-case concentrations for this scenario remained well within state and national standards.

For the Year 2018 with the full development of the pProject and the adjacent with Honua'ula affordable residential project, the estimated worst-case 8-hour concentrations were predicted to remain about the same or increase slightly compared to the without project scenario. All predicted concentrations for this scenario remained within the National and State standards.

During worst-case conditions, model results indicated that present 1-hour and 8-hour carbon monoxide concentrations are well within both the state and the national ~~Ambient Air Quality Standards (AAQS)~~.

As part of the preparation of the FEIS, the Applicant retained B. D. Neal & Associates to analyze the years 2025 and 2032 to estimate long range air quality impacts, and to prepare updates to the Air Quality Survey prepared for the DEIS. Air quality studies were conducted on March 11, 2016 and again on February 2, 2017. Based on these studies, and based further on the review of the TIAR update dated December 20, 2016, B. D. Neal & Associates determined that re-analysis of the Project air quality impacts was not necessary, as the conclusions stated in the 2014 Air Quality Survey remain valid. (See: Appendix D-2 "Air Quality Report Update dated February 2, 2017")

Short- and/or long-term impacts on air quality will occur either directly or indirectly as a consequence of project construction and use. Short-term impacts from fugitive dust will likely occur during the project construction phases. To a lesser extent, exhaust emissions from stationary and mobile construction equipment, from the disruption of traffic, and from workers' vehicles may also affect air quality during the period of construction. State air pollution control regulations require that there be no visible fugitive dust emissions at the property line. Hence, an effective dust control plan will be implemented to ensure compliance with State regulations. Fugitive dust emissions can be controlled to a large extent by implementing the following types of mitigation measures:

- Watering of active work areas;
- Using wind screens;
- Keeping adjacent paved roads clean; ~~and~~
- Covering open-bodied trucks;-



- Limiting the area that can be disturbed at any given time; and
- Mulching or chemically stabilizing inactive areas that have been ~~worked~~ disturbed.

Paving and landscaping of project areas early in the construction schedule will also reduce dust emissions. ~~Monitoring dust at the project boundary during the period of construction could be considered as a means to evaluate the effectiveness of the project dust control program.~~ Exhaust emissions can be mitigated by moving construction equipment and workers to and from the project site during off-peak traffic hours. During development, adequate dust control measures, in compliance with HAR, Chapter 11-60.1, "Air Pollution Control," Section 11-60.1-33, Fugitive Dust will be implemented to control dust during all phases of construction.

Depending on the demand levels, long-term impacts on air quality are also possible due to indirect emissions associated with a development's electrical power and solid waste disposal requirements.

~~Renewable energy sources, if developed, could reduce these emissions substantially. Incorporating energy conservation design features and promoting energy conservation programs within the proposed development could also serve to reduce any associated emissions.~~ Presently, all solid waste on Maui is landfilled, and any associated air pollution emissions are relatively negligible. ~~Nevertheless,~~ Promoting conservation and recycling programs within the proposed development could serve to further reduce any associated impacts.

As previously mentioned, based on the review of the TIAR Update dated December 20, 2016, it is the opinion of B. D. Neal & Associates that re-analysis of the Project air quality impacts due to Project traffic would not yield significantly different results and conclusions from those stated in the 2014 Air Quality Survey, and thus the 2014 Air Quality Survey remains valid. (See: Appendix D-2 "Air Quality Report Update dated February 2, 2017")

7. Noise Quality

Existing Conditions. Ambient noise levels are an important indicator of environmental quality. In an urban environment, noise is primarily generated by vehicular traffic, air travel, heavy machinery, construction activities, and heating and cooling systems. The



ramifications of various activities and their corresponding sound levels may impact health conditions and the physical or sensory appeal of an area.

An Acoustic Study (February, 2014) was prepared by Y. Ebisu & Associates to describe the existing and future traffic noise levels in the environs of the proposed Pi'ilani Promenade. Traffic noise level increases and impacts associated with the proposed project were determined within the project site and along public roadways servicing the development. The original Acoustic Study assumes the proposed project will be ~~built~~ built out in 2018 (See: Appendix E, "Acoustic Study").

The existing traffic noise levels in the project environs along Pi'ilani Highway are in the "Significant Exposure, Normally Unacceptable" category, and at or greater than 65 DNL (Day-Night Average Sound Level) at the first row of existing homes on the *makai* side of ~~the Pi'ilani highway,~~ which are the Kaonoulu Estates single family homes. The existing traffic noise levels in the project environs along South Kihei Road are in the "Significant Exposure, Normally Unacceptable" categories, and at or greater than 65 DNL within 57 to 60 to 63 feet of the roadway's centerline. Along the lower volume connector streets, existing noise levels are in the "Moderate Exposure, Acceptable" category, and less than 65 DNL at 50 feet or greater distance from the roadways' centerlines.

Potential Impacts and Mitigation Measures. Based on the review of the TIAR update, an updated Acoustic Study was prepared assuming full project build out. (See: Appendix E-1 "Acoustic Study dated March 2016") Additionally, the Acoustic Study was updated again to include an analysis of the adjacent HPL affordable housing project. (See: Appendix E-2 "Acoustic Study dated January 23, 2017")

The growth in **non-project traffic** by 2018 full build out is predicted to result in traffic noise level increases of ~~0.6~~ 0.0 to ~~0.8~~ 1.4 DNL along Pi'ilani Highway. Chapter 7 of the Acoustic Study reports that increases in future traffic noise levels of ~~0.2~~ 0.4 to ~~0.8~~ 0.7 DNL are expected along Pi'ilani Highway in the project environs by 2018 full build out as a result of **project-related traffic**.

The largest total increase (~~1.7~~ 2.9 to ~~2.6~~ 3.6 DNL) in Project related traffic noise level is anticipated to occur along Kaonoulu Street between Pi'ilani Highway and South Kihei Road. Non-Project traffic is expected to add 2.9 to 5.1 DNL of traffic noise to this section of Kaonoulu Street. Adverse traffic noise impacts along Kaonoulu Street are possible towards the west end of Kaonoulu Street where relatively small setback distances could result in future traffic noise levels exceeding the United States Department of Housing & Urban Development ("HUD") standard of 65 DNL by 1 DNL unit at full build out. ~~not~~



~~expected to occur since existing traffic noise levels are very low, and the addition of both project plus non-project traffic is not expected to cause traffic noise to exceed 65 DNL at existing residences along Kaonoulu Street, therefore~~ The remaining majority of noise sensitive residential buildings along Kaonoulu Street have adequate setback distances such that predicted traffic noise levels at full build out should remain in the "Moderate Exposure, Normally Acceptable" category at these buildings. For these reasons, traffic noise mitigation measures is should not be required for the existing residences.

The addition of the proposed extension of Kaonoulu Street mauka of Pi'ilani Highway will increase the existing background ambient noise levels along the center portion of the Project site. Through Project build-out, noise levels at the Project's planned residential buildings fronting Kaonoulu Street should not exceed the 65 DNL HUD standard or the State DOT 66 Leq (equivalent continuous sound level) noise abatement criteria as long as the residential buildings are located at least 51 feet from the centerline of Kaonoulu Street. Based on the best available traffic forecasts available for future conditions following completion of the KUH, a setback distance of 70 feet from the centerline of Kaonoulu Street is required for 65 DNL and 66 Leq to not be exceeded at these residential buildings. Noise mitigation measures in the form of a sound attenuating wall or closure and air conditioning would be required if adequate setback distances are not available. The future traffic noise levels at all planned residential buildings will not exceed the State DOT's "15 dB increase" noise abatement criteria.

In order to minimize the potential for noise conflicts between the Project's residential units and the Project's light industrial, business, and commercial tenants, the inclusion of various restrictive provisions within the land conveyance documents is recommended. These include limits on noise emissions from the light industrial, business, and commercial tenants to levels allowed by the State DOH for multifamily dwellings, as well as disclosure of potential noise from adjoining nonresidential uses to owners/renters of the Project's residential units. In addition, creating driveway setbacks from the Project's residential units, enforcing restrictions on nighttime and early morning delivery truck operations, and the use of broadband backup alarms instead of beeper type backup alarms within the nonresidential lots are recommended.

The project site will be designed such that rental residential uses within the project are ~~situated~~ located at adequate setback distances from the future Kihei Upcountry Highway to eliminate the need for traffic noise mitigation measures. The Applicant will inform future residents of the potential for high noise levels due to existing light industrial activities adjacent to the northern corner of the project site.



Based on the review of the TIAR Update dated December 20, 2016, it is the opinion of Y. Ebisu & Associates that any potential adverse noise impacts at the HPL workforce housing project can be compared to the potential noise impacts as follows:

There should be less exposure to noise from the Project's noise source since on the south side of the Honua'ula Parcel will face the Project's business/commercial activities;

Pi'ilani Promenade traffic on East Kaonoulu Street fronting the Honua'ula Parcel should be less than Pi'ilani Promenade traffic on East Kaonoulu Street fronting the Pi'ilani Promenade's 226 residential units. Total predicted traffic noise in 2032 at the HPL workforce housing project should also be less than the 59 to 61 DNL predicted at the Pi'ilani Promenade's 226 residential units.

Figures 18 (Noise Impact Map 5A) and 19 (Noise Impact Map 6A) were prepared by Y. Ebisu & Associates and show the predicted traffic noise levels at 3 locations on the proposed high school site. Both existing and future (2032) traffic noise levels from Pi'ilani Highway should be less than 55 DNL at the proposed Kihei High School facilities due to adequate setback distances provided from Pi'ilani Highway. Adverse traffic noise impacts at the proposed high school are not anticipated for this reason.

Unavoidable, but temporary, noise impacts may occur during construction of the proposed project, particularly during the earth-moving activities on the project site. While construction activities are predicted to be audible within the project site and at nearby properties the quality of the acoustic environment may be degraded to unacceptable levels during periods of construction. Mitigation measures to reduce construction noise to inaudible levels will not be practical in all cases. ~~Notwithstanding this,~~ The project will comply with State Department of Health noise regulations including Chapter 11-46, HRS pertaining to "Community Noise Control". for construction activities. As stipulated by DOH permit requirements, noise-generating construction activities are not allowed on Sundays and holidays, during the early morning, and during the late evening and nighttime periods.

8. Historical and Archaeological Resources

Existing Conditions. An Archaeological Inventory Survey (AIS) was previously undertaken and completed by Xamanek Researches in July 1994. A total of 20 sites were located during the 1994 AIS of the 88-acre property. Of these sites there were eight (8) rock piles and cairns, two (2) enclosures, three (3) parallel alignments, one (1) erosion



containment wall segment, five (5) surface scatters, and a petroglyph on a boulder. These sites were designated 50-50-10-3727 through 3746. The majority of the sites were associated with ranching and World War II military activities, while the petroglyph and surface scatter remains were interpreted as possible pre-contact sites. The petroglyph boulder (Site 3746) was relocated to the property of a former land owner after the 1994 AIS with a relocation study completed and with the approval of the State Historic Preservation Division. **Note:** The 1994 AIS is included as an Appendix in the 2014 AIS. (See: Appendix F, “Archaeological Inventory Survey dated March 2014 revised August 26, 2015”)

In connection with the proposed project, the Applicant retained Xamanek Researches to update the 1994 AIS to include the project area and areas included for off-site improvements. The purpose of the updated AIS (March 2014) was to determine the presence/absence of archaeological midden, deposits, and/or artifact deposits on the surface of the parcels and to assess the potential for the presence of subsurface cultural deposits (See: Appendix F, “Archaeological Inventory Survey dated March 2014 revised August 26, 2015”).

During the environmental review consultation process questions were raised as to the presence of historical sites within Kulanihakoi Gulch (which is not located on the Project site) and the need for additional survey work to assess the presence of possible sites. In response to this request, the Applicant contacted Kaonoulu Ranch and received their approval to submit an SHPD accepted AIS (2008) done for the area south of the project boundary including the gulch area adjacent to and mauka of the project area. The 2008 AIS indicates that no resources were found in the area fronting the property on either side of the Kulanihakoi Gulch (See: Appendix G, “Archaeological Inventory Survey of Kulanihakoi Gulch AIS dated 2008”).

Potential Impacts and Mitigation Measures.

The significance assessments for Sites 50-50-10-3727 through 3746 remain the same, while data recovery is the recommended mitigation for several of the remaining sites. A forthcoming data recovery plan will be developed for Sites 3727, 3728, 3735, 3736, and 3741-3745.

The archaeological survey of the offsite water storage tank area was conducted on January 8 and 13, 2014. No significant materials or cultural remains were located on this previously disturbed land during the 2014 archaeological survey. (See: Appendix F, “Archaeological Inventory Survey dated March 2014 revised August 26, 2015”).



A public information meeting for the proposed project was held on February 25, 2014. Transcripts from this meeting have been included in the DFEIS. The focus of the meeting was to review the previous 1994 AIS and discuss the findings of the ~~current~~ 2014 AIS, and to receive and document input from the cultural community on archaeological and cultural knowledge of the Project area. In addition to discussing the return of the petroglyph boulder and potential impacts to Kulanihakoi Gulch, some of the participants suggested that the archaeological sites could be incorporated into the design of the project or into its landscaping and the previously removed petroglyph stone be returned to the property. The Applicant has discussed the possible return of the petroglyph stone and the owner (the former owner of Kaonoulu Ranch) rejected this request given the fact that the relocation plan was submitted and approved by SHPD. In addition, an archaeological monitoring plan was submitted to SHPD for review and approval, was approved and referenced for all recent work on the site. The monitoring plan may be found in Appendix H and will be updated once project construction is initiated. (See: Appendix H, "Archaeological Monitoring Plan dated July 2011 with SHPD acceptance letter dated August 2011").

In July 2015, SHPD received comments from Maui Cultural Lands indicating that there were undocumented sites on the Project site and that further investigation work was necessary. The Applicant retained the Project Archaeologist to conduct a follow-up survey of the Project site. Supplemental inventory level fieldwork was carried out during the summer of 2015 and covered 100% of the Project site. In addition, all previously identified sites from the 1994 AIS were located, reassessed and altered/impacted sites were remapped. Of the original 20 sites, Site 3746 (the petroglyph) was previously relocated, and Site 3734 (stone pile) and Site 3939 (parallel boulder alignment) were destroyed by previous heavy equipment activity on the Project site. Seven of the sites were impacted to some extent by post-1994 earthmoving activities on the Project Site.

During the survey, a new site was identified on Parcel 16. This site has been identified as Site 50-50-10-8266 and is interpreted as a possible pre-contact temporary habitation area, and qualifies for significance under Criterion "d" for its information content. This site consists of a rectangular rock enclosure, and based on subsurface test results, this site appears to be a temporary habitation area that was possibly used in pre-contact times. Data recovery is the recommended mitigation for this site. In addition to locating a new site, the status of individual previously identified sites was updated in an AIS dated August 26, 2015 (See: Appendix F, "Archaeological Inventory Survey dated March 2014 revised August 26, 2015"). The remaining 17 sites on the Project site are listed in Table 2 below, along with the newly identified Site 8266 (a rock enclosure), for a total of 18 sites.



The significance assessments for ~~several Sites 50-50-10-3727 through 3746~~ remain the same, while data recovery is the recommended mitigation for several of the remaining sites. A forthcoming data recovery plan will be developed for Sites 3727, 3728, 3735, 3736, and 3741-3745. ~~has been revised since the Draft EIS. The following Table No. 2 is the revised 2015 AIS mitigation recommendations:~~

Table No. 2 Archaeological Mitigation Recommendations

<u>Site # 50-50-10-</u>	<u>Site Type</u>	<u>2015 Mitigation Recommendation</u>
<u>3727</u>	<u>Stone piles</u>	<u>Data recovery ("DR")</u>
<u>3728</u>	<u>Stone piles</u>	<u>DR</u>
<u>3729</u>	<u>Stone cairn</u>	<u>DR</u>
<u>3730</u>	<u>Stone cairn</u>	<u>No further work ("NFW")</u>
<u>3731</u>	<u>Stone cairn</u>	<u>NFW</u>
<u>3732</u>	<u>Stone cairn</u>	<u>DR</u>
<u>3733</u>	<u>Stone cairn</u>	<u>NFW</u>
<u>3735</u>	<u>Enclosure</u>	<u>DR</u>
<u>3736</u>	<u>Enclosure</u>	<u>DR</u>
<u>3737</u>	<u>Parallel alignment</u>	<u>NFW</u>
<u>3738</u>	<u>Parallel alignment</u>	<u>NFW</u>
<u>3740</u>	<u>Erosion containment walls</u>	<u>NFW</u>
<u>3741</u>	<u>Surface scatter</u>	<u>DR</u>
<u>3742</u>	<u>Surface scatter</u>	<u>DR</u>
<u>3743</u>	<u>Surface scatter</u>	<u>DR</u>
<u>3744</u>	<u>Surface scatter</u>	<u>DR</u>
<u>3745</u>	<u>Surface scatter</u>	<u>DR</u>
<u>8266</u>	<u>Enclosure</u>	<u>DR</u>

The archaeological survey of the offsite water storage tank area was conducted on January 8 and 13, 2014. No significant materials or cultural remains were located on this previously disturbed land during the 2014 archaeological survey (**See:** Appendix F, "Archaeological Inventory Survey dated March 2014 revised August 26, 2015").

As a follow up to the February 25, 2014 meeting, the Project team's Archaeologist and Cultural consultant participated in a site visit on January 22, 2016. The site visit was attended by:



- Kimokeo Kapahulehua
- Erik Frederickson
- Brett Davis
- Jordan Hart
- Daniel Kanahele
- Michael Lee
- Basil Oshiro
- Brian Naeole
- Florence K. Lani
- Lucienne DeNaie

The Applicant's Archaeologist prepared a data recovery plan that was received by the SHPD on June 17, 2016 and is under review. In addition, the Project AIS was accepted by SHPD on January 6, 2016. (See: Appendix F-1, "SHPD acceptance letter dated January 6, 2016").

In conclusion, the updated archaeological survey of the Project site was conducted in the summer of 2015, and one new historic property was located. The previously identified sites were registered in the State Inventory of Historic Places (SIHP) as No. 50-50-10-3727 through 3746. Of the original 20 sites, 17 remain and one new site was identified for a new total of 18 sites. Seven of these sites have been impacted to some extent by post-1994 earthmoving activities on the Project site. Of the impacted sites, Site 3734 (a rock pile) and Site 3739 (parallel boulder alignment) have essentially been destroyed. In addition, the Site 3746 petroglyph was removed from the Project site in late 1994 by a previous landowner. As such, a total of 18 sites are present within the Project site. No historic properties were located on the previously disturbed off-site portions of the Project site.

The SHPD issued a letter dated January 6, 2016 that accepts the AIS as **final**. (See: Appendix F-1, "SHPD acceptance letter dated January 6, 2016"). Data recovery is now the recommended mitigation for twelve (12) sites, including Sites 3727-3729, 3732, 3735, 3736, 3741 through 3745, and newly identified Site 8266 (See: Table No. 2). A data recovery plan has been prepared and submitted to SHPD in June 2016 and is currently under review by SHPD staff. In addition the SHPD issued a letter dated January 6, 2016 that accepts the AIS as **final**. (See: Appendix F-1, "SHPD acceptance letter dated January 6, 2016").

The SHPD-accepted AIS makes no connection between the sites located within the Project site and Drainageway A. There is one site, an erosion containment wall along Drainageway A, with a recommendation for No Further Work.



The Project promotes the preservation of historic resources and as noted the Applicant's Archaeologist prepared a data recovery plan that was received by the SHPD on June 17, 2016 and is under review.

As previously noted, the Site 3746 petroglyph was removed from the Project site in late 1994 by a former landowner. An after-the-fact Preservation Plan for the treatment of this petroglyph was submitted in October 1994 (Munekiyo & Hiraga, Inc.).

In 2011 a monitoring plan was completed and accepted for a large parcel within Ka'ono'ulu ahupua'a (SHPD DOC #1108MD012). While the proposed Project is located within this ahupua'a, a Project-specific monitoring plan will be prepared for on- and off-site project improvements with input from the SHPD Maui office. Also included in the forthcoming monitoring plan will be Lot 2B, which is owned by a separate entity, but which will be affected by the Project.

Drainageway "A" is located in the northern half of the Project site. (See: "Appendix L, "Preliminary Engineering Report Figures 2-3 and 2-4). A portion of Drainageway "A contains one previously identified historic property - Site 50-50-10-3740. Site 3740 was first identified during the 1994 AIS, which surveyed the entire Petition Area (Fredericksen, et al., 1994). At the time, Site 3740 was interpreted as a post-contact ranch-era feature, possibly associated with erosion control. This site consists of segments of a low, discontinuous rock wall that primarily extend along portions of either side of the gully. The SHPD Maui staff archaeologist at the time visited the Petition Area in 1994 to inspect the various sites that had been identified during the inventory survey, including Site 3740. The SHPD approved the archaeological inventory survey report, concurred with site interpretations, and indicated that no further archaeological work was needed for any of the remaining identified sites, including Site 3740. This recommendation was reaffirmed in a 2011 SHPD comment letter (SHPD DOC NO: 1103MD05).

Xamanek Researches LLC was subsequently hired to carry out an archaeological inventory survey of the Petition Area plus additional lands in 2014-2015. This subsequent survey reexamined sites previously identified in 1994, including Site 3740, in addition to one newly identified site. Pedestrian inspections of all previously identified sites, including Site 3740, were conducted during the Applicant's 2014-2015 fieldwork. The SHPD Maui staff archaeologist at the time carried out two project inspections with Xamanek Researches LLC staff in 2015. The SHPD Maui staff archaeologist was able to view all sites, including Site 3740. The archaeological inventory survey report (Fredericksen, 2015) for the overall Project site was approved in a 2016 SHPD comment



letter (SHPDDOC NO: 1601MD08). The SHPD concurred with the interpreted function for Site 3740 and affirmed that no additional work was warranted for this post-contact site.

Xamanek Researches LLC staff members have subsequently revisited the gully area on three separate occasions since the inventory survey was accepted in early 2016. No additional findings have been made in Drainageway "A". However, given concerns raised, the Applicant's has voluntarily agreed to have archaeological data recovery work carried out on Site 3740. This additional and intensive work will include detailed mapping, subsurface and surface investigation of the construction style of sections of the wall segments, including a short wall section that is located within along a portion of Drainageway "A"'s slope. Results of this work will be included in the Project's forthcoming data recovery report. The SHPD will review the results of this future report. (See: Appendix H-1 "Archaeological Consultant memo dated October 28, 2016.)

The previous archaeological inventory survey report (Fredericksen, 2015) for the overall Project site was approved in a 2016 State Historic Preservation Division comment letter (SHPD DOC NO: 1601MD08). Site 3727 consists of three stone piles and a surface scatter, and Site 3728 consists of a stone pile. Both of these sites will be further investigated during the forthcoming Archaeological Data Recovery project (Fredericksen, 2016). Both of the above sites are in the vicinity (west) of the County Department of Water Supply 36-inch waterline that crosses Project site. This substantial waterline was installed about 40 years ago.

Many boulders in this area display heavy equipment scars from prior mechanical disturbance of this portion of the Project site. By way of background, the SHPD Maui staff archaeologist previously carried out two project inspections with Xamanek Researches LLC staff in 2015. The SHPD Maui staff archaeologist was able to view all previously identified sites, including Sites 3727 and 3728. The SHPD Maui staff archaeologist was previously sent the Submittal by Interested Parties that included comment regarding the natural boulder (eclipse rock feature) in question, and subsequently provided Xamanek Researches LLC with a copy of a 2015 memo prepared in advance of her two inspections of the Project site.

Xamanek Researches LLC staff members have subsequently revisited this portion of the Project site on two separate occasions since the inventory survey was accepted in early 2016. No additional archaeological findings have been made, which suggest the possible function of this boulder. However, given the concern raised, the Applicant has voluntarily agreed to preserve this natural boulder (eclipse rock feature) on the Project site. Concerned individuals will be consulted regarding the final location of this boulder (eclipse rock



feature). (See: Appendix H-2 "Archaeological Consultant memo dated November 15, 2016.)

With regard to incorporating into the Project landscape plan elements of the cultural and archaeological history of the area the results of data recovery work on the various sites within the Project site may provide material that may be incorporated into the plan. A decision on what and where will be addressed once the data recovery work is complete and through cultural consultation.

Xamanek Researches was contracted by a former landowner to conduct the 1994 AIS. That AIS, which identified 20 archaeological sites on the property, was accepted by the State Historic Preservation Division ("SHPD") by letter dated July 12, 1994.

In July 2011, Piilani Promenade engaged Scientific Consultant Services, Inc. to prepare an archaeological monitoring plan for the Piilani Promenade properties. That plan was accepted by the SHPD by letter dated August 10, 2011.

In March 2014, Piilani Promenade engaged Xamanek Researches LLC to update the July 1994 AIS. That updated AIS was accepted by the SHPD in January 2016. The updated survey identified 19 of the original 20 archaeological sites on the property. However, two of the originally identified sites (3734 and 3739) were determined to have been destroyed/lost by post-1994 land altering activities. The updated AIS report contained the following mitigation recommendations:

- Data recovery was recommended for twelve (12) archaeological sites: 3727, 3728, 3729, 3732, 3735, 3736, 3741, 3742, 3743, 3744, 3745, and 8622. **Note: the SHPD review/acceptance letter (Doc No: 1601MD08) contains a typo - it states 13 sites for data recovery (this is a simple addition error).**
- No further work was recommended for six (6) archaeological sites: 3730, 3731, 3733, 3737, 3738, and 3740.

In July 2015, Piilani Promenade organized a site visit of its property for any interested members of the community. Following that site visit, two interested community members - Daniel Kanahele and Lucienne DeNaie -- recommended to SHPD that the following seven (7) archaeological sites be preserved: 3730, 3731, 3732, 3736, 3740, 3745, and 8622. In addition, Mr. Kanahele and Ms. DeNaie also identified (i) an unmarked stone near archaeological sites 3727 and 3728, and (ii) an unmarked stone on the southwest portion of the Piilani Promenade property, and recommended to SHPD that these stones also be preserved. These seven archaeological sites and two unmarked stones are hereinafter collectively referred to as the "Community Sites".

Having reviewed the revised 2015 Xamanek Report and considering the above recommendations of Mr. Kanahele and Ms. DeNaie, the SHPD accepted the updated Xamanek Researches LLC report and issued a letter dated January 6, 2016, accepting the specific mitigation recommendations contained in Xamanek's updated AIS.



Notwithstanding the above, given the concerns expressed by interested community members, Piilani Promenade has agreed - in the spirit of cooperation - to meet with Mr. Kanahele, Ms. DeNaie and Xamanek to authenticate which sites have significance and preserve the appropriate Community Sites at reasonable locations on the Piilani Promenade property. Piilani Promenade will consult with Mr. Kanahele and Ms. DeNaie to determine a reasonable and appropriate means and location of preservation of the Community Sites.

9. Visual Resources

Existing Conditions. The project site is located in North Kihei along the southern flank of Haleakala. Elevations on the project site range from 30 feet above mean sea level near Pi'ilani Highway to approximately 115 feet AMSL. The project site lies between existing light industrial development to the north of the site and Kulanihakoi Gulch which defines the southern boundary of the site (See: Figure 1, "Regional Location Map").

Scenic resources that are visible from certain areas in the Kihei region include the West Maui Mountains to the north, Haleakala to the east, Pu`u Olai to the south, and the Pacific Ocean and offshore islands of Molokini, Kaho`olawe, and Lana`i to the west.

Potential Impacts and Mitigation Measures. The Maui Coastal Scenic Resources Study (August 31, 1990) was prepared by Environmental Planning Associates, Inc. on behalf of the Maui Planning Department. The proposed Pi'ilani Promenade is located in an area which is largely characterized by open space views on the *mauka* side of Pi'ilani Highway (See: Figure 13, "Scenic Resources Map"). Most of these lands are owned by Haleakala Ranch and Kaonoulu Ranch and have been used for cattle grazing although the project site has been designated for urban use and development by the Kihei-Makena Community Plan for over 20 years.

The project site is adjacent to the Pi'ilani Highway. Building heights within this area are limited to 60 feet. The site plan and building layout for the Pi'ilani Promenade will be designed to preserve the view towards Haleakala from Pi'ilani Highway. In addition, the project will be setback from Pi'ilani Highway a minimum of 30 feet, and the future KUH and will also be buffered by landscape planting as noted in the approved Landscape Plan for Kaonoulu Marketplace subdivision(the name of the prior development project on the Project site). (See: Figure No. 17 "Landscape Plan")



The Project will include light industrial, business, commercial, and residential apartment structures. As shown in the approved Landscape Plan for the Project, a significant element of the landscape program is the inclusion of a 30-foot landscaping easement located adjacent to the Pi'ilani Highway. The landscaping easement will be planted with monkeypod trees, which when mature are expected to significantly buffer the transition between the Pi'ilani Highway and the Project, and to define the views from Pi'ilani Highway into the Project. (See: Figure 17A "Landscape Rendering").

A view analysis was prepared by Architects Orange and depicts 4 views from Pi'ilani Highway looking across the Project site towards Haleakala. (See: Figure 16 "View Analysis"). The view analysis used the following methodology:

1. Photographs used in the analysis are approximately 5 feet 8 inches above street level on the makai side of Pi'ilani Highway, across from the Project site.
2. The estimated future finish grade is based upon preliminary calculations made by the Project civil engineer, Warren S. Unemori Engineering, Inc.
3. The assumed 60-foot building height is based on the current County zoning code, which permits for 60-foot maximum building heights in an M-1 Zoning district. These 60-foot buildings will be set back 500 feet from the Project site boundary along Pi'ilani Highway.
4. The estimated 30-foot building height is based upon the height of mid-sized commercial buildings that may be built through-out the Project site.

As shown in the view analysis, the maximum allowable building height does not impact the public view of Pu'u o Kali or the summit of Haleakala. The extension of Kaonoulu Road will provide views towards Pu'u o Kali and the summit of Haleakala, but is not considered a major view corridor.

The proposed apartments will be a maximum of three (3) stories tall, up to a maximum allowable height of 60 feet provided for in the M-1 zoning district. The light industrial and commercial buildings are permitted to have a maximum height of 60 feet, however, the estimated height of future buildings is unknown at this time.

The Applicant is proposing to develop the Project with the following development standards as mitigation measures to limit the impacts to visual resources.

1. Any buildings at the maximum height allowed by the then-current County zoning code will be set back at least 500 feet from the Project site boundary along Pi'ilani Highway.



2. Any building above 30 feet in height will be set back at least 100 feet from the western boundary of the Project site.
3. The cumulative linear frontage of buildings built within the 100 foot set back from the western boundary of the Project site will not exceed 35% of the total frontage of the western boundary of the Project site.

The proposed project will transform the character of the site from ~~its existing large lot-only approved design vacant land~~ to a mixed-used development consisting of ~~retail, office,~~ business/commercial, light industrial, multi-family (226 apartment units), and public/quasi-public (park, MECO substation) uses, ~~as well as~~ with pedestrian and bicycle networks, an approximately 2-acre park and landscape plantings. The project will set forth building height limits and setbacks in order to help maintain views towards the summit of Haleakala and the Pacific Ocean. In addition the open space areas incorporated into the Pi'ilani Promenade will provide view corridors in between buildings toward the Pacific Ocean and Haleakala.

With regard to design, the proposed project will positively complement the architectural character of the adjacent concrete tilt up light industrial structures to the north of the Project area. ~~complement the high quality architectural character as other developed properties in the area.~~ The Pi'ilani Promenade ~~will be~~ is being designed to control the density, architectural design, and variation of all buildings in the project without sacrificing views or the aesthetic character of the proposed project. As noted, the maximum building height within the Project will be 60 feet and buildings will be setback from Pi'ilani Highway to maintain public views towards the summit of Haleakala from Pi'ilani Highway. Overall urban design of the project will position buildings fronting landscaped roadways to screen the massing of the buildings.

All buildings within the Pi'ilani Promenade will be designed in accordance with the applicable Maui County building code standards.

In response to comments, the Applicant has coordinated with the Planning Department and will continue to refine plans to create a well-designed Project. Following the acceptance of the FEIS and completion of the Motion to Amend process, design guidelines will be presented to the Kihei Community Association Design Review Committee and the Maui County Urban Design Review Board for review and comment prior to submittal to the Planning Department for review and approval.



10. Agricultural Resources

Existing Conditions. The project site is located in the State Urban District, the County's M-1, Light Industrial Zoning District, and is designated for Light Industrial (LI) use by the 1998 Kihei-Makena Community Plan.

LSB. In 1967 The University of Hawaii, Land Study Bureau (LSB), developed the Overall Productivity Rating, which classifies soils according to five (5) levels, ranging from "A", representing the class of highest productivity soils, to "E", representing the lowest.

The lands underlying the project site are classified as "E", or very poorly suited for agricultural production (See: Figure 11, "Land Study Bureau Map").

ALISH. In 1977, the State Department of Agriculture developed a classification system to identify Agricultural Lands of Importance to the State of Hawaii (ALISH). The classification system is based primarily, although not exclusively, upon the soil characteristics of the lands. The three (3) classes of ALISH lands are: "Prime", "Unique", and "Other", with all remaining lands termed "Unclassified". When utilized with modern farming methods, "Prime" agricultural lands have a soil quality, growing season and moisture supply necessary to produce sustained crop yields economically. "Unique" agricultural lands possess a combination of soil quality, growing season, and moisture supply to produce sustained high yields of a specific crop. "Other" agricultural lands include those that have not been rated as "Prime" or "Unique" but are still considered important agricultural lands.

The ALISH system classifies the majority of the project site as "Unclassified". A small 3-acre portion of the project site, located by the southwest corner of the site, is classified as "Prime" (See: Figure 12, "Agricultural Lands of Importance to the State of Hawaii Map"). ~~There is a large supply of good farmland of which there is also a large supply.~~ As such, the proposed project is not expected to impact the long-term viability or growth of agriculture on the island of Maui.

The Monsanto farming fields were not part of the Petition Area, and are not part of the Project.

The LSB and ALISH classification systems indicate that the lands underlying the Project site possess poor soil and low soil ratings for productive agricultural uses. The lands underlying the project site are classified as "E", or very poorly suited for agricultural production. As such, the utilization of these poorly-rated agricultural lands for urban use and development is deemed appropriate.



Formerly, the Project site was a dry, seasonal pasture situated on gently sloping lands above the coastal plain in north Kihei. For the past 150 years, the area has been grazed by livestock which has resulted in a gradual loss of native plant species and the subsequent growth of hardy pasture grasses and weeds. During the past 40 years, introduced axis deer (*Axis axis*) have eliminated native plants and fires have swept through the area as evidenced by charred stumps throughout the Project site.

Potential Impacts and Mitigation Measures. The LSB and ALISH classification systems indicate that the lands underlying the project site possess poor soil and low soil ratings for productive agricultural uses. As such, the utilization of these poorly-rated agricultural lands for urban use and development is deemed appropriate.

A Phase I Environmental Site Assessment (ESA) for the proposed project found no presence of any fertilizers, herbicides, pesticides, or other types of agricultural products which may have been used on the site or the presence of any hazardous substance or petroleum products on the property.

In addition, there is no evidence of any historic or current significant misuse of hazardous or regulated substances on the subject property (**See:** Appendix B, "Environmental Site Assessment"). While the proposed project will result in the loss of low-quality agricultural land, the inventory of good quality, productive agricultural lands will not be significantly affected.

11. Groundwater Resources

Existing Conditions. Drinking water for the proposed project will come from the network owned and operated by the Maui Department of Water Supply (DWS). Three 3-inch domestic water meters have been approved by the DWS and are available for the Project. The issuance of water meters for the Project by the DWS carries the implicit approval by the DWS of the Project's use of the DWS system for drinking water.

Water for the Central Maui Water System is pumped from existing groundwater wells located in upper Waiehu and North Waihee which draws groundwater from the Iao and Waihee Aquifers. The most reliable estimate of the Iao Aquifer and the Waihee Aquifer's rate of recharge and resulting groundwater flow rate is in the CWRM Water Resource Protection Plan 2008. This plan has estimated the groundwater recharge from rainfall in the Iao Aquifer system to be 20 MGD and the Waihee Aquifer system to be 8 MGD. The



Water Resource Protection Plan 2008 is currently being updated and a draft plan is expected in late 2017.

In consultation with Mr. Charley Ice (CWRM Water Resource Planner) on February 9, 2017, the CWRM has allocated 19.579 MGD to existing users and estimates that 0.421 MGD of groundwater can be allocated from the Iao Aquifer System.

The Waihee Aquifer is split into two (2) portions that each yield 4 MGD per day. The lower portion of the Waihee Aquifer has reached its capacity of 4 MGD, however there is additional drinking water available in the upper portion of the Waihee Aquifer that can be allocated for future development. A specific allocation amount is not available because water allocations are not recorded for the Waihee Aquifer. The CWRM has indicated that increase withdraw from the Waihee Aquifer may result in an initiation of groundwater management area designated by the CWRM.

The Pi'ilani Promenade at the request of the DWS agreed to ~~has an agreement with the DWS to~~ construct a 1.0 million gallon (MG) water storage tank which will serve the future needs of the project and South Maui. Three 3-inch domestic water meters have been approved and are available for the project. The combined flow capacity of these meters is 1,050 gallons per minute (gpm) which exceeds the approximately 600 gpm of required flow capacity for which the Pi'ilani Promenade, therefore there will be adequate flow capacity need to build out the project. Consequently, no additional drinking water sources beyond the County-issued water meters are anticipated in order to construct and operate the Pi'ilani Promenade (See: Appendix L, "Preliminary Engineering Report dated December 2013, revised February 2, 2017").

The State Commission on Water Resource Management approved an irrigation well permit for a well built in 2011 at a wellhead elevation of 118 feet. The well has proven to be capable of producing 216,000 gallons of non-drinking water per day and a permanent pump (150 gpm) has since been installed but is not in use. The well water will be used during future construction for dust control and ~~Construction of the distribution infrastructure for the irrigation system is currently pending~~ when permanent electrical power is available, the well will be used for landscape irrigation. In addition, a connection point for utilizing reclaimed water from the County's R-1 system in the future will be provided (See: Appendix L, "Preliminary Engineering Report dated December 2013, revised February 2, 2017").

Groundwater beneath the Project site occurs as a brackish basal lens overlying saline groundwater at depth and in hydraulic contact with seawater shore. This groundwater



body has been named as the Kamaole Aquifer by the CWRM. The most reliable estimate of the Kamaole Aquifer's rate of recharge and resulting groundwater flow rate is in the CWRM Water Resource Protection Plan 2008. This plan has estimated the groundwater recharge from rainfall in the Kamaole Aquifer system to be 25 MGD. Of the estimated 25 MGD of groundwater recharge, the CWRM estimates that 11 MGD of groundwater can be developed within the Kamaole Aquifer System on a sustainable basis. (Water Resource Protection Plan, 2008). The Water Resource Protection Plan is currently being updated and a draft plan is expected in late 2017.

Existing water use within the Kamaole Aquifer System amounted to 1.859 MGD (Water Resource Protection Plan, 2008). This water use is primarily for golf course and landscape irrigation purposes from existing brackish wells.

A subsurface investigation conducted in 2011 by a reputable geotechnical engineering firm performed 27 soil borings across portions of the Project site to depths ranging from 10 to 40 feet below the ground surface. No groundwater was encountered at any of the boring locations. (See: Appendix Q "Soil Investigation Reports")

Potential Impacts and Mitigation Measures. The Pi'ilani Promenade will consume on average of 252,000 gpd of water at full build-out, including 171,000 gpd of drinking water for domestic uses and 81,000 gpd of nondrinking water for irrigation. (See: Appendix L, "Preliminary Engineering Report dated December 2013, revised February 2, 2017")

As mentioned, the CWRM estimates that 0.421 MGD of groundwater can be allocated within the Iao Aquifer System. The Piilani Promenade drinking water demand is expected to withdraw 171,000 gpd and can be accommodated within the remaining 0.421 MGD of available groundwater. This limited amount of water is not anticipated to significantly impact the Iao Aquifer from recharging.

As mentioned, three 3-inch domestic water meters have been approved by the County DWS and are available for the project. The issuance of water meters for the project by the DWS carries the implicit approval by the DWS of Piilani Promenade's use of the Iao Aquifer System for drinking water.

The CWRM estimates that 11 MGD of groundwater can be developed within the Kamaole Aquifer System on a sustainable basis. (Water Resource Protection Plan, 2008). The irrigation well for landscaping is expected withdraw 81,000 gpd and this limited amount of water is not anticipated to significantly impact the Kamaole Aquifer from recharging. In the future, when the County reclaimed water line is extended north towards the Project



site, the Applicant will connect to the R-1 water source for irrigation water eliminating the need for the brackish irrigation well.

In response to comments on the DEIS, the FEIS has been updated in the ground water section, the water section, and the cumulative impacts section to include a matrix of the readily identifiable future developments in South Maui and their direct potential effect on water source and availability. Table No. 3 below provides an estimate of water use by future proposed developments in South Maui.

Table No. 3 Estimated Water Use by Future Developments

<u>Name of Project</u>	<u>Average Daily Drinking Water Use</u>	<u>Drinking Source</u>	<u>Average Non-drinking Water Use</u>	<u>Non Drinking Source</u>	<u>Type of System</u>	<u>Source Document</u>
<u>Maui Lu Resort</u>	<u>144,200 gpd</u> <u>(53,300 gpd existing;</u> <u>86,300 gpd proposed)</u>	<u>CWS,</u> <u>existing meter</u>	<u>136,000 gpd</u>	<u>Existing well water</u> <u>(Kamaole Aquifer)</u>	<u>Private irrigation</u> <u>brackish water</u>	<u>Maui Lu</u> <u>FEA 2004</u>
<u>Noni Loa</u>	<u>21,840 gpd</u>	<u>CWS,</u> <u>Existing meter</u>	<u>None, will use drinking water until R-1 line is available</u>	<u>CWS</u>	<u>CWS</u>	<u>Noni Loa</u> <u>FEA</u> <u>December 8,</u> <u>2015</u>
<u>Makena Resort</u>	<u>94,260 gpd</u>	<u>CWS,</u> <u>existing meter</u>	<u>129,075 gpd</u>	<u>Existing Well water</u> <u>(Kamaole aquifer)</u>	<u>Private irrigation</u> <u>brackish water</u>	<u>Makena</u> <u>Resort DEA</u> <u>January 8,</u> <u>2016</u>
<u>MRTP</u>	<u>789,065 gpd</u>	<u>CWS,</u> <u>existing meters</u>	<u>373,329 gpd</u>	<u>R-1 Water line</u>	<u>Maui County</u> <u>R-1 Water line</u>	<u>MRTP FEIS</u> <u>March 23,</u> <u>2013</u>
<u>Kenolio Apartments</u>	<u>104,160 gpd</u>	<u>Proposed connection to CWS</u>	<u>15,000 gpd</u>	<u>1 proposed brackish water well</u> <u>(Kamaole Aquifer)</u>	<u>* will connect to R-1 line once available to property</u>	<u>Kenolio</u> <u>Apartments</u> <u>FEA July 23,</u> <u>2014</u>
<u>Kaiwahine Village</u>	<u>67,200 gpd</u>	<u>Proposed connection to CWS</u>	<u>None, will use drinking water until R-1 line is available</u>	<u>CWS</u>	<u>CWS</u>	<u>Kaiwahine</u> <u>Village</u> <u>201H</u> <u>Application</u> <u>February</u> <u>2011</u>



<u>Name of Project</u>	<u>Average Daily Drinking Water Use</u>	<u>Drinking Source</u>	<u>Average Non-drinking Water Use</u>	<u>Non Drinking Source</u>	<u>Type of System</u>	<u>Source Document</u>
<u>Kihei High School</u>	<u>37,450 gpd</u>	<u>Proposed connection to CWS</u>	<u>185,000 gpd</u>	<u>2 proposed brackish water wells (Kamaole Aquifer)</u>	<u>Private brackish well</u>	<u>Kihei H.S. FEIS September 8, 2012</u>
<u>Honua'ula Affordable Housing Project</u>	<u>210,000 gpd</u>	<u>Proposed connection to CWS</u>	<u>Unknown</u>	<u>Existing well water (Kamaole Aquifer)</u>	<u>Private brackish well</u>	<u>Calculated using County standards.</u>
<u>Downtown Kihei</u>	<u>48,500 - 143,600 gpd</u>	<u>Proposed connection to CWS</u>	<u>15,900 - 29,500 gpd</u>	<u>County R-1 Water</u>	<u>R-1 Water line from KWWRF</u>	<u>Downtown Kihei FEA April 8, 2013</u>
<u>Honua'ula (Mauka of Makena Resort)</u>	<u>340,000 gpd</u>	<u>Proposed Well water (Kamaole aquifer)</u>	<u>810,000 gpd for irrigation, 717,000 gpd for golf course</u>	<u>Well water (Kamaole aquifer) * will connect to R-1 line once available to property</u>	<u>Private brackish well</u>	<u>Honua'ula FEIS August 8, 2012</u>
<u>Kihei Residential</u>	<u>530,000 gpd</u>	<u>Connect to CWS or Well water (from Kahului or Paia aquifers)</u>	<u>None</u>	<u>Connect to County Water system or Well water (from Kahului or Paia aquifers)</u>	<u>Private brackish well, *Applicant would prefer to connect with the Maui County R-1 Water line</u>	<u>Kihei Residential FEIS June 8, 2008</u>
<u>Estimated Totals</u>	<u>2,481,775 gpd of estimated drinking water usage 2,394,904 gpd of estimated non-drinking water usage</u>					

Table No. 3 above provides the direct impacts related to each project and in total the estimated cumulative impact for drinking water systems is a total of 2,481,775 gpd of estimated drinking water usage, and 2,394,904 gpd of estimated non-drinking water usage.

In regards to the drinking water, the Applicant will cooperate with the CWRM to determine available water use in the Iao Aquifer and underlying Kamaole Aquifer as the Water Resources Protection Plan is updated. It is the Applicant's understanding that the CWRM judges use of the



aquifers relative to its sustainable yield by the 12-month moving average of pumpage, not by the cumulative capacity of pump installations permits; therefore the proposed use of the Iao and Kamaole a\Aquifers, will not exceed the sustainable yields.

The Applicant retained Marine Research Consultants, Inc. to prepare a Baseline Assessment of Marine Water Chemistry and Marine Biotic Communities. The purpose of the report was to assess potential impacts to groundwater and the marine environment as a result of the proposed project. In connection with this work, water quality testing was conducted and the underwater biotic composition along the Kihei coastline was analyzed.

The findings of the report indicate that the proposed project will not have any significant negative effect on water quality. (See: Appendix J, "Baseline Assessment of Marine Water Chemistry and Marine Biotic Communities Report")

In regards to the non-drinking water, which will be drawn from the irrigation well, Waimea Water Services prepared an assessment of potential impacts from the pumping of the approved irrigation well. (See: Appendix R, "Waimea Water Services Report") (Note: Waimea Water Services applied for and supervised the well drilling for the approved irrigation well described above). The assessment found that no probable impact to the aquifer will occur from using the well for irrigation purposes.

Due to the proposed pumping rate of the newly constructed irrigation well, known as the Kaonoulu Irrigation Well, a 24-hour long term pump test was required by the State. The test results suggest that the water quality and quantity were stable at the 175gpm pumping rate and prolonged pumping at this rate would not be likely to adversely affect the aquifer at this location. The present estimate is that the sustained pumping rate of the well should not exceed 175 gpm, but it must be noted that this is only a best estimate based on available data.

Waimea Water Services recently performed a pump test and monitoring program in the Kihei area, and the results are pertinent to this discussion due to the proximity to the Kaonoulu Irrigation Well and because of the similar hydro-geological setting. In summary, no recorded influences from the 96-hour pump test were observed in the surrounding monitoring wells. Tidal influences were expected and documented in all three surrounding monitoring wells in the form of water level changes related to the local tide. The data collected from the three monitoring wells also suggests that there are no subsurface geological barriers that would potentially impede water flow.

In an effort to further understand the hydrogeology of the area surrounding the Kaonoulu Irrigation Well, Waimea Water Services performed an investigation into the available CWRM



well data of the Kihei area. Twelve irrigation wells are located within 6,300 feet of the Kaonoulu Irrigation Well, three of which are located downstream of the subject well. All three of these wells are located greater than 3,000 feet away from the subject well and it is the opinion of Waimea Water Services, based upon its field experience in this location, that adverse impacts would be highly unlikely to be detected in these wells as long as the Kaonoulu Irrigation Well does not exceed the proposed 175 gpm or 100,000 gpd.

The data gathered thus far occurs over a very limited time span. Data over the long term operation of the wells in the Kihei area is needed for a true determination of the long term performance or impacts of the Kaonoulu Irrigation Well. It is absolutely essential that the water levels and the total chlorides in these wells be monitored on a regular basis to provide a real indication of what this aquifer can reliably produce on a sustainable basis. (See: Appendix R, "Waimea Water Services Report")

A condition imposed during the County re-zoning process for the Project site was the requirement that the landowner provide a future connection to the County reclaimed water system. In the future, connecting the Project to the reclaimed water system will eliminate the need for the brackish irrigation well.

B. SOCIO-ECONOMIC ENVIRONMENT

1. Population

Existing Conditions. The population of the County of Maui has exhibited relatively strong growth from 2000-2010. The population increased from 128,241 in 2000 to 154,924 residents in 2010. The Maui Island population is projected to increase to 181,017 in 2020 and 207,307 in 2030.²

The proposed project site is located in Kihei, a Census Designated Place (CDP). In 2010 the population of the Kihei CDP was 20,881 residents.

In addition to the resident population, for the year 2010 the Maui County Planning Department projects that the Maui Island average visitor census is 49,476 people. Approximately 21,621 (43 percent of total) of these visitors are in the Kihei-Makena region.³ Currently the property does not contain any residents.

1. ² *Maui County Data Book, 2012*

2. ³ *Maui County Planning Department 2006*



Potential Impacts and Mitigation Measures. An Economic and Fiscal Impact Assessment was prepared for the Project by the Hallstrom Group Inc. in December 2013, and was updated in July 2015 (See: Appendix K, "Economic and Fiscal Impact Assessment revised July 2015"). It is anticipated that the construction of the proposed project will create 878 worker years' worth of construction jobs and wWhen fully built out, the total resident population of the multi-family developments is projected to be 607 persons. After completion the mixed use project could support an estimated 1,210 permanent jobs.

The projected population increase as a result of 226 apartment units is relatively small when compared to other proposed projects in South Maui such as the MRTP (1,250 units); however the project will result in a small increased population which will use local streets, recreation facilities, and other public services such as schools, and fire and police protection services. The Pi'ilani Promenade will contribute to various assessment and impacts fee programs as required to offset impacts associated with the proposed project and will contribute towards the tax base of Maui County.

2. Housing

Existing Conditions. For a variety of reasons, there has been a generally high appreciation of real estate prices on Maui since the early 1970s. At the same time, the population has expanded significantly, leading to high demand for residential units.

Median home prices have increased over the last year. ~~In March 2014, the median sales price of a single family home on Maui was \$596,000, a 15% percent increase from the March 2013 median sales price of \$508,000.~~ In the Kihei area, median home prices have increased substantially over the past year from ~~\$489,550~~ \$647,500 in March ~~2013~~ 2016 to \$700,000 in December 2014 2016.⁴

The median family income for the island of Maui (except for Hana) is \$75,800.00 based on income data provided by the U.S. Department of Housing and Urban Development, adjusted for Maui County. As home prices increase more residents are seeking rental options. The Maui County Department of Housing and Human Concerns (DHHC) has indicated there is a need for rental units in Kihei.

According to the Economic and Fiscal Impact Assessment prepared for the Project (~~See: Appendix H~~), the demand for new residential units in the Kihei-Makena Corridor will be

3. ⁴ Realtors Association of Maui, December ~~2014~~ 2016.



from 7,250 to 11,500 units over the next 22 18 years (through 2035) (See: Appendix K, "Economic and Fiscal Impact Assessment dated December 2013, revised July 2015").

Potential Impacts and Mitigation Measures.

In response to comments on the DEIS from the State Office of Planning, the proposed 226 rental apartment units are for the Project and none of the rental units will be used or credited by another project. The Project will satisfy the County's affordable housing requirements by providing the required rental units on-site at an affordable rate to be determined by the DHHC. Currently the County requirement is for 25% of the units to be rented at affordable rates.

The proposed includes the construction of 226 rental housing units, of which a required twenty-five percent (25%) or 57 units will be rented at an affordable rate determined by the Maui County Department of Housing and Human Concerns.

In response to comments from the Hawaii Housing Finance and Development Corporation the apartment units will be a mix of one and two bedroom units and are targeted at the full spectrum of workers in the development. The units will be available for all age groups, including seniors and rented for a range of consumer groups, including workforce affordable units and will not be available for sale.

Chapter 2.96 MCC (Residential Workforce Housing Policy) requires that one third (1/3) of the affordable units be provided to 1) "very low income" residents and "low income" residents, 2) "below moderate income" residents, and 3) "moderate income" residents. Based on the 2016 Affordable Sales Pricing Guidelines 1) "very low income" residents and "low income" residents range from 50-80% of the median income for County, 2) "Below moderate income" residents, range from 81%- 100% and 3) "moderate income" residents earn 101%-120% of median income.

The exact rental prices for the units and allocation of units by income is unknown at this time and will be determined after the environmental review process and when the project is ready for construction. The project will comply with the affordability requirements of Chapter 2.96 MCC (Residential Workforce Housing Policy). The Applicant will execute the residential workforce housing agreement with the Department prior to building permit approval.

Rental housing in Kihei is under-supplied, with low vacancies and is a result of the focus of developers on upper-end housing which usually includes high land and construction



costs. The Economic and Fiscal Impact Assessment estimates the projected demand for new residential units in Kihei-Makena is 7,250 – 11,500 units through 2035.

As mentioned above there is a demand for new residential units in the Kihei-Makena region especially rental units, therefore it is anticipated that long-term regional growth of south Maui will support the proposed 226 apartments at the project site.

3. Economy

Existing Conditions. An Economic and Fiscal Impact Assessment was prepared for the Project by The Hallstrom Group Inc. in December 2013, and was updated in July 2015. (See: Appendix K, “Economic and Fiscal Impact Assessment”). Hawaii has steadily rebounded from the 2008-09 recession and associated down-cycle in the real estate market with Maui and Oahu showing the strongest recovery. Unemployment in Maui County has dropped to a the current level of 4.5 percent to a high of 9.1 percent during the 2008-09 recession. In addition median household income has grown two percent in each of the last two years, leasing of commercial and industrial space has shown strong gain in 2013.

As of the report date, Maui currently has some approximately 16.1 million square feet of “commercial” floor area, including light industrial, retail and office uses, or about 108.8 square feet per resident, which is lower than the U.S. average of 138.8 square feet per resident. The Kihei -Makena region currently has 1.8 million square feet of commercial space, which is an average of 63.4 square feet per resident. The Economic and Fiscal Impact Assessment estimates that there will be a demand for an additional 936,000 to 1,505,000 square feet of leasable commercial floor space in Kihei-Makena region by 2035.

Contending with Maui’s high cost of living, most households support themselves on two or more jobs and many are forced into renting housing. According to the Department of Business, Economic Development and Tourism, the median household income is ~~\$64,583.~~ \$67,013.⁵ Rental housing in Kihei is under-supplied, with low vacancies and is a result of the focus of developers on upper-end housing which usually includes high land and construction costs. The Economic and Fiscal Impact Assessment estimates the projected demand for new residential units in Kihei-Makena is 7,250 – 11,500 units through 2035.

According to the Maui Island Plan (December 2012), diversifying Maui’s economy has been a key, longstanding County policy. The Economic Development chapter of the plan

⁵ Maui County Data Book, ~~2012~~ 2015.



includes the following statement in its analysis of the island's challenges and opportunities:

"The Island of Maui, like the County as a whole, faces two fundamental challenges in economic development: (1) diversification; and (2) increasing the number and proportion of living wage jobs. There is a subset of more specific challenges, such as the high cost of housing and the need to strengthen public education".

Potential Impacts and Mitigation Measures. Over the past 20 years the Maui light industrial sector has evolved and the initial conceptual plan of 123 small lots ~~to~~ would support approximately 900,000 square feet (SF) of business floor area and is no longer valid in today's market. The updated Pi'ilani Promenade project proposes a smaller development at 530,000 square feet of business commercial space, and approximately 58,000 square feet of light industrial space, and the 226 multi-family units. Therefore it is anticipated that this development is more appropriate and will be successful in current and future market conditions.

The construction of the Pi'ilani Promenade is expected to inject approximately \$212 million of new capital investment into the local economy and provide an estimated 878 "worker years" of employment as well as \$66.5 million in total wages over a 12 to 15 year period. The effect of these expenditures will have positive direct, indirect, and induced beneficial impacts on the economy of the County of Maui. During its operations phase, the Pi'ilani Promenade will increase the level of capital investment in the region which will create employment opportunities and economic stimulus for the region. The proposed project will provide direct employment opportunities for Maui residents and contribute to economic diversification and growth for both Maui and the State. After "stabilization," the Pi'ilani Promenade is envisioned to support 1,210 permanent jobs with an annual payroll of about \$ 36.6 million (See: Appendix K, "Economic and Fiscal Impact Assessment").

The 226 unit apartment component of the Project is required to provide a certain amount of the rental units at an affordable price determined by the DHHC.

During the build out period, the project will generate approximately \$2.3 billion in economic activity. After completion and stabilization of the project, the onsite businesses will generate approximately \$348.7 million in revenues/sales per year (See: Appendix K, "Economic and Fiscal Impact Assessment").



The State of Hawaii will receive \$210.7 million in net tax revenue (profit) during development of the project and \$26 million per year to the State on an annualized basis thereafter. The project will generate \$25.9 million in net tax revenue (profit) during the build-out period and \$2.2 million in annual net tax revenue (profit) to the County of Maui after the build-out period.

The KMCP identifies four areas that have been fully developed and provide some of the commercial needs for south Maui residents, which are: 1) North Kihei, between the existing South Kihei Road, Piilani Highway and Uwapo Road; 2) A central business and commercial center for Kihei clustered about the South Kihei Road/Road "C" intersection; 3) in existing commercially zoned areas along South Kihei Road in the vicinity of Kalama Park; and 4) along South Kihei Road opposite the Kamaole beach parks. These limited commercial areas were intended to serve the commercial needs of the fastest growing community in the State which has clearly out grown the goods and services available in these areas. The KMCP has designated the Project site for light industrial uses with approved zoning providing for light industrial uses that include neighborhood and regional needs addressing the current and future demand.

While there will inevitably be some cross-over, the Pi'ilani Promenade and Downtown Kihei development will appeal to different customer and tenant types. Downtown Kihei does not offer the exposure, access, intercept or site characteristics that Pi'ilani Promenade does. According to Downtown Kihei market study, the primary patrons of the Project will be visitors.

The Project is intended to focus on providing light industrial and commercial uses for local Maui residents as an alternative shopping destination to Kahului. It is not intended to be directly competitive with the majority of stores along South Kihei Road which attract large numbers of visitors as their primary patrons, or otherwise comprise a significant portion of their customer base.

We anticipate some visitors will patronize the Project but will comprise only a minority of shoppers to selected retail stores and restaurants and not necessarily for the resident-oriented anchor tenant and light industrial businesses.

As part of this FEIS, the Hallstrom Group prepared an Economic and Fiscal Impact Assessment for the Project, which includes analysis of the existing commercial properties in Kihei. An inventory of existing occupied and vacant commercial properties was developed and used as part of the economic analysis for the Project. The Economic and Fiscal Impact Assessment was revised to address comments received on the DEIS.



Specifically, Table V-4 of the Economic and Fiscal Impact Assessment in the FEIS now includes the accurate County costs and State costs per year.

It is projected that the Project will address sub-regional and regional commercial demand more efficiently than the fragmented commercial space located along South Kihei Road because of its location and visibility and ease of access for residents in west, south and central Maui.

In mid-2014, The Hallstrom Group completed an inventory of the Kihei Retail market and found that about 10 percent of the total floor area in the community was vacant. However, the vacancies were either restaurant spaces (the least stable sector of the market) or in uncompetitive projects or locations (such as along Lipoa Street). All of the quality/competitive spaces along South Kihei Road or in newer, modern centers were occupied. Over the past year numerous new leases have been signed and the vacancy rate in Kihei has dropped below seven percent (2014).

The Hallstrom Group's assessment determines that the problem is not with demand for competitive spaces in the area, but the lack of quality, modern, well-located inventory. Overall the Kihei retail market is strong, and performed better during the recession and recovery than most neighbor island sectors.

This Project will not alleviate the need for other available light industrial and commercial spaces within Kihei to maintain a competitive, and attractive position in the market.

In summary, the Pi'ilani Promenade will create jobs for residents, which will in turn have a positive impact on the rest of the Maui economy. As a new mixed use development, the proposed Pi'ilani Promenade will provide affordable rental housing units and will contribute to the standing of South Maui as a destination for business by offering quality, well-located, building parcel inventory capable of supporting a wide variety of commercial and light industrial use types meeting the demands of companies seeking an accessible location in Kihei.

4. Cultural Resources

Existing Conditions. Hana Pono LLC. prepared a Cultural Impact Assessment (CIA) for the Pi'ilani Promenade to identify historical and current cultural uses of the project area and to assess the impact of the proposed action on the cultural resources, practices, and beliefs. The CIA included the Honua'ula Affordable Housing development parcel in its



analysis. The CIA was conducted in accordance with the State of Hawaii Office of Environmental Quality Control (OEQC) guidelines for Assessing Cultural Impact Assessments. In response to consultation with the community and various government agencies, the Applicant retained Scientific Consultant Services (SCS) to prepare a supplemental CIA (the "SCIA") to include supplemental consultation and additional interviews with people who may have knowledge of the area. (See: Appendix I-1 "Supplemental Cultural Impact Assessment Report dated March 2017"). It is noted that the SCIA does not include the Honua'ula Affordable Housing development parcel however SCS has prepared a separate CIA for the Honua'ula Affordable Housing development parcel. (See: Appendix I-2 "Cultural Impact Assessment for the proposed Honua'ula offsite workforce housing project dated April 2017").

The project site is located in the Kula Moku and the Waiohuli and Kaonoulu ahupua'a in an area archaeologically known as the "barren zone". Based on a praxis of archaeological studies conducted on the "barren zone" in the region of the Project site, site expectation and site density is low. (See: Appendix I-1 "Supplemental Cultural Impact Assessment Report dated March 2017").

The area of Kihei that includes the project site has been severely disturbed from its original and unaltered state for many decades, by the effects of grazing cattle and the construction of ranch roads, county roads and the construction of Pi'ilani Highway. The CIA indicates that any resources or practices occurring traditionally in the area are ~~no~~ non-existent and would have been obliterated. (See: Appendix I "Cultural Impact Assessment Report dated December 2013, revised March and August 2016").

Interviews with individuals (~~kūpuna-kapuna~~/makua) knowledgeable about the lands of the Kaonoulu ahupua'a were conducted in 2013 and in 2016 by Hana Pono LLC- as part of the CIA, and by SCS in 2016 as part of the SCIA. As noted SCS has prepared a separate CIA for the Honua'ula Affordable Housing development parcel that includes interviews with the same individuals as the SCIA. (See: Appendix I-2 "Cultural Impact Assessment for the proposed Honua'ula offsite workforce housing project dated April 2017"). The oral history interviews were conducted in order to collect information on possible pre-historic and historic cultural resources associated with these lands, as well as traditional cultural practices. (See: Appendix I "Cultural Impact Assessment Report dated December 2013, revised March and August 2016"; see also Appendix I-1 "Supplemental Cultural Impact Assessment Report dated March 2017" and Appendix I-2 "Cultural Impact Assessment for the proposed Honua'ula offsite workforce housing project dated April 2017").



A public information and cultural consultation meeting for the proposed project was held on February 25, 2014. Transcripts from this meeting have been included in the DEIS. The focus of the meeting was to review the previous 1994 AIS and discuss the findings of the current 2014 AIS. In addition to discussing the return of the petroglyph boulder (which removed from the Project site and is preserved under a SHPD-approved preservation plan) and potential impacts to Kulanihakoi Gulch (which is not located on the Project site), some of the participants suggested that the potential archaeological sites could be incorporated into the design of the project or into its landscaping and the previously removed petroglyph stone be returned to the property. The Applicant has discussed the possible return of the petroglyph stone and the former owner (Kaonoulu Ranch) rejected this request given the fact that the relocation and a preservation plan was submitted and approved by SHPD.

As a follow up to the February 25, 2014 meeting, the Project team's archaeologist and cultural consultant participated in a site visit on January 22, 2016. Following the January 22, 2016 site visit, a request was made from the Aha Moku for a further cultural consultation meeting. The meeting was held on April 27, 2016, and a transcript of the April 27, 2016 meeting is available as Appendix A to the Supplemental Cultural Impact Assessment. (See: Appendix I-1 "Supplemental Cultural Impact Assessment dated March 2017"). As part of the SCIA, SCS reached out to 21 persons for consultation, 3 of whom responded and wanted to be interviewed.

Potential Impacts and Mitigation Measures.

In general, concerns expressed by the community in these site visits, meetings, and cultural consultations focused on the potential presence of undocumented archaeological sites within the Project site that may be impacted by development of the Project. As documented in Section III.8 of this FEIS, an Archaeological Inventory Survey undertaken and completed by Xamanek Researches in July 1994 identified a total of 20 archaeological sites within the Petition Area. The Archaeological Inventory Survey prepared for the DEIS identified an additional archaeological site on the Project. (See: Appendix F, "Archaeological Inventory Survey dated March 2014 revised August 26, 2015").~~In addition,~~To monitor these sites, an archaeological monitoring plan was prepared and submitted to SHPD for review and approval, and was approved and referenced for all recent work on the site. The monitoring plan may be found in Appendix H and will be updated once project construction is initiated. (See: Appendix F, "Archaeological Inventory Survey dated March 2014 revised August 26, 2015").

The concerns expressed by those interviewed for the SCIA did not focus on traditional cultural practices previously or currently conducted within the Project area. However,



there is the potential for traditional cultural practices conducted within the greater ahupua'a to be impacted by development of the Project (i.e., naturally occurring flooding and run-off generated by construction activities within the Project area which may negatively affect the adjacent areas, including Kalepolepo Fishpond and the Pacific Ocean). As discussed in Section III.D.2, the Applicant is proposing several measures to mitigation any potential adverse drainage impacts caused by development of the Project, which includes under- and above-ground stormwater detention basins. For more information on the proposed mitigation measures that will be implemented to provide a level of stormwater filtration and pollution control, please review Section III.D.2 of this FEIS.

The CIA reports that the proposed project will have no ~~has no~~ significant effects impact on ~~to~~ cultural resources, beliefs, or practices. Given the culture-historical background presented by the CIA and SCIA, in addition to the summarized results of prior archaeological studies in the project area and in the neighboring areas, the CIA and SCIA determined that there are no specific valued cultural, historical, or natural resources within the project area; nor are there any traditional and customary native Hawaiian rights being exercised within the project area. The long-term use of the project area for grazing and ranching activities also supports this conclusion.

The cultural and historical background presented in the CIA prepared by Hana Pono, LLC and the SCIA prepared by SCS, in addition to the findings of prior archaeological studies in the project area and in the neighboring areas, support the findings of the CIA prepared for the Honua'ula offsite workforce housing project. The findings are that there are no specific valued cultural, historical, or natural resources within the project area. Nor are there any traditional and customary native Hawaiian rights being exercised within the project area. (See: Appendix I-2 "Cultural Impact Assessment for the proposed Honua'ula offsite workforce housing project dated April 2017").

From a cultural practices and beliefs perspective, the subject property bears no apparent signs of cultural practices or gatherings currently taking place. The oral history interviews did not reveal any known gathering places on the subject property or any access concerns as a result of the proposed project. Therefore it can be concluded that development of the site will not impact cultural resources on the property or within its immediate vicinity (See: Appendix I "Cultural Impact Assessment Report dated December 2013, revised March and August 2016").

Notwithstanding the absence of valued resources, the Applicant is willing to continue meetings with the Aha Moku members as well as other members of the community during



the Data Recovery effort proposed for the archaeological sites. The findings of the Archaeological Monitoring program will be conducted under the guidance and directive of the SHPD.

Because there are no valued cultural, historical, or natural resources in the Project site, and because there are no traditional and customary native Hawaiian rights exercised within the Project site, such resources --including traditional and customary native Hawaiian rights--will not be affected or impaired by the Project. Accordingly, there are no feasible actions needed to reasonably protect native Hawaiian rights. See Ka Pa'akai O Ka'Aina v. Land Use Comm'n, State of Hawai'i, 94 Hawai'i 31, 7 P.3d 1068 (2000).

C. PUBLIC SERVICES

1. Recreational Facilities

Existing Conditions. Sub-regional parks include mini-, neighborhood, and district/community parks. Most parks within the South Maui area are located along the coast, and are mainly beach parks with few recreational facilities. Phase I of the South Maui Community Park was completed and opened in 2011, significantly adding to Kihei's inventory of regional park acreage.

The following County public parks and community centers are currently available in the region:

- South Maui Community Park, Phase I;
- Charley Young Park;
- Cove Park;
- Hale Pi'ilani Park;
- Hay craft Park;
- Kalama Park;
- Kalepolepo Park;
- Kamaole Beach Park (I, II, III);
- Kenolio Recreation Complex;
- Keonekai Park;
- Kihei Aquatic Center;
- Kihei Beach Reserve / Waipuilani Park;
- Kihei Community Center;
- Kilohana Park;
- Mai Poina Park / Maipoina OE IAU Beach Park;



- Piikea Park; and
- Poolenalena Park / Chang's Beach.

In addition to County parks, Makena State Park is located in the Kihei-Makena region, encompassing 164-acres of scenic beach park. Numerous recreational facilities, including golf courses and tennis courts, are also present within the region's private hotels.

Potential Impacts and Mitigation Measures. A number of existing park facilities, including South Maui Community Park, Kihei Aquatic Center, Kihei Community Center, Kalama Park, and Charley Young Park are within close proximity to the project site.

