

## 5.0 ASSESSMENT OF Affected ENVIRONMENT, PROBABLE IMPACTS AND MITIGATION: SOCIO-ECONOMIC ENVIRONMENT

### 5.1 POPULATION

#### 5.1.1 Affected Environment

The U.S. Census has recorded O'ahu's resident population as increasing, from 836,231 in 1990 to 876,156 in 2000. The Ko'olau Poko region had a population of 117,910 in 2000, or approximately 13.5% of O'ahu's population. Between 1990 and 2000, the Ko'olau Poko region's population increased at an average annual rate of 0.7%, compared to 0.9% for the island of O'ahu. The population distribution for Ko'olau Poko is set forth in the General Plan to be 11.6% of total O'ahu population by 2025. In contrast, population projections based on current assumptions to 2030 documented by the City and County of Honolulu DPP show the region dropping to 11% of total O'ahu population by 2025, and 10% by 2030 (Table 5).

**Table 5**  
**Ko'olau Poko Region Population**

Year	Ko'olau Poko Population	% of O'ahu Population
1980	109,373	14.3
1990	117,694	14.1
2000	117,999	13.5
2010	119,852	12.6
2020	119,569	11.5
2025	118,064	11.0
2030	116,666	10.0

Source: DPP FY2006 Annual Report

As can be seen from Table 6, Hawai'i's resident population over the age of 55 is on the rise, a trend which reflects the baby boomer generation moving into and through their 50s and 60s. The total of Hawai'i residents that are 55+ years of age is projected to increase from 19.8% of the population in 1990 to 30.6% of the population in 2030. In real numbers, this increase means the total number of Hawai'i residents over 55 years of age will increase from 219,108 in 1990 to 499,550 in 2030, more than doubling in 40 years. Numbers for cohorts age 70+ are even more dramatic. As a percentage of the overall population, this group will grow from 7.1% of the population in 1990 to a projected 14.7% of the population in 2030. In real numbers, this translates to a 300% increase, from 79,421 in 1990 to a projected 239,150 in 2030.

**Table 6**  
**Resident Aging Population Projections**

Year	Total Population State of Hawai'i	55+ State of Hawai'i	55+ as % of Total Population	70+ State of Hawai'i	70+ as % of Total Population
1990	1,108,220	219,108	19.8%	79,421	7.2%
2000	1,212,670	266,943	22.0%	117,467	9.7%
2010*	1,346,000	358,600	22.6%	134,000	10.0%
2020*	1,489,550	442,300	29.7%	176,500	11.8%
2030*	1,630,450	499,550	30.6%	239,150	14.7%

\*Projected

Source: 2006 State of Hawai'i Data Book

In 2000, the resident deaths in Hawai'i totaled 8,163; in 2005 the total was 8,988 (State of Hawai'i 2006). As seen in Table 7, below, the annual average number of deaths is projected to increase by 62% between 2000-2005 and 2030-2035.

**Table 7**  
**Resident Deaths in Hawai'i**  
**(Annual average for the period)**

Period	# of deaths
1980-1985	5,200
1985-1990	6,100
1990-1995	7,000
1995-2000	8,000
2000-2005	8,400
2005-2010*	9,300
2010-2015*	10,000
2015-2020*	10,900
2020-2025*	11,700
2025-2030*	12,500
2030-2035*	13,600

\*Projected

Source: State of Hawai'i 2035 Series

The preferences for post-death care for Hawai'i residents has seen changes over the last 25 years. While burial used to be almost equal to cremation as a method of disposition, cremation has risen to over twice the percentage of burials (Table 8). In 1980, 45% of those interred in Hawai'i were buried; in 2005 that number had dropped to 29%. In contrast, in 1980, 43% of those interred in Hawai'i were cremated; in 2005 that number reached 64%. No data is kept on how many cremated remains are scattered. However, the last several years have seen a leveling of the trend in cremations. Even with a higher percentage of cremations, the number of casketed burials will still rise dramatically because the number of resident deaths will rise dramatically as a function of the aging population.

**Table 8**  
**Deaths by Method of Disposition for Hawai'i**

Method	1980	1990	2000	2003	2004	2005
Burial	2,343	2,798	2,767	2,800	2,696	2,667
% of total	45%	40%	33%	31%	29%	29%
Cremation	2,241	3,564	5,092	5,778	5,900	5,964
% of total	43%	51%	60%	63%	64%	64%
Other	612	691	650	598	655	698
% of total	12%	10%	8%	7%	7%	7%
Unknown	8	2	2	3	1	1
% of total	0.15%	0.03%	0.02%	0.03%	0.01%	0.01%
All methods	5,204	7,055	8,511	9,179	9,252	9,330

Source: 2006 State of Hawai'i Data Book

### 5.1.2 Probable Impacts

The development of the residential portion of the Former Proposed Action Petition Area ~~will would have increased~~ the population in the neighborhood by 20 housing units, or approximately 64 people. ~~Deletion of the residential development will result in no impact on population growth.~~ This could be an increase in the population of the Kāne'ohe region, but is not expected to significantly increase the population of the state as the majority of the homebuyers are expected to be residents already living in the state. The residential development is expected to accommodate the increase in the region's population or the increase in household formation. The development of the cemetery will have the beneficial impact of providing continued after-death services to families on O'ahu and throughout Hawaii in a location that is familiar and with existing support services, and that is conveniently located.

## 5.2 HOUSING

### 5.2.1 Affected Environment

Section 5.1 Population, summarizes population trends for the Island of O'ahu and the vicinity of the Petition Area. O'ahu's resident population is expected to grow to over 1,600,000 residents by 2030, with the Ko'olau Poko region supporting a small percentage (10% according to DPP's Annual Report) of the island's population, down from 12% in 2000. O'ahu's household size is expected to continue to decrease in the future, leading to a greater number of households needing housing. For owner-occupied homes, in 1990 household size was on average 3.23 for O'ahu and 3.19 for the state. In 2000, it had decreased 3.1% for O'ahu to 3.13, and 3.8% for the state to 3.07. Data for the Ko'olau Poko region shows similar downward trends, with a decrease between 1990 when household size was 3.32, to 3.17 in 2000.

The Island of O'ahu had 315,988 housing units in 2000, and is projected to reach 429,026 housing units by 2030. By comparison, the Ko'olau Poko region had 36,964 housing units in 2000 and is projected to reach 39,278 housing units in 2020, with no expected change to this number through 2030 (Table 9).

**Table 9**  
**Number of Housing Units for Ko'olau Poko SCP Area**

Development Plan Area	Actual	Projected		
		2000	2010	2020
Ko'olau Poko	36,964	38,258	39,278	39,278
O'ahu Total	315,988	348,870	389,317	429,026
Annual Growth Rate		+1.0%	+1.1%	+1.0%

Source: DPP 2006 Annual Report

The SCP specifies that housing growth in the region should be minimal, with predominant housing growth for O'ahu directed to the Primary Urban Center and the Ewa Development Plan Areas. The region's share of population is projected to fall within the range of 11 and 12.2% of the island. However, according to DPP projections for housing for the region, there will still be a need for 1,020 additional housing units between 2010 and 2030 (City and County of Honolulu DPP 2008). Approximately 200 units are known to be planned for the Ko'olau Poko region, leaving a need for approximately 820 additional units.

### 5.2.2 Probable Impacts

~~As a result of a combination of factors, particularly a decrease in household size, and the formation of new households, the region will necessitate new housing. These factors include a reduction in household size, and the formation of new households. The Petition Area will increase O'ahu's housing inventory by 20 new homes, all expected to be primary residences. This will fill a small percentage (2.5%) of the projected need of 820 housing units in the region. The development will provide affordable housing opportunities in accordance with applicable City and County of Honolulu affordable housing requirements. The method of satisfying the affordable housing requirement will come from negotiation of the Affordable Housing Plan, approved by appropriate City and County of Honolulu agencies. The Plan could include a range of options, including sale of lots to qualifying affordable owners, construction of dwelling units elsewhere, or payment of an in-lieu fee. Deletion of the residential development will result in no impact on supply of housing or demand for housing in the Ko'olau Poko region.~~

### 5.2.3 Mitigation

~~In developing the Petition Area, the Petitioner agrees to provide affordable housing opportunities for low and moderate income residents of the State of Hawai'i to the satisfaction of the City and County of Honolulu. The location and distribution of the affordable housing or other provisions for affordable housing shall be under such terms as are mutually agreeable between the Petitioner and the City and County of Honolulu. With the adoption of the Revised Proposed Action, no housing will be included in the project, and no mitigation will be required.~~

## 5.3 EMPLOYMENT

### 5.3.1 Affected Environment

Because the Petition Area is vacant and absent any economic activity, there are no existing job opportunities found there. Immediately adjacent to the Petition Area, HMP currently employs 85 people with job categories including administration, sales, and family service counseling. The park also employs 23 unionized operations and maintenance workers, whose primary functions are for the physical upkeep of the cemetery and associated grounds, for a total employment level of about 108 full time jobs.

### 5.3.2 Probable Impacts

The Former and Revised Proposed Actions will create new development-related jobs and new jobs associated with the continuing operations of the cemetery.

It is estimated that there will be ~~four~~three phases to the overall implementation of the Revised Proposed Action (Section 2.5), with areas ranging from ~~14.6 to 16.57 to 25~~ acres. Phase 1 and 2 will be ~~further~~ phased in ~~7-10~~14-16 acre increments, for a total of ~~six~~three development periods. Each ~~7-10~~14-16-acre construction period will last ~~about between six and nine~~9 months and generate about 45 man-years of full-time equivalent direct construction-related jobs. In total, approximately 270 man-years of full-time direct construction-related jobs will be provided over the course of the 20-year build out of the cemetery and the ~~20-lot subdivision~~.