On-site ~~park~~ open spaces will include a central neighborhood park, totaling approximately two (2) acres and small open spaces throughout the development. The owners of the project will comply with the requirements for Parks and Playgrounds, pursuant to Maui County Code Section 18.16.320. The park assessment requirements are designed to mitigate the incremental impact that new development places upon the region's park facilities. As such, the Pi'ilani Promenade is anticipated to positively impact recreational facilities by providing an approximately 2-acre park site adjacent to the proposed Apartments.

The Applicant met with the County Department of Parks & Recreation on March 13, 2015 to discuss how the parks and playgrounds assessment requirements for the proposed Project can be satisfied in accordance with MCC Section 18.16.320. As a result of the meeting, the Applicant is proposing the following general changes to the on-site park space:

1. Inclusion of active play space and facilities within the park areas;
2. Inclusion of parking for park users; and
3. Possible reconfiguration of the park acreage to create a more contiguous park area.

Additionally, improvements are being made to accommodate pedestrian and bicycle travel adjacent to and within the Project. Recognizing that the availability of existing off-street pedestrian and bike pathways is limited in south Maui, and that there is a need for projects to offer options other than vehicular access, the Pi'ilani Promenade includes a pedestrian and bike pathway system adjacent to and within the Project site, as shown in Figure 15 "Conceptual Circulation Plan". The red bike lane shown in Figure 15 is located within the Pi'ilani Highway right of way. The blue system shown provides for a series of pedestrian and bike pathways with the Project site and East Kaonoulu Road allowing for safe off street interconnectivity for the public using the various components of the land plan and providing for future connectivity to the areas north, south and east of the Project site.



2. Medical Facilities

Existing Conditions. Maui Memorial Medical Center, located in Wailuku and approximately 10 miles from the project site, is the island's only acute care hospital. This 240-bed facility provides acute, general, and emergency care services. Various private medical offices and facilities are located in the South Maui area including Kihei Clinic and Wailea Medical Service, Kihei Pediatric Clinic, Kihei Physicians, the Kihei-Wailea Medical Center, Maui Medical Group, and Kaiser Permanente.

Potential Impacts and Mitigation Measures. The Project will produce an increase in the population of the immediate area. The minimal increase in population will produce a marginal increase in demand for physicians, dentists, nurses, mental health personnel, and hospital beds. In the context of the overall population growth for the island, the proposed project is not anticipated to produce an overall significant impact to the island's medical facilities.

The Pi'ilani Promenade commercial areas will provide the opportunity for expanded services, such as medical and dental offices to serve the central Kihei area.

3. Police and Fire Protection Services

Existing Conditions. The Maui Police Department is headquartered at the Wailuku Police Station on Mahalani Street. The Pi'ilani Promenade falls within the Maui Police Department's Kihei Patrol District 6 (Ma'alaea, Kihei, Wailea, Makena). This police district is served by the recently completed Kihei District Police Station located at the intersection of Pi'ilani Highway and Kanani Road, approximately 1.5 miles south of the project site.

There are two fire stations servicing South Maui; Wailea Fire Station and Kihei Fire Station. The Kihei Fire Station is located near Kalama Park on South Kihei Road, about 1.5 miles from the project site, sufficiently proximate to provide adequate fire service to the site. Additionally, a 2-acre fire station facility is planned within the proposed Honua'ula development with Golf Course mauka of the Wailea Resort.

Potential Impacts and Mitigation Measures. The Project will produce a minimal increase in the population of the immediate area. The increase in population will produce a marginal increase in demand for police and fire protection services, including personnel, vehicles, and facilities. According to the *Maui County Public Facilities Assessment Update* (R.M. Towill Corporation, 2007) the Maui Police Department's generation rate for officers per 1,000 population is 1.96, and the generation rate for total employees per 1,000



population is 2.56. Assuming the project increases population by 607 people and using the provided generation rates the proposed project is estimated to generate the need for 1.19 additional officers and 1.55 additional total employees.

Increased tax revenues generated by the project will provide additional funds to the County for police and fire capital facility improvements and service upgrades. Additionally, the Project will comply with any impact fee ordinances for police and fire that may be adopted.

4. Schools

Existing Conditions. Maui schools are organized into complexes and complex-areas. A complex consists of a high school and all of the intermediate/middle and elementary schools that flow into it. Groups of two to four complexes form a "complex area" that is under the supervision of a complex area superintendent.

The Pi'ilani Promenade site is located within the State Department of Education's (DOE) Maui Complex, within the Baldwin-Kekaulike-Maui Complex-Area. Currently there is capacity at all public schools for additional students. Current and projected enrollment and capacities for area schools are given in Table No. 24, "DOE School Enrollment & Capacity" below. *Note: the "Capacity" column numbers are based on the results of a classroom space survey conducted by DOE in the 2012-13 school year.

Table No. 24 DOE School Enrollment & Capacity

Schools	2013-2014 Enrollment	Capacity	2014-2015 Projected Enrollment	2014-2015 Enrollment	2015-2016 Enrollment	2016-2017 Projected Enrollment	2016 Enrollment	2017-2018 Projected Enrollment
Kihei Elementary	947	890	851	<u>864</u>	<u>801</u>	<u>883</u>	<u>786</u>	<u>791</u>
Kamalii Elementary	585	928	584	<u>530</u>	<u>481</u>	<u>542</u>	<u>452</u>	<u>447</u>
Lokelani Intermediate	550	836	525	<u>553</u>	<u>594</u>	<u>593</u>	<u>584</u>	<u>574</u>
Maui High	1908	2035	1967	<u>1931</u>	<u>1906</u>	<u>1861</u>	<u>1941</u>	<u>1977</u>

Source: DOE 2016

Currently, the State DOE is planning to build a new high school for grades 9-12 in Kihei on approximately 77 acres mauka of Pi'ilani Highway between Kulanihakoi and Waipuilani Gulches, south of the Pi'ilani Promenade. ~~Phase I is slated to open in 2017 with a design capacity of 930 students, staff and visitors and Phase II is planned to open~~



in 2025 with a design capacity of 1,941. Based upon consultation with the DOE in April 2016, the high school in Kihei does not have a schedule for opening because the school is still in a pre-design phase. Grading work has started at the site and construction will begin when further funding is available.

Additionally, Kihei Charter School, provides K through 12 education for 546 students and the Kihei Charter School is pursuing building permits to construct a new high school in the MRTTP in 2017.

Potential Impacts and Mitigation Measures. The Economic and Fiscal Impact Assessment estimates that the proposed project will generate 60-70 students that will attend public schools (See: Appendix K, "Economic and Fiscal Impact Assessment").

The Economic and Fiscal Impact Assessment projected that the Project would generate 60-70 students. This projection is based on population/age modeling, and assumes that the children in an affordable apartment project would attend public school. The Economic and Fiscal Impact Assessment based the student generation rate on census data that between 10% and 11.5% of the population is of school age, which equals about 60 to 70 students based on the projected resident population of 607.

The DOE forecasts public school children for Kihei (which is considered part of Central Maui) at the rate of .22 public school children per multifamily unit and at .49 per single family home.

So, applying the DOE formula the total number of anticipated public school attendees from the 226-proposed subject apartment units would be 49.72, rounded to 50 students (.22 X 226).

The Project has not been designed to accommodate a public school site. In 2007, the Hawaii Legislature enacted Act 245 as Section 302A, HRS, "School Impact Fees". Based upon this legislation, the DOE has enacted impact fees for residential developments that occur within identified school impact districts. The Project is within the boundaries of the Central Maui Impact District and is within the Makawao Cost Area of that district. Projects within the district and cost area pay a construction fee and either a fee-in-lieu of land or a land donation, at the DOE's discretion. The Economic Impact Assessment estimates the projects impact fee is ~~\$535,846.00~~ \$553,926.00 (See: Appendix K, "Economic and Fiscal Impact Assessment"). At the appropriate time, the Applicant will contact the DOE to enter into an impact fee agreement that will help finance the construction of a school facilities in Kihei.



The Applicant had discussions with the DOE on the Project and is still designing the rental apartment portion of the Project and will enter into a written agreement with the DOE after the EIS and LUC review process has concluded.

To clarify, there was an estimation of the impact fee error in the DEIS and Economic and Fiscal Impact Analysis. The Project site contains land located within the Makawao Cost Area, and the appropriate school impact fee amount will be settled in the written agreement.

5. Solid Waste

Existing Conditions. The Department's Residential Collection program collects and disposes of residential waste in three major districts: Wailuku (including Kahului and South Maui), Makawao (including Kula, Pukalani, Paia, and Haiku) and Lahaina (West Maui). The Project is located in the Wailuku waste district. Weekly, single-family residential solid-waste collection in the area is provided by the County of Maui, Department of Environmental Management (DEM), Solid Waste Division. The proposed multi-family apartments are required to contract a private refuse company to handle solid waste generated by the apartment residents.

The Central Maui Landfill, which is located in the Wailuku-Kahului Community Plan region, receives residential solid waste from the area. Green waste is processed collected by Eko Compost, which is located at the Central Maui Landfill. Construction and demolition (C&D) waste is accepted at the privately operated C&D Landfill in Ma'alaea.

Plastic, glass, metal, cardboard, and newspaper can be recycled when left at various drop-boxes throughout the County. Additional green waste recycling is provided by several private organizations.

Potential Impacts and Mitigation Measures. The proposed project will consist of industrial, commercial and multi-family uses therefore the owners are required to contract a private refuse company to handle solid waste generated at the project site. The County's DEM, Solid Waste Division estimates that residential households on Maui generate approximately 2.3 tons of solid waste per household per year. Commercial units on Maui generate approximately 1.58 tons of solid waste per employee per year.⁶ Solid waste generation includes all the waste produced in a residence or business, including that which is reused or recycled as well as that which is disposed of in landfills.

⁶ Gershman, Brickner & Bratton, Inc. February 2009. Integrated Solid Waste Management Plan. Prepared for County of Maui Department of Environmental Management Solid Waste Division.



Using the above rates, after full build-out and occupancy of all 226 residential apartment units and commercial units employing an estimated 1,210 people at the Project site, total waste generated is estimated to be approximately (2,431.60) 2,432 tons per year. (2.3 x 226 = 519.80 tons per year) (1.58 x 1,210 = 1,911.80 tons per year) (519.8 + 1911.8 = 2,431.6 rounded to 2,432 tons per year)

Using the County's waste diversion rate of 30 percent, total waste from the Project site is estimated to be approximately 1,702 tons per year. Achieving the County's waste diversion rate of 50 percent by 2030 would reduce the Project's waste to 1,216 tons per year.

In 2009 the Integrated Solid Waste Management Plan (ISWMP) for Maui County was updated and projected that the Central Maui Landfill will have adequate capacity to accommodate Residential and Commercial waste through the year 2026. This estimate does not take into account future increases in source reduction and waste diversion. Increases in waste diversion achieved through education, recycling, composting, and reuse programs are expected to decrease demand for landfill space and extend the life of the Central Maui Landfill beyond the currently projected closure year. The County's Department of Environmental Management, Solid Waste Division, anticipates that additional phases of the Central Maui Landfill will be developed as needed to accommodate future waste.

Waste generated by site preparation will primarily consist of rocks, and debris from clearing, grubbing, and grading. Very little demolition material is expected, as the site is vacant.

During the short term, construction activities will require the disposal of the existing onsite waste, as well as cleared vegetation and construction-related solid waste. A solid waste management plan will be coordinated with the County's Solid Waste Division for the disposal of onsite and construction-related waste material. The applicants will work with the contractor to minimize the amount of solid waste generated during the construction of the project.

In addition the project will provide on-site recycling opportunities ~~for residents~~ in an effort to reduce solid waste entering the landfill.



6. Civil Defense

Existing Conditions. The State of Hawaii Civil Defense recently installed a new emergency siren at the Kihei Community Center which provides coverage for a majority of central Kihei.

Potential Impacts and Mitigation Measures. Except as stated below, no comments on civil defense issues were received during the DEIS comment period and no requests from Civil Defense were received.

In response to comments from LUC, the Applicant has contacted the Maui County Civil Defense Agency on several occasions and has not received any comments to date. The Maui County Civil Defense Agency was provided a copy of the DEIS for comment in August 2014, and after receiving no comment the Applicant's planning consultant hand delivered a hardcopy of summary documents and figures, and a copy of the DEIS on December 11, 2014. The Applicant is willing to consider recommendations from Maui County Civil Defense Agency, should they provide comment on the proposed project.

Furthermore, Condition 4 of the 1995 Decision and Order states that the "Petitioner shall fund and construct adequate civil defense measures as determined by the State and County Civil Defense Agencies". The Applicant does not seek any modification or deletion of Condition 4.

D. INFRASTRUCTURE

1. Roadways

Existing Conditions: A Traffic Impact Analysis Report was prepared for the DEIS by Phillip Rowell and Associates, Inc. in June 2014 which describes the traffic characteristics of the proposed project and likely impacts to the adjacent roadway network (See: Appendix M, "Traffic Impact Analysis Report dated June 6, 2014"). ~~The Traffic Impact Assessment Report (TIAR) was prepared by Phillip Rowell and Associates in June 2014 for the DEIS. Once the DEIS was published for comment, due to severe medical complications, Mr. Rowell was physically unable to complete his analysis and respond to the comments received on the DEIS and the Applicant elected to engage another consultant with the task of fully updating the TIAR and assisting with the responses to comments. The TIAR was updated in December 2016 by a new transportation consultant, SSFM International, which included revised estimated automobile trips generated by the project utilizing current traffic count data, input from the State DOT, and a further~~



analysis of other proposed projects in south Maui. (See: Appendix M-1, "Traffic Impact Analysis Report Update, dated December 20, 2016").

The singular access route into and out of the Project area will be the first increment of the KUH at the intersection of Pi'ilani Highway and Kaonoulu Street.

Existing Roadway System

Pi'ilani Highway provides primary regional mobility for the Kihei and Wailea-Makena areas. Pi'ilani Highway is a four-lane, undivided highway with a north-south orientation connecting Mokulele Highway to the north with Wailea Resort to the south. The posted speed limit is 40 miles per hour south of Ohukai Road and ~~45~~ 40 miles per hour north of Ohukai Road.

Ohukai Road is a two-lane, two-way street, but widens to provide two approach lanes as it approaches Pi'ilani Highway. The posted speed limit is 20 miles per hour. ~~Both the eastbound and westbound approaches provide a through and left turn lane and a separate right turn lane. The eastbound and westbound approaches move concurrently, which means that left turns are permitted rather than protected. The eastbound approach has been modified to provide one left turn lane, one through lane and one right turn lane. The westbound approach has been modified to provide one left turn lane, an optional left turn or through lane and one right turn lane.~~

Kaonoulu Street currently connects Pi'ilani Highway with South Kihei Road. Currently, it is a two-lane, two-way street with separate left turn lanes at intersections. The posted speed limit is 20 miles per hour. The intersection with Pi'ilani Highway is currently an unsignalized, T-intersection.

Kaiwahine Street is a two-lane, two-way residential collector street connecting the project with Pi'ilani Highway. The posted speed limit is 20 miles per hour. Residential parking is allowed along both sides of the street. Uwapo Road is an extension of Kaiwahine Street west of Pi'ilani Highway to South Kihei Road. No Project related traffic will be routed onto Kaiwahine Street. The singular access route into and out of the Project area will be the first increment of the KUH.

Uwapo Road is a two-lane, two-way roadway. There is no development along the north side and there are multi-family residential units along the south side. No parking is allowed along either side. The assumed speed limit is 20 miles per hour.



South Kihei Road is a collector road providing north-south mobility and property access within the Kihei Community. It is generally a two-lane roadway. Major segments of South Kihei Road have been improved to provide either a median turn lane or parallel parking on the makai-side. Sidewalks were provided on these enhanced segments along with striped bike lanes. Unimproved sections of South Kihei Road usually have only two undivided traffic lanes. The posted speed limit on South Kihei Road is ~~25~~ 30 miles per hour along most of its length, with 20 mph in select locations due to roadway conditions.

Bicycle and Pedestrian Access

No dedicated bicycle facilities or sidewalks currently exist at the vacant site. Bicycles share the pavement with motor vehicles along Pi'ilani Highway. Moderate pedestrian and bicycle volumes were counted at the Project intersections during the AM, PM and Saturday peak hours (See: Tables 5 & 6 of Appendix M-1, Traffic Impact Analysis Report Update dated December 20, 2016) near the Project area. Saturday volumes were higher than weekday volumes which is reflective of the use of the roads more for recreational riding than commuting.

Public Transit

The island of Maui is served by the Maui Public Bus Transit System, operated by Maui County. Kihei is served by the Kihei Villager and Islander bus routes. The Kihei Islander route extends further to the north and south, connecting Kahului to Makena via Ma'alaea and Kihei. Both routes operate with a headway of one hour throughout the day. Within Kihei, the Maui buses use South Kihei Road. The closest bus stop to the site is located at the intersection of Kaonoulu Street and South Kihei Road.

Existing Traffic Volumes

As part of the TIAR update, traffic turning movement counts were conducted at the following study area intersections in ~~May and October 2013~~ on January 12, 2016 at the following intersections shown in Table No. ~~3 5~~.

Intersection	Jurisdiction	Existing Right-of-Way Control
North Kihei Road at South Kihei Road	State	Signals
Pi'ilani Highway at North Kihei Road	State	Signals
Pi'ilani Highway at Kaiwahine Street /Uwapo Road	State	Signals
Pi'ilani Highway at Ohukai Road	State	Signals



Pi'ilani Highway at Piikea Avenue	State	Signals
Pi'ilani Highway at Kaonoulu Street	State	Stop Sign
Kaonoulu Street at South Kihei Road	County	Stop Sign
Pi'ilani Highway at Kulanihako'i Street	State	Stop Sign
Kaonoulu Street at Kenolio Road	County	Stop Sign
Kaonoulu Street at Alulike Street	County	Stop Sign

Existing Intersection Operations

The intersections noted in Table No. 5 were analyzed during weekdays from 6:00-9:00AM and 3:00-6:00PM and the Saturday traffic counts were performed from 10:00AM to 2:00PM.

Operating conditions at an intersection by approach are expressed as a qualitative measure known as Level of Service (LOS) ranging from A to F. LOS A represents free-flow operations with low delay, while LOS F represents congested conditions with relatively high delay. The overall intersection LOS is a weighted average of the LOS of individual traffic movement groups. Field observations were performed at selected intersections to verify the results of the intersection analyses. Table No. 4 6 displays the existing (2016) conditions level of service (LOS) for each signalized and un-signalized intersection, volume to capacity ratio (v/c) and delay were determined for the weekday AM and PM and weekend (Saturday) mid-day peak hours (see Table No. 6).

Existing (2016) unsignalized and signalized intersection LOS, v/c ratio and delay were determined for the weekday AM and PM and weekend (Saturday) mid-day peak hours (see Table No. 6). All signalized intersection LOS resulted in LOS D or better; however, individual traffic movements for the signalized and unsignalized intersections resulted in LOS E or F conditions with some having v/c greater than 1.0. The worst conditions were seen for the minor movements at the unsignalized intersections of Pi'ilani Highway at Piikea Avenue, Pi'ilani Highway at Kaonoulu Street, and Pi'ilani Highway at Kulanihako'i Street which resulted in LOS F conditions and high v/c. Detailed analysis reports for these intersections during Existing (2016) conditions are provided in Appendix D of the TIAR update.

Table 4 — 2013 Levels of Service of Signalized Intersections

Intersection and Lane Group	AM Peak Hour			PM Peak Hour			Saturday Peak Hour		
	V/C	Delay ¹	LOS ²	V/C	Delay	LOS	V/C	Delay	LOS
<i>Pi'ilani Highway at Ohukai Road</i>	0.95	46.7	D	0.87	50.3	D	0.88	29.7	C
Eastbound Left & Thru	0.88	80.6	F	0.97	122.0	F	0.85	50.1	D
Eastbound Right	0.08	46.8	D	0.06	60.4	E	0.11	26.6	C
Westbound Left & Thru	1.05	116.6	F	0.91	84.4	F	0.71	37.9	D

Pi'ilani Promenade



Westbound Right	0.13	44.4	D	0.12	49.4	D	0.03	26.7	C
Northbound Left	0.36	61.1	E	0.70	67.9	E	0.60	40.8	D
Northbound Thru	0.86	31.7	C	0.87	47.5	D	0.92	32.5	C
Northbound Right	0.04	13.0	B	0.08	30.4	C	0.10	15.2	B
Southbound Left	0.91	100.0	F	0.71	90.1	F	0.68	40.9	D
Southbound Thru	0.97	37.3	D	0.85	33.6	C	0.82	23.4	C
Southbound Right	0.06	2.6	A	0.08	7.4	A	0.05	12.9	B
Pi'ilani Highway at Kaiwaha Street	0.69	32.0	C	0.64	33.3	C	0.55	10.4	B
Eastbound Left & Thru	0.87	77.6	E	0.82	93.9	F	0.55	30.0	C
Eastbound Right	0.11	41.4	D	0.06	58.0	E	0.05	24.2	C
Westbound Left & Thru	0.64	52.2	D	0.51	63.5	E	0.43	27.4	C
Westbound Right	0.06	40.9	D	0.04	57.8	E	0.03	24.1	C
Northbound Left	0.28	31.8	C	0.50	57.2	E	0.49	30.5	C
Northbound Thru	0.64	30.3	C	0.61	32.6	C	0.51	7.5	A
Northbound Right	0.04	42.6	D	0.07	36.3	D	0.03	5.1	A
Southbound Left	0.38	45.1	D	0.60	51.4	D	0.55	30.9	C
Southbound Thru	0.57	23.1	C	0.54	22.2	C	0.59	7.7	A
Southbound Right	0.02	12.9	B	0.05	26.9	C	0.05	4.7	A
Pi'ilani Highway at North Kihei Road	0.66	30.5	C	0.86	48.0	D	0.58	16.6	B
Eastbound Left	0.70	70.8	E	0.82	65.4	E	0.55	31.2	C
Eastbound Left & Thru	0.72	72.0	E	0.86	71.2	E	0.55	31.0	C
Eastbound Right	0.22	26.7	C	0.09	134.3	F	0.15	15.2	B
Westbound Left, Thru & Right	0.31	60.0	E	0.84	83.6	F	0.06	32.4	C
Northbound Left	0.71	41.2	D	0.89	77.4	E	0.55	27.0	C
Northbound Thru & Right	0.54	19.2	B	0.61	15.3	B	0.45	8.3	A
Southbound Left	0.73	172.3	F	0.57	86.1	F	0.60	62.4	E
Southbound Thru	0.66	27.0	C	0.82	41.6	D	0.70	17.9	B
Southbound Right	0.08	18.1	B	0.18	25.7	C	0.11	12.0	B
North Kihei Road at South Kihei Road	0.39	19.5	B	0.53	22.4	C	0.51	10.4	B
Eastbound Thru	0.27	9.7	A	0.54	29.3	C	0.39	9.9	A
Eastbound Right	0.14	8.6	A	0.30	24.5	C	0.20	8.7	A
Westbound Left	0.59	57.3	E	0.58	25.4	C	0.70	26.6	C
Westbound Thru	0.17	1.3	A	0.16	3.7	A	0.13	3.3	A
Northbound Left	0.75	54.2	D	0.32	44.2	D	0.47	16.7	B
Northbound Right	0.13	0.0	A	0.12	0.0	A	0.11	0.0	A
Pi'ilani Highway at Piikea Avenue	0.71	19.2	B	0.98	19.8	B	0.73	16.3	B
Eastbound Left	0.87	71.2	E	0.99	113.8	F	0.76	29.4	C
Eastbound Right	0.51	47.4	D	0.66	71.8	E	0.17	18.5	B
Northbound left	0.67	27.9	C	0.96	57.8	E	0.74	32.7	C
Northbound Thru	0.41	6.0	A	0.54	6.7	A	0.45	6.4	A
Southbound Thru	0.60	12.0	B	0.46	1.7	A	0.71	18.7	B
Southbound Right	0.25	31.3	C	0.25	0.8	A	0.24	13.4	B

NOTES:

- (1) Delay is in seconds per vehicle.
- (2) LOS denotes Level of Service calculated using the operations method described in *Highway Capacity Manual*. Level of Service is based on delay.
- (3) See [Appendix B](#) for Level of Service Analysis Worksheets.

**Table 5 — 2013 Levels of Service of Unsignalized Intersections**

Intersection and Lane Group	AM Peak Hour		PM Peak Hour		Saturday Peak Hour	
	Delay ¹	LOS ²	Delay	LOS	Delay	LOS
<i>Pi'ilani Highway at Kaonoulu Street</i>	11.5	B	1.8	A	1.7	A
Eastbound Left	72.3	F	36.0	E	24.0	C
Eastbound Right	122.6	F	24.2	C	15.6	C
Northbound Left	20.7	C	16.9	C	12.4	B
<i>South Kihei Road at Kaonoulu Street</i>	2.7	A	2.9	A	3.2	A
Westbound Left	29.6	D	42.7	E	32.7	D
Westbound Right	13.5	B	12.8	B	12.5	B
Southbound Left	0.6	A	1.9	A	0.6	A
<i>Pi'ilani Highway at Kulanihako'i Street</i>	5.0	A	2.0	A	1.4	A
Eastbound Left	159.2	F	62.5	F	23.7	C
Eastbound Right	44.2	E	24.0	C	15.0	C
Northbound Left	24.4	C	19.3	C	11.8	B
<i>Kaonoulu Street at Kenolio Road</i>	7.5	A	5.4	A	5.7	A
Eastbound Left	7.5	A	7.6	A	7.5	A
Westbound Left	7.4	A	7.5	A	7.4	A
Northbound Left	0.0	A	0.0	A	0.0	A
Northbound Thru & Right	9.1	A	10.0	B	9.6	A
Southbound Left	14.5	B	14.4	B	12.2	B
Southbound Thru & Right	9.1	A	10.2	B	9.1	A
<i>Kaonoulu Street at Alulike Street</i>	3.8	A	3.4	A	5.0	A
Eastbound Left	7.4	A	7.5	A	7.5	A
Westbound Left	7.4	A	7.5	A	7.5	A
Northbound Left, Thru & Right	10.2	B	11.3	A	10.9	B
Southbound Left, Thru & Right	9.0	A	9.5	A	10.2	B

NOTES:

(1) Delay is in seconds per vehicle.

(2) LOS denotes Level of Service calculated using the operations method described in *Highway Capacity Manual*. Level of Service is based on delay.(3) See [Appendix B](#) for Level of Service Analysis Worksheets.



Table 6: Existing (2016) Intersection Level of Service

Intersection	Traffic Control		AM Peak Hour			PM Peak Hour			Weekend Peak Hour		
	Appr	Mvmt	Delay	v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS
Pi'ilani Highway and Ohukai Road	Signalized		<u>47.3</u>	-	<u>D</u>	<u>26.0</u>	-	<u>C</u>	<u>24.2</u>	-	<u>C</u>
	EB	<u>L</u>	64.3	<u>0.74</u>	<u>E</u>	<u>77.7</u>	<u>0.71</u>	<u>E</u>	<u>52.6</u>	<u>0.65</u>	<u>D</u>
		<u>T</u>	<u>51.4</u>	<u>0.42</u>	<u>D</u>	<u>62.9</u>	<u>0.32</u>	<u>E</u>	<u>31.3</u>	<u>0.20</u>	<u>C</u>
		<u>R</u>	<u>0.0</u>	<u>0.00</u>	<u>*</u>	<u>0.0</u>	<u>0.00</u>	<u>*</u>	<u>0.0</u>	<u>0.00</u>	<u>*</u>
	WB	<u>L</u>	82.4	<u>0.92</u>	<u>F</u>	87.9	<u>0.86</u>	<u>F</u>	<u>43.0</u>	<u>0.68</u>	<u>D</u>
		<u>T</u>	<u>40.0</u>	<u>0.10</u>	<u>D</u>	<u>52.6</u>	<u>0.18</u>	<u>D</u>	<u>28.9</u>	<u>0.12</u>	<u>C</u>
		<u>R</u>	<u>0.0</u>	<u>0.00</u>	<u>*</u>	<u>0.0</u>	<u>0.00</u>	<u>*</u>	<u>0.0</u>	<u>0.00</u>	<u>*</u>
	NB	<u>L</u>	57.4	<u>0.25</u>	<u>E</u>	68.4	<u>0.44</u>	<u>E</u>	<u>36.5</u>	<u>0.29</u>	<u>D</u>
		<u>T</u>	<u>31.3</u>	<u>0.71</u>	<u>C</u>	<u>29.9</u>	<u>0.79</u>	<u>C</u>	<u>24.9</u>	<u>0.78</u>	<u>C</u>
		<u>R</u>	<u>0.0</u>	<u>0.00</u>	<u>*</u>	<u>0.0</u>	<u>0.00</u>	<u>*</u>	<u>0.0</u>	<u>0.00</u>	<u>*</u>
	SB	<u>L</u>	73.0	<u>0.84</u>	<u>E</u>	78.1	<u>0.85</u>	<u>E</u>	<u>32.8</u>	<u>0.37</u>	<u>C</u>
		<u>T</u>	<u>47.5</u>	<u>0.79</u>	<u>D</u>	<u>1.7</u>	<u>0.72</u>	<u>A</u>	<u>18.4</u>	<u>0.67</u>	<u>B</u>
<u>R</u>		<u>0.0</u>	<u>0.00</u>	<u>*</u>	<u>0.0</u>	<u>0.00</u>	<u>*</u>	<u>0.0</u>	<u>0.00</u>	<u>*</u>	
Pi'ilani Highway and Uwapo Road/ Kaiwahine Street	Signalized		<u>6.1</u>	-	<u>A</u>	<u>5.5</u>	-	<u>A</u>	<u>8.3</u>	-	<u>A</u>
	EB	<u>LT</u>	<u>52.7</u>	<u>0.43</u>	<u>D</u>	69.9	<u>0.41</u>	<u>E</u>	<u>28.4</u>	<u>0.25</u>	<u>C</u>
		<u>R</u>	<u>0.0</u>	<u>0.00</u>	<u>*</u>	<u>0.0</u>	<u>0.00</u>	<u>*</u>	<u>0.0</u>	<u>0.00</u>	<u>*</u>
	WB	<u>LT</u>	56.1	<u>0.60</u>	<u>E</u>	71.6	<u>0.48</u>	<u>E</u>	<u>29.0</u>	<u>0.32</u>	<u>C</u>
		<u>R</u>	<u>0.0</u>	<u>0.00</u>	<u>*</u>	<u>0.0</u>	<u>0.00</u>	<u>*</u>	<u>0.0</u>	<u>0.00</u>	<u>*</u>
	NB	<u>L</u>	58.9	<u>0.48</u>	<u>E</u>	71.1	<u>0.64</u>	<u>E</u>	<u>30.3</u>	<u>0.45</u>	<u>C</u>
		<u>T</u>	<u>0.5</u>	<u>0.50</u>	<u>A</u>	<u>6.1</u>	<u>0.57</u>	<u>A</u>	<u>6.3</u>	<u>0.54</u>	<u>A</u>
		<u>R</u>	<u>0.0</u>	<u>0.00</u>	<u>*</u>	<u>0.0</u>	<u>0.00</u>	<u>*</u>	<u>0.0</u>	<u>0.00</u>	<u>*</u>
	SB	<u>L</u>	59.3	<u>0.46</u>	<u>E</u>	71.9	<u>0.73</u>	<u>E</u>	<u>30.6</u>	<u>0.42</u>	<u>C</u>
<u>T</u>		<u>0.7</u>	<u>0.56</u>	<u>A</u>	<u>5.1</u>	<u>0.57</u>	<u>A</u>	<u>6.3</u>	<u>0.51</u>	<u>A</u>	
<u>R</u>		<u>0.0</u>	<u>0.00</u>	<u>*</u>	<u>0.0</u>	<u>0.00</u>	<u>*</u>	<u>0.0</u>	<u>0.00</u>	<u>*</u>	
Pi'ilani Highway and North Kihei Road	Signalized		<u>19.3</u>	-	<u>B</u>	<u>22.4</u>	-	<u>C</u>	<u>15.7</u>	-	<u>B</u>
	EB	<u>LT</u>	56.6	<u>0.64</u>	<u>E</u>	69.0	<u>0.67</u>	<u>E</u>	<u>37.8</u>	<u>0.58</u>	<u>D</u>
		<u>R</u>	<u>0.0</u>	<u>0.00</u>	<u>*</u>	<u>0.0</u>	<u>0.00</u>	<u>*</u>	<u>0.0</u>	<u>0.00</u>	<u>*</u>
	WB	<u>L</u>	58.2	<u>0.12</u>	<u>E</u>	70.0	<u>0.30</u>	<u>E</u>	<u>40.6</u>	<u>0.06</u>	<u>D</u>
		<u>TR</u>	62.0	<u>0.35</u>	<u>E</u>	90.9	<u>0.69</u>	<u>F</u>	<u>41.3</u>	<u>0.02</u>	<u>D</u>
	NB	<u>L</u>	<u>47.7</u>	<u>0.86</u>	<u>D</u>	60.3	<u>0.87</u>	<u>E</u>	<u>37.1</u>	<u>0.71</u>	<u>D</u>
		<u>T</u>	<u>0.4</u>	<u>0.42</u>	<u>A</u>	<u>0.5</u>	<u>0.49</u>	<u>A</u>	<u>7.1</u>	<u>0.45</u>	<u>A</u>
		<u>R</u>	<u>0.0</u>	<u>0.00</u>	<u>*</u>	<u>0.0</u>	<u>0.00</u>	<u>*</u>	<u>0.0</u>	<u>0.00</u>	<u>*</u>
	SB	<u>L</u>	98.2	<u>0.53</u>	<u>F</u>	93.5	<u>0.56</u>	<u>F</u>	67.4	<u>0.53</u>	<u>E</u>
<u>T</u>		<u>17.3</u>	<u>0.54</u>	<u>B</u>	<u>20.3</u>	<u>0.65</u>	<u>C</u>	<u>13.1</u>	<u>0.52</u>	<u>B</u>	
<u>R</u>		<u>0.0</u>	<u>0.00</u>	<u>*</u>	<u>0.0</u>	<u>0.00</u>	<u>*</u>	<u>0.0</u>	<u>0.00</u>	<u>*</u>	
South Kihei Road and North Kihei Road	Signalized		<u>26.0</u>	-	<u>C</u>	<u>31.2</u>	-	<u>C</u>	<u>12.2</u>	-	<u>B</u>
	EB	<u>T</u>	<u>8.9</u>	<u>0.29</u>	<u>A</u>	<u>12.3</u>	<u>0.35</u>	<u>B</u>	<u>11.6</u>	<u>0.51</u>	<u>B</u>
		<u>R</u>	<u>0.0</u>	<u>0.00</u>	<u>*</u>	<u>0.0</u>	<u>0.00</u>	<u>*</u>	<u>0.0</u>	<u>0.00</u>	<u>*</u>
	WB	<u>L</u>	56.1	<u>0.78</u>	<u>E</u>	60.0	<u>0.90</u>	<u>E</u>	<u>18.7</u>	<u>0.69</u>	<u>B</u>
		<u>T</u>	<u>0.1</u>	<u>0.18</u>	<u>A</u>	<u>0.1</u>	<u>0.16</u>	<u>A</u>	<u>3.7</u>	<u>0.16</u>	<u>A</u>
	NB	<u>L</u>	<u>51.1</u>	<u>0.77</u>	<u>D</u>	61.1	<u>0.61</u>	<u>E</u>	<u>14.6</u>	<u>0.41</u>	<u>B</u>
<u>R</u>		<u>53.6</u>	<u>0.79</u>	<u>D</u>	76.9	<u>0.86</u>	<u>E</u>	<u>20.0</u>	<u>0.64</u>	<u>B</u>	

Pi'ilani Promenade



Intersection	Traffic Control		AM Peak Hour			PM Peak Hour			Weekend Peak Hour		
	Appr	Mvmt	Delay	v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS
Pi'ilani Highway and Piikea Avenue	Signalized		<u>20.4</u>	-	<u>C</u>	<u>23.0</u>	-	<u>C</u>	<u>13.3</u>	-	<u>B</u>
	EB	L	<u>72.0</u>	<u>0.89</u>	<u>E</u>	<u>80.4</u>	<u>0.91</u>	<u>F</u>	<u>30.2</u>	<u>0.81</u>	<u>C</u>
		R	<u>0.0</u>	<u>0.00</u>	*	<u>0.0</u>	<u>0.00</u>	*	<u>0.0</u>	<u>0.00</u>	*
	NB	L	<u>73.1</u>	<u>0.85</u>	<u>E</u>	<u>83.5</u>	<u>0.90</u>	<u>F</u>	<u>38.2</u>	<u>0.81</u>	<u>D</u>
		T	<u>5.0</u>	<u>0.40</u>	<u>A</u>	<u>7.5</u>	<u>0.58</u>	<u>A</u>	<u>4.8</u>	<u>0.45</u>	<u>A</u>
	SB	T	<u>17.7</u>	<u>0.74</u>	<u>B</u>	<u>20.2</u>	<u>0.65</u>	<u>C</u>	<u>13.1</u>	<u>0.62</u>	<u>B</u>
R		<u>0.0</u>	<u>0.00</u>	*	<u>0.0</u>	<u>0.00</u>	*	<u>0.0</u>	<u>0.00</u>	*	
Pi'ilani Highway and Kaonoulu Street	Unsignalized		-	-	-	-	-	-	-	-	-
	NB	L	<u>17.7</u>	<u>0.14</u>	<u>C</u>	<u>18.6</u>	<u>0.24</u>	<u>C</u>	<u>12.6</u>	<u>0.14</u>	<u>B</u>
	EB	L	<u>500+</u>	<u>1.35</u>	<u>F</u>	<u>500+</u>	<u>1.61</u>	<u>F</u>	<u>201.5</u>	<u>0.67</u>	<u>F</u>
		R	<u>53.1</u>	<u>0.79</u>	<u>F</u>	<u>25.1</u>	<u>0.38</u>	<u>D</u>	<u>16.3</u>	<u>0.24</u>	<u>C</u>
South Kihei Road and Kaonoulu Street	Unsignalized		-	-	-	-	-	-	-	-	-
	SB	L	<u>8.6</u>	<u>0.01</u>	<u>A</u>	<u>9.1</u>	<u>0.03</u>	<u>A</u>	<u>8.9</u>	<u>0.03</u>	<u>A</u>
	WB	L	<u>20.4</u>	<u>0.22</u>	<u>C</u>	<u>32.2</u>	<u>0.27</u>	<u>D</u>	<u>30.7</u>	<u>0.32</u>	<u>D</u>
		R	<u>11.8</u>	<u>0.04</u>	<u>B</u>	<u>12.7</u>	<u>0.05</u>	<u>B</u>	<u>12.3</u>	<u>0.03</u>	<u>B</u>
Pi'ilani Highway and Kulanihako i Street	Unsignalized		-	-	-	-	-	-	-	-	-
	NB	L	<u>19.7</u>	<u>0.15</u>	<u>C</u>	<u>17.2</u>	<u>0.16</u>	<u>C</u>	<u>12.3</u>	<u>0.08</u>	<u>B</u>
	EB	L	<u>500+</u>	<u>4.21</u>	<u>F</u>	<u>500+</u>	<u>2.51</u>	<u>F</u>	<u>304.4</u>	<u>1.05</u>	<u>F</u>
		R	<u>37.6</u>	<u>0.57</u>	<u>E</u>	<u>24.3</u>	<u>0.36</u>	<u>C</u>	<u>15.5</u>	<u>0.18</u>	<u>C</u>
Kenolio Road and Kaonoulu Street	Unsignalized		-	-	-	-	-	-	-	-	-
	NB	L	<u>9.5</u>	<u>0.01</u>	<u>A</u>	<u>0.0</u>	<u>0.00</u>	<u>A</u>	<u>10.2</u>	<u>0.01</u>	<u>B</u>
		TR	<u>8.8</u>	<u>0.03</u>	<u>A</u>	<u>9.3</u>	<u>0.02</u>	<u>A</u>	<u>9.3</u>	<u>0.02</u>	<u>A</u>
	EB	L	<u>7.4</u>	<u>0.02</u>	<u>A</u>	<u>7.7</u>	<u>0.03</u>	<u>A</u>	<u>7.5</u>	<u>0.03</u>	<u>A</u>
	WB	L	<u>7.3</u>	<u>0.01</u>	<u>A</u>	<u>7.3</u>	<u>0.01</u>	<u>A</u>	<u>7.4</u>	<u>0.01</u>	<u>A</u>
	SB	L	<u>10.9</u>	<u>0.22</u>	<u>B</u>	<u>11.6</u>	<u>0.13</u>	<u>B</u>	<u>11.1</u>	<u>0.14</u>	<u>B</u>
TR		<u>8.8</u>	<u>0.01</u>	<u>A</u>	<u>9.2</u>	<u>0.02</u>	<u>A</u>	<u>9.1</u>	<u>0.02</u>	<u>A</u>	
Kaonoulu Street and Alulike Street	Unsignalized		-	-	-	-	-	-	-	-	-
	NB	LTR	<u>9.6</u>	<u>0.02</u>	<u>A</u>	<u>10.7</u>	<u>0.01</u>	<u>B</u>	<u>10.0</u>	<u>0.02</u>	<u>B</u>
	EB	L	<u>7.3</u>	<u>0.02</u>	<u>A</u>	<u>7.4</u>	<u>0.05</u>	<u>A</u>	<u>7.4</u>	<u>0.02</u>	<u>A</u>
	WB	L	<u>7.3</u>	<u>0.01</u>	<u>A</u>	<u>7.4</u>	<u>0.01</u>	<u>A</u>	<u>7.4</u>	<u>0.01</u>	<u>A</u>
	SB	LTR	<u>8.7</u>	<u>0.05</u>	<u>A</u>	<u>9.0</u>	<u>0.04</u>	<u>A</u>	<u>9.0</u>	<u>0.06</u>	<u>A</u>

* Right turn channelization; Appr = Approach; Mvmt = Movement; v/c = volume to capacity ratio; NB = Northbound; EB = Eastbound; WB = Westbound; SB = Southbound; L = Left turn movement; R = Right turn movement; T = Through movement



Existing Mitigation Measures

At the intersections of Pi'ilani Highway at Kaonoulu Street and Pi'ilani Highway at Kulanihako'i Street, the westbound left turn movements resulted in LOS F during all peak hours with the v/c ratio greater than 1.0 which suggests that capacity is exceeded. Mitigating measures were considered to address existing intersection conditions. Potential mitigation considered included the need for signaling the intersections.

Existing Deficiencies

For signalized intersections, Level-of-Service D is the minimum acceptable Level-of-Service⁶⁷ and this standard is applicable to the overall intersection and major through movements. Minor movements, such as left turns, and minor side street approaches may operate at Level-of-Service E or F for short periods of time during the peak hours so that the overall intersection and major movements along the major highway will operate at Level-of-Service D, or better. All volume-to-capacity ratios must be 1.00 or less⁸.

A standard has not been established for unsignalized intersections that has been agreed to by State of Hawaii Department of Transportation. Therefore, we have used the industry standard that Level-of-Service D is an acceptable level-of-service for major controlled lane groups, such as left turns from a major street to a minor street. Side street approaches may operate at Level-of-Service E or F for short periods of time. This is determined from the delays of the individual lane groups. If the delay of any of the side street approaches appears to be so long that it will affect the overall level-of-service of the intersection, then mitigation measures should be assessed.

~~At the intersection of Pi'ilani Highway at Ohukai Road, the westbound left and through lane group operates at Level of Service F during the morning peak hour. The volume to capacity ratio is 1.05 and the average vehicle delay is 116.6. This lane group operates at Level of Service F during the afternoon peak hour and Level of Service D during the Saturday peak hour, but the volume to capacity ratio is less than 1.00.~~

Future Roadway Construction

Planned construction in the area includes the North-South Collector Road, between Kaonoulu Street and Waipuilani Road, as well as the proposed mauka roadway, between Ohukai Road and Lipoa Street. These roads will add additional capacity and should help alleviate the vehicle demand on Pi'ilani Highway. However, without additional information on timing, these projects were not included in the future analysis.

⁶⁷ Institute of Transportation Engineers, *Transportation Impact Analyses for Site Development: A Recommended Practice*, 2006, page 60.

⁷⁸ Transportation Research Board, *Highway Capacity Manual*, Washington, D.C., 2000, p. 16-35.



Future Surrounding Area Development

Known developments in the surrounding area that were considered likely to be constructed by 2025 and 2032 are shown in Figure 7 of the TIAR update. (See: Appendix M-1, "Traffic Impact Analysis Report Update dated December 20, 2016"). The description of each development is explained in the following sections.

Kaiwahine Village

The proposed Kaiwahine Village is located at the east end of Kaiwahine Street. This affordable housing residential development will consist of 120 multi-family units. The traffic assignments for the subdivision were obtained from the *Traffic Impact Analysis Report for Kaiwahine Village* (PRA, 2010). This project is anticipated to be completed by 2025.

Maui Lu Resort

Maui Lu Resort currently exists in the northeast quadrant of the intersection of South Kihei Road at Kaonoulu Street. Plans are for the existing resort to be demolished and a 400-unit timeshare constructed in its place. It is also proposed that each timeshare unit will have one lock off unit which may be used as a separate hotel room. As part of the Maui Lu project, the intersection of South Kihei Road at Kaonoulu Street will be signalized. Construction has started on the redevelopment of this resort with a proposed opening in 2017. The proposed signalization had not been completed at the time of this report. The traffic assignments for the project were obtained from *TIAR for Maui Lu Resort* (PRA, 2004).

The intersection of South Kihei Road at Kaonoulu Street will be signalized and the southbound approach has been modified to provide a separate left turn lane. These improvements are recommended as part of the Maui Lu Resort Redevelopment project.

Kihei High School

The proposed Kihei High School will be located along the east side of Pi'ilani Highway, south of the Pi'ilani Promenade. According to the *Traffic Impact Report for Kihei High School* (WOC, 2012), the school will have a capacity of approximately 1,650 students serving grades 9 through 12. The development of the school will be in two phases with 800 students in Phase 1 and 850 students in Phase 2. Both phases are expected to be completed by 2025.

Access and egress will be via the intersection of Pi'ilani Highway at Kulanihakoi Road, which will be modified with an extension of Kulanihakoi Road across Pi'ilani Highway. The intersection of Pi'ilani Highway at Kulanihakoi Street will be signalized to accommodate the trips generated proposed high school.

The number of trips that the high school will generate during weekday peak hours was obtained from the *Traffic Impact Report for Kihei High School* (WOC, 2012) for the project. Based on the trip generation data, the number of trips generated on a Saturday will be negligible.



The intersection of Pi'ilani Highway at Kulanihako'i Road will be signalized. The northbound approach will be modified to provide a dedicated right turn lane, the southbound approach will be modified to provide a left turn lane and the eastbound and westbound approaches will be modified to provide a shared through/left turn lane and a dedicated right turn lane. These improvements are those recommended in the TIAR to accommodate the traffic from the proposed Kihei High School.

Kenolio Apartments

The Kenolio Apartments is located between Pi'ilani Highway and Kenolio Road in the southwest quadrant of the intersection of Kaonoulu Street at Pi'ilani Highway. The project is a 186 unit multi-family affordable housing development. It is anticipated that the project will be completed in 2017. Access to and egress from will be via two driveways along the east side of Kenolio Road. The traffic assignments for the project were obtained from the *TIAR for Kenolio Apartments, An Affordable Housing Project (PRA, 2014)*.

Kihei Residential

The proposed Kihei Residential development is located on the east side of Pi'ilani Highway, north of Kaiwahine Street. The project includes 400 single-family units, 200 multi-family units, 3,000 square feet of commercial area, 7,000 square feet of offices, and a 10 acre park. Groundbreaking occurred in mid-January 2016. It is anticipated that 25% of the project will be completed by 2025 and full build out will be by 2032. Access to and egress from will be via a driveway along Kaiwahine Road and a driveway along Pi'ilani Highway. The traffic assignments for the project were obtained from the *TIAR Kihei Residential Project (ATA, 2007)*.

It was recommended to modify the southbound approach on Pi'ilani Highway to provide an additional left-turn lane. It was also recommended that the westbound approach on Kaiwahine Street have an additional left-turn lane. These modifications were included in the future analyses.

Krausz Companies Commercial Mixed-Use Development (Downtown Kihei)

The proposed Krausz Companies commercial mixed-use development (referred as Downtown Kihei) is located along Piikea Avenue between Liloa Drive and South Kihei Road. The project includes 249,450 square feet of retail space, approximately 18,500 square feet of office space, and a 150-room hotel. The traffic assignments for the project were obtained from the *TIAR Krausz Companies Commercial Mixed-Use Development (Downtown Kihei) (ATA, 2012)*. Proposed completion is expected by 2025.

It was recommended to install an additional left-turn lane on the eastbound approach of Piikea Avenue at the intersection of Pi'ilani Highway. It was also recommended to monitor the northbound left-turn movement along Pi'ilani Highway at this intersection in case an additional left-turn lane is needed. However, the status of the construction of the additional turn lane is unknown at this time and will not be included in the future analyses.



Honua'ula Affordable Housing

The proposed Honua'ula Affordable Housing is located north of Pi'ilani Promenade. This development will include 125 units of affordable apartments and 125 owner-occupied units, meeting the requirements of the County Work Force Housing Ordinance. Access to this development will be through East Kaonoulu Street. If construction of the Honua'ula Affordable Housing commences prior to the construction of the East Kaonoulu Street extension, temporary construction access to this development will be through a driveway off of Ohukai Road. Once the East Kaonoulu Street extension is open, the temporary access will be closed and all trips generated by this trip will use East Kaonoulu Street. This development is anticipated to be completed by 2025.

Maui Research and Technology Park

The Maui Research and Technology Park (MRTP) is located south of Kihei High School on the mauka side of Pi'ilani Highway. Primary access to MRTP will be through the intersection of Pi'ilani Highway and Lipoa Parkway. According to the *Traffic Impact Analysis for Maui Research and Technology Park* (PB, 2013), the proposed development will be implemented in two phases. Phase 1 will consist of 723,200 square feet (sf) of employment, 100,000 sf of retail, 750 residential dwelling units, 150 hotel rooms and 102,000 sf of an elementary school. Phase 2 will consist of over one-million sf of employment, and 500 residential dwelling units. Phase 1 of the MRTP is projected to be completed by 2024. Phase 2 is projected to be completed by 2034. Traffic associated with the MRTP would be accounted for in the background growth as the primary access to the MRTP is located outside the study area (south of the intersection of Pi'ilani Highway and Piikea Avenue).

Other Developments

There were several additional developments identified within Kihei, Wailea and Makena. However, upon research, the status of these developments was in flux. It was therefore assumed that the increase in traffic associated with these developments would be accounted for in the background growth.

Changes in roadway configuration are expected as described above and are anticipated to be completed by 2025. In addition to the changes in roadway configuration due to surrounding area developments, the intersection of Pi'ilani Highway and Kaonoulu Street passed signal warrants and therefore was analyzed as a signalized intersection.

According to the *Maui Long Range Land Transportation Plan* model (CH2M Hill/HDOT, 2013), traffic volumes along Pi'ilani Highway are projected to increase an average of 1.25% per year from 2007 to 2020 and 1.24% per year from 2020 to 2035. The annual compounded growth rate along South Kihei Road was 3.60% from 2007 to 2020 and 2.05% from 2020 to 2035. These growth rates were used to calculate the projected background growth from 2016 to 2025 and from 2025 to 2032.



The respective growth factors were applied to the northbound and southbound through traffic movements along Pi'ilani Highway and South Kihei Road at the study intersections. Intersection turning movement traffic volumes are considered a reflection of individual project trips and not regional growth, and therefore no ambient growth rate was applied.

Other Project Related Volumes

The addition of trips resulting from the surrounding area projects are shown in Table No. 7. This data was taken from the respective traffic impact analysis reports or calculated.

Table No. 7: Other Project Related Trips

Project Name	AM Peak Hour			PM Peak Hour			Saturday Peak Hour		
	In	Out	Total	In	Out	Total	In	Out	Total
<u>Kaiwahine Village</u>	<u>10</u>	<u>50</u>	<u>60</u>	<u>47</u>	<u>23</u>	<u>70</u>	<u>42</u>	<u>35</u>	<u>77</u>
<u>Maui Lu Resort</u>	<u>213</u>	<u>103</u>	<u>316</u>	<u>157</u>	<u>206</u>	<u>363</u>	<u>157</u>	<u>206</u>	<u>363</u>
<u>Kihei High School Phase 1</u>	<u>228</u>	<u>108</u>	<u>336</u>	<u>49</u>	<u>55</u>	<u>104</u>	<u>0</u>	<u>0</u>	<u>0</u>
<u>Kihei High School Phase 2</u>	<u>243</u>	<u>114</u>	<u>357</u>	<u>52</u>	<u>59</u>	<u>111</u>	<u>0</u>	<u>0</u>	<u>0</u>
<u>Kenolio Apartments</u>	<u>19</u>	<u>76</u>	<u>95</u>	<u>78</u>	<u>42</u>	<u>120</u>	<u>47</u>	<u>48</u>	<u>95</u>
<u>Kihei Residential</u>	<u>213</u>	<u>403</u>	<u>616</u>	<u>405</u>	<u>332</u>	<u>737</u>	<u>330</u>	<u>311</u>	<u>641</u>
<u>Krauz Development</u>	<u>143</u>	<u>78</u>	<u>221</u>	<u>249</u>	<u>270</u>	<u>519</u>	<u>338</u>	<u>305</u>	<u>643</u>
	<u>87</u>	<u>55</u>	<u>142</u>	<u>259</u>	<u>270</u>	<u>529</u>	<u>361</u>	<u>333</u>	<u>694</u>
<u>Honua'ula Affordable Housing</u>	<u>24</u>	<u>103</u>	<u>127</u>	<u>104</u>	<u>54</u>	<u>158</u>	<u>78</u>	<u>71</u>	<u>149</u>

Potential Impacts and Mitigation Measures.

The TIAR update analyzed the future traffic of the years 2025 and 2032 to estimate the traffic impacts of surrounding developments and the Project.

Projected Year 2018 Background Traffic

The TIAR analyzed the future traffic conditions of the Year 2018 to estimate the traffic impacts of surrounding developments. The Year 2018 background traffic volumes were derived using existing traffic along with trip generation obtained from the Maui Travel Demand Forecasting Model. The future Year 2018 background traffic assumes the presence of the following developments:

- Kaiwahine Village
- Maui Lu Resort



- Kihei High School Phase 1
- Kenolio 6 affordable housing project

The projected Year 2018 trip generation summary of related projects is shown in Table 6.

Table 6 — Trip Generation Summary of Related Projects

<u>Related Project</u>	<u>Description</u>	<u>AM Peak Hour</u>			<u>PM Peak Hour</u>			<u>Saturday Peak Hour</u>		
		<u>In</u>	<u>Out</u>		<u>In</u>	<u>Out</u>		<u>In</u>	<u>Out</u>	
			<u>Out</u>	<u>Tot</u>		<u>Out</u>	<u>Tot</u>		<u>Out</u>	<u>Tot</u>
A	Kaiwahine Village 120 Multi Family	19	47	66	49	31	80	26	26	52
B	Maui Lu Resort 400 Timeshares + 400 Lock-Off Units (Maximum)	245	140	385	205	230	435	350	275	625
C	Kihei High School (Phase 1) 800 Students Grades 9 thru 12	228	108	336	104	55	159	0	0	0
D	Kenolio 6 Affordable Housing Project 124 Multi Family	20	48	68	51	32	83	32	32	64
TOTALS FOR 2018		512	343	855	409	348	757	408	333	741

The results of the level of service analysis of the signalized intersections for 2018 background without project generated traffic are shown in the TIAR, which summarizes the volume to capacity ratios, average vehicle delays and levels of service of the overall intersection and all controlled lane groups.

The conclusion of the level of service of 2018 baseline conditions is that roadway improvements are required at the intersection of Pi'ilani Highway at Ohukai Road and the intersection of Pi'ilani Highway at Kaiwahine Street and Uwapo Road to accommodate traffic associated with background growth and the related projects. The recommended improvements are:

- At the intersection of Pi'ilani Highway at Ohukai Road, the eastbound and westbound approaches should be modified to provide one left turn lane, one optional left turn or thru lane and one right turn lane and the southbound approach should be modified to provide an additional left turn only lane.
- At the intersection of Pi'ilani Highway at Kaiwahine Street and Uwapo Road, the eastbound and westbound approaches should be modified to provide separate left turn, through and right turn lanes.



Future (2025) Without Project LOS

Future (2025) Without Project intersection LOS, v/c ratio and delay were determined for the AM, PM and Saturday peak hours (see: Table No. 8). For Future (2025) Without Project conditions, all signalized intersection LOS maintained LOS D or better results. Individual turning movement LOS and v/c remained poor for some signalized intersections. All unsignalized intersections resulted in LOS C or better. Detailed analysis reports for these intersections are provided in Appendix F of the TIAR update. (See: Appendix M-1, "Traffic Impact Analysis Report Update dated December 20, 2016").

Table No. 8: Future (2025) Without Project Intersection Level of Service

<u>Intersection</u>	<u>Traffic Control</u>		<u>AM Peak Hour</u>			<u>PM Peak Hour</u>			<u>Weekend Peak Hour</u>		
	<u>Appr</u>	<u>Mvmt</u>	<u>Delay</u>	<u>v/c</u>	<u>LOS</u>	<u>Delay</u>	<u>v/c</u>	<u>LOS</u>	<u>Delay</u>	<u>v/c</u>	<u>LOS</u>
<u>Pi'ilani Highway and Ohukai Road</u>	<u>Signalized</u>		<u>48.9</u>	<u>-</u>	<u>D</u>	<u>48.4</u>	<u>-</u>	<u>D</u>	<u>33.2</u>	<u>-</u>	<u>C</u>
	<u>EB</u>	<u>L</u>	<u>75.4</u>	<u>0.77</u>	<u>E</u>	<u>89.7</u>	<u>0.73</u>	<u>F</u>	<u>68.8</u>	<u>0.68</u>	<u>E</u>
		<u>T</u>	<u>63.2</u>	<u>0.54</u>	<u>E</u>	<u>76.0</u>	<u>0.54</u>	<u>E</u>	<u>53.5</u>	<u>0.30</u>	<u>D</u>
		<u>R</u>	<u>0.0</u>	<u>0.00</u>	<u>*</u>	<u>0.0</u>	<u>0.00</u>	<u>*</u>	<u>0.0</u>	<u>0.00</u>	<u>*</u>
	<u>WB</u>	<u>L</u>	<u>141.6</u>	<u>1.10</u>	<u>F</u>	<u>133.8</u>	<u>1.01</u>	<u>F</u>	<u>74.3</u>	<u>0.83</u>	<u>E</u>
		<u>T</u>	<u>48.4</u>	<u>0.18</u>	<u>D</u>	<u>61.3</u>	<u>0.23</u>	<u>E</u>	<u>45.1</u>	<u>0.20</u>	<u>D</u>
	<u>NB</u>	<u>L</u>	<u>66.5</u>	<u>0.30</u>	<u>E</u>	<u>80.4</u>	<u>0.56</u>	<u>F</u>	<u>59.2</u>	<u>0.44</u>	<u>E</u>
		<u>T</u>	<u>33.8</u>	<u>0.72</u>	<u>C</u>	<u>45.5</u>	<u>0.95</u>	<u>D</u>	<u>29.7</u>	<u>0.83</u>	<u>C</u>
		<u>R</u>	<u>0.0</u>	<u>0.00</u>	<u>*</u>	<u>0.0</u>	<u>0.00</u>	<u>*</u>	<u>0.0</u>	<u>0.00</u>	<u>*</u>
	<u>SB</u>	<u>L</u>	<u>75.1</u>	<u>0.87</u>	<u>E</u>	<u>123.4</u>	<u>1.01</u>	<u>F</u>	<u>72.3</u>	<u>0.81</u>	<u>E</u>
		<u>T</u>	<u>35.9</u>	<u>0.93</u>	<u>D</u>	<u>28.1</u>	<u>0.85</u>	<u>C</u>	<u>23.0</u>	<u>0.73</u>	<u>C</u>
		<u>R</u>	<u>0.0</u>	<u>0.00</u>	<u>*</u>	<u>0.0</u>	<u>0.00</u>	<u>*</u>	<u>0.0</u>	<u>0.00</u>	<u>*</u>
<u>Pi'ilani Highway and Uwapo Road/ Kaiwahine Street</u>	<u>Signalized</u>		<u>34.7</u>	<u>-</u>	<u>C</u>	<u>20.4</u>	<u>-</u>	<u>C</u>	<u>14.2</u>	<u>-</u>	<u>B</u>
	<u>EB</u>	<u>L</u>	<u>150.4</u>	<u>0.98</u>	<u>F</u>	<u>44.4</u>	<u>0.48</u>	<u>D</u>	<u>72.0</u>	<u>0.60</u>	<u>E</u>
		<u>T</u>	<u>67.1</u>	<u>0.40</u>	<u>E</u>	<u>39.9</u>	<u>0.41</u>	<u>D</u>	<u>64.9</u>	<u>0.40</u>	<u>E</u>
		<u>R</u>	<u>0.0</u>	<u>0.00</u>	<u>*</u>	<u>0.0</u>	<u>0.00</u>	<u>*</u>	<u>0.0</u>	<u>0.00</u>	<u>*</u>
	<u>WB</u>	<u>L</u>	<u>193.1</u>	<u>1.19</u>	<u>F</u>	<u>40.8</u>	<u>0.55</u>	<u>D</u>	<u>63.6</u>	<u>0.55</u>	<u>E</u>
		<u>T</u>	<u>66.6</u>	<u>0.37</u>	<u>E</u>	<u>35.2</u>	<u>0.16</u>	<u>D</u>	<u>59.6</u>	<u>0.20</u>	<u>E</u>
	<u>NB</u>	<u>L</u>	<u>40.8</u>	<u>0.08</u>	<u>D</u>	<u>37.3</u>	<u>0.40</u>	<u>D</u>	<u>56.9</u>	<u>0.41</u>	<u>E</u>
		<u>T</u>	<u>7.5</u>	<u>0.54</u>	<u>A</u>	<u>17.9</u>	<u>0.88</u>	<u>B</u>	<u>8.4</u>	<u>0.61</u>	<u>A</u>
		<u>R</u>	<u>0.0</u>	<u>0.00</u>	<u>*</u>	<u>0.0</u>	<u>0.00</u>	<u>*</u>	<u>0.0</u>	<u>0.00</u>	<u>*</u>
	<u>SB</u>	<u>L</u>	<u>63.7</u>	<u>0.42</u>	<u>E</u>	<u>40.4</u>	<u>0.61</u>	<u>D</u>	<u>61.6</u>	<u>0.40</u>	<u>E</u>
		<u>T</u>	<u>29.6</u>	<u>0.88</u>	<u>C</u>	<u>18.5</u>	<u>0.89</u>	<u>B</u>	<u>11.0</u>	<u>0.61</u>	<u>B</u>
		<u>R</u>	<u>0.0</u>	<u>0.00</u>	<u>*</u>	<u>0.0</u>	<u>0.00</u>	<u>*</u>	<u>0.0</u>	<u>0.00</u>	<u>*</u>
<u>Pi'ilani Highway and North Kihei Road</u>	<u>Signalized</u>		<u>23.9</u>	<u>-</u>	<u>C</u>	<u>32.3</u>	<u>-</u>	<u>C</u>	<u>19.4</u>	<u>-</u>	<u>B</u>
	<u>EB</u>	<u>LT</u>	<u>35.9</u>	<u>0.59</u>	<u>D</u>	<u>45.5</u>	<u>0.61</u>	<u>D</u>	<u>47.0</u>	<u>0.63</u>	<u>D</u>
		<u>R</u>	<u>0.0</u>	<u>0.00</u>	<u>*</u>	<u>0.0</u>	<u>0.00</u>	<u>*</u>	<u>0.0</u>	<u>0.00</u>	<u>*</u>
	<u>WB</u>	<u>L</u>	<u>36.1</u>	<u>0.09</u>	<u>D</u>	<u>46.3</u>	<u>0.23</u>	<u>D</u>	<u>51.8</u>	<u>0.07</u>	<u>D</u>
		<u>TR</u>	<u>38.5</u>	<u>0.26</u>	<u>D</u>	<u>52.2</u>	<u>0.54</u>	<u>D</u>	<u>52.3</u>	<u>0.03</u>	<u>D</u>
	<u>NB</u>	<u>L</u>	<u>42.8</u>	<u>0.88</u>	<u>D</u>	<u>55.6</u>	<u>0.89</u>	<u>E</u>	<u>47.4</u>	<u>0.80</u>	<u>D</u>
		<u>T</u>	<u>9.1</u>	<u>0.54</u>	<u>A</u>	<u>11.4</u>	<u>0.68</u>	<u>B</u>	<u>7.6</u>	<u>0.54</u>	<u>A</u>
		<u>R</u>	<u>0.0</u>	<u>0.00</u>	<u>*</u>	<u>0.0</u>	<u>0.00</u>	<u>*</u>	<u>0.0</u>	<u>0.00</u>	<u>*</u>

Pi'ilani Promenade



Intersection	Traffic Control		AM Peak Hour			PM Peak Hour			Weekend Peak Hour		
	Appr	Mvmt	Delay	v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS
	SB	L	<u>74.6</u>	<u>0.52</u>	<u>E</u>	<u>68.3</u>	<u>0.54</u>	<u>E</u>	<u>79.0</u>	<u>0.53</u>	<u>E</u>
		T	<u>26.4</u>	<u>0.86</u>	<u>C</u>	<u>41.7</u>	<u>0.98</u>	<u>D</u>	<u>16.9</u>	<u>0.64</u>	<u>B</u>
		R	<u>0.0</u>	<u>0.00</u>	<u>*</u>	<u>0.0</u>	<u>0.00</u>	<u>*</u>	<u>0.0</u>	<u>0.00</u>	<u>*</u>
South Kihei Road and North Kihei Road	Signalized		<u>18.3</u>	<u>-</u>	<u>B</u>	<u>18.0</u>	<u>-</u>	<u>B</u>	<u>15.2</u>	<u>-</u>	<u>B</u>
	EB	T	<u>11.7</u>	<u>0.44</u>	<u>B</u>	<u>14.3</u>	<u>0.65</u>	<u>B</u>	<u>13.0</u>	<u>0.58</u>	<u>B</u>
		R	<u>0.0</u>	<u>0.00</u>	<u>*</u>	<u>0.0</u>	<u>0.00</u>	<u>*</u>	<u>0.0</u>	<u>0.00</u>	<u>*</u>
	WB	L	<u>28.6</u>	<u>0.63</u>	<u>C</u>	<u>29.2</u>	<u>0.76</u>	<u>C</u>	<u>22.2</u>	<u>0.72</u>	<u>C</u>
		T	<u>4.8</u>	<u>0.24</u>	<u>A</u>	<u>4.1</u>	<u>0.23</u>	<u>A</u>	<u>4.1</u>	<u>0.20</u>	<u>A</u>
	NB	L	<u>26.3</u>	<u>0.79</u>	<u>C</u>	<u>20.6</u>	<u>0.64</u>	<u>C</u>	<u>17.9</u>	<u>0.61</u>	<u>B</u>
R		<u>33.8</u>	<u>0.79</u>	<u>C</u>	<u>41.9</u>	<u>0.86</u>	<u>D</u>	<u>29.1</u>	<u>0.79</u>	<u>C</u>	
Pi'ilani Highway and Piikea Avenue	Signalized		<u>31.4</u>	<u>-</u>	<u>C</u>	<u>41.1</u>	<u>-</u>	<u>D</u>	<u>35.0</u>	<u>-</u>	<u>D</u>
	EB	L	<u>62.0</u>	<u>0.89</u>	<u>E</u>	<u>84.8</u>	<u>1.02</u>	<u>F</u>	<u>74.1</u>	<u>0.93</u>	<u>E</u>
		R	<u>0.0</u>	<u>0.00</u>	<u>*</u>	<u>0.0</u>	<u>0.00</u>	<u>*</u>	<u>0.0</u>	<u>0.00</u>	<u>*</u>
	NB	L	<u>106.8</u>	<u>1.00</u>	<u>F</u>	<u>99.2</u>	<u>1.03</u>	<u>F</u>	<u>80.4</u>	<u>0.92</u>	<u>F</u>
		T	<u>6.5</u>	<u>0.59</u>	<u>A</u>	<u>12.5</u>	<u>0.80</u>	<u>B</u>	<u>11.8</u>	<u>0.54</u>	<u>B</u>
	SB	T	<u>39.0</u>	<u>1.00</u>	<u>F</u>	<u>52.8</u>	<u>1.03</u>	<u>F</u>	<u>34.9</u>	<u>0.77</u>	<u>C</u>
R		<u>0.0</u>	<u>0.00</u>	<u>*</u>	<u>0.0</u>	<u>0.00</u>	<u>*</u>	<u>0.0</u>	<u>0.00</u>	<u>*</u>	
Pi'ilani Highway and Kaonoulu Street	Signalized		<u>11.3</u>	<u>-</u>	<u>B</u>	<u>17.9</u>	<u>-</u>	<u>B</u>	<u>12.6</u>	<u>-</u>	<u>B</u>
	EB	L	<u>55.3</u>	<u>0.76</u>	<u>F</u>	<u>94.3</u>	<u>0.84</u>	<u>F</u>	<u>74.7</u>	<u>0.82</u>	<u>E</u>
		R	<u>0.0</u>	<u>0.00</u>	<u>*</u>	<u>0.0</u>	<u>0.00</u>	<u>*</u>	<u>0.0</u>	<u>0.00</u>	<u>*</u>
	NB	L	<u>92.5</u>	<u>0.91</u>	<u>F</u>	<u>65.9</u>	<u>0.52</u>	<u>E</u>	<u>55.2</u>	<u>0.49</u>	<u>E</u>
		T	<u>2.0</u>	<u>0.47</u>	<u>A</u>	<u>4.6</u>	<u>0.71</u>	<u>A</u>	<u>3.2</u>	<u>0.56</u>	<u>A</u>
	SB	T	<u>11.4</u>	<u>0.84</u>	<u>B</u>	<u>24.6</u>	<u>0.86</u>	<u>C</u>	<u>14.5</u>	<u>0.66</u>	<u>B</u>
R		<u>0.0</u>	<u>0.00</u>	<u>*</u>	<u>0.0</u>	<u>0.00</u>	<u>*</u>	<u>0.0</u>	<u>0.00</u>	<u>*</u>	
South Kihei Road and Kaonoulu Street	Signalized		<u>9.3</u>	<u>-</u>	<u>A</u>	<u>9.2</u>	<u>-</u>	<u>A</u>	<u>10.2</u>	<u>-</u>	<u>B</u>
	WB	L	<u>31.4</u>	<u>0.65</u>	<u>C</u>	<u>27.6</u>	<u>0.61</u>	<u>C</u>	<u>24.5</u>	<u>0.63</u>	<u>C</u>
		R	<u>24.7</u>	<u>0.34</u>	<u>C</u>	<u>25.4</u>	<u>0.42</u>	<u>C</u>	<u>21.3</u>	<u>0.33</u>	<u>C</u>
	NB	T	<u>0.0</u>	<u>0.00</u>	<u>*</u>	<u>0.0</u>	<u>0.00</u>	<u>*</u>	<u>0.0</u>	<u>0.00</u>	<u>*</u>
		R	<u>8.3</u>	<u>0.67</u>	<u>A</u>	<u>10.4</u>	<u>0.83</u>	<u>B</u>	<u>12.6</u>	<u>0.85</u>	<u>B</u>
	SB	L	<u>42.6</u>	<u>0.68</u>	<u>D</u>	<u>38.3</u>	<u>0.74</u>	<u>D</u>	<u>33.6</u>	<u>0.70</u>	<u>C</u>
T		<u>2.7</u>	<u>0.36</u>	<u>A</u>	<u>3.0</u>	<u>0.59</u>	<u>A</u>	<u>3.2</u>	<u>0.58</u>	<u>A</u>	
Pi'ilani Highway and Kulanihako'i Street	Signalized		<u>24.7</u>	<u>-</u>	<u>C</u>	<u>24.6</u>	<u>-</u>	<u>C</u>	<u>6.0</u>	<u>-</u>	<u>A</u>
	EB	LT	<u>45.2</u>	<u>0.33</u>	<u>D</u>	<u>75.7</u>	<u>0.32</u>	<u>E</u>	<u>64.6</u>	<u>0.45</u>	<u>E</u>
		R	<u>0.0</u>	<u>0.00</u>	<u>*</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>0.0</u>	<u>0.00</u>	<u>*</u>
	WB	LT	<u>52.9</u>	<u>0.68</u>	<u>D</u>	<u>81.1</u>	<u>0.62</u>	<u>F</u>	<u>59.7</u>	<u>0.05</u>	<u>E</u>
		R	<u>0.0</u>	<u>0.00</u>	<u>*</u>	<u>0.0</u>	<u>0.00</u>	<u>*</u>	<u>0.0</u>	<u>0.00</u>	<u>*</u>
	NB	L	<u>118.0</u>	<u>0.83</u>	<u>F</u>	<u>98.0</u>	<u>0.80</u>	<u>F</u>	<u>79.4</u>	<u>0.77</u>	<u>E</u>
		T	<u>14.2</u>	<u>0.65</u>	<u>B</u>	<u>32.1</u>	<u>0.93</u>	<u>C</u>	<u>2.9</u>	<u>0.60</u>	<u>A</u>
	SB	L	<u>67.4</u>	<u>0.83</u>	<u>E</u>	<u>59.5</u>	<u>0.09</u>	<u>E</u>	<u>0.0</u>	<u>0.00</u>	<u>*</u>
T		<u>23.9</u>	<u>0.94</u>	<u>C</u>	<u>10.3</u>	<u>0.76</u>	<u>B</u>	<u>5.1</u>	<u>0.59</u>	<u>A</u>	
Kenolio Road and	Unsignalized		<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
	NB	L	<u>13.0</u>	<u>0.05</u>	<u>B</u>	<u>17.6</u>	<u>0.07</u>	<u>C</u>	<u>15.7</u>	<u>0.07</u>	<u>C</u>
		TR	<u>9.9</u>	<u>0.08</u>	<u>A</u>	<u>11.0</u>	<u>0.09</u>	<u>B</u>	<u>11.0</u>	<u>0.09</u>	<u>B</u>



Intersection	Traffic Control		AM Peak Hour			PM Peak Hour			Weekend Peak Hour		
	Appr	Mvmt	Delay	v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS
Kaonoulu Street	EB	L	7.7	0.02	A	8.0	0.04	A	7.8	0.03	A
	WB	L	7.6	0.03	A	7.8	0.05	A	7.8	0.04	A
	SB	L	19.3	0.43	C	24.9	0.39	C	22.0	0.38	C
		TR	10.5	0.04	B	12.6	0.07	B	11.3	0.05	B
Kaonoulu Street and Alulike Street	Unsignalized		=	=	=	=	=	=	=	=	=
	NB	LTR	11.9	0.05	B	12.9	0.03	B	12.6	0.04	B
	EB	L	7.7	0.03	A	7.8	0.06	A	7.7	0.04	A
	WB	L	7.6	0.01	A	7.8	0.01	A	7.8	0.01	A
	SB	LTR	10.1	0.09	B	10.7	0.10	B	10.8	0.13	B

* Right turn channelization; Appr = Approach; Mvmt = Movement; v/c = volume to capacity ratio; NB = Northbound; EB = Eastbound; WB = Westbound; SB = Southbound; L = Left turn movement; R = Right turn movement; T = Through movement

Future (2032) Without Project LOS

Future (2032) Without Project intersection LOS, v/c ratio and delay were determined for the AM, PM and Saturday peak hours (see Table No. 9 below). For Future (2032) Without Project conditions, all signalized intersection LOS maintained LOS D or better results except for the intersection of Pi'ilani Highway at Ohukai Road which resulted in LOS E during the AM and Weekend peak hours. Individual turning movement LOS and v/c remained poor for some signalized intersections. All unsignalized intersections resulted in LOS C or better. Detailed analysis reports for these intersections are provided in Appendix F.