In terms of operational jobs, the administrative and other office-related jobs will remain steady. Even though the size of the cemetery will be expanded, the actual number of families serviced should remain stable. Thus, no new jobs will be created in the service areas. Approximately 3-5 new full-time equivalent jobs will be added in the maintenance sector, as the size of the cemetery increases.

In terms of indirect jobs, the cemetery supports a wide range of vendors and suppliers. The cemetery is continually adorned with flowers and other memorials and keep sakes purchased~~s~~ by families and friends from off-site flower and craft stores. With over 800 interments per year, local material distributors, shippers, and suppliers benefit from providing vaults, markers, monuments, and the respective engraving and markings.

## 5.4 FISCAL IMPACTS

The analysis of the Fiscal Impacts of any given development project are primarily intended to allow a comparison of the long-term civic fiscal benefits and costs associated with the development. Methodologically, an estimate is made of the projected increase in population (net positive migration) within the County and the State that can be assigned as the effects of building the Revised Proposed Action. Then, the governmental revenues projected to be generated by the proposed project are weighed against the costs to be incurred by State and County governments to provide increased services to the additional population.

As discussed in Section 1.1, the “Cemetery Expansion Only” Alternative (Alternative III) presented in Chapter 8 has been selected as the “Revised Proposed Action” to be submitted to the Land Use Commission as the action that will now comprise the project for the State Land Use District Boundary Amendment. This selection is based on the analysis presented in the DEIS, and many comment letters received from agencies and organizations during the EIS review process. Therefore, the discussion of the Fiscal Impacts associated with the residential development is now moot, because no residential lots will be included in the Revised Proposed Action.

In terms of the cemetery expansion, the fiscal impacts of the Proposed Action are related to revenues generated by the cemetery, the salaries paid to cemetery employees and future construction workers, property taxes paid by the future residential properties created as part of the Proposed Action, and corporate and property taxes paid by the cemetery. In addition, as a result of the cemetery expansion, vendors and suppliers of goods and services associated with the cemetery will be able to continue to operate their businesses and pay their employees salary and their own general excise and corporate taxes.

It has been estimated that HMP will employ 113 people on a full-time basis at full build out of the Proposed Action cemetery, an increase of five employees over current levels. As a result, these individuals will be paying individual state income taxes, and will be paying general excise taxes when they purchase goods and services in the community. It has also been estimated that the construction phases of the project will create 270 direct full-time equivalent jobs over the course of the phased 20-year build-out. Payroll for these workers will include state personal income taxes and these individuals will also be buying goods and services with accompanying general excise taxes.

The overall fiscal impacts associated with the Revised Proposed Action will be beneficial, with the contribution of a variety of taxes for use by the City and County of Honolulu, and the State of Hawai'i, including significant increases in property tax payments by the owners of the property in the residential subdivision. The most important recurring fiscal impact associated with the cemetery is the tax paid on cemetery and funeral contracts by HMP. In calendar year 2007, this amount was \$571,947. If the cemetery is not allowed to expand, this value will soon diminish and suffer negative acceleration as fewer and fewer burial plots are available at HMP.

In terms of impacts to government services, no new roadways will be required. It is possible, but unlikely, that a traffic signal will be required for the Kamehameha Highway intersections with the main HMP access road and Halekou Road. A future warrant study prepared by HMP will validate the need, or lack thereof, for a signal at this intersection. If required, HMP will pay its pro rata share for installation of this signal. No additional demand will be placed on the public schools in the vicinity, as no new families will be moving to Kāne'ohe. This minimal demand would be applicable for public safety, human services, recreation, debt services, and government employee benefits.

A beneficial impact of the cemetery expansion is related to the use of the cemetery as a de facto passive park. Residents from nearby neighborhoods use the cemetery to walk their dogs, jog and walk for exercise, in addition to its use as a contemplative open

space that HMP shares with its neighbors. Cemeteries provide a safe area for these activities, taking pressure off other public spaces used for the same purpose.

## 5.5 TRADITIONAL CUSTOMS AND PRACTICES

In order to address the effects the proposed development activity may have on Native Hawaiian practices, culture, and traditions, CSH prepared a *Cultural Impact Assessment for the Hawaiian Memorial Park Expansion Area* in 2008. The study findings are summarized below and the full report is included as Appendix JG.

The purpose of the CIA was to evaluate potential impacts to cultural practices as a result of the Former Proposed Action, which are also applicable to the Revised Proposed Action. The study documented present and past land use; the presence of cultural sites, including religious, medicinal, traditional gathering, subsistence; and cultural associations of the Petition Area. Methods included research of historical documents, maps and existing archaeological information, in addition to community consultations and “talk-story” sessions with people who have knowledge of the Kāne‘ohe ahupua‘a.

During preparation of the CIA, efforts were made to contact Hawaiian cultural organizations, government agencies, and individuals who might have knowledge of or concerns about traditional cultural practices specifically related to the Petition Area. Names of potential community contacts came from the SHPD, Office of Hawaiian Affairs, O‘ahu Island Burial Council, and members of the community organizations who maintain the Kawa‘ewa‘e Heiau. In the conduct of the CIA, 32 individuals were contacted as possible leads, 27 people responded and 10 *kūpuna* and/or *kama‘āina* were interviewed for more in-depth contributions. A list of individuals consulted, their affiliations, and comments is found in the full CIA report (Appendix JG).

### 5.5.1 Affected Environment

Based on personal consultations and examination of historic documents and existing archaeological information, the CIA concluded that the Petition Area’s cultural landscape is important in relation to the following: pre-contact habitation and agricultural land uses as cultural properties; gathering of plant resources; burials; trails; and *wahi pana* (storied places).

The Petition Area is noteworthy for several sites and features found within or nearby. Findings of the AIS enumerate several pre-contact cultural sites that suggest association with Kawa‘ewa‘e Heiau as well as a possible ceremonial/*heiau* structure. In total, the AIS identified 11 historic sites within or near the Petition Area (discussed in detail in Section 4.9 and shown in Figure 20). Of these, six are considered pre-contact and five historic sites. The Kawa‘ewa‘e Heiau was of primary interest to many people contacted for the CIA. Many discussed the importance of protecting the *heiau* and associated features while considering the surrounding cultural landscape and other four *heiau* built for ‘Olopana in the Ko‘olau Poko moku. In fact, the *heiau* should be viewed as part of a ‘complex’ of sites serving habitation, agricultural, ceremonial, and ritual purposes.

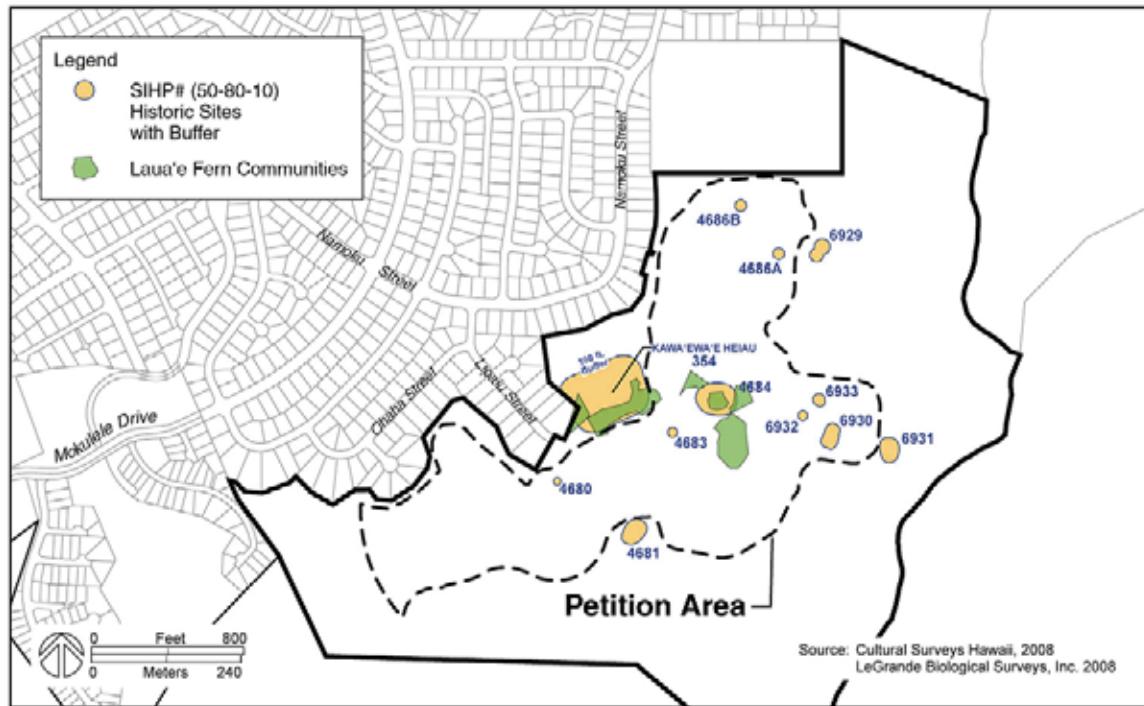
A few of the cultural consultants for the CIA commented on a *hōlua* (slide) known to have been located in the area, thought to be on a ridge immediately south of the Kawa‘ewa‘e Heiau. *Hōlua* sled courses were created by Hawaiians by making a rock

track, covering it with grasses, and wetting it down for speed. In 1933, McAllister described one in the area known as Site 355 as a “small round hill, the name of which is not remembered, near the mountain side of Kawa'ewa'e Heiau..” (p. 181). He added that the slide had been destroyed and cleared for pineapple cultivation. While the *hōlua* was noted to exist in 1853 and 1881, McAllister was unable to relocate the site in his 1930 survey. During the AIS, a substantial effort was made to relocate the *hōlua* slide site, specifically looking for any remnants or indications of it. No definitive site was identified. Community members are interested in locating this site.