Table No. 9: Future (2032) Without Project Intersection Level of Service

Intersection	Traffic Control		AM Peak Hour			PM Peak Hour			Weekend Peak Hour		
	Appr	Mvmt	Delay	v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS
Pi'ilani Highway and Ohukai Road	Signalized		<u>61.3</u>	-	<u>E</u>	<u>52.7</u>	-	<u>D</u>	<u>60.0</u>	-	<u>E</u>
	EB	L	<u>79.1</u>	0.77	<u>E</u>	<u>147.6</u>	0.80	<u>F</u>	<u>71.6</u>	0.69	<u>E</u>
		T	<u>66.1</u>	0.56	<u>E</u>	<u>142.9</u>	0.81	<u>F</u>	<u>57.7</u>	0.44	<u>E</u>
		R	<u>0.0</u>	0.00	*	<u>0.0</u>	0.00	*	<u>0.0</u>	0.00	*
	WB	L	<u>222.3</u>	1.30	<u>F</u>	<u>181.7</u>	1.02	<u>F</u>	<u>135.9</u>	1.08	<u>F</u>
		T	<u>53.9</u>	0.21	<u>D</u>	<u>104.2</u>	0.28	<u>F</u>	<u>44.8</u>	0.23	<u>D</u>
	NB	L	<u>69.0</u>	0.31	<u>E</u>	<u>155.7</u>	0.77	<u>F</u>	<u>61.9</u>	0.45	<u>E</u>
		T	<u>32.9</u>	0.78	<u>C</u>	<u>61.7</u>	0.98	<u>E</u>	<u>64.0</u>	1.02	<u>F</u>
		R	<u>0.0</u>	0.00	*	<u>0.0</u>	0.00	*	<u>0.0</u>	0.00	*
	SB	L	<u>89.3</u>	0.95	<u>F</u>	<u>170.1</u>	1.03	<u>F</u>	<u>136.5</u>	1.08	<u>F</u>
		T	<u>50.9</u>	1.03	<u>F</u>	<u>6.2</u>	0.86	<u>A</u>	<u>28.4</u>	0.81	<u>C</u>
		R	<u>0.0</u>	0.00	*	<u>0.0</u>	0.00	*	<u>0.0</u>	0.00	*
Pi'ilani Highway and Uwapo Road/ Kaiwahine Street	Signalized		<u>21.4</u>	-	<u>C</u>	<u>19.9</u>	-	<u>B</u>	<u>18.0</u>	-	<u>B</u>
	EB	L	<u>77.2</u>	0.74	<u>E</u>	<u>145.6</u>	0.67	<u>F</u>	<u>36.9</u>	0.46	<u>D</u>
		T	<u>76.5</u>	0.54	<u>E</u>	<u>144.8</u>	0.80	<u>F</u>	<u>31.8</u>	0.24	<u>C</u>
		R	<u>0.0</u>	0.00	*	<u>0.0</u>	0.00	*	<u>0.0</u>	0.00	*
	WB	L	<u>107.0</u>	0.98	<u>F</u>	<u>143.4</u>	0.86	<u>F</u>	<u>32.8</u>	0.42	<u>C</u>
		T	<u>66.9</u>	0.39	<u>E</u>	<u>111.6</u>	0.26	<u>F</u>	<u>29.5</u>	0.13	<u>C</u>
	NB	L	<u>36.9</u>	0.09	<u>D</u>	<u>103.1</u>	0.31	<u>F</u>	<u>33.5</u>	0.57	<u>C</u>
		T	<u>0.9</u>	0.67	<u>A</u>	<u>0.8</u>	0.86	<u>A</u>	<u>16.9</u>	0.86	<u>B</u>
		R	<u>0.0</u>	0.00	*	<u>0.0</u>	0.00	*	<u>0.0</u>	0.00	*
	SB	L	<u>66.6</u>	0.67	<u>E</u>	<u>118.0</u>	0.90	<u>F</u>	<u>31.4</u>	0.27	<u>C</u>
		T	<u>14.0</u>	0.99	<u>B</u>	<u>1.5</u>	0.84	<u>A</u>	<u>16.5</u>	0.85	<u>B</u>
		R	<u>0.0</u>	0.00	*	<u>0.0</u>	0.00	*	<u>0.0</u>	0.00	*
Pi'ilani Highway and North Kihei Road	Signalized		<u>26.4</u>	-	<u>C</u>	<u>44.0</u>	-	<u>D</u>	<u>22.5</u>	-	<u>C</u>
	EB	LT	<u>69.5</u>	0.72	<u>E</u>	<u>130.2</u>	0.81	<u>F</u>	<u>33.6</u>	0.63	<u>C</u>
		R	<u>0.0</u>	0.00	*	<u>0.0</u>	0.00	*	<u>0.0</u>	0.00	*
	WB	L	<u>70.6</u>	0.13	<u>E</u>	<u>151.2</u>	0.61	<u>F</u>	<u>34.9</u>	0.05	<u>C</u>
		TR	<u>75.5</u>	0.39	<u>E</u>	<u>415.8</u>	1.42	<u>F</u>	<u>35.6</u>	0.02	<u>D</u>
	NB	L	<u>52.7</u>	0.92	<u>D</u>	<u>93.1</u>	0.95	<u>F</u>	<u>29.7</u>	0.75	<u>C</u>
		T	<u>0.5</u>	0.53	<u>A</u>	<u>0.4</u>	0.62	<u>A</u>	<u>10.3</u>	0.70	<u>B</u>
		R	<u>0.0</u>	0.00	*	<u>0.0</u>	0.00	*	<u>0.0</u>	0.00	*
	SB	L	<u>111.3</u>	0.53	<u>F</u>	<u>158.2</u>	0.61	<u>F</u>	<u>61.4</u>	0.52	<u>E</u>
		T	<u>30.6</u>	0.79	<u>C</u>	<u>44.1</u>	0.86	<u>D</u>	<u>30.7</u>	0.94	<u>C</u>
		R	<u>0.0</u>	0.00	*	<u>0.0</u>	0.00	*	<u>0.0</u>	0.00	*
	South Kihei Road and North Kihei Road	Signalized		<u>22.6</u>	-	<u>C</u>	<u>32.9</u>	-	<u>C</u>	<u>17.1</u>	-
EB		T	<u>14.2</u>	0.46	<u>B</u>	<u>18.8</u>	0.52	<u>B</u>	<u>14.3</u>	0.63	<u>B</u>
		R	<u>0.0</u>	0.00	*	<u>0.0</u>	0.00	*	<u>0.0</u>	0.00	*
WB		L	<u>36.8</u>	0.67	<u>D</u>	<u>57.9</u>	0.89	<u>E</u>	<u>25.1</u>	0.73	<u>C</u>
		T	<u>15.5</u>	0.27	<u>B</u>	<u>0.1</u>	0.22	<u>A</u>	<u>4.6</u>	0.21	<u>A</u>
NB		L	<u>28.1</u>	0.79	<u>C</u>	<u>52.3</u>	0.73	<u>D</u>	<u>19.4</u>	0.67	<u>B</u>
	R	<u>30.3</u>	0.75	<u>C</u>	<u>73.4</u>	0.90	<u>E</u>	<u>33.8</u>	0.83	<u>C</u>	

Pi'ilani Promenade



Intersection	Traffic Control		AM Peak Hour			PM Peak Hour			Weekend Peak Hour		
	Appr	Mvmt	Delay	v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS
Pi'ilani Highway and Piikea Avenue	Signalized		49.3	-	D	51.7	-	D	34.6	-	C
	EB	L	121.5	1.05	F	119.0	1.08	F	86.7	1.05	F
		R	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*
	NB	L	140.7	1.06	F	130.2	1.09	F	85.3	1.01	F
		T	7.3	0.62	A	17.1	0.88	B	8.8	0.65	A
	SB	T	62.4	1.06	F	65.1	1.06	F	35.9	0.96	D
R		0.0	0.00	*	0.0	0.00	*	0.0	0.00	*	
Pi'ilani Highway and Kaonoulu Street	Signalized		15.1	-	B	25.6	-	C	14.7	-	B
	EB	L	84.9	0.78	F	155.0	0.89	F	64.7	0.81	E
		R	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*
	NB	L	138.3	0.97	F	111.4	0.60	F	42.8	0.39	D
		T	2.1	0.53	A	6.5	0.79	A	4.0	0.65	A
	SB	T	15.8	0.90	B	34.4	0.91	C	21.0	0.82	C
R		0.0	0.00	*	0.0	0.00	*	0.0	0.00	*	
South Kihei Road and Kaonoulu Street	Signalized		11.2	-	B	10.3	-	B	12.3	-	B
	WB	L	30.6	0.67	C	35.0	0.64	C	28.3	0.65	C
		R	26.5	0.34	C	32.2	0.44	C	24.7	0.34	C
	NB	T	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*
		R	11.7	0.78	B	11.5	0.86	B	16.2	0.89	B
	SB	L	42.7	0.71	D	53.1	0.80	D	39.6	0.74	D
T		3.3	0.43	A	3.2	0.65	A	3.8	0.64	A	
Pi'ilani Highway and Kulanihakoi Street	Signalized		49.2	-	D	33.0	-	C	6.6	-	A
	EB	L	56.5	0.34	E	119.4	0.35	F	58.6	0.42	E
		TR	0.0	0.00	*	-	-	-	0.0	0.00	*
	WB	L	72.6	0.74	E	130.7	0.73	F	54.3	0.11	D
		TR	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*
	NB	L	215.1	1.04	F	161.7	0.84	F	74.0	0.77	E
		T	41.1	0.92	D	40.0	0.96	D	3.5	0.68	A
	SB	L	48.4	0.32	D	106.7	0.13	F	0.0	0.00	*
T		49.5	1.04	F	15.6	0.84	B	6.4	0.69	A	
Kenolio Road and Kaonoulu Street	Unsignalized		-	-	-	-	-	-	-	-	-
	NB	L	13.0	0.05	B	17.6	0.07	C	15.7	0.07	C
		TR	9.9	0.08	A	11.0	0.09	B	11.0	0.09	B
	EB	L	7.7	0.02	A	8.0	0.04	A	7.8	0.03	A
		WB	L	7.6	0.03	A	7.8	0.52	A	7.8	0.04
	SB	L	19.3	0.43	C	24.9	0.39	C	22.0	0.38	C
TR		10.5	0.04	B	12.6	0.07	B	11.3	0.05	B	
Kaonoulu Street and Alulike Street	Unsignalized		-	-	-	-	-	-	-	-	-
	NB	LTR	12.0	0.05	B	12.9	0.03	B	12.7	0.04	B
		L	7.7	0.03	A	7.8	0.06	A	7.7	0.04	A
	WB	L	7.6	0.01	A	7.8	0.01	A	7.8	0.01	A
		SB	LTR	10.1	0.09	B	10.7	0.10	B	10.8	0.13

* Right turn channelization; Appr = Approach; Mvmt = Movement; v/c = volume to capacity ratio;
 NB = Northbound; EB = Eastbound; WB = Westbound; SB = Southbound;
 L = Left turn movement; R = Right turn movement; T = Through movement



FUTURE WITHOUT PROJECT CONDITIONS

Future (2025) Without Project Mitigation

With all signalized intersections maintaining LOS D or better results and unsignalized intersection turning movements resulting in LOS C or better, no mitigation measures are deemed necessary.

Future (2032) Without Project Mitigation

Pi'ilani Highway and Ohukai Road

The intersection of Pi'ilani Highway and Ohukai Road resulted in poor LOS for Future (2032) Without Project conditions. Possible mitigation measures include signal optimization or the construction of additional turning lanes.

FUTURE WITH PROJECT CONDITIONS

Future with Project Geometric Configuration

A portion of East Kaonoulu Street is being constructed with the development of Pi'ilani Promenade by 2025. This will add a mauka leg to the intersection of Pi'ilani Highway and Kaonoulu Street. Additional intersection modifications include:

- Install traffic signals and striped pedestrian crosswalks across Pi'ilani Highway.
- Southbound approach will have double left turn lanes, two through lanes, and a channelized right turn lane.
- Northbound approach will have a dedicated left turn lane, two through lanes, and a channelized right turn lane.
- Eastbound approach will have a left turn lane, a through lane, and a channelized right turn lane.
- Westbound approach will have dual left turn lanes, a through lane and channelized right turn lane with an acceleration lane.

The lane configuration for Future with Project conditions are shown in Figure 12 of the TIAR update.

The project also includes the construction of a shared-use pedestrian and bike path along the mauka-side of Pi'ilani Highway, adjacent to the proposed development and within the project site, in addition to the bike lanes on Pi'ilani Highway. A pedestrian plan created for the project is included as Figure No. 15 of the FEIS and in Appendix G of the TIAR update. (See: Appendix M-1, "Traffic Impact Analysis Report Update dated December 20, 2016").



Future with Project Traffic Volumes

Project Related Volumes

The addition of trips resulting from the Project was calculated using the four-step trip generation methodology: trip generation, trip distribution, modal choice, route assignment.

Trip Generation

Trip Generation Methodology

The proposed mixed-use development is planning to include commercial, light industrial and affordable apartment units. Resulting trip generation for the Project was calculated using *Trip Generation, 8th Edition* (ITE, 2008) and related trip generation rates are shown in Table No. 10.

Project Related Traffic Conditions

Future traffic volumes generated by the project were estimated using the procedures described in the *Trip Generation Handbook*⁹ and data provided in *Trip Generation*¹⁰. This method used trip generation rates or equations to estimate the number of trips that the project will generate during the peak hours of the project and along the adjacent street.

Trip generation land use codes used for the Project are as follows:

- Shopping Center [820]: A shopping center is an integrated group of commercial establishments that is planned, developed, owned and managed as a unit. A shopping center's composition is related to its market area in terms of size, location and type of store. A shopping center also provides on-side parking facilities sufficient to serve its own parking demands.
- General Light Industrial [110]: Light industrial facilities are free-standing facilities devoted to a single use. The facilities have an emphasis on activities other than manufacturing and typically have minimal office space. Typical light industrial activities include printing, material testing and assembly of data processing equipment.
- Apartment [220]: Apartments are rental dwelling units located within the same building with at least three other dwelling units, for example, quadraplexes and all types of apartment buildings. The studies included in this land use did not identify whether the apartments were low-rise, mid-rise, or high-rise.

⁹ Institute of Transportation Engineers, *Trip Generation Handbook*, Washington, D.C., 1998, p. 7-12

¹⁰ Institute of Transportation Engineers, *Trip Generation*, Washington, D.C., 2003



The results of the trip generation calculations are summarized in Table No. 10 below. The trips shown are the peak hourly trips generated by the project during the peak hours of the adjacent street. As shown, the project will generate ~~613~~ 564 new trips during the morning peak hour, ~~1,830~~ 2,482 new trips during the afternoon peak hour and ~~2,278~~ 2,651 new trips during the Saturday peak hour.

Table No. 10: Phased Project Related Trip Generation Volumes

Land Use [ITE Code]	Years	Project Related Trips								
		AM Peak Hour			PM Peak Hour			Saturday Peak Hour		
		In	Out	Total	In	Out	Total	In	Out	Total
Commercial [820]	2025	126	81	207	540	562	1,102	659	608	1,267
	2032	125	80	205	540	563	1,103	659	608	1,267
	Total	251	161	412	1,080	1,125	2,205	1,318	1,216	2,534
Light Industrial [110]	2025	16	3	19	16	53	69	1	2	3
	2032	16	3	19	14	52	67	1	1	2
	Total	32	6	38	30	105	135	2	3	5
Apartment [220]	2025	23	91	114	92	50	142	56	56	112
	2032	0	0	0	0	0	0	0	0	0
	Total	23	91	114	92	50	142	56	56	112
Total Project	2025	165	175	340	648	665	1,313	716	665	1,382
	2032	141	84	225	554	615	1,170	660	609	1,270
	Total	306	258	564	1,202	1,280	2,482	1,376	1,275	2,651

Table 7 — Summary of Trip Generation Analysis

Time Period	Direction	North Parcel					South Parcel				Total Project		
		Retail (100,000 SF)			Light Industrial (5 Acres)	Apartment (226 Units)	Retail (358,091 SF)			Outdoor Garden Total Trips (28,000 SF)			
		Total Trips	Pass By Trips	Net New Trips			Total Trips	Pass By Trips	Net New Trips				
AM Peak Hour	Total	145	15	130	38	114	327	33	294	37	661	48	613
	In	88	8	80	32	23	199	17	182	19	361	25	336
	Out	57	7	50	6	91	128	16	112	18	300	23	277
PM Peak Hour	Total	593	238	355	135	142	1496	404	1092	106	2472	642	1830
	In	291	119	172	30	92	733	202	531	53	1199	321	878
	Out	302	119	183	105	50	763	202	561	53	1273	321	952
Saturday Peak Hour	Total	800	294	506	5	112	1964	617	1347	308	3189	911	2278
	In	416	147	269	2	56	1021	309	712	154	1649	456	1193
	Out	384	147	237	3	56	943	308	635	154	1540	455	1085



The project-related trips were distributed along the anticipated approach routes to the project site based on following assumptions:

1. The purpose of the project is to provide services for the residents of and visitors to of South Maui. Thus marketing and advertising will be directed toward this area. Accordingly, it was assumed that 75% of the traffic to and from the project will be generated by Kihei and South Maui.
2. 25% of the project generated traffic will approach and depart via Mokulele Highway (10%) and North Kihei Road (15%). Of the 15% from North Kihei Road, 10% will use North Kihei Road to Pi'ilani Highway at then Pi'ilani Highway to the project. The remaining 5% will use South Kihei Road and Kaonoulu Street.
3. The traffic generated from within Kihei (75%) was distributed based on the distribution of residential units and hotel rooms (including timeshares and vacation rentals) using the data presented in the *Maui Long-Range Land Transportation Plan* with adjustments to reflect Maui Lu Resort Redevelopment, the Kihei Residential Development, Honua'ula, Makena Resort and additional Wailea Resort units. Using this distribution, 20% of the trips would be generated by the area north of Kaonoulu Street and 80% would be generated by the area south of Kaonoulu Street.

~~Trips were assigned based on the following assumptions:~~

- ~~1. Kaonoulu Street is extended mauka of Pi'ilani Highway to provide access to the project and the intersection of Pi'ilani Highway at Kaonoulu Street is signalized.~~
- ~~2. There are four (4) driveways along East Kaonoulu Street to serve the project.~~

~~The results of the Level of Service analysis for the 2018 background plus project traffic of the signalized intersections are summarized in Table 8 and the results of the Level of Service analysis of the unsignalized intersections are summarized in Table 9.~~

~~Table 8 — 2018 Background Plus Project Levels of Service — Signalized Intersections~~

Intersection and Movement	AM Peak Hour						PM Peak Hour						Saturday Peak Hour					
	Without Project			With Project			Without Project			With Project			Without Project			With Project		
	V/C	Delay	LOS	V/C	Delay	LOS	V/C	Delay	LOS	V/C	Delay	LOS	V/C	Delay	LOS	V/C	Delay	LOS
Pi'ilani Hwy at Olukai Rd	0.77	25.8	C	0.82	29.9	C	0.77	34.3	C	0.90	44.2	D	.62	18.8	B	0.80	24.3	C
Eastbound Left	0.46	51.7	D	0.46	51.7	D	0.62	72.7	E	0.72	84.2	F	0.57	37.7	D	0.54	38.2	D
Eastbound Left & Thru	0.41	51.1	D	0.41	51.1	D	0.63	73.1	E	0.72	83.4	F	0.59	38.4	D	0.56	38.8	D
Eastbound Right	0.05	47.6	D	0.06	47.7	D	0.06	61.7	E	0.08	63.7	E	0.09	32.2	C	0.39	36.1	D

Pi'ilani Promenade



Westbound Left	0.60	55.9	E	0.63	56.6	E	0.69	72.8	E	0.78	80.7	F	0.63	48.2	D	0.80	68.6	E
Westbound Left & Thru	0.63	56.9	E	0.65	58.0	E	0.72	74.2	E	0.80	83.1	F	0.55	42.4	D	0.81	70.1	E
Westbound Right	0.12	48.3	D	0.12	47.9	D	0.24	60.1	E	0.43	62.2	E	0.03	35.8	C	0.03	37.4	D
Northbound Left	0.27	74.8	E	0.32	58.9	E	0.69	85.4	F	0.82	86.6	F	0.43	38.8	D	0.83	77.0	E
Northbound Thru	0.69	14.1	B	0.76	18.6	B	0.76	13.9	B	0.87	28.1	C	0.60	14.9	B	0.75	18.2	B
Northbound Right	0.03	2.2	A	0.04	17.1	B	0.05	2.3	A	0.08	11.3	B	0.07	10.2	B	0.10	10.1	B
Southbound Left	0.46	65.2	E	0.46	66.4	E	0.62	63.4	D	0.73	65.2	E	0.30	34.4	C	0.37	38.1	D
Southbound Thru	0.83	19.1	B	0.92	25.8	C	0.74	33.8	C	0.90	43.7	D	0.60	12.7	B	0.81	18.6	B
Southbound Right	0.07	2.4	A	0.07	4.1	A	0.07	35.6	D	0.07	33.0	C	0.07	8.3	A	0.07	9.2	A
Pi'ilani Hwy at Kaiwaha St	0.60	24.5	C	0.63	26.6	C	0.65	22.1	C	0.74	26.9	C	0.58	10.0	B	0.71	15.1	B
Eastbound Left	0.66	56.8	E	0.66	56.8	E	0.65	75.9	E	0.63	73.7	E	0.44	33.0	C	0.35	37.2	D
Eastbound Thru	0.06	44.1	D	0.06	44.1	D	0.12	62.2	E	0.11	61.7	E	0.07	29.1	C	0.06	34.3	C
Eastbound Right	0.07	44.3	D	0.08	44.4	D	0.05	61.7	E	0.08	61.5	E	0.04	28.9	C	0.08	34.5	C
Westbound Left	0.33	47.3	D	0.41	48.3	D	0.27	63.9	E	0.56	69.5	E	0.30	31.2	C	0.55	40.9	D
Westbound Thru	0.10	44.5	D	0.10	44.5	D	0.26	63.5	E	0.25	63.0	E	0.21	30.0	C	0.17	35.1	D
Westbound Right	0.07	44.3	D	0.07	44.3	D	0.05	61.6	E	0.05	61.2	E	0.03	28.9	C	0.03	34.2	C
Northbound Left	0.25	38.0	D	0.33	32.5	C	0.47	79.2	E	0.62	76.5	E	0.33	34.3	C	0.56	43.4	D
Northbound Thru	0.60	19.7	B	0.64	22.5	C	0.65	18.2	B	0.74	23.5	C	0.53	6.7	A	0.64	10.2	B
Northbound Right	0.04	26.7	C	0.05	26.3	C	0.08	10.2	B	0.11	13.2	B	0.04	4.3	A	0.07	5.8	A
Southbound Left	0.37	44.4	D	0.37	45.5	D	0.63	83.5	F	0.63	82.9	F	0.67	45.2	D	0.53	41.8	D
Southbound Thru	0.56	20.3	C	0.63	22.6	C	0.60	12.3	B	0.71	17.2	B	0.62	7.2	A	0.77	12.8	B
Southbound Right	0.01	13.3	B	0.01	16.9	B	0.05	5.0	A	0.05	6.7	A	0.03	3.8	A	0.03	5.6	A
Pi'ilani Hwy at N. Kihei Rd	0.61	29.6	C	0.64	29.6	C	0.78	36.5	D	0.85	39.9	D	0.61	17.1	B	0.69	19.0	B
Eastbound Left	0.57	59.7	E	0.58	58.9	E	0.75	56.8	E	0.74	55.6	E	0.46	29.8	C	0.54	37.8	D
Eastbound Left & Thru	0.59	60.9	E	0.60	59.8	E	0.78	59.6	E	0.77	58.1	E	0.46	29.8	C	0.54	37.8	D
Eastbound Right	0.22	59.9	E	0.28	54.4	D	0.13	58.2	E	0.23	39.5	D	0.14	15.6	B	0.33	20.4	C
Westbound Left, Thru & Rt	0.20	58.3	E	0.22	59.0	E	0.58	73.5	E	0.58	73.5	E	0.02	32.5	C	0.02	38.5	D
Northbound Left	0.71	42.1	D	0.74	44.5	D	0.84	72.9	E	0.94	85.0	F	0.54	27.4	C	0.69	34.3	C
Northbound Thru & Right	0.54	19.0	B	0.56	18.7	B	0.56	16.9	B	0.61	18.7	B	0.50	8.7	A	0.51	7.9	A
Southbound Left	0.19	63.6	E	0.21	64.4	E	0.46	78.4	E	0.46	78.4	E	0.35	38.3	D	0.41	46.3	D
Southbound Thru	0.66	23.0	C	0.68	23.8	C	0.76	32.5	C	0.86	39.0	D	0.80	20.6	C	0.81	21.4	C
Southbound Right	0.08	14.7	B	0.08	14.8	B	0.16	20.0	C	0.17	21.4	C	0.11	11.8	B	0.11	11.7	B
N. Kihei Rd at S. Kihei Rd	0.40	20.5	C	0.42	20.2	C	0.58	24.5	C	0.64	28.6	C	0.59	10.1	B	0.61	12.5	B
Eastbound Thru	0.27	9.9	A	0.30	10.5	B	0.42	19.8	B	0.51	21.8	C	0.39	10.1	B	0.54	14.0	B
Eastbound Right	0.18	9.2	A	0.19	9.5	A	0.36	18.8	B	0.42	20.1	C	0.27	9.3	A	0.30	11.7	B
Westbound Left	0.59	68.9	E	0.59	70.5	E	0.71	98.7	F	0.71	99.7	F	0.57	21.2	C	0.51	24.5	C
Westbound Thru	0.17	1.1	A	0.19	1.1	A	0.15	2.1	A	0.19	1.8	A	0.14	3.3	A	0.18	4.2	A
Northbound Left	0.77	54.8	D	0.77	54.5	D	0.37	49.7	D	0.43	50.7	D	0.52	17.9	B	0.52	21.8	C
Northbound Right	0.13	0.0	A	0.13	0.0	A	0.12	0.0	A	0.12	46.1	D	0.10	0.0	A	0.10	0.0	A



Table 8 — 2018 Background Plus Projects Levels-of-Service — Signalized Intersections (Continued)

Intersection and Movement	AM Peak Hour						PM Peak Hour						Saturday Peak Hour					
	Without Project			With Project			Without Project			With Project			Without Project			With Project		
	V/C	Delay	LOS	V/C	Delay	LOS	V/C	Delay	LOS	V/C	Delay	LOS	V/C	Delay	LOS	V/C	Delay	LOS
<i>Pi'ilani Hwy at Kaonoulu St</i>	0.79	16.1	B	0.78	32.9	C	0.74	13.0	B	0.88	50.5	D	0.61	6.1	A	0.87	37.2	D
Eastbound Left	0.36	55.5	E	0.48	59.8	E	0.45	70.2	E	0.57	91.8	F	0.27	21.0	C	0.51	41.9	D
Eastbound Thru				0.26	53.7	D				0.66	85.0	F				0.64	41.4	D
Eastbound Right	0.42	56.3	E	0.64	48.4	D	0.13	66.6	E	0.62	75.1	E	0.46	22.4	C	0.39	30.5	C
Westbound Left				0.74	70.0	E				0.90	78.7	E				0.97	62.3	E
Westbound Thru				0.50	56.6	E				0.52	66.4	E				0.54	31.4	C
Westbound Right				0.05	42.4	D				0.40	44.8	D				0.36	15.5	B
Northbound Left	0.62	43.2	D	0.55	38.6	D	0.72	71.9	E	0.57	84.0	F	0.59	8.6	A	0.74	54.0	D
Northbound Thru	0.39	7.9	A	0.52	26.8	C	0.56	4.1	A	0.90	51.0	D	0.46	4.1	A	0.94	49.4	D
Northbound Right				0.05	36.4	D				0.28	13.6	B				0.48	16.5	B
Southbound Left				0.53	41.3	D				0.89	86.8	F				0.96	56.5	E
Southbound Thru	0.68	12.7	B	0.80	26.1	C	0.63	9.0	A	0.70	28.7	C	0.52	4.4	A	0.73	25.4	C
Southbound Right	0.05	13.4	B	0.05	26.2	C	0.07	7.6	A	0.08	16.8	B	0.08	2.9	A	0.08	17.4	B
<i>S. Kihei Rd at Kaonoulu St</i>	0.45	6.2	A	0.47	6.6	A	0.50	8.4	A	0.66	15.9	B	0.44	6.4	A	0.55	7.2	A
Westbound Left	0.42	23.8	C	0.42	20.8	C	0.46	28.4	C	0.57	22.6	C	0.48	23.6	C	0.55	15.4	B
Westbound Right	0.03	21.5	C	0.05	18.6	B	0.03	25.4	C	0.08	18.6	B	0.02	20.8	C	0.08	12.5	B
Northbound Thru	0.45	3.5	A	0.49	4.7	A	0.49	6.1	A	0.63	10.9	B	0.44	3.6	A	0.55	6.0	A
Northbound Thru	0.06	2.3	A	0.08	3.2	A	0.11	4.3	A	0.16	7.3	A	0.09	2.5	A	0.16	4.2	A
Southbound Left	0.06	2.3	A	0.14	3.5	A	0.70	48.5	D	0.95	79.1	E	0.10	2.5	A	0.43	5.8	A
Southbound Thru	0.30	2.9	A	0.33	4.0	A	0.40	2.6	A	0.45	4.3	A	0.37	3.3	A	0.46	5.4	A
<i>Pi'ilani Hwy at Kulanihako'i St</i>	0.76	15.5	B	0.81	16.7	B	0.66	10.8	B	0.79	15.1	B	0.53	6.4	A	0.67	8.1	A
Eastbound Left & Thru	0.37	54.2	D	0.52	57.0	E	0.51	72.0	E	0.64	75.2	E	0.29	28.2	C	0.57	41.3	D
Eastbound Right	0.27	53.1	D	0.37	54.1	D	0.06	65.8	E	0.06	62.1	E	0.06	26.6	C	0.06	34.5	C
Westbound Left & Thru	0.61	62.3	E	0.66	67.4	E	0.47	71.3	E	0.39	66.2	E	0.00	0.0	A	0.00	0.0	A
Westbound Right	0.02	50.8	D	0.02	50.8	D	0.01	65.4	E	0.01	61.6	E	0.00	0.0	A	0.00	0.0	A
Northbound Left	0.51	74.1	E	0.60	85.6	F	0.60	67.0	E	0.60	64.7	E	0.73	73.4	E	0.44	44.0	D
Northbound Thru	0.54	9.7	A	0.58	10.0	B	0.68	4.6	A	0.80	8.5	A	0.48	3.1	A	0.63	4.2	A
Northbound Right	0.08	4.3	A	0.08	3.1	A	0.02	2.1	A	0.02	3.9	A	0.00	0.0	A	0.00	0.0	A
Southbound Left	0.51	63.0	E	0.55	56.9	E	0.32	57.3	E	0.32	77.5	E	0.00	0.0	A	0.00	0.0	A
Southbound Thru	0.76	12.4	B	0.80	14.5	B	0.64	8.4	A	0.80	14.8	B	0.53	5.7	A	0.68	8.4	A
Southbound Right	0.02	5.5	A	0.03	7.7	A	0.06	7.8	A	0.09	5.4	A	0.05	3.7	A	0.07	4.3	A
<i>Pi'ilani Hwy at Piikea Ave</i>	0.80	19.7	B	0.84	21.6	C	0.78	30.8	C	0.92	32.3	C	0.79	17.4	B	0.91	28.4	C
Eastbound Left	0.86	67.2	E	0.89	70.4	E	0.86	77.1	E	0.97	93.6	F	0.79	30.8	C	0.92	55.5	E
Eastbound Right	0.16	42.1	D	0.24	41.3	D	0.17	50.8	D	0.25	47.3	D	0.17	18.2	B	0.18	24.8	C
Northbound Left	0.67	65.1	E	0.76	77.3	E	0.85	79.9	E	0.85	79.9	E	0.77	35.5	D	0.91	75.1	E
Northbound Thru	0.46	7.0	A	0.51	8.3	A	0.61	9.5	A	0.73	14.8	B	0.51	7.0	A	0.65	12.3	B
Southbound Thru	0.80	17.2	B	0.84	19.3	B	0.72	32.3	C	0.91	31.5	C	0.80	21.4	C	0.90	32.7	C
Southbound Right	0.28	10.5	B	0.32	11.6	B	0.34	31.6	C	0.47	17.7	B	0.26	13.5	B	0.33	18.2	B



NOTES:

- (1) Delay is in seconds per vehicle.
- (2) LOS denotes Level of Service calculated using the operations method described in *Highway Capacity Manual*. Level of Service is based on delay.
- (3) See [Appendix D](#) for Level of Service Analysis Worksheets without Project.
- (4) See [Appendix E](#) for Level of Service Analysis Worksheets with Project.

Table 9 2018 Background Plus Project Levels of Service – Unsignalized Intersections

Intersection and Movement	AM Peak Hour				PM Peak Hour				Saturday Peak Hour			
	Without Project		With Project		Without Project		With Project		Without Project		With Project	
	Delay ¹	LOS ²	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Kaonoulu St at Kenolio Rd	6.9	A	6.9	A	5.4	A	6.8	A	6.4	A	6.2	A
Eastbound Left	7.6	A	7.8	A	7.7	A	8.3	A	8.1	A	8.4	A
Westbound Left	7.5	A	7.6	A	7.6	A	8.0	A	7.7	A	8.1	A
Northbound Left	11.2	B	12.5	B	12.8	B	19.1	C	17.9	C	19.6	C
Northbound Thru & Right	9.4	A	9.9	A	10.2	B	12.3	B	11.5	B	13.1	B
Southbound Left	16.0	C	20.4	C	16.2	C	39.0	E	27.7	D	39.5	E
Southbound Thru & Right	9.5	A	10.0	B	11.0	B	14.2	B	12.0	B	12.6	B
Kaonoulu St at Alulike St	2.8	A	2.4	A	2.7	A	1.9	A	3.4	A	2.4	A
Eastbound Left	7.5	A	7.6	A	7.7	A	8.1	A	7.7	A	8.2	A
Westbound Left	7.5	A	7.6	A	7.7	A	8.0	A	7.6	A	8.1	A
Northbound Left, Thru & Right	11.7	B	12.8	B	11.9	B	15.5	C	12.6	B	18.5	C
Southbound Left, Thru & Right	9.2	A	9.6	A	9.7	A	11.2	B	10.3	B	12.8	B

NOTES:

- (1) Delay is in seconds per vehicle.
- (2) LOS denotes Level of Service calculated using the operations method described in *Highway Capacity Manual*. Level of Service is based on delay.
- (3) See [Appendix C](#) for Level of Service Analysis Worksheets for Without Project conditions.
- (4) See [Appendix D](#) for Level of Service Analysis Worksheets for With Project conditions.

Future with Project Level of Service

Future (2025) With Project LOS

Future (2025) With Project conditions intersection LOS, v/c ratio and delay were determined for the AM, PM and Saturday peak hours (See: Table No. 11). For Future (2025) With Project conditions, all signalized intersection LOS maintained LOS D or better results except the intersection of Pi'ilani Highway at Kaonoulu Street which operated at LOS E during the PM peak hour. Individual turning movement LOS and v/c remained poor for some signalized intersections. Most unsignalized intersections resulted in LOS D or better for individual movements, except for the southbound left turn movement which operated at LOS F for PM and Saturday peak hours. Detailed analysis reports for these intersections are provided in Appendix H of the TIAR update. (See: Appendix M-1, "Traffic Impact Analysis Report Update dated December 20, 2016").



Table No. 11: Future (2025) With Project Intersection Level of Service

Intersection	Traffic Control		AM Peak Hour			PM Peak Hour			Weekend Peak Hour		
	Appr	Mvmt	Delay	v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS
Pi'ilani Highway and Ohukai Road	Signalized		45.3	-	D	54.2	-	D	33.0	-	C
	EB	L	75.4	0.77	E	76.5	0.71	E	69.9	0.68	E
		T	62.4	0.49	E	60.2	0.31	E	54.7	0.31	D
		R	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*
	WB	L	135.0	1.07	F	182.1	1.17	F	76.7	0.82	E
		T	50.1	0.12	D	53.2	0.20	D	46.8	0.16	D
	NB	L	66.1	0.35	E	68.0	0.57	E	60.6	0.53	E
		T	32.0	0.74	C	56.1	1.02	F	30.0	0.86	C
		R	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*
	SB	L	73.8	0.87	E	100.3	0.95	F	70.8	0.76	E
		T	34.5	0.94	C	32.7	0.95	C	24.1	0.78	C
		R	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*
Pi'ilani Highway and Uwapo Road/ Kaiwahine Street	Signalized		37.7	-	D	33.7	-	C	15.0	-	B
	EB	L	77.2	0.74	E	61.2	0.57	F	72.2	0.60	E
		T	76.2	0.44	E	55.8	0.50	E	65.1	0.40	E
		R	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*
	WB	L	114.1	0.96	F	79.7	0.82	E	63.7	0.57	E
		T	62.7	0.17	E	49.5	0.21	D	59.3	0.19	E
	NB	L	48.3	0.10	D	35.8	0.17	D	57.6	0.47	E
		T	12.7	0.61	B	11.0	0.81	B	9.1	0.64	A
		R	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*
	SB	L	71.4	0.46	E	60.8	0.82	E	61.8	0.40	E
		T	44.9	0.97	D	50.1	1.04	F	12.0	0.65	B
		R	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*
Pi'ilani Highway and North Kihei Road	Signalized		24.0	-	C	32.8	-	C	20.9	-	C
	EB	LT	43.3	0.66	D	53.7	0.65	D	51.3	0.65	D
		R	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*
	WB	L	41.0	0.09	D	55.4	0.27	E	56.2	0.08	E
		TR	43.7	0.28	D	68.4	0.63	E	56.7	0.03	E
	NB	L	44.6	0.88	D	74.3	1.00	E	50.7	0.82	D
		T	8.3	0.52	A	10.5	0.66	B	7.4	0.54	A
		R	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*
	SB	L	79.9	0.52	E	77.5	0.55	E	83.6	0.53	F
		T	25.2	0.82	C	35.2	0.93	D	18.5	0.66	B
		R	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*
	South Kihei Road and North Kihei Road	Signalized		18.2	-	B	21.3	-	C	15.9	-
EB		T	12.0	0.46	B	15.3	0.64	B	13.5	0.62	B
		R	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*
WB		L	28.6	0.63	C	29.3	0.81	C	24.3	0.73	C
		T	4.9	0.25	A	0.1	0.24	A	4.1	0.21	A
NB		L	26.4	0.79	C	27.5	0.75	C	19.6	0.66	B
		R	32.9	0.78	C	66.9	0.95	E	30.9	0.79	C

Pi'ilani Promenade



Intersection	Traffic Control		AM Peak Hour			PM Peak Hour			Weekend Peak Hour		
	Appr	Mvmt	Delay	v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS
Pi'ilani Highway and Piikea Avenue	Signalized		38.4	-	D	51.0	-	D	39.8	-	D
	EB	L	88.3	0.99	F	114.1	1.08	F	77.2	0.95	E
		R	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*
	NB	L	119.9	1.04	F	130.2	1.09	F	87.4	0.93	F
		T	7.1	0.60	A	16.5	0.84	B	14.5	0.60	B
	SB	T	46.2	1.02	F	61.0	1.04	F	42.5	0.87	D
R		0.0	0.00	*	0.0	0.00	*	0.0	0.00	*	
Pi'ilani Highway and Kaonoulu Street	Signalized		28.5	-	C	70.3	-	E	35.9	-	D
	EB	L	79.1	0.69	E	61.6	0.42	E	87.0	0.53	F
		T	78.3	0.68	E	80.3	0.86	F	119.3	0.90	F
	WB	L	70.1	0.57	E	69.5	0.81	E	103.6	0.88	F
		T	76.7	0.73	E	75.1	0.82	E	94.0	0.72	F
	NB	L	275.9	1.33	F	214.4	1.21	F	41.9	0.6	D
		T	8.8	0.54	A	55.6	1.02	F	15.5	0.61	B
	SB	T	78.2	0.63	E	231.5	1.29	F	58.6	0.77	E
R		18.2	0.84	B	52.2	1.00	D	14.5	0.57	B	
South Kihei Road and Kaonoulu Street	Signalized		12.0	-	B	21.6	-	C	20.5	-	C
	WB	L	32.2	0.70	C	46.5	0.79	D	36.1	0.77	D
		R	28.2	0.40	C	39.4	0.53	D	30.6	0.42	C
	NB	T	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*
		R	10.6	0.71	B	21.2	0.88	C	23.7	0.91	C
		L	48.8	0.78	D	98.3	0.91	F	69.7	0.83	E
	T	3.3	0.38	A	5.3	0.57	A	5.4	0.56	A	
Pi'ilani Highway and Kulanihakoi Street	Signalized		31.3	-	C	30.4	-	C	8.6	-	A
	EB	L	138.5	1.05	F	39.4	0.48	D	65.0	0.58	E
		TR	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*
	WB	L	92.2	0.94	F	34.2	0.32	C	57.5	0.03	E
		TR	37.3	0.26	D	32.5	0.14	C	0.0	0.00	*
	NB	L	86.3	0.78	F	81.0	0.79	F	82.2	0.78	F
		T	14.1	0.70	B	28.4	0.99	C	4.5	0.67	A
		R	9.4	0.31	A	4.3	0.06	A	0.0	0.00	-
	SB	L	55.3	0.81	E	61.5	0.69	E	0.0	0.00	*
T		32.4	0.99	C	31.0	0.99	C	7.8	0.67	A	
Kenolio Road and Kaonoulu Street	Unsignalized		-	-	-	-	-	-	-	-	-
	NB	L	15.0	0.06	C	30.0	0.13	D	23.9	0.11	C
		TR	10.4	0.09	B	13.5	0.14	B	13.2	0.13	B
	EB	L	7.9	0.02	A	8.5	0.05	A	8.2	0.04	A
		WB	L	7.7	0.03	A	8.3	0.07	A	8.3	0.05
	SB	L	26.4	0.54	D	85.6	0.80	F	57.3	0.70	F
		TR	11.4	0.04	B	16.9	0.10	C	13.9	0.07	B
	Unsignalized		-	-	-	-	-	-	-	-	



Intersection	Traffic Control		AM Peak Hour			PM Peak Hour			Weekend Peak Hour		
	Appr	Mvmt	Delay	v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS
Kaonoulu Street and Alulike Street	NB	LTR	13.0	0.06	B	14.9	0.06	B	15.0	0.07	C
	EB	L	7.8	0.04	A	8.2	0.07	A	8.0	0.04	A
	WB	L	7.7	0.01	A	8.3	0.02	A	8.2	0.01	A
	SB	LTR	11.0	0.11	B	14.8	0.17	B	13.9	0.20	B

* Right turn channelization; Appr = Approach; Mvmt = Movement; v/c = volume to capacity ratio; NB = Northbound; EB = Eastbound; WB = Westbound; SB = Southbound; L = Left turn movement; R = Right turn movement; T = Through movement

Future (2032) With Project LOS

Future (2032) With Project conditions intersection LOS, v/c ratio and delay were determined for the AM, PM and Saturday peak hours (See Table No. 12). For Future (2032) With Project conditions, the signalized intersections of Pi'ilani Highway at Ohukai Road, at Piikea Avenue and at Kulanihakoi Street operated at poor LOS E or F. The unsignalized intersection of Kenolio Street and Kaonoulu Street resulted in LOS E and F for the northbound left turn movement and the southbound left turn movement. Detailed analysis reports for these intersections are provided in Appendix H of the TIAR update. (See: Appendix M-1, "Traffic Impact Analysis Report Update dated December 20, 2016").

Table No. 12: Future (2032) With Project Intersection Level of Service

Intersection	Traffic Control		AM Peak Hour			PM Peak Hour			Weekend Peak Hour		
	Appr	Mvmt	Delay	v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS
Pi'ilani Highway and Ohukai Road	Signalized		74.0	-	E	105.3	-	F	71.5	-	E
	EB	L	68.6	0.75	E	76.5	0.71	E	71.6	0.69	E
		T	57.2	0.45	E	60.2	0.31	E	57.7	0.44	E
		R	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*
	WB	L	167.9	1.17	F	274.9	1.40	F	161.6	1.15	F
		T	47.5	0.13	D	55.0	0.21	D	46.1	0.21	D
	NB	L	61.3	0.13	E	73.2	0.65	E	65.0	0.59	E
		T	34.1	0.35	C	122.7	1.20	F	83.7	1.09	F
		R	0.0	0.85	*	0.0	0.00	*	0.0	0.00	*
	SB	L	92.4	0.91	F	87.5	0.95	F	151.5	1.11	F
		T	88.7	1.11	F	75.8	1.10	F	35.5	0.92	D
		R	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*
Pi'ilani Highway and Uwapo Road/ Kaiwahine Street	Signalized		45.8	-	D	34.5	-	C	39.3	-	D
	EB	L	94.8	0.76	F	82.8	0.61	F	55.2	0.56	E
		T	93.1	0.58	F	76.7	0.66	E	47.8	0.32	D
		R	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*
	WB	L	148.2	1.09	F	165.5	1.12	F	53.3	0.62	D
		T	65.0	0.20	E	63.1	0.27	E	44.5	0.17	D
	NB	L	64.9	0.14	E	59.7	0.33	E	30.7	0.20	C
T		25.0	0.76	C	22.5	0.97	C	10.7	0.80	B	

Pi'ilani Promenade



Intersection	Traffic Control		AM Peak Hour			PM Peak Hour			Weekend Peak Hour		
	Appr	Mvmt	Delay	v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS
	SB	R	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*
		L	82.8	0.71	F	150.9	1.18	F	46.2	0.33	D
		T	37.7	1.07	F	14.2	1.02	F	67.0	1.08	F
		R	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*
Pi'ilani Highway and North Kihei Road	Signalized		26.0	-	C	45.1	-	C	23.1	-	C
	EB	LT	45.9	0.72	D	69.2	0.72	E	47.4	0.73	D
		R	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*
	WB	L	41.0	0.09	D	71.6	0.34	E	45.7	0.06	D
		TR	43.7	0.28	D	112.2	0.79	F	46.3	0.02	D
	NB	L	50.2	0.99	D	82.8	1.07	F	40.4	0.84	D
		T	0.7	0.61	A	0.3	0.73	A	8.8	0.66	A
	SB	R	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*
		L	79.9	0.52	E	93.5	0.56	F	72.6	0.53	E
		T	35.0	0.94	C	68.1	1.05	F	27.0	0.87	C
	R	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*	
	Signalized		19.0	-	B	23.0	-	C	21.4	-	C
	EB	T	14.1	0.53	B	21.2	0.78	C	16.8	0.66	B
R		0.0	0.00	*	0.0	0.00	*	0.0	0.00	*	
South Kihei Road and North Kihei Road	WB	L	30.6	0.66	C	35.2	0.83	D	34.7	0.77	C
		T	5.8	0.29	A	4.7	0.29	A	4.6	0.24	A
	NB	L	26.5	0.82	C	26.7	0.77	C	26.7	0.77	C
R		31.4	0.79	C	54.8	0.92	D	45.1	0.87	D	
Pi'ilani Highway and Piikea Avenue	Signalized		57.8	-	E	87.9	-	F	51.1	-	D
	EB	L	133.1	1.07	F	150.8	1.16	F	101.2	1.06	F
		R	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*
	WB	L	153.1	1.07	F	184.4	1.21	F	116.6	1.05	F
		T	9.0	0.65	A	35.7	0.99	D	15.3	0.74	B
	SB	T	75.2	1.09	F	118.8	1.18	F	16.1	1.03	F
R		0.0	0.00	*	0.0	0.00	*	0.0	0.00	*	
Pi'ilani Highway and Kaonoulu Street	Signalized		44.7	-	D	204.6	-	F	101.2	-	F
	EB	L	69.5	0.47	E	54.8	0.31	D	55.0	0.33	E
		T	77.2	0.77	E	127.6	1.06	F	117.9	1.02	F
	WB	L	69.2	0.62	E	118.3	1.07	F	129.7	1.10	F
		T	75.4	0.76	E	126.7	1.05	F	81.1	0.86	F
	NB	L	275.9	1.33	F	327.9	1.47	F	131.5	0.96	F
		T	14.2	0.66	B	245.2	1.45	F	113.7	1.13	F
	SB	T	84.9	0.72	F	344.6	1.58	F	176.4	1.21	F
		R	46.1	1.02	F	178.4	1.30	F	49.1	0.93	D
	South Kihei Road and Kaonoulu Street	Signalized		16.4	-	B	45.8	-	D	45.3	-
WB		L	39.6	0.77	D	116.7	1.02	F	67.1	0.88	E
		R	33.8	0.42	C	56.7	0.66	E	39.9	0.50	D
NB		T	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*
		R	15.1	0.81	B	52.9	1.03	F	61.5	1.06	F
SB		L	71.5	0.78	E	114.8	0.95	F	115.6	0.98	F



Intersection	Traffic Control		AM Peak Hour			PM Peak Hour			Weekend Peak Hour		
	Appr	Mvmt	Delay	v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS
Pi'ilani Highway and Kulanihakoi Street		T	3.9	0.43	A	7.2	0.65	A	7.7	0.64	A
	Signalized		59.3	-	E	52.7	-	D	13.7	-	B
	EB	L	361.2	1.58	F	148.1	1.02	F	41.0	0.56	D
	-	TR	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*
	WB	L	107.7	0.96	F	58.6	0.41	E	0.0	0.00	*
		TR	44.9	0.26	D	55.6	0.17	E	0.0	0.00	*
	NB	L	118.0	0.83	F	188.3	1.03	F	77.7	0.78	E
	-	T	17.4	0.78	B	50.2	1.06	F	9.6	0.86	A
	-	R	9.7	0.30	A	3.8	0.06	A	0.0	0.00	-
	SB	L	79.0	0.83	E	107.1	0.80	F	0.0	0.00	*
-	T	72.3	1.11	F	47.9	1.05	F	15.1	0.89	B	
Kenolio Road and Kaonoulu Street	Unsignalized		-	-	-	-	-	-	-	-	-
	NB	L	16.0	0.07	C	50.4	0.22	F	36.0	0.17	E
		TR	10.7	0.10	B	16.4	0.19	C	15.8	0.18	C
	EB	L	7.9	0.02	A	9.0	0.06	A	8.5	0.04	A
	WB	L	7.8	0.03	A	8.8	0.08	A	8.7	0.06	A
	SB	L	31.7	0.60	D	324.8	1.43	F	198.6	1.16	F
		TR	11.7	0.04	B	22.6	0.14	C	16.9	0.09	C
Kaonoulu Street and Alulike Street	Unsignalized		-	-	-	-	-	-	-	-	-
	NB	LTR	13.5	0.06	B	17.4	0.09	C	17.5	0.11	C
	EB	L	7.9	0.04	A	8.7	0.08	A	8.3	0.04	A
	WB	L	7.8	0.01	A	8.6	0.03	A	8.5	0.02	A
	SB	LTR	11.5	0.13	B	22.4	0.28	C	18.7	0.30	C

Right turn channelization; Appr = Approach; Mvmt = Movement; v/c = volume to capacity ratio; NB = Northbound; EB = Eastbound; WB = Westbound; SB = Southbound; L = Left turn movement; R = Right turn movement; T = Through movement

The results of the Level of Service analysis of the project driveways are summarized in Table 10. Drive A, which is the only signalized driveway, will operate at Level of Service A during the morning peak hour, Level of Service D during the afternoon peak hour and Level of Service C during the Saturday. Drives B, C and D will operate at Level of Service A during all peak hours.

Table 10 — 2018 Levels of Service of Project Driveways

Intersection and Movement	AM Peak Hour			PM Peak Hour			Saturday Peak Hour		
	With Project			With Project			With Project		
	V/C ^(*)	Delay ^(*)	LOS ^(*)	V/C	Delay	LOS	V/C	Delay	LOS
E. Kaonoulu Street at Drive A	0.13	7.6	A	0.63	45.5	D	0.76	35.0	C
Eastbound Left	0.15	8.0	A	0.72	47.4	D	0.94	54.9	D
Eastbound Thru	0.03	7.3	A	0.11	19.5	B	0.15	13.6	B
Eastbound Right	0.06	7.6	A	0.22	87.3	F	0.32	14.9	B

Pi'ilani Promenade



Westbound Left	0.00	0.0	A	0.00	0.0	A	0.00	0.0	A
Westbound Thru & Right	0.06	7.4	A	0.71	38.8	D	0.82	35.7	D
Northbound Left	0.07	7.5	A	0.68	36.6	D	0.91	46.3	D
Northbound Thru & Right	0.00	0.0	A	0.00	0.0	A	0.00	0.0	A
Southbound Left	0.00	0.0	A	0.00	0.0	A	0.00	0.0	A
Southbound Thru & Right	0.04	7.5	A	0.13	25.3	C	0.13	23.6	C
E. Kaonoulu St at Drive B South	nc	0.0	A	nc	0.0	A	nc	0.0	A
Northbound Right	nc	0.0	A	nc	0.0	A	nc	0.0	A
E. Kaonoulu St at Drive B North	nc	1.5	A	nc	2.2	A	nc	2.1	A
Southbound Right	nc	9.4	A	nc	18.0	C	nc	22.5	C
E. Kaonoulu Street at Drive C	nc	5.8	A	nc	7.7	A	nc	8.9	A
Northbound Left	nc	8.8	A	nc	11.4	B	nc	13.8	B
E. Kaonoulu Street at Drive D	nc	5.1	A	nc	5.8	A	nc	5.8	A
Northbound Left & Right	nc	8.5	A	nc	8.7	A	nc	8.8	A

NOTES:

- (1) — Denotes volume-to-capacity ratio. Volume-to-capacity ratios are not calculated for the unsignalized intersections.
- (2) — Delay is in seconds per vehicle.
- (3) — LOS denotes Level-of-Service calculated using the operations method described in *Highway Capacity Manual*. Level-of-Service is based on delay.
- (4) — See [Appendix D](#) for Level-of-Service Analysis Worksheets.
- (5) — nc = not calculated.

The TIAR update concludes the following: has determined that proposed Pi'ilani Promenade project will warrant the following improvements: at the intersection of Pi'ilani Highway at Kaonoulu Street.

Existing (2016) conditions resulted in appropriate LOS conditions for all signalized intersections. Two unsignalized study intersections of Pi'ilani Highway at Kaonoulu Street and Pi'ilani Highway at Kulanihako'i Street resulted in individual turning movements with poor LOS. Signal warrants passed for these two intersections.

Future (2025) Without Project conditions resulted in appropriate intersection operations for signalized intersections and appropriate turning movement operations for unsignalized intersections. Future (2032) Without Project conditions resulted in all signalized intersections maintaining LOS D or better results except for the intersection of Pi'ilani Highway at Ohukai Road. All unsignalized intersection turning movements resulted in LOS C or better.

A portion of East Kaonoulu Street is being constructed by the owner with the development of Pi'ilani Promenade by 2025. This will add a mauka leg to the intersection of Pi'ilani Highway and Kaonoulu Street. Additional intersection modifications include:

- Install traffic signals and striped pedestrian crosswalks across Pi'ilani Highway.



- Southbound approach will have double left turn lanes, two through lanes, and a channelized right turn lane.
- Northbound approach will have a dedicated left turn lane, two through lanes, and a channelized right turn lane.
- Eastbound approach will have a left turn lane, a through lane, and a channelized right turn lane.
- Westbound approach will have dual left turn lanes, a through lane and channelized right turn lane with an acceleration lane.
- The Project also includes the construction of a shared-use pedestrian and bike path along the mauka-side of Pi'ilani Highway, adjacent to the proposed development and within the project site, in addition to bike lanes on Pi'ilani Highway.

Future (2025) With Project Mitigation Future (2025) With Project conditions resulted in all signalized intersection LOS maintaining LOS D or better results except the intersection of Pi'ilani Highway at Kaonoulu Street. Most unsignalized intersections resulted in LOS D or better for individual movements, except for the intersection of Kenolio Street at Kaonoulu Street.

Future (2032) With Project Mitigation Future (2032) With Project conditions, the signalized intersections of Pi'ilani Highway at Ohukai Road, Piikea Avenue, and Kulanihakoi Street operated at poor LOS E or F. The unsignalized intersection of Kenolio Street and Kaonoulu Street also resulted in poor LOS for some turning movements. Future roadway construction in the area will provide additional capacity which should alleviate the vehicle demand on Pi'ilani Highway and improve intersection LOS.

- ~~1. Modify eastbound approach to provide one left turn lane, one through lane and one right turn lane~~
- ~~2. Provide two southbound to eastbound left turn lanes~~
- ~~3. Provide two left turn lanes, one through lane and one right turn lanes along the westbound approach~~

Table 11 is summary of the recommended Mitigation Measures for the proposed project, and surrounding developments.

Table 11 — Summary of Recommended Mitigation Measures

Location	Mitigation Required to Mitigate 2018 Background Conditions (These improvements are to be implemented by others)	Improvements Recommended As Part of Pi'ilani Promenade Project	Additional Mitigation Required to Mitigate 2018 Background Plus Project
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Overall			1. Provide setbacks along East Kaonoulu Street at all project driveways for future right turn decelerations lanes. (Required by SDOT)
Pi'ilani Highway at Kaonoulu Street	1. Install traffic signals	1. <u>Install traffic signals</u> 2. <u>Modify eastbound approach to provide one left turn lane, one through lane and one right turn lane</u> 3. <u>Provide two southbound to eastbound left turn lanes</u> 4. <u>Provide two left turn lanes, one through lane and one right turn lanes along the westbound approach</u>	No additional mitigation required
Pi'ilani Highway at Ohukai Street	2. <u>Modify the westbound approach to provide a one left turn lane, one optional left or thru lane and one right turn lane.</u> 3. <u>Modify the eastbound approach to provide one left turn lane, one thru lane and one right turn lane.</u> 4. <u>Modify the southbound approach to provide an additional left turn lane.</u> <u>Note: This improvement work has been completed since the DEIS publication</u>		No additional mitigation required



Pi'ilani Highway at Kaiwahine St and Uwape Road	<ol style="list-style-type: none"> 1. Modify the eastbound approach to provide separate left, through and right turn lanes 2. Modify the westbound approach to provide two left turn lanes, one through lane and one right turn lane. 3. Modify the southbound approach to provide a second left turn lane. 		No additional mitigation required
South Kihei Road at Kaonoulu Street	<ol style="list-style-type: none"> 1. Install traffic signals 2. Provide southbound to eastbound left turn lane and northbound to eastbound right turn lane. 		No additional mitigation required
Pi'ilani Highway at Kulanihako'i Road			No additional mitigation required

Impacts of Pedestrians

~~An assessment of the potential impacts of pedestrians on traffic conditions at the intersection of Pi'ilani Highway at Kaonoulu Street was performed. It is anticipated that there will be pedestrian traffic across Pi'ilani Highway at this intersection. However, there are no pedestrian trip generation data to develop reliable estimates for pedestrian use. In order to assess the impacts of pedestrian traffic across Pi'ilani Highway, the level-of-service was rerun assuming that 100 pedestrians per hour would use the crosswalks across Pi'ilani Highway. The addition of 100 pedestrians per hour increased the intersection volume-to-capacity ratios and increased the overall intersection delays slightly but not enough to change the intersection level-of-service. It has been recommended that traffic conditions at this intersection be re-assessed at 65% occupancy.~~

Without additional connectivity and access, the resulting number of users likely to travel by foot, bike, or transit is relatively small and thus no factor was applied to the resulting volumes. However, improvements are being made to accommodate pedestrian and bicycle travel adjacent to and within the Project. Recognizing that the availability of existing off street pedestrian and bike pathways is limited in south Maui, and that there is a need for projects to offer options to vehicular traffic, a description of the pedestrian



and bike pathway system adjacent to and within the project area is included in a figure in Appendix G of the TIAR update and Figure 15 "Conceptual Circulation Plan" of the FEIS. (See: Appendix M-1, "Traffic Impact Analysis Report Update dated December 20, 2016"). The red bike lane shown in the figure is located within the Pi'ilani Highway right of way. The blue system shown provides for a series of pedestrian and bike pathways with the project area and East Kaonoulu Road allowing for safe off street interconnectivity for the public using the various components of the land plan and providing for future connectivity to the areas north, south and east of the project area.

Impacts on Emergency Services

There is no indication within the TIAR that operation of emergency vehicles on the Pi'ilani Highway or the future improved section of the Kihei Upcountry Highway within the proposed Pi'ilani Promenade project will be impaired in any way. All the final levels-of-service are within accepted standards. To the contrary, the traffic signal systems planned for the project will be designed to automatically prioritize emergency vehicle operations, subject to State of Hawaii Department of Transportation's approval of the plans. The roadways and intersections included in the TIAR update will operate within acceptable ranges of operation and there is no indication that development of the proposed project or roadway improvements will create a system that impairs the operation of emergency vehicles.

Impacts of Honua'ula

The Project and the Honua'ula Affordable Housing Project are two separate projects proposed by two different owners. However, the two project sites are both part of the Petition Area, until the LUC approves the Motion to Amend and the 1995 Decision and Order is amended and the Petition Area is bifurcated. Further, the timing of construction may be somewhat similar. For these reasons, explanation is offered.

This TIAR update treats Honua'ula Affordable Housing Project in the following way:

- Trip generation rates were calculated using trip generation equations for Apartment (125units) and Residential Condominium/Townhouse (125 units) from the *Trip Generation, 8th Edition* (ITE, 2008). The results in Table 10 show that during the AM peak hour, 103outbound trips are generated and 24 inbound for a total of 127 trips. The PM peak hour has slightly more traffic generated, 104 in and 54 out movements for a total of 158 trips. Saturday peak hour has 78 in movements and 71 out for a total of 149 trips.
- Access for the Honua'ula Affordable Housing project is through a new mauka leg East Kaonoulu Street and assigned to that roadway. This roadway extension will be completed



as part of Pi'ilani Promenade. The traffic analysis for **With Project** includes both projects using East Kaonoulu Street. See Figures 14 to 16 in the TIAR update for project related trips associated with Pi'ilani Promenade and see Figure 17 in the TIAR update for project related trips associated with Honua'ula Affordable Housing Project. (See: Appendix M-1, "Traffic Impact Analysis Report Update dated December 20, 2016").

In order to isolate the effects of Pi'ilani Promenade, Honua'ula Affordable Housing Project is treated as part of background traffic in the Without Project because East Kaonoulu Street is not assumed to be completed under this condition, traffic associated with Honua'ula Affordable Housing Project is assigned to use a possible temporary driveway access off of Ohukai Road. Ohukai Road temporary access is subsequently closed when East Kaonoulu Street is constructed and opened. See Figures 18 to 20 in the TIAR update.

~~The Honua'ula Affordable Housing Project is not part of the Pi'ilani Promenade Project, nor is it considered a related background project, because it cannot be constructed until after East Kaonoulu Road is completed, which will be done as part of the Pi'ilani Promenade project. Until this roadway is completed, there is no roadway to assign Honua'ula trips. However, if completed, Honua'ula Affordable Housing Project traffic would impact traffic along East Kaonoulu Road. Based on the LOS analysis, and the TIAR update does not recommend concludes that no additional mitigation is required to accommodate traffic generated by the Honua'ula Affordable Housing project.~~

Long Range Forecast

State of Hawaii Department of Transportation requested long-range forecasts of the intersections along Pi'ilani Highway that included traffic generated by the south Maui projects for the year 2025. As part of the FEIS, a TIAR update was prepared to analyze Maui projects in years 2025 and 2032. (See: Appendix M-1, "Traffic Impact Analysis Report Update dated December 20, 2016").

The TIAR update was prepared by SSFM International Inc. to evaluate existing conditions, assess impacts to the surrounding area as a result of the proposed development and changes associated with anticipated surrounding area development. The TIAR update includes a LOS analysis and recommends mitigation measures.

The TIAR prepared for the DEIS by Phillip Rowell and Associates recommended a connection between Ohukai and East Kaonoulu Street to satisfy 2025 traffic impacts. This was a recommendation based on another TIAR prepared for the MRTP in which a mauka



roadway from Mokulele Highway to some point south of the MRTP is referenced. That TIAR also recommended that a future mauka roadway be constructed within the park to connect Lipoa Street in the Maui Research and Technology Park to the Kihei High School. Therefore it was recommended in the DEIS TIAR that the portion between Ohukai and East Kaonoulu Street be included in the DEIS. The TIAR update done for the FEIS does **not** recommend this connection be made.

The long range plan for construction of a mauka collector road between Mokulele highway and a point somewhere south of the MRTP intersecting with Pi'ilani Highway will be critical to north-south mobility in Kihei as it would provide additional capacity and divert regional trips away from Pi'ilani Highway. Because these issues are long range and of a regional nature, they must be addressed collectively by the State, the County, land owners, and other stakeholders as part of the long range highway planning process.

The *Kihei Master Traffic Plan Study*¹¹ contained morning and afternoon traffic forecasts for the intersections along Pi'ilani Highway that included traffic associated with the Upcountry Highway. The report also implies that the forecast included traffic associated with major South Maui projects such as known at the time, primarily Wailea, Makena and Honua'ula.

The traffic forecasts in the *Kihei Master Traffic Plan Study* were also adjusted to include traffic from the following projects

- Kaiwahine Village
- Maui Lu Resort
- Kenolio 6 Residential
- Kihei Residential
- Kihei High School Phases 1 and 2
- Honua'ula Off-site Affordable Housing
- Maui Research and Technology Park

The resulting morning and afternoon 2025 traffic projections are provided in the TIAR in Figures 29 and 30, respectively. The resulting peak hour projections along East Kaonoulu Street are shown on Figure 31. A level of service analysis was performed to confirm that the study intersections would operate at acceptable levels of service.

The level of service analysis confirmed that the following improvements should be implemented to satisfy 2025 traffic impacts:

1. The North-South Collector Road should be completed between Kaonoulu Street and Waipuulani Road.

¹¹ Parsons Brinckerhoff Quade & Douglas, *Kihei Master Traffic Plan Study*, Honolulu, HI, September 2003



- ~~2. The mauka roadway should be completed between Ohukai Street and Lipoa Street. It should be noted that the connection between Lipoa Street and the proposed Kihei High School was recommended in the TIAR for the Maui Research and Technology Park and the connection between Ohukai Road and East Kaonoulu Street is recommended in this report.~~
- ~~3. The intersection of East Kaonoulu Street at Drive C should be signalized. This intersection provides access and egress to the proposed Honua'ula Affordable Housing project.~~

Transportation Management Plan

The purpose of the Transportation Management Plan (TMP) is typically to identify and describe transportation management strategies to reduce travel demand, primarily "single-occupancy private vehicles", or to redistribute demand in time. These strategies should accomplish the following:

1. Reduce the need for employees and customers of Pi'ilani Promenade to use "single-occupancy private vehicles" by encouraging the use of alternative modes of transportation, such as walking, biking, and public transportation and ride sharing.
2. Provide alternative modes and facilities for these alternative modes.
3. Coordinate the establishment of programs, such as carpools and other ride sharing programs that reduce the amount of traffic generated by the project.

Transportation Management Plan Strategies

- A Transportation Coordinator ~~will~~ should be designated by the developer or property manager. The Transportation Coordinator will be responsible for establishing, coordinating and managing the TMP strategies identified in the plan. The Transportation Coordinator ~~will~~ should also document and respond to any traffic related complaints received from the surrounding community.
- Employers should allow flexible work hours. Examples of flexible work hours are:
 - Start the work day such that employees get to work before or after the weekday commute peak hours.
 - Some employees have scheduled four 10-hour work days per week, with alternating Monday through Thursday and Tuesday through Friday work weeks. Every other week end is a four day weekend.



Employees are divided into two groups so that offices are always covered with half the staff on the alternating Monday and Fridays.

- The Transportation Coordinator ~~should~~ will establish and coordinate a ride sharing program for employees. Since the Transportation Coordinator is employed by the developer or property manager, employees of various employers of Pi'ilani Promenade can be brought into the program, not those from just a single major employer.
- The Transportation Coordinator will ~~should~~ coordinate with the Maui Department of Transportation to establish bus routes to provide service between the project, hotels and Kihei.
- Bus passes should be provided to employees free or at a subsidized price.
- Bus stops should be provided within the project area that will minimize walking distances to the various businesses in the project.
- The Transportation Coordinator will ~~should~~ coordinate with the hotels, especially those in Kihei and adjacent areas, to provide shuttle bus service between the hotels and Pi'ilani Promenade.
- A voucher program should be established for employees that participate in one of the ride sharing programs or bus pass programs and have to leave work for family emergencies.
- Preferential parking spaces will ~~should~~ be provided for employees that participate in ride sharing programs.
- Secure bicycle storage facilities will ~~should~~ be provided at several locations within the project. Showers for employees should also be considered.
- Pedestrian walkways will ~~should~~ be designated within the parking lot areas to encourage pedestrian circulation and enhance safety of pedestrians between the roadways and buildings.



Recommended Project Mitigation Measures

The Applicant is responsible for providing the following improvements at the intersection of Piilani Highway and Kaonoulu Street as part of Project:

- Install traffic signals and striped pedestrian crosswalks across Pi'ilani Highway.
- Southbound approach will have double left turn lanes, two through lanes, and a channelized right turn lane.
- Northbound approach will have a dedicated left turn lane, two through lanes, and a channelized right turn lane.
- Eastbound approach will have a left turn lane, a through lane, and a channelized right turn lane.
- Westbound approach will have dual left turn lanes, a through lane and channelized right turn lane with an acceleration lane.
- The Project also includes the construction of a shared-use pedestrian and bike path along the mauka-side of Pi'ilani Highway, adjacent to the Project and within the Project site, in addition to bike lanes on Pi'ilani Highway.

In consultation with the State DOT Highways Division, the authoritative State agency on the design of roads and highways in Hawaii, it was determined that a frontage road along Pi'ilani Highway was unnecessary. As part of the Project, Pi'ilani Highway will be widened and a striped pedestrian crosswalk will provide a safe route across Piilani Highway. Additionally a separated bicycle and pedestrian pathway will be provided along the property frontage to encourage pedestrian connectivity in Kihei.

In addition, Appendix N of the FEIS provides a list of the existing conditions in the 1995 Decision and Order and the amendments proposed by the Applicant.

The TIAR update provides the following mitigation recommendations to be provided by others for study area intersections. (See: Appendix M-1, "Traffic Impact Analysis Report Update dated December 20, 2016").

Kenolio Road and Kaonoulu Street

The unsignalized intersection of Kenolio Street and Kaonoulu Street resulted in poor LOS for the southbound left turn movement. Possible mitigation to be completed by the Maui Lu re-development project includes reconstructing as a single lane roundabout.

Pi'ilani Highway and Ohukai Road

The signalized intersection of Pi'ilani Highway at Ohukai Road will continue to operate at a poor LOS similar to Future (2032) Without Project conditions. Therefore, due to



current conditions and other background growth possible mitigation includes providing additional left turn lanes for the westbound and southbound approaches.

Pi'ilani Highway and Piikea Avenue

The signalized intersection of Pi'ilani Highway at Piikea Avenue also resulted in poor LOS. Possible mitigation includes adding an additional eastbound left turn lane.

Pi'ilani Highway and Kulanihakoi Street

The signalized intersection of Pi'ilani Highway at Kulanihakoi Street resulted in poor LOS for Future (2032) With Project conditions. Possible mitigation measures include the construction of additional turning lanes for the northbound and southbound approaches.

Pi'ilani Highway and Kaiwahine Street

No project related traffic will be routed onto Kaiwahine Street. The singular access route into and out of the Project will be the first increment of the KUH. The TIAR update does not recommend mitigation measures for the intersection of Kaiwahine Street at the Piilani Highway.

2. Drainage

Existing Conditions. A Preliminary Engineering Report was prepared by Warren S. Unemori Engineering, Inc. ~~on~~ in December 2013 (See: Appendix L, "Preliminary Engineering Report"). Elevations across the project area range from approximately 123 feet above Mean Sea Level (MSL) at the mauka (East) property boundary to approximately 30 feet MSL along the property's Pi'ilani Highway frontage. The project site has an average slope of 4 percent and includes a small unnamed natural drainageway (Drainageway "A") that runs in a northeast-to-southwest direction across the site before converging off site with the much larger Kulanihakoi Gulch *makai* of Pi'ilani Highway. This minor drainageway is not recognized as a regulated drainage way, there is no documented evidence of a name for the drainage. ~~yet individuals have referred to the minor drainage as a Kaonoulu Gulch. The offsite 1.0 MG water tank is located 234 feet above Mean Sea Level (MSL).~~

Offsite Storm Flows Storm runoff from approximately 471 acres of undeveloped land east (*mauka*) of Pi'ilani Promenade is conveyed by Drainageway "A", to the eastern boundary of the project area. The 100-year, 24-hour peak runoff conveyed in Drainageway "A" is 498 cfs. Once across the eastern boundary, Drainageway "A" continues across the project area in an east-west direction to an existing 102-inch twin barrel culvert crossing



at Pi'ilani Highway. Once across Pi'ilani Highway, Drainageway "A" converges with the main stem of the much larger Kulanihakoi Gulch before reaching the Pacific Ocean.

Ohukai Subdivision, an existing residential development located to the northeast of Pi'ilani Promenade, discharges approximately 25 cubic feet per second (cfs) of stormwater runoff toward the project area from a drainage outlet located on the south side of Ohukai Road. Runoff discharged from Ohukai Subdivision's drainage culvert is conveyed southward by Drainageway "B" until it converges with Drainageway "A" which was described earlier (See: Appendix L, "Preliminary Engineering Report").

Onsite Storm Flows The existing, undeveloped project area generates approximately 85 cfs of surface runoff during a 50 year 1-hour storm. This runoff sheetflows in a westerly direction until it is intercepted by either 1) Kulanihakoi Gulch, 2) Drainageway "A", 3) existing concrete drainage ditches along Pi'ilani Highway, or 4) an existing 54-inch culvert at Pi'ilani Highway located near the northwest corner of the project area (See Figure 2-3 of the Preliminary Engineering Report) - all of which eventually drain to the main stem of Kulanihakoi Gulch before reaching the ocean (See: Appendix L, "Preliminary Engineering Report").

Potential Impacts and Mitigation Measures. Warren S. Unemori Engineering, Inc. has prepared a drainage plan to mitigate surface runoff caused by seasonal storm events.

Offsite runoff: Offsite runoff will be allowed to pass through the project area and will not be affected by the development of the Pi'ilani Promenade. Offsite surface runoff conveyed in Drainageways "A" and "B" will be routed ~~via underground drainlines~~ to a new diversion ditch constructed along the project's eastern boundary where an underground drain line along the future East Kaonoulu Street will convey the runoff to the existing 102-inch culvert crossing at Pi'ilani Highway (See: Appendix L, "Preliminary Engineering Report")

Onsite runoff: Once developed, the Pi'ilani Promenade project area is expected to produce a peak runoff volume of 292 cfs from a 50-year 1-hour storm. This represents a net increase of approximately 207 cfs attributable to development of the project area as shown in Table No. 42 13.

**TABLE 12-13 Increase in Runoff Attributable to Development of Pi'ilani Promenade**

Drainage Area	Pre-Development Flow	Post-Development Flow before Mitigation	Net Change
Onsite	85 cfs	292 cfs	+207 cfs

(See: Appendix L, "Preliminary Engineering Report")

Proposed Improvements: Surface runoff generated by Pi'ilani Promenade's buildings and pavement will be directed to drain inlets located throughout the development and then conveyed to stormwater detention facilities (by underground drainlines) in order to provide peak flow mitigation (See: Figure 2-4 of the Preliminary Engineering Report). In compliance with Maui County's Drainage Rules, underground detention chambers on the southern portion of the Project site within Promenade South and an open detention pond on the northern portion of the Project site within Promenade North, will provide a combined storage capacity of 7.6 acre-feet and will limit downstream stormwater discharges to a peak flow rate that does not exceed pre-development levels.

Both under- and above-ground stormwater detention basins will have sufficient capacity to accommodate the standard 50 year design storm required of new developments by the DPW. Should a larger storm event occur, stormwater in excess of the available basin capacity will overflow into the storm drainage systems located within East Kaonoulu Street and Pi'ilani Highway.

A subsurface investigation conducted in 2011 by a reputable geotechnical engineering firm performed 27 soil borings across portions of the Project site to depths ranging from 10 to 40 feet below the ground surface. No groundwater was encountered at any of the boring locations. (See: Appendix Q, "Soil Investigation Reports")

The Project does not propose any channeling or culvert work for Kulanihakoi Gulch. The smaller "Drainageway A" crossing the Project will be diverted to the KUH alignment with a *makai* terminus in the same location as the present. A FEA was prepared for the proposed affordable housing project located across Pi'ilani Highway, and that applicant retained environmental consultant Mr. Bob Hobdy to perform a Wetland Assessment to assess potential aquatic resources, and to determine if any wetlands or waters of the U.S. (as defined by the U.S. Army Corps of Engineers) were located on that property. The Wetland Assessment included analysis of surface vegetation and the digging of test pits to analyze soil and hydrology parameters, and identified Drainageway "A" as a tributary of the larger Kulanihakoi Gulch channel. Drainageway "A" is an ephemeral stream in a very dry part of Maui that flows for only about 1 day a year during the largest of winter storms. The Army determined that Drainageway "A" was not a wetland or a water of the U.S.



Under current conditions, no riparian zone exists in the vicinity of Drainageway "A" within the Project site.

The change in water flow due to the conversion of approximately 2,500 feet of Drainageway "A" to roughly 2,700 lineal feet of concrete-lined channel and large-diameter pipe culvert (approximately 0.3%) is captured in the on-site drainage impact analysis, which examines the effect of urbanizing the Project site, including the portion of the natural drainage channel which passes through it. Consequently, the flow rate increases resulting from the overall Project improvements due to decreased permeability are compensated for by the proposed onsite peak flow mitigation measures.

Modifications to Drainageway "A" are also necessary as part of the engineering design and solution for the KUH as the grades for the roadway are much higher than the existing grades within Drainageway "A", requiring a design solution to allow drainage flow, which is accommodated in the project plan.

The post-development peak storm flow of the Project, after mitigation measures are implemented, is the same as the pre-development storm flow, which is equal to or less than 85 cfs. The Project will retain the increase in post development runoff generated by development, consistent with County of Maui regulations.

The Project will comply with the condition of the 1995 Decision and Order, which requires that the Applicant fund the design and construction of its pro-rata share of drainage improvements required as a result of the development of the Project site, including oil water separators and other filters as appropriate, and other BMPs as necessary to minimize non-point source pollution. The Applicant understands that all Project-related water discharges must comply with the State's Water Quality Standards, which are set forth in Chapter 11-54, HAR.

BMPs prepared in accordance with MCC Chapter 20.08 (*Soil Erosion and Sedimentation Control*) will be submitted to the DPW for review and approval prior to the issuance of grubbing and grading permits. In addition, since Project site work will exceed one acre, a NPDES will be obtained from the DOH's Clean Water Branch for the discharge of storm water associated with construction activities. The Applicant will meet all of the requirements set forth by the DOH's Clean Water Branch.

Low-impact development strategies, including a series of strategically located drainage retention basins and channels, are designed to mitigate downstream impacts to *makai* landowners. A Drainage Master Plan was designed to County standards, and includes measures that mitigate the increase in runoff generated from the development of impervious surfaces. On-site runoff will be collected by catch basins located at



appropriate intervals along the interior roadways and landscaped area. Drain lines from the catch basins will convey the runoff to onsite detention basins or underground subsurface drainage systems.

The onsite drainage system will provide storage for the increase in stormwater runoff from a 50 -year, 1 -hour storm. The drainage system will be designed in compliance with Chapter 4 "Rules for the Design of Storm Drainage Facilities in the County of Maui" and Chapter 15-11 "Rules for the Design of Storm Water Treatment Best Management Practices."

Water Quality Measures

Maui County now requires the implementation of water quality control measures to reduce water pollution from stormwater runoff. Both "flow through" and "detention based" treatments will be employed by Pi'ilani Promenade to mitigate stormwater-related water pollution associated with the Promenade North and South development sites. "Flow through" treatment will be achieved by outfitting parking lot drain inlets with filters capable of removing up to 80 percent of Total Suspended Solids. "Detention based" treatment will be provided by providing additional storage volume in the subsurface detention chambers and surface detention pond to facilitate sediment removal in addition to peak flow mitigation.

The proposed stormwater detention improvements will accommodate and mitigate the increase in peak flow attributable to development while simultaneously providing water pollution control. Table 13 14 summarizes the storage capacity within the stormwater detention system needed to achieve both of these objectives.

TABLE 13 14 Drainage Detention System Capacity for Pi'ilani Promenade

Storage Capacity Required to Meet Water Quality Criteria	Additional Storage Capacity Required to Mitigate Peak Flow	Total Storage Capacity to be Provided
2.5 ac. -ft.	5.1 ac. -ft.	7.6 ac. -ft.

Once the stormwater detention facilities are in place, the hydrologic impact on downstream properties resulting from the proposed development of Pi'ilani Promenade will be negligible because the pre-development peak flow is the same as the post-development peak flow after mitigation as summarized in Table 14 15 below.



TABLE 14 15 Result of Peak Runoff by Pi'ilani Promenade

Drainage Area	Acreage	Pre-Development Peak Flow	Post-Development Peak Flow Before Mitigation	Post-Development Peak Flow After Mitigation	Net Change in Peak Runoff
North	30.1	31.2 cfs	107.7 cfs	9.6 cfs	-21.6 cfs
South	38.1	41.0 cfs	148.2 cfs	39.2 cfs	-1.8 cfs
Roads, Water Tank, Diversion Ditch	9.4	12.5 cfs	35.9 cfs	35.9 cfs	+23.4 cfs
TOTAL	77.6	84.7 cfs	291.8 cfs	84.7 cfs	0.0 cfs

3. Water

Existing Conditions. The Pi'ilani Promenade lies within the Central Maui Water System's service area which falls under the jurisdiction of the Maui Department of Water Supply (DWS). Drinking water for the south Maui area currently comes from existing wells located in upper Waiehu and North Waihee which draws groundwater from the Iao and Waihee Aquifers. Drinking water from these wells is pumped into an existing 1.0 million gallon (MG) capacity concrete water storage tank located in upper Waiehu, then conveyed across the isthmus by the Central Maui Water System's 36-inch diameter transmission main to consumers in South Maui. The existing DWS drinking water distribution system does not currently extend into the project area.

The Central Maui Water Transmission Line currently bisects the Honua'ula Parcel and the Project site diagonally and is proposed to be re-routed within an easement at the eastern (mauka) edge and continue underneath East Kaonoulu Street. The proposed transmission line realignment will create new bends in the pipe at the eastern (mauka) edge of East Kaonoulu Street and at the intersection of East Kaonoulu Street and Pi'ilani Highway as shown in figure 3-1 of the Preliminary Engineering Report prepared by Warren S. Unemori Engineering, Inc. The relocated waterline will be designed and engineered with proper materials to maintain the existing water flow to south Maui customers. In addition, the new 1.0 MG water tank to be constructed as part of the Project will create additional water storage capacity in south Maui. The County DWS, which has sole jurisdiction for the management of the Central Maui Water Transmission System, has already reviewed the specific construction details associated with the transmission line realignment and approved it for construction.



The drinking water for the Project will come from the Central Maui Water System which is supplied by fresh water from the Iao and Waihee Aquifers. At the request of the DWS, the Applicant agreed to construct a 1.0 MG water storage tank to serve the future needs of the Project and South Maui. Three 3-inch domestic water meters have been approved and are available for the Project. The combined flow capacity of these meters is 1,050 gpm, which exceeds the approximately 600 gpm of required flow capacity for the Project. Therefore, there will be adequate flow capacity to build out the Project. Consequently, no additional drinking water sources beyond the County-issued water meters are anticipated in order to construct and operate the Pi'ilani Promenade.

The State Commission on Water Resource Management approved an irrigation well permit for a well built in 2011 at a wellhead elevation of 118 feet. The well has proven to be capable of producing 216,000 gallons of non-drinking water per day and a permanent pump (150 gpm) has since been installed. Construction of the distribution infrastructure for the landscape irrigation system is currently pending.

Potential Impacts and Mitigation Measures. The Pi'ilani Promenade will consume on average of 252,000 gpd at build-out, including 171,000 gpd of drinking water for domestic uses and 81,000 gpd of non-drinking water for irrigation. (See: Appendix L, "Preliminary Engineering Report")

As mentioned, the CWRM estimates that 0.421 MGD of groundwater can be allocated within the Iao Aquifer System. The Piilani Promenade drinking water demand is expected to withdraw 171,000 gpd and can be accommodated within the remaining 0.421 MGD of available groundwater. This limited amount of water is not anticipated to significantly impact the Iao Aquifer from recharging.

As mentioned, three 3-inch domestic water meters have been approved by the County DWS and are available for the project. The issuance of water meters for the project by the DWS carries the implicit approval by the DWS of Piilani Promenade's use of the Iao Aquifer System for drinking water.

The CWRM estimates that 11 MGD of groundwater can be developed within the Kamaole Aquifer System on a sustainable basis. (Water Resource Protection Plan, 2008). The irrigation well for landscaping is expected withdraw 81,000 gpd and this limited amount of water is not anticipated to significantly impact the Kamaole Aquifer from recharging. In the future, when the County reclaimed water line is extended north towards the Project



site, the Applicant will connect to the R-1 water source for irrigation water eliminating the need for the brackish irrigation well.

The Pi'ilani Promenade Preliminary Engineering Report uses the estimating method prescribed by the DWS to compute drinking water demand. A different method prescribed by the Maui County Department of Environmental Management is used to calculate wastewater output. The use of prescribed methods allows each agency to more accurately evaluate project demands against its own systems' capabilities by using its own standard metrics.

As an example, the DWS estimates average daily domestic water consumption for a commercial building using a rate of 140 gallons per 1000 square feet of floor area. In comparison the Department of Environmental Management estimates average daily wastewater output for the same building using a rate of 100 gallons per 1000 square feet of floor area. Though they differ, the demand rates adopted by each agency are carefully considered to reflect needed "safety factors" and other adjustments which the agencies have found, based on their own experience, allow them to best manage the complex infrastructure under its control and reliably deliver the essential services to the community with which it is tasked.

The approximate 60,000 gallon mathematical difference between the two demand figures results from different estimating methods in computing drinking water and wastewater demand.

The Applicant is required to provide for a future connection to the County reclaimed water system as a condition of County Zoning for this project (Ordinance 2772, May 25, 1999). In the future, connecting the Project to the reclaimed water system will eliminate the need for the brackish irrigation well.

The Pi'ilani Promenade will be served by the water system improvements that the Applicant is required to construct in order to complete the subdivision improvements for the Kaonoulu Ranch Large-Lot Subdivision No. 2.17 (See: Figure 3-2 of Appendix L, "Preliminary Engineering Report"). These improvements will consist of:

- 1) Relocating a 2,500 ft. long segment of the Central Maui Water System's existing 36-inch diameter waterline from its present alignment, which currently crosses the project area, onto a new alignment along East Kaonoulu Street;



- 2) Constructing a new 1.0 MG capacity concrete water storage reservoir located 234 feet MSL which will be dedicated to the DWS upon completion;
- 3) Installing a 3,200 ft. long, 12-inch diameter transmission waterline from the Central Maui Water System's existing 36-inch transmission line to the new 1.0 MG storage reservoir for refilling the storage tank;
- 4) Installing a 5,500 ft. long, 16-inch diameter distribution main from the new 1.0 MG storage reservoir to and along East Kaonoulu Street which will deliver drinking water for domestic use and provide fire protection for the Pi'ilani Promenade project site; and
- 5) Installing a 1,100 ft. section of a 12-inch diameter distribution main across Pi'ilani Highway to a connection point at the 18-inch diameter waterline on Kenolio Road in order to provide water circulation and link the new water system improvements to the County water distribution system serving the Kihei area.

The foregoing improvements will be installed at the expense of the Applicant.

The Honua'ula Affordable Housing Development is estimated to need a storage allowance of 210,000 gpd of water. 250 dwelling units x 560 gpd average daily consumption x 1.5 peaking factor = 210,000 gallons per day. This number was estimated by the project civil engineer using the formula provided by the County.

4. Wastewater

Existing Conditions. The project site is currently undeveloped and is not served by the County's wastewater collection system which is located to the west of the site across Pi'ilani Highway. Wastewater collected by the County's Kihei wastewater system is conveyed by a series of existing gravity lines, pump stations, and force mains along Kihei Road which transports the collected wastewater to the County's Kihei Wastewater Reclamation Facility (KWWRF) for processing and disposal.

Potential Impacts and Mitigation Measures. The Pi'ilani Promenade is expected to generate 114,000 gallons of wastewater per day. The Apartment uses will generate 57,630 gpd, the Light Industrial uses will generate 2,879 gpd and the business commercial uses will generate 53,071 gpd. Wastewater service for the project will be provided by connecting the Pi'ilani Promenade to the existing County sewerage system at a connection point at the intersection of Kaonoulu and Alulike Streets (*makai* of Pi'ilani Highway)



where the County sewer system has sufficient capacity to accept the wastewater generated by the project (**See:** Figure 4-1 of Appendix L, "Preliminary Engineering Report")

The Wastewater Reclamation Division of the Maui Department of Environmental Management reports that available capacity at the KWWRF is approximately 4.6 million-gallons-per-day (mgd) of out of 8.0 mgd total treatment capacity based on measured average daily flows. As such, there should be ample treatment capacity available to accommodate the 114,000 gallon (0.1 mgd) daily wastewater flow which the Pi'ilani Promenade project is expected to generate. Additionally the proposed Honua'ula Affordable Housing Development wastewater generation of 63,750 gpd can also be accommodated at this time.

In a comment letter from the Department of Environmental Management, Wastewater Division, the County is requesting that the Applicant provide a 10,000 square foot lot for a future wastewater pump station and associated easement for transmission line that would service future development in north-central Kihei (**See:** Appendix A "EISPN Letters with Responses"). The Applicant is coordinating with the Department on the optimal location to provide for the 10,000 square foot lot and associated 20-foot wide easement.

At the time of publication of this FEIS, the Department of Environmental Management, Wastewater Division has not prepared designs for the sewer line or pump station and has not included the future sewer line or pump station in any capital improvement program (CIP) budget request for design. The Applicant will continue to cooperate with the Department of Environmental Management, Wastewater Division to set aside an area in the Project site for the pump station and sewer line.

As noted below, the Pi'ilani Promenade will be subject to an two (2)-impact fees levied by the County of Maui in order to cover the cost of wastewater collection and treatment infrastructure for the Kihei area.

1. The Regional Wastewater Treatment System Facility Expansion Assessment Fee, for treatment plant expansion, which is assessed at a rate of \$4.65 per gallon of project flow. The Pi'ilani Promenade will be assessed approximately \$530,100 for the 114,000 gpd of wastewater flow which the project is expected to generate.
2. ~~"Kihei Regional Wastewater Treatment System Collection/Transmission System Project Assessment Fee," for collection system upgrades, which is assessed at \$6.64 per gallon of project flow. The Pi'ilani Promenade will be assessed approximately~~



~~\$756,960~~ for the 114,000 gpd of wastewater flow which the project is expected to generate. On April 27, 2015 the DPW discontinued collection of the Collection/Transmission System Project Assessment Fee, therefore this fee is no longer applicable to the proposed project.

The Honua'ula Affordable Housing Development is estimated to generate 63,750 gallons per unit per day of wastewater. 250 dwelling units x 255 gpd average daily generation = 63,750 gallons per day. This number was estimated using the formula provided by the County.

5. Electrical

Existing Conditions. There are no existing Maui Electric Company (MECO) power sources in the immediate vicinity of the proposed development. The closest existing MECO power source is an overhead 69 Kilovolt (kV) and 12 kV pole line running through an existing subdivision just *makai* of Pi'ilani Highway. The 69 kV is part of MECO's transmission loop for the Island of Maui and is the nearest source of large power. The 12 kV pole lines provide distribution power to existing commercial and residential developments in the area.

Potential Impacts and Mitigation Measures. MECO will provide temporary power to serve the project during construction. MECO is planning a new substation to provide the additional capacity needed to accommodate further growth in the ~~north~~ Kihei mauka area. ~~However,~~

MECO has advised that the existing 12 kV system, based on current electrical use growth projections, does not have sufficient spare capacity to accommodate the estimated 6,250 kilo-volt-ampere (kVA) of load required by the current Pi'ilani Promenade development plan. MECO has agreed to provide temporary power to the project until the substation is complete.

The new substation will be located in the ~~northwest~~ northeast corner of the Pi'ilani Promenade development, and will be fed by an overhead 69 kV line extension across Pi'ilani Highway, which will be tapped into MECO's transmission loop pole line below the highway. (See Figure 6-1 of Appendix L, "Preliminary Engineering Report"). The new MECO substation is a permitted use in the Light Industrial (LI) zoning district and subject to review and approval by the State Public Utilities Commission. The substation will contain two (2) MECO transformers to step down the voltage from 69 kV to 12 kV for



local distribution. A new 12 kV concrete-encased underground ductline and manholes will be provided to extend power from the substation to a major ductline along the Kaonoulu Street extension. Stubouts for 12 kV distribution line will be provided at each bulk-lot for future onsite distribution. All power distribution serving uses within the project will be underground, including the wiring along East Kaonoulu Street for MECO's street lighting system. As of August 1, 2016 the MECO substation eventually will be subdivided out of the project parcel once the offsite improvements are completed. MECO will apply for building and electrical permits as needed. MECO anticipates beginning construction in March 2017 and estimates completion by September 2017.

The Applicant recognizes the importance of sustainability in planning, and in response to comments on the DEIS, the Project incorporates sustainability design elements such as solar photovoltaic panels for common areas and the vegetated detention basins located on site to intercept stormwater runoff closer to the source. The Applicant is exploring other renewable energy technologies and conservation measures to promote sustainability. Solar hot water heaters will be utilized throughout the residential portion of the Project. Occupants of the Pi'ilani Promenade will be encouraged to install photovoltaic energy systems where appropriate and feasible.

The Project will include a water and energy efficient landscaping irrigation system designed to conserve water.

6. Communication and Cable TV Systems

Existing Conditions. Hawaiian Telcom (HT) and Oceanic Time Warner Cable (Oceanic) do not have any existing telecommunications facilities in the immediate vicinity of the proposed development. The closest source of telephone and cable television (CATV) service is MECO's 69 kV pole line which is *makai* of Pi'ilani Highway.

Potential Impacts and Mitigation Measures. To provide telephone and CATV service for the project, an underground ductline extension from the existing 69 kV pole line (across Pi'ilani Highway) and an underground installation along the Kaonoulu Street extension are proposed. Conduit stubouts will be provided for each bulk-lot for future onsite distribution. HT and Oceanic will provide the fiber optic cables for the ductlines on an "as-needed" basis. No central offices or electronic equipment pads are anticipated. However, small cross connects and CATV node pads may be required along Kaonoulu Street. As with MECO, all HT and Oceanic distribution lines serving uses within the project will be placed underground.



IV. RELATIONSHIP TO GOVERNMENTAL PLANS, POLICIES, AND CONTROLS

A. CHAPTER 343 HAWAII REVISED STATUTES

This FEIS has been prepared in accordance with the provisions of Chapter 343, Hawaii Revised Statutes (“HRS”) (the “Environmental Impact Statement Law”) and Title 11, Chapter 200, Hawaii Administrative Rules (“HAR”) (the “Environmental Impact Statement Rules”).

Section ~~343-5~~ 343-5 HRS, establishes nine “triggers” that require compliance with the preparation of an Environmental Assessment (EA) or EIS Impact Statement Law. The trigger for the Pi'ilani Promenade ~~includes work in the State Right of Way on Pi'ilani Highway. The Applicant also agreed to preparation~~ is the proposal of the use of State lands for roadway widening purposes.

On August 14, 2013 the Applicant filed an Environmental Impact Statement Preparation Notice with the LUC consistent with Act 172, Session Laws of Hawaii 2012, to proceed directly to the preparation of the EIS itself rather than preparing an environmental assessment to determine whether an EIS is warranted. On September 10, 2013, the LUC entered an Order determining that the Project may have a significant impact upon the environment that warrants the preparation of an EIS, and agreeing that the LUC would be the accepting agency.

B. STATE LAND USE

The State Land Use Law Chapter 205, Hawaii Revised Statutes, relating to the Land Use Commission (LUC HRS), establishes the LUC and four (4) major land use districts in which all lands in the state are placed. These districts are designated as Urban, Rural,



Agricultural, and Conservation. The lands of the Pi'ilani Promenade lie within the State Urban district (**See:** Figure No. 5, "State Land Use Map").

~~The Applicant is not proposing a reclassification or amendment of the State Land Use District Boundaries; however the Applicant is proposing a use that the Commission has determined is different~~ As discussed in more detail in Section II.C herein, the Project site was reclassified from Agricultural to Urban pursuant to the 1995 Decision and Order. While the Project proposes uses that are consistent with the Urban designation, the LUC has determined that the proposed uses differ from that which was represented to the Commission by the Original Petitioner to obtain the 1995 Decision and Order.

As previously described in the Background section herein, there is currently pending an Order to Show Cause proceeding, which has been stayed pending Applicant filing a Motion for Order Amending the Findings of Fact, Conclusions of Law, and Decision and Order Dated February 10, 1995 ("Motion to Amend"). Applicant submitted its Motion to Amend to the LUC, however, without an Environmental Impact Statement ("EIS"), that Motion to Amend is considered incomplete by the LUC, and will not be set for hearing before the LUC until this FEIS has been completed and ~~or~~ accepted by the LUC.

In the Motion to Amend, Applicant requests that the LUC issue a new docket sheet for that portion of the property subject to the LUC's 1995 Decision and Order that is owned by Applicant, that the Applicant be released from the conditions of the 1995 Decision and Order, and that the LUC issue new Findings of Fact, Conclusions of Law, and a Decision and Order specific to the planned Pi'ilani Promenade project that is the subject of this FEIS. Attached hereto as Appendix N is a review and analysis of the currently existing conditions in the 1995 Decision and Order that would be included in the new Findings of Fact, Conclusions of Law and Decision and Order and would apply only to the Pi'ilani Parcels, as sought by Applicant in the Motion to Amend (**See:** Appendix N, "Conditions of the Motion to Amend with Proposed Changes").

Sec 15-15-18, Hawaii Administrative Rules. The proposed Pi'ilani Promenade is consistent with the following standards of the Urban District, Sec 15-15-18, Hawaii Administrative Rules:

1. *It shall include lands characterized by "city-like" concentrations of people, structures, streets, urban and other related land uses.*

Analysis:

The Pi'ilani Promenade project site is located in Kihei which is the urban center of South Maui. The project site is located immediately south and adjacent to existing commercial



uses. Along the Project's southern boundary is the Kulanihakoi Gulch and future Kihei High School. Across Pi'ilani Highway and within close proximity of the project site are the Kihei Aquatic and Community Center, Pi'ilani Shopping Center and a variety of business and commercial services along with single-family and multi-family residential development.

- 2. Proximity to centers of trading and employment except where the development would generate new centers of trading and employment;*

Analysis:

The Pi'ilani Promenade is located within close proximity to one of three commercial nodes located in central Kihei. The Pi'ilani Shopping Center, Azeka Shopping Center, the Maui Research and Technology Park along with numerous professional and business services are all located a short distance from the Pi'ilani Promenade and generate substantial employment. In addition, the Kihei-Makena Community Plan identifies the project site as (LI) Light Industrial and the Maui Island Plan ~~identify~~ identifies the project in the Urban Growth Boundary.

- 3. Availability of basic services such as schools, parks, wastewater systems, solid waste disposal, drainage, water, transportation systems, public utilities, and police and fire protection; and*

Analysis:

Basic public services and facilities, such as transportation systems, sewer, water, drainage and public utility hook-ups are available in close proximity to the proposed project. All of the drainage improvements for the proposed development will comply with County of Maui standards. The County of Maui currently does not provide solid waste disposal service to multi-family residences in the area, therefore a private refuse company will be contracted for solid waste disposal. The Pi'ilani Promenade is also adjacent to Pi'ilani Highway, a major roadway serving the general Kihei area. A new roadway will be constructed to provide access from Pi'ilani Highway; this roadway will also become the future Kihei Upcountry Highway (KUH) connecting to Haleakala Highway in the future.

The lands of the project area have poor soil conditions, ~~limited~~ suitable topography, and are close to existing infrastructure making the subject property a suitable location for the proposed development. Section III.D (Infrastructure) details the preliminary engineering and drainage analyses conducted for the proposed development. Schools and several parks are located in close proximity to the Pi'ilani Promenade, such as Waipuilani Park, Kalepolepo Park, the three (3) Kamaole Beach Parks, Charley Young Park, Kalama Park and South Maui Community Park. Other recreational facilities include the Kihei Aquatic



Center and Community Center, both a short distance from the Pi'ilani Promenade. It should be noted that the proposed development will also include landscaped open space and a park, which will help to mitigate vehicular traffic to and from the subject property.

The State Department of Education's public school system in the Kihei region includes Kamalii and Kihei Elementary Schools (Grades K to 5), Lokelani Intermediate School (Grades 6 to 8) and Maui and Kihei Public Charter High School (Grades 9 to 12). The Kihei Charter School provides K-12 classes within close proximity of the project site at Lipoa Center and Kihei Commercial Center. The future Kihei High School is proposed for development adjacent to the Kulanihakoi Gulch, south of the subject property, along Pi'ilani Highway, ~~and the State Department of Education is preparing and processing land use entitlements for this development.~~ Once developed, the Pi'ilani Promenade will be within a short distance of an elementary, intermediate and high school.

Police protection for the Kihei area is provided by the Maui County Police Department, with the existing Kihei Station located approximately 1.5 miles from the Pi'ilani Promenade. Likewise, fire protection for the Kihei area, which encompasses fire prevention, suppression, rescue, and emergency services, is provided by the Maui County Fire Department, with the Kihei Fire Station located near Kalama Park on South Kihei Road, approximately 1.5 miles from the Pi'ilani Promenade. The proposed development will not result in any extension of the existing service area limits for these emergency services.

4. Sufficient reserve areas for foreseeable urban growth.

Analysis:

The Kihei-Makena Community Plan region will have sufficient reserve areas for foreseeable urban growth. The Maui Island Plan, Directed Growth Plan identifies Planned Growth Areas for Central Kihei, mauka of Pi'ilani Highway that are ideal for a new community. The lands mauka of Pi'ilani Highway offer suitable topography for a new community, and is located outside of the tsunami inundation zone.

5. It shall include lands with satisfactory topography, drainage, and reasonably free from the danger of any flood, tsunami, unstable soil condition, and other adverse environmental effects.

***Analysis:***

Elevations across the project area range from approximately 123 feet above Mean Sea Level (MSL) at the mauka (East) property boundary to approximately 30 feet MSL along the Pi'ilani Highway fronting the site. The average slope across the project site is 4%.

The site includes two soil types "Waiakoa extremely stony silty clay loam", 3 to 25 percent slopes, eroded (WID2) and Alae sandy loam, 3 to 7 percent slopes (AaB). These soils developed in volcanic ash and recent alluvium derived from basic igneous rock. Runoff is slow and the erosion hazard is slight therefore these soils are appropriate for development.

As indicated by the Flood Insurance Rate Map, the Pi'ilani Promenade is located within Zone X, which is outside of any flood hazard. The project site is not subject to tsunami, unstable soil conditions or other adverse environmental effects which would render it unsuitable or inappropriate for the proposed development.

6. *Land contiguous with existing urban areas shall be given more consideration than non-contiguous land, and particularly when indicated for future urban use on state or county general plans.*

Analysis:

As reflected on the State Land Use Classification map, the project site is already designated "Urban". In addition, the surrounding project is within the Maui Island Plan's Urban Growth Boundary and is also designated by the Kihei-Makena Community Plan for ~~urban~~ Light Industrial use.

As noted above, the project site is contiguous to existing urban areas, including a Gas station and light industrial/commercial uses, and the Kaonoulu Estates residential subdivision. In addition, the future Kihei High School is proposed on lands south of the project site. Just west of the project site, across Pi'ilani Highway, are commercial, civic, and residential developments within central Kihei.

7. *It shall include lands in appropriate locations for new urban concentrations and shall give consideration to areas of urban growth as shown on the state and county general plans.*

Analysis:

Given the Light Industrial (LI) designation of the property by the Kihei-Makena Community Plan and the placement of the Project area within the Urban Growth Boundary by the Maui Island Plan, the project site is in an appropriate location for new



urban concentration and growth. Both of these plans support an urban use of the subject property, and with existing infrastructure and public facilities in close proximity, balancing employment with housing and services is a central tenet of smart growth.

8. *May include lands which do not conform to the standards in paragraphs (1) to (5):*
 - (A) *When surrounded by or adjacent to existing urban development; and*
 - (B) *Only when those lands represent a minor portion of this district;*

Analysis:

The project site is located in the State Land Use Urban District and conforms to the standards in paragraphs (1) to (5).

9. *It shall not include lands, the urbanization of which will contribute toward scattered spot urban development, necessitating unreasonable investment in public infrastructure or support services.*

Analysis:

Development of the Project area will not contribute to scattered spot urban development. The property is located adjacent to, and will become part of, the existing urban uses mauka of Pi'ilani Highway and other residential and commercial subdivisions in the area. Recently approved development mauka of Pi'ilani Highway includes the Kihei High School, the MRTP and the A&B Kihei residential subdivision. The Project site is within the Maui Island Plan's Urban Growth Boundary and is also designated by the Kihei-Makena Community Plan for Light Industrial use.

The proposed development will not necessitate unreasonable public investment in infrastructure facilities or public services. The Applicant will be engaging in infrastructure improvements to mitigate any potential impacts of the proposed development.

10. *It may include lands with a general slope of twenty per cent or more if the commission finds that those lands are desirable and suitable for urban purposes and that the design and construction controls, as adopted by any federal, state, or county agency, are adequate to protect the public health, welfare and safety, and the public's interests in the aesthetic quality of the landscape.*

Analysis:

The project area is characterized by an average slope of four (4) percent.



The site is not suitable for productive agricultural land use and is better suited for urban development. The proposed development would provide additional opportunities for housing and employment. Basic services such as schools, parks, wastewater systems, solid waste disposal, drainage, water, transportation systems, public utilities, and police and fire protection are in close proximity to the site. The Pi'ilani Promenade is currently within the General Plan's Urban Growth Boundary.

Sec 15-15-24, Hawaii Administrative Rules. Permissible uses within the "U" Urban District.

The proposed Pi'ilani Promenade is located within the Urban District; therefore the project is in compliance with section 15-15-24 HAR.

C. HAWAII STATE PLAN

The Hawaii State Plan (Chapter 226, HRS), establishes a set of goals, objectives, and policies that serve to guide the long-term growth and development of the State. The Plan consists of three (3) parts. Part I includes its Overall Theme, Goals, Objectives, and Policies; Part II encompasses Planning, Coordination, and Implementation; and Part III establishes Priority Guidelines. Since Part II of the State Plan covers its administrative structure and implementation process, comments relating to the applicability of Part II to the proposed project are not appropriate. In addition to sections of the State Plan that are applicable to the proposed project, a discussion of how the project conforms to the State Plan is included below. In response to comments received during the public comment period, the Applicant has revised the FEIS to include a review of HRS § 226-108 (Sustainability).

In addition, based on comments received during the public comment period, various goals, objectives and policies have been revised to more accurately reflect the Project as it relates to various government plans.

Hawaii State Plan, Chapter 226, HRS Part 1. Overall Themes, Goals, Objectives and Policies Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable	S	N/S	N/A
HRS 226-1: Findings and Purpose			
HRS 226-2: Definitions			
HRS 226-3: Overall Theme			



HRS 226-4: State Goals. In order to guarantee, for the present and future generations, those elements of choice and mobility that insure that individuals and groups may approach their desired levels of self-reliance and self determination, it shall be the goal of the State to achieve:

1. A strong, viable economy, characterized by stability, diversity, and growth, that enables the fulfillment of the needs and expectations of Hawaii's present and future generations.
2. A desired physical environment, characterized by beauty, cleanliness, quiet, stable natural systems, and uniqueness, that enhances the mental and physical well-being of the people.
3. Physical, social, and economic well-being, for individuals and families in Hawaii, that nourishes a sense of community responsibility, of caring, and of participation in community life.

Analysis: The proposed Pi'ilani Promenade achieves the above-referenced goals by 1) creating a more conducive environment for the diversification of the State's economy; and 2) creating employment opportunities and affordable rental housing for Maui residents, thereby providing greater opportunity for self-reliance and self-determination. Moreover, the project will include contributions such as constructing a portion of the Kihei Upcountry Highway and dedication of a 1.0 MG drinking water tank for public use, and enhancing the County's infrastructure and public facilities.

Chapter 226-5, HRS, Objective and Policies for Population

Objective: It shall be the objective in planning for the state's population to guide population growth to be consistent with the achievement of physical, economic and social objectives contained in this chapter.

<i>Policies:</i>	S	N/S	N/A
(1) Manage population growth statewide in a manner that provides increased opportunities for Hawaii's people to pursue their physical, social, and economic aspirations while recognizing the unique needs of each county.	✓		
(2) Encourage an increase in economic activities and employment opportunities on the neighbor islands consistent with community needs and desires.	✓		
(3) Promote increased opportunities for Hawaii's people to pursue their socio-economic aspirations throughout the islands.	✓		
(4) Encourage research activities and public awareness programs to foster an understanding of Hawaii's limited capacity to accommodate population needs and to address concerns resulting from an increase in Hawaii's population.			✓
(5) Encourage federal actions and coordination among major governmental agencies to promote a more balanced distribution of			✓



immigrants among the states, provided that such actions do not prevent the reunion of immediate family members.			
(6) Pursue an increase in federal assistance for states with a greater proportion of foreign immigrants relative to their state's population.			✓
(7) Plan the development and availability of land and water resources in a coordinated manner so as to provide for the desired levels of growth in each geographic area. [L 1978, c 100, pt of §2; am L 1986, c 276, §4; am L 1988, c 70, §3; am L 1993, c 213, §3]	✓		
<p><i>Analysis:</i> <u>The Project supports policy items 1-3 and 7. Policy item 4 is not applicable as the Project does not include public awareness programs or activities to understand concerns of population increase.</u> The proposed project includes a residential component that will help accommodate foreseeable population growth on Maui. The Pi'ilani Promenade incorporates current land use planning themes which encourages mixed use projects and incorporates a variety of compatible uses on the same property. <u>Given the Light Industrial (LI) designation of the property by the Kihei-Makena Community Plan and the placement of the Project site within the Urban Growth Boundary by the Maui Island Plan, the Project site is in an appropriate location for new urban concentration and growth. Both of these plans support an urban use of the Project site, and with existing infrastructure and public facilities in close proximity, balancing employment with housing and services is a central tenet of smart growth.</u></p> <p>The Pi'ilani Promenade will strengthen Maui's economy by creating jobs for Maui residents which will in turn have a positive impact on the rest of the Maui economy. The result will be an increase in economic activities and employment opportunities on the neighbor islands consistent with community needs and desires, which will promote increased opportunities for Hawaii.</p>			
Chapter 226-6, HRS, Objectives and Policies for the Economy - in General			
Objectives: Planning for the State's economy in general shall be directed toward achievement of the following objectives:			
Objectives:	S	N/S	N/A
(1) Increased and diversified employment opportunities to achieve full employment, increased income and job choice, and improved living standards for Hawaii's people, while at the same time stimulating the development and expansion of economic activities capitalizing on defense, dual-use, and science and technology assets, particularly on the neighbor islands where employment opportunities may be limited.	✓		



(2) A steadily growing and diversified economic base that is not overly dependent on a few industries, and includes the development and expansion of industries on the neighbor islands.	✓		
Policies:	S	N/S	N/A
(1) Expand Hawaii's national and international marketing, communication, and organizational ties, to increase the State's capacity to adjust to and capitalize upon economic changes and opportunities occurring outside the State.	✓		
(2) Promote Hawaii as an attractive market for environmentally and socially sound investment activities that benefit Hawaii's people.	✓		
(3) Seek broader outlets for new or expanded Hawaii business investments.	✓		
(4) Expand existing markets and penetrate new markets for Hawaii's products and services.	✓		
(5) Assure that the basic economic needs of Hawaii's people are maintained in the event of disruptions in overseas transportation.			✓
(6) Strive to achieve a level of construction activity responsive to, and consistent with, state growth objectives.	✓		
(7) Encourage the formation of cooperatives and other favorable marketing arrangements at the local or regional level to assist Hawaii's small scale producers, manufacturers, and distributors.			✓
(8) Encourage labor-intensive activities that are economically satisfying and which offer opportunities for upward mobility.	✓		
(9) Foster greater cooperation and coordination between the government and private sectors in developing Hawaii's employment and economic growth opportunities.	✓		
(10) Stimulate the development and expansion of economic activities which will benefit areas with substantial or expected employment problems.	✓		
(11) Maintain acceptable working conditions and standards for Hawaii's workers.	✓		
(12) Provide equal employment opportunities for all segments of Hawaii's population through affirmative action and nondiscrimination measures.	✓		
(13) Stimulate the development and expansion of economic activities capitalizing on defense, dual-use, and science and	✓		



technology assets, particularly on the neighbor islands where employment opportunities may be limited.			
(14) Encourage businesses that have favorable financial multiplier effects within Hawaii's economy, particularly with respect to emerging industries in science and technology.	✓		
(15) Promote and protect intangible resources in Hawaii, such as scenic beauty and the aloha spirit, which are vital to a healthy economy.	✓		
(16) Increase effective communication between the educational community and the private sector to develop relevant curricula and training programs to meet future employment needs in general, and requirements of new, potential growth industries in particular.			✓
(17) Foster a business climate in Hawaii--including attitudes, tax and regulatory policies, and financial and technical assistance programs--that is conducive to the expansion of existing enterprises and the creation and attraction of new business and industry. [L 1978, c 100, pt of §2; am L 1986, c 276, §5; am L 1988, c 70, §4; am L 1993, c 213, §4; am L 2009, c 167, §2]	✓		
<p><u>Analysis: The Project supports policy items 2, 3, 8-10, 14, 15, and 17. Given the Light Industrial (LI) designation of the property by the Kihei-Makena Community Plan and the placement of the Project site within the Urban Growth Boundary by the Maui Island Plan, the Project site is in an appropriate location for new urban concentration and growth. Both of these plans support an urban use of the Project site, and with existing infrastructure and public facilities in close proximity, balancing employment with housing and services is a central tenet of smart growth.</u></p> <p>As discussed in Section III.B.3 (Economy) the construction of the Pi'ilani Promenade is expected to inject approximately \$212 million of new capital investment into the local economy and provide an estimated 878 "worker years" of employment as well as \$66.5 million in total wages over a 12 to 15 year period. The effect of these expenditures will have positive direct, indirect, and induced beneficial impacts on the economy of the County of Maui. During its operations phase, the Pi'ilani Promenade will increase the level of capital investment in the region which will create employment opportunities and economic stimulus for the region. The proposed project will provide direct employment opportunities for Maui residents and contribute to economic diversification and growth for both Maui and the State. After "stabilization," the Pi'ilani Promenade is envisioned to support 1,210 permanent jobs with an annual payroll of about \$ 36.6 million.</p>			
<p>Chapter 226-7 Objectives and policies for the economy-agriculture.</p>			



<p><i>Analysis:</i> As discussed in Section III.A.10 (Agricultural Resources) The LSB and ALISH classification systems indicate that the lands underlying the project site possess poor soil and low soil ratings for productive agricultural uses. As such, the utilization of these poorly-rated agricultural lands for urban use and development is deemed appropriate; therefore Chapter 226-7 is not applicable to the proposed project.</p>				
<p>Chapter 226-8 Objective and policies for the economy-visitor industry.</p>				
<p>Objectives: Planning for the State's economy with regard to the visitor industry shall be directed towards the achievement of the objective of a visitor industry that constitutes a major component of steady growth for Hawaii's economy.</p>				
<p><i>Analysis:</i> The Pi'ilani Promenade is not targeting the visitor industry; hotels, transient vacation rentals, timeshares, and bed and breakfast operations will be prohibited; however visitors may choose to visit the Pi'ilani Promenade to shop or dine at future retail and restaurant establishments.</p>				
<p>Chapter 226-9 Objective and policies for the economy-federal expenditures.</p>				
<p>Objective: Planning for the State's economy with regard to federal expenditures shall be directed towards achievement of the objective of a stable federal investment base as an integral component of Hawaii's economy.</p>				
<p><i>Analysis:</i> The Pi'ilani Promenade will not use federal funds or land nor will it require additional federal expenditures in the State. Therefore, Chapter 226-9 does not apply to the proposed project.</p>				
<p>Chapter 226-10 Objective and policies for the economy-potential growth activities.</p>				
<p>Objective: Planning for the State's economy with regard to potential growth activities shall be directed towards achievement of the objective of development and expansion of potential growth activities that serve to increase and diversify Hawaii's economic base.</p>				
Policies:		S	N/S	N/A
(1) Facilitate investment and employment growth in economic activities that have the potential to expand and diversify Hawaii's economy, including but not limited to diversified agriculture, aquaculture, renewable energy development, creative media, and science and technology-based sectors;		✓		



(2) Expand Hawaii's capacity to attract and service international programs and activities that generate employment for Hawaii's people;			
(3) Enhance and promote Hawaii's role as a center for international relations, trade, finance, services, technology, education, culture, and the arts;			✓
(4) Accelerate research and development of new energy-related industries based on wind, solar, ocean, and underground resources and solid waste;	✓		
(5) Promote Hawaii's geographic, environmental, social, and technological advantages to attract new economic activities into the State;	✓		
(6) Provide public incentives and encourage private initiative to attract new industries that best support Hawaii's social, economic, physical, and environmental objectives;	✓		
(8) Develop, promote, and support research and educational and training programs that will enhance Hawaii's ability to attract and develop economic activities of benefit to Hawaii;			✓
(9) Foster a broader public recognition and understanding of the potential benefits of new, growth-oriented industry in Hawaii;			✓
(10) Encourage the development and implementation of joint federal and state initiatives to attract federal programs and projects that will support Hawaii's social, economic, physical, and environmental objectives;			✓
(11) Increase research and development of businesses and services in the telecommunications and information industries; and	✓		
<p><i>Analysis: The Pi'ilani Promenade will encompass a variety of permitted land uses which are expected to attract a broad range of businesses because of this diversity. This mixture of light industrial, residential, commercial, and retail uses will make the Pi'ilani Promenade a more vibrant and attractive environment for businesses to setup shop and to grow their operations. The Pi'ilani Promenade supports policy items 1, 5, 6, 9 and 11 because the Project will facilitate the development of new businesses, including the opportunity for information industry which will provide employment opportunities for Maui residents.</i></p>			
<p>Chapter 226-10.5 Objectives and policies for the economy-information industry.</p>			
<p>Objective: Planning for the State's economy with regard to telecommunications and information technology shall be directed toward positioning Hawaii as a leader in broadband communications and applications in the Pacific Region.</p>			



Analysis: **The mixture and variety of land uses within the Pi'ilani Promenade will provide opportunities for research and technology-based businesses and would complement the future uses of the property.**

Chapter 226-11, HRS, Objectives and Policies for the Physical Environment - Land Based, Shoreline, and Marine Resources

(a) Planning for the State's physical environment with regard to land-based, shoreline, and marine resources shall be directed towards achievement of the following objectives:

Objectives:	S	N/S	N/A
(1) Prudent use of Hawaii's land-based, shoreline, and marine resources.	✓		
(2) Effective protection of Hawaii's unique and fragile environmental resources.	✓		
Policies:			
(1) Exercise an overall conservation ethic in the use of Hawaii's natural resources.	✓		
(2) Ensure compatibility between land-based and water-based activities and natural resources and ecological systems.	✓		
(3) Take into account the physical attributes of areas when planning and designing activities and facilities.	✓		
(4) Manage natural resources and environs to encourage their beneficial and multiple use without generating costly or irreparable environmental damage.	✓		
(5) Consider multiple uses in watershed areas, provided such uses do not detrimentally affect water quality and recharge functions.	✗		✓
(6) Encourage the protection of rare or endangered plant and animal species and habitats native to Hawaii.	✓		
(7) Provide public incentives that encourage private actions to protect significant natural resources from degradation or unnecessary depletion.	✗		✓
(8) Pursue compatible relationships among activities, facilities, and natural resources.	✓		
(9) Promote increased accessibility and prudent use of inland and shoreline areas for public recreational, educational, and scientific purposes. [L 1978, c 100, pt of §2; am L 1986, c 276, §10]			✓

Analysis: **The Applicant has changed polices items 5 and 7 to "N/A" as requested by the South Maui Citizens for Responsible Growth (SMCRG) since the issues are not applicable to the Project. Policy 9 was already marked as N/A. Policies 1-4, 6 and 8 are supportive because the Pi'ilani Promenade does not lie within the Hawaii Coastal Zone Management Area nor is it**



~~located within the Special Management Area for the island of Maui. No listed or endangered species of flora and fauna were identified on the property. During the construction and operational phases of the project, Best Management Practices (BMPs) will be implemented to mitigate non-point source pollution to coastal resources and mitigate the effects of fugitive dust. Through the public review process for the EIS, mitigation measures will be identified to help address any environmental impacts that may arise from the proposed project. As documented in Section II.H "potential impacts and mitigation measures" of the FEIS, the Project is not anticipated to result in significant impacts to the environment.~~

Chapter 226-12, HRS, Objective and Policies for the Physical Environment - Scenic, Natural Beauty, and Historic Resources

Objective: Planning for the State's physical environment shall be directed towards achievement of the objective of enhancement of Hawaii's scenic assets, natural beauty, and multi-cultural/historical resources.

Policies:	S	N/S	N/A
(1) Promote the preservation and restoration of significant natural and historic resources.	✓		
(2) Provide incentives to maintain and enhance historic, cultural, and scenic amenities.	✓		
(3) Promote the preservation of views and vistas to enhance the visual and aesthetic enjoyment of mountains, ocean, scenic landscapes, and other natural features.	✓		
(4) Protect those special areas, structures, and elements that are an integral and functional part of Hawaii's ethnic and cultural heritage.	✓		
(5) Encourage the design of developments and activities that complement the natural beauty of the islands. [L 1978, c 100, pt of §2; am L 1986, c 276, §11]	✓		

Analysis: Policy items 1- 5 are supported by the Project. The Pi'ilani Promenade will complement the architectural character of South Maui as well as other developed properties in the area. As part of the environmental review process the Maui County Planning Department has requested to be involved in the design of the Project, which the Applicant has agreed to.

As discussed in Section III.A. 8 (Historical and Archaeological Resources) The proposed project will not impact Kulanihakoi Gulch and is not anticipated to significantly impact the physical environment. The project promotes the preservation of historic resources and the Applicant's Archaeologist has submitted a Data Recovery Plan to will work with the State Historic Preservation Division that is currently under review. to prepare a data recovery plan.



The archaeological survey of the offsite water storage tank area was conducted on January 8 and 13, 2014. No significant materials or cultural remains were located on this previously disturbed land during the 2014 archaeological survey. (See: Appendix F, "Archaeological Inventory Survey dated March 2014 revised August 26, 2015").

A public information meeting for the proposed project was held on February 25, 2014. Transcripts from this meeting have been included in the DFEIS. The focus of the meeting was to review the previous 1994 AIS and discuss the findings of the current 2014 AIS. In addition to discussing potential impacts to Kulanihakoi Gulch and the return of the petroglyph boulder that was previously removed from the project site by a former land owner, some of the participants suggested that the archaeological sites could be incorporated into the design of the project or into its landscaping and that the petroglyph boulder be returned to the property. The Applicant has discussed the possible return of the petroglyph boulder with the former land owner; however, the former owner rejected this request since the relocation plan was approved by State Historic Preservation Division (SHPD). In addition, the archaeological monitoring plan that was submitted to the SHPD for review has been approved and is referenced for all recent work on the site. The monitoring plan may be found in Appendix H and may be updated once project construction is initiated.

As discussed in Section III.B.4 (Cultural Resources) the cultural impact statement (CIA) which was prepared for the proposed project reported that there were no visible cultural resources, (*i.e.* medicinal plants, shoreline resources, religious sites, or archeological resources) observed on the property. From a cultural practices and beliefs perspective, the subject property bears no apparent signs of cultural practices or any gatherings currently taking place on the site. The oral history interviews did not reveal any known gathering places on the subject property nor did any access concerns surface as a result of the proposed Project. In light of the foregoing, it can be concluded that development of the site will not impact cultural resources on the property or within its immediate vicinity.

As discussed in Section III.A.9 (Visual Resources) the Pi'ilani Promenade is not anticipated to have significant impacts on views from Pi'ilani Highway toward Haleakala. The property is setback 30 feet from Pi'ilani Highway and building heights are limited to 60 feet. The proposed project will complement the architectural character of South Maui as well as other developed properties in the area.

Chapter 226-13, Hawaii Revised Statutes, Objectives and Policies for the Physical Environment - Land, Air, and Water Quality



Objectives:	S	N/S	N/A
(1) Maintenance and pursuit of improved quality in Hawaii's land, air, and water resources.	✓		✓
(2) Greater public awareness and appreciation of Hawaii's environmental resources.	✓		✓
Policies:	S	N/S	N/A
(1) Foster educational activities that promote a better understanding of Hawaii's limited environmental resources.			✓
(2) Promote the proper management of Hawaii's land and water resources.	✓		
(3) Promote effective measures to achieve desired quality in Hawaii's surface, ground, and coastal waters.	✓		
(4) Encourage actions to maintain or improve aural and air quality levels to enhance the health and well-being of Hawaii's people.	✓		
(5) Reduce the threat to life and property from erosion, flooding, tsunamis, hurricanes, earthquakes, volcanic eruptions, and other natural or man-induced hazards and disasters.	✓		
(6) Encourage design and construction practices that enhance the physical qualities of Hawaii's communities.	✓		
(7) Encourage urban developments in close proximity to existing services and facilities.	✓		
(8) Foster recognition of the importance and value of the land, air, and water resources to Hawaii's people, their cultures and visitors. [L 1978, c 100, pt of §2; am L 1986, c 276, §12]	✓		
<p><u>Analysis: The Applicant has changed objective items 1 and 2 in the FEIS to read "N/A" as the Piilani Promenade project is not promoting maintenance or greater public awareness and appreciation of Hawaii's environmental resources. Policy items 2-7 remain supportive. The proposed project is zoned for light industrial uses, including commercial and multi-family and is located adjacent to existing urban development and will utilize best management practices to limit impacts to the physical environment.</u></p> <p><u>The Pi'ilani Promenade does not lie with the Hawaii Coastal Zone Management Area nor is it located within the Special Management Area for the island of Maui. No listed or endangered species of flora and fauna were identified on the subject property. During the construction and operational phases of the project, Best Management Practices (BMPs) will be implemented to mitigate non-point source pollution to coastal resources and mitigate the effects of fugitive dust. Through the public review process for the EIS, mitigation measures will be identified to help address any environmental impacts that may arise from the proposed project.</u></p>			



From a site planning perspective, the design and layout of the project involved an evaluation of existing topographic conditions in order to create a viable development plan which would minimize potential impacts to the land form. To the extent practicable, the layout and orientation of future buildings will strive to preserve view planes toward the Pacific Ocean.

As discussed in Section III.A.6 (Air Quality), appropriate mitigation measures will be implemented during construction to minimize any temporary impacts on air quality. The proposed project will be developed in accordance with applicable Federal and/or State air quality standards.

As discussed in Section III.A.4 (Natural Hazards), the development of the Pi'ilani Promenade will not increase the possibility of natural hazards such as flooding, tsunami inundation, hurricanes, and earthquakes. The Pi'ilani Promenade will be constructed in compliance with County, State and Federal standards.

The New Urbanism concept is a globally successful design practice which will be utilized for the Pi'ilani Promenade. The design of the project will enhance the physical quality of the property by providing housing, development, and related infrastructure on the same site.

Chapter 226-14 Objective and policies for facility systems-in general.

Objective: Planning for the State's facility systems in general shall be directed towards achievement of the objective of water, transportation, waste disposal, and energy and telecommunication systems that support statewide social, economic, and physical objectives.

Analysis: **The proposed Pi'ilani Promenade does not involve planning for the State's facility systems; therefore these objectives and policies are not applicable.**

Chapter 226-15, Hawaii Revised Statutes, Objectives and Policies for Facility Systems - Solid and Liquid Waste.

Objectives: Planning for the State's facility systems in general shall be directed towards achievement of the objective of water, transportation, waste disposal, and energy and telecommunication systems that support statewide social, economic, and physical objectives.

Objectives:	S	N/S	N/A
(1) Maintenance of basic public health and sanitation standards relating to treatment and disposal of solid and liquid wastes.	✓		
(2) Provision of adequate sewerage facilities for physical and economic activities that alleviate problems in housing, employment, mobility, and other areas.	✓		
Policies:	S	N/S	N/A



(1) Encourage the adequate development of sewerage facilities that complement planned growth.	✓		
(2) Promote re-use and recycling to reduce solid and liquid wastes and employ a conservation ethic.	✓		
(3) Promote research to develop more efficient and economical treatment and disposal of solid and liquid wastes. [L 1978, c 100, pt of §2; am L 1986, c 276, §14]	✓		
<p>Analysis: As discussed in Section III.D.5 (Wastewater), the Pi'ilani Promenade will connect to the Maui County sewer system and the Kihei Wastewater Reclamation Facility (KWWRF). The KWWRF was designed to accommodate future population growth in South Maui and has a sufficient capacity to accommodate the expected wastewater generated by Pi'ilani Promenade.</p> <p>As discussed in Section III.C.5 (Solid Waste), the Pi'ilani Promenade will develop strategies for reducing solid waste delivered to the County landfill by providing options for recycling and promoting recycling practices among future residents and businesses.</p>			
<p>Chapter 226-16, Hawaii Revised Statutes, Objectives and Policies for Facility Systems - Water.</p>			
<p>Objective: Planning for the State's facility systems in general shall be directed towards achievement of the objective of water, transportation, waste disposal, and energy and telecommunication systems that support statewide social, economic, and physical objectives.</p>			
Policies:	S	N/S	N/A
(1) Coordinate development of land use activities with existing and potential water supply.	✓		
(2) Support research and development of alternative methods to meet future water requirements well in advance of anticipated needs.	✓		
(3) Reclaim and encourage the productive use of runoff water and wastewater discharges.	✓		
(4) Assist in improving the quality, efficiency, service, and storage capabilities of water systems for domestic and agricultural use.	✓		
(5) Support water supply services to areas experiencing critical water problems.	✓		
(6) Promote water conservation programs and practices in government, private industry, and the general public to help ensure adequate water to meet long-term needs. [L 1978, c 100, pt of §2; am L 1986, c 276, §15]	✓		



Analysis: As discussed in Section III.D.4 (Water), the drinking water source for the Pi'ilani Promenade is water provided by the Maui Department of Water Supply (DWS), while the source of non-drinking water is brackish water provided by an onsite well. The proposed project includes construction of a 1.0 MG water tank for public drinking water use.

In addition to developing its own onsite water source, the ~~developer~~ Applicant is committed to water conservation strategies for reducing consumption, conserving resources, and minimizing water demands, and implementing the water conservation measures of the DWS.

Chapter 226-17 Objectives and policies for facility systems-transportation.