Several plants within the Petition Area have past and present ethnobotanical uses for native Hawaiians. Many of these plants are Polynesian introductions such as *kukui*, (true) *kamani*, *hau*, *ki* or *ti*, *noni*, *'ohe*, and *mai'a*. Some of these Hawaiian canoe plants (brought by early Polynesians in their canoes) are indicators of former Hawaiian habitation. For example, *kamani* was often planted around *heiau*, and considered a sacred tree in parts of Polynesia. The same is true of *ki/ti*, and *mai'a*, which were planted around *taro lo'i* and dwellings. Contributors to the CIA rarely mentioned past or ongoing plant gathering except for reference to continued collection and value of the *lei* and *hula* plants gathered in the area, particularly the *laua'e* fern (*Phymatosorus grossus*). *Laua'e* is a very common non-native fern found as a ground cover from coastal to shaded moist low-elevation forests and windswept ridges. It is also a popular yard ornamental plant that is ubiquitous in the Hawaiian Islands, particularly in environments disturbed by humans. This *P. grossus laua'e* was introduced to the islands around 1900 and is not the same species as the original endemic *laua'e* fern that is deeply and emotionally connected to Hawaiian culture. The native *laua'e* (*Microsorum spectrum*) is now very rare, and instead, Hawaiians have turned to the *P. grossus* fern (that has been given the same name *laua'e*) for gathering of *hula* adornments. It is thought that they have transferred the cultural importance and use to this more abundant and easily accessible plant.

Community informants for the CIA commented on the importance of the *laua'e* gathering within the Petition Area. The *laua'e* is valued as a *hula* plant, and specimens known in sections of the Petition Area are particularly noteworthy for its thickness, color, and fragrance. The *laua'e* that grows as an understory plant differs considerably from those in open sunny areas. Full sun causes fronds to be a lighter shade of green, which is less culturally desirable than the darker fronds. The crushed leaves of *laua'e* have a faint but distinctive smell reminiscent of another popular *hula* plant; *maile* (*Alyxia oliviformis*). There is a cultural significance of gathering the plant *in situ* within the ideal moist conditions of the Petition Area that creates the abundant, luxuriant and healthy stands of the most coveted forms of *laua'e*, even in a forest of pre-dominantly non-native trees. An addendum to the original Botanical Survey conducted prior to the preparation of the DEIS, was conducted in August 2008 by LeGrande Biological Surveys Inc. As a result, 2.5 acres of *laua'e* fern communities were identified as shown in Figure 25, 2.3 of which will remain untouched (1.2 acres within the cultural preserve that is not part of the Revised Proposed Action, and 1.1 acres outside of the Petition Area).

No human burials have been documented within the Petition Area. CIA contributors did not specifically mention knowledge of *iwi kūpuna* (ancestral remains) in the area. However, one of the concerns of community members was the potential presence of *laua'e*.

**Lau'a'e Fern Communities: Revised Proposed Action****Figure 25**

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(burial pits) associated with Kawa'ewa'e Heiau. *Lua* would be found inside and outside of *luakini heiau* which were used to bury the bones of those sacrificed. This was considered throughout all field work. None were observed. Field survey members were aware of this possibility and were looking for *lua*.

Trails once served to connect the various settlements throughout O'ahu. Many trials traversed the mountain ranges, and it is possible that trails connected the various *heiau* of the area. A popular hiking trail traverses a portion of the property which is reportedly used by Hawai'i Trail and Mountain Club and other groups. The trail starts in Friendship Garden to the north of the Petition Area, and then follows the ridgeline south to a side ridge that connects to the Kawa'ewa'e Heiau, ending at Lipalu Place. All trail use of the property for recreation purposes is unauthorized. In addition, after consultation with DLNR, Na Ala Hele Trails Program, there are no known ancient trails within the Petition Area. Recreational trail use is discussed in Section 6.8 of this EIS.

Kāne'ohe is rich in legends concerning naming of the *ahupua'a* itself and other sites within the area. Of particular relevance to the Petition Area are stories of the Kawa'ewa'e Heiau, reportedly erected in the beginning of the 12<sup>th</sup> century and related to the high chief 'Olopana. Surrounding features to the Kawa'ewa'e Heiau relate to its use, including what CIA contributors point out as stone guardians in the area that together appear to guard the area used by chiefs and their retinue for preparation, prayer, and/or sacrifice. Another contributor also believes the mango trees found on the Petition Area mark sacred spots for future generations.

### 5.5.2 Probable Impacts

The findings of the CIA suggest that there are three primary cultural concerns regarding the Former and Revised Proposed Actions: 1) preservation and protection of the Kawa'ewa'e Heiau and other contiguous cultural properties in the area; 2) gathering practices for *hula* and *lei* plants; and 3) possibility of burial sites, or *iwi kūpuna*. The conceptual site plan has been designed specifically to incorporate the known archaeological and cultural sites, and a 9.4-acre cultural preserve is included as part of the Revised Proposed Action that encompasses five archaeological sites within the Petition Area east of Kawa'ewa'e Heiau (shown on Figure 4a) with ample buffer zones included. Kawa'ewa'e Heiau is located approximately 100 ft to the west of the Petition Area.

~~As the Petition Area will be graded and changed from Java forest to cemetery and residential use and revegetation with native plants, the laua'e along with other plants growing in the area could be affected. Even in the areas where revegetation will occur with native plants, this habitat will not be the thick introduced overstory of mature trees that currently provides the laua'e with its favorable dark lush leaves. The cultural preserve is intended to protect ample communities of laua'e to provide future supply for those who gather this plant. This preserve area will be designed in careful consideration of site boundaries and in relationship to contiguous sites.~~ Although no *lua* were observed there is still a potential for subsurface cultural resources in the Petition Area. With the development of the proposed project, future access through the property will need to be arranged beforehand with the land owner.

### 5.5.3 Mitigation

The Petitioner will follow the mitigation measures as recommended by the CIA to address potential adverse impacts of the Revised Proposed Action on Hawaiian cultural beliefs, practices, and resources. These include:

1. Recognize that the Kawa'ewa'e Heiau is part of a complex of cultural sites, not a discrete site. The plans and design for the cemetery will be integrated with the cultural significance of the area surrounding the Kawa'ewa'e Heiau and significant archaeological sites and cultural features of the landscape will be buffered and protected from any roadways, bulldozing, or other intrusive activity. Additionally, the *heiau* complex will be protected and seen in relationship to other sacred sites in the Ko'olau Poko District. All significant archaeological sites within and near the Petition Area will be preserved and kipuka (buffer zones) a cultural preserve area will be incorporated as indicated on the Revised Proposed Action Concept Plan (Figure 4a).
2. The Kawa'ewa'e Heiau, currently on the National Register of Historic Places has been evaluated as significant under both Criterion D and E of the Hawai'i Register of Historic Places and will be registered with the State of Hawai'i.
3. All cultural properties and archaeological sites in and near the Petition Area will be investigated, preserved, and protected through the creation of kipuka a 9.4-acre cultural preserve areaas appropriate. The kipuka cultural preserve will be

designed in careful consideration of site boundaries and in relationship to contiguous sites.

4. The Petitioner will continue consultation with appropriate state agencies, such as the OHA, throughout the planning and development process to ensure appropriate evaluation and protection of archaeological and cultural resources. This consultation is required by law and will continue throughout the project.
5. If there is need for further consultation regarding handling of archaeological sites, the Petitioner will have the project reviewed by OHA's Native Hawaiian Historic Preservation Council or other appropriate groups.
6. Those involved with the development activities in the Petition Area will be informed of the possibility of inadvertent cultural finds, including human remains. Should cultural or burial sites be identified during ground disturbance, all work will immediately cease, and the appropriate agencies will be notified pursuant to applicable law. Mandatory education programs will be provided to any entity or personnel working within the Petition Area to ensure that appropriate protective and notification action is undertaken should any inadvertent cultural or archaeological finds take place.
7. Cultural monitoring will be conducted during all phases of development activities. A cultural and archaeological monitor will observe all grading and excavation activities to provide verification that cultural and archaeological finds have been protected.
8. On-going cultural practices, such as gathering of *hula* and *lei* plants, will be recognized and accommodated (subject to safety and liability issues) as provided by law. To the degree feasible, these plant communities will be enhanced and expanded within the buffer areas and permanent open space areas as appropriate.
9. The areas where the *hula* plant *laua'e* (*Phymatosorus grossus*) is most concentrated will be protected to the degree feasible and practicable. The availability, abundance, and quality of the *laua'e* ferns will be protected through creation of a plant gathering cultural preservekipuka, including maintenance of an intact vegetative overstory. An addendum to the Botanical Survey was conducted in August 2008 by LeGrande Biological Surveys, Inc. (and is included in Appendix D). As a result, 2.5 acres of laua'e fern communities were identified as shown in Figure 25, 2.3 of which will remain untouched (1.2 acres within the cultural preserve that is not part of the Revised Proposed Action, and 1.1 acres outside of the Petition Area);
10. Community members and groups responsible for the long-term care of the Kawa'ewa'e Heiau, as well as cultural practitioners who utilize the area for gathering and cultural education activities, will be further consulted regarding the mitigation measures throughout the planning, for the proposed cemetery and residential development. This consultation will include all interested community groups and individuals who have a stake in the Petition Area.