Objectives: Planning for the State's facility systems with regard to transportation shall be directed towards the achievement of the following objectives:

Objectives:	S	N/S	N/A
(1) An integrated multi-modal transportation system that services statewide needs and promotes the efficient, economical, safe, and convenient movement of people and goods.	✓		✓
(2) A statewide transportation system that is consistent with and will accommodate planned growth objectives throughout the State.	✓		✓
Policies:			
(1) Design, program, and develop a multi-modal system in conformance with desired growth and physical development as stated in this chapter;	✓		✓
(2) Coordinate state, county, federal, and private transportation activities and programs toward the achievement of statewide objectives;	✓		✓
(3) Encourage a reasonable distribution of financial responsibilities for transportation among participating governmental and private parties;	✓		✓
(4) Provide for improved accessibility to shipping, docking, and storage facilities;			✓
(5) Promote a reasonable level and variety of mass transportation services that adequately meet statewide and community needs;	✓		✓
(6) Encourage transportation systems that serve to accommodate present and future development needs of communities;	✓		
(7) Encourage a variety of carriers to offer increased opportunities and advantages to interisland movement of people and goods;	✓		✓



(8) Increase the capacities of airport and harbor systems and support facilities to effectively accommodate transshipment and storage needs;	✓		✓
(9) Encourage the development of transportation systems and programs which would assist statewide economic growth and diversification;	✓		
(10) Encourage the design and development of transportation systems sensitive to the needs of affected communities and the quality of Hawaii's natural environment;	✓		
(11) Encourage safe and convenient use of low-cost, energy-efficient, non-polluting means of transportation;	✓		
(12) Coordinate intergovernmental land use and transportation planning activities to ensure the timely delivery of supporting transportation infrastructure in order to accommodate planned growth objectives;	✓		
(13) Encourage diversification of transportation modes and infrastructure to promote alternate fuels and energy efficiency. [L 1978, c 100, pt of §2; am L 1986, c 276, §16; am L 1993, c 149, §1; am L 1994, c 96, §3]	✓		
<p><u>Analysis: The Applicant has changed items 1- 3, 5, 7, and 8 in the FEIS to read "N/A" because the Applicant is not responsible for planning for the State's facility systems with regard to transportation. The Project includes creation of a unified system of pedestrian and bicycle infrastructure which will provide connectivity between the residential and employment areas within the Project site.</u></p> <p><u>The Project will also provide a segment of the future KUH. Transportation demand and management strategies for the Project support methods such as bicycle and pedestrian use, ridesharing, and off-peak commuting.</u></p> <p>As discussed in Section II.E.3 and 4 F of the FEIS, the proposed project establishes a settlement pattern that is significantly more compact and mixed-use in character as compared to the previously approved 123-lot light industrial subdivision. This new site plan also reflects the creation of a unified system of pedestrian and bicycle infrastructure which will provide connectivity between the residential and employment areas within the project site.</p> <p>The proposed project will also provide a segment of the future Kihei Upcountry Highway (KUH). Transportation demand and management strategies for the Pi'ilani Promenade support methods such as ridesharing, bicycle and pedestrian use, off-peak commuting and</p>			



other measures discussed in the TIAR (See: Appendix M) and TIAR update (See: Appendix M-1).			
Chapter 226-18, Hawaii Revised Statutes, Objectives and Policies for Facility Systems - Energy.			
Objectives: Planning for the State's facility systems with regard to energy shall be directed toward the achievement of the following objectives, giving due consideration to all:			
Objectives:	S	N/S	N/A
(1) Dependable, efficient, and economical statewide energy systems capable of supporting the needs of the people;	✓		✓
(2) Increased energy self-sufficiency where the ratio of indigenous to imported energy use is increased;	✓		
(3) Greater energy security and diversification in the face of threats to Hawaii's energy supplies and systems;	✓		✓
(4) Reduction, avoidance, or sequestration of greenhouse gas emissions from energy supply and use.	✓		
Policies:	S	N/S	N/A
(1) Support research and development as well as promote the use of renewable energy sources;	✓		
(2) Ensure that the combination of energy supplies and energy-saving systems is sufficient to support the demands of growth;	✓		
(3) Base decisions of least-cost supply-side and demand-side energy resource options on a comparison of their total costs and benefits when a least-cost is determined by a reasonably comprehensive, quantitative, and qualitative accounting of their long-term, direct and indirect economic, environmental, social, cultural, and public health costs and benefits;	✓		✓
(4) Promote all cost-effective conservation of power and fuel supplies through measures, including:	✓		
(A) Development of cost-effective demand-side management programs;	✓		✓
(B) Education;	✓		✓
(C) Adoption of energy-efficient practices and technologies;	✓		✓
(5) Ensure, to the extent that new supply-side resources are needed, that the development or expansion of energy systems uses	✓		✓



the least-cost energy supply option and maximizes efficient technologies;			
(6) Support research, development, demonstration, and use of energy efficiency, load management, and other demand-side management programs, practices, and technologies;	✓		✓
(7) Promote alternate fuels and transportation energy efficiency;	✓		✓
(8) Support actions that reduce, avoid, or sequester greenhouse gases in utility, transportation, and industrial sector applications;	✓		
(9) Support actions that reduce, avoid, or sequester Hawaii's greenhouse gas emissions through agriculture and forestry initiatives; and	✓		✓
(10) Provide priority handling and processing for all state and county permits required for renewable energy projects. [L 1978, c 100, pt of §2; am L 1986, c 276, §17; am L 1990, c 319, §2; am L 1994, c 96, §4; am L 2000, c 176, §1; am L 2007, c 205, §6; am L 2009, c 155, §17 and c 156, §3]	✓		✓
<p><u>Analysis: Policies 4 and 8 were left as "S" because the Project will reduce greenhouse gas by incorporating renewable energy such as solar water heaters and photovoltaic panels when possible. Landscaping will be incorporated into the Project site that can help filter emissions and improve air quality. Items 9 and 10 were changed to "N/A" as there is no proposed action to reduce gas emissions through agriculture and forestry initiatives and no evidence that the Project will provide priority handling of energy permits, a government function.</u></p> <p>As discussed in Section III.D.5 "(Electrical)," the Pi'ilani Promenade will include conservation measures to encourage the use of energy-efficient technology throughout the project, specifically in areas involving lighting, air-conditioning, and building materials. Solar hot water heaters will be utilized throughout the residential portion of the development. Occupants of the Pi'ilani Promenade will be encouraged to install Photovoltaic Energy Systems where appropriate and feasible.</p> <p>In addition, the Pi'ilani Promenade is utilizing smart growth planning techniques that will help to reduce automobile trips. The design of the project will help minimize automobile trips by providing employment, goods, services and housing within walking or biking distance of each other. The design and layout of the Pi'ilani Promenade includes a unified pedestrian and bicycle system within the project site, as well as connections to areas of existing and future development. The pedestrian and bicycle system will provide future residents with an alternative to motorized transport within the Pi'ilani Promenade. In addition, the Applicant</p>			



<p>will work with the Maui Department of Transportation to provide a location for a Maui Bus stop.</p>			
<p>Chapter 226-18.5 Objectives and policies for facility systems-telecommunications.</p>			
<p>Objectives: (a) Planning for the State's telecommunications facility systems shall be directed towards the achievement of dependable, efficient, and economical statewide telecommunications systems capable of supporting the needs of the people. (b) To achieve the telecommunications objective, it shall be the policy of this State to ensure the provision of adequate, reasonably priced, and dependable telecommunications services to accommodate demand.</p>			
<p><i>Analysis:</i> The Pi'ilani Promenade does not involve any planning for the State's telecommunication systems; therefore, this objective is not applicable.</p>			
<p>Chapter 226-19 Objectives and policies for socio-cultural advancement-housing.</p>			
<p>Objectives: Planning for the State's socio-cultural advancement with regard to housing shall be directed toward the achievement of the following objectives:</p>			
Objectives:	S	N/S	N/A
(1) Greater opportunities for Hawaii's people to secure reasonably priced, safe, sanitary, and livable homes, located in suitable environments that satisfactorily accommodate the needs and desires of families and individuals, through collaboration and cooperation between government and nonprofit and for-profit developers to ensure that more affordable housing is made available to very low-, low- and moderate-income segments of Hawaii's population.	✓		
(2) The orderly development of residential areas sensitive to community needs and other land uses.	✓		
(3) The development and provision of affordable rental housing by the State to meet the housing needs of Hawaii's people.	✓		
Policies:	S	N/S	N/A
(1) Effectively accommodate the housing needs of Hawaii's people.	✓		
(2) Stimulate and promote feasible approaches that increase housing choices for low-income, moderate-income, and gap-group households.	✓		
(3) Increase homeownership and rental opportunities and choices in terms of quality, location, cost, densities, style, and size of housing.	✓		



(4) Promote appropriate improvement, rehabilitation, and maintenance of existing housing units and residential areas.	✓		✓
(5) Promote design and location of housing developments taking into account the physical setting, accessibility to public facilities and services, and other concerns of existing communities and surrounding areas.	✓		
(6) Facilitate the use of available vacant, developable, and underutilized urban lands for housing.	✓		
(7) Foster a variety of lifestyles traditional to Hawaii through the design and maintenance of neighborhoods that reflect the culture and values of the community.	✓		
(8) Promote research and development of methods to reduce the cost of housing construction in Hawaii. [L 1978, c 100, pt of §2; am L 1986, c 276, §18; am L 1992, c 27, §2]	✓		✓
<p><i>Analysis:</i> <u>The Project supports objective item 2 by providing residential units onsite as part of an orderly mixed use development. In addition, the Applicant believes that policy items 5 and 7 are “S” supported by the Project because onsite residential units will be constructed with accessibility to facilities and services in the surrounding areas. Item 7 is supported by the Project because the design of the Project will include collaboration with the Maui County Planning Department to ensure the design will foster a variety of Maui residents and their lifestyles. The Project is located within the Urban Growth Boundary of Kihei and is an appropriate location for urban development. The Applicant has changed items 4 and 8 in the FEIS to read “N/A” because the Project does not have existing housing, and will not promote research and development to reduce the cost of housing construction.</u></p> <p>As discussed in Section III.B.2 (Housing), the Pi'ilani Promenade will offer multi-family housing to address the diverse housing needs of Maui residents. The multi-family housing will include affordable housing units in compliance with Maui County Code, Chapter 2.96 (Residential Workforce Housing Policy). Workforce homes will be subject to the requirements of Chapter 2.96, MCC to ensure that affordable homes are available for full-time Maui residents.</p>			
Chapter 226-20 Objectives and policies for socio-cultural advancement-health.			
Objectives: Planning for the State's socio-cultural advancement with regard to health shall be directed towards achievement of the following objectives:			
Objectives:	S	N/S	N/A
(1) Fulfillment of basic individual health needs of the general public.	✓		✓



(2) Maintenance of sanitary and environmentally healthful conditions in Hawaii's communities.	✓		✓
<p><i>Analysis:</i> The Applicant is supportive of advances in healthcare; however the Pi'ilani Promenade does not involve or require the advancement of a State initiative or program with regard to health. Based on the preceding, these objectives are not applicable. Accordingly, the Applicant has changed objectives 1 and 2 in the FEIS to read "N/A".</p>			
<p>Chapter 226-21, Hawaii Revised Statutes, Objectives for Socio-Cultural Advancement - Education.</p>			
<p>Objective: Planning for the State's socio-cultural advancement with regard to education shall be directed towards achievement of the objective of the provision of a variety of educational opportunities to enable individuals to fulfill their needs, responsibilities, and aspirations.</p>			
<p><i>Analysis:</i> As discussed in Section III.C.4 (Schools), the Pi'ilani Promenade has not been designed to accommodate a public school site. However, the Hawaii Legislature enacted Act 245 in 2007 as Section 302A, HRS, "School Impact Fees". The Pi'ilani Promenade is within the boundaries of the Department of Education's (DOE) Central Maui Impact District and is within the Makawao Cost Area of that district. Projects within the district and cost area are required to pay a construction fee and either a fee-in-lieu of land or a land donation (at the discretion of the DOE). At the appropriate time, the Applicant will contact the DOE to enter into an impact fee agreement.</p>			
<p>Chapter 226-22 Objective and policies for socio-cultural advancement-social services.</p>			
<p>Objective: Planning for the State's socio-cultural advancement with regard to social services shall be directed towards the achievement of the objective of improved public and private social services and activities that enable individuals, families, and groups to become more self-reliant and confident to improve their well-being.</p>			
<p><i>Analysis:</i> The proposed project does not require nor does it involve any State initiative or program for the advancement of social services. In this light, this objective is not applicable.</p>			
<p>Chapter 226-23, Hawaii Revised Statutes, Objectives for Socio-Cultural Advancement - Leisure.</p>			
<p>Objective: Planning for the State's socio-cultural advancement with regard to leisure shall be directed towards the achievement of the objective of the adequate provision of resources to accommodate diverse cultural, artistic, and recreational needs for present and future generations.</p>			
<p>Policies:</p>			
(1) Foster and preserve Hawaii's multi-cultural heritage through supportive cultural, artistic, recreational, and humanities-oriented programs and activities.	✓		



(2) Provide a wide range of activities and facilities to fulfill the cultural, artistic, and recreational needs of all diverse and special groups effectively and efficiently.	✓		
(3) Enhance the enjoyment of recreational experiences through safety and security measures, educational opportunities, and improved facility design and maintenance.	✓		
(4) Promote the recreational and educational potential of natural resources having scenic, open space, cultural, historical, geological, or biological values while ensuring that their inherent values are preserved.	✓		
(5) Ensure opportunities for everyone to use and enjoy Hawaii's recreational resources.	✓		
(6) Assure the availability of sufficient resources to provide for future cultural, artistic, and recreational needs.	✗		✓
(7) Provide adequate and accessible physical fitness programs to promote the physical and mental well-being of Hawaii's people.	✓		
(8) Increase opportunities for appreciation and participation in the creative arts, including the literary, theatrical, visual, musical, folk, and traditional art forms.	✗		✓
(9) Encourage the development of creative expression in the artistic disciplines to enable all segments of Hawaii's population to participate in the creative arts.			✓
(10) Assure adequate access to significant natural and cultural resources in public ownership. [L 1978, c 100, pt of §2; am L 1986, c 276, §22]	✗		✓

Analysis: Policies 1-5, 7 are left as "S" supportive. The Project provides a neighborhood park and open spaces with pedestrian and bicycle pathways. Additionally, the Project is subject to, and will comply with, the provisions of Section 18.16.320, MCC which requires developers to provide land and/or money for park and playground purposes in the in the Kihei-Makena Community Plan region. The Applicant has changed items 6, 8 and 10 in the FEIS to read "N/A" because they are not applicable to the Project. The Applicant has kept policy item 9 as "N/A" because the Project is not developing creative expression in the artistic disciplines to enable all segments of Hawaii's population to participate in the creative arts.

As discussed in Section II.D.F.5, E the site plan for the Pi'ilani Promenade provides a neighborhood park and open spaces with pedestrian and bicycle pathways. Additionally, the Pi'ilani Promenade is subject to, and will comply with, the provisions of Section 18.16.320,



<p>MCC which requires developers to provide land and/or money for park and playground purposes in the in the Kihei-Makena Community Plan region.</p>			
<p>Chapter 226-24 Objective and policies for socio-cultural advancement-individual rights and personal well-being.</p>			
<p>Objective: Planning for the State's socio-cultural advancement with regard to individual rights and personal well-being shall be directed towards achievement of the objective of increased opportunities and protection of individual rights to enable individuals to fulfill their socio-economic needs and aspirations.</p>			
<p><i>Analysis:</i> The proposed project does not require or involve any State initiatives or programs for socio-cultural advancement relative to individual rights and personal well-being. As such, this objective is not applicable.</p>			
<p>Chapter 226-25, Hawaii Revised Statutes, Objectives for Socio-Cultural Advancement - Culture.</p>			
<p>Objective: Planning for the State's socio-cultural advancement with regard to culture shall be directed toward the achievement of the objective of enhancement of cultural identities, traditions, values, customs, and arts of Hawaii's people.</p>			
<p><i>Analysis:</i> The Pi'ilani Promenade does not require nor does it involve any State initiatives or programs for socio-cultural advancement with regard to culture. Accordingly, this objective is not applicable.</p>			
<p>Chapter 226-26 Objectives and policies for socio-cultural advancement-public safety.</p>			
<p>Objectives:</p>	<p>S</p>	<p>N/S</p>	<p>N/A</p>
<p>(1) Assurance of public safety and adequate protection of life and property for all people.</p>	<p>✓</p>		
<p>(2) Optimum organizational readiness and capability in all phases of emergency management to maintain the strength, resources, and social and economic well-being of the community in the event of civil disruptions, wars, natural disasters, and other major disturbances.</p>	<p>✓</p>		
<p>(3) Promotion of a sense of community responsibility for the welfare and safety of Hawaii's people.</p>	<p>✗</p>		<p>✓</p>
<p><i>Analysis:</i> The Applicant has changed item 3 in the FEIS to read "N/A". The proposed project does not require or involve any State initiatives or programs for public safety; therefore, these objectives are not applicable.</p>			
<p>Chapter 226-27 Objectives and policies for socio-cultural advancement-government.</p>			



Objectives: Planning the State's socio-cultural advancement with regard to government shall be directed towards the achievement of the following objectives:			
(1) Efficient, effective, and responsive government services at all levels in the State.	✓		✓
(2) Fiscal integrity, responsibility, and efficiency in the state government and county governments.	✓		✓
<i>Analysis:</i> The Applicant supports government responsibility and efficiency; however the proposed project does not involve planning for the State's socio-cultural advancement with regard to government. In light of the foregoing, these objectives are not applicable. Accordingly, the Applicant has changed items 1 and 2 in the FEIS to read "N/A".			

PART III. PRIORITY GUIDELINES

The priority guidelines of the Hawaii State Plan establish overall priority guidelines which address areas of State-wide concern. The Hawaii State Plan notes that the State shall strive to improve the quality of life for Hawaii's present and future population through the pursuit of desirable courses of action in five (5) major areas of Statewide concern which merit priority attention: 1) economic development; 2) population growth 3) affordable housing; 4) crime and criminal justice; and 5) quality education (§226-102). The development of the Pi'ilani Promenade is supportive of the following priority guidelines of the Hawaii State Plan. In response to comments received during the public comment period, the Applicant has revised the FEIS to include a review of HRS § 226-108 (Sustainability).

In addition, based on comments received during the public comment period, various goals, objectives and policies have been revised to more accurately reflect the proposed Piilani Promenade as it relates to various government plans.

Hawaii State Plan, Chapter 226, HRS Part III. Priority Guidelines Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable	S	N/S	N/A
HRS 226-101: Purpose. The purpose of this part is to establish overall priority guidelines to address areas of statewide concern.			
HRS 226-102: Overall Direction. The State shall strive to improve the quality of life for Hawaii's present and future population through the pursuit of desirable courses of action in five major areas of statewide concern which merit priority attention: economic development, population growth and			



land resource management, affordable housing, crime and criminal justice, and quality education. [L 1978, c 100, pt of §2; am L 1986, c 276, §29]

HRS 226-103: Economic Priority Guidelines.

(a) Priority Guidelines to stimulate economic growth and encourage business expansion and development to provide needed jobs for Hawaii's people and achieve a stable and diversified economy;

Priority Guidelines:	S	N/S	N/A
(1) Seek a variety of means to increase the availability of investment capital for new and expanding enterprises.	✓		
(A) Encourage investments which:			
(i) Reflect long term commitments to the State;	✓		
(ii) Rely on economic linkages within the local economy;	✓		
(iii) Diversify the economy;	✓		
(iv) Reinvest in the local economy;	✓		
(v) Are sensitive to community needs and priorities; and	✓		
(vi) Demonstrate a commitment to provide management opportunities to Hawaii residents.	✓		
(2) Encourage the expansion of technological research to assist industry development and support the development and commercialization of technological advancements.	✓		
(3) Improve the quality, accessibility, and range of services provided by government to business, including data and reference services and assistance in complying with governmental regulations.			✓
(4) Seek to ensure that state business tax and labor laws and administrative policies are equitable, rational, and predictable.			✓
(5) Streamline the building and development permit and review process, and eliminate or consolidate other burdensome or duplicative governmental requirements imposed on business, where public health, safety and welfare would not be adversely affected.	✓		
(6) Encourage the formation of cooperatives and other favorable marketing or distribution arrangements at the regional or local level to assist Hawaii's small-scale producers, manufacturers, and distributors.			✓
(7) Continue to seek legislation to protect Hawaii from transportation interruptions between Hawaii and the continental United States.			✓



(8) Provide public incentives and encourage private initiative to develop and attract industries which promise long-term growth potentials and which have the following characteristics:			✓
(A) An industry that can take advantage of Hawaii's unique location and available physical and human resources.			✓
(B) A clean industry that would have minimal adverse effects on Hawaii's environment.	✓		
(C) An industry that is willing to hire and train Hawaii's people to meet the industry's labor needs at all levels of employment.	✓		
(D) An industry that would provide reasonable income and steady employment.	✓		
(9) Support and encourage, through educational and technical assistance programs and other means, expanded opportunities for employee ownership and participation in Hawaii business.			✓
(10) Enhance the quality of Hawaii's labor force and develop and maintain career opportunities for Hawaii's people through the following actions:	✓		
(A) Expand vocational training in diversified agriculture, aquaculture, information industry, and other areas where growth is desired and feasible.			✓
(B) Encourage more effective career counseling and guidance in high schools and post-secondary institutions to inform students of present and future career opportunities.			✓
(C) Allocate educational resources to career areas where high employment is expected and where growth of new industries is desired.			✓
(D) Promote career opportunities in all industries for Hawaii's people by encouraging firms doing business in the State to hire residents.	✓		
(E) Promote greater public and private sector cooperation in determining industrial training needs and in developing relevant curricula and on- the-job training opportunities.	✓		
(F) Provide retraining programs and other support services to assist entry of displaced workers into alternative employment.			✓
<u>Analysis: The purpose of the updated Pi'ilani Promenade supports priority guideline items 1-10 and the Project goal is to provide an opportunity for a mix of uses for greater flexibility to attract a broader range of desirable businesses with a diversified offering. New Urbanism planning techniques and urban design strategies will make the Pi'ilani Promenade a more vibrant and attractive environment for businesses to locate and grow their operations. The Pi'ilani Promenade will expand Maui's employer base and increase employment and management opportunities for residents.</u>			
(b) Priority guidelines to promote the economic health and quality of the visitor industry:			



Priority Guidelines:	S	N/S	N/A
(1) Promote visitor satisfaction by fostering an environment which enhances the Aloha Spirit and minimizes inconveniences to Hawaii's residents and visitors.	✓		✓
(2) Encourage the development and maintenance of well-designed, adequately serviced hotels and resort destination areas which are sensitive to neighboring communities and activities and which provide for adequate shoreline setbacks and beach access.			✓
(3) Support appropriate capital improvements to enhance the quality of existing resort destination areas and provide incentives to encourage investment in upgrading, repair, and maintenance of visitor facilities.			✓
(4) Encourage visitor industry practices and activities which respect, preserve, and enhance Hawaii's significant natural, scenic, historic, and cultural resources.			✓
(5) Develop and maintain career opportunities in the visitor industry for Hawaii's people, with emphasis on managerial positions.			✓
(6) Support and coordinate tourism promotion abroad to enhance Hawaii's share of existing and potential visitor markets.			✓
(7) Maintain and encourage a more favorable resort investment climate consistent with the objectives of this chapter.			✓
(8) Support law enforcement activities that provide a safer environment for both visitors and residents alike.	✓		✓
(9) Coordinate visitor industry activities and promotions to business visitors through the state network of advanced data communication techniques.	✓		✓
<u>Analysis: The Applicant has changed priority guideline items 1, 8, and 9 in the FEIS to read "N/A" because the Project is not promoting the visitor industry or activities.</u>			
(e) Priority guidelines for water use and development:			
Priority Guidelines:	S	N/S	N/A
(1) Maintain and improve water conservation programs to reduce the overall water consumption rate.	✓		
(2) Encourage the improvement of irrigation technology and promote the use of non-drinking water for agricultural and landscaping purposes.	✓		
(3) Increase the support for research and development of economically feasible alternative water sources.	✓		✓
(4) Explore alternative funding sources and approaches to support future water development programs and water system improvements.	✓		✓



Analysis: The Applicant has changed items 3 and 4 in the FEIS to read "N/A" because the Project is not involved with researching or developing alternative water sources not is the Project exploring alternative funding sources for water system improvements.

(f) Priority guidelines for energy use and development:

Priority Guidelines:	S	N/S	N/A
(1) Encourage the development, demonstration, and commercialization of renewable energy sources.			✓
(2) Initiate, maintain, and improve energy conservation programs aimed at reducing energy waste and increasing public awareness of the need to conserve energy.	✓		✓
(3) Provide incentives to encourage the use of energy conserving technology in residential, industrial, and other buildings.	✓		✓
(4) Encourage the development and use of energy conserving and cost-efficient transportation systems.	✓		

Analysis: The Applicant has changed items 1-3 in the FEIS to read "N/A". Item 4 is supported by the Project because the Project will include energy-efficient design and conservation measures. Specifically, the Applicant will encourage the use of energy efficient technology throughout the Project, specifically, in lighting, air-conditioning, and building materials. Solar hot water heaters will be utilized throughout the residential portion of the Project and installation of Photovoltaic Energy Systems will be encouraged in all areas of the Project. The Applicant is open to working with the Maui Bus on a potential bus stop location to encourage public transportation.

(g) Priority guidelines to promote the development of the information industry:

Priority Guidelines:	S	N/S	N/A
(1) Establish an information network that will serve as the catalyst for establishing a viable information industry in Hawaii.			✓
(2) Encourage the development of services such as financial data processing, products and services exchange, foreign language translations, telemarketing, teleconferencing, a twenty-four-hour international stock exchange, international banking, and a Pacific Rim management center.	✓		
(3) Encourage the development of small businesses in the information field such as software development, the development of new information systems and peripherals, data conversion and data entry services, and home or cottage services such as computer programming, secretarial, and accounting services.	✓		



(4) Encourage the development or expansion of educational and training opportunities for residents in the information and telecommunications fields.	✓		
(5) Encourage research activities, including legal research in the information and telecommunications fields.	✓		
(6) Support promotional activities to market Hawaii's information industry services. [L 1978, c 100, pt of §2; am L 1984, c 236, §15; am L 1986, c 276, §30; am L Sp 1988, c 1, §6; am L 1989, c 250, §2]	✓		✓
<p><u>Analysis: The Applicant has changed item 6 to "N/A" and kept items 2-5 as "S". The purpose of the Project is to provide an opportunity for a mix of uses for greater flexibility to attract a broader range of desirable businesses with a diversified offering. The Project plan will encourage a tenant like a technology/business incubator. In addition, the Project will facilitate the development of new businesses, including the opportunity for information industry which will provide employment opportunities for Maui residents.</u></p> <p>As discussed in Section III.D.65 (<u>Electrical Utilities</u>) the Pi'ilani Promenade will include energy-efficient design and conservation measures. Specifically, the Applicant will encourage the use of energy efficient technology throughout the project, specifically, in lighting, air-conditioning, and building materials. Solar hot water heaters will be utilized throughout the residential portion of the development and installation of Photovoltaic Energy Systems will be encouraged in all areas of the Pi'ilani Promenade.</p> <p>As discussed in Section III.B.3 (Economy) the construction of the Pi'ilani Promenade is projected to generate approximately \$212 million of new capital investment into the Maui economy and will provide an estimated 878 "worker years" of employment and \$66.5 million in total wages over a 12-15 year period. This will result in expenditures that will have a positive direct, indirect and induced impact on the County of Maui economy. During the operations phase, the Pi'ilani Promenade will increase the level of capital investment in the region which will create employment opportunities and economic stimulus for the region. The Pi'ilani Promenade will provide direct employment opportunities for Maui residents and contribute to the diversification and growth of the Island's and State's economies. After "stabilization" is estimated that the Promenade will support 1,210 permanent jobs with an annual payroll of about \$ 36.6 million.</p>			
<p>Chapter 226-104, HRS, Population Growth and Land Resources Priority Guidelines</p>			
<p>(a) Priority guidelines to effect desired statewide growth and distribution:</p>			
<p>Priority Guidelines:</p>	<p>S</p>	<p>N/S</p>	<p>N/A</p>



(1) Encourage planning and resource management to insure that population growth rates throughout the State are consistent with available and planned resource capacities and reflect the needs and desires of Hawaii's people.	✓		
(2) Manage a growth rate for Hawaii's economy that will parallel future employment needs for Hawaii's people.	✓		
(3) Ensure that adequate support services and facilities are provided to accommodate the desired distribution of future growth throughout the State.	✓		
(4) Encourage major state and federal investments and services to promote economic development and private investment to the neighbor islands, as appropriate.	✗		✓
(5) Explore the possibility of making available urban land, low-interest loans, and housing subsidies to encourage the provision of housing to support selective economic and population growth on the neighbor islands.	✓		
(6) Seek federal funds and other funding sources outside the State for research, program development, and training to provide future employment opportunities on the neighbor islands.			✓
(7) Support the development of high technology parks on the neighbor islands.	✗		✓
<p><u>Analysis: The Applicant has kept items 1-3 as "S" supportive because the Project will provide housing and employment opportunities for the growing population of the Kihei-Makena region. The Project site is located within the Maui Island Plan's Urban Growth Boundary and the Project site is designated for Light Industrial use in the Kihei-Makena Community Plan. Significant urban development and supporting infrastructure adjoin the Project site and existing urban development and future urban growth areas in Kihei are in close proximity.</u></p> <p><u>The Applicant has changed item 4 to "N/A" as the Project is not encouraging major state and federal investments and services to promote economic development and private investment to the neighbor islands, as appropriate.</u></p> <p><u>The Applicant has changed item 7 to "N/A" as the Project is not a technology park.</u></p>			
(b) Priority guidelines for regional growth distribution and land resource utilization:			
Priority Guidelines:	S	N/S	N/A
(1) Encourage urban growth primarily to existing urban areas where adequate public facilities are already available or can be provided with reasonable public expenditures, and away from areas where other important benefits are present, such as protection of important agricultural land or preservation of lifestyles.	✓		



(2) Make available marginal or nonessential agricultural lands for appropriate urban uses while maintaining agricultural lands of importance in the agricultural district.	✓		
(3) Restrict development when drafting of water would result in exceeding the sustainable yield or in significantly diminishing the recharge capacity of any groundwater area.	✓		
(4) Encourage restriction of new urban development in areas where water is insufficient from any source for both agricultural and domestic use.	✓		
(5) In order to preserve green belts, give priority to state capital-improvement funds which encourage location of urban development within existing urban areas except where compelling public interest dictates development of a noncontiguous new urban core.	✗		✓
(6) Seek participation from the private sector for the cost of building infrastructure and utilities, and maintaining open spaces.	✓		
(7) Pursue rehabilitation of appropriate urban areas.	✗		✓
(8) Support the redevelopment of Kakaako into a viable residential, industrial, and commercial community.			✓
(9) Direct future urban development away from critical environmental areas or impose mitigating measures so that negative impacts on the environment would be minimized.	✓		
(10) Identify critical environmental areas in Hawaii to include but not be limited to the following: watershed and recharge areas; wildlife habitats (on land and in the ocean); areas with endangered species of plants and wildlife; natural streams and water bodies; scenic and recreational shoreline resources; open space and natural areas; historic and cultural sites; areas particularly sensitive to reduction in water and air quality; and scenic resources.	✗		✓
(11) Identify all areas where priority should be given to preserving rural character and lifestyle.			✓
(12) Utilize Hawaii's limited land resources wisely, providing adequate land to accommodate projected population and economic growth needs while ensuring the protection of the environment and the availability of the shoreline, conservation lands, and other limited resources for future generations.	✓		
(13) Protect and enhance Hawaii's shoreline, open spaces, and scenic resources. [L 1978, c 100, pt of §2; am L 1984, c 236, §16; am L 1986, c 276, §31]	✗		✓
<u>Analysis: Items 1, 3 and 4 are supported "S" by the Project because significant urban development and supporting infrastructure adjoin the site and existing urban development and future urban growth areas in Kihei are in close proximity.</u>			



The Applicant has changed items 5 and 7 to "N/A". Item 12 is supported because the Project will provide housing and employment opportunities for the growing population of the Kihei-Makena region. The Project site is located within the Maui Island Plan's Urban Growth Boundary and the Project site is designated for Light Industrial use in the Kihei-Makena Community Plan.

Item 9 is supported "S" by the Project as the development is not located in a critical environmental area. The LSB and ALISH classification systems indicate that the Project site possesses poor soil and low soil ratings for productive agricultural uses. As such, the utilization of these poorly-rated agricultural lands for urban use and development is deemed appropriate. The Applicant has changed items 10 and 13 to "N/A" because these priority guidelines are not applicable to the Project.

As discussed in Section III.B.1 (Population) the Pi'ilani Promenade will provide housing and employment opportunities for the growing population of the Kihei-Makena region. The subject property is located within the Maui Island Plan's Urban Growth Boundary and the property is designated for Light Industrial use in the Kihei-Makena Community Plan. Significant urban development and supporting infrastructure adjoin the site and existing urban development and future urban growth areas in Kihei are in close proximity.

As discussed in Section III.D (Infrastructure), the Pi'ilani Promenade will be responsible for all required infrastructure improvements including water source and system improvements for drinking water use, onsite drainage improvements, a portion of regional traffic-related improvements attributable to the project, required on- and off-site wastewater system improvements, and utility upgrades as determined by the appropriate governmental agencies and public utility companies.

From a site planning perspective, the design and layout of the project involved an evaluation of existing topographic conditions in order to create a viable development plan which would minimize potential impacts to the land form. To the extent practicable, the layout and orientation of future buildings will strive to preserve view planes toward the Pacific Ocean.

As discussed in Section III.C.4 (Schools), the Pi'ilani Promenade has not been designed to accommodate a public school site. However, the Hawaii Legislature enacted Act 245 in 2007 as Section 302A, HRS, "School Impact Fees". The Pi'ilani Promenade is within the boundaries of the Department of Education's (DOE) Central Maui Impact District and is within the Makawao Cost Area of that district. Projects within the district and cost area are required to pay a construction fee and either a fee-in-lieu of land or a land donation (at the discretion of the DOE). At the appropriate time, the Applicant will contact the DOE to enter into an impact fee agreement.



As discussed in Section III.C.3 (Police and Fire protection services) increased tax revenues generated by the project will provide additional funds to the County for police and fire capital facility improvements and service upgrades. Additionally, the applicant will comply with any impact fee ordinances for police and fire.

As discussed in Section III.A.10 (Agricultural Resources) The LSB and ALISH classification systems indicate that the lands underlying the project site possess poor soil and low soil ratings for productive agricultural uses. As such, the utilization of these poorly-rated agricultural lands for urban use and development is deemed appropriate.

~~The Pi'ilani Promenade does not lie with the Hawaii Coastal Zone Management Area nor is it located within the Special Management Area for the island of Maui. No listed or endangered species of flora and fauna were identified on the subject property. During the construction and operational phases of the project, Best Management Practices (BMPs) will be implemented to mitigate non-point source pollution to coastal resources and mitigate the effects of fugitive dust. Through the public review process for the EIS, mitigation measures will be identified to help address any environmental impacts that may arise from the proposed project.~~

Chapter 226-105 Crime and criminal justice.

Priority guidelines in the area of crime and criminal justice:	S	N/S	N/A
(1) Support law enforcement activities and other criminal justice efforts that are directed to provide a safer environment.	✓		✓
(2) Target state and local resources on efforts to reduce the incidence of violent crime and on programs relating to the apprehension and prosecution of repeat offenders.			✓
(3) Support community and neighborhood program initiatives that enable residents to assist law enforcement agencies in preventing criminal activities.	✓		✓
(4) Reduce overcrowding or substandard conditions in correctional facilities through a comprehensive approach among all criminal justice agencies which may include sentencing law revisions and use of alternative sanctions other than incarceration for persons who pose no danger to their community.			✓
(5) Provide a range of appropriate sanctions for juvenile offenders, including community-based programs and other alternative sanctions.			✓
(6) Increase public and private efforts to assist witnesses and victims of crimes and to minimize the costs of victimization. [L 1978, c 100, pt of §2; am L 1984, c 236, §17; am L 1986, c 276, §32]			✓

Analysis: The Applicant has changed items 1 and 3 to "N/A" because the priority guidelines for crime and criminal justice are not applicable to the Pi'ilani Promenade project.



Chapter 226-106 Affordable housing. Priority guidelines for the provision of affordable housing:			
Priority guidelines for the provision of affordable housing:	S	N/S	N/A
(1) Seek to use marginal or nonessential agricultural land and public land to meet housing needs of low- and moderate-income and gap-group households.	✓		
(2) Encourage the use of alternative construction and development methods as a means of reducing production costs.	✓		
(3) Improve information and analysis relative to land availability and suitability for housing.	✓		
(4) Create incentives for development which would increase home ownership and rental opportunities for Hawaii's low- and moderate-income households, gap-group households, and residents with special needs.	✓		
(5) Encourage continued support for government or private housing programs that provide low interest mortgages to Hawaii's people for the purchase of initial owner- occupied housing.	✓		
(6) Encourage public and private sector cooperation in the development of rental housing alternatives.	✓		
(7) Encourage improved coordination between various agencies and levels of government to deal with housing policies and regulations.	✓		
(8) Give higher priority to the provision of quality housing that is affordable for Hawaii's residents and less priority to development of housing intended primarily for individuals outside of Hawaii. [L 1986, c 276, §33; am L 1989, c 250, §3]	✓		
<i>Analysis: As discussed in Section III.B.2 (Housing), the Pi'ilani Promenade will offer multi-family housing to address the diverse housing needs of Maui residents. The multi-family housing will include affordable housing units in compliance with Maui County Code, Chapter 2.96 (Residential Workforce Housing Policy). Workforce homes will be subject to the requirements of Chapter 2.96, MCC to ensure that affordable homes are available for full-time Maui residents.</i>			
Chapter 226-107 Quality education.			
Priority guidelines to promote quality education:			
Priority Guidelines:	S	N/S	N/A
(1) Pursue effective programs which reflect the varied district, school, and student needs to strengthen basic skills achievement;			✓



(2) Continue emphasis on general education "core" requirements to provide common background to students and essential support to other university programs;			✓
(3) Initiate efforts to improve the quality of education by improving the capabilities of the education work force;			✓
(4) Promote increased opportunities for greater autonomy and flexibility of educational institutions in their decision making responsibilities;			✓
(5) Increase and improve the use of information technology in education by the availability of telecommunications equipment for:			✓
(A) The electronic exchange of information;			✓
(B) Statewide electronic mail; and			✓
(C) Access to the Internet.			✓
Encourage programs that increase the public's awareness and understanding of the impact of information technologies on our lives;			
(1) Pursue the establishment of Hawaii's public and private universities and colleges as research and training centers of the Pacific;			✓
(2) Develop resources and programs for early childhood education;			✓
(3) Explore alternatives for funding and delivery of educational services to improve the overall quality of education; and			✓
(4) Strengthen and expand educational programs and services for students with special needs. [L 1986, c 276, §34; am L 1999, c 178, §18]			✓
<p><i>Analysis:</i> As discussed in Section III.C.4 (Schools), the Pi'ilani Promenade has not been designed to accommodate a public school site. However, the Hawaii Legislature enacted Act 245 in 2007 as Section 302A, HRS, "School Impact Fees". The Pi'ilani Promenade is within the boundaries of the Department of Education's (DOE) Central Maui Impact District and is within the Makawao Cost Area of that district. Projects within the district and cost area are required to pay a construction fee and either a fee-in-lieu of land or a land donation (at the discretion of the DOE). At the appropriate time, the Applicant will contact the DOE to enter into an impact fee agreement.</p>			



<u>Chapter 226-108 Sustainability priority.</u>			
<u>Priority guidelines to promote sustainability:</u>			
<u>Priority Guidelines:</u>	<u>S</u>	<u>N/S</u>	<u>N/A</u>
<u>(1) Encouraging balanced economic, social, community, and environmental priorities;</u>	<u>✓</u>		
<u>(2) Encourage planning that respects and promotes living within the natural resources and limits of the State;</u>	<u>✓</u>		
<u>(3) Promote a diversified and dynamic economy;</u>	<u>✓</u>		
<u>(4) Encouraging respect for the host culture;</u>	<u>✓</u>		
<u>(5) Promoting decisions based on meeting the needs of the present without compromising the needs of future generations;</u>	<u>✓</u>		
<u>(6) Considering the principles of the ahupua'a system; and</u>	<u>✓</u>		
<u>(7) Emphasizing that everyone, including individuals, families, communities, businesses, and government, has the responsibility for achieving a sustainable Hawaii.</u>	<u>✓</u>		
<p><u>Analysis: The Project will provide greatly needed affordable and market rate rental units in Kihei. Providing Affordable Housing for Maui residents is priority of Maui Island Plan, Kihei –Makena Community Plan and the Department of Housing and Human Concern. The Project also supports Hawaii State Plan Chapter 226, HRS 226-106 “Affordable Housing” which sets priority guidelines for the provision of affordable housing in the State of Hawaii.</u></p> <p><u>The Project is a planned urban infill project that will complement the light industrial development to the north and the proposed Kihei High School to the south, and is an appropriate location for urban development. The Project is approximately 0.5 miles from commercial services located at the Pi'ilani Shopping Center and 0.4 miles from the commercial services located at Ohukai Road. The Project site is approximately 1 mile from the public beach access along South Kihei Road.</u></p> <p><u>The proposed mixed use development will provide light industrial, commercial and rental housing opportunities for workforce residents. The allowable mix of permitted uses on the Project site, including rental opportunities support a dynamic economy by proving additional</u></p>			



light industrial, retail, commercial and housing options to Maui's workforce residents and visitors.

The Applicant has prepared a revised Cultural Impact Assessment to study and document cultural practices which may affect the project site. It was determined that the proposed project would not have an adverse impact on any cultural activities or significant historic sites. In addition an Archaeological Inventory was completed in 2015 as part of the Final EIS and the State Department of Land and Natural Resources, State Historic Preservation Division approved the AIS report in January 2016.

The Project can be described as urban infill that will complete an existing neighborhood and provide needed affordable rental units in the near future. The Applicant anticipates acceptance of the FEIS, which will document that the Project will not compromise the needs of future generations.

In the context of the Ahupua'a system, the Project will seek to improve the quality of storm water runoff as it travels towards the ocean through the implementation of the onsite drainage system which will provide storage for the increase in stormwater runoff in compliance with Chapter 4. "Rules for the Design of Storm Drainage Facilities in the County of Maui" and Chapter 15-11 Rules for the Design of Storm Water Treatment Best Management Practices." The *makai* Project site boundary fronts Pi'ilani Highway and is approximately 0.5 miles from the ocean.

The Applicant is providing the Project residents with a 2-acre park space in front of the apartment development to promote recreation opportunities. In addition, sidewalks and bike paths will be incorporated into the site plan to promote no-vehicular circulation on the site.

The Applicant recognizes the importance of sustainability in planning, and in response to comments on the DEIS, the Project incorporates sustainability design elements such as solar photovoltaic panels for common areas and the vegetated detention basins located on site to intercept stormwater runoff closer to the source. The Applicant is exploring other renewable energy technologies and conservation measures to promote sustainability. Solar hot water heaters will be utilized throughout the residential portion of the Project. Occupants of the Pi'ilani Promenade will be encouraged to install photovoltaic energy systems where appropriate and feasible.

Chapter 226-109 Climate change adaptation priority.

Priority guidelines to prepare the State to address the impacts of climate change, including impacts to the areas of agriculture; conservation lands; coastal and nearshore marine areas; natural



and cultural resources; education; energy; higher education; health; historic preservation; water resources; the built environment, such as housing, recreation, transportation; and the economy shall:			
Priority Guidelines:	S	N/S	N/A
(1) Ensure that Hawaii's people are educated, informed, and aware of the impacts climate change may have on their communities;			✓
(2) Encourage community stewardship groups and local stakeholders to participate in planning and implementation of climate change policies;			✓
(3) Invest in continued monitoring and research of Hawaii's climate and the impacts of climate change on the State;			✓
(4) Consider native Hawaiian traditional knowledge and practices in planning for the impacts of climate change;			✓
(5) Encourage the preservation and restoration of natural landscape features, such as coral reefs, beaches and dunes, forests, streams, floodplains, and wetlands, that have the inherent capacity to avoid, minimize, or mitigate the impacts of climate change;	✓		
(6) Explore adaptation strategies that moderate harm or exploit beneficial opportunities in response to actual or expected climate change impacts to the natural and built environments;			✓
(7) Promote sector resilience in areas such as water, roads, airports, and public health, by encouraging the identification of climate change threats, assessment of potential consequences, and evaluation of adaptation options;			✓
(8) Foster cross-jurisdictional collaboration between county, state, and federal agencies and partnerships between government and private entities and other nongovernmental entities, including nonprofit entities;			✓
(9) Use management and implementation approaches that encourage the continual collection, evaluation, and integration of new information and strategies into new and existing practices, policies, and plans; and			✓
(10) Encourage planning and management of the natural and built environments that effectively integrate climate change policy. [L 2012, c 286, §2			✓
<i>Analysis:</i> Sea level rise will have adverse effects on all shoreline communities, our economies, and our natural and cultural resources. The Pi'ilani Promenade does not lie with the Hawaii Coastal Zone Management Area nor is it located within the Special Management Area for the island of Maui. The project site is located in an area identified for Urban, <u>Light Industrial</u> development that is approximately one half mile from the ocean.			



As discussed in Section III.A.10 (Agricultural Resources) The LSB and ALISH classification systems indicate that the Project site possesses poor soil and low soil ratings for productive agricultural uses. As such, the utilization of these poorly-rated agricultural lands for urban use and development is deemed appropriate.

The Project will not impact the adjacent natural Kulanihakoi gulch, wetlands, streams, beaches, sand dunes and forest, therefore the Project is anticipated to have no significant adverse impact.

D. HAWAII STATE FUNCTIONAL PLANS

The Hawaii State Plan directs State agencies to prepare functional plans for their respective program areas. There are fourteen (14) State Functional Plans that serve as the primary implementing vehicle for the goals, objectives, and policies of the Hawaii State Plan. In response to comments received on the DEIS, various goals, objectives and policies have been revised to more accurately reflect the Project as it relates to various government plans. The functional plans which are pertinent to the proposed project, along with each plan's applicable objectives, policies, and actions are discussed below.

Hawaii State Functional Plans	S	N/S	N/A
Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable			
State Functional Plan – Agriculture			
Objectives:	S	N/S	N/A
a. Achievement of increased agricultural production and growth through cultural and management practices.			✓
b. Achievement of an orderly agricultural marketing system through product promotion and industry organization.			✓
c. <u>Achievement of increased consumption of and demand for Hawaii's agricultural products through consumer education and product quality.</u>			✓
d. Achievement of optimal contribution by agriculture to the State's economy.			✓
e. Achievement of adequate capital, and knowledge of its proper management, for agricultural development.			✓
f. Achievement of increased agricultural production and growth through pest and disease controls.			✓
g. Achievement of effective protection and improved quality of Hawaii's land, water, and air.			✓



h. Achievement of productive agricultural use of lands most suitable and needed for agricultural use.			✓
i. Achievement of efficient and equitable provision of adequate water for agricultural use.			✓
j. Achievement of maximum degree of public understanding and support of agriculture in Hawaii.			✓
k. Achievement of adequate supply of properly trained labor for agricultural needs.			✓
l. Achievement of adequate transportation services and facilities to meet agricultural needs.			✓
m. Achievement of adequate support services and infrastructure to meet agricultural needs.			✓
<p>Analysis: As discussed in Section III.A.10 (Agricultural Resources), the development of the Pi'ilani Promenade will not reduce the inventory of significant agricultural lands on Maui or in the State of Hawaii. The subject property is rated "E" by the Land Study Bureau (LSB) classification system which represents poor overall agricultural productivity. The majority of the project site is "Unclassified" (i.e., unrated or residual land) by the maps which identify Agricultural Lands of Importance to the State of Hawaii (ALISH). Approximately three (3) acres located at the southwest corner of the site are classified as "Prime" by the ALISH maps.</p>			
<p>State Functional Plan – Conservation Lands</p>			
Objectives:	S	N/S	N/A
1a. Establishment of data bases for inventories of existing lands and resources.			✓
1b. Establishment of criteria for management of land and natural resources.			✓
2a. Establishment of plans for natural resources and land management.			✓
2b. Protection of fragile or rare natural resources.			✓
2c. Enhancement of natural resources.			✓
2d. Appropriate development of natural resources designated for commercial development.			✓
2e. Promotion and marketing of appropriate natural resources designated for commercial development.			✓



2f. Increase enforcement of land and natural resource use laws and regulations.			✓
3a. Develop and implement conservation education programs for the general public and visitors.			✓
3b. Increase access to land and natural resources data by the public and increase cooperation between agencies by making access to land and natural resource information more efficient.			✓
<p><i>Analysis: The Pi'ilani Promenade is not located within the State Conservation District. While the southern boundary of the site is adjacent to Kulanihakoi Gulch, the proposed project is not expected to have an impact upon the gulch as future design schemes will incorporate generous landscape buffers along the portion of the site that borders the gulch. In connection with the preparation of the FEIS, a Flora and Fauna Assessment was prepared, and no rare, threatened, or endangered species of plant or animal life were identified on the property.</i></p>			
State Functional Plan – Education			
Objectives:	S	N/S	N/A
A1. Academic Excellence. Emphasize quality educational programs in Hawaii's institutions to promote academic excellence.			✓
A2. Basic Skills. Promote programs and activities that facilitate the acquisition of basic skills, such as reading, writing, computing, listening, speaking, and reasoning. Pursue effective programs which reflect the varied district, school, and student needs to strengthen basic skills achievement.			✓
A3. Education Workforce. Initiate efforts to improve the quality of education by improving the capabilities of the education workforce.			✓
A4. Services and Facilities. Ensure the provision of adequate and accessible educational services and facilities that are designed to meet individual and community needs.			✓
B1. Alternatives for funding and delivery. Explore alternatives for funding and delivery of educational services to improve the overall quality of education.			✓
B2. Autonomy and flexibility. Promote increased opportunities for greater autonomy and flexibility of educational institutions in their decision making responsibilities.			✓
B3. Increase use of Technology. Increase and improve the use of information technology in education and encourage programs which increase the public's awareness and understanding of the impact of information technologies on our lives.			✓



B4. Personal Development. Support education programs and activities that enhance personal development, physical fitness, recreation, and cultural pursuits of all groups.			✓
B5. Students with Special Needs. Provide appropriate educational opportunities for groups with special needs.			✓
C1. Early Childhood Education. Develop resources and programs for early childhood education.			✓
C2. Hawaii's Cultural Heritage. Promote educational programs which enhance understanding of Hawaii's cultural heritage.			✓
C3. Research programs and (Communication) Activities. Support research programs and activities that enhance the education programs of the State.			✓

Analysis: As discussed in Section III.C.4 (Schools), the Pi'ilani Promenade has not been designed to accommodate a public school site. However, the Hawaii Legislature enacted Act 245 in 2007 as Section 302A, HRS, "School Impact Fees". The Pi'ilani Promenade is within the boundaries of the Department of Education's (DOE) Central Maui Impact District and is within the Makawao Cost Area of that district. Projects within the district and cost area are required to pay a construction fee and either a fee-in-lieu of land or a land donation (at the discretion of the DOE). At the appropriate time, the Applicant will contact the DOE to enter into an impact fee agreement.

State Functional Plan – Employment

Objectives:	S	N/S	N/A
a. Improve the qualifications of entry-level-workers and their transition to employment.	✓		✓
b. Develop and deliver education, training and related services to ensure and maintain a quality and competitive workforce.			✓
c. Improve labor exchange.			✓
d. Improve the quality of life for workers and families.	✓		
e. Improve planning of economic development, employment and training activities.	✓		✓

*Analysis: **The Applicant has changed objective items a and e to "N/A". The Project supports item d by providing the opportunity to help improve the quality of life for employees and their families by providing affordable rental housing opportunities that are proximate to local services and centers of employment.***

The proposed development of the Pi'ilani Promenade is in response to the needs of industrial users and other entrepreneurs, both large and small, who are seeking to open and/or expand businesses on Maui. This can be accomplished by creating greater flexibility in site planning and



building design to help reduce operational costs for employers and provide employees with a good working environment.

The Pi'ilani Promenade will help improve the quality of life for employees and their families by providing affordable rental housing opportunities that are proximate to local services and centers of employment.

State Functional Plan – Energy

Objectives:	S	N/S	N/A
a. Moderate the growth in energy demand through conservation and energy efficiency.	✓		
b. Displace oil and fossil fuels through alternate and renewable energy resources.	✓		
c. Promote energy education and legislation.			✓
d. Support and develop an integrated approach to energy development and management.	✗		✓
e. Ensure State's ability to implement energy emergency actions immediately in event of fuel supply disruptions. Ensure essential public services are maintained and provisions are made to alleviate economic and personal hardships which may arise.			✓

Analysis: Items a and b are supported by the Project. The Pi'ilani Promenade will include conservation measures to encourage the use of energy-efficient technology throughout the Project, specifically in areas involving lighting, air-conditioning, and building materials. Solar hot water heaters will be utilized throughout the residential portion of the Project. Occupants of the Pi'ilani Promenade will be encouraged to install photovoltaic energy Systems where appropriate and feasible. The Applicant has changed item d to "N/A" because the Applicant is not proposing to support and develop energy development and management as part of the Project.

As discussed in Section III.D.5 "(Electrical)," the Pi'ilani Promenade will include conservation measures to encourage the use of energy-efficient technology throughout the project, specifically in areas involving lighting, air-conditioning, and building materials. Solar hot water heaters will be utilized throughout the residential portion of the development. Occupants of the Pi'ilani Promenade will be encouraged to install Photovoltaic Energy Systems where appropriate and feasible.

State Functional Plan – Health



Objectives:	S	N/S	N/A
1. Health promotion and disease prevention. Reduction in the incidence, morbidity and mortality associated with the preventable and controllable conditions.			✓
2. Prevention and control of communicable diseases. Reduction in the incidence, morbidity, and mortality associated with infectious and communicable diseases.			✓
3. Health needs of special populations with impaired access to health care. Increased availability and accessibility of health services for groups with impaired access to health care programs.			✓
4. Community hospitals system. Development of a community hospital system which is innovative, responsive and supplies high quality care to the constituencies it serves.			✓
5. Environmental programs to protect and enhance the environment. Continued development of new environmental protection and health services programs to protect, monitor, and enhance the quality of life in Hawaii.			✓
6. DOH leadership. To improve the Department of Health's ability to meet the public health need of the State of Hawaii in the most appropriate, beneficial and economical way possible.			✓
<p><i>Analysis:</i> <u>As previously mentioned, the Project will include bicycle and pedestrian pathways as illustrated in the circulation plan. (See: Figure 15 Conceptual Circulation Plan). However, because the The Pi'ilani Promenade does not propose the creation of any medical or health programs; therefore, this Functional Plan is not applicable. The proposed project will provide opportunities for physicians, medical clinics, and other health care practitioners, services, and facilities to locate to the Pi'ilani Promenade and help serve the needs of the community.</u></p>			
State Functional Plan – Higher Education			
Objectives:	S	N/S	N/A
A. A number and variety of postsecondary education institutions sufficient to provide the diverse range of programs required to satisfy individual and societal needs and interests.			✓
B. The highest level of quality, commensurate with its mission and objectives, of each educational, research, and public service program offered in Hawaii by an institution of higher education.			✓
C. Provide appropriate educational opportunities for all who are willing and able to benefit from postsecondary education.			✓
D. Provide financing for postsecondary education programs sufficient to ensure adequate diversity, high quality, and wide accessibility.			✓



E. Increase program effectiveness and efficiency through better coordination of education resources.			✓
<i>Analysis: The Pi'ilani Promenade does not propose the creation of higher education programs; therefore, this Functional Plan is not applicable.</i>			
State Functional Plan – Historic Preservation			
Objectives:	S	N/S	N/A
A. Identification of historic properties.	✓		
B. Protection of historic properties.	✓		
C. Management and treatment of historic properties.	✓		
D. Provision of adequate facilities to preserve.	✗		✓
E. The establishment of programs to collect and conserve historic records, artifacts, and oral histories and to document and perpetuate traditional arts, skills, and culture.	✗		✓
F. Provision of better access to historic information.	✗		✓
G. Enhancement of skills and knowledge needed to preserve historical resources.	✗		✓
<p><u>Analysis: The Project is supportive of objectives a-c, and in support thereof, the Applicant has completed an Archaeological Inventory Survey and a Cultural Impact Assessment report for the Project. Both the Archaeological Inventory Survey and Cultural Impact Assessment identify historic properties. In support of objectives b and c, the Applicant's Archaeologist is preparing a Data Recovery Plan in coordination with the DLNR SHPD recommendations for protection, management, and treatment of historic properties.</u></p> <p>The project promotes the preservation of historic resources and the Applicant's Archaeologist submitted a data recovery plan that was received by the SHPD on June 17, 2016 and approval is pending. will work with the State Historic Preservation Division to prepare a data recovery plan.</p> <p><u>The Applicant has changed items d-g to "N/A" because the Applicant is not proposing to establish programs to document historical records, provide better access to historic information or enhance skills needed to preserve historical resources.</u></p> <p>The archaeological survey of the offsite water storage tank area was conducted on January 8 and 13, 2014. No significant materials or cultural remains were located on this previously disturbed land during the 2014 archaeological survey. (See: Appendix F, "Archaeological Inventory Survey <u>dated March 2014, revised August 26, 2015</u>").</p>			



A public information meeting for the proposed project was held on February 25, 2014. Transcripts from this meeting have been included in the DEIS. The focus of the meeting was to review the previous 1994 AIS and discuss the findings of the current 2014 AIS. As previously noted, the AIS was updated in 2015 and approved by SHPD in 2016. In addition to discussing potential impacts to Kulanihako'i Gulch and the return of the petroglyph boulder that was previously removed from the project site by a former land owner, some of the participants suggested that the archaeological sites could be incorporated into the design of the project or into its landscaping and that the petroglyph boulder be returned to the property. The Applicant has discussed the possible return of the petroglyph boulder with the former land owner; however, the former owner rejected this request since the relocation plan was approved by State Historic Preservation Division (SHPD). In addition, the archaeological monitoring plan that was submitted to the SHPD for review has been approved and is referenced for all recent work on the site. The monitoring plan may be found in Appendix H and may be updated once project construction is initiated.

State Functional Plan – Housing

Objectives and Policies:	S	N/S	N/A
A. Homeownership for at least sixty percent, or roughly 248,500 households by the year 2000.			✓
B. Sufficient amount of affordable rental housing units by the year 2000 so as to increase the State's rental vacancy rate to at least 3% with priority given to increasing the supply of units affordable to very low and lower income households.	✓		
C. Increased development of rental housing units for the elderly and other special needs groups to afford them an equal access to housing.	✓		
D. Preservation of existing public and private housing stock.	✓		
E. Acquire and designate land suitable for housing development in sufficient amount to locate the deficit in housing units by the year 2000.	✓		
F. Maintain a statewide housing data system for use by public and private agencies engaged in the provision of housing.	✓		

Analysis: The Applicant notes that the policies are targeting the year 2000 and need to be updated to reflect a more current or future date. Notwithstanding the foregoing, the Project supports the objectives and policies of the State Functional Plan – Housing. The Pi'ilani Promenade will help satisfy the growing demand for rental housing in Kihei by providing 226 apartment units which include affordable rental units in compliance with the County's Residential Workforce Housing Policy set forth in Chapter 2.96, MCC.



State Functional Plan – Human Services			
Objectives and Policies:	S	N/S	N/A
A. To sustain and improve current elder abuse and neglect services.			✓
B. To increase cost-effective, high quality home and community based services.			✓
C. To increase home-based services to keep children in their homes and to increase placement resources for those children who must be temporarily or permanently removed from their homes, due to abuse or neglect.			✓
D. To address factors that contribute to child abuse and other forms of family violence.			✓
E. To provide affordable, accessible, and quality child care.			✓
F. To maximize efforts of self-sufficiency through provision of transitional medical care services.			✓
G. To provide AFDC recipients with a viable opportunity to become independent of the welfare system.			✓
H. To facilitate client access to human services.			✓
I. To eliminate organizational barriers which limit client access to human services.			✓
<i>Analysis:</i> The Pi'ilani Promenade does not include the creation of human service programs; therefore, this Functional Plan is not applicable.			
State Functional Plan – Recreation			
Objectives and Policies:	S	N/S	N/A
1a. Address the problem of saturation of the capacity of beach parks and nearshore waters.			✓
1b. Reduce the incidence of ocean recreation accidents.			✓
1c. Resolve conflicts between different activities at heavily used ocean recreation areas.			✓
1d. Provide adequate boating facilities. Balance the demand for boating facilities against the need to protect the marine environment from potential adverse impacts.			✓
2a. Plan, develop, and promote recreational activities and facilities in mauka and other areas to provide a wide range of alternatives.	✓		
2b. Meet special recreation needs of the elderly, the disabled, woman, single-parent families, immigrants, and other groups.			✓
2c. Improve and expand the provision of recreation facilities in urban areas and local communities.	✓		



3a. Prevent the loss of access to shoreline and upland recreation areas due to new developments.			✓
3b. Resolve the problem of landowner liability that seriously hampers public access over private lands.			✓
3c. Increase access to State Forest Reserve lands over federal property, leased State lands, and other government lands.			✓
3d. Acquire, develop, and manage additional public access ways.	✓		
4a. Promote a conservation ethic in the use of Hawaii's recreational resources.			✓
4b. Prevent degradation of the marine environment.			✓
4c. Improve the State's enforcement capabilities.			✓
4d. Mitigate adverse impacts of tour helicopters on the quality of recreational experiences in wilderness areas.			✓
5a. Properly maintain existing park and recreation areas.	✓		
5b. Promote interagency coordination and cooperation to facilitate sharing of resources, joint development efforts, clarification of responsibilities and jurisdictions, and improvements in enforcement capabilities.			✓
5c. Assure adequate support for priority outdoor recreation programs and facilities.			✓
6a. Increase recreational access and opportunities in Hawaii's wetlands.			✓
6b. Develop and adequate information base to assist the County planning departments and other regulatory agencies in making decisions regarding the wetlands.			✓
6c. Assure the protection of the most valuable wetlands in the State.			✓
<p><i>Analysis:</i> As discussed in Section II.D.F.5 E (Proposed Project Description), the site plan for the Pi'ilani Promenade will provide an approximately 2-acre neighborhood park and open spaces with pedestrian and bicycle pathways. In addition, the Pi'ilani Promenade is subject to, and will comply with, the provisions of Section 18.16.320, MCC which requires developers to provide land and/or money for park and playground purposes in the Kihei-Makena Community Plan region.</p>			
<p>State Functional Plan – Tourism</p>			
Objectives:	S	N/S	N/A
1a. Development, implementation and maintenance of policies and actions which support the steady and balanced growth of the visitor industry.			✓
2a. Development and maintenance of well-designed visitor facilities and related developments which are sensitive to the environment, sensitive to			✓



neighboring communities and activities, and adequately serviced by infrastructure and support services.			
3a. Enhancement of respect and regard for the fragile resources which comprise Hawaii's natural and cultural environment. Increased preservation and maintenance efforts.			✓
4a. Support of Hawaii's diverse range of lifestyles and natural environment.			✓
4b. Achievement of mutual appreciation among residents, visitors, and the visitor industry.			✓
5a. Development of a productive workforce to maintain a high quality visitor industry.			✓
5b. Enhancement of career and employment opportunities in the visitor destination in specific desired market segments.			✓
6a. Maintenance of a high customer awareness of Hawaii as a visitor destination in specific desired market segments.			✓
<i>Analysis:</i> The Pi'ilani Promenade is not targeting the visitor industry and there are no hotel uses proposed as part of the project; however, restaurants and retail opportunities within the Pi'ilani Promenade may attract visitors to the site.			
State Functional Plan – Transportation			
Objectives:	S	N/S	N/A
1a. Expansion of transportation system.	✓		
1b. Reduction of travel demand through zoning and decentralization initiatives.	✓		
1c. Management of existing transportation systems through a program of transportation systems management (TSM).	✓		
1d. Identification and reservation of lands and right-of-way required for future transportation improvements.	✓		
1e. Planning and designing State highways to enhance inter-regional mobility.	✓		
1f. Improving and enhancing transportation safety.	✓		
1g. Improved transportation maintenance programs.			✓
1h. Ensure that transportation facilities are accessible to people with disabilities.	✓		
2a. Development of a transportation infrastructure that supports economic development initiatives.			✓
3a. Expansion of revenue bases for transportation improvements.	✓		
4a. Providing educational programs.			✓



Analysis: As discussed in Section III.D (Infrastructure) the Pi'ilani Promenade will provide a variety of traffic-related improvements that will include improving the intersection of Pi'ilani Highway and Kaonoulu Street and constructing a segment of the future Upcountry Highway.

The Pi'ilani Promenade's non-vehicular transportation strategy includes: 1) compact and mixed-use development patterns, 2) pedestrian oriented streets integrating street trees, sidewalks, and traffic calming, 3) both striped and separated bike lanes in appropriate locations, and 4) supporting connectivity to adjacent developments, such as the Kihei High School and uses *makai* of Pi'ilani Highway.

The transportation demand and management measures proposed for the project include encouraging alternate work schedules and off-peak hours for employment generators and supporting park and ride, ridesharing, carpooling, and van pooling. In addition, the Applicant will also meet with the Maui Department of Transportation to discuss the possibility of establishing bus stops within the project site.

State Functional Plan – Water Resources Development

Objectives:	S	N/S	N/A
a. Enunciate State water policy and improve management framework.	✓		✓
b. Maintain the long-term availability of freshwater supplies, giving consideration to the accommodation of important environmental values.	✓		✓
c. Improve management of floodplains.	✓		✓
d. Assure adequate municipal water supplies for planned urban growth.	✓		✓
e. Assure the availability of adequate water for agriculture.	✓		✓
f. Encourage and coordinate with other water programs the development of self-supplied industrial water and the production of water-based energy.	✓		✓
g. provide for the protection and enhancement of Hawaii's freshwater and estuarine environment.	✓		✓
h. Improve State grant and loan procedures for water program and projects.	✓		✓
i. Pursue water resources data collection and research to meet changing needs.	✓		✓

Analysis: The Applicant has changed items a-i to "N/A" as the Project is not responsible for maintaining or enforcing water resource development.

The proposed project will be served by the County's public water system. The Applicant will dedicate a 1.0 million gallon water tank and associated infrastructure to Maui County to be used by the project and the public.



In developing the property, Best Management Practices will be incorporated to mitigate potential impacts during the construction phase. In compliance with applicable regulatory requirements, a drainage plan has been prepared to capture and retain the incremental increase in stormwater runoff on the project site. As such, no adverse impacts to Hawaii's freshwater and estuarine environment are anticipated.

E. MAUI COUNTY GENERAL PLAN

1. County-wide Policy Plan

The County-wide Policy Plan establishes a list (below) of county-wide goals, objectives, policies, and implementing actions related to key strategies. In response to comments received on the DEIS, various goals, objectives and policies have been revised to more accurately reflect the Project as it relates to various government plans.

Countywide Policy Plan Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable	S	N/S	N/A
A. Protect the Natural Environment			
Goal: Maui County's natural environment and distinctive open spaces will be preserved, managed, and cared for in perpetuity.			
Objective:	S	N/S	N/A
(1) Improve the opportunity to experience the natural beauty and native biodiversity of the islands for present and future generations.	✓		✓
<i>Analysis:</i> The Applicant has changed item 1 to "N/A" because the Project site is not identified as a distinctive open space. The Pi'ilani Promenade is not located within the State's Special Management Area and no listed or endangered species of flora and fauna were identified on the property. During build-out and during the operation phase best management practices will be implemented to mitigate non-point source pollution to Maui's coastal resources as well as to mitigate fugitive dust impacts. In addition, through the environmental impact statement application process, mitigation measures will be identified to help address any environmental impacts that may arise from the proposed project.			
Objective:			



(2) Improve the quality of environmentally sensitive, locally valued natural resources and native ecology of each island.			
Policies:	S	N/S	N/A
a. Protect and restore nearshore reef environments and water quality	✓		
b. Protect marine resources and valued wildlife	✓		
c. Improve the connection between urban environments and the natural landscape, and incorporate natural features of the land into urban design.	✗		✓
d. Utilize land-conservation tools to ensure the permanence of valued open spaces.	✗		✓
e. Mitigate the negative effects of upland uses on coastal wetlands, marine life, and coral reefs.	✓		
f. Strengthen coastal zone management, re-naturalization of shorelines, where possible, and filtration or treatment of urban and agricultural runoff.	✓		
g. Regulate the use and maintenance of stormwater-treatment systems that incorporate the use of native vegetation and mimic natural systems.	✗		✓
h. Advocate for stronger regulation of fishing, boating, cruise ship, and ecotourism activities.			✓
i. Restore watersheds and aquifer-recharge areas to healthy and productive status, and increase public knowledge about the importance of watershed stewardship, water conservation, and ground water protection.	✗		✓
Implementing Actions:			
a. Develop regulations to minimize runoff of pollutants into nearshore waters and reduce nonpoint and point source pollution.			✓
<p><i>Analysis:</i> <u>The Applicant has changed items a-i to “N/A” as the Project site is located in an area designated for urban growth and will be developed consistent with all applicable State and County regulations. The Project site is not located on environmentally sensitive land. The Pi'ilani Promenade is not located within the State’s Special Management Area and is not expected to impact the shoreline or reef environments. During build-out and during the operation phase best management practices will be implemented to mitigate non-point source pollution to Maui’s coastal resources. In addition, through the EIS and entitlement application processes mitigation measures will be identified to help address any environmental impacts that may arise from the project.</u>—The site itself is not located within an area of critical habitat and surveys have confirmed that no threatened or endangered species of flora or fauna are on the property.</p> <p><u>The Project supports policy items a, b, e and f. The Project will comply with the condition of the 1995 Decision and Order, which requires that the Applicant fund the design and construction of its pro-</u></p>			



rata share of drainage improvements required as a result of the development of the Project site, including oil water separators and other filters as appropriate, and other BMPs as necessary to minimize non-point source pollution. The Applicant understands that all Project-related water discharges must comply with the State's Water Quality Standards, which are set forth in Chapter 11-54, HAR.

BMPs prepared in accordance with MCC Chapter 20.08 (Soil Erosion and Sedimentation Control) will be submitted to the DPW for review and approval prior to the issuance of grubbing and grading permits. In addition, since Project site work will exceed one acre, a NPDES will be obtained from the DOH's Clean Water Branch for the discharge of storm water associated with construction activities. The Applicant will meet all of the requirements set forth by the DOH's Clean Water Branch. (pg. 162 FEIS)

The Applicant has changed items c, d, g, i to "N/A" as the Project is not proposing to incorporate natural features of the land into urban design, does not utilize land conservation tools, and does not regulate the use and maintenance of stormwater treatment systems. The Project site is located in an area designated for urban growth and will be developed consistent with all applicable State and County regulations. The Project site is not located on environmentally sensitive land. The Pi'ilani Promenade is not located within the State's Special Management Area and is not expected to impact the shoreline or reef environments. During build-out and during the operation phase best management practices will be implemented to mitigate non-point source pollution to Maui's coastal resources. In addition, through the EIS and entitlement application processes mitigation measures will be identified to help address any environmental impacts that may arise from the project. The site itself is not located within an area of critical habitat and surveys have confirmed that no threatened or endangered species of flora or fauna are on the property.

Objective:

(3) Improve the stewardship of the natural environment.

Policies:

S	N/S	N/A
✓		✓
		✓
✓		

a. Preserve and protect natural resources with significant scenic, economic, cultural, environmental, or recreational value.

b. Improve communication, coordination, and collaboration among government agencies, nonprofit organizations, communities, individuals, and land owners that work for the protection of the natural environment.

c. Evaluate development to assess potential short-term and long-term impacts on land, air, aquatic, and marine environments.



d. Improve efforts to mitigate and plan for the impact of natural disasters, human influenced emergencies, and global warming.	✓		✓
e. Regulate access to sensitive ecological sites and landscapes.	✓		✓
f. Reduce air, noise, light, land, and water pollution, and reduce Maui County's contribution to global climate change.			
g. Plan and prepare for and educate visitors and residents about the possible effects of global warming.	✓		✓
h. Provide public access to beaches and shoreline for recreational and cultural purposes where appropriate.			✓
i. Educate the construction and landscape industries and property owners about the use of best management practices to prevent erosion and nonpoint source pollution.	✓		
j. Support the acquisition of resources with scenic, environmental, and recreational value, and encumber their use.			✓
k. Improve enforcement activities relating to the natural environment.			✓
l. For each shoreline community, identify and prioritize beach conservation objectives, and develop action plans for their implementation.			✓
Implementing Actions:	S	N/S	N/A
a. Document, record, and monitor existing conditions, populations, and locations of flora and fauna communities.	✓		
b. Implement Federal and State policies that require a reduction of greenhouse-gas emissions.	✓		✓
c. Establish a baseline inventory of available natural resources and their respective carrying capacity.			✓
<p><u>Analysis: The Applicant has changed items a and d to "N/A". Item b is not applicable to the Project, and item c is supported by the various technical studies contained in the FEIS to evaluate short term and long term impacts resulting from the Project. The Applicant has changed item b to "N/A". The implementation of government policies to improve gas emissions is not applicable to the Project. The Applicant has changed items e and g to "N/A" because the Project site does not contain sensitive ecological sites and landscapes such as wetlands or habitats for endangered species.</u></p> <p>The Pi'ilani Promenade is not located within the State's Special Management Area and no listed or endangered species of flora and fauna were identified on the property. During build-out and during the operation phase best management practices will be implemented to mitigate non-point source pollution to Maui's coastal resources as well as to mitigate fugitive dust impacts. In</p>			



~~addition, through the EIS review process mitigation measures will be identified to help address any environmental impacts that may arise from the project.~~

As discussed in Section III.A.3 (Natural Hazards) the development of the Pi'ilani Promenade will not increase the possibility of natural hazards such as flooding, tsunami inundation, hurricanes and earthquakes. The Pi'ilani Promenade will be constructed in compliance with County, State and Federal standards.

As discussed in Section III.A.6 (Air Quality) the Pi'ilani Promenade may create short term impacts on air quality directly and indirectly during construction, however mitigation measures will be implemented. It is anticipated that the Pi'ilani Promenade does not violate Federal or State air quality standards.

As discussed in Section III.D.6 5 (Utilities Electrical) the Pi'ilani Promenade will include energy-efficient design and conservation measures specifically, in lighting, air-conditioning, and building materials. Solar hot water heaters will be utilized throughout the residential portion of the development and installation of Photovoltaic Energy Systems will be encouraged in all areas of the Pi'ilani Promenade.

In addition, the Pi'ilani Promenade is utilizing smart growth planning techniques that will help to reduce automobile trips and associated pollution. The design will help to minimize automobile trips by providing employment, goods, services and housing within walking or biking distance of each other. The Pi'ilani Promenade has a unified pedestrian and bicycle system within the project and will provide opportunities for connections to its existing and future surrounding uses.

Objective :	S	N/S	N/A
(4) Educate residents and visitors about responsible stewardship practices and the interconnectedness of the natural environment and people.			✓
Policies:			
a. Expand education about native flora, fauna, and ecosystems.			✓
b. Align priorities to recognize the health of the natural environment and the health of people.			✓
c. Promote programs and incentives that decrease greenhouse-gas emissions and improve environmental stewardship.	✓		✓

Analysis: The Applicant has changed item c to "N/A". The promotion of government programs and incentives to improve environmental stewardship is not applicable to the Project. The Pi'ilani Promenade is not located within the State's Special Management Area and no listed or



endangered species of flora and fauna were identified on the property. During build-out and during the operation phase best management practices will be implemented to mitigate non-point source pollution. ~~In addition, through the EIS and entitlement application processes mitigation measures will be identified to help address any environmental impacts that may arise from the project.~~

As discussed in Section II.E.3 and 4 (~~Proposed Action~~ Project Description) the Pi'ilani Promenade creates a development pattern that by its more compact and mixed-use character is less dependent on motorized transportation. The Pi'ilani Promenade also makes considerable investment into public water and roadway infrastructure. The project will include a unified pedestrian and bicycle system within the Pi'ilani Promenade with connections to its existing and future surroundings.

As discussed in Section III.D.6 ~~5~~ (Utilities Electrical) the Pi'ilani Promenade will include energy-efficient design and conservation measures. Specifically, the design guidelines will encourage the use of energy efficient technology throughout the Pi'ilani Promenade, specifically, in lighting, air-conditioning, and building materials. Solar hot water heaters will be utilized throughout the residential portion of the development and installation of Photovoltaic Energy Systems will be encouraged in all areas of the Pi'ilani Promenade.

B. Preserve Local Cultures and Traditions

Goal: Maui County will foster a spirit of pono and protect, perpetuate, and reinvigorate its residents' multi-cultural values and traditions to ensure that current and future generations will enjoy the benefits of their rich island heritage.

Objective:	S	N/S	N/A
(1) Perpetuate the Hawaiian culture as a vital force in the lives of residents.	✓		✓
Policies:			
a. Protect and preserve access to mountain, ocean, and island resources for traditional Hawaiian cultural practices.	✓		✓
b. Prohibit inappropriate development of cultural lands and sites that are important for traditional Hawaiian cultural practices, and establish mandates for the special protection of these lands in perpetuity.	✓		✓
c. Promote the use of ahupua'a and moku management practices.			✓



d. Encourage the use of traditional Hawaiian architecture and craftsmanship.	✓		✓
e. Promote the use of the Hawaiian language.			✓
f. Recognize and preserve the unique natural and cultural characteristics of each ahupua'a or district.	✓		✓
g. Encourage schools to promote broader incorporation of Hawaiian and other local cultures' history and value lessons into curriculum.			✓
h. Ensure the protection of Native Hawaiian rights.			✓
i. Promote, encourage, and require the correct use of traditional place names, particularly in government documents, signage, and tourism industry.	✓		✓
Implementing Actions:			
a. Establish alternative land use and overlay zoning designations that recognize and preserve the unique natural and cultural characteristics of each ahupua'a or district.			✓
b. Develop requirements for all County applicants to perpetuate and use proper traditional place names in all applications submitted.	✓		✓
<p><u>Analysis: The Applicant has changed all items to "N/A". As discussed in Section III.A. 8 (Historical and Archaeological Resources) The proposed project will not impact Kulanihako'i Gulch and is not anticipated to significantly impact the physical environment. The project promotes the preservation of historic resources and the Applicant's will work with the State Historic Preservation Division to prepare a data recovery plan. The Project archaeologist submitted a data recovery plan to the SHPD on June 17, 2016, and it is currently under review.</u></p> <p>The archaeological survey of the offsite water storage tank area was conducted on January 8 and 13, 2014. No significant materials or cultural remains were located on this previously disturbed land during the 2014 archaeological survey. (See: Appendix F, "Archaeological Inventory Survey").</p> <p>A public information meeting for the proposed project was held on February 25, 2014. Transcripts from this meeting have been included in the DFEIS. The focus of the meeting was to review the previous 1994 AIS and discuss the findings of the current 2014 AIS. In addition to discussing potential impacts to Kulanihako'i Gulch and the return of the petroglyph boulder that was previously removed from the project site by a former land owner, some of the participants suggested that the archaeological sites could be incorporated into the design of the project or into its landscaping and that the petroglyph boulder be returned to the property. The Applicant has discussed the possible return of the petroglyph boulder with the former land</p>			



owner; however, the former owner rejected this request since the relocation plan was approved by State Historic Preservation Division (SHPD). In addition, the archaeological monitoring plan that was submitted to the SHPD for review has been approved and is referenced for all recent work on the site. The monitoring plan may be found in Appendix H and may be updated once project construction is initiated.

As discussed in Section III.B.4 (Cultural Resources) the cultural impact statement (CIA) and the SCIA which ~~was~~ were prepared for the proposed project reported that there were no visible cultural resources, (i.e. medicinal plants, shoreline resources, religious sites, or archeological resources) observed on the property. From a cultural practices and beliefs perspective, the subject property bears no apparent signs of cultural practices or any gatherings currently taking place on the site. The oral history interviews did not reveal any known gathering places on the subject property nor did any access concerns surface as a result of the proposed Project. In light of the foregoing, it can be concluded that development of the site will not impact cultural resources on the property or within its immediate vicinity.

Objective:	S	N/S	N/A
(2) Emphasize respect for our island lifestyle and our unique local cultures, family, and natural environment.	✓		
Policies:	S	N/S	N/A
a. Acknowledge the Hawaiian culture as the host culture, and foster respect and humility among residents and visitors toward the Hawaiian people and their practices.	✓		
b. Perpetuate a respect for diversity, and recognize the historic blending of cultures and ethnicities.	✓		
c. Encourage the perpetuation of each culture's unique cuisine, attire, dance, music, and folklore, and other unique island traditions and recreational activities.	✓		
d. Recognize the interconnectedness between the natural environment and the cultural heritage of the islands.	✓		
e. Protect and prioritize funding for recreational activities that support local cultural practices, such as surfing, fishing, and outrigger-canoe paddling.			✓
<i>Analysis:</i> As discussed in Section III.B.4 (Cultural Resources) the cultural impact statement (CIA) which was prepared for the proposed project reported that there were no visible cultural resources, (i.e. medicinal plants, shoreline resources, religious sites, or archeological resources) observed on the property. From a cultural practices and beliefs perspective, the subject property bears no apparent signs of cultural practices or any gatherings currently taking place on the site. The oral history interviews did not reveal any known gathering places on the subject property			



nor did any access concerns surface as a result of the proposed Project. In light of the foregoing, it can be concluded that development of the site will not impact cultural resources on the property or within its immediate vicinity.			
Objective:	S	N/S	N/A
(3) Preserve for present and future generations the opportunity to know and experience the arts, culture, and history of Maui County.	✓		
Policies:			
a. Foster teaching opportunities for cultural practitioners to share their knowledge and skills.	✓		
b. Support the development of cultural centers.			✓
c. Broaden opportunities for public art and the display of local artwork.	✓		
d. Foster the Aloha Spirit by celebrating the Hawaiian host culture and other Maui County cultures through support of cultural-education programs, festivals, celebrations, and ceremonies.	✓		
e. Support the perpetuation of Hawaiian arts and culture.	✓		
f. Support programs and activities that record the oral and pictorial history of residents.			✓
g. Support the development of repositories for culture, history, genealogy, oral history, film, and interactive learning.			✓
Implementing Actions:			
a. Establish incentives for the display of public art.			✓
b. Establish centers and programs of excellence for the perpetuation of Hawaiian arts and culture.			✓
Analysis: The Pi'ilani Promenade project will include an active park that could provide an opportunity for a variety of gatherings to celebrate the Aloha Spirit, provide education on Hawaiian arts, and to provide a place for practitioners to share their knowledge and skills. In addition as the project is developed the owner can encourage the use of Hawaiian artwork.			
Objective:	S	N/S	N/A
(4) Preserve and restore significant historic architecture, structures, cultural sites, cultural districts, and cultural landscapes.	✓		
Policies:	S	N/S	N/A



b. Promote the rehabilitation and adaptive reuse of historic sites, buildings, and structures to perpetuate a traditional sense of place.			✓
d. Protect and preserve lands that are culturally or historically significant.	✓		
g. Seek solutions that honor the traditions and practices of the host culture while recognizing the needs of the community.	✓		
i. Protect summits, slopes, and ridgelines from inappropriate development.	✓		
j. Support the registering of important historic sites on the State and Federal historic registers.	✓		
k. Provide opportunities for public involvement with restoration and enhancement of all types of cultural resources.	✓		
l. Foster partnerships to identify and preserve or revitalize historic and cultural sites.	✓		
Implementing Actions:	S	N/S	N/A
a. Identify, develop, map, and maintain an inventory of locally significant natural, cultural, and historical resources for protection.	✓		
d. Nominate important historic sites to the State and Federal historic registers.	✓		

Analysis: The Project promotes the preservation of historic resources and the Applicant's Archaeologist submitted a data recovery plan that was received by the SHPD on June 17, 2016 and approval is pending. ~~will work with the State Historic Preservation Division to prepare a data recovery plan.~~

The archaeological survey of the offsite water storage tank area was conducted on January 8 and 13, 2014. No significant materials or cultural remains were located on this previously disturbed land during the 2014 archaeological survey. (See: Appendix F, "Archaeological Inventory Survey").

A public information meeting for the proposed project was held on February 25, 2014. Transcripts from this meeting have been included in the DEIS. The focus of the meeting was to review the previous 1994 AIS and discuss the findings of the current 2014 AIS. In addition to discussing potential impacts to Kulanihakoi Gulch and the return of the petroglyph boulder that was previously removed from the project site by a former land owner, some of the participants suggested that the archaeological sites could be incorporated into the design of the project or into its landscaping and that the petroglyph boulder be returned to the property. The Applicant has discussed the possible return of the petroglyph boulder with the former land owner; however, the former owner rejected this request since the relocation plan was approved by State Historic Preservation Division (SHPD).



In addition, the archaeological monitoring plan that was submitted to the SHPD for review has been approved and is referenced for all recent work on the site. The monitoring plan may be found in Appendix H and may be updated once project construction is initiated.

C. Improve Education

Goal: Residents will have access to lifelong formal and informal educational options enabling them to realize their ambitions.

Objectives:

(1) Encourage the State to attract and retain school administrators and educators of the highest quality.

(2) Provide nurturing learning environments that build skills for the 21st century.

(3) Provide all residents with educational opportunities that can help them better understand themselves and their surroundings and allow them to realize their ambitions.

Implementing Actions:

S	N/S	N/A
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a. Develop safe walking and bicycling programs for school children.

✓		
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Analysis: **As discussed in Section III.C.4 (Schools) the Pi'ilani Promenade proposes residential use on a portion of the property and is adjacent to the proposed Kihei High School. The Project site is being planned to accommodate a future pedestrian connection with the proposed Kihei High School. The Project will include separated bicycle lanes along Kaonoulu Street and Pi'ilani Highway providing a critical component of overall connectivity in Kihei. As surrounding developments are constructed including the Kihei High School, the Project bike paths and sidewalks will become part of a larger non-vehicular network.**

D. Strengthen Social and Healthcare Services

Goal: Health and social services in Maui County will fully and comprehensively serve all segments of the population.

Analysis: **The Pi'ilani Promenade does not include the creation of health or social services; therefore, this goal is not directly applicable. However, the Pi'ilani Promenade will allow medical services such as doctor's offices and ancillary services.**

E. Expand Housing Opportunities for Residents

Goal: Quality, island-appropriate housing will be available to all residents.

Objective:



(1) Reduce the affordable housing deficit for residents.			
Policies:	S	N/S	N/A
a. Ensure that an adequate and permanent supply of affordable housing, both new and existing units, is made available for purchase or rental to our resident and/or workforce population, with special emphasis on providing housing for low- to moderate-income families, and ensure that all affordable housing remains affordable in perpetuity.	✓		
b. Seek innovative ways to lower housing costs without compromising the quality of our island lifestyle.	✓		
j. Redevelop commercial areas with a mixture of affordable residential and business uses, where appropriate.	✓		
k. Ensure residents are given priority to obtain affordable housing units developed in their communities, consistent with all applicable regulations.	✓		
l. Establish pricing for affordable housing that is more reflective of Maui County's workforce than the United States Housing and Urban Development's median-income estimates for Maui County.	✓		
m. Develop neighborhoods with a mixture of accessible and integrated community facilities and services.	✓		
q. Support the opportunity to age in place by providing accessible and appropriately designed residential units.	✓		
<i>Analysis: As discussed in Section III.B.2 (Housing) the Pi'ilani Promenade will offer 226- rental housing units. The Pi'ilani Promenade will include the required affordable rental housing units in compliance with Chapter 2.96, MCC Residential Workforce Housing Policy.</i>			
Objective:			
(3) Increase and maintain the affordable housing inventory.			
Policies:	S	N/S	N/A
a. Recognize housing as a basic human need, and work to fulfill that need.	✓		
b. Prioritize available infrastructure capacity for affordable housing.	✓		
g. Minimize the intrusion of housing on prime, productive, and potentially productive agricultural lands and regionally valuable agricultural lands.	✓		
h. Encourage long-term residential use of existing and future housing to meet residential needs.	✓		



Analysis: As discussed in Section III.B.2 (Housing) the Pi'ilani Promenade will offer 226 rental housing units. The Pi'ilani Promenade will include the required affordable rental housing units in compliance with Chapter 2.96, MCC Residential Workforce housing Policy. Workforce homes will be subject to the requirements of Chapter 2.96, MCC to ensure the affordable rentals are available for full time Maui residents.

As discussed in section III.A.10 (Agricultural Resources) the development of the Pi'ilani Promenade will not reduce the inventory of agriculturally significant lands therefore the proposed development is appropriate for the site.

Objective:

(4) Expand access to education related to housing options, homeownership, financing, and residential construction.

Analysis: The Pi'ilani promenade does not directly expand access to education with regard to housing options, home-ownership, financing and residential construction; therefore this objective is not applicable.

F. Strengthen the Local Economy

Goal: Maui County's economy will be diverse, sustainable, and supportive of community values.

Objective:

(1) Promote an economic climate that will encourage diversification of the County's economic base and a sustainable rate of economic growth.

Policies:	S	N/S	N/A
a. Support economic decisions that create long-term benefits.	✓		
b. Promote lifelong education, career development, and technical training for existing and emerging industries.	✓		
c. Invest in infrastructure, facilities, and programs that foster economic diversification.	✓		
d. Support and promote locally produced products and locally owned operations and businesses that benefit local communities and meet local demand.	✓		
e. Support programs that assist industries to retain and attract more local labor and facilitate the creation of jobs that offer a living wage.	✓		
f. Encourage work environments that are safe, rewarding, and fulfilling to employees.	✓		



g. Support home-based businesses that are appropriate for and in character with the community.			✓
h. Encourage businesses that promote the health and well-being of the residents, produce value-added products, and support community values.	✓		
i. Foster an understanding of the role of all industries in our economy.	✓		
j. Support efforts to improve conditions that foster economic vitality in our historic small towns.			✓
k. Support and encourage traditional host-culture businesses and indigenous agricultural practices.			✓
l. Support public and private entities that assist entrepreneurs in establishing locally operated businesses.	✓		
Implementing Actions:			
a. Develop regulations and programs that support opportunities for local merchants, farmers, and small businesses to sell their goods and services directly to the public.			✓
b. Monitor the carrying capacity of the islands' social, ecological, and infrastructure systems with respect to the economy.			✓
<p><u>Analysis: The Project could support several industries. The proposed updated Project responds to the most current trends in the development of mixed use industrial and commercial centers. The Pi'ilani Promenade will strengthen Maui's economy by providing a convenient location for a mixed use project with related/supportive businesses. These industries will create a diverse range of jobs for residents, which will benefit the rest of the economy. The result will be an increase in economic activities and employment opportunities consistent with community needs and desires, which will promote increased employment and entrepreneurial opportunities for Maui's residents.</u></p> <p>As discussed in Section III.B.3 (Economy) the construction of the Pi'ilani Promenade is expected to inject approximately \$212 million of new capital investment into the local economy and provide an estimated 878 "worker years" of employment as well as \$66.5 million in total wages over a 12 to 15 year period. The effect of these expenditures will have positive direct, indirect, and induced beneficial impacts on the economy of the County of Maui. During its operations phase, the Pi'ilani Promenade will increase the level of capital investment in the region which will create employment opportunities and economic stimulus for the region. The proposed project will provide direct employment opportunities for Maui residents and contribute to economic</p>			



diversification and growth for both Maui and the State. After “stabilization,” the Pi’ilani Promenade is envisioned to support 1,210 permanent jobs with an annual payroll of about \$ 36.6 million.

Objective:

(2) Diversify and expand sustainable forms of agriculture and aquaculture.

Analysis: The proposed Pi’ilani Promenade will not include agriculture or aquaculture operations; therefore this objective is not applicable.

Objective 3:

Support a visitor industry that respects the resident culture and the environment.

Analysis: The Pi’ilani Promenade is not targeting the visitor industry; however visitors will likely shop at future retail uses proposed as part of the project.

Objective:

(4) Expand economic sectors that increase living-wage job choices and are compatible with community values.

Policies:	S	N/S	N/A
a. Support emerging industries, including the following: <ul style="list-style-type: none"> • Health and wellness industry; • Sports and recreation industry; • Film and entertainment industry; • Arts and culture industry; • Renewable-energy industry; • Research and development industry; • High-technology and knowledge-based industries; • Education and training industry; • Ecotourism industry; and • Agritourism industry. 	✓		

Analysis: **The Pi’ilani Promenade project would support several of the above listed industries. The proposed updated project responds to the most current trends in the development of mixed use industrial and commercial centers. The Pi’ilani Promenade will strengthen Maui’s economy by providing a convenient location for a mixed use project with related/supportive businesses. These industries will create a diverse range of jobs for residents, which will benefit the rest of the**



economy. The result will be an increase in economic activities and employment opportunities consistent with community needs and desires, which will promote increased employment and entrepreneurial opportunities for Maui's residents.

G. Improve Parks and Public Facilities

Goal: A full range of island-appropriate public facilities and recreational opportunities will be provided to improve the quality of life for residents and visitors.

Objective 1:

Expand access to recreational opportunities and community facilities to meet the present and future needs of residents of all ages and physical abilities.

Policies:	S	N/S	N/A
a. Protect, enhance, and expand access to public shoreline and mountain resources.	✓		<u>✓</u>
b. Expand and enhance the network of parks, multi-use paths, and bikeways.	✓		
c. Assist communities in developing recreational facilities that promote physical fitness.	✓		
f. Encourage and invest in recreational, social, and leisure activities that bring people together and build community pride.	✓		
g. Promote the development and enhancement of community centers, civic spaces, and gathering places throughout our communities.	✓		
h. Expand affordable access to recreational opportunities that support the local lifestyle.	✓		

Analysis: The Applicant has changed item 1a to "N/A" because the Project site is not located along the shoreline and does not provide access to mountain resources.

As discussed in Section II.E.3 and 4 (Proposed Action Project Description) the Pi'ilani Promenade plans to provide a 2-acre neighborhood park and a unified pedestrian and bicycle system within the property and opportunities for connections to its existing and future surroundings. The Pi'ilani Promenade is subject to the Department of Parks and Recreation Parks Assessment that requires the owner, to provide land or money in lieu of, for recreational and leisure space in the Kihei-Makena Community Plan region.

The New Urbanism design technique will provide a complete and vibrant community with employment opportunities, a range of housing types, parks and open spaces, and a bicycle and



pedestrian pathways. These elements encourage future residents to interact with each other, rely less on automobiles and enjoy the outdoors.

Objective:

(2) Improve the quality and adequacy of community facilities.

Policies:	S	N/S	N/A
a. Provide an adequate supply of dedicated shelters and facilities for disaster relief.			✓
b. Provide and maintain community facilities that are appropriately designed to reflect the traditions and customs of local cultures.			✓
c. Ensure that parks and public facilities are safe and adequately equipped for the needs of all ages and physical abilities to the extent reasonable.	✓		
d. Maintain, enhance, expand, and provide new active and passive recreational facilities in ways that preserve the natural beauty of their locations.	✓		
e. Redesign or retrofit public facilities to adapt to major shifts in environmental or urban conditions to the extent reasonable.			✓

Analysis: **The Pi'ilani Promenade's plans to provide a 2-acre active park space. In addition open spaces and bicycle and pedestrian networks will provide a variety of recreational options that create an enhanced community.**

Objective:

(3) Enhance the funding, management, and planning of public facilities and park lands.

Analysis: **As discussed in Section II.D.F.5, E (Proposed Project Description) the site plan for the Pi'ilani Promenade will provide an approximately 2-acre neighborhood park and open spaces with pedestrian and bicycle pathways. In addition, the Pi'ilani Promenade is subject to, and will comply with, the provisions of Section 18.16.320, MCC which requires developers to provide land and/or money for park and playground purposes in the Kihei-Makena Community Plan region.**

H. Diversify Transportation Options

Goal: Maui County will have an efficient, economical, and environmentally sensitive means of moving people and goods.

Objective:



(1) Provide an effective, affordable, and convenient ground-transportation system that is environmentally sustainable.			
Policies:	S	N/S	N/A
a. Execute planning strategies to reduce traffic congestion.	✓		
b. Plan for the efficient relocation of roadways for the public benefit.	✗		✓
c. Support the use of alternative roadway designs, such as traffic-calming techniques and modern roundabouts.	✓		
d. Increase route and mode options in the ground-transportation network.	✗		✓
e. Ensure that roadway systems are safe, efficient, and maintained in good condition.	✓		
f. Preserve roadway corridors that have historic, scenic, or unique physical attributes that enhance the character and scenic resources of communities.	✗		✓
g. Design new roads and roadway improvements to retain and enhance the existing character and scenic resources of the communities through which they pass.	✓		
h. Promote a variety of affordable and convenient transportation services that meet countywide and community needs and expand ridership of transit systems.	✓		
i. Collaborate with transit agencies, government agencies, employers, and operators to provide planning strategies that reduce peak-hour traffic.	✓		
j. Develop and expand an attractive, island-appropriate, and efficient public-transportation system.	✓		
k. Provide and encourage the development of specialized transportation options for the young, the elderly, and persons with disabilities.	✓		
l. Evaluate all alternatives to preserve quality of life before widening roads.	✗	✓	
m. Encourage businesses in the promotion of alternative transportation options for resident and visitor use.	✓		
n. Support the development of carbon-emission standards and an incentive program aimed at achieving County carbon-emission goals.	✓		
Implementing Actions:			



a. Create incentives and implement strategies to reduce visitor dependence on rental cars.			✓
b. Establish efficient public-transit routes between employment centers and primary workforce residential areas.	✓		
c. Create attractive, island-appropriate, conveniently located park-and-ride and ride-share facilities.	✓		

Analysis: As discussed in Section III.D (Infrastructure) the Pi'ilani Promenade will provide a variety of traffic-related improvements that will include improving the intersection of Pi'ilani Highway and Kaonoulu Street and constructing a segment of the future Upcountry Highway.

The Applicant has changed policy item 1b to "N/A" because the Project does not involve the relocation of roadways. Item 1.d was changed to "N/A" because the Pi'ilani Promenade is not a transportation project. Item 1.f was changed to "N/A" because the Project does not involve preservation of historic or scenic roadway corridors. Item 1.l was changed to "N/S" because the Project will require widening of Pi'ilani Highway at the intersection with the future Kihei Upcountry Highway to accommodate additional turn lanes and a new signalized intersection.

The Pi'ilani Promenade's non-vehicular transportation strategy includes: 1) compact and mixed-use development patterns, 2) pedestrian oriented streets integrating street trees, sidewalks, and traffic calming, 3) both striped and separated bike lanes in appropriate locations, and 4) supporting connectivity to adjacent developments, such as the Kihei High School and uses *makai* of Pi'ilani Highway.

The Project will include separated bicycle lanes along Kaonoulu Street and Pi'ilani Highway providing a critical component of overall connectivity in Kihei. As surrounding developments are constructed including the Kihei High School the Project bike paths and sidewalks will become part of a larger non-vehicular network.

The transportation demand and management measures proposed for the project include encouraging alternate work schedules and off-peak hours for employment generators and supporting park and ride, ridesharing, carpooling, and van pooling. In addition, the Applicant will also meet with the Maui Department of Transportation to discuss the possibility of establishing bus stops within the project site.

Objective:



(2) Reduce the reliance on the automobile and fossil fuels by encouraging walking, bicycling, and other energy-efficient and safe alternative modes of transportation.			
Policies:	S	N/S	N/A
a. Make walking and bicycling transportation safe and easy between and within communities.	✓		
b. Require development to be designed with the pedestrian in mind.	✓		
c. Design new and retrofit existing rights-of-way with adequate sidewalks, bicycle lanes, or separated multi-use transit corridors.	✓		
d. Support the development of a countywide network of bikeways, equestrian trails, and pedestrian paths.	✓		
e. Support the reestablishment of traditional trails between communities, to the ocean, and through the mountains for public use.			✓
f. Encourage educational programs to increase safety for pedestrians and bicyclists.			✓
Implementing Actions:			
a. Design, build, and modify existing bikeways to improve safety and separation from automobiles.	✓		
b. Increase enforcement to reduce abuse of bicycle and pedestrian lanes by motorized vehicles.	✓		
c. Identify non-motorized transportation options as a priority for new sources of funding.	✓		
<i>Analysis:</i> The Pi'ilani Promenade's non-vehicular transportation strategy includes: 1) compact and mixed-use development patterns, 2) pedestrian oriented streets integrating street trees, sidewalks, and traffic calming, 3) both striped and separated bike lanes in appropriate locations, and 4) supporting connectivity to adjacent developments, such as the Kihei High School and uses <i>makai</i> of Pi'ilani Highway.			
Objective:			
(3) Improve opportunities for affordable, efficient, safe, and reliable air transportation.			
<i>Analysis:</i> The Pi'ilani Promenade does not include facilities for air transportation; therefore, this objective is not applicable.			



Objective:			
(4) Improve opportunities for affordable, efficient, safe, and reliable ocean transportation.			
<i>Analysis: The Pi'ilani Promenade is not located on the coastline and does not include facilities for ocean transportation; therefore, this objective regarding ocean transportation is not applicable.</i>			
Objective:			
(5) Improve and expand the planning and management of transportation systems.			
Policies:	S	N/S	N/A
a. Encourage progressive community design and development that will reduce transportation trips.	✓		
b. Require new developments to contribute their <i>pro rata</i> share of local and regional infrastructure costs.	✓		
c. Establish appropriate user fees for private enterprises that utilize public-transportation facilities for recreational purposes.	✓		
d. Support the revision of roadway-design criteria and standards so that roads are compatible with surrounding neighborhoods and the character of rural areas.	✓		
e. Plan for multi-modal transportation and utility corridors on each island.			✓
f. Support designing all transportation facilities, including airport, harbor, and mass-transit stations, to reflect Hawaiian architecture.			✓
g. Utilize transportation-demand management as an integral part of transportation planning.	✓		
h. Accommodate the planting of street trees and other appropriate landscaping in all public rights-of-way.	✓		
<i>Analysis: As discussed in Section III.D (Infrastructure) the Pi'ilani Promenade will provide a variety of traffic-related improvements that will include improving the intersection of Pi'ilani Highway and Kaonoulu Street and constructing a segment of the future Kihei Upcountry Highway.</i>			
The Pi'ilani Promenade's non-vehicular transportation strategy includes: 1) compact and mixed-use development patterns, 2) pedestrian oriented streets integrating street trees, sidewalks, and traffic calming, 3) both striped and separated bike lanes in appropriate locations, and 4) supporting connectivity to adjacent developments, such as the Kihei High School and uses <i>makai</i> of Pi'ilani Highway.			



The transportation demand and management measures proposed for the project include encouraging alternate work schedules and off-peak hours for employment generators and supporting park and ride, ridesharing, carpooling, and van pooling. In addition, the Applicant will also meet with the Maui Department of Transportation to discuss the possibility of establishing bus stops within the project site.

I. Improve Physical Infrastructure

Goal: Maui County's physical infrastructure will be maintained in optimum condition and will provide for and effectively serve the needs of the County through clean and sustainable technologies.

Objective:

(1) Improve water systems to assure access to sustainable, clean, reliable, and affordable sources of water.

Policies:	S	N/S	N/A
a. Ensure that adequate supplies of water are available prior to approval of subdivision or construction documents.	✓		
b. Develop and fund improved water-delivery systems.	✓		
c. Ensure a reliable and affordable supply of water for productive agricultural uses.			✓
d. Promote the reclamation of gray water, and enable the use of reclaimed, gray, and brackish water for activities that do not require drinking water.	✓		
e. Retain and expand public control and ownership of water resources and delivery systems.	✓		
f. Improve the management of water systems so that surface-water and groundwater resources are not degraded by overuse or pollution.	✓		
g. Explore and promote alternative water-source-development methods.			✓
h. Seek reliable long-term sources of water to serve developments that achieve consistency with the appropriate Community Plans.	✓		
Implementing Actions:			
a. Develop a process to review all applications for desalination.			✓



Analysis: As discussed in Section III.D.4 (Water) the Pi'ilani Promenade's source of drinking water will be supplied by the County Department of Water Supply (DWS) and the non-drinking water is brackish water from an on-site well.

In addition the developer is committed to water conservation strategies to reduce consumption, conserve resources and minimize water demands, and it will implement water conservation recommendations of the County of Maui Department of Water Supply.

Objective:

(2) Improve waste-disposal practices and systems to be efficient, safe, and as environmentally sound as possible.

Policies:	S	N/S	N/A
a. Provide sustainable waste-disposal systems and comprehensive, convenient recycling programs to reduce the flow of waste into landfills.	✓		
b. Support innovative and alternative practices in recycling solid waste and wastewater and disposing of hazardous waste.	✓		
c. Encourage vendors and owners of automobile, appliance, and white goods to participate in the safe disposal and recycling of such goods, and ensure greater accountability for large waste producers.	✓		
d. Develop strategies to promote public awareness to reduce pollution and litter, and encourage residents to reduce, reuse, recycle, and compost waste materials.			✓
e. Pursue improvements and upgrades to existing wastewater and solid-waste systems consistent with current and future plans and the County's Capital Improvement Program.	✓		

Analysis: As discussed in Section III.C.5 (Solid Waste), The Pi'ilani Promenade will support the County's recycling, reuse, and composting activities. The County of Maui Integrated Solid Waste Management Plan (2009) provides strategies for diverting solid waste from landfills to reduce landfill dependency, save landfill capacity and improve operational efficiency. The Pi'ilani Promenade will implement these strategies by providing options for recycling, such as collection systems and bin space, within the site, and promoting sound recycling practices among residents and businesses.

Objective:

(3) Significantly increase the use of renewable and green technologies to promote energy efficiency and energy self-sufficiency.



Policies:	S	N/S	N/A
a. Promote the use of local renewable energy sources, and reward energy efficiency.	✓		
b. Consider tax incentives and credits for the development of sustainable- and renewable-energy sources.			✓
c. Expand education about energy conservation and self-sufficiency.			✓
d. Encourage small-scale energy generation that utilizes wind, sun, water, biowaste, and other renewable sources of energy.	✓		
e. Expand renewable-energy production.			✓
f. Develop public-private partnerships to ensure the use of renewable energy and increase energy efficiency.	✗		✓
g. Require the incorporation of locally appropriate energy-saving and green building design concepts in all new developments by providing energy-efficient urban design guidelines and amendments to the Building Code.	✓		
h. Encourage the use of sustainable energy to power vehicles.	✓		
i. Promote the retrofitting of existing buildings and new development to incorporate energy-saving design concepts and devices.	✓		
j. Encourage green footprint practices.	✓		
k. Reduce Maui County's dependence on fossil fuels and energy imports.			✓
l. Support green building practices such as the construction of buildings that aim to minimize carbon dioxide production, produce renewable energy, and recycle water.	✓		
m. Promote and support environmentally friendly practices in all energy sectors.	✓		
Implementing Actions:			
a. Adopt an energy-efficiency policy for Maui County government as a model for other jurisdictions.			✓
b. Adopt a Green Building Code, and support green building practices.			✓
<i>Analysis: The Applicant has changed item f, to "N/A" because the Project is not proposing to develop public-private partnerships to increase energy efficiency.</i>			



<p>As discussed in Section III.D.5 (Electrical) the Pi'ilani Promenade will include conservation measures to encourage the use of energy-efficient technology throughout the project, specifically in areas involving lighting, air-conditioning, and building materials. Solar hot water heaters will be utilized throughout the residential portion of the development. Occupants of the Pi'ilani Promenade will be encouraged to install Photovoltaic Energy Systems where appropriate and feasible.</p>			
<p>Objective:</p>			
<p>(4) Direct growth in a way that makes efficient use of existing infrastructure and to areas where there is available infrastructure capacity.</p>			
<p>Policies:</p>	<p>S</p>	<p>N/S</p>	<p>N/A</p>
<p>a. Capitalize on existing infrastructure capacity as a priority over infrastructure expansion.</p>	<p>✓</p>		
<p>b. Planning for new towns should only be considered if a region's growth is too large to be directed into infill and adjacent growth areas.</p>			<p>✓</p>
<p>c. Utilize appropriate infrastructure technologies in the appropriate locations.</p>	<p>✓</p>		
<p>d. Promote land use patterns that can be provided with infrastructure and public facilities in a cost-effective manner.</p>	<p>✓</p>		
<p>e. Support catchment systems and on-site wastewater treatment in rural areas and aggregated water and wastewater systems in urban areas if they are appropriately located.</p>	<p>✓</p>		
<p>Implementing Actions:</p>			
<p>a. Develop a streamlining system for urban infill projects.</p>	<p>✓</p>		
<p>b. Identify appropriate areas for urban expansion of existing towns where infrastructure and public facilities can be provided in a cost-effective manner.</p>	<p>✓</p>		
<p><i>Analysis:</i> The Pi'ilani Promenade is utilizing smart growth planning techniques. The design of the project will help minimize automobile trips by providing employment, goods, services and housing within walking or biking distance of each other. The design and layout of the Pi'ilani Promenade includes a pedestrian and bicycle network within the project site, as well as opportunities for future connections to areas of existing and future development. The pedestrian and bicycle system will provide future residents with an alternative to motorized transport within the Pi'ilani Promenade. The project's close proximity to Central Kihei brings residents into easy commuting distance of the region's multitude of public facility systems, including schools, police,</p>			



fire, and park and recreation facilities. The Project site is also proximate to the regions, public water system, sewer system and existing State and County roadways.

Objective:

(5) Improve the planning and management of infrastructure systems.

Policies:	S	N/S	N/A
a. Provide a reliable and sufficient level of funding to enhance and maintain infrastructure systems.			✓
b. Require new developments to contribute their <i>pro rata</i> share of local and regional infrastructure costs.	✓		
c. Improve coordination among infrastructure providers and planning agencies to minimize construction impacts.	✓		
d. Maintain inventories of infrastructure capacity, and project future infrastructure needs.			✓
e. Require social-justice and -equity issues to be considered during the infrastructure-planning process.	✓		
f. Discourage the development of critical infrastructure systems within hazard zones and the tsunami-inundation zone to the extent practical.	✓		
g. Ensure that infrastructure is built concurrent with or prior to development.	✓		
h. Ensure that basic infrastructure needs can be met during a disaster.			✓
i. Locate public facilities and emergency services in appropriate locations that support the health, safety, and welfare of each community and that minimize delivery inefficiencies.	✓		
j. Promote the undergrounding of utility and other distribution lines for health, safety, and aesthetic reasons.	✓		

Implementing Actions:

a. Develop and regularly update functional plans for infrastructure systems.			✓
b. Develop, adopt, and regularly update local or community-sensitive level-of-service standards for infrastructure systems.			✓

Analysis: The implementation of the ~~Master Plan Update~~ Project will increase demand for public infrastructure and facility systems. In response, ~~mitigative~~ mitigation measures will be implemented to address the impacts. For example, the Pi'ilani Promenade will make land available for schools, parks, and other necessary public facilities. In addition, the project will contribute off-site infrastructure improvements as warranted. The Applicant will also pay required impact fees for infrastructure and public facility systems, as law requires.



J. Promote Sustainable Land Use and Growth Management

Goal: Community character, lifestyles, economies, and natural assets will be preserved by managing growth and using land in a sustainable manner.

Objective:

(1) Improve land use management and implement a directed-growth strategy.

Policies:	S	N/S	N/A
a. Establish, map, and enforce urban- and rural-growth limits.			✓
b. Direct urban and rural growth to designated areas.	✗		✓ —
e. Encourage redevelopment and infill in existing communities on lands intended for urban use to protect productive farm land and open-space resources.	✓		
g. Restrict development in areas that are prone to natural hazards, disasters, or sea-level rise.	✓		
h. Direct new development in and around communities with existing infrastructure and service capacity, and protect natural, scenic, shoreline, and cultural resources.	✓		
j. Support the dedication of land for public uses.	✗		✓ —
l. Enable existing and future communities to be self-sufficient through sustainable land use planning and management practices.	✓		

Analysis: As for objective 1, the Applicant has changed policies b and j to "N/A" because it is not the Applicant's responsibility to direct urban and rural growth to designated areas, nor dedicate land for public use.

The proposed development is located entirely within the Maui Island Plan's Urban Growth Boundary. The Project site is located in the Maui County Light Industrial District. The proposed project is in a location that is proximate to infrastructure and public facilities and existing employment. The Project site is not located within an area that is subject to natural hazards and no critical wildlife habitats are on the property.

Objective:

(2) Improve planning for and management of agricultural lands and rural areas.

Analysis: As discussed in Section III.A.11 (Agricultural Resources) the development of the Pi'ilani Promenade is located in the State Land Use Urban District therefore agricultural lands and rural areas will not be impacted by the proposed Pi'ilani Promenade project.

Objective:



(3) Design all developments to be in harmony with the environment and to protect each community's sense of place.			
Policies:	S	N/S	N/A
a. Support and provide incentives for green building practices.	✓		
b. Encourage the incorporation of green building practices and technologies into all government facilities to the extent practicable.			✓
c. Protect and enhance the unique architectural and landscape characteristics of each Community Plan Area, small town, and neighborhood.	✓		
d. Ensure that adequate recreational areas, open spaces, and public-gathering places are provided and maintained in all urban centers and neighborhoods.	✓		
e. Ensure business districts are distinctive, attractive, and pedestrian-friendly destinations.	✓		
f. Use trees and other forms of landscaping along rights-of-way and within parking lots to provide shade, beauty, urban-heat reduction, and separation of pedestrians from automobile traffic in accordance with community desires.	✓		
g. Where appropriate, integrate public-transit, equestrian, pedestrian, and bicycle facilities, and public rights-of-way as design elements in new and existing communities.	✓		
h. Ensure better connectivity and linkages between land uses.	✓		
i. Adequately buffer and mitigate noise and air pollution in mixed-use areas to maintain residential quality of life.	✓		
j. Protect rural communities and traditional small towns by regulating the footprint, locations, site planning, and design of structures.			✓
k. Support small-town revitalization and preservation.			✓
l. Facilitate safe pedestrian access, and create linkages between destinations and within parking areas.	✓		
<i>Analysis: As previously mentioned, the proposed project will encourage the use of green building practices for both employment and residential uses; incorporate bicycle and pedestrian infrastructure throughout; utilize street trees for beautification, heat reduction, and traffic calming; and will ensure better connectivity and linkages between land uses than what is possible through traditional suburban development practices.</i>			
Objective:			
(4) Improve and increase efficiency in land use planning and management.			
Policies:	S	N/S	N/A



a. Assess the cumulative impact of developments on natural ecosystems, natural resources, wildlife habitat, and surrounding uses.	✓		
b. Ensure that new development projects requiring discretionary permits demonstrate a community need, show consistency with the General Plan, and provide an analysis of impacts.	✓		
c. Encourage public and private partnerships to preserve lands of importance, develop housing, and meet the needs of residents.			✓
d. Promote creative subdivision designs that implement best practices in land development, sustainable management of natural and physical resources, increased pedestrian and bicycle functionality and safety, and the principles of livable communities.	✓		
e. Coordinate with Federal, State, and County officials in order to ensure that land use decisions are consistent with County plans and the vision local populations have for their communities.	✓		
f. Enable greater public participation in the review of subdivisions.			✓
g. Improve land use decision making through the use of land- and geographic-information systems.			✓
Implementing Actions:			
A. Institute a time limit and sunseting stipulations on development entitlements and their implementation.			✓
<p><i>Analysis:</i> During the preparation of the EIS, a site analysis was conducted to ensure that urban development would mitigate impacts to the natural and cultural environment. The subject project is consistent with the County's General Plan and impacts have been analyzed in the subject FEIS including assessment of the cumulative impact of the development and its potential impacts to natural ecosystems, natural resources, wildlife habitat and surrounding land uses.</p>			
K. Strive for Good Governance			
Goal:			
Objective:			
(1) Strengthen governmental planning, coordination, consensus building, and decision making.			
(2) Promote civic engagement.			
(3) Improve the efficiency, reliability, and transparency of County government's internal processes and decision making.			
(4) Adequately fund in order to effectively administer, implement, and enforce the General Plan.			



(5) Strive for County government to be a role model for implementing cultural and environmental policies and practices.

Analysis: **The public participation program involved numerous participatory meetings with key stakeholders, community groups, neighboring property owners and governmental agencies at various stages of the planning process. These meetings provided opportunity for the public to ask questions and present concerns about the project prior to the submittal of the EIS and FEIS.**

Further review of the proposed project will include review of this FEIS by the State Land Use Commission. These steps provide for agency and public input and comments, as well as opportunities for the public and decision makers to ask for more information to address any additional concerns that may arise.

The Pi'ilani Promenade will not directly improve government administration, programs, or plans; therefore these objectives 1-5 are not applicable "N/A". However, the Pi'ilani Project build out will have a positive impact on the Maui County economy and will contribute to increased County revenues in the form of increased property taxes, general excise taxes, and income taxes, a portion of which could be used to help fund implementation of the General Plan.

~~The Pi'ilani Promenade will not directly improve government policies and practices; therefore this objective and these policies are not applicable. However, the Pi'ilani Project build out will have a significant positive impact on the Maui County economy and will contribute to increased County revenues in the form of increased property taxes, general excise taxes, and income taxes.~~

2. Maui Island Plan

The Maui Island Plan, December 2012, serves as the regional plan for the Island of Maui. The Plan is comprised of the following ten elements: 1) Population; 2) Heritage Resources; 3) Natural Hazards; 4) Economic Development; 5) Housing; 6) Infrastructure and Public Facilities; 7) Land Use; 8) Directed Growth Plan; 9) Long Range Implementation Plan; and 10) Monitoring and Evaluation. Each element contains goals, objectives, policies and implementing actions. The Directed Growth Plan identifies the location of future development through 2030. The Directed Growth Plan is intended to guide the location and general character of future urban development and will direct future zoning changes and guide the development of the County's short-term and long-term capital improvement plan budgets.

The General Plan of the County of Maui refers to a hierarchy of planning documents that together set forth future growth and policy direction in the County. The General Plan is comprised of the following documents: 1) County-wide Policy Plan; 2) Maui Island Plan; and 3) nine community plans.



The County-wide Policy Plan was adopted in March 2010 and is a broad policy document that identifies a vision for the future of Maui County. It establishes a set of guiding principles and provides comprehensive goals, objectives, policies and implementing actions that portray the desired direction of the County's future. The County-wide Policy Plan provides the policy framework for the development of the Maui Island Plan and nine Community Plans.

The Maui Island Plan functions as a regional plan and addresses the policies and issued that are not confined to just one community plan area, including regional systems such as transportation, utilities and growth management, for the Island of Maui. Together, the Island and Community Plans develop strategies with respect to population density, land use maps, land use regulations, transportation systems, public and community facility locations, water and sewage systems, visitor destinations, urban design and other matters related to development.

The Maui Island Plan is approved it will be used to guide the growth and development of Maui County. As indicated by the Planning Department's proposed Directed Growth Maps, the Pi'ilani Promenade lies within the limits of the proposed Urban Growth Boundary for Kihei.

The FEIS will discuss portions of Chapters 4 and 7 of the Maui Island Plan that are applicable to the development of the Pi'ilani Promenade. In response to comments received on the DEIS, various goals, objectives and policies have been revised to more accurately reflect the Project as it relates to various government plans.

Chapter 4 Economic Development

Maui Island Plan	S	N/S	N/A
Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable			
Economic Development			
Economic Diversification			
Goal: Maui will have a balanced economy composed of a variety of industries that offer employment opportunities and well-paying jobs and a business environment that is sensitive to resident needs and the island's unique natural and cultural resources.			
Objective:	S	N/S	N/A



Objective 4.1.1: A more diversified economy.	✓		
Policies:	S	N/S	N/A
Policy 4.1.1.a: Encourage an economy that is driven by innovation, research and development, and human resource development.	✓		
Policy 4.1.1.b: Support the creation of new jobs and industries that provide a living wage.	✓		
<p><i>Analysis:</i> The updated Pi'ilani Promenade plan responds to the most current trends in the development of innovation centers nationwide. After build-out the Pi'ilani Promenade will strengthen Maui's economy and will create a diverse range of jobs for residents. This will in turn benefit the rest of the economy. The result will be an increase in economic activities and employment opportunities consistent with community needs and desires, which will promote increased employment and entrepreneurial opportunities for Maui's residents.</p> <p>As discussed in Section III.B.3 (Economy) the construction of the Pi'ilani Promenade is expected to inject approximately \$212 million of new capital investment into the local economy and provide an estimated 878 "worker years" of employment as well as \$66.5 million in total wages over a 12 to 15 year period. The effect of these expenditures will have positive direct, indirect, and induced beneficial impacts on the economy of the County of Maui. During its operations phase, the Pi'ilani Promenade will increase the level of capital investment in the region which will create employment opportunities and economic stimulus for the region. The proposed project will provide direct employment opportunities for Maui residents and contribute to economic diversification and growth for both Maui and the State. After "stabilization," the Pi'ilani Promenade is envisioned to support 1,210 permanent jobs with an annual payroll of about \$ 36.6 million.</p> <p>The project site is located within the Maui Island Plan's Urban Growth Boundary. The Project is being prepared pursuant to smart growth and New Urbanism planning principles, with a distribution of uses that provides housing, jobs, shopping for daily needs, open space and recreation areas in close proximity to each other.</p>			
Objective:	S	N/S	N/A
Objective 4.1.2 Increase activities that support principles of sustainability.	✓		



Policies:	S	N/S	N/A
4.1.2.a: Support industries that are sustainable, and culturally and environmentally sensitive.	✓		
4.1.2.b: Encourage and support local businesses.	✓		
4.1.2.e: Encourage all businesses to save energy, water and other resources.	✓		
<p><u>Analysis: The Pi'ilani Promenade supports the objective and policies to promote sustainability. The Project will strengthen Maui's economy and will create a diverse range of jobs for residents. The Applicant supports encouraging local businesses to locate within the Project, and all businesses within the Project will be encouraged to use energy efficient technology specifically in areas involving lighting, air conditioning and building materials. The result will be an increase in economic activities and employment opportunities consistent with community needs and desires.</u></p> <p>As discussed in Section III.D.5 (Electrical) the Pi'ilani Promenade will include conservation measures to encourage the use of energy-efficient technology throughout the project, specifically in areas involving lighting, air-conditioning, and building materials. Solar hot water heaters will be utilized throughout the residential portion of the development. Occupants of the Pi'ilani Promenade will be encouraged to install Photovoltaic Energy Systems where appropriate and feasible.</p>			
Objective:	S	N/S	N/A
Objective 4.1.3 Improve the island's business climate.	✓		
Policies:	S	N/S	N/A
4.1.3.a: Upgrade, maintain the quality, and improve access to telecommunications infrastructure.	✓		
4.1.3.b: Ensure an adequate supply of affordable workforce housing.	✓		
4.1.3.c: Develop neighborhoods and communities that are attractive to the workforce of a diversified economy.	✓		
4.1.3.e: Encourage employers to establish incentive programs such as telecommuting, flexible working hours, four-day work weeks, health incentives, and rebates for public transportation users.	✓		



4.1.3.f: Assist community development organizations with revitalization and development of neighborhoods and communities that are attractive to the workforce of a diversified economy.			✓
<p><i>Analysis:</i> The Project site is located within the Maui Island Plan's Urban Growth Boundary. The Project is being prepared pursuant to smart growth and New Urbanism planning principles with a distribution of uses that provides housing, jobs, shopping for daily needs, open space and recreation areas in close proximity to each other. Together, these elements of the proposed project will help to create communities that are attractive to the workforce of a diversified economy.</p>			
Emerging Sectors			
Goal: A diverse array of emerging economic sectors.			
Objective:	S	N/S	N/A
Objective 4.4.1 Increase efforts to develop emerging industries.			✓
Policies:	S	N/S	N/A
4.4.1.a: Support the development of and access to state-of-the-art voice, video, and data telecommunications systems.			✓
4.4.1.b: Attract and assist industries to compete in high technology activities such as those related to renewable energy, green technologies, diversified agriculture, ocean sciences, health sciences, and other knowledge-based industries.	✓		
4.4.1.c: Support new industries that are environmentally and culturally sensitive such as health and wellness, sports and outdoor activities, cultural activities, the arts, film-making, entertainment, and digital media.	✓		
4.4.1.d: Support the continued development of the Maui Research and Technology Park in Kihei as a center for research and development and education.			✓
4.4.1.e: Work with appropriate organizations to support the development of high technology clusters around renewable energy, diversified agriculture, ocean sciences, health sciences, and other knowledge-based industries.			✓
<p><i>Analysis:</i> The purpose of the updated Pi'ilani Promenade is to provide an opportunity for a mix of uses for greater flexibility to attract a broader range of desirable businesses with a diversified offering including emerging sectors, therefore the Project would support industries listed in Items 4.4.1.b and 4.4.1.c. It is anticipated that New Urbanism planning techniques and urban design strategies will make the Pi'ilani Promenade a more</p>			



vibrant and attractive environment for businesses to locate and grow their operations. The Pi'ilani Promenade will expand Maui's employer base and increase employment and management opportunities for residents.			
Objective:	S	N/S	N/A
Objective 4.4.2 Increase the development of renewable energy technologies.			✓
Policies:	S	N/S	N/A
4.4.2.a: Support the expansion of the renewable energy sector and the use of solar, wind, wave, and biofuel technologies.	✓		
4.4.2.b: Provide incentives to encourage renewable energy development, the use of green energy technologies, and energy conservation.			✓
<i>Analysis: The Pi'ilani Promenade isn't targeted specifically to the renewable energy sector, however the Applicant will market the project as available to this sector of the employment. As discussed in Section III.D.6 5 (Utilities Electrical) the Pi'ilani Promenade supports energy-efficient design and conservation measures. Specifically, the Applicant will encourage the use of energy efficient technology throughout the project, specifically, in lighting, air-conditioning, and building materials. Solar hot water heaters will be utilized throughout the residential portion of the development and installation of Photovoltaic Energy Systems will be encouraged in all areas of the Pi'ilani Promenade.</i>			

Chapter 7 Land Uses

Urban Areas

"Urban areas are characterized by a convergence of housing, jobs, civic activities, commercial services and shopping."

"The Maui Island plan will promote vibrant and sustainable communities, economize on infrastructure, and protect open space."

Maui Island Plan	S	N/S	N/A
Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable			
Land Use			
Urban Land Use Issues			
Goal: Maui will have livable human scale urban communities, an efficient and sustainable land use pattern, and sufficient housing and services for Maui residents.			



Objective:	S	N/S	N/A
Objective 7.3.1: Facilitate and support a more compact, efficient, human-scale urban development pattern.	✓		
Policies:	S	N/S	N/A
Policy 7.3.1.a: Ensure higher density compact urban communities, infill and redevelopment of underutilized urban lots within Urban Growth Boundaries.	✓		
Policy 7.3.1.c: Strengthen evaluation requirements for new urban expansion, new towns, and major urban infill projects within urban growth boundaries. Tailor submittal requirements to reflect the impact or scale of different projects.			✓
Policy 7.3.1.f: Encourage the development and implementation of neighborhood design standards that are environmentally friendly such as LEED-ND standards.	✓		
Policy 7.3.1.g: Discourage future pyramid zoning within the industrial zoning districts, while allowing accessory commercial uses and grandfathering existing uses.			✓
Policy 7.3.1.h: Promote agriculture by encouraging community gardening, community supported agricultural programs, and farmers' markets within and adjacent to urban areas.	✗		✓
Policy 7.3.1.i: Discourage land use and urban design that impedes inter-connectivity between adjacent communities.	✓		
<p><u>Analysis: The Pi'ilani Promenade supports Objective 7.3.1 because the Pi'ilani Promenade mixed use design includes residential, commercial and Light Industrial uses within a single development which is expected to facilitate and support a more compact, efficient, human-scale urban development pattern. Pi'ilani Promenade is located on lands adjacent to an existing employment base with urban development and supporting infrastructure in place. The subject property has been community planned for urban development since the 1980's and is within the Maui Island Plan's Urban Growth Boundary. The Pi'ilani Promenade is being prepared pursuant to smart growth and New-Urbanism planning principles with a distribution of uses that provides housing, jobs, shopping for daily needs, open space and recreation areas in close proximity to each other. The residential area will not include gated communities; and design and appearance will be controlled by neighborhood design standards to promote environmentally friendly neighborhoods.</u></p>			



<p>As discussed in this FEIS the Pi'ilani Promenade incorporates New Urbanism planning techniques and urban design strategies which help to create a settlement pattern that by its more compact and mixed-use character is less dependent on motorized transportation. This will facilitate a self-sufficient community and result in shorter commutes by offering multi-modal transportation opportunities. The project also makes considerable investment into infrastructure that supports a unified pedestrian and bicycle system within the project site. The system will connect the residential area, neighborhood park and employment areas. The result will be a more diverse and dynamic economy with increased employment opportunities for residents. <u>In light of the above information, the Pi'ilani Promenade supports Items 7.3.1a and 7.3.1c, 7.3.1g, and 7.3.1i. Policy item 7.3.1h has been changed to "N/A" since the Pi'ilani Promenade is not an agriculture project.</u></p>			
Objective:	S	N/S	N/A
Objective 7.3.2 Facilitate more self-sufficient and sustainable communities.	✓		
Policies:	S	N/S	N/A
7.3.2.a: When developing new communities, provide sufficient lands for commercial, appropriate industrial, educational, spiritual and non-profit uses to serve the daily needs of community residents.	✓		
7.3.2.b: Site community facilities such as schools, parks, libraries, and community centers within walking and biking distance of residences.	✓		
7.3.2.c: Facilitate self-sufficient communities and shorten commutes by: a. directing residential development to job-rich areas; b. Allowing appropriate commercial development and community services to shorten commutes; and c. Allowing home occupations that are compatible with surrounding neighborhoods.	✓		
7.3.2.d: Ensure that major employment centers are located in areas that encourage affordable employee housing and multi-modal transportation opportunities.	✓		
7.3.2.e: Discourage the establishment of bedroom communities where long commutes are required to employment centers.	✓		



7.3.2.f: Facilitate development of housing by focusing projects in locations where land and infrastructure costs facilitate the development of affordably-priced housing.	✓		
7.3.2.g: Provide incentives to facilitate the development of multi-family housing.	✓		
7.3.2.h: Encourage the placement of rental housing projects in the same areas for-sale housing to facilitate mixed-income communities.	✓		
7.3.2.i: Develop communities that provide sufficient parks, schools, libraries, and other essential public facilities and services to serve resident needs.	✓		
<p><i>Analysis: The Pi'ilani Promenade is strongly supportive of Objective 7.32 and its subordinate policies. Recognizing the importance of locating jobs near housing, the plan incorporates 226 rental housing units of. While the proposed housing won't create a complete equilibrium of jobs-housing, it will significantly alleviate the necessity for vehicular trips to and from the Pi'ilani Promenade. The Pi'ilani Promenade is centrally located close to regional recreation and educational facilities that together with retail and industrial uses will complement the larger Kihei community.</i></p> <p>As discussed in Section II.E.3 and 4 (Proposed Action <u>Project Description</u>) the proposed project incorporates New Urbanism planning techniques and urban design strategies which help to create a settlement pattern that by its more compact and mixed-use character is less dependent on motorized transportation. These techniques and strategies will facilitate a self-sufficient community and result in shorter commutes by offering multi-modal transportation opportunities. The Plan also makes considerable investment into infrastructure that supports a unified pedestrian and bicycle system within the project site and will provide opportunities for future connectivity to its existing and future surroundings.</p>			
Objective:	S	N/S	N/A
Objective 7.3.3 Strengthen the island's sense of place.	✓		
Policies:	S	N/S	N/A
7.3.3.a: Protect and enhance the unique architectural and landscape characteristics of each community.	✓		
7.3.3.b: Encourage Hawaiian Architecture and tropical building designs.	✓		
7.3.3.d: Strongly encourage the preservation of buildings, structures, and sites of historic significance.	✓		



7.3.3.e: Require Community-based Public Design Charrettes/Design Workshops for major new urban expansion, new towns, and major urban infill projects.	✓		
7.3.3.f: Require design enhancement, landscaping, and integration of park and rides, bicycle parking areas and mass transit infrastructure to mitigate the effect of parking lots and structured parking on the urban landscape.	✓		
7.3.3.g: Ensure that safe and attractive public spaces (e.g., plazas, parks, town/village squares) are provided throughout the island's urban areas.	✓		
<p>Analysis: The Pi'ilani Promenade updated plan was prepared with community input. Numerous meetings were conducted and presentation given to community stakeholders, including the Kihei Community Association, neighboring property owners, Urban Design Review Board and State and County agencies.</p> <p>In order to create a sense of place, the Applicant proposes a diversification of uses within the Park. Creating a "place", a location which people are drawn to, involves a combination of factors. Among others, these factors include diversification of land uses and creation of an attractive and welcoming public realm. A satisfying and interesting place contains a variety of users and activities, and is friendly to people on foot. In order to create a place, the project proposes the creation of housing, retail, and open spaces to the site will add amenities for business attraction and retention and will create a true neighborhood in place of the vacant land that exists today. The combination of elements will create synergies beyond what all of these land uses would add up to as separated pods, and this added energy will drive development of employment of the Pi'ilani Promenade.</p> <p>The Pi'ilani Promenade will provide open space that will be landscaped with native plants and shade trees. A core feature of the plan is a 2-acre park space adjacent to the proposed residential component of the project. Pedestrian walkways and bikeways will be landscaped and incorporated throughout the site.</p>			
Objective:	S	N/S	N/A
Objective 7.3.5 Ensure that Maui's Planning process becomes more transparent, efficient and innovative.	✓		
Policies:	S	N/S	N/A
7.3.5.a: Encourage greater community involvement in land use planning and decision making.	✓		
7.3.5.b: Establish a predictable and timely development review process that facilitates the approval of projects that meet planning and regulatory requirements.	✓		



7.3.5.c: Increase inter-agency coordination between the Department of Planning and all State and County agencies responsible for infrastructure and public facilities provision.	✓		
7.3.5.d: Provide greater certainty and transparency in the development review process.	✓		
7.3.5.e: Expand and maintain land use and geographic information system databases for improved decisions and make data and products available to the public.			✓
<i>Analysis:</i> The Environmental Review process has and will continue to facilitate a great deal of community involvement in the decision making process for the proposed Pi'ilani Promenade.			

F. KIHEI-MAKENA COMMUNITY PLAN

Within Maui County, there are nine (9) community plan regions. From a General Plan implementation standpoint, each region is governed by a Community Plan which sets forth desired land use patterns, as well as goals, objectives, policies, and implementing actions for a number of functional areas including infrastructure-related parameters.

The Pi'ilani Promenade is located within the Kihei-Makena Community Plan (KMCP) region. The KMCP was adopted by Ordinance No. 2641 on March 6, 1998. The property is designated for (LI) Light Industrial uses by the KMCP. The KMCP defines "Light Industrial (LI)" as follows: "This is for warehousing, light assembly, service and craft-type industrial operations." The County of Maui Planning Department has consistently interpreted the KMCP's LI designation consistent with the M-1 Light Industrial zoning classification, as the KMCP specifically states that the goals, objectives and policies of the KMCP are implemented and effectuated through various processes, including zoning. Consistent with the Maui County long-standing application of the KMCP, the proposed projects complies with the LI designation in the KMCP. This issue, and the possible alternative of seeking an amendment of the KMCP, is discussed further under section V. D. Unresolved Issues.

Interregional Issues

The Kihei Makena Community Plan identifies Major Public Facilities and Upcountry transportation connection as the two (2) primary Interregional Issues important to the South Maui community.



1. Major Public Facility

The project will include the off-site development of a MECO substation to provide electrical power to the proposed project and anticipated future surrounding development. The Facility will be built and operated by MECO on land provided by the proposed project.

2. Upcountry Transportation Connection

The Pi'ilani Promenade improvements will include construction of a portion of the future Kihei Upcountry Highway (KUH) which is planned to intersect Pi'ilani Highway at Kaonoulu Street and extend mauka towards Haliimaile intersection with Haleakala Highway. Subsequent to the adoption of the KMCP in 1998, the Hawaii Department of Transportation formalized the location of the KUH. The KUH is considered both a major public facility and interregional infrastructural element. The portion of the KUH that bisects the project Promenade project will be constructed by the project and will be subsequently dedicated to the State of Hawaii.

The goals, objectives, and policies of the KMCP that are relevant to the proposed project are discussed below. In response to comments on the DEIS various goals, objectives and policies have been revised to more accurately reflect the proposed project as it relates to various government plans.

Kihei Makena Community Plan	S	N/S	N/A
Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable			
Land Use			
<i>Goal: A well-planned community with land use and development patterns designed to achieve the efficient and timely provision of infrastructural and community needs while preserving and enhancing the unique character of Ma'alaea, Kihei, Wailea and Makena as well as the region's natural environment, marine resources and traditional shoreline uses.</i>			
Objectives and Policies:	S	N/S	N/A
a. Acquire beachfront properties for public use.			✓
b. Identify priority growth areas to focus public and private efforts on the provision of infrastructure and amenities to serve existing residents and to accommodate new growth.	✓		
c. Upon adoption of this plan, allow no further development unless infrastructure, public facilities, and services needed to service new	✗		✓



development are available prior to or concurrent with the impacts of new development.			
d. Limit hotel uses to those areas presently planned for hotel use, and limit hotel development until adequate public facilities and services are established to meet existing needs.	✓		✓
e. Establish a system of parks, utility easements, shoreline areas, drainageways and wetlands as an open space framework for the urban areas of the region, i.e. where structures exist or are planned to exist, and provide an integrated system of pedestrian and bicycle paths.	✓		
f. Establish a distribution of land uses which provides housing, jobs, shopping, open space, and recreation areas in close proximity to each other in order to enhance Kihei's neighborhoods and to minimize dependence on automobiles.	✓		✓
g. Encourage the establishment of single-family and multi-family land use designations which provide affordable housing opportunities for areas which are in close proximity to infrastructure systems and other urban services.	✓		
h. Develop commercial services at the following locations to meet community needs: 1) North Kihei, between the existing South Kihei Road, Pi'ilani Highway and Uwapo Road. 2) A central business and commercial center for Kihei clustered about the South Kihei Road/Road "C" intersection. 3) In <i>existing</i> commercially zoned areas along South Kihei Road in the vicinity of Kalama Park. 4) Along South Kihei Road opposite the Kamaole beach parks.			✓
i. Limit commercial services to neighborhood business uses or other low-key business activities with a residential scale on those properties which abut single-family residential areas.	✓		
j. Locate resort-related retail commercial facilities at strategic points in the Wailea and Makena destination areas.			✓
k. Provide for limited expansion of light industrial services in the area south of Ohukai and <i>mauka</i> of Pi'ilani Highway, as well as limited marine-based industrial services in areas next to Ma'alaea Harbor. Provide for moderate expansion of light industrial use in the Central Maui Baseyard, along Mokulele Highway. These areas should limit retail business or commercial activities to the extent that they are accessory or provide service to the predominate light industrial use. These actions will place industrial use near existing and proposed transportation arteries for the efficient movement of goods.	✓		



l. Preserve coastal vistas, open space and recreational opportunities for residents by prohibiting further shoreline development except in places designated on the 1997 community plan land use map, and prohibit future community plan amendments along the shoreline that would increase the intensity of land use, with the exception of land use that is public or quasi-public in nature.	✓		
m. Provide for limited residential expansion in Ma'alaea which complements the existing natural and built environment.			✓
n. Maintain State Conservation District boundaries in the planning region. However, State Conservation District reclassification of lands may be warranted to enhance environmental preservation.			✓
o. Establish a site for a future higher educational institution north of the research and technology park project district.			✓
p. Prevent urbanization of important agricultural lands.	✓		
q. Allow ohana units only where sufficient infrastructure is available.			✓
r. Allow special permits in the State Agricultural Districts to accommodate unusual yet reasonable uses including: (1) limited agriculturally related commercial, public and quasi-public uses serving the immediate community; (2) uses clearly accessory or subordinate to a principal agricultural use on the property; (3) public facility uses such as utility installations or landfills whose location depends on technical considerations; and (4) extractive industries, such as quarrying, where the operation would not adversely affect the environment or surrounding agricultural uses.			✓
<u>Analysis:</u> The Applicant has changed items c, d and f to read "N/A". The remaining items in this section are supported by the Project.			
Implementing Actions:	S	N/S	N/A
a. Prepare a prioritized island-wide directed and managed growth strategy to ensure that the location, rate and timing of development is consistent with the provision of infrastructure and public facilities and services.			✓
b. Include conditions of approval for new residential developments requiring that adequate school facilities shall be in place before a certificate of occupancy is issued.	✗		✓
c. Prepare an Open Space Master Plan for the region to provide a unified system of non-motorized access to community resources, and to provide a planned program of resource stewardship. Establish standards			✓



<p>for the use of drainage ways, gulches, wetlands, and easements for public access. The Open Space Master Plan shall be prepared by partnership between governmental and non-governmental organizations. The plan preparation shall include, but not be limited to, public input and informational workshops; inventory and mapping of cultural, natural, and open space resources; and review of legal options and constraints. Professional design of the Open Space Master Plan should be funded; and, upon its adoption, the Open Space Master Plan should be incorporated into the Kihei-Makena Community Plan.</p>			
<p>d. Control the timing and phasing of project district construction through zoning in order to ensure systematic and incremental development. Such an action shall prevent haphazard development, and ensure that the provision of adequate infrastructure and public facilities and services takes place prior to or concurrent with development.</p>			✓
<p>e. Review, amend and adopt, as appropriate, zoning ordinances and maps to carry out the intent of the land use categories identified in the plan.</p>	✗		✓
<p>f. Establish and enforce building height limits and densities <i>mauka</i> of Pi'ilani Highway which preserve significant <i>mauka</i> views and vistas.</p>	✗		✓
<p><u>Analysis: The Applicant has changed items b, e, and f to read "N/A".</u></p>			
<p>The Pi'ilani Promenade is located in North Kihei, within the Maui Island Plan's Urban Growth Boundary. The proposed project will be developed in accordance with smart growth and New Urbanism planning principles, and will encompass a distribution of land uses that provide housing, jobs, neighborhood shopping, and open space and recreation areas in close proximity to each other (goals f and g). The project also incorporates rental housing that will provide affordable units for Maui residents.</p>			
<p>As discussed in Section II.E.3 and 4 (Proposed Action Project Description), the proposed project incorporates New Urbanism planning techniques and urban design strategies which help to create a settlement pattern that is more compact and mixed-use in character. This will facilitate a self-sufficient development and result in shorter commutes by offering multi-modal transportation opportunities. The proposed project will also make a considerable investment in infrastructure which will support a unified pedestrian and bicycle system within the project with opportunities for extending and connecting these systems to existing and future development in surrounding areas (goals b, c, and f).</p>			
<p>As discussed in Section III.A.10 (Agricultural Resources), The LSB and ALISH classification systems indicate that the lands underlying the project site possess poor soil and low soil ratings for productive agricultural uses. As such, the utilization of these poorly-rated agricultural lands for urban use and development is deemed appropriate.</p>			



The proposed project will comply with the 60-foot maximum building height limit set forth by Chapter 19.24, MCC pertaining to M-1, Light Industrial zoning which will help minimize potential adverse impacts on mauka views toward Haleakala.