## 6.0 ASSESSMENT OF Affected ENVIRONMENT, PROBABLE IMPACTS AND MITIGATION: PUBLIC FACILITIES AND SERVICES

### 6.1 TRANSPORTATION

Perazim Consulting prepared a Traffic Impact Analysis Study for the project, which is summarized below and attached to this DEIS as Appendix K-H. The traffic study describes the potential traffic impacts of the proposed land use alternatives and identifies mitigation measures, as appropriate. Various types of traffic information, including roadway laneage and traffic volume data, were collected to establish existing traffic conditions. Future traffic forecasts without the proposed alternatives were developed to identify future baseline conditions. Traffic volumes were estimated and the future traffic assignments with two of the Alternatives (Alternatives II and ~~III~~Revised Proposed Action) were analyzed. The analytical comparison of future traffic conditions with and without Alternatives determines the project-related traffic impacts. For this study, seven study intersections were selected for analysis to identify the potential traffic impacts (Figure 2526). Manual turning movement count data and field observations were collected at the study intersections.

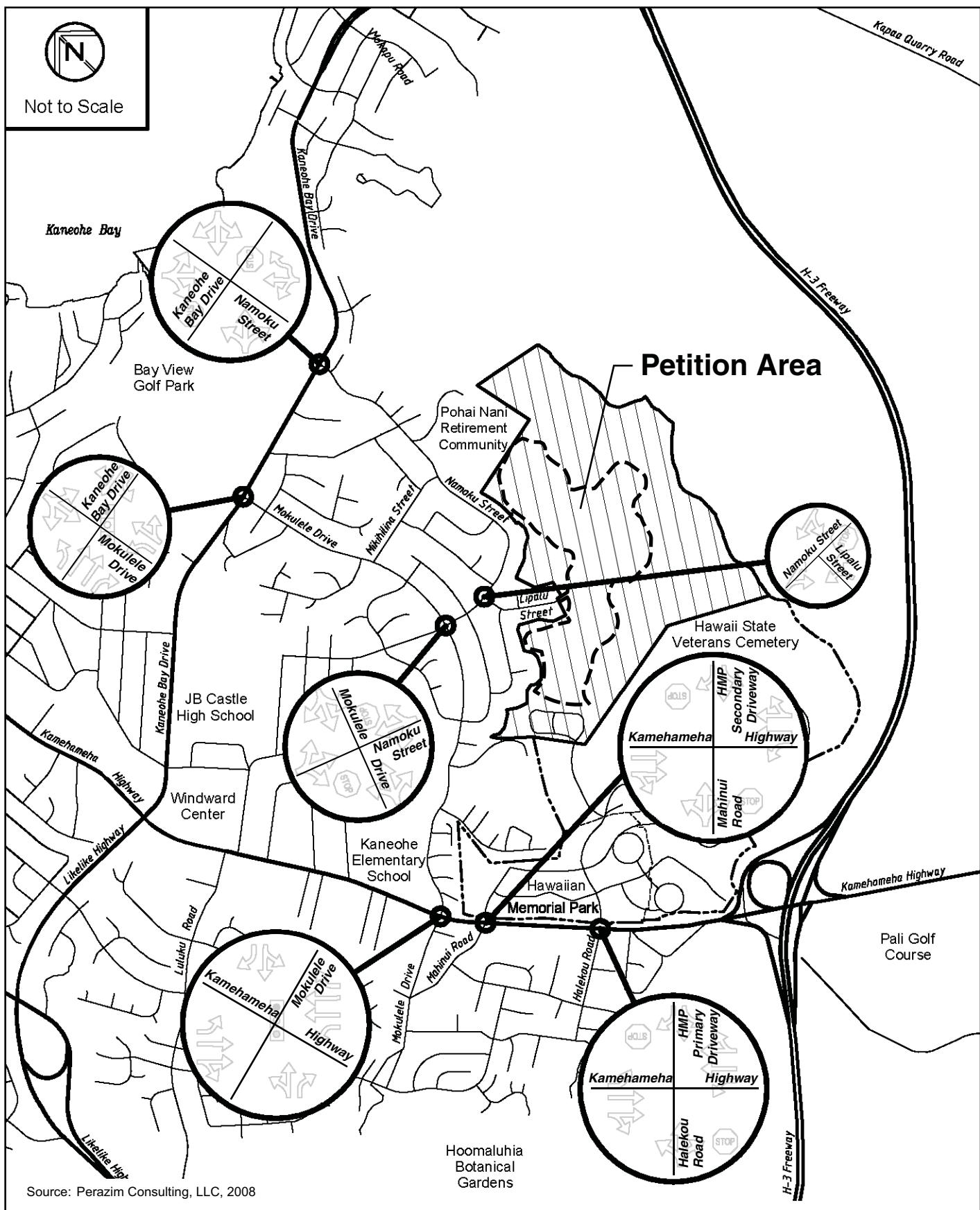
#### 6.1.1 Affected Environment

##### 6.1.1.1 Existing Roadway System

The main vehicular circulation route in the vicinity is Kamehameha Highway, a state highway that links the Kāne'ohe area with communities along the northeast coast of O'ahu and into Central O'ahu, Pearl City, and Honolulu. In the vicinity of the Petition Area, the highway is a divided four-lane highway with 12-ft travel lanes and left-turn lanes within the median area at selected intersections. Kaneohe Bay Drive links Kāne'ohe and Kailua towns. It begins as a four-lane divided highway with 12-ft travel lanes at its connection to Likelike Highway, and transitions to a two-lane undivided highway with 12-ft travel lanes between Castle High School and Nohea Place.

Halekou Road and Mahinui Road are two-lane collector roads for the nearby residential subdivisions on the west side of Kamehameha Highway. Mokulele Drive and Nāmoku Street are collector roads while Mihikilina Street and Lipalu Street are two-lane local roadways within the residential subdivisions on the east side of Kamehameha Highway. Mokulele Driveway terminates at Kamehameha Highway and at Kaneohe Bay Drive in signalized intersections. Parking is allowed along these residential streets, but most motorists park away from the intersections which permits right-turn movements to travel around other motorists waiting to execute left turn or through movements at the intersections.

There are two existing access points to HMP from Kamehameha Highway. A paved two-lane road beginning at the Kamehameha Highway entrance to the HMP and Hawaii State Veterans Cemetery runs northeast through the existing HMP grounds. The HMP and Hawaii State Veterans Cemetery currently share the same driveway connections at the Kamehameha Highway intersection with Halekou Road and at the Kamehameha



**Traffic Intersections Studied**

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Kāne'ohe, O'ahu, Hawai'i

**Figure 26**

Highway intersection with Mahinui Road. The primary HMP driveway is located across Halekou Road and the secondary driveway is aligned directly across Mahinui Road.

The main road through HMP has several small spurs leading to outlying sections of the cemetery. Visitors to gravesites or attendees of a burial service park their vehicles along the internal roads. The internal road system provides access to the Ocean View Garden area of HMP through an easement agreement with Hawaii State Veterans Cemetery. HMP currently closes the vehicular access gates to the cemetery at dusk. An unpaved access road to offsite utilities on Kumakua Place was developed in 1997 as part of the Ocean View Garden expansion of HMP.

Currently, there is no vehicular access through the Petition Area.

#### **6.1.1.2 Existing Traffic Conditions**

Currently, HMP operations limit burial and inurnment ceremonies to mid-day time periods, typically from 9:00 a.m. to 3:00 p.m. Funerals are also restricted to similar mid-day time periods. Some funeral services are scheduled during the evenings, starting at 6:00 p.m. Thus, the cemetery activities that draw the largest crowds are intentionally scheduled during the non-peak mid-day or evening time periods when there are lower traffic volumes and less congestion on Kamehameha Highway.

**Levels of Service.** The Traffic Impact Analysis utilized the Highway Capacity Manual 2000 analytical methodology for unsignalized intersections and signalized intersections. The analysis results provide Level of Service (LOS) conditions, which are rated from A to F (best to worst), and capacity conditions. LOS represents a qualitative measure of traffic operating conditions, and considers speed, travel time, freedom to maneuver, types of traffic controls, and interruptions as well as driver comfort and convenience. LOS A describes free flow with no congestion or delay while LOS F describes congested conditions and excessive delays. LOS B describes a condition that is not free flow, but delays or restrictions to maneuvering are minimal. Some restriction to flow and reasonable delays at intersections are described by LOS C. LOS D describes conditions in which long delays occur at intersections and travel on roadway segments appear congested, but flow is stable. LOS E describes near-capacity conditions, with very long delays at intersections and flow on roadways are heavy and approach instability. The existing traffic conditions at the five unsignalized and two signalized intersections near the Petition Area are summarized in Table 10 below.

#### **Kamehameha Highway, Halekou Road, and the HMP primary driveway**

The morning peak hour conditions at the unsignalized intersection of Kamehameha Highway, Halekou Road, and the HMP primary driveway are at LOS D or better. However, the primary cemetery driveway experiences LOS F conditions during the afternoon peak hour, related to vehicles turning left onto Kamehameha Highway as they exit the cemetery.

#### **Kamehameha Highway, Mahinui Road, and HMP's secondary driveway**

For the unsignalized intersection of Kamehameha Highway, Mahinui Road, and HMP's secondary driveway, the Mahinui Road approach experiences LOS E conditions during

**Table 10**  
**Existing Traffic Conditions**

<b>Intersections</b>	<b>Existing LOS</b>		<b>Intersections</b>	<b>Existing LOS</b>	
	AM Peak	PM Peak		AM Peak	PM Peak
<b>Kamehameha Highway, Halekou Road, and HMP Primary Driveway</b>		<b>Nāmoku Street</b>	Northbound Approach	C	C
Kamehameha Highway			Northbound Left Turn/ Through Movement	F	F
Northbound Left Turn	B		Northbound Right Turn	C	C
Southbound Left Turn	B		Southbound Approach	C	E
Halekou Road			<b>Mokulele Drive and Nāmoku Street</b>		
Eastbound Approach	D		Mokulele Drive		
HMP Primary Driveway			Northbound Left Turn	A	A
Westbound Approach	C		Southbound Left Turn	A	A
Westbound Left Turn/ Through Movement	D		Nāmoku Street		
Westbound Right Turn	C		<b>Kamehameha Highway, Mahinui Road, and HMP Secondary Driveway</b>		
Kamehameha Highway		<b>Nāmoku Street and Lipalu Street</b>	Eastbound Approach	B	B
Northbound Left Turn	B		Westbound Approach	B	B
Southbound Left Turn	B		Nāmoku Street		
Mahinui Road			Northbound Left Turn	A	A
Eastbound Approach	E		Lipalu Street		
HMP Secondary Driveway			Eastbound Approach	A	A
Westbound Approach	B		<b>Kamehameha Highway and Mokulele Drive</b>		
Westbound Left Turn/ Through Movement	B		Overall Intersection	C	C
Westbound Right Turn	B		<b>Kaneohe Bay Drive and Nāmoku Street</b>		
Kaneohe Bay Drive			Overall Intersection	C	C
Eastbound Left Turn	A	A			
Westbound Left Turn	A	A			

the morning and afternoon peak hours. The left turn and through movements at the cemetery secondary driveways experience LOS E conditions during the afternoon peak hour.

#### Kaneohe Bay Drive and Nāmoku Street

The unsignalized intersection of Kaneohe Bay Drive and Nāmoku Street has LOS F conditions at the northbound left turn and through movements during the morning and afternoon peak hours. The southbound approach operates with LOS E conditions during the afternoon peak hour; this approach provides access for the Bay View Estates subdivision currently under construction.

### Mokulele Drive and Nāmoku Street

The unsignalized intersection of Mokulele Drive and Nāmoku Street operates with short or little delays at LOS A and B during the morning and afternoon peak hours.

### Nāmoku Street and Lipalu Street

For the unsignalized intersection of Nāmoku Street and Lipalu Street, there is little or no delay with LOS A conditions during the morning and afternoon peak hours.

### Kamehameha Highway and Mokulele Drive

For the signalized intersection of Kamehameha Highway and Mokulele Drive, the Mokulele Drive westbound left turn and through movement is at LOS E during the morning and afternoon peak hours. Overall, the intersection operates at LOS C during both peak hours.

### Kaneohe Bay and Mokulele Drive

The turning movements at the intersection of Kaneohe Bay Drive and Mokulele Drive are at LOS D or better the morning and afternoon peak hours. Overall, this intersection is at LOS C.

**Traffic Signal Peak Hour Warrants:** Currently, there are two unsignalized intersections which have LOS F conditions for left turns or through movements: Kamehameha Highway Intersection with Halekou Road/ HMP primary driveway, and the Kaneohe Bay Drive intersection with Nāmoku Street. The existing traffic volumes at these two intersections were assessed by the technical criteria for the Manual of Uniform Traffic Control Devices traffic signal peak hour warrants. A modified peak hour warrant (70% factor) can be used where the local community population is less than 10,000 or where speeds on the major street are above 40 miles per hour. Only the morning traffic volumes at the Kamehameha Highway Intersection with Halekou Road/ HMP primary driveway meet the regular peak hour warrant; however, both morning and afternoon peak hour traffic volumes meet the technical criteria for the modified peak hour warrant. The traffic volumes at Kaneohe Bay Drive intersection with Nāmoku Street do not satisfy the peak hour warrant criteria.

**Public Transportation:** The City and County of Honolulu provides public transportation services to the areas adjacent to the existing HMP. These include a number of TheBus fixed route bus service that pass near the Petition Area. TheHandiVan provides door-to-door service for persons who have difficulty in accessing the fixed route service.

**TheBus Routes** – The existing bus routes that provide service near the Petition Area include the following:

Route 55 Kaneohe Circle Island – Route 55 provides part of a circle island route through the City of Kāne‘ohe around the Windward side of the island north to Turtle Bay where it turns into Route 52 to continue the circle back to Ala Moana Center. The service operates seven days a week from about 6:00 AM to 11:00 PM.

Route 65 Kaneohe/Kahaluu – Route 65 provides regular bus service between Ala Moana Center and Kaneohe, through downtown, the Pali Highway and Kamehameha Highway through Kāne'ohe. Service is provided seven days a week from about 6:30 AM to 9:15 PM.

Route 77 Waimanalo – Route 77 provides bus service between Waimanalo and Kāne'ohe. The route travels the Kalanianaole Highway and Kamehameha Highway, circling in Waimanalo and the Windward Mall. Service is provided weekdays only from about 6:00 AM to 6:00 PM.

### 6.1.2 Probable Impacts

Access to the proposed cemetery expansion area will be from Kamehameha Highway through the private road system servicing the existing HMP, Hawaii State Veterans Cemetery, and Ocean View Garden. Internal roadways will be provided throughout the new cemetery area, and will be 26-ft wide with a one-ft rolled curb on each side. The proposed connection point is at the existing Ocean View Garden roadway. ~~Also, a 12-ft wide road will be provided from the internal cemetery roadway to the proposed water tank located within the cemetery.~~

~~A proposed road from the end of Lipalu Street will be provided for access to the residential subdivision. The access will have a 44 ft right-of-way with two 12-ft wide travel lanes. Also, six-inch curbs will be provided on each side of the roadway. Within the residential subdivision, a cul-de-sac design is proposed and will be provided at each dead-end.~~

Construction period traffic will result in the addition of large trucks and construction equipment on surrounding roads.

#### 6.1.2.1 Future Conditions Without the Proposed Action

Research of historical traffic volume data, traffic generated by nearby projects and regional traffic forecasts was conducted for the traffic survey to develop future year 2011 traffic assignment without the Former and Revised Proposed Actions. For the regional traffic growth, historical traffic volumes collected by the State of Hawai'i Department of Transportation indicate that Kamehameha Highway traffic volumes in the vicinity of the Petition Area have been increasing at approximately 1.4% per year. However, regional traffic volumes on Kaneohe Bay Drive in the vicinity of the two study intersections have been declining by about 0.7% per year. For this study, a growth factor of 1.4% per year was applied to Kamehameha Highway to account for future increase in regional highway volumes. For Kaneohe Bay Drive, a growth factor of 0.7% per year was utilized with the assumption that some of the declining traffic will return in the future conditions without the project.

The future traffic conditions without the project will result in slightly longer delays at several of the study intersections. For the Kamehameha Highway, Halekou Road, and HMP primary driveway unsignalized intersection, the Halekou Road approach will drop from LOS D to LOS E during the morning and afternoon peak hours. The westbound left turn and through movements at HMP's primary driveway will continue to experience LOS F conditions. At the Kaneohe Bay Drive unsignalized intersection with Nāmoku Street,

the northbound left turn/through movement will continue to operate with long delays with LOS F conditions.

For the intersection of Kamehameha Highway, Halekou Road, and the HMP primary driveway, the installation of traffic signals would alleviate delays and the individual turning movements would be at LOS D or better. The overall intersection will operate with LOS B conditions during the morning and afternoon peak hour. The enforcement of existing Kamehameha Highway posted speed limit of 35 miles per hour would also be helpful for Halekou Road and HMP traffic, as there would be larger gaps in highway traffic allowing more frequent left turns. Also, the lowering of speed limits of 45 miles per hour on the south side of Halekou interchange should be considered. No traffic improvements are proposed for the intersection of Kaneohe Bay Drive and Nāmoku Street as this intersection does not meet the peak hour warrants criteria.

**Public Transportation:** Bus routes for the area are not expected to be modified nor is there expected to be an impact from the Proposed Action.

#### **6.1.2.2 Future Conditions with the Former and Revised Proposed Actions**

Although cemeteries typically have long usage periods of 40 to 50 years, overall visitor traffic generally remains stable over time because the frequency of visits by family or friends to a deceased's grave site or columbarium niche decline over the years as family members grow older or move away. As new areas of a cemetery are opened for new burials or columbarium buildings, visitor traffic shifts to the newer areas of the cemetery and visitor traffic slowly declines in the older areas of the cemetery. The cemetery burial/niche occupancy rate depends upon the actual interment market demand. The overall size of a cemetery in terms of acreage serves as a better parameter to estimate visitor traffic because the utilization rate changes as the cemetery decides to open new acreage for internment usage. Thus, the total acreage in the expanded cemetery area serves as the parameter to estimate new cemetery visitor trips for future year 2011. The use of full burial acreage in the traffic study provides a conservative estimate of cemetery traffic when the new cemetery expansion area is opened. Table 11 compares existing traffic conditions with those future conditions expected with and without the Former and Revised Proposed Actions.