The subject property is located in North Kihei, south of Ohukai Road, and mauka of Pi'ilani Highway. This area was designated in the KMCP for light industrial use in order to encourage urban expansion in the area mauka of Pi'ilani Highway (goal k). The original conceptual plan of 123 light industrial lots, which fit squarely within that designation, is no longer desirable or economically viable. Since the KMCP was adopted in 1998, the proposed planning for that area has adjusted. Other developments south of Ohukai and mauka of Pi'ilani are predominantly retail, with only some instances of true light industrial uses. The community planning process has evolved since 1998, and the current Maui Island Plan indicates that the Pi'ilani Promenade is located within the Urban Growth Boundary, and is surrounded by areas currently not zoned for urbanization, but designated as "planned growth areas." The Maui Island Plan specifically cites the need for mixed-use neighborhood centers "to provide services and jobs within close proximity to where people live and provide a more efficient land use pattern." Maui Island Plan at 8-27.

The Pi'ilani Promenade project follows these more recent planning guidelines, providing a mixed use that fits within the existing M-1 zoning, and provides a mix of light industrial, retail, and residential uses. Therefore an updated plan was prepared for this EIS which responds to the most current trends in the development of multi-use retail-living centers nationwide. The proposed project will strengthen Maui's economy by making the Pi'ilani Promenade a more attractive location for the limited light industrial activities envisioned within the KMCP as well as much needed retail businesses. These businesses will create a diverse range of jobs for Maui residents which, in turn, will benefit the local and Statewide economy. The result will be an increase in economic activities and employment opportunities consistent with community needs and desires, which will promote increased employment and entrepreneurial opportunities for Maui's residents. Thus, while the Pi'ilani Promenade project does not strictly support all of goal k in the KMCP, it meets other important competing planning criteria within the KMCP. The County of Maui has interpreted the Pi'ilani Promenade project as complying with the KMCP, as the KMCP provides that the goals and objectives are guidelines to the ultimate implementation of the plan. This issue, and the possible amendment of the KMCP, is discussed further in section VI.D. Unresolved Issues.

Environment

Goal: Preservation, protection, and enhancement of Kihei-Makena's unique and fragile environmental resources.

Objectives and Policies:	S	N/S	N/A
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<p>a. Acquire beachfront properties for public use.</p>			✓
<p>b. Preserve, protect, and restore unique natural areas with significant conservation values.</p>			✓
<p>c. Require that new shoreline development respect shoreline resources and maintain public access:</p> <ol style="list-style-type: none"> 1) Existing dune formations are important elements of the natural setting and should remain intact. 2) Indigenous or endemic strand vegetation should remain undisturbed; new development and landscaping should treat such vegetation as given conditions. 3) Planning for new shoreline development, as well as redevelopment, shall consider the cyclic nature of beach processes. Setbacks shall be used to provide a sufficient buffer between the ocean and structures to allow for periodic and long-term accretion and erosion of the shoreline. A Coastal Erosion Rate Analysis shall be developed. The planning commissions are encouraged to incorporate data from the analysis into planning decisions for shoreline areas, especially with respect to shoreline building setbacks. In the interim period prior to the completion of the analysis, the planning commissions are further encouraged to utilize minimum setbacks for multi-family and hotel uses of 150 feet from sandy shorelines, and 75 feet from rocky shorelines, or 25% of the average lot depth, whichever is greater. Where shoreline erosion threatens existing structures or facilities, beach replenishment shall be the preferred means of controlling erosion, as opposed to sole reliance on seawalls or other permanent shoreline hardening structures. 4) Storm water run-off from proposed developments shall not adversely affect the marine environment and nearshore and offshore water quality. 5) Planning, design, and layout for new development shall be integrated with public shoreline use and sound principles of resource management. 			✓
<p>d. Permit recreational activities in the shoreline zone which respond to shoreline characteristics and principles of sound resource management. Activities which damage or deplete shoreline resources, or are incompatible with ecological systems, shall not be permitted.</p>			✓



e. Protect the quality of nearshore waters by ensuring that land-based discharges meet water quality standards. Continued monitoring of existing and future waste disposal systems is necessary to ensure their efficient operation. Programs should be implemented to reduce the reliance on injection wells for wastewater disposal.	✓		
f. Protect all wetland resources, such as those at Kealia Pond and near Road "C". These open space and wildlife habitat resources are important for flood control and for their natural beauty.	✓		
g. Require the integration of wetlands and drainageways into an open space, pedestrian pathway, and bikeway system within and around the Lipoa business district.			✓
h. Encourage such land uses as would serve to reduce hazardous fire conditions in the developed community plan areas.	✓		
i. Discourage shoreline hardening structures where North Kihei Road abuts the coastline. Instead, use soft approaches such as dune restoration and beach nourishment with or without supporting structures.			✓
Implementing Actions:	S	N/S	N/A
a. Implement programs to reduce the reliance on injection wells for wastewater disposal.			✓
b. Establish and maintain a monitoring program for nearshore waters.			✓
c. Support the development of the Ma'alaea-Kealia bypass highway.	✓		
d. Develop a master plan for a recreational coastline access along North Kihei Road once the Ma'alaea-Kealia bypass is planned.			✓
e. Facilitate protection of valuable shoreline resources in the Open Space Master Plan by transferring State Beach Reserves and adjacent undeveloped State-owned lots to County jurisdiction. Prepare and implement a plan for enhancement of these lands to provide stewardship of cultural and natural resources and the fostering of traditional cultural activities.			✓
f. Survey, map, and describe the <i>mauka</i> boundaries of the State Beach Reserves to delineate between public and private property.			✓
g. Partner with the Na Ala Hele, South Maui Heritage Corridor, Kihei 2000, and Bikeways Maui organizations to establish a continuous trail/greenway/bikeway system from Kealia Pond to Kilohana Road, to			✓



provide pedestrian lateral accesses to the Kihei-Makena shoreline, and to protect and maintain traditional shoreline access.			
h. Initiate a wetlands enhancement project with the Kihei Franks development in coordination with the enhancement of the County owned wetland adjacent to Saint Theresa's Church. Include a pedestrian and bike path to allow school children to access the beach and greenway.			✓
i. Develop and implement a strategy for sand dune protection.			✓
j. New studies should be commissioned that seek to better understand site-specific causes of coastal erosion.			✓
k. Develop and implement a dune restoration project for the beach area along South Kihei Road from the Maui Lu to Suda Store. Such a project may use drift fencing, native vegetation, and dune walkovers in order to restore the sand dunes and prevent sand from blowing onto and across the road.			✓
<p><i>Analysis:</i> The proposed project will not impact Kulanihakoi Gulch or any coastal wetlands. The increase between pre- and post-development stormwater volume generated by the project site will be captured and stored onsite which will minimize potential drainage impacts to downstream and neighboring properties.</p> <p>The Pi'ilani Promenade is not located on the coastline; therefore policies regarding shoreline resources are not applicable. It should be noted, however, that Best Management Practices will be implemented during the construction and operation of the project to mitigate non-point source pollution to Maui's coastal resources. In addition, mitigation measures will be identified through the FEIS and regulatory review processes to help address any environmental impacts that may arise from the Project.</p> <p>To mitigate the potential of wildfires occurring on the subject property, site work for the development of the Pi'ilani Promenade will involve the removal of existing surface vegetation (e.g., buffelgrass) which could fuel fires. Additionally, the construction of buildings, roadways, and irrigated landscape plantings will help reduce the risk of wildfires.</p> <p>In light of the foregoing, it can be concluded that development of the site will not impact environmental resources on the property or within its immediate vicinity.</p>			
<p>Cultural Resources</p>			
<p>Goal: Identification, preservation, enhancement, and appropriate use of cultural resources, cultural practice, and historic sites that:</p>			



	S	N/S	N/A
a. Provides a sense of history and defines a sense of place for the Kihei Makena region;	✓		✓
b. Preserves and protects native Hawaiian rights customarily and traditionally exercised for subsistence, cultural, and religious purposes in accordance with Article XII, Section 7, of the Hawaii State Constitution, and the Hawaii Supreme Court's PASH opinion, 79 Haw. 425 (1995).	✓		✓
Objectives and Policies:	S	N/S	N/A
a. Identify, preserve, protect and restore significant historical and cultural sites.	✓		
b. Foster an awareness of the diversity and importance of cultural and archaeological resources and of the history of Kihei-Makena. Promote distinct cultural resources as an identifying characteristic of the region.	✓		
c. Encourage and protect traditional <i>mauka</i> and <i>makai</i> accesses, cultural practices and rural lifestyles.			✓
d. Protect those areas, structures and elements that are a significant and functional part of Hawaii's ethnic and cultural heritage.			✓
e. Encourage community stewardship of historic sites.			✓
f. Preserve and restore historical roads and paths as cultural resources, and require such resources to be available to the public.			✓
g. Recognize and respect family ancestral ties to certain sites.			✓
h. Establish "cultural parks" and heritage corridors for visitation and education.			✓
i. Establish cultural and educational programs to perpetuate Hawaiian and other ethnic heritages.			✓
j. Develop a County ordinance for indigenous architecture.			✓
<u>Analysis: the items listed in the Objectives and Policies section are N/A because there are no valued cultural, historical, or natural resources in the Project site, and because there are no traditional and customary native Hawaiian rights exercised within the Project site as documented in the CIA and SCIA prepared for the Project.</u>			
Implementing Actions:	S	N/S	N/A
a. Prepare a Kihei-Makena specific Cultural Resources Management Plan. Use the plan to update the Countywide Cultural Resources Management Plan. Include an inventory of cultural resources and develop strategies for the preservation and enhancement of those resources.	✓		✓



<p>b. Require development projects to identify all cultural resources located within or adjacent to the project area, prior to application, as part of the County development review process. Further require that all proposed activity include recommendations to mitigate potential adverse impacts on cultural resources, including site avoidance, adequate buffer areas and interpretation. Particular attention should be directed toward the southern areas of the planning region.</p>	<p>✓</p>		
<p>c. Implement a historic or cultural district overlay ordinance to provide protection for areas of significant archaeological, historical and cultural resources. These ordinances should be used at Palauea, Keone'o'io and other significant archaeological complexes in the Honua'ula District of the region.</p>			<p>✓</p>
<p>d. Upon development of Project District 8 (Palauea), the developer shall implement a historic park and interpretative center at Palauea, preserving the Palauea archaeological district and providing interpretation for sites in the Makena-Wailea region. Permitted uses shall include a cultural preserve/park area which shall be a minimum of at least 20 contiguous acres to protect and preserve known significant archaeological sites, which shall include, but not be limited to, the Palauea village and heiau complex, and the Palauea landing complex. Consideration should also be given to expanding the cultural preserve to include additional newly identified sites. Because of the significance of the sites, the County Cultural Resources Commission shall review all plans for development. Because of high public interest and the contiguous nature of the sites, consideration should be given to educational uses of the sites.</p>			<p>✓</p>
<p>e. Formulate and adopt rural and historic district roadway standards for the old Makena Road to promote the maintenance of historic landscapes and streetscapes in character with the region, so long as these standards are for public roadway purposes, and do not obstruct or interfere with the rights of the public for the use and enjoyment of the area. Makena Road shall be kept open for public use.</p>			<p>✓</p>
<p>f. General sites that should be identified for preservation include, but are not limited to, the following: 1) Ancient Trails/Old Government Roads 2) Fishponds 3) Landings 4) Nearshore marine cultural resources 5) Significant native vegetation zones</p>			<p>✓</p>



<p>6) Plantation ditch systems 7) Religious Structures (shrines, churches & heiau) 8) Old bridges 9) Plantation camps 10) Plantation era structures & homes 11) Petroglyphs 12) Burials</p>			
<p>g. Important sites and areas in the Kihei-Makena Community Plan region include the following: 1) Lahaina-Pali Trail 2) McGregor's Landing 3) Ma'alaea/McGregor Complex 4) Ma'alaea Petroglyphs 5) Kealia Pond 6) Naval Air Station Pu'unene 7) Kihei Landing 8) Keolahou Church 9) Kalepolepo Fishpond 10) David Malo Church 11) Waiohuli Kai Fishpond 12) <i>Ko`a</i> at Waimahaihai, Kama`ole 13) Kihei Regional Park Complex 14) Kama`ole House Site 15) Palauea Complex 16) Makena Landing Area Sites 17) Makena Complex 18) Keawala`i Church 19) Pu`u Olai 20) Mo`omuku <i>Ko`a</i> 21) Kanahena Landing Area 22) Moanakala Village 23) Kanahena Point Complex 24) Kalaeloa Complex 25) Keone`o`io Village 26) Hoapili Trail 27) Keawanaku Complex 28) Wawaloa Complex 29) Alaha Complex 30) Waiakapuhi Complex</p>			<p>✓</p>



<p>31) Kalulu Complex</p> <p>The above list is not comprehensive. It represents some of the well known sites that are currently listed in the State inventory of Historic Places and on file with the State and National Registers of Historic Places. Many more sites have not been surveyed for historic significance. A map indicating the general location of these sites is on file with the County's Department of Planning. The said map should be consulted prior to development proposals affecting the above-mentioned areas. Prior to any development approvals, the said map shall be referenced and the comments of the State Historic Preservation Division and the County Cultural Resources Commission shall be sought.</p>			
<p><u>Analysis: The Applicant has changed implementing action item a to read "N/A" because the project is not proposing to prepare a Kihei Makena specific cultural resources management plan.</u></p> <p>As discussed in Section III.A. 8 (Historical and Archaeological Resources), the proposed project will not impact Kulanihakoi Gulch and is not anticipated to significantly impact the physical environment. The project promotes the preservation of historic resources and the Applicant's Archaeologist submitted a data recovery plan that was received by the SHPD on June 17, 2016 and approval is pending. will work with the State Historic Preservation Division to prepare a data recovery plan.</p> <p>The archaeological survey of the offsite water storage tank area was conducted on January 8 and 13, 2014. No significant materials or cultural remains were located on this previously disturbed land during the 2014 archaeological survey. (See: Appendix F, "Archaeological Inventory Survey").</p> <p>A public information meeting for the proposed project was held on February 25, 2014. Transcripts from this meeting have been included in the DFEIS. The focus of the meeting was to review the previous 1994 AIS and discuss the findings of the current 2014 AIS. There was discussion about how the known archaeological sites could be incorporated into the design of the project and/or landscaping plan. Due to the location of sites relative to infrastructure site development requirements preservation of sites is not possible; however, data recovery has been proposed for selected sites within the project area. In previous archaeological work done on the site a petroglyph stone was identified. Under the original ranch ownership this stone was relocated to more appropriate location in the Ahupua'a and a relocation report done, submitted and approved by SHPD for the relocation effort. It was suggested that perhaps the original landowner would be willing to relocate the stone to the property. The landowner was asked about this possibility and declined the request. In</p>			



addition, the archaeological monitoring plan that was submitted to the SHPD for review has been approved and is referenced for all recent work on the site. The monitoring plan may be found in Appendix H and may be updated once project construction is initiated.

As discussed in Section III.B.4 (Cultural Resources) the cultural impact statement (CIA) and the SCIA which ~~was~~ were prepared for the proposed project reported that there were no visible cultural resources, (*i.e.* medicinal plants, shoreline resources, religious sites, or archeological resources) observed on the property. From a cultural practices and beliefs perspective, the subject property bears no apparent signs of cultural practices or any gatherings currently taking place on the site. The oral history interviews did not reveal any known gathering places on the subject property nor did any access concerns surface as a result of the proposed Project. In light of the foregoing, it can be concluded that development of the site will not impact cultural resources on the property or within its immediate vicinity.

Economic Activity

Goal: A diversified and stable economic base which serves resident and visitor needs while providing long-term resident employment.

Objectives and Policies:	S	N/S	N/A
a. Establish a sustainable rate of economic development consistent with concurrent provision of needed transportation, utilities, and public facilities improvements.	✓		
b. Expand educational opportunities and encourage research and technological activities.	✗		✓
c. Encourage research, development, and use of alternate energy sources.	✓		
d. Establish balance between visitor industry employment and non visitor industry employment.	✗		✓
e. Provide for the preservation and enhancement of important agricultural lands for a variety of agricultural activities, including sugar cane, diversified agriculture and aquaculture.			✓
f. Increase the availability and variety of commercial services to provide for regional needs and strategically establish small scale commercial uses within, or in close proximity to, residential areas.	✓		
Implementing Actions:	S	N/S	N/A
a. Seek State and private support for the establishment of a four-year university in the Kihei-Makena region.			✓
b. Establish a comprehensive data base to analyze county and regional economic statistics.			✓



c. Where feasible within the region, utilize alternate energy sources in all public structures, and encourage the same in private residences.	✓		
<p><u>Analysis: The Project site is located on the mauka side of Pi'ilani Highway and supports items a and f by creating the opportunity for economic development by permitting a variety of commercial services within close proximity to the existing and proposed residential areas. The Applicant has changed items b and d to read "N/A".</u></p>			
<p>As discussed in Section III.B.3 (Economy), the construction of the Pi'ilani Promenade is expected to inject approximately \$212 million of new capital investment into the local economy and provide an estimated 878 "worker years" of employment as well as \$66.5 million in total wages over a 12 to 15 year period. The effect of these expenditures will have positive direct, indirect, and induced beneficial impacts on the economy of the County of Maui. During its operations phase, the Pi'ilani Promenade will increase the level of capital investment in the region which will create employment opportunities and economic stimulus for the region. The proposed project will provide direct employment opportunities for Maui residents and contribute to economic diversification and growth for both Maui and the State. After "stabilization," the Pi'ilani Promenade is envisioned to support 1,210 permanent jobs with an annual payroll of about \$ 36.6 million.</p> <p>The proposed project will incorporate New Urbanism principles in a manner that will reduce the Project's environmental impacts while creating a more livable community. The design will enhance the physical quality of the property by providing housing and a variety of commercial facilities and services which are supported by commensurate infrastructure.</p> <p>As discussed in Section III.D.6 5(Utilities Electrical), the Pi'ilani Promenade will include energy-efficient design and energy conservation measures; specifically, in areas such as lighting, air-conditioning, and building materials. Solar hot water heaters will be utilized throughout the residential portion of the development and the installation of Photovoltaic Energy Systems will be encouraged where feasible and appropriate.</p>			
<p>Housing and Urban Design</p>			
<p>Goal: A variety of attractive, sanitary, safe and affordable homes for Kihei's residents, especially for families earning less than the median income for families within the County. Also, a built environment which provides complementary and aesthetically pleasing physical and visual linkages with the natural environment.</p>			
<p>Objectives and Policies:</p>	<p>S</p>	<p>N/S</p>	<p>N/A</p>
<p>a. Provide an adequate variety of housing choices and range of prices for the needs of Kihei' s residents, especially for families earning less than</p>	<p>✓</p>		



the median income for families within the County, through the project district approach and other related programs. Choices can be increased through public/private sector cooperation and coordinated development of necessary support facilities and services.			
b. Require a mix of affordable and market-priced housing in all major residential projects, unless the project is to be developed exclusively as an affordable housing project.	✓		
c. Preserve Kihei-Makena's significant views of the Pacific Ocean and the broad vista to the Central Maui and Upcountry region. Prohibit the use of walls higher than 4 feet in front yard setbacks especially in areas close to the shoreline where view corridors can be blocked.	✓		
d. Provide for integration of natural physical features with future development of the region. New development shall incorporate features such as gulches and wetlands into open space and pedestrian pathway and bikeway systems.	✓		
e. Implement landscaped setbacks for future multi-family and commercial areas. Developments shall provide space for landscaped pedestrian ways and bikeways.	✓		
f. Incorporate the principles of xeriscaping in all future landscaping.	✓		
g. Encourage the use of native plants in landscaping in the spirit of Act 73, Session Laws of Hawaii, 1992.	✓		
h. Recommend to the Maui County Arborist Committee for consideration as "Exceptional Trees" all trees, or groves of trees, that have historic or cultural value, represent an important community resource, or are exceptional by reason of age, rarity, location, size, aesthetic quality, or endemic qualities. Healthy mature trees shall be saved and incorporated in the landscape plans of subdivisions, roads, or any other construction or development.			✓
Implementing Actions:	S	N/S	N/A
a. Develop a comprehensive strategy for housing assistance which coordinates all available public and private resources and incorporates appropriate regulatory measures.			✓
b. Explore modifying zoning, building and subdivision codes to incorporate minimum lot sizes, compact parking ratios, and roadway and utility standards which meet resident needs but which may depart from customary urban standards, in an effort to reduce development and housing costs.	✓		



<p>c. Plant appropriate trees, turfgrass, and ground covers along existing public rights-of-way, roads, and parks. Neighborhood communities and citizen groups shall be encouraged to upgrade their streets and parks in accordance with the Maui County Planting Plan.</p>	<p>✓</p>		
<p>d. Provide landscaped buffer areas between Pi'ilani Highway and adjacent communities to mitigate highway noise and to reduce the visual impact of development. Both Pi'ilani Highway and South Kihei Road shall be landscaped to achieve a parkway character.</p>	<p>✓</p>		
<p>e. Provide an aesthetic landscaped entry-way and park at the north end of Kihei, north of the future commercial area. Provide a similar Kihei entry-way at Road C.</p>			<p>✓</p>
<p>f. Develop Kihei-Makena Urban Design Guidelines to address architectural, landscape, and graphic design standards. Use the guidelines to establish a sense of place by defining distinctive standards for four neighborhoods: the Uwapo Road-Suda Store neighborhood, the Lipoa Street-Azeka Place neighborhood, the Kalama Park neighborhood, and the Kama`ole Parks neighborhood.</p>	<p>✓</p>		
<p>g. Implement streetscape beautification through an "adoption" program for trees, sidewalks, street frontages, and intersections.</p>	<p>✓</p>		
<p><i>Analysis:</i> As discussed in Section III.B.2 (Housing), the Pi'ilani Promenade will offer multi-family housing opportunities for Maui residents. The project will include affordable rental housing units in compliance with Chapter 2.96, MCC Residential Workforce housing Policy.</p> <p>Park and open space areas within the Pi'ilani Promenade will be landscaped with drought-tolerant native plant species, as well as shade trees to enhance and provide protective cover for the park. Street trees will be planted along the project's internal roadways and along its interior bicycle and pedestrian network. Landscape design will be mindful of irrigation water requirements and will use recycled water to the extent it is available. The Maui County Planting Plan will serve as a resource for the selection of landscape planting materials for the Project's parks, open space areas, and along its roadways.</p>			
<p>Physical and Social Infrastructure</p>			
<p>Goal: Provision of facility systems, public services and capital improvement projects in an efficient, reliable, cost effective, and environmentally sensitive manner which accommodates the needs of the Kihei-Makena community, and fully support present and planned land uses, especially in the case of project district implementation.</p>			



Allow no development for which infrastructure may not be available concurrent with the development's impacts.			
<u>Transportation</u>			
Objectives and Policies:	S	N/S	N/A
a. Develop and implement a well-planned road and public transportation system to allow residents and visitors to move safely, effectively and comfortably within the region. Roadway improvements should be planned, designed, and constructed as prioritized under the Implementing Actions section below, and as generally described in the Kihei Traffic Master Plan.	✓		
b. Undertake transportation system improvements concurrently with planned growth of the Kihei-Makena region. Require adequate interregional highway capacity, including the widening of Pi'ilani and Mokulele Highways to four lanes, prior to the construction of major projects south of Kilohana Road or <i>mauka</i> of Pi'ilani Highway.	✓		
c. Strengthen the coordination of land use planning and transportation planning to promote sustainable development and to reduce dependence on automobiles. New residential communities should provide convenient pedestrian and bicycle access between residences and neighborhood commercial areas, parks and public facilities.	✓		
d. Support ridesharing, bicycle and pedestrian use, alternative work schedules, traffic signal synchronization, and/or other transportation demand management strategies.	✓		
e. Support a new bypass highway <i>mauka</i> of Pi'ilani Highway, coordinated with a Ma'alaea-Kealia Pond bypass highway, and an Upcountry-Kihei connector road, to be constructed as growth in the region warrants.	✓		
f. Protect and preserve the traditional rural scale and character of existing portions of old Makena Road in a manner similar to that existing at Keawalai Church.	✓		✓
g. Plan, design, and construct a pedestrian and bikeway network throughout the Kihei-Makena region which considers the utilization of existing stream beds, drainageways, wetlands and public rights-of-way along coastal and inland areas.	✓		
h. Encourage joint public/private participation in the planning, design and construction of roadway improvements, especially those identified in this plan.	✓		



<p>i. Support the planning and design of the Ma'alaea-Kealia bypass highway in order to address potential environmental concerns of North Kihei Road, and its proximity to the shoreline.</p>	✓		✓
<p><i>Analysis:</i> The Pi'ilani Promenade supports the Kihei Design Guidelines. The project's non-vehicular transportation strategy includes: 1) compact and mixed-use development patterns, 2) integrating pedestrian-oriented streets, street trees, sidewalks, and traffic calming features, 3) both striped and separated bike lanes in appropriate locations, and 4) supporting connectivity to adjacent developments including Kihei High School and land uses <i>makai</i> of Pi'ilani Highway.</p> <p>The Applicant has changed items f and i to read "N/A" because the Project does not protect and preserve the traditional rural scale and character of existing portions of old Makena Road because the Project is located in Kihei. Item i has been changed to "N/A" because the Project does not involve the planning and design of the Ma'alaea-Kealia bypass highway.</p>			
<p>Implementing Actions:</p>	S	N/S	N/A
<p>a. Plan, design and construct a new Road "C", from South Kihei Road to Pi'ilani Highway, to provide an alternative connector roadway in Central Kihei, as described in the Kihei Traffic Master Plan. Said alignment shall extend in an easterly direction from its existing segment at South Kihei Road and link with Pi'ilani Highway. This is the highest priority for roadway improvements in the community plan region.</p>			✓
<p>b. Plan, design and construct appropriate sections of a new North-South Collector Road, from Uwapo Road to Keonekai Road, to facilitate improved traffic movement in Kihei proper. When selecting a specific alignment, impacting existing structures should be kept to a minimum. Consideration should be given to segments between Kaonoulu Street and Auhana Street as well as between Ke Alii Alanui and Keonekai Road. In terms of roadway improvements within the community plan region, this shall be the second priority.</p>			✓
<p>c. Widen Pi'ilani Highway, between Mokulele Highway and Wailea Ike Drive, to four lanes. In terms of roadway improvements within the community plan region, this shall be the third priority.</p>			✓
<p>d. Plan, design and construct a new Road "B", from South Kihei Road to the new North-South Collector Road, to improve internal circulation in the Central Kihei area.</p>			✓
<p>e. Plan, design and construct a new Road "A", from Road "B" to Lipoa Street, to provide increased circulation in the Lipoa business area.</p>			✓



<p>f. Provide clear signage with adequate lighting along Pi'ilani Highway to indicate Kihei access points. Also provide a landscape buffer and bike path on both sides of Pi'ilani Highway.</p>	<p>✓</p>		
<p>g. Provide left turn storage lanes and acceleration/ deceleration lanes on Pi'ilani Highway, and traffic signals at important intersections along South Kihei Road.</p>	<p>✓</p>		
<p>h. Widen Mokulele Highway to four lanes.</p>			<p>✓</p>
<p>i. Preserve and enhance the identity of Kihei's neighborhoods by designing the north-south collector road in discontinuous segments. Work with landowners, neighborhoods, and community groups to plan and implement an adjacent but separate trail/greenway/bike path to provide non-motorized public access along the full length of the road reserve. In sections where no roadway is built, the trail/greenway/bike path may be broadened to form a neighborhood park, public access, or open space area.</p>			<p>✓</p>
<p><i>Analysis:</i> A Traffic Impact Analysis Report (TIAR) was prepared for the Project and is discussed in Section III.D.1 "Roadways" and in Appendix M. The TIAR identifies the impact of the proposed project on the region's roadways and identifies the necessary on- and off-site roadway improvements to mitigate project-related traffic impacts. These proposed improvements include planned State and County capital improvement projects (CIP), as well as improvements that will be initiated by the Pi'ilani Promenade and other participating landowners in response to their development proposals.</p> <p>The gradual build-out of the project will increase traffic to and from the project site. As mentioned in Section III.D.1 "Roadways" and in Appendix M-1. The recommended mitigation measures as part of the proposed project include modification and expansion of the Pi'ilani Highway at Kaonoulu Street intersection to provide left turn, right turn, and through lanes. The intersection will be signalized as a part of surrounding developments.</p> <p>Growth and development in the Kihei-Makena Community Plan region (independent of the Pi'ilani Promenade) will be the major cause of traffic impacts to the region's roadways in the future. The Pi'ilani Promenade will be an active partner in working with the State and County, as well as area developers to ensure that regional roadways operate at an acceptable levels-of-service.</p> <p>The Pi'ilani Promenade supports the Kihei Design Guidelines. The project's non-vehicular transportation strategy includes: 1) compact and mixed-use development patterns, 2) integrating pedestrian-oriented streets, street trees, sidewalks, and traffic calming features, 3) both striped and separated bike lanes in appropriate locations, and 4) supporting connectivity</p>			



to adjacent developments including Kihei High School and land uses *makai* of Pi'ilani Highway.

The Project is located in north Kihei close to residential areas adjacent to the Pi'ilani Highway and not located within close proximity to the existing public schools in Kihei, however it is anticipated that educational facilities in addition to the Kihei High School will be built mauka of Pi'ilani Highway, therefore this Project site will become an integral piece of future developments mauka of Pi'ilani Highway. The Project site will serve as a link between the existing neighborhoods surrounding Ohukai Road to the future Kihei High school. As mentioned a pedestrian easement will be provided from Ohukai Road into the Project site's network of sidewalks and bike paths.

From a regional perspective, as part of the Kihei High School project conditions of approval, the DOE must provide an over or underpass across Pi'ilani Highway to provide safe pedestrian access, which will likely become a primary pedestrian route connecting developments mauka and makai of Pi'ilani Highway. Furthermore there will be an opportunity to provide lateral access along Pi'ilani Highway across Kulanihakoi and Waipuiani Gulches to the MRTP.

The on-site pedestrian oriented improvements proposed as part of the Project will reduce the need for the automobile and create a healthier lifestyle for those who live there, and the off-site easement will expand the regional non-vehicular transportation network.

The transportation demand and management measures proposed for the project include encouraging alternate work schedules and off-peak hours for employment generators and supporting park and ride, ridesharing, carpooling, and van pooling. In addition, the Applicant will also meet with the Maui Department of Transportation to discuss the possibility of establishing bus stops within the project site. At the time of submittal of this FEIS, the Maui DOT is not planning a bus route to service the Project. As demand is created in South Maui, the Maui DOT will evaluate the need for additional bus stops mauka of Pi'ilani Highway.

Water Distribution

Objectives and Policies:	S	N/S	N/A
a. Provide for appropriate water source and transmission improvements concurrent with planned growth of the Kihei-Makena region.	✓		
b. Support and expand the projected development of the Central Maui and East Maui water systems in order to meet the needs of all Maui residents.	✓		
c. Develop water conservation, reuse and educational programs.	✓		



d. Encourage the use of non-drinking water for irrigation purposes and water features. Prohibit the use of drinking water in large water features or require substantial mitigation fees.	✓		
e. Encourage the use of plants which have a relatively low need for water.	✓		
<p><i>Analysis:</i> A Preliminary Engineering Report (PER) was prepared for the Project and is discussed in Section D3-5 (Drainage, Water and Wastewater) and in Appendix L. The proposed project will be served by the County's public water system which is owned and operated by the Department of Water Supply (DWS). The PER describes the water source and transmission improvements which are required for the project and will be coordinated with the DWS.</p> <p>The development of the Pi'ilani Promenade will involve the construction of a 1.0 MG water tank and associated infrastructure which will connect to the County water system and be used by the project and the public. The proposed water system improvements will be dedicated to the County upon completion.</p> <p>The Project will incorporate water conservation measures to minimize drinking water demand. These measures may include the use of water conserving fixtures, the use of reclaimed and brackish water for irrigation, the use of drought-tolerant plant materials, and the use of efficient low-flow irrigation systems.</p>			
Liquid and Solid Waste			
Objectives and Policies:	S	N/S	N/A
a. Coordinate improvements to sewer transmission lines and wastewater reclamation facilities to meet the needs of future population growth. Require that the Wailea Resort Company and the Wailea Makena Alliance work toward a solution that would enable the Wailea sewerage system to be dedicated to the County.	✓		
b. Provide efficient, safe and environmentally sound systems for the reuse, recycling, and disposal of liquid and solid wastes.	✓		
c. Reduce the reliance on injection wells for wastewater disposal. Require the use of reclaimed effluent--a procedure which is safe, economical and environmentally sound--for irrigation of golf courses, parks and landscaped areas.			✓
d. Encourage public awareness of the need to reduce, reuse, recycle and compost waste materials, and make composting facilities available to the public.	✓		



Analysis: As discussed in Section III.D.3 (Wastewater), the Pi'ilani Promenade is expected to generate 114,000 gallons of wastewater per day. The development will connect to the existing County sewerage system at an appropriate location where the County's sewer system has sufficient capacity to accept the wastewater generated by the project.

A solid waste management plan will be coordinated with the Solid Waste Division of the Maui Department of Environmental Management (DEM), for the disposal of onsite and construction-related waste material. After construction, the Pi'ilani Promenade's Owners and Tenants Association will implement strategies from the County of Maui Integrated Solid Waste Management Plan (2009) for diverting solid waste from landfills. Waste materials comprised of paper, aluminum, glass, and plastic products will be recycled to the extent possible. Waste that cannot be recycled will be sent to the Central Maui Landfill in the Pu'unene area.

Drainage

Objectives and Policies:	S	N/S	N/A
a. Design drainage systems that protect coastal water quality by incorporating best management practices to remove pollutants from runoff. Construct and maintain, as needed, sediment retention basins and other best management practices to remove sediments and other pollutants from runoff.	✓		
b. Construct necessary drainage improvements in flood prone areas. Where replacement drainage are required for flood protection, these systems shall be designed, constructed, and maintained using structural controls and best management practices to preserve the functions of the natural system that are beneficial to water quality. These functions include infiltration, moderation of flow velocity, reduced erosion, uptake of nutrients and pollutants by plants, filtering, and settlement of sediment particles. The use of landscaped swales and unlined channels shall be urged.	✓		
c. Support the implementation of flood control projects and sediment retention basins <i>mauka</i> of Pi'ilani Highway to address present problem areas.	✓		
d. Minimize the increase in discharge of storm water runoff to coastal waters by preserving flood storage capacity in low-lying areas, and encouraging infiltration of runoff.	✓		
e. Encourage the use of setbacks and flood protection areas as part of an open space pedestrian-way and bikeway network throughout the region.	✓		



Implementing Actions:	S	N/S	N/A
a. Formulate a drainage master plan for Kihei-Makena that considers the cumulative impacts of existing and planned development. The master plan shall guide future development while preventing flooding and providing guidance to reduce the degradation of coastal waters.	✓		
b. Establish a comprehensive program of improvements to the storm drainage system; implement a maintenance program; and ensure that safety, property loss, pollutant removal, and the need for comprehensive planning, are considered.	✓		
c. Revise the County drainage rules to require that drainage system design shall not adversely affect downstream and coastal water quality.	✓		
<p><i>Analysis:</i> As discussed in Section III.D.2 (Drainage), stormwater runoff from the Pi'ilani Promenade is not expected to have a significant adverse effect upon groundwater, downstream properties, or marine waters. In accordance with the County's "Rules for the Design of Storm Drainage Facilities" all drainage improvements will be designed to retain the incremental increase in runoff generated by the project site.</p> <p>Stormwater will be collected and managed through a drainage system that will include onsite surface and subsurface drainage basins or chambers. These systems will be designed so that there will be no increase in the peak rate of stormwater runoff leaving the property compared to existing conditions. Best Management Practices (BMPs) will be implemented during the construction and operational phases of project development to protect coastal water quality. Temporary construction measures include, but are not limited to, dust screens, silt fences, filter berms, fuel containment berms, and tire cleaning pads. Construction BMPs will comply with the provisions of Chapter 20.08, MCC pertaining to "Soil Erosion and Sediment Control."</p> <p>Permanent BMPs are measures that are part of the project and will remain in place after the construction has been completed. Permanent measures are intended to reduce stormwater pollution generated from the development of the project site. The use of detention basins, grassed swales, and permanent grassing, and the landscaping of exposed areas will be implemented to provide a level of stormwater filtration and pollution control.</p>			
Energy and Public Utilities			
Objectives and Policies:	S	N/S	N/A
a. Promote energy efficiency as the energy resource of first choice, and increase energy efficiency in all sectors of the community.	✓		
b. Locate goods, services, and employment in close proximity to residential centers to minimize energy expenditures for transportation.	✓		



Support the development of communication infrastructure and promote telecommuting to minimize travel.			
c. Increase the use of renewable resources in all County-owned buildings, facilities, and vehicles. Utilize renewable energy for water pumping or other energy services which can take advantage of intermittent energy resources.			✓
d. Promote environmentally and culturally sensitive use of renewable energy resources like biomass, solar, wind, and hydroelectric energy in all sectors of the community.	✓		
e. Support the establishment of an alternate fuels distribution infrastructure.			✓
f. Interface County planning with the energy utilities' integrated resource planning programs.	✓		
g. Encourage the provision of public utilities which will meet community needs in a timely manner.	✓		
h. Require proper site selection, facility construction and monitoring of power generation facilities in order to minimize adverse environmental impacts upon the Kihei-Makena community.	✓		
i. Increase the energy security of community "lifeline" facilities and improve energy emergency response capabilities.			✓
Implementing Actions:	S	N/S	N/A
a. Develop incentives and requirements for energy-efficient building design and site development practices through various approaches, including modifications to building, zoning, and subdivision codes.	✓		
b. Develop, compile and disseminate information on new energy technologies, policies, and programs that may prove helpful to the community's economy and environment.			✓
c. Initiate an integrated County energy resource planning program.			✓
d. Use energy-efficient street lights and develop appropriate street lighting standards for agricultural and rural areas.	✓		
<p><i>Analysis:</i> <u>Item b is supported by the Project. The Project site will allow Kihei residents to minimize energy expenditures for transportation by making commercial options available in Kihei, thereby relieving the need to travel to Kahului for such services.</u> The implementation of the project will provide utilities prior to or concurrent with development. As discussed in Section D III.D.6 <u>5(Utilities Electrical)</u>, the Pi'ilani Promenade will include energy-efficient design and conservation measures; specifically, in street lighting, air-conditioning, and building materials. Solar hot water heaters will be utilized throughout the residential portion</p>			



of the development and the installation of Photovoltaic Energy Systems will be encouraged where appropriate and feasible.

Recreation			
Objectives and Policies:	S	N/S	N/A
a. Provide high-quality recreational facilities to meet the present and future needs of residents of all ages and physical ability.	✓		
b. Provide for a range of park sizes and types at neighborhood, community and regional scales. New residential developments shall provide recreational facilities on-site to meet the immediate needs of project residents.	✓		
c. Plan, design and construct a regional park on approximately 100-150 acres within the District. Facilities should include, but may not be limited to: a community center, swimming pool, ball fields, and basketball and tennis courts. Consideration should be given to locating the park in fairly close proximity to the Kihei Wastewater Reclamation Facility so that treated effluent may be used for park irrigation purposes.			✓
d. Encourage the construction of public parks adjacent to schools to provide for joint utilization of facilities by school and community.			✓
e. Improve recreation facilities and services through the integration of public parking, vehicular drop-offs and turnarounds, and sanitation facilities with facility planning and design.			✓
f. Improve public access to shoreline and nearshore resources through the following measures: 1) Develop and implement a plan for public access to the shoreline, which includes both existing and future accesses, based on the location of significant shoreline resources. Accesses shall be consistent with the characteristics of resources to be reached. 2) Provide adequate landscaped public access to shoreline areas with significant recreational and scenic value. Provide adequate lateral public access along the shoreline to connect significant shoreline areas and to establish continuity of the public shoreline areas. Particular attention shall be directed toward southern shoreline resources from Polo Beach southwards, and between Kama`ole Parks II and III. 3) Require setbacks to include recreational space on lands behind the legally defined public shoreline zone wherever possible. This allows for adequate recreational activities and proper management of the shoreline.			✓



4) Provide setback areas with landscaping to enhance recreational use and scenic quality. Recreational amenities should be commensurate with the scale of the setback area, intended use, and resource characteristics.			
g. Establish several youth centers throughout the region, one of which could be located at the park site adjacent to Lokelani Intermediate School.			✓
h. Provide for adequate parking at all park facilities. Many existing parks lack sufficient parking and require substantial increases in parking spaces.			✓
i. Support the creation and promotion of overnight campsites within the region.			✓
Implementing Actions:	S	N/S	N/A
a. Designate appropriate locations and provide for community and neighborhood parks within the Kihei-Makena region.	✓		
b. Revise standards in the park dedication ordinance to increase the quantity and quality of parks generated by new developments. Strategies which should be explored include increasing park assessment provisions, various cash vs. land dedication options, and provision of active vs. passive recreation parks. The analysis should recognize the importance of on-site recreational facilities as well as the need for parks at the neighborhood, community and regional level.			✓
c. Implement Makena-LaPerouse Park for nature-oriented recreation, including shoreline activities, picnicking, camping, biking, and interpretive/educational pursuits. Provide for a residential caretaker and security personnel to oversee facilities and public safety at this large remote destination.			✓
d. Provide adequate maintenance programs and enforce existing regulations regarding littering and defacement of public property at all public facilities.			✓
e. Create a master plan to rehabilitate the existing beach parks in the region, and to develop County-owned lands designated for park use.			✓
<p><i>Analysis:</i> As discussed in Section II.E.3 and 4 (Proposed Action Project Description), the revised Pi'ilani Promenade plan includes 226 apartment units, including a neighborhood park for active play along with a unified pedestrian and bicycle system which will connect the park with existing and future development in the surrounding area. In addition, the Pi'ilani Promenade is subject to, and will comply with, the provisions of Section 18.16.320, MCC which requires developers to provide land and/or money for park and playground purposes in the Kihei-Makena Community Plan region.</p>			



Health and Public Safety			
Objectives and Policies:	S	N/S	N/A
a. Improve and expand the delivery of health and public safety services to Kihei-Makena residents and visitors.			✓
b. Provide for the establishment of a health clinic with full emergency services.			✓
c. Support a new full-service hospital facility in the Kihei-Makena Region to be constructed as growth in the region and the island warrants.			✓
Implementing Actions:	S	N/S	N/A
a. Provide a police station in the Kihei-Makena region.			✓
b. Expand firefighting and rescue capabilities, including the acquisition of a new ladder truck, and the provision of a fire and ambulance station in the Wailea area.			✓
<p><i>Analysis:</i> Build-out of the Pi'ilani Promenade includes a new 1 MG water tank that provides additional fire flow and public safety in Kihei. However the project will increase demands upon Maui's Police and Fire Departments. In response to the impact that new development has on these facilities, the County has initiated the preparation of an impact fee ordinance that will collect monies for police and fire capital improvements. These monies will be collected from developers at the time of building permit issuance. The Applicant will work with the County to pay any such fees as required by ordinance. In addition, the Pi'ilani Promenade will generate property tax revenue that will help fund County facilities. The primary funding source for Police and Fire facilities on Maui are property tax revenues that are deposited into the County's General Fund.</p> <p>The Pi'ilani Promenade is zoned for M-1, Light Industrial uses. While medical clinics are allowed by M-1 zoning, no health clinic with full emergency services is proposed as part of this project.</p>			
Education			
Objectives and Policies:	S	N/S	N/A
a. Require the delivery of quality educational facilities at the time such facilities are needed. Emphasize advanced planning so that school facilities such as classrooms, playgrounds, libraries, cafeterias and other appurtenant structures are delivered in a timely manner so as to eliminate the use of portable facilities.			✓
b. Enhance the classroom learning environment through measures which would reduce excessive temperature and background noise problems.			✓



c. Consider a third elementary school site of approximately 20 acres in the North Kihei area.			✓
d. Build a high school to serve the Kihei region when required to accommodate growth.			✓
e. Encourage the construction of child day care centers which are located convenient to users, but which place minimal impact upon residential neighborhoods.			✓
Implementing Actions:	S	N/S	N/A
a. Enhance the classroom learning environment through such measures as the installation of air-conditioning and ceiling fans.			✓
b. Require the construction of a playground and physical education facilities east of Lokelani Intermediate School. Consider the joint use of property on the south side of Lokelani Intermediate School for playground use in order to provide additional recreation space and flexibility for both Lokelani and Kihei Elementary schools.			✓
c. Request that the Department of Education shall provide and maintain a landscaped buffer between Pi'ilani Highway and Lokelani and Kihei Elementary schools. This visually attractive buffer would reduce excessive noise problems from Pi'ilani Highway.			✓
d. Plan and locate a site for a high school to serve the Kihei region.	✓		
<p><i>Analysis:</i> As discussed in Section III.C.4 (Schools), <u>The Project has not been designed to accommodate a public school site.</u> In 2007, the Hawaii Legislature enacted Act 245 as Section 302A, HRS, "School Impact Fees". Based upon this legislation, the DOE has enacted impact fees for residential developments that occur within identified school impact districts. The Project is within the boundaries of the Central Maui Impact District and is within the Makawao Cost Area of that district. Projects within the district and cost area pay a construction fee and either a fee-in-lieu of land or a land donation, at the DOE's discretion. The Economic Impact Assessment estimates the projects impact fee is \$535,846.00 <u>\$553,926.00</u> (See: Appendix K, "Economic and Fiscal Impact Assessment"). At the appropriate time, the Applicant will contact the DOE to enter into an impact fee agreement <u>that will help finance the construction of a school facilities in Kihei.</u></p> <p><u>The Applicant had discussions with the DOE on the Project and is still designing the rental apartment portion of the Project and will enter into a written agreement with the DOE after the EIS and LUC review process has concluded.</u></p>			
Government			



Goal: Efficient, effective and responsive government services in the Kihei-Makena region.			
Objectives and Policies:	S	N/S	N/A
a. Improve the delivery of services by government agencies to the Kihei-Makena region.			✓
b. Continue to streamline the permit process, where appropriate, through means such as consolidated public hearings and concurrent processing of applications.			✓
c. Continue to expedite the review and approval process for projects which will result in public benefit by "fast-tracking" and the assignment of permit expeditors.			✓
d. Use the County's real property tax assessment function as a mechanism to encourage desirable private development, rehabilitation, or preservation, to monitor the implementation of the Community Plan, and to establish a land use information base.			✓
Implementing Actions:	S	N/S	N/A
a. Evaluate and modify present zoning and subdivision ordinances to incorporate land use and design guidelines as well as other recommendations incorporated herein.			✓
b. Compile plans and studies to implement the recommendations of this Plan, including water development, housing, local and regional circulation, drainage, solid waste, and other special studies as required.			✓
c. Continue to develop and utilize a computerized County planning system, including, but not limited to, integrating into the system future plans, studies, guidelines, and legislation. The computerized planning system should not become stagnant, but should become an integral part of planning within the County.			✓
d. Continue to operate and fund mobile/satellite government facilities.			✓
e. Implement tax incentives and/or disincentives that encourage desirable private development or preservation.			✓
f. Adopt a beach/mountain access dedication ordinance pursuant to Chapter 46, Hawaii Revised Statutes to assist in establishing public <i>mauka</i> and <i>makai</i> accesses, in conjunction with an overall public access master plan to serve as the framework for decision-making.			✓
<i>Analysis:</i> The construction and development of the Pi'ilani Promenade will improve the delivery of services by government agencies in the form of cash or land contributions for parks, schools, traffic improvements, and police and fire services.			



As discussed in Section III.B.3 (Economy), the construction of the Pi'ilani Promenade is expected to inject approximately \$212 million of new capital investment into the local economy and provide an estimated 878 "worker years" of employment, as well as \$66.5 million in total wages over a 12 to 15 year period. The effect of these expenditures will have positive direct, indirect, and induced beneficial impacts on the economy of the County of Maui. During its operational phase, the Pi'ilani Promenade will increase the level of capital investment in the region which will create employment opportunities and economic stimulus for the region. The proposed project will provide direct employment opportunities for Maui residents and contribute to economic diversification and growth for both Maui and the State. After "stabilization," the Pi'ilani Promenade is envisioned to support 1,210 permanent jobs with an annual payroll of about \$ 36.6 million.

In connection with proposed development of the Pi'ilani Promenade, a number of technical studies have been prepared for the FEIS. The data collected in these studies have been made available to the State and County for their use.

Indigenous Architecture

Goal: Reserve for future implementation provisions for indigenous architecture as may be adopted from time to time by the County Council and/or the County Cultural Resources Commission.

Objective and Policy:	S	N/S	N/A
a. To legitimize indigenous architecture as viable spaces for living, work, and recreation.			✓
Implementing Actions:	S	N/S	N/A
a. Develop a County ordinance for indigenous architecture.			✓
b. Adopt standards for indigenous architecture.			✓
<i>Analysis: The Pi'ilani Promenade does not involve planning for the region's future implementation of indigenous architecture; therefore, this objective and policy are not applicable.</i>			
C. Planning Standards			
Land Use Standards:	S	N/S	N/A
a. All zoning applications and/or proposed land uses and developments shall be consistent with the Land Use Map and Objectives and Policies of the Kihei-Makena Community Plan.	✓		



b. Development of the Kihei Kalama Villages property identified as TMK3-9-03: portion of 08, approximately 0.6 acres in size, shall be limited in its use for parking purposes only.			✓
c. Development of the Pacific Warehouse properties identified as TMK 3-9-03:33, approximately 10,000 square feet in size, and TMK 3-9-3:45, approximately 1.0 acres in size, shall be limited in its use for parking, trash compactor, and storage purposes only.			✓
d. Road widening adjacent to the Stinson property, identified as TMK 3-9-07:38, 39, 40, and 41, approximately 1.1 acres in size, shall occur entirely on the said Stinson property, to the extent feasible.			✓
e. Development of the "Changs Beach" property, identified as TMK 2-1-12:15, approximately 1.4 acres in size, shall be compatible with Native Hawaiian cultural practices. Compatibility shall include, but not be limited to, consulting with Native Hawaiian organizations regarding the property's site plans, providing a program for cultural interpretation and education, and ensuring access for cultural practices, including complete privacy where warranted. Furthermore, a non-vehicular public access shall be provided at the western tip of the property, consisting of a 100 foot southerly ocean setback, and a 40 foot northerly ocean setback.			✓
f. The existing parking lot for the Wailea Shopping Village identified as TMK 2-1-08:74, approximately 5.5 acres in size, shall be limited in its use for parking purposes only.			✓

Analysis: Although the County of Maui has determined that the proposed Project complies with the KMCP, the Applicant recognizes that certain parties have asserted that an amendment to the KMCP is necessary for development of the Project to proceed. This issue may be resolved by the LUC during its consideration of the Applicant's Motion to Amend.

The subject property is located in North Kihei, south of Ohukai Road, and mauka of Pi'ilani Highway. This area was designated in the KMCP for light industrial use in order to encourage urban expansion in the area mauka of Pi'ilani Highway (goal k). The original conceptual plan of 123 light industrial lots, which fit squarely within that designation, is no longer desirable or economically viable. Since the KMCP was adopted in 1998, the proposed planning for that area as adjusted. Other developments south of Ohukai and mauka of Pi'ilani are predominantly retail, with only some instances of true light industrial uses. The community planning process has evolved since 1998, and the current Maui Island Plan indicates that the Pi'ilani Promenade is located within the Urban Growth Boundary, and is surrounded by areas currently not zoned for urbanization, but designated as "planned growth areas." The Maui Island Plan specifically cites the need for mixed-use neighborhood centers "to provide services and jobs within close



proximity to where people live and provide a more efficient land use pattern.” Maui Island Plan at 8-27.

The Pi'ilani Promenade project follows these more recent planning guidelines, providing a mixed use that fits within the existing M-1 zoning, and provides a mix of light industrial, retail, and residential uses. Therefore an updated plan was prepared for this FEIS which responds to the most current trends in the development of multi-use retail-living centers nationwide. The proposed project will strengthen Maui's economy by making the Pi'ilani Promenade a more attractive location for the limited light industrial activities envisioned within the KMCP as well as much needed retail businesses. These businesses will create a diverse range of jobs for Maui residents which, in turn, will benefit the local and Statewide economy. The result will be an increase in economic activities and employment opportunities consistent with community needs and desires, which will promote increased employment and entrepreneurial opportunities for Maui's residents. Thus, while the Pi'ilani Promenade project does not strictly support all of goals in the KMCP, it meets other important competing planning criteria within the KMCP. The County of Maui has interpreted the Pi'ilani Promenade project as complying with the KMCP, as the KMCP provides that the goals and objectives are guidelines to the ultimate implementation of the plan. This issue, and the possible amendment of the KMCP, is discussed further in section V.D. Unresolved Issues.

Urban Design Standards:

<p><i>a. Building Form</i></p> <p>1) Establish a maximum of thirty-five (35) feet in building height for new commercial facilities.</p> <p>2) Establish a maximum of forty-five (45) feet for multi-family development.</p> <p>3) Limit resort development throughout the region to thirty-five (35) feet in building height for sites near the shoreline. Building height limits may gradually be increased up to seventy-five (75) feet for inland resort development provided that important <i>mauka/makai</i> vistas are maintained, and impacts to coastal resources are minimized. Resort community planning and design shall integrate recreational amenities with adequate shoreline setback and public shoreline access provisions.</p> <p>4) Limit the height of industrial buildings to thirty-five (35) feet. Within large industrial tracts, separate industrial design guidelines should be formulated to guide development. Such guidelines shall, among other</p>	<p>✓</p>		
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<p>issues, address landscaping and building design to achieve design continuity for the overall industrial development area.</p> <p>5) All new multi-family and commercial facilities should provide a garden setting appropriate to the region. Setback requirements should be sufficient to allow for street and sidewalk climate-adapted landscaped buffers and interior planting areas.</p>			
<p><i>b. Setbacks</i></p> <p>A Coastal Erosion Rate Analysis shall be developed. Data from the analysis shall be incorporated into planning decisions for shoreline areas, especially with respect to shoreline building setbacks. In the interim period prior to the completion of the analysis, minimum setbacks for multi-family and hotel uses shall be 150 feet from sandy shorelines, and 75 feet from rocky shorelines, or 25% of the average lot depth, whichever is greater.</p>			✓
<p><i>c. Special Design Standards</i></p> <p>1) Establish design standards for new and existing residential, commercial, and hotel developments using the following guidelines:</p> <p>a. Establish streetscape standards that address low-cost improvements to landscaping, lighting, signage, and intersections along South Kihei Road, Pi'ilani Highway, and all existing or proposed collector roads.</p> <p>b. Establish building design standards which promote island architecture while at the same time providing related visual and physical characteristics for the Kihei region.</p> <p>c. Set uniform right-of-way standards for connector roads and South Kihei Road.</p>	✓		
<p><i>Analysis:</i> Where possible, design of the Promenade project will be consistent with many of the design concepts identified within the KMCP as well as the recently adopted Light Industrial zoning district.</p>			

G. COUNTY ZONING

The comprehensive zoning provisions for the County of Maui are set forth in Article II of Title 19 of the Maui County Code. The purpose and intent of comprehensive zoning is to regulate the utilization of land in a manner encouraging orderly development in accordance with the land use directives of the Hawaii Revised Statutes, the charter of the County of Maui, and the general plan and community plans of the County, as well as to promote and protect the health, safety, and welfare of the people of the County. The subject property is zoned for “M-1, Light Industrial District” uses by the County of Maui,



and land uses that are proposed for the Pi'ilani Promenade are allowable under "M-1, Light Industrial" zoning (See: Figure 6, "Maui County Zoning Map"). The M-1 light industrial zoning district allows, as of right, all of the commercial uses contained in the Maui County business districts, B-1, B-2 and B-3. This specifically includes the light industrial, commercial, and apartment uses proposed for the Promenade Project.

Although the County of Maui has determined that the proposed Project complies with the KMCP, the Applicant recognizes that certain parties have asserted that an amendment to the KMCP is necessary for development of the Project to proceed. This issue may be resolved by the LUC during its consideration of the Applicant's Motion to Amend.

The Planning Department believes that community plans and zoning play complimentary but different roles. Community plan land use designations are intended to depict what types of land uses are envisioned during the duration of the community plan. They are intended to guide decision-making for changes in zoning, subdivisions, budgeting and capital improvements, and developments in the special management area. They do not provide, nor are they intended to be, exclusive or complete lists of land uses allowed. They do not provide specific development standards. Zoning regulates land use; zoning provides exclusive and complete lists of land uses and specific development standards.

H. COASTAL ZONE MANAGEMENT

HRS Chapter 205 established the State of Hawaii CZM program (CZMP), which includes the provisions establishing and governing of the Special Management Area (SMA). The Federal Coastal Zone Management Act of 1972 was adopted in response to competing development and preservation interests in U.S. coastal areas. Population growth and development in coastal areas were impacting marine resources, open space, view sheds, wildlife, and other important ecological, cultural, and historic resources. In response to this concern, Congress created a framework for managing and regulating the coastal zone and appropriated funds for the State-run coastal zone management programs (CZMP). The State's acceptance of the Federal funds necessitated compliance with federal CZMP standards.

The boundaries of Hawaii's coastal zone management program are defined by coastal waters and adjacent coastlands that are strongly influenced by each other. Coastal areas



which require special consideration due to their unique values or characteristics are called Special Management Areas (SMA) and must be designated by a management plan. Any development within these areas is subject to a special assessment process. This protocol provides a means to preserve, protect, and when possible, restore the natural resources of the coastal zone by controlling development with shoreline areas in order to avoid the permanent loss of valuable resources. As required by State law, maps showing the limits of the SMA have been prepared by each County. In the Kihei-Makena Community Plan region, Pi'ilani Highway serves as the SMA boundary for this part of the island.

The westernmost portion of the Pi'ilani Promenade site is approximately 0.5 miles (*mauka*) from the Pacific Ocean and is **not** located within the limits of the Special Management Area (SMA) for this part of the island.

The following section discusses the relationship of the proposed project to the objectives and policies of the Hawaii Coastal Zone Management Program pursuant to Chapter 205A, HRS.

1. Recreational Resources

Objective: Provide coastal recreational resources accessible to the public.

Policies:

- (a) Improve coordination and funding of coastal recreational planning and management; and
- (b) Provide adequate, accessible, and diverse recreational opportunities in the coastal zone management area by:
 - (i) Protecting coastal resources uniquely suited for recreational activities that cannot be provided in other areas;
 - (ii) Requiring replacement of coastal resources having significant recreational value, including but not limited to surfing sites, fishponds, and sand beaches, when such resources will be unavoidably damaged by development; or require reasonable monetary compensation to the state for recreation when replacement is not feasible or desirable;
 - (iii) Providing and managing adequate public access, consistent with conservation of natural resources, to and along shorelines with recreational value;
 - (iv) Providing an adequate supply of shoreline parks and other recreational facilities suitable for public recreation;



- (v) Ensuring public recreational uses of county, state, and federally owned or controlled shoreline lands and waters having standards and conservation of natural resources;
- (vi) Adopting water quality standards and regulating point and non-point sources of pollution to protect, and where feasible, restore the recreational value of coastal waters;
- (vii) Developing new shoreline recreational opportunities, where appropriate, such as artificial lagoons, artificial beaches, and artificial reefs for surfing and fishing;
- (viii) Encourage reasonable dedication of shoreline areas with recreational value for public use as part of discretionary approvals or permits by the land use commission, board of land and natural resources, and county authorities; and crediting such dedication against the requirements of Section 46-6, HRS.

Analysis: The proposed development of the Pi'ilani Promenade will not restrict public recreation opportunities along the coastline because the site is approximately 0.5 miles from the Pacific Ocean. As previously stated the Pi'ilani Promenade lies *mauka* of Pi'ilani Highway and will not directly affect the coastline. The design of the proposed drainage system will minimize the possibility of non-point source pollution from entering the marine environment. Kulanihakoi Gulch, which is south of, and adjacent to the project site, will not be impacted since stormwater runoff will be directed toward onsite retention basins which are strategically located throughout the site.

2. Historical/Cultural Resources

Objective: Protect, preserve and, where desirable, restore those natural and manmade historic and prehistoric resources in the coastal zone management area that are significant in Hawaiian and American history and culture.

Policies:

- (a) Identify and analyze significant archeological resources;
- (b) Maximize information retention through preservation of remains and artifacts or salvage operations; and
- (c) Support state goals for protection, restoration, interpretation, and display of historic structures.

***Analysis:* The project promotes the preservation of historic resources and the Applicant's Archaeologist submitted a data recovery plan that was received by the SHPD on June 17, 2016 and approval is pending. ~~will work with the State Historic Preservation Division to prepare a data recovery plan.~~**

The archaeological survey of the offsite water storage tank area was conducted on January 8 and 13, 2014. No significant materials or cultural remains were located on this previously



disturbed land during the 2014 archaeological survey. (See: Appendix F, "Archaeological Inventory Survey").

A public information meeting for the proposed project was held on February 25, 2014. Transcripts from this meeting have been included in the DEIS and FEIS. The focus of the meeting was to review the previous 1994 AIS and discuss the findings of the current 2014 AIS. In addition to discussing potential impacts to Kulanihakoi Gulch and the return of the petroglyph boulder that was previously removed from the project site by a former land owner, some of the participants suggested that the archaeological sites could be incorporated into the design of the project or into its landscaping and that the petroglyph boulder be returned to the property. The Applicant has discussed the possible return of the petroglyph boulder with the former land owner; however, the former owner rejected this request since the relocation plan was approved by State Historic Preservation Division (SHPD). In addition, the archaeological monitoring plan that was submitted to the SHPD for review has been approved and is referenced for all recent work on the site. The monitoring plan may be found in Appendix H and may be updated once project construction is initiated.

From a cultural practices and beliefs perspective, the subject property bears no apparent signs of cultural practices or gatherings currently taking place. The oral history interviews did not reveal any known gathering places on the subject property or any access concerns as a result of the proposed project. Therefore it can be concluded that development of the site will not impact cultural resources on the property or within its immediate vicinity (See: Appendix I "Cultural Impact Assessment Report dated December 2013, revised March and August 2016").

3. Scenic and Open Space Resources

Objective: Protect, preserve and, where desirable, restore or improve the quality of coastal scenic and open space resources.

Policies:

- (a) Identify valued scenic resources in the coastal zone management area;
- (b) Ensure that new developments are compatible with their visual environment by designing and locating such developments to minimize the alteration of natural landforms and existing public views to and along the shoreline;
- (c) Preserve, maintain, and where desirable, improve and restore shoreline open space and scenic resources; and
- (d) Encourage those developments that are not coastal dependent to locate in inland areas.



Analysis: ~~The site plan for the proposed project features open space areas, landscape plantings, and elevated viewpoints above Pi'ilani Highway. Pre-existing views from Upcountry to the Pacific Ocean will not be adversely affected by the project. Impacts to views of Haleakala from Pi'ilani Highway and other *makai* properties will be minimized by limiting the height of buildings to 60 feet. The plan will situate buildings and landscape plantings in areas which will help minimize building mass when viewed from Pi'ilani Highway and the East Kaonoulu Street extension. Parking and open space areas located between building clusters will provide view corridors throughout the site.~~

The project site is adjacent to the Pi'ilani Highway. Building heights within this area are limited to 60 feet. The site plan and building layout for the Pi'ilani Promenade will be designed to preserve the view towards Haleakala from Pi'ilani Highway. In addition, the project will be setback from Pi'ilani Highway a minimum of 30 feet, and the future KUH and will also be buffered by landscape planting as noted in the approved Landscape Plan for Kaonoulu Marketplace Subdivision (the name of the prior development project on the Project site). (See: Figure No. 17 "Landscape Plan").

The Project will include light industrial, business, commercial, and residential apartment structures. As shown in the approved Landscape Plan for the Project, a significant element of the landscape program is the inclusion of a 30-foot landscaping easement located adjacent to the Pi'ilani Highway. The landscaping easement will be planted with monkeypod trees, which when mature are expected to significantly buffer the transition between the Pi'ilani Highway and the Project, and to define the views from Pi'ilani Highway into the Project. (See: Figure 17 "Landscape Plan").

4. Coastal Ecosystems

Objective: Protect valuable coastal ecosystems, including reefs, from disruption and minimize adverse impacts on all coastal ecosystems.

Policies:

- (a) Exercise an overall conservation ethic, and practice stewardship in the protection, use, and development of marine and coastal resources;
- (b) Improve the technical basis for natural resource management;
- (c) Preserve valuable coastal ecosystems, including reefs, of significant biological or economic importance;
- (d) Minimize disruption or degradation of coastal water ecosystems by effective regulation of stream diversions, channelization, and similar land and water uses, recognizing competing water needs; and
- (e) Promote water quantity and quality planning and management practices that reflect the tolerance of fresh water and marine ecosystems and maintain and enhance water quality through the development and



implementation of point and non-point source water pollution control measures.

Analysis: The Pi'ilani Promenade is located approximately 0.5 miles from the shoreline; therefore the proposed project is expected to have minimal impact on the coastal ecosystem. The design of the proposed drainage system will minimize the possibility of non-point source pollution from entering the marine environment. Adjacent gulches will not be impacted since stormwater runoff will be directed toward onsite retention basins that are strategically placed throughout the site. Furthermore, the implementation of Best Management Practices will minimize the potential for short-term adverse impacts during construction of the project.

The Applicant retained Marine Research Consultants, Inc. to prepare a Baseline Assessment of Marine Water Chemistry and Marine Biotic Communities. The purpose of the report was to assess potential impacts to groundwater and the marine environment as a result of the proposed project. In connection with this work, water quality testing was conducted and the underwater biotic composition along the Kihei coastline was analyzed. The findings of the report indicate that the proposed project will not have any significant negative effect on water quality.

5. Economic Use

Objective: Provide public or private facilities and improvements important to the State's economy in suitable locations.

Policies:

- (a) Concentrate coastal dependent development in appropriate areas;
- (b) Ensure that coastal dependent development such as harbors and ports, and coastal related development such as visitor facilities and energy generating facilities, are located, designed, and constructed to minimize adverse social, visual, and environmental impacts in the coastal zone management area;
- (c) Direct the location and expansion of coastal dependent developments to areas presently designated and used for such development and permit reasonable long-term growth at such areas, and permit coastal dependent development outside of presently designated areas when:
 - (i) Use of presently designated locations is not feasible;
 - (ii) Adverse environmental impacts are minimized; and
 - (iii) The development is important to the State's economy.

Analysis: As discussed in Section III.B.3 (Economy) the construction of the Pi'ilani Promenade is expected to inject approximately \$212 million of new capital investment into the local economy and provide an estimated 878 "worker years" of employment as well as \$66.5 million in total wages over a 12 to 15 year period. The effect of these expenditures will have positive direct, indirect, and induced beneficial impacts on the



economy of the County of Maui. During its operations phase, the Pi'ilani Promenade will increase the level of capital investment in the region which will create employment opportunities and economic stimulus for the region. The proposed project will provide direct employment opportunities for Maui residents and contribute to economic diversification and growth for both Maui and the State. After "stabilization," the Pi'ilani Promenade is envisioned to support 1,210 permanent jobs with an annual payroll of about \$ 36.6 million.

6. Coastal Hazards

Objective: Reduce hazard to life and property from tsunami, storm waves, stream flooding, erosion, subsidence and pollution.

Policies:

- (a) Develop and communicate adequate information about storm wave, tsunami, flood, erosion, subsidence, and point and non-point source pollution hazards;
- (b) Control development in areas subject to storm wave, tsunami, flood, erosion, subsidence, and point and non-point pollution hazards;
- (c) Ensure that developments comply with requirements of the Federal Flood Insurance Program; and
- (d) Prevent coastal flooding from inland projects.

Analysis: According to Federal Insurance Rate Map (FIRM) Panels 1500030580F and 0586F dated September 19, 2012, the Pi'ilani Promenade parcels are located in Zone X, which represents an area beyond the limits of a flood hazard area.

A drainage system has been designed to collect stormwater runoff resulting from the development of the Pi'ilani Promenade. The increase in surface runoff volume between pre- and post-development conditions will be retained by onsite surface retention basins and gradually released at a rate not to exceed current flows. Therefore, the subject property is not anticipated to have an adverse impact on neighboring properties in terms of flood hazard potential.

7. Managing Development

Objective: Improve the development review process, communication, and public participation in the management of coastal resources and hazards.

Policies:

- (a) Use, implement, and enforce existing law effectively to the maximum extent possible in managing present and future coastal zone development;
- (b) Facilitate timely processing of applications for development permits and resolve overlapping of conflicting permit requirements; and



- (c) Communicate the potential short and long-term impacts of proposed significant coastal developments early in their life cycle and in terms understandable to the public to facilitate public participation in the planning and review process.

Analysis: The Pi'ilani Promenade is not a coastal development and is located approximately 0.5 miles from the Pacific Ocean and beyond the limits of the Special Management Area for this part of Maui. The proposed project is not expected to negatively impact the management of coastal resources in the SMA. The project team has conducted public informational meetings and will continue to do so in the future as part of their effort to facilitate public participation in the planning and review process.

8. Public Participation

Objective: Stimulate public awareness, education, and participation in coastal management.

Policies:

- (a) Promote public involvement in coastal zone management processes;
- (b) Disseminate information on coastal management issues by means of educational materials, published reports, staff contact, and public workshops for persons and organizations concerned with coastal issues, developments, and government activities; and
- (c) Organize workshops, policy dialogues, and site-specific mediations to respond to coastal issues and conflicts.