As part of the approach to conducting the traffic assessment, the impacts of three of the four alternatives for this DEIS were prepared. This included Alternatives II and III. The unsignalized intersection analysis results are virtually the same for all Alternatives. **The LOS conditions are the same as the future traffic conditions without the project.**

For the unsignalized intersection of Kaneohe Bay Drive and Nāmoku Street, the northbound left turn/through movement continues with LOS F conditions. **The signalized intersection analysis results for the Alternatives remain the same as future traffic conditions without the project.**

The Nāmoku Street intersection with Lipalu Street and Mokulele Drive intersection with Nāmoku Street will have the highest percentages of traffic volume change because the existing traffic volumes at these two intersections are low in comparison to the intersections along Kamehameha Highway and along Kaneohe Bay Drive. These percentages reflect the magnitude of changes that will be felt by residents living near

**Table 11**  
**Future Traffic Conditions**

Intersections	Existing LOS		Future w/out Project		Future w/ Project	
	AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak
<b>Kamehameha Highway, Halekou Road, and HMP Primary Driveway</b>						
Kamehameha Highway						
Northbound Left Turn	B	B	B	B	B	B
Southbound Left Turn	B	B	B	B	B	B
Halekou Road						
Eastbound Approach	D	D	E	E	E	E
HMP Primary Driveway						
Westbound Approach	C	E	C	F	C	F
Westbound Left Turn/Through Movement	D	F	D	F	D	F
Westbound Right Turn	C	C	B	C	B	C
<b>Kamehameha Highway, Mahinui Road, and HMP Secondary Driveway</b>						
Kamehameha Highway						
Northbound Left Turn	B	B	B	B	B	B
Southbound Left Turn	B	B	B	B	B	B
Mahinui Road						
Eastbound Approach	E	E	E	E	E	E
HMP Secondary Driveway						
Westbound Approach	B	C	C	C	C	C
Westbound Left Turn/Through Movement	B	E	D	E	D	E
Westbound Right Turn	B	C	B	C	B	C
<b>Kaneohe Bay Drive and Nāmoku Street</b>						
Kaneohe Bay Drive						
Eastbound Left Turn	A	A	A	A	A	A
Westbound Left Turn	A	A	A	A	A	A
Nāmoku Street						
Northbound Approach	C	C	C	C	D	C
Northbound Left Turn/Through Movement	F	F	F	F	F	F
Northbound Right Turn	C	C	C	C	C	C
Southbound Approach	C	E	D	D	D	D
<b>Mokulele Drive and Nāmoku Street</b>						
Mokulele Drive						
Northbound Left Turn	A	A	A	A	A	A
Southbound Left Turn	A	A	A	A	A	A
Nāmoku Street						
Eastbound Approach	B	B	B	B	B	B
Westbound Approach	B	B	B	B	B	B
<b>Nāmoku Street and Lipalu Street</b>						
Nāmoku Street						
Northbound Left Turn	A	A	A	A	A	A
Lipalu Street						
Eastbound Approach	A	A	A	A	A	A
<b>Kamehameha Highway and Mokulele Drive</b>						
Overall Intersection	C	C	C	C	C	C
<b>Kaneohe Bay Drive and Mokulele Drive</b>						
Overall Intersection	C	C	C	C	C	C

these study intersections. **However, turning movements at the Nāmoku Street/Lipalu Street intersection and Mokulele Drive/Nāmoku Street intersection will operate with no or little delay with LOS A or LOS B conditions.**

The Mahinui Road eastbound approach at the unsignalized intersection of Kamehameha Highway, Mahinui Road and the HMP secondary driveway is at LOS E during the morning and afternoon peak hours. The northbound left turn/through movement at the intersection of Kaneohe Bay Drive and Nāmoku Street has LOS F conditions during the morning and afternoon peak hours, but traffic volumes for this Nāmoku Street movement are low and do not meet the traffic signal warrant criteria.

The unsignalized intersections of Mokulele Drive with Nāmoku Street and Nāmoku Street with Lipalu Street operate with LOS B or better. The westbound left turn and through movement at the signalized intersection of Kamehameha Highway with Mokulele Drive and Kaneohe Bay Drive with Mokulele Drive experience LOS E conditions, but overall intersection operations are at LOS C. Overall, the signalized intersection of Kaneohe Bay Drive with Mokulele Drive is also at LOS C.

#### 6.1.3 Mitigation

The Traffic Impact Analysis found that mitigation measures are required with or without the Revised Proposed Action. For the intersection of Kamehameha Highway, Halekou Road, and the HMP primary driveway, analysis as a signalized intersection found that while some left turn movements or approaches would be at LOS D, the intersection would operate with overall LOS B conditions during the morning and afternoon peak hours. The installation of traffic signals at this intersection would be adequate for mitigation improvements for this intersection. HMP will work in coordination with the State of Hawai'i Department of Transportation Traffic Branch to provide this traffic signal warrant study subsequent to project approval by the Land Use Commission. The enforcement of existing Kamehameha Highway posted speed limit of 35 miles per hour would also be helpful for Halekou Road and HMP traffic, as there would be larger gaps in highway traffic allowing more frequent left turns. Also, the lowering of speed limits of 45 miles per hour on the south side of Halekou interchange should be considered. This mitigation measure is identical to the future conditions without the project.

No mitigation measures are proposed for the Kaneohe Bay Drive intersection with Nāmoku Street as traffic volumes do not satisfy the peak hour warrants, and the Revised Proposed Action will no longer involve construction of access to the Petition Area using Lipalu Street.

Scheduling deliveries and transportation of equipment during non-peak hours (when traffic is expected to be less) will minimize disruption for neighboring residences. Contractors will be responsible for providing traffic controls and precautions to maintain traffic safety.

## 6.2 WATER SUPPLY

Water resources are discussed in the 2007-2008 PER report prepared for this DEIS by SSFM International Inc. The findings regarding water are summarized below and the full report is attached as Appendix C.

### 6.2.1 Affected Environment

Windward O'ahu, where the Petition Area is located, receives sufficient precipitation to minimize the need for supplemental irrigation of landscaping. During dry hot periods, particularly during establishment of new landscaping, irrigation will be required. Non-potable water is preferred for irrigation of the cemetery expansion lawn areas by the BWS.

Presently, the Petition Area is without on-site water infrastructure. The irrigation system and on-site domestic needs for the existing sections of HMP are served by the City's ~~potable drinking~~ water system from two different points. The connection point for the main section of HMP is located at the entrance to HMP in the vicinity of Mahinui Road and Kamehameha Highway. A 6-inch meter on Kamehameha Highway services HMP, and has a capacity of 1,000 gpm.

A  $\frac{5}{8}$ -inch water meter at Kumakua Place and a 1-inch lateral coming off of the  $\frac{5}{8}$ -inch meter serves the irrigation system for the Ocean View Garden section of HMP. There is also a waterline under Lipalu Street, which does not service HMP.

Three non-potable wells exist near the Petition Area, on State property along Kamehameha Highway near the H-3 interchange (See Figure 11 of the PER, attached as Appendix C to this DEIS). The Hawaii State Veteran's Cemetery uses these wells as a source for ~~their its~~ irrigation. To date, the wells have operated satisfactorily.

### 6.2.2 Probable Impacts

**Domestic Water.** Domestic water ~~will would have been~~ required for both the 20-lot residential subdivision and the proposed cemetery comfort station. The subdivision and comfort station ~~is were~~ expected to generate a maximum daily demand of 15,000 gpd and a peak hour demand of 30,000 gpd. The only viable option for providing ~~potable drinking~~ water for the subdivision ~~is would have been~~ the creation of an on-site water system. The BWS has indicated that existing systems cannot service these new lots.

The proposed on-site well system for irrigation water could also ~~have provided~~ the necessary ~~potable drinking~~ water supply if the water ~~testeds~~ successfully for potability and/or if additional on-site treatment ~~is was~~ performed. This ~~potable drinking~~ water could ~~have been~~ stored in an 80,000 gallon tank located in the upper developed cemetery grounds at approximately 330 ft elevation. This ~~will facility would have been be~~ set into grade and landscaped to reduce or eliminate visibility from offsite areas. A water master plan ~~will would have been~~ prepared and submitted to the BWS for review and approval. Water use allocations ~~will would only have been~~ granted when construction plans are approved or building permits ~~are were~~ obtained. With the selection of Alternative III as the Revised Proposed Action, no new domestic drinking water source

will be required. To obtain drinking water for the cemetery comfort station and drinking fountain, the project will include an extension of a small line into the cemetery expansion area from the 5/8-inch water meter within the existing HMP Cemetery. If this is not feasible, the cemetery comfort station will be eliminated.

**Irrigation.** It has been estimated that as much as 90,000 gpd of irrigation water may be needed for the cemetery at full build-out for occasional hot dry periods (at a maximum rate of 550 gpm). Options for irrigation include: (1) construction of non-potable on-site wells on HMP property and near the Petition Area; or (2) connection to existing water systems, most of which are potable drinking water sources. Based on Hawaii State Veterans Cemetery's satisfactory use of non-potable wells near the Petition Area, it should be feasible to provide adequate water for irrigation using new on-site wells. If non-potable water is either unavailable or infeasible, a report of investigation including proposed irrigation demands will be submitted to BWS for their its consideration of use of potable drinking water. Discussions with the BWS have indicated that water quantities and pressure may currently be available in association with the Kumakua Place system to fully service the approximately 30 acres of turf landscaping for the cemetery expansion area. It is unknown whether the existing reservoir serving Kumakua Place has available water capacity for irrigation. If approved by BWS, the existing water meter at Kumakua Place would need to be enlarged from the present size of 5/8 inches to 3 or 4 inches.

## 6.3 WASTEWATER

Wastewater resources are discussed in the 2007-2008 PER report prepared for this DEIS by SSFM International Inc. The findings regarding wastewater are summarized below and the full report is attached as Appendix C.

### 6.3.1 Affected Environment

There are currently no sewer lines within the Petition Area. There are wastewater lines within the existing HMP adjacent to the Petition Area, and an 8-inch municipal transmission line in Lipalu Street. The Kailua Wastewater Treatment Plant (WWTP) handles the wastewater from the area surrounding the Petition Area.

### 6.3.2 Probable Impacts

The wastewater generated by the public restroom facility in the cemetery expansion area and residential subdivision will be accommodated by construction of a septic tank and leach field added wastewater lines and a collection system within the Petition Area. The restroom is estimated to generate approximately 13,430 gallons per day or 0.013 mgd of wastewater at a design flow average. Use of waterless urinals and other water reduction techniques will be explored. The residential subdivision is estimated to generate 38,631 gallons per day (0.04 mgd). The existing 8-inch sanitary sewer line in Lipalu Street has excess capacity to accommodate these new flows. This connection has been approved by the City and County of Honolulu DPP.

Several improvement projects are underway to strengthen the sewage capacity of the region (City and County of Honolulu Department of Environmental Services 2007). Projects include:

- improvements to Kaneohe Pump Station #1 for increased reliability connecting to the Kailua WWTP (to be constructed in 2007-2008);
- sewer manhole and pipe structural rehabilitation for both the Kailua and Kāne'ohe area (to be bid in 2008);
- rehabilitation of mains, manholes, and laterals to reduce inflow/infiltration in Kailua and Kāne'ohe (to be bid in 2008);
- improvements to the Kailua WWTP itself to address reliability issues, plant capacity, and odor and noise issues to be bid in 2008; rehabilitation of sewer lines from Kalaheo Avenue to the Kailua WWTP (to be bid in 2007); and
- construction of a new force main from the Kaneohe Wastewater Preliminary Treatment Facility to Kailua WWTP (to be designed and constructed in 2008).

No mitigation is required.

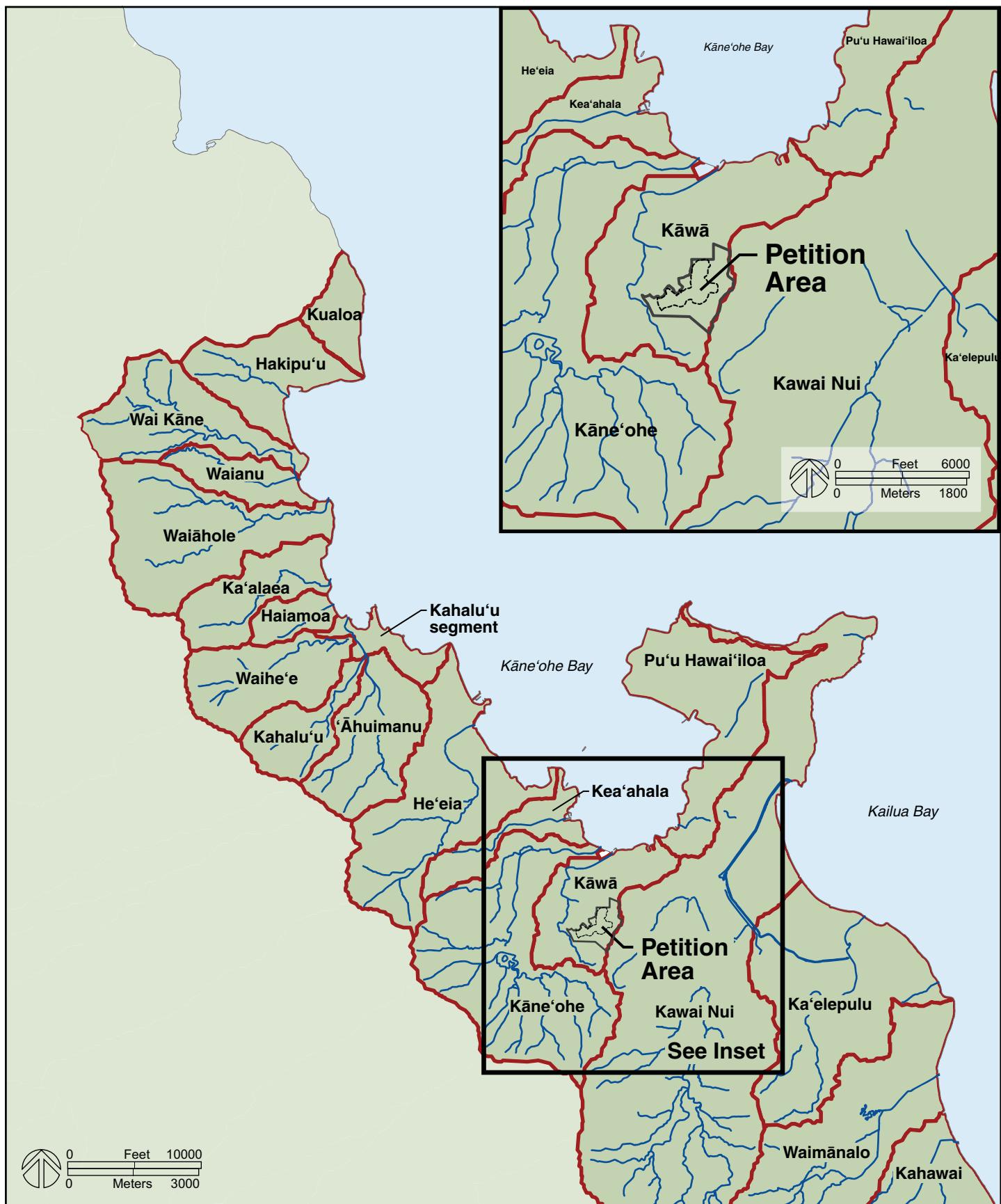
## 6.4 DRAINAGE

Drainage is discussed in the 2008<sup>7</sup> PER report prepared for this DEIS by SSM International Inc. The findings regarding drainage are summarized below and the full report is attached as Appendix C, Element Environmental LLC prepared a TMDL Analysis Report for this EIS, which is summarized below and attached to this EIS as Appendix L.

### 6.4.1 Affected Environment

The Petition Area lies within the Kāwā Stream watershed, which is part of the larger Kāne'ohe Bay watershed. The Kāne'ohe watershed is located to the north and west, and the Kawai Nui watershed to the east (Figure 2627). Kāwā Stream has a drainage area of approximately 1.56 square miles (998 acres) that includes the Hawaii State Veterans Cemetery and most of HMP Cemetery, nearly all of the residential urban developments east of Kamehameha Highway from the cemetery down to Kāne'ohe Bay Drive, and the Bay View Golf Course. The total Kāne'ohe Bay watershed system encompasses 23,500 acres and the Kāwā Stream watershed represents 5.7% this total. The Kāwā Stream watershed is characterized as an urban area; approximately 40% of the watershed is impervious surfaces (KBAC 2007).

Kāwā Stream is similar to other perennial streams of Hawai'i, with higher flows triggered by heavy rain events and otherwise steady base flows. The watershed is filled with seeps and small springs that recharge the stream. Its headwaters are located at approximately 100-150 ft AMSL; above this the stream is ephemeral. Several branches and tributaries combine to make up Kāwā Stream's 2.5 mile length, ending in an approximately 0.4-mile estuarine segment before the ocean. Kāwā Stream makes its way under Kaneohe Bay Drive bridge, through the Bay View Golf Course, and into a red mangrove swamp forest parallel to the south wall of Waikalua Loko before discharging into the south basin of Kāne'ohe Bay.



**Ko'olau Poko Moku Watersheds**

Hawaiian Memorial Park Cemetery Expansion Environmental Impact Statement  
Kāne'ohe, O'ahu, Hawai'i

**Figure 27**

Along its reach, several branches drain the ridge of hills between Kailua and Kāne'ohe. The central branch arises within the Hawaii State Veterans Cemetery west of the Petition Area, which was filled in the early 1990s to improve the slope in the burial areas for operation and maintenance of the Hawaii State Veterans Cemetery. Runoff that once flowed through this tributary is collected in underground drainage systems, roadside gutters, drop inlets and storm drain pipes (State of Hawai'i Department of Defense 1991).

One of the upper eastern intermittent branches of the stream is located in-to the southwest of the Petition Area. The stream channel here is not distinct, but some evidence exists in the forest floor that it meanders through the Petition Area before entering a box culvert where stream flow is directed under Lipalu Street. This branch of the stream remains underground through a portion of the Pikoiloa/Parkway developments, coming above ground after crossing under Nāmoku Street. From here, the stream travels through mostly channelized areas and culverts to make its way to Kāne'ohe Bay.

Kāne'ohe Bay has been designated as a Class 'AA' water body, providing the highest priority water quality protection. The Bay does not meet water quality standards set by the U.S. EPA under the Clean Water Act. Kāne'ohe Bay's water quality is influenced by point and nonpoint pollution. Kāwā Stream is a contributing water body to the Bay, and it has been categorized an "impaired water body" by the State of Hawai'i under the Federal Clean Water Act §303 (d) because of poor water quality.

The Clean Water Act §303(d) requires states to submit a list of waters that do not meet state water quality standards, and in addition, a priority ranking of listed waters, based on the severity of pollution and the uses of the waters. Section 303(d) listed waters are called "Water Quality-Limited Segments." Total Maximum Daily Loads (TMDLs) are pollution budgets intended to bring §303(d)-listed pollutant/water body combinations into compliance with water quality standards. Computation of TMDLs for all 303(d) listed pollutant water body combinations must follow EPA approval of each State's list. The TMDL process identifies activities to reduce pollutant loads, improve water quality, and increase a waterbody's ability to support its legally-protected uses.