Analysis: To facilitate public participation in the planning and review process, the project team has held public informational meetings and will continue to do during the environmental review process.

9. Beach Protection

Objective: Protect beaches for public use and recreation.

Policies:

- (a) Locate new structures inland from the shoreline setback to conserve open space, minimize interference with natural shoreline processes, and minimize loss of improvements due to erosion;
- (b) Prohibit construction of private erosion-protection structures seaward of the shoreline, except when they result in improved aesthetic and engineering solutions to erosion at the sites and do not interfere with existing recreational and waterline activities; and
- (c) Minimize the construction of public erosion-protection structures seaward of the shoreline.



Analysis: The Pi'ilani Promenade is located approximately 0.5 miles (*mauka*) from the Pacific Ocean. As such, the proposed project is not expected to negatively impact beaches for public use or recreation.

10. Marine Resources

Objective: Promote the protection, use, and development of marine and coastal resources to assure their sustainability.

Policies:

- (a) Ensure that the use and development of marine and coastal resources are ecologically and environmentally sound and economically beneficial;
- (b) Coordinate the management of marine and coastal resources and activities to improve effectiveness and efficiency;
- (c) Assert and articulate the interests of the State as a partner with federal agencies in the sound management of ocean resources within the United States exclusive economic zone;
- (d) Promote research, study, and understanding of ocean processes, marine life, and other ocean resources in order to acquire and inventory information necessary to understand how ocean development activities relate to and impact upon ocean and coastal resources; and
- (e) Encourage research and development of new, innovative technologies for exploring, using, or protecting marine and coastal resources. [L 1977, c 188, pt of §3; am L 1993, c 258, §1; am L 1994, c 3, §1; am L 1995, c 104, §5; am L 2001, c 169, §3]

Analysis: As previously stated, the Pi'ilani Promenade is located approximately 0.5 miles (*mauka*) from the Pacific Ocean. The proposed drainage system for the project will retain stormwater runoff in onsite, surface basins and in subsurface chambers to capture any incremental increase in run-off created by the development. Best Management Practices (BMPs) will be implemented during project construction and post-operation phases to protect coastal water quality. Construction BMPs and temporary drainage and erosion control measures will be installed prior to the start of construction and will be removed after the site has been stabilized and after permanent measures are in place.

The Applicant retained Marine Research Consultants, Inc. to prepare a Baseline Assessment of Marine Water Chemistry and Marine Biotic Communities. The purpose of the report was to assess potential impacts to groundwater and the marine environment as a result of the proposed project. In connection with this work, water quality testing was conducted and the underwater biotic composition along the Kihei coastline was analyzed. The findings of the report indicate that the proposed project will not have any significant negative effect on water quality.



In addition, Waimea Water Services prepared an assessment of potential impacts from the pumping of the approved irrigation well. (See: Appendix R "Waimea Water Report") (Note: Waimea Water Services applied for and supervised the well drilling for the approved irrigation well described above). As a result of the analysis the subject well and projected pumping for irrigation use against other wells in the area and found that no probable impact from such a use.

Due to the proposed pumping rate of the newly constructed Kaonoulu Irrigation well, a 24-hour long term pump test was required by the state.

The test results suggest that the water quality and quantity were stable at the 175gpm pumping rate and prolonged pumping at this rate would not be likely to adversely affect the aquifer at this location. Our present estimate is that the sustained pumping rate of the well should not exceed 175 gpm, but it must be noted that this is only a best estimate based on available data.

Waimea Water Services recently performed a pump test and monitoring program in the Kihei area and we consider the results from this test pertinent to this discussion due to the proximity to the Kaonoulu Irrigation Well and the similar hydro-geological setting.

In summary, no recorded influences from the 96 hour pump test were observed in the surrounding monitoring wells. Tidal influences were expected and documented in all three surrounding monitoring wells in the form of water level changes related to the local tide. The data collected from the three monitoring wells also suggests that there are no subsurface geological barriers that would potentially impede water flow.

In an effort to further understand the hydro geology of the area surrounding the Kaonoulu Irrigation Well, Waimea Water Services performed an investigation into the available CWRM well data of the Kihei area. Twelve irrigation wells are located within 6,300 ft. of the Kaonoulu Irrigation Well yet, only three of which can be considered to be located downstream of the subject well. All three of these wells are located greater than 3,000ft away from the subject well and it is the opinion of Waimea Water Services, based upon our field experience in this location that adverse impacts would be highly unlikely to be detected in these wells as long as the Kaonoulu Irrigation well does not exceed the proposed 175gpm or 100,000gpd.

Furthermore, the data gathered thus far occurs over a very limited time span. Data over the long term operation of the wells in the Kihei area is needed for a true determination of the well's long term performance or impacts. It is absolutely essential that the water



levels and the total chlorides in these wells be monitored on a regular basis to provide a real indication of what this aquifer can reliably produce on a sustainable basis.

V. CONTEXTUAL ISSUES

A. RELATIONSHIP BETWEEN SHORT-TERM USES AND MAINTENANCE OF LONG-TERM PRODUCTIVITY

Short-term uses and long-term productivity consists of short-term construction activities related to the build-out of the Pi'ilani Promenade and the long-term benefits of these activities.

Trade-offs among short-term and long term gains and losses: Potential short and long term environmental impacts will be offset by proposed mitigation measures. Construction activities would result in short-term impacts involving temporary and permanent alteration of land for grading, site work, infrastructure and building. Localized degradation of air quality and increased noise levels would also occur in the short-term due to construction-related activities. Many short-term impacts can be avoided or mitigated by implementation of construction BMPs. Applicable BMPs include implementing erosion control measures, directing storm water run-off to detention/retention basins, and preventing the release of fuel or other contaminants. The tradeoffs among these short-term impacts are the increase in employment and immediate economic benefits of construction-related activities.

In response to comments from the LUC and in accordance with section 11-200-17(j), HAR, a description of the relationship between local short-term uses of humanity's environment and the maintenance and enhancement of long-term productivity is provided in the context of the four specific areas of concern. Construction activities would result in short-term impacts involving temporary and permanent alteration of land for grading, site work, infrastructure and building. Localized degradation of air quality and increased noise levels would also occur in the short-term due to construction-related activities. Many short-term impacts can be avoided or mitigated by implementation of construction Best Management Practices (BMPs). Applicable BMPs include implementing erosion control measures, directing storm water



run-off to detention/retention basins, and preventing the release of fuel or other contaminants. The tradeoffs among these short-term impacts are the increase in employment and immediate economic benefits of construction-related activities. These short-term impacts and benefits are documented in Section III.B. 3 of the FEIS.

In the long-term, the infrastructure and building construction associated with the Pi'ilani Promenade would facilitate the diversification of Maui's economy. Economic diversification and the creation of "living wage jobs" are key objectives of the Maui Island Plan and County-wide Policy Plan.

Ultimately, the long-term build-out of the Pi'ilani Promenade will produce impacts that must be weighed against the Project's benefits. Increased development will lead to an increase in population of the immediate area, whether in the form of residents living within the Pi'ilani Promenade or employees commuting to the Pi'ilani Promenade during regular business hours. With the projected population increases, the volume of traffic coming in and out of the Pi'ilani Promenade will increase. This will affect regional traffic conditions by increasing volumes on the region's existing roadway network. As documented in Section III.D.1 of the DEFEIS, creative strategies involving roadway improvements and upgrades, transportation demand-management counter-measures, and innovative urban design approaches are required to mitigate the Project's traffic impact. Likewise, an increase in population will produce greater demands upon the island's drinking water resources, wastewater systems and public facilities including parks, schools, police and fire. These impacts and the necessary mitigation counter-measures are thoroughly documented in Sections III.C and D of the DEFEIS.

With regard to long-term productivity, this project utilizes the principles of New Urbanism and Smart Growth to transform the current, single-use large lot light industrial subdivision into a mixed-use project with employment opportunities in close proximity. Implementation of this vision will require a broadening of the development standards to allow a variety of lots sizes for the use of smaller firms and, professional services, restaurants, neighborhood serving retail, and housing.

The proposed Pi'ilani Promenade project will create jobs both temporary construction jobs and permanent long term employment. The economic impacts associated with the short and long-term implementation of the Pi'ilani Promenade are thoroughly documented in Section III.B.3 of the DEFEIS.

Forecloses future options: Development of the Piilani Promenade would reduce future development options for the property, however the project has been designed to allow for



a mix of uses including Light Industrial, commercial/business, and multi-family. This mix of uses will provide the flexibility to accommodate the desired businesses for the growing South Maui community.

Narrows the range of beneficial uses of the environment: The proposed project would reduce the amount of land available for ranching by 68.19 acres of land. The property is poorly suited for agriculture and the Flora and Fauna reports did not identify any critical habitats such as wetlands on the property. The proposed project will include construction of a portion of a new Kihei-Upcountry Highway, rental housing, a location for a 1.0 Million gallon water tank and MECO substation to help provide housing, water storage, transportation and power to the growing South Maui Community.

Long-term risks to health and safety: The project is not expected to pose any such risk. The developer will comply with Federal, State and County regulations pertaining to grading codes, building codes, environmental health, etc. to ensure that risk to health and safety will be limited. No hazardous materials have been identified.

B. IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES

Implementation of the development will result in the irreversible and irretrievable commitment of certain natural and fiscal resources. Major resource commitments include the land and capital, construction materials, non-renewable resources, labor, and energy required for the Plan's implementation. Impacts represented by the commitment of these resources must be weighed against the positive socio-economic benefits that could be derived from the project versus the consequences of either taking no action or pursuing another less beneficial use of the area.

When fully built out, the development will be updated into an integrated and vibrant mixed-use community focused around a regional employment base.

As with any construction activity, nonrenewable resources such as fossil fuel and construction material will be irrevocably committed. Labor will be required for planning, engineering, and construction. New residential, commercial, or employment uses will generate increases in the demand for water, electricity, and sewer services. Similar types of developments proposed on other parts of Maui will also generate demand for these resources. Chapter III of the FEIS documents the Project's short- and long-term impacts.



In response to comments from the LUC, the commitment of resources will be provided by the Applicant. The Applicant will finance the construction of the project with private funds. The following responses quantifies the Applicant's commitment of resources as a result of the proposed project.

Land: the project site development parcels and roadway widening lots total 74.871 acres of land that will be irretrievable.

Labor: Construction is estimated to provide 878 "worker years" of direct on-site employment and \$66.5 million in total wages over a 12-15 year absorption period.

Construction materials: The cost of the project is estimated in Table No. 1a of the FEIS and the infrastructure for the project is estimated to cost approximately \$22 million dollars, the estimated vertical construction cost for Phase 2 is \$74,000,000.00 and Phase 3 is estimated at \$118,250,000.00.

Energy: The project is estimated to utilize 6,250 kVA of electricity. MECO will supply electricity to the project site and has been provided a lot within the proposed development to construct a new MECO substation to provide stable power to the project site and future development in the area.

There will be a permanent commitment of funds and resources from the developer to design, construct and operate the project.

C. CUMULATIVE AND SECONDARY IMPACTS

Cumulative impacts are defined as the impact on the environment, which results from the incremental impact of an action when added to other past, present, and reasonably foreseeable future actions, regardless of what agency or person undertakes such other actions.

Secondary impacts are those that have the potential to occur later in time or farther in the future, but which are reasonably foreseeable. They can be viewed as actions of others that are taken because of the presence of the project. Secondary impacts from highway projects, for example, can occur because they can induce development by removing transportation impediments to growth.

The build-out of the Pi'ilani Promenade is likely to affect the businesses and residents of Kihei. Implementation of the project, when added to other adopted and proposed



projects, may have a significant effect on a regional scale. The Project will be subject to the Maui County building permit process and the Project will be constructed as required by the LUC conditions and within the requirements of Maui County. The Applicant will be required to comply with mitigation measures as mandated by County and State law.

As described in Sections II.A and F of the FEIS, the entire property is designated Light Industrial (LI) by the Kihei-Makena Community Plan. The entire project area is located within the Maui Island Plan's Urban Growth Boundary. The Kihei area is expected to receive a substantial portion of the island's population and employment over the next 20 years.

There are several other projects planned for the Kihei-Makena area over the next decade, some of which are in close proximity of the proposed project. According to the *Maui County Data Book* (2012), the Maui resident population was 154,924 persons in 2010 and is forecasted to increase to 207,307 residents by 2030. Taken together, regional population growth will increase demand on natural resources, infrastructure and public facility systems. To better manage the island's growth and its related impacts, the County's Maui Island Plan identifies appropriate locations for development to occur. The Maui Island Plan may allow for the private and public sectors to better plan for and coordinate the delivery of infrastructure and public facilities systems in response to forecasted population growth.

As a precursor to preparing the Maui Island Plan, the County of Maui prepared the following infrastructure and public facility technical studies: Infrastructure and Public Facilities Issue Paper (September 2007), Public Facilities Assessment Update (March 2007) and Infrastructure Assessment Update (May 2003). These studies assess the impact of population growth on the island's infrastructure and public facility systems. In general, the studies conclude that on-going public and private sector investment will be necessary to accommodate growth through 2030.

This section identifies secondary and cumulative impacts that may result from the phased development of the Pi'ilani Promenade and surrounding development projects.

Existing and future development projects that were considered likely to be constructed in the central Kihei region were the basis for analyzing potential cumulative and secondary impacts. It is noted that most projects are not yet constructed. The developments listed below are the same as those identified in the TIAR update and includes the Maui Research and Technology Park (MRTP). (See: Table No. 16).

**Table No. 16 Other Potential Projects**

<u>Development</u>	<u>Land Use</u>	<u>Number of Units/ Development Area</u>
<u>Kaiwahine Village</u>	<u>Multi-Family Residential</u>	<u>120 affordable units</u>
<u>Maui Lu Resort</u>	<u>Hotel</u>	<u>788 hotel rooms & 154 affordable units</u>
	<u>Existing Hotel (Demolished)</u>	<u>174 rooms</u>
<u>Kihei High School</u>	<u>School</u>	<u>215,000 Square Feet</u>
<u>Kenolio Apartments</u>	<u>Multi-Family Residential</u>	<u>186 units</u>
<u>Kihei Residential</u>	<u>Single Family Residential</u>	<u>400 units</u>
	<u>Multi-Family Residential</u>	<u>200 units</u>
	<u>Commercial</u>	<u>7,000 Square Feet</u>
<u>Downtown Kihei</u>	<u>Commercial</u>	<u>258,000 Square Feet</u>
	<u>Hotel</u>	<u>150 rooms</u>
<u>Maui Research and Technology Park</u>	<u>Multi-Family Residential</u>	<u>500 units</u>
	<u>Single Family Residential</u>	<u>750 units</u>
	<u>Knowledge Industry/ Commercial /Business</u>	<u>2 million Square Feet</u>
	<u>Hotel</u>	<u>500 rooms</u>
<u>Honua'ula Affordable Housing Development</u>	<u>Multi-Family Residential</u>	<u>250 units</u>

A brief description of each proposed development is provided as follows:

Kaiwahine Village

The proposed Kaiwahine Village is located at the east end of Kaiwahine Street. This 100% affordable housing residential development will consist of 120 multi-family units with landscape planting, parking, infrastructure and utility improvements. The affordable housing development will positively impact the community by providing 120 affordable rental units in Kihei, where housing is needed, and will positively impact the economy by providing real property taxes and creating construction jobs. Construction of the affordable housing development will involve development of vacant land, and short-term air and noise impacts. Future residents of the project will increase local traffic to and from the site, increase the demand for drinking water and non-drinking water, and require extension of drinking water and wastewater infrastructure. This project is anticipated to be completed by 2025.



Maui Lu Resort

Maui Lu Resort currently exists in the northeast quadrant of the intersection of South Kihei Road at Kaonoulu Street. Plans are for the existing resort to be demolished and a 400-unit timeshare constructed in its place along with related service and recreational amenities, and landscape planting, parking, infrastructure and utility improvements. The proposed action involves demolition and removal of the existing Maui Lu Resort complex on the mauka property. On the makai parcel, a two-story oceanfront structure parallel with South Kihei Road will be replaced with a single-story beach club. The other two existing buildings will be reduced in size and renovated. The redevelopment project will positively impact the local economy by generating revenue from visitors. Additionally, redevelopment will provide permanent employment opportunities at the project site in addition to construction jobs and enhancements to the shoreline area may include beach nourishment, sand dune stabilization, and/or improved public beach access. Construction will involve short-term air and noise impacts. Project site operations will increase local traffic to and from the site.

As part of the Maui Lu project, the intersection of South Kihei Road at Kaonoulu Street will be signalized. The proposed signalization had not been completed at the time of this report. Construction has started on the redevelopment of this resort with a proposed opening in 2017.

Kihei High School

The proposed Kihei High School will be located along the east side of Pi'ilani Highway, south of the proposed Pi'ilani Promenade development. According to the *Traffic Impact Report for Kihei High School* (WOC, 2012), the school will have a capacity of approximately 1,650 students serving grades 9 through 12.

Appropriately designed infrastructure will be incorporated into the project to support the campus facilities, operations, and occupants. Access to the proposed high school campus is planned via a new right-in right-out access road off Piilani Highway. The high school will be designed and constructed to incorporate sustainable design features. The project will positively impact the community through provision of a new educational facility and employment opportunities in the construction and education fields. Construction of the high school will involve development of vacant land, minor loss of agricultural land, visual impacts to views from Piilani Highway, and short-term air and noise impacts. School operations will increase local traffic to and from the school, increase the demand for drinking water and non-drinking water, and require extension of drinking water and wastewater infrastructure. The development of the school will be in two phases with 800



students in Phase 1 and 850 students in Phase 2. Both phases are expected to be completed by 2025.

Kenolio Apartments

The Kenolio Apartments is located between Pi'ilani Highway and Kenolio Road in the southwest quadrant of the intersection of Kaonoulu Street at Pi'ilani Highway. The proposed project is a 100% affordable multi-family; residential development that will include construction of a total of 186 units including up to two (2) unrestricted on-site manager's units with necessary supporting infrastructure. The development will result in 63, 1-bedroom units, 100, 2-bedroom units and 23, 3-bedroom units.

The plan includes accessible walking paths and sidewalks throughout the site for residents to access common spaces and amenities within the development such as the Community Building (including fitness room, gathering area, computer center, common laundry and manager's office), pool, picnic areas, barbecue, trash and recycling areas. Additional sidewalk connectivity to the North South Collector Road (Kenolio Road) will be included in the final design.

Associated infrastructure improvements include paved roadways; concrete curbs, gutters and sidewalks; onsite parking, drainage systems, water system, sewer system, underground utilities, irrigation well for landscape planting, and offsite roadway improvements along Kenolio Road fronting a portion of the project site. It is anticipated that the project will be completed in 2017.

Kihei Residential

The proposed Kihei Residential development is located on the east side of Pi'ilani Highway, north of Kaiwahine Street. The project includes 400 single-family units, 200 multi-family units, 3,000 square feet of commercial areas, 7,000 square feet of offices, and a 10 acre park. The proposed commercial area will allow for business uses, which will provide services for the convenience of the surrounding neighborhoods. Groundbreaking occurred in mid-January 2016. The mixed use development will positively impact the community providing a variety of new housing types within walking distance of small neighborhood commercial area that will provide permanent employment opportunities at the project site in addition to construction jobs. Construction of the mixed use development will involve development of vacant land, and short-term air and noise impacts. Project site operations will increase local traffic to and from the site, increase the demand for drinking water and non-drinking water, and require extension of drinking water and wastewater infrastructure. It is anticipated that 25% of the project will be completed by 2025 and full build out will be by 2032.

**Krausz Companies Commercial Mixed-Use Development (Downtown Kihei)**

The proposed Krausz Companies commercial mixed-use development (referred as Downtown Kihei) is located along Piikea Avenue between Liloa Drive and South Kihei Road. The project includes 249,450 square feet of retail space, approximately 18,500 square feet of office space, and a 150-room hotel. Related improvements include grading, landscaping, underground utilities, drainage facilities, lighting, vehicle parking, and roadway improvements, including the reconstruction of Piikea Avenue. The mixed use development will positively impact the community providing new commercial, hotel and entertainment space that will provide permanent employment opportunities at the project site in addition to construction jobs. Construction of the mixed use development will involve development of vacant land, and short-term air and noise impacts. Project site operations will increase local traffic to and from the site, increase the demand for drinking water and non-drinking water, and require extension of drinking water and wastewater infrastructure. The proposed completion is expected by 2025.

Maui Research and Technology Park

The Maui Research and Technology Park (MRTP) is located in Kihei, Maui, Hawaii. The Park is situated mauka (east) of Pi'ilani Highway and is accessible from Lipoa Parkway. The MRTP encompasses approximately 411 acres owned in fee simple by various land owners. MRTP was established in the 1980's to bring diversification to Maui's economy through investment in high technology. Today the Park has over 180,000 square feet of office space, with over 400 people working at over 20 high technology and professional services companies. The recently approved MRTP Master Plan Update proposes to utilize the principles of New Urbanism and Smart Growth to transform the current, single-use large lot research and technology campus into an integrated and vibrant mixed-use community focused around a regional knowledge-based industry employment base.

The mixed use development will positively impact the community providing new employment and housing opportunities in a compact walkable community. The development will provide permanent employment opportunities at the project site in addition to construction jobs. Construction of the mixed use development will involve development of vacant land, loss of agricultural land, and short-term air and noise impacts. Project site operations will increase local traffic to and from the site, increase the demand for drinking water and non-drinking water, and require extension of drinking water and wastewater infrastructure.

The park will be developed in two phases. Phase 1, through 2024, will include a mixed-use village center, knowledge-industry employment core, residential neighborhoods,



schools and parks. Phase 2, through 2034, will include additional residential development and knowledge industry expansion campuses to the east and south. At build-out, in 2034, the Park will comprise knowledge industry, commercial, and civic uses totaling approximately 2 million square feet together with 1,250 single- and multi-family residences. It is estimated that 60% of the residential units will be single-family and 40% multi-family.

All of the necessary land use entitlements to fully implement the Plan were obtained and key infrastructure improvements are tied to each phase of development and as the improvements are warranted.

Honua'ula Affordable Housing Development

The proposed Honua'ula affordable housing development is located north of Pi'ilani Promenade. This development will include 125 units of affordable apartments and 125 owner-occupied units. Access to this development will be through East Kaonoulu Street. If construction of the Honua'ula affordable housing development commences prior to the construction of East Kaonoulu Street extension, temporary construction access to this development will be through a driveway off of Ohukai Road. Once the East Kaonoulu Street extension is open, all trips generated by this trip will use East Kaonoulu Street.

The affordable housing development will positively impact the community by providing 125 affordable rental units in Kihei, where housing is identified as major problem in the region. The proposed development will positively impact the economy by providing real property taxes and creating construction jobs. Construction of the affordable housing development will involve development of vacant land, and short-term air and noise impacts. Future residents of the project will increase local traffic to and from the site, increase the demand for drinking water and non-drinking water, and require extension of drinking water and wastewater infrastructure. An Environmental Assessment will be prepared for the proposed affordable housing development in the future to identify the potential impacts of the proposed development. This development is anticipated to be completed by 2025.

Impacts to Natural and Environmental Resources

~~Assuming all BMPs and mitigation measures documented in this DFEIS are implemented and all permit induced requirements are complied with, no cumulative or secondary impacts are anticipated on the natural environment.~~

Flora and Fauna. Development of the Pi'ilani Promenade, together with other area projects, could have cumulative and/or secondary impacts on rare or endangered species



of flora and fauna if natural habitats and/or species are directly or indirectly disturbed. As documented in Section III.A.5 of the DEIS, the Project will not impact rare or endangered flora and fauna species. Adjacent proposed developments will be required to conduct flora and fauna surveys prior to development. These surveys will be reviewed by the U.S. Fish and Wildlife Service and mitigation counter-measures will be required if warranted.

Of the projects listed in Table No. 16, the Downtown Kihei project will preserve 2 man-made wetlands and all of the other project sites do not contain wetlands or critical habitats and are therefore appropriate locations for urban development. The FEIS documents for the MRTP and the Kihei High School indicate that the Applicant will limit tree trimming during the months of June 1 to September 15. The FEA for the Maui Lu notes the project will provide down shielded lighting to limit light impacts to birds.

In consideration of existing State and Federal regulations to protect rare and endangered species, there should be no significant cumulative and/or secondary impacts to flora and fauna resources arising from planned growth in the area.

Coastal Water Quality. Development of the Pi'ilani Promenade, together with other area projects, could have significant cumulative impacts to coastal water quality if BMPs are not strictly adhered to. During the construction phase, BMPs must be implemented to mitigate runoff of bare soils and other construction contaminants into drainageways and culverts. If not properly mitigated, the cumulative impact of these contaminants could impact coastal water quality.

During the Project's operation phase, any increase in runoff will be maintained on site as required by the County's drainage rules (See: Section III.D.2) Maintaining runoff on-site, together with filtration of contaminants from runoff, will mitigate the Project's impact to coastal waters. Likewise, future developments in the area will be required to implement similar mitigation measures as part of their operation phase BMPs.

The projects listed in Table No. 16a have the following increase in estimated peak runoff identified in their respective applications. Note: Honua'ula affordable housing development application has not been prepared at the time of this FEIS.

**Table No. 16a Other Potential Projects: Drainage**

<u>Development</u>	<u>Increase in Runoff from proposed projects (cubic feet per second, cfs)</u>
<u>Kaiwahine Village</u>	<u>11.15 cfs</u>
<u>Maui Lu Resort</u>	<u>10.6 cfs</u>
<u>Kihei High School</u>	<u>60 cfs</u>
<u>Kenolio Apartments</u>	<u>15.57 cfs</u>
<u>Kihei Residential</u>	<u>96 cfs</u>
<u>Downtown Kihei</u>	<u>10.6 cfs</u>
<u>Maui Research and Technology Park</u>	<u>525 cfs</u>
<u>Honua'ula Affordable Housing Development</u>	<u>unknown</u>
<u>Total</u>	<u>728.92 cfs</u>

The total increase in runoff as a result of the development of projects listed in Table No. 16a is 728.92 cfs. The total runoff amount will be retained by the individual projects in accordance with the Maui County drainage rules.

The specific mitigation measures identified for projects in Table No. 16a vary from above ground landscaped detention basins, underground basins within parking lots and roadways, vegetated swales and landscape planting to reduce the impacts associated with runoff. Water Quality will be maintained by the future drainage systems for surrounding projects including oil water separators and other filters as appropriate, and other BMPs as necessary to minimize non-point source pollution.

All surrounding projects will be required to implement the BMP's as required by the County and State. In addition, the Applicant understands that all other projects related water discharges must comply with the State's Water Quality Standards, which are set forth in Chapter 11-54, HAR.

The Applicant has reviewed the Guidance Document titled, *Stormwater Impact Assessments*, prepared by PBR Hawaii and Associates, Inc. for the Hawaii Office of Planning in May 2013. The purpose of the Guidance Document is to provide guidance on assessing stormwater impacts in the planning phase of project development.



“The Guidance Document suggests incorporating design concepts and mitigation measures into the planning phase of development to achieve compliance with existing ordinances, rules, and regulations. No new regulations are proposed with this Guidance Document.”

As noted in the FEIS section V. C. (Cumulative and Secondary Impacts) the post-development peak storm flow of the Project, after mitigation measures are implemented, is the same as the pre-development storm flow, which is equal to or less than 85 cfs. The Project will retain the increase in post development runoff generated by development, consistent with County of Maui regulations.

The Project will comply with the condition of the 1995 Decision and Order, which requires that the Applicant fund the design and construction of its pro-rata share of drainage improvements required as a result of the development of the Project site, including oil water separators and other filters as appropriate, and other BMPs as necessary to minimize non-point source pollution. The Applicant understands that all Project-related water discharges must comply with the State’s Water Quality Standards, which are set forth in Chapter 11-54, HAR.

BMPs prepared in accordance with MCC Chapter 20.08 (*Soil Erosion and Sedimentation Control*) will be submitted to the DPW for review and approval prior to the issuance of grubbing and grading permits. In addition, since Project site work will exceed one acre, a NPDES will be obtained from the DOH’s Clean Water Branch for the discharge of storm water associated with construction activities. The Applicant will meet all of the requirements set forth by the DOH’s Clean Water Branch.

Low-impact development strategies, including a series of strategically located drainage retention basins and channels, are designed to mitigate downstream impacts to *makai* landowners. A Drainage Master Plan was designed to County standards, and includes measures that mitigate the increase in runoff generated from the development of impervious surfaces. On-site runoff will be collected by catch basins located at appropriate intervals along the interior roadways and landscaped area. Drain lines from the catch basins will convey the runoff to onsite detention basins or underground subsurface drainage systems.

The onsite drainage system will provide storage for the increase in stormwater runoff from a 50 -year, 1 -hour storm. The drainage system will be designed in compliance with Chapter 4 “Rules for the Design of Storm Drainage Facilities in the County of Maui” and Chapter 15-11 “Rules for the Design of Storm Water Treatment Best Management Practices.”



Therefore the Project, together with other planned projects in the area, should not have a significant cumulative impact on coastal water quality if construction and operation phase BMPs are strictly adhered to. It is noted that only the Kihei Residential project has begun construction of those listed in Table No. 16.

Agricultural Lands. As documented in Section III.A.10 of the DFEIS, the Pi'ilani Promenade is located on State designated Urban land, therefore, the Project is not expected to have a significant cumulative impact upon the long-term viability or growth of agriculture on Maui.

In regards to secondary impacts, urban development can impact agricultural land uses in two ways. First, in certain circumstances, urbanization of agricultural lands can cause agricultural lands prices to go higher making it more cost prohibitive for farmers to buy or lease land to farm. Second, urban development can create use conflicts between farmers and urban residents. In regards to the first issue, the establishment of Urban Growth Boundaries in the Maui Island Plan create more predictable development patterns and this will create more certainty in the urban and agricultural land markets; thereby, mitigating the escalation of agricultural land values. In regards to the second issue, HRS, Chapter 165 "Hawaii Right to Farm Act" protects farmers from lawsuits filed by residents living within close proximity of agricultural operations. Future residents of the Pi'ilani Promenade will continue to be notified prior to the purchase of property that ranching activities will occur on abutting agricultural lands. In addition, the Pi'ilani Promenade will establish landscape planting around the perimeter of the property with a buffer to mitigate potential agricultural use conflicts.

Of the projects listed in Table No. 16, the Kihei High School (76 acres), Kihei Residential (94.3 acres), MRTP (102 acres) required a State Land Use District Boundary Amendment from Agricultural to Urban. The total designation of Agricultural land to urban for surrounding developments is 272.3 acres. The 272.3 acres represents 0.098 percent of the approximately 246,000 acres of State Agricultural district lands on the island of Maui. Based on this minimal impact to agricultural lands the Project with other potential projects is not anticipated to have a significant impact on Agricultural resources.

The remaining projects on Table No. 16 are located on land that is Urban and therefore no impacts to Agricultural resources are anticipated.

Drinking Water Resources. The development of the Pi'ilani Promenade, together with other area projects, will increase the demand for drinking water. The Applicant is constructing a 1.0 million gallon water tank and supporting infrastructure to provide



water for the project and future south Maui water customers. The development of the 1.0 MG water tank will help support the drinking water needs for the future planned growth of South Maui. With these measures in place, significant cumulative and/or secondary impacts are not anticipated to threaten the long-term sustainability of the County's water resources. This 1.0 MG water tank will provide substantially more drinking water source storage than would be required both for the Pi'ilani Promenade Project, and for the Honua'ula affordable housing project, if that project is developed. Other proposed projects will be required to meet the requirements of the Department of Water Supply including but not limited to project specific improvements to the water transmission and storage systems.

Table No. 16b Other Potential Projects: Water

<u>Development</u>	<u>Drinking water Demand (gallons per day)</u>
<u>Kaiwahine Village</u>	<u>67,200</u>
<u>Maui Lu Resort</u>	<u>148,800</u>
<u>Kihei High School</u>	<u>185,000</u>
<u>Kenolio Apartments</u>	<u>104,160</u>
<u>Kihei Residential</u>	<u>790,000</u>
<u>Downtown Kihei</u>	<u>48,500</u>
<u>Maui Research and Technology Park</u>	<u>798,065</u>
<u>Honua'ula Affordable Housing Development</u>	<u>210,000</u>
<u>Total</u>	<u>2,351,725 gallons per day</u>

It is estimated that the total drinking water demand for the projects listed in Table No. 16b is 2,351,725 gallons per day. As noted in the FEIS, 0.421 MGD of groundwater can be allocated from the Iao Aquifer System, therefore all proposed projects in Table No. 16b will not be able to utilize drinking water from the Iao Aquifer System. It is noted that only the Kihei Residential project has begun construction of those listed in Table No. 16b and as development occurs each individual project will need to provide a viable water source. Alternatives considered by the projects in Table No. 16b include but are not limited to drilling wells within the Kamaole Aquifer as a new water source.

Air Quality. The cumulative impact of the build-out of the Pi'ilani Promenade, together with other developments in Kihei, will increase the amount of pollutants entering the



atmosphere. These pollutants will be generated by an increase in demand for energy in the form of transportation fuels for automobiles and carbon-based fuels to power the Ma'alaea Power Plant. Of the projects listed in Table No. 16, the Kihei High School and MRTP had air quality analysis conducted as part of their EIS documents. All other projects listed in Table No. 16 do not have an analysis to quantify air quality impacts. The conclusion of the MRTP and Kihei High School air quality reports is that implementing any air quality mitigation measures is unnecessary and unwarranted since the worst-case scenario carbon monoxide concentrations are projected to remain well within air quality standards.

Noise Quality. The cumulative impact of the build-out of the Pi'ilani Promenade, together with other developments in Kihei, will increase the amount of noise generated primarily from vehicles. Of the projects listed in Table No. 16, the Kihei High School, MRTP and Honua'ula Affordable housing development had noise quality analysis conducted as part of their EIS documents. The Honua'ula impacts were analyzed as part of the Project FEIS. All other projects listed in Table No. 16 do not have an analysis to quantify noise quality impacts. The recommended mitigation measures for the MRTP and Honua'ula Affordable housing development is to place noise sensitive buildings adequately setback from roadways. The Kihei High School is setback at least 650 feet from Piilani Highway, where future noise levels are predicted to be acceptable at less than 55 DNL.

Impacts to the Socio-Cultural Environment

The development of the Pi'ilani Promenade, together with other developments in Kihei, will increase population, create jobs, and generate tax revenues. Together, these projects will also increase the demand for housing and place increasing demands on infrastructure and public facility systems both locally and island-wide.

Of the projects listed in Table No. 16, the Kihei High School, Downtown Kihei projects are not proposing residential development. The activities of the School and the Downtown projects will require a population of students and teachers and employee and customers, however these facilities will serve people who already live in Kihei and are not expected to be population generations. The Maui Lu project and Honua'ula Affordable housing development are required to provide a total of 404 affordable units in the Kihei Makena plan region. It is unknown at this time what the unit size is for these two projects.

**Table No. 16c Other Potential Projects: Population**

<u>Development</u>	<u>Estimated population</u>
<u>Kaiwahine Village</u>	<u>360</u>
<u>Maui Lu Resort</u>	<u>154 affordable units, population not estimated in report</u>
<u>Kihei High School</u>	<u>0</u>
<u>Kenolio Apartments</u>	<u>498</u>
<u>Kihei Residential</u>	<u>1,800</u>
<u>Downtown Kihei</u>	<u>0</u>
<u>Maui Research and Technology Park</u>	<u>2,756</u>
<u>Honua'ula Affordable Housing Development</u>	<u>250 affordable units, population not estimated</u>
<u>Total</u>	<u>5,414 people</u>

Of the projects listed in Table No. 16c that provided population estimates, The following projects are estimated to generate 5,414 more people living in Kihei.

According to the Maui Island Plan, there will be a demand for an additional 34,637 housing units on Maui through 2030. The County of Maui's Land Use Forecast (November 2006) forecasted that there will be a demand for an additional 9,735 units in Kihei-Makena through 2030. The 226 units proposed at the project are approximately 2% of the forecasted Kihei-Makena demand. The proposed project together with other planned projects in Kihei, are a necessary source of housing to accommodate the forecasted population growth.

**Table No. 16d Other Potential Projects: Housing**

<u>Development</u>	<u>Land Use</u>	<u>Number of Units/ Development Area</u>
<u>Kaiwahine Village</u>	<u>Multi-Family Residential</u>	<u>120 affordable units</u>
<u>Maui Lu Resort</u>	<u>Hotel</u>	<u>788 hotel rooms & 154 affordable units</u>
	<u>Existing Hotel (Demolished)</u>	<u>174 rooms</u>
<u>Kihei High School</u>	<u>School</u>	<u>215,000 Square Feet</u>
<u>Kenolio Apartments</u>	<u>Multi-Family Residential</u>	<u>186 units</u>
<u>Kihei Residential</u>	<u>Single Family Residential</u>	<u>400 units</u>
	<u>Multi-Family Residential</u>	<u>200 units</u>
	<u>Commercial</u>	<u>7,000 Square Feet</u>
<u>Downtown Kihei</u>	<u>Commercial</u>	<u>258,000 Square Feet</u>
	<u>Hotel</u>	<u>150 rooms</u>
<u>Maui Research and Technology Park</u>	<u>Multi-Family Residential</u>	<u>500 units</u>
	<u>Single Family Residential</u>	<u>750 units</u>
	<u>Knowledge Industry/ Commercial /Business</u>	<u>2 million Square Feet</u>
	<u>Hotel</u>	<u>500 rooms</u>
<u>Honua'ula Affordable Housing Development</u>	<u>Multi-Family Residential</u>	<u>250 units</u>
<u>Total</u>	<u>Single Family</u>	<u>1,150 SF units</u>
	<u>Multi Family</u>	<u>1,410 MF units</u>
		<u>2,560 total units</u>

The projects listed in Table No. 16d estimate construction of 2,560 multi-family and single-family units combined and represent approximately 26% of the forecasted demand for an additional 9,735 units in Kihei-Makena. The completion of the projects listed in Table No. 16d will support the goal of providing additional housing in the Kihei-Makena region to meet the demand of the growing community.

The continued build-out of Kihei will also change the area's urban design character and sense of place. Today, Kihei is a developing community with a number of undeveloped infill parcels intermixed with lower and medium-density residential, strip commercial, industrial, resort and public facility uses. In the coming years, pursuant to the land-use policies contained in the Maui Island Plan and Kihei-Makena Community Plan, Kihei will evolve to become a more unified and cohesive urban settlement. Urban development will



likely become more compact, mixed-use and interconnected. Networks of open-space, parks, bikeways, trails and pedestrian-oriented streets will link districts and neighborhoods together. An increase in population, including population created by the Pi'ilani Promenade, may increase demand for coastal and inland active and passive recreation lands. The County's Infrastructure and Public Facilities Issue Paper (September 2007) recommends a pro-active public-sector strategy to acquire additional shoreline and inland park lands to accommodate the increasing demand for recreation and shoreline-based cultural activities. MCC Title 18.16.320 requires a park land dedication, or cash-in-lieu fee, to mitigate the impact of growth on park and recreation facilities.

Of the projects listed in Table No. 16e the Kihei Residential, the MRTP, and the Honua'ula Affordable Housing Development are subject to MCC Title 18.16.320 which requires a park land dedication, or cash-in-lieu fee, to mitigate the impact of growth on park and recreation facilities.

Table No. 16e Other Potential Projects: Recreation Facilities

<u>Development</u>	<u>Parks Contribution</u>
<u>Kaiwahine Village</u>	<u>0</u>
<u>Maui Lu Resort</u>	<u>0</u>
<u>Kihei High School</u>	<u>0</u>
<u>Kenolio Apartments</u>	<u>0</u>
<u>Kihei Residential</u>	<u>On site park with restrooms and parking will be provided</u>
<u>Downtown Kihei</u>	<u>0</u>
<u>Maui Research and Technology Park</u>	<u>On site parks and open space will be provided</u>
<u>Honua'ula Affordable Housing Development</u>	<u>Cash-in-lieu fee to be paid to Maui County</u>

The Kihei Residential, the MRTP, and the Honua'ula Affordable Housing Development are subject to MCC Title 18.16.320 and will therefore mitigate potential recreational impacts by providing park space in Kihei-Makena region.

With regard to the concern relative to sprawl, the proposed project is located immediately adjacent to an extensive and larger light industrial complex which is adjacent to a significant residential area in north Kihei. Immediately to the south of the proposed project is the proposed Kihei High School for which the State of Hawaii has acquired the



land and is now in the process of design. The amount of residential or apartment zoned land in south Maui available for residential and especially apartment development is limited. The project site is County zoned Light Industrial and Apartments are a permitted use. The proposed project has been designated for urban development since 1995 and is located within the Maui Island Plan Urban Growth Boundary, an area determined to be the location of desired future urban development for south Maui. This mixed-use project will include light industrial, business /commercial and residential uses, active park space, pedestrian and bicycle connectivity within the site and along the frontage portions of the Kihei Upcountry Highway and Pi'ilani Highway to promote smart growth and less dependence on the automobile. In addition the project will provide an easement for pedestrian and bicycle connectivity from Ohukai Road to the mauka portion of the project site and the Applicant anticipates that there will be opportunities for future connection along Pi'ilani Highway with the Kihei High School. The onsite pedestrian oriented improvements will reduce the need for the automobile and create a healthier lifestyle for those who live there and the offsite easement will expand the regional non-vehicular transportation network.

The Applicant's for each proposed project will be required to comply with mitigation measures as mandated by County and State law.

Infrastructure and Public Facilities

The build-out of the Pi'ilani Promenade, together with other developments in Kihei, will increase population; thereby, increasing the demand for infrastructure and public facility systems, including water, wastewater, and roadways; solid waste, schools, and parks; and medical facilities, public transit and government offices. The County's Infrastructure and Public Facilities Issue Paper (September 2007) documents the impact of projected population growth on the County's infrastructure and public facility systems by region and identifies associated capital improvement projects to support this growth.

The TIAR update prepared for the project has examined and evaluated traffic impacts of the project, as well as the other potential projects identified on Table No. 16f. The projected trip generation impact of these projects is presented in table 10 in the TIAR update. As noted in the TIAR, these projects have been included in the traffic analysis, however some projects are in the planning and entitlement phase and for various reasons may not be constructed within the estimated completion date of this project.

**Table No. 16f Other Potential Projects: Traffic**

<u>Development</u>	<u>Trip Generation AM</u>	<u>Trip Generation PM</u>
<u>Kaiwahine Village</u>	<u>66</u>	<u>80</u>
<u>Maui Lu Resort</u>	<u>316</u>	<u>363</u>
<u>Kihei High School</u>	<u>693</u>	<u>215</u>
<u>Kenolio Apartments</u>	<u>103</u>	<u>127</u>
<u>Kihei Residential</u>	<u>616</u>	<u>737</u>
<u>Downtown Kihei</u>	<u>230</u>	<u>393</u>
<u>Maui Research and Technology Park</u>	<u>2120</u>	<u>1713</u>
<u>Honua'ula Affordable Housing Development</u>	<u>127</u>	<u>158</u>
<u>Total</u>	<u>4271</u>	<u>3786</u>

Of the projects listed in Table No. 16f the estimated traffic generation is 4,271 trips in the morning and 3,786 trips in the afternoon. The proposed traffic mitigation measures for the other potential developments are provided in Section D. 1 (Roadways) of the FEIS.

Table No. 16g Other Potential Projects: Wastewater

<u>Development</u>	<u>Wastewater (gallons per day)</u>
<u>Kaiwahine Village</u>	<u>76,500</u>
<u>Maui Lu Resort</u>	<u>116,500</u>
<u>Kihei High School</u>	<u>210,000</u>
<u>Kenolio Apartments</u>	<u>47,430</u>
<u>Kihei Residential</u>	<u>935,000</u>
<u>Downtown Kihei</u>	<u>177,800</u>
<u>Maui Research and Technology Park</u>	<u>1,850,000</u>
<u>Honua'ula Affordable Housing Development</u>	<u>63,750</u>
<u>Total</u>	<u>3,476,980</u>



Of the projects listed in Table No. 16g the estimated wastewater generation is 3,476,980 gallons per day and the available capacity at the KWWRF is approximately 4.6 million gallons per day, therefore the total of other developments listed can be accommodated.

Other developments will be required to pay assessment fees also and mitigate impacts to the County sewer and maintain system service.

Sewage generated by the Project will be treated at the KWRF. As indicated by the County DEM, wastewater capacity is available for the project. The Applicant will be required to make system improvements at the time of service and applicable assessment fees will be required.

As documented in Section III.D of the DFEIS, the Pi'ilani Promenade will mitigate its impact on infrastructure and public facility systems through a variety of on- and off-site infrastructure and public facility counter-measures. One such counter measure, as documented in Section III.D.3 of the DFEIS, is the development of a 1.0 MG drinking water storage tank to provide drinking water storage to accommodate the cumulative impact of projected population growth. Property taxes generated by the development, together with other planned projects in the area, will help fund County operations and capital improvement projects.

The mitigation of other projects potential adverse cumulative impacts resulting from infrastructure use will be provided during the course of development by providing additional facilities on-site and offsite such as park facilities, stormwater management, and water. Mitigation measures will also include required contribution of impacts fees such as school, traffic and wastewater.

The projects listed in Table No. 16 represent future potential developments identified, however the timeframe for these projects are dependent upon individual entitlement processes and market conditions which are not linked to the proposed Piilani Promenade project. It is in this context that Maui County has processes and mechanisms to ensure that mitigation measures attributable to cumulative impacts are provided.

Cumulative Impacts of Honua'ula Affordable Housing Development

The Preliminary Engineering Report (PER) was developed to address the engineering issues and impacts associated with the Promenade project in terms of utility service, drainage, access, grading and other aspects of site development. It is important to remember that the final subdivision map creating both the Promenade and Honua'ula Partners LLC (HPL) parcel was required to provide adequate utility service to each lot



(water, sewer, electrical, etc.). The subdivision map and associated civil construction plans provide for all of these services for each lot including the HPL parcel. All of the drainage work done to date has been completed to address the on and off site infrastructure development needed to serve all of the parcels including HPL. The Promenade PER specifically addresses the drainage concerns associated with development of that project only while the HPL parcel, when developed, will need to comply with the County of Maui drainage requirements as a separate project not impacting the assumptions already addressed in the subdivision and Promenade PER documents.

In addition to the above the HPL parcel is owned by a separate entity with development timing subject to both Chapter 343 compliance and processing of a Motion to Amend with the Commission. Therefore, its development timing is uncertain and there are no specific development plans yet developed to provide a basis for PER analysis other than the number of units.

AIS: the AIS includes the Honua'ula affordable housing development parcel in its Survey and no Historical Sites were identified on this project parcel outside of the Piilani Promenade.

CIA: The CIA included the Honua'ula parcel in its Assessment. Drainageway "A" was noted by some interviewees as having cultural importance however the CIA concludes that:

"Given the input received through the consultation process and a review of the archaeological data gathered in the project AIS we cannot conclude the minor drainageway "A" discussed within the project documents or consultation discussions has any relevant cultural significance. As part of the data recovery process proposed for the project area further information may reveal more about this drainage way and possible significance." In addition SCS has prepared a separate CIA for the Honua'ula Affordable Housing development parcel. (See: Appendix I-2 "Cultural Impact Assessment for the proposed Honua'ula offsite workforce housing project dated April 2017").

The cultural and historical background presented in the CIA prepared by Hana Pono, LLC and the SCIA prepared by SCS, in addition to the findings of prior archaeological studies in the project area and in the neighboring areas, support the findings of the CIA prepared for the Honua'ula offsite workforce housing project. The findings are that there are no specific valued cultural, historical, or natural resources within the project area. Nor are there any traditional and customary native Hawaiian rights being exercised within the project area. (See: Appendix I-2 "Cultural Impact Assessment for the proposed Honua'ula offsite workforce housing project dated April 2017").



PER: The PER does not identify the drainage and electrical impacts of the Honua'ula affordable housing development yet that parcel will be served by all major utility connections already established and shown in the subdivision improvement plans and all infrastructure has been sized to reflect the buildout of both Piilani and Honua'ula affordable housing development. Honua'ula's affordable housing development electrical requirements will be served from the new MECO substation and any drainage by Honua'ula affordable housing development will be required to meet Maui County Standards. The Applicant calculated the estimated Drinking Water Demand for both Piilani and Honua'ula affordable housing development by using Maui County Code Standards.

TIAR: The estimated Traffic generated by Honua'ula affordable housing development were analyzed as part of the TIAR update by SSFM. This traffic along with other background growth was used to understand the impacts of other projects, along with the proposed Piilani project.

ECON: The Study did not measure other projects economic impacts. The Study mentions the Honua'ula Affordable housing project in 2 places related to affordable housing. The statement is made that 125 units of the 250 will be rental with the remainder owner occupied. The positive social impact of the Affordable Housing Development can be identified in the FEIS.

Waimea Water Services Report: The irrigation well is located on Honua'ula Affordable Housing project parcel and will provide the water for construction dust control and temporary irrigation for the both Piilani and Honua'ula affordable housing development. The Waimea water services report has determined that during a test pumping of a well in the same area as the on property well , there was no change in the water level and quality at 3 observation wells. In addition the report noted that three irrigation wells are located downstream of the property, all of which are located at a distance of over 3000 feet from the well and it is the conclusion of the Waimea water services report that it is unlikely the proposed irrigation well will impact downstream irrigation wells.

Air Quality: The Air Quality Study included the Honua'ula affordable housing development, however the affordable project is separated from the Piilani Promenade project. Additionally, the essential data used for the air quality analysis is the data finalized within the TIAR update which includes the impacts of the Honua'ula affordable housing development. As previously mentioned, based on the review of the TIAR Update



dated December 2016 it is the opinion of the air quality consultant that re-analysis of the project air quality impacts due to project traffic would not yield significantly different results and the conclusions stated in the air quality study of August 2014 remain valid. (See: Appendix D-2 "Air Quality Report Update dated February 2, 2017")

Noise Study: Based on the review of the TIAR Update dated December 20, 2016 it is the opinion of the Acoustic Study consultant that any potential adverse noise impacts at the Honua'ula affordable housing project can be compared to the potential noise impacts as follows:

There should be less exposure to noise from the Piilani Promenade project's noise source since on the south side of the Honua'ula affordable housing project will face the Piilani Promenade business/commercial activities;

Piilani Promenade traffic on E. Kaonoulu Street fronting the Honua'ula affordable housing project should be less than Piilani Promenade traffic on E. Kaonoulu Street fronting the Piilani Promenade's 226 residential units. Total predicted traffic noise in 2032 at the Honua'ula affordable housing project should also be less than the 59 to 61 DNL predicted at the Piilani Promenade's 226 residential units. (See: Appendix E-2 "Acoustic Study dated January 23, 2017")

Shared infrastructure Irrigation Well: The irrigation well is intended to serve both the Piilani and HPL parcels and is designed to do so with the irrigation system located for future connection by all parcels. Additionally, this private system has been designed for conversion to reclaimed water when that service is available from the County of Maui consistent with the zoning conditions for the parcel.

Kihei Up-Country Highway: The Piilani Promenade will construct the increment of the Kihei/Upcountry Highway from its intersection with the Piilani Highway through to the eastern boundary of the property serving all four parcels with a fully improved roadway section including major utilities, drainage, off road bicycle and pedestrian paths, roadway and landscaped shoulders and median strips.

Utilities: The improvements proposed by Piilani Promenade will provide full utility service to all parcels in the subdivision including the HPL parcel. Water, sewer, electrical, roadway drainage will all be provided per the subdivision construction plans.



Secondary impacts

Secondary impacts are those that have the potential to occur later in time or farther in the future, but which are reasonably foreseeable. They can be viewed as actions of others that are taken because of the presence of the project. Secondary impacts from highway projects, for example, can occur because they can induce development by removing transportation impediments to growth.

Secondary impacts could also result from investments into infrastructure and public facility improvements to support the Project. For example, development of the KUH could induce further growth mauka of Pi'ilani Highway. As documented in Section III.D.1 of the DFEIS, development mauka of Pi'ilani Highway is supported by the Maui Island Plan. The future growth of the KUH outside of the project area is unknown at this time.

While the project is anticipated to add to the resident population, the proportion of in-migrants is expected to be modest given the demand for apartment rental housing in Kihei. As previously noted, the project will result in construction-term expenditures, wages and taxes. Real property taxes will contribute to the County's revenue tax base to support the increase in public services. The project is not anticipated to have a significant adverse impact on the physical environment. As previously noted, no adverse impacts to historic properties, or rare threatened or endangered species are anticipated. Necessary infrastructure systems and services can be reasonably provided to serve the project. The proposed action is not anticipated to result in significant adverse secondary impacts.

D. UNRESOLVED ISSUES

Table No. 17 Unresolved Issues

Issue	Parties Involved	Estimated Resolution
1. Motion for o Order Amending the Findings of Fact, Conclusions of Law, and Decision and Order dated February 10, 1995 (Docket No. A-94-706)	Applicant, LUC, Office of State Planning	2015 7
2. Compliance with the Kihei-Makena Community Plan	Applicant, County of Maui, Department of Planning	2014-2015 7
3. Preservation of Archaeological Sites	Applicant, SHPD	2016 7



4. Future location of Wastewater Pump Station	Applicant, County of Maui, Department of Environmental Management	2015<u>8</u>
5. Pedestrian Connectivity to the Kihei High School	Applicant, DOE, various private land owners	2017<u>9</u>
<u>6. Army Corps of Engineers Jurisdictional determination if a navigable waterway of the United States is located on property.</u>	<u>Applicant, Army</u>	<u>Unknown: the Applicant estimates a response from the Army in 2017</u>
<u>7. Impact Fee Agreement with the Department of Education (DOE)</u>	<u>Applicant, DOE</u>	<u>Prior to construction of the Project infrastructure, which is estimated to happen in 2018.</u>

1. Motion for ~~o~~Order Amending the Findings of Fact, Conclusions of Law, and Decision and Order dated February 10, 1995 (Docket No. A-94-706)

On February 10, 1995, the Land Use Commission issued its Findings of Fact, Conclusions of Law, Decision and Order, in Docket No. A94-706 (the "1995 Decision and Order"). The 1995 Decision and Order reclassified the Petition Area from Ag to Urban subject to conditions.

On September 10, 2010, Maui Industrial Partners, LLC sold the project parcels TMK's (2) 3-9-001:016, 170-174 to the Applicant. The project parcels comprise approximately 75 of the 88 acres contained within the Petition Area. The remaining 13 acres are owned by a third party (Honua'ula Partners) and are not part of the project area.

Applicant, through Eclipse Development Company, LLC, originally planned to develop a shopping complex known as "Pi'ilani Promenade" on the Pi'ilani Parcels. On April 11, 2012 and April 18, 2012, Maui County issued to Applicant two grading permits, placing Applicant in a position to begin construction of on-site and off-site infrastructure for the Pi'ilani Parcels. However, on May 23, 2012, Maui Tomorrow Foundation, Inc., South Maui Citizens for Responsible Growth, and Daniel Kanahale filed a Motion for a Hearing, Issuance of Order to Show Cause, and Other Relief with the Commission, which was granted on September 10, 2012 (the "Order to Show Cause"). At a meeting on February 7, 2013, a majority of the members of the Commission determined by oral vote that Applicant's proposed use of the Pi'ilani Parcels and Honua'ula's proposed use of the



Honua'ula Parcel would violate Conditions 5 and 15 of the 1995 Decision and Order, and that Condition 17 had also been violated. No written order regarding the foregoing has been entered. Thereafter, Applicant moved for, and the LUC issued, a stay of the Order to Show Cause Proceeding, to allow the Applicant to file motion to amend the 1995 Decision and Order (the "Motion to Amend").

The Applicant filed a Motion to Amend requesting that the LUC issue a new docket number, release the project parcels from the conditions of the 1995 Decision and Order, and issue new Findings of Fact, Conclusion of Law, and a Decision and Order as to the Pi'ilani parcels applicable and only to the project site. If the Motion to Amend is granted, ~~then it is the Applicant's position that the Order to Show Cause proceeding would be moot, and should be dismissed.~~

2. Compliance with the Kihei-Makena Community Plan

The Pi'ilani Promenade is designated for (LI) Light Industrial uses by the KMCP. The KMCP defines "Light Industrial (LI)" as follows: "This is for warehousing, light assembly, service and craft-type industrial operations." The County of Maui Planning Department has consistently interpreted the KMCP's LI designation consistent with the M-1 Light Industrial zoning classification, as the KMCP specifically states that the goals, objectives and policies of the KMCP are implemented and effectuated through various processes, including zoning. ~~The Applicant expects the Planning Department to provide written comment on this Draft EIS and we expect any concerns to be documented in their comment letter.~~

The subject property is located in North Kihei, south of Ohukai Road, and mauka of Pi'ilani Highway. This area was designated in the KMCP for light industrial use in order to encourage urban expansion in the area mauka of Pi'ilani Highway (goal k). Goal k of the KMCP seeks to "[p]rovide for limited expansion of light industrial services in the area south of Ohukai and mauka of Pi'ilani Highway, These areas should limit retail business or commercial activities to the extent that they are accessory or provide service to the predominate light industrial use." The original conceptual plan of 123 light industrial lots, which fit squarely within that designation, is no longer desirable or economically viable. The KMCP specifically states that it is intended to "reflect current and anticipated conditions in the Kihei-Makena region" and is intended to guide decision making through the year 2010. See KMCP at 3. Since the KMCP was adopted in 1998, the proposed planning for that area has adjusted. Other developments south of Ohukai and mauka of Pi'ilani are predominantly retail, with only some instances of true light industrial uses. The community planning process has evolved since 1998, and the current Maui Island Plan indicates that the Pi'ilani Promenade is located within the Urban Growth



Boundary, and is surrounded by areas currently not zoned for urbanization, but designated as “planned growth areas.” The Maui Island Plan specifically cites the need for mixed-use neighborhood centers “to provide services and jobs within close proximity to where people live and provide a more efficient land use pattern.” Maui Island Plan at 8-27.

~~It is the Applicant’s position, which it intends to advocate for on the pending Motion to Amend before the LUC, that the project falls within the Light Industrial designation of the KMCP, as that provision is implemented by the corresponding M-1 zoning designation, and that goal k of the Land Use section on page 18 of the KMCP is substantially met by the proposed project. In the event that the LUC does not agree with the Applicant’s position in deciding the Motion to Amend, then, as an alternative, Applicant will seek any necessary amendment to the KMCP.~~

Although the County of Maui has determined that the proposed Project complies with the KMCP, the Applicant recognizes that certain parties have asserted that an amendment to the KMCP is necessary for development of the Project to proceed. This issue may be resolved by the LUC during its consideration of the Applicant’s Motion to Amend.

3. Preservation of Archaeological Sites

~~As stated in the DEIS, the property contains archaeological sites and the project Archaeologist has recommended a data recovery plan as the mitigation measure. The Applicant expects that SHPD will comment on the DEIS and provide guidance on preparation of an adequate data recovery plan as practical mitigation solution. Data recovery is now the recommended mitigation for twelve (12) Sites 3727-3729, 3732, 3735, 3736, Sites 3741 through 3745, and newly identified Site 8266 (See: Table No. 2). A data recovery plan has been prepared and submitted to SHPD in June 2016 and is currently under review by SHPD staff. In addition the SHPD issued a letter dated January 6, 2016 that accepts the AIS as final. (See: Appendix F-1, “SHPD acceptance letter dated January 6, 2016”).~~

The Applicant is willing to continue meetings with the Aha Moku members as well as other members of the community during the site data recovery process to further understand the cultural and archaeological nature of the site and where possible, development of a preservation plan for those sites.

The Applicant is aware that no ground disturbing work can proceed until a formal agreement with the SHPD is complete.



4. Development of Wastewater Pump Station

The County of Maui, Department of Environmental Management requested that the applicant locate a 10,000 square foot wastewater pump station on the project site. The Applicant met with the Department on May 6, 2014 to discuss the preferred location of the pump station. As a result of that meeting the Applicant will continue coordinating with the Department and the Project team's Civil Engineer during the environmental review process to determine the preferred location, ~~prior to the submittal of the Final EIS.~~

At the time of publication of this FEIS, the Department of Environmental Management, Wastewater Division has not prepared designs for the sewer line or pump station and has not included the future sewer line or pump station in any capital improvement program (CIP) budget request for design. The Applicant will continue to cooperate with the Department of Environmental Management, Wastewater Division to set aside an area in the Project site for the pump station and sewer line. The pump station is a large piece of infrastructure that will service the central Kihei region in the future and the construction timetable is unknown at this time.

5. Pedestrian Connection to the Kihei High School

The Kulanihakoi Gulch separates the proposed project and future Kihei High School. The Applicant is willing to discuss connectivity opportunities with the SDOT to create pedestrian access between the school and Pi'ilani Promenade. The Kihei High School is required to construct an underpass or overpass across Pi'ilani Highway to provide pedestrian access. The DOE has not made a decision on which option is the most viable. The construction schedule for the school and appropriate funding sources for the pedestrian access are uncertain at this time. The connectivity issue will be resolved as the Kihei High School plans become finalized.

At the time of publication of this FEIS the issue remains unresolved.

However, the current Project plan includes off road pedestrian and bicycle routes along both East Kaonoulu Street, as well as through an access easement from Ohukai Street to East Kaonoulu Street. Additionally, the Project includes a separate pedestrian/bicycle pathway running parallel to the Pi'ilani right of way within the Project site as a preferred and safe route for south Maui residents traveling to and from the Project site. With regard to the Kulanihakoi Gulch crossing, the Applicant has offered to assist the State DOT in the design of a separate crossing facility located within the right of way and outside the roadway section for pedestrian and bicycle safety. All of the above proposed improvements are intended to facilitate safe walking and bicycling and to reduce the requirement for automobile use in order to access the development.



6. Army Corps of Engineers Jurisdictional Determination

The Applicant is awaiting a jurisdictional determination by the Army Corps of Engineers whether a navigable waterway of the United States is located within the Project site. The Applicant met with the Army Corp of Engineers on the Project site on January 19, 2017. The Army Corp of Engineers is currently finishing review of the field notes and a determination is pending. The Applicant expects resolution of this issue in 2017.

7. Impact Fee Agreement with the Department of Education (DOE)

The Applicant will enter into an Impact Fee Agreement with the DOE, which will be executed prior to construction of the Project infrastructure, which is estimated to happen in 2018.



VI. REFERENCES

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VII. CONSULTATION AND REVIEW

A. EARLY CONSULTATION

Prior to the preparation of the Draft EIS, consultation on the project was undertaken with the following agencies and groups:

Various Dates 2013	Meetings with Kihei Community Association to discuss the project and preparation of the EISPN (4/26, 6/4, 6/28, 9/10/13)
June 25, 2013	Maui Nutrition and Physical Activity Coalition (NPAC)
July 9, 2013	South Maui retail business owners meeting to discuss project design
September 10, 2013	Meeting with Maui Chamber of Commerce and Maui Contractors Association to discuss project design.
September 11, 2013	Native Hawaiian Chamber of Commerce
November 5, 2013	General Public Community Meeting, approximately 150 people from the public attended. The entire project team was present to answer questions from the Community.
February 25, 2014	Public Informational meeting on Archaeology, approximately 15 people attended. (a transcript of the meeting is located in Appendix F)
May 6, 2014	Consultation meeting with Maui County Department of Environmental Management to discuss location of a future wastewater pump station and associated easement.

After the preparation of the DEIS, consultation on the Project was undertaken with the following agencies and groups.

<u>January 22, 2016</u>	<u>Site visit with individuals to review archaeological site.</u>
<u>February 19, 2016</u>	<u>Meeting with Planning Department to discuss the Project.</u>



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- April 26, 2016 Consultation phone call with Maui County Department of Environmental Management to discuss location of a future wastewater pump station and associated easement.
- April 27, 2016 Consultation meeting with Aha Moku and other individuals to review cultural and archaeological concerns.

B. EIS PREPARATION NOTICE DISTRIBUTION

The EISPN was published by the Department of Health, Office of Environmental Quality Control (OEQC) on September 23, 2013 and the 30-day public comment deadline was October 23, 2013. The EISPN was transmitted to the following agencies, ~~and~~ organizations, and individuals for review and comment. The agencies, organizations, and individuals with an asterisk * provided comments (See: Appendix A, "EISPN Comments and Responses") The EISPN was transmitted to the Kihei Public Library for public review. No public comments were received.

Federal Agencies

U.S. Department of Agriculture, Natural Resources Conservation Service
U.S. Army Engineer Division*
U.S. Fish and Wildlife Service

State Agencies

Department of Agriculture
Department of Accounting and General Services*
Department of Business, Economic Development & Tourism (DBEDT)
DBEDT - Office of Planning*
Department of Education*
Department of Hawaiian Home Lands
Department of Health- Environmental Planning Office*
Department of Health- Clean Water Branch*
Department of Health- Safe Drinking Water Branch*
Department of Health- Clean Air Branch*
Department of Health- Wastewater Branch*
Department of Health- Maui District*
Department of Human Services
Department of Labor and Industrial Relations
Department of Land and Natural Resources (DLNR) - Land Division*



DLNR – State Historic Preservation Division (SHPD)
DLNR- Engineering Division*
DLNR- Commission on Water Resource Management*
Department of Transportation*
Hawaii Housing Financing and Development Corporation
Office of Hawaiian Affairs
University of Hawaii, Environmental Center

Maui County Agencies

Department of Environmental Management*
Department of Fire and Public Safety*
Department of Housing and Human Concerns*
Department of Parks and Recreation*
Department of Planning
Department of Public Works*
Department of Transportation*
Department of Water Supply
Police Department

Others

Maui Tomorrow*
Kihei Community Association*
South Maui Citizens for Responsible Growth*
Daniel Kanahale*
Elden Liu*
Michael Lee*
Lila Sherman*
Brian Naeole*
Edwin Lindsey (Maui Cultural Lands)*
Clare Apana*

C. COMMENTS ON THE DRAFT EIS

The DEIS was published by the Department of Health, Office of Environmental Quality Control (OEQC) on August 23, 2014 and the 45-day public comment deadline was October 7, 2014. The DEIS was transmitted to the following agencies, organizations, and individuals for review and comment. The agencies, organizations, and individuals with an asterisk * provided comments (See: Appendix P, Comments on the Draft EIS)



Federal Agencies

U.S. Department of Agriculture, Natural Resources Conservation Service

Department of the Army, Army Corps of Engineers

U.S. Army Engineering District, Honolulu, Regulatory Branch

Department of Homeland Security, Coast Guard

U.S. Department of the Interior, National Park Service

U.S. Department of the Interior, USGS*

U.S. Fish and Wildlife Service

U.S. Department of Commerce, National Marine Fisheries Service

Department of Transportation, Federal Aviation Administration

Department of Transportation, Federal Transit Administration

State Agencies

Department of Agriculture

Department of Accounting and General Services*

Department of Business, Economic Development & Tourism, Office of Planning*

Department of Business, Economic Development & Tourism, Strategic Industries Division

Department of Business, Economic Development & Tourism, Hawaii State Energy Office

Department of Defense

Department of Education*

University of Hawaii, Water Resources Research Center

University of Hawaii, Environmental Center

Department of Hawaiian Homelands

Department of Health (DOH) Environmental Planning Office*

DOH- Clean Air Branch*

DOH- Clean Water Branch*

DOH- Indoor & Radiological Health Branch

DOH- Maui District Health Office*

DOH- Safe Drinking Water Branch*

DOH- Solid & Hazardous Waste Branch

DOH- Wastewater Branch*

Department of Land and Natural Resources (DLNR) Land Division*

DLNR- Engineering Division*

DLNR- Commission on Water Resource Management*

DLNR- State Historic Preservation Division (SHPD)*

DLNR- SHPD, Maui District Office

DLNR- Land Division

DLNR- Maui Land Division

Office of Hawaiian Affairs



Department of Transportation*
Department of Transportation, Planning Branch
Department of Transportation, Maui Highways Division
Land Use Commission*

Maui County Agencies

Department of Environmental Management
Department of Fire and Public Safety
Department of Fire and Public Safety, Fire Prevention Bureau
Department of Housing and Human Concerns*
Department of Parks and Recreation*
Department of Planning*
Maui Police Department
Department of Public Works*
Maui Department of Transportation
Department of Water Supply*
Maui Civil Defense Agency

Elected Officials

United States Senator, Mr. Brian Schatz
United States Senator, Ms. Mazie Hirono
State Senator Rosalyn Baker
State Representative Angus McKelvey

Maui County Council Members

Don Guzman
Gladys Coelho Baisa
Robert Carroll
Elle Cochran
Donald G. Couch, Jr.
G. Riki Hokama
Michael P. Victorino
Mike White
Stacy Crivello

Others

Maui News
Hawaiian Telcom, Inc.
Maui Electric Company, Ltd.
Maui Planning Commission



Ms. Zandra Amaral*
Ms. Paula Baldwin*
Ms. Kellie Cruz*
Mr. Daniel Kanahele*
Mr. Michael Lee
Mr. Elden Liu*
Ms. Desiree Lopes*
Ms. Joan Martin*
Mr. Dick Mayer*
Mr. Brian Naeole
Mr. David Reader*
Ms. Sharon Rose*
Ms. Millie Septimo*
Ms. Lila Sherman
Ms. Gylia Solay*

Kihei Community Association*
Maui Chamber of Commerce*
Maui Cultural Lands Inc.
Maui Tomorrow Foundation*
South Maui Citizens for Responsible Growth*
Tom Pierce, Attorney at Law LLC

D. CONSULTANT LIST

The following consultants prepared technical studies in preparation of the Draft and Final Environmental Impact Statements.

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Cultural

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Environmental

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Geotechnical Engineering

Fewell Geotechnical Engineering, LTD.
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Air Quality

B.D. Neal & Associates
P.O. Box 1808, Kailua-Kona, Hawaii 96745
Contact: Mr. Barry Neal (808.329.1627)

Acoustic

Y. Ebisu & Associates
1126 12th Avenue, Room 305, Honolulu, Hawaii 96816
Contact: Mr. Yoichi Ebisu (808.735.1634)

Architect/ View Analysis

Architects Orange
144 N. Orange St., Orange CA 92866
Contact: Mr. Jack Selman (714.639.9860)