In 1996/1997, the nomination process began for streams to be surveyed for the State of Hawai'i. Of the 80 streams surveyed, the three with the worst water quality were Waimanalo, Kapa'a, and Kāwā Streams. Kāwā Stream is considered impaired by high levels of nutrients (nitrogen and phosphorus), turbidity, and suspended solids. The first step in the TMDL process is a bioassessment (State of Hawai'i, DOH Environmental Planning Office 2001). The Bioassessment concluded that Kāwā is *Non-supporting* for biotic integrity, causing Kāwā to be considered *Moderately impaired to Impaired*. The U.S. EPA approved TMDLs for total suspended solids (TSS), nitrogen (TN), and phosphorus (TP) in Kāwā Stream in 2002 (Oceanit Laboratoris *et al.* 2002). A follow up allocation study was completed in 2005 (State of Hawai'i, DOH Environmental Planning Office 2005) to comply with conditions of EPA's acceptance of the 2002 TMDLs. Conditions were to establish waste load allocations (shares divided out to permit holders). An implementation plan was also completed based on the TMDL plan (State of Hawai'i, DOH Environmental Planning Office 2002). Additionally, the *Ko'olaupoko Watershed Restoration Action Strategy* of 2007 compiled by the KBAC is intended to

provide direction for implementation of the BMPs, restoration, monitoring, education and outreach in the sub-watersheds of the moku.

Hawai‘i’s water quality standards for streams provide specific criteria for turbidity, TN, TP, and TSS (§11-54-05.02). Discharge into Kāwā Stream is permitted with a National Pollutant Discharge Elimination System permit provided that there is sufficient loading capacity available to accept the discharge. The City and County of Honolulu and the State of Hawai‘i Department of Transportation hold such permits to discharge into Kāwā Stream.

For the purposes of the TMDL study, the existing HMP Cemetery, Bay View Golf Course, and residential and forested areas of Kāwā watershed are considered nonpoint source contributors to Kāwā Stream. These are not part of the jurisdiction of storm sewer system (MS4) permits, or the point source contributions, which account for the highest percentage of storm runoff and pollutant loads in the watershed (86% volume; 95% of the TSS; 92% of the TN; 91% of TP). Baseflow volumes of both the wet and dry season are primarily from the non source point sources.

Existing conditions for Kāwā Stream include an estimated annual TSS load of about 59,590 pounds/year (lb/yr), TN load of about 3,030 lb/yr, and TP load of about 430 lb/yr. Base flow of phosphorus concentrations are almost equal to the State water quality standards; during storm events they exceed this. For TSS concentrations, state water quality standards are met in base flows, and storm flows push them to slightly exceed standards. TN levels significantly exceed the state water quality standards for both base flows and storm flows; during wet seasons state levels are exceeded by 7 times, dry season by 20 times (State of Hawaii, DOH Environmental Planning Office, 2005).

The highest concentrations of nitrogen appear in the upper reaches of the stream, from the basins that make up the existing HMP and Hawaii State Veterans Cemeteries and residential housing. The sub basin of the existing Petition Area produces the lowest levels of nitrogen in the Kāwā watershed (State of Hawaii, DOH Environmental Planning Office, 2005). The 2008 TMDL Analysis Report performed for this EIS estimated the following levels of nutrient masses are generated by the Petition Area under the stormwater flow levels described in the 2005 TMDL Allocation Study: 136.3 kilograms (kg) of TSS; 6.8 kg of TN; and 1.4 kg of TP.

The 2005 TMDL Allocation study reported the required reductions necessary to achieve the TMDLs for Kāwā Stream. TSS would only need to be reduced for storm flow; TN would need to be reduced for dry and wet seasons and storm flows; TP would need to be reduced for dry season and storm flows.

Runoff is mostly collected by street storm drains that discharge into underground culverts before entering the stream. The Pikoiloa Tract subdivision drainage system connects to the Kāwā channel with drain lines and a box culvert. Runoff from some of the adjacent lots sheetflows directly into the stream.

Due to the slope and low soil permeability associated with the Petition Area, the majority of storm water runoff currently generated during rain events discharges from the site as runoff rather than infiltrating into the soil. Present storm water runoff from the Petition Area sheetflows into various valleys, channels, etc., along the existing topography.

Channelized runoff is captured at collection points in the surrounding residential neighborhoods before discharging into Kāwā Stream or various storm pipe networks terminating in Kāne'ohe Bay.

The hydraulic analysis of the PER indicates that this drainage system is adequate for the current undeveloped conditions within the Petition Area. The existing undeveloped conditions within the Petition Area produce storm water runoff of approximately 478 cubic ft per second (cfs). Anecdotal reports of flooding during peak storm events have not been confirmed; nor have the potential causes, such as an undersized storm drain system or a lack of proper maintenance of the surrounding inlets, interceptor drains, and interceptor ditches (See Section 4.6 of this DEIS).

#### 6.4.2 Probable Impacts

Kāwā Stream's water quality can be influenced by recharge from its natural seeps; runoff from rain as it flows over the land; and human induced runoff. As a result of the cemetery expansion and residential development, total storm water runoff attributable to the Petition Revised Proposed Action Area is expected to increase from 478 cfs to 5020 cfs. This represents an increase of about 4.68.7%. The adjacent residential areas' storm water systems, at the base of the mountain ridge, have been sized to meet existing conditions with little excess capacity available.

Runoff from the Petition Area, which is 4.2% of the area of Kāwā Stream watershed, is not expected to change significantly; nor are impacts expected to increase for Kāne'ohe Bay. The Petition Area makes up 0.24% of the total Kāne'ohe Bay Watershed system. Storm water runoff associated with the proposed Revised Proposed Action project will be increased because of the added impervious surfaces of the roadways and mausoleums within the cemetery expansion area, and from the roadways and structures within the residential development. The exact effect of the Proposed Action on the TMDLs for Kāwā Stream is not certain. Only 8.5% (4.8 acres) of the Petition Area is considered impervious for the purposes of calculating runoff.

The 2008 TMDL analysis performed for this EIS found that the proposed retention system which has been developed to satisfy the City and County of Honolulu's design criteria of a 10-year, 1-hour duration (2.5 inches per hour) storm event will capture all of the runoff generated by the daily rainfall events used to generate the Kāwā Watershed TMDLs. The on-site retention volume to capture this excess runoff is 631,730 gallons. The runoff used in the 2005 TMDL report was 518,060 gallons. Because no additional runoff will enter Kāwā Stream, a net reduction of 136.3 kg TSS, 6.82 kg TN, and 1.4 kg TP will result from the project. Because the project will utilize retention areas to retain runoff on-site, it is possible that some of This equates to a net reduction of 27.5% of the TSS, 17.5% of the TN, and 17% of the TP pollutants that currently enter the Kāwā Stream system will be averted.

Fertilizers will be applied to the cemetery grounds twice a year; in the fall before and rainy season and in the spring before the summer heat. Impacts to Kāwā Stream should be minimal as HMP employs slow release turf fertilizer to ensure absorption by the plant material as opposed to using fast-acting fertilizers that are more likely to be washed out of the soil. Any necessary herbicides and pesticides will be applied by a Certified Pesticides Control Authority. It should be noted that the operational requirements of the

cemetery are very different from those of a golf course. The cemetery does not strive for the level of manicured appearance of a golf course. Consequently, pesticides are rarely needed.

#### 6.4.3 Mitigation

Erosion control measures will minimize potential sediment runoff to existing drainage facilities, reducing the soil loss to acceptable levels. During construction, the contractor will use mulching to provide the necessary erosion control as they proceed. The permanent erosion control measures proposed will protect the site from future soil erosion.

As suggested in the *Ko'olaupoko Watershed Regional Strategy Report* (KBAC 2007), HMP will work in cooperation with KBAC to ensure groundwater impacts are minimized. HMP will maintain fertilizer maintenance logs as part of a fertilizer management plan. In addition, soil or tissue samples (grass) will be submitted to UH's Agricultural Diagnostic Service Center to test if fertilizer is necessary before the semi-annual fertilizer application.

Under the Clean Water Act, states that have primacy for the Act have the right to regulate parties against the harmful impact of any development to surface waters. For the Revised ~~p~~Proposed aAction, this impact includes the runoff of eroded soils. Construction standards to mitigate the runoff of soils during construction and development activities will be employed as necessary. Long term erosional problems will be mitigated with addition of vegetation and surface covering.

For the Revised Proposed Action, eEngineering design for the Petition Area will adhere to City and County of Honolulu DPP Rules relating to Storm Drainage Standards of January 2000. These rules are followed for design of drainage systems and hydraulic/hydrology calculations, and they mandate that any increase in storm water runoff generated by new development from the 10-year one-hour storm event not affect properties down-stream. Any increased runoff generated by the Revised Proposed Action will be retained on-site for the county design storm event.

Retention areas are included in the Concept Plan as the preferred method to control runoff. The retention areas will hold storm water and that will then percolate into the soil and/or evaporate, and allow sediment to settle instead of reaching drainage ways, streams, and Kāne'ohe Bay, before water is slowly released into the existing storm drain system. For the Revised Proposed Action, the retention areas will be designed to ensure that pollutant levels of TSS, TN, and TP that ultimately reach Kāwā Stream from the Petition Area will decrease from current levels, and be managed on-site. They are projected to provide 27.5% of the net reduction of TSS, 17.5% of the net reduction for TN, and 17.0% of the net reduction for TP required to achieve the load allocation targets that were set for Kāwā Stream in the U.S. EPA-approved allocation study (Element Environmental, 2008).

The retention areas will be scattered throughout the cemetery to provide the required amount of storage, and will be designed in a manner that allows them to blend in with the landscaped cemetery grounds (Figure 2728). The size of the retention areas will vary from 5,000 to 20,000 730 to 17,500 sf, totaling 56,300 sf (1.3 acres) 105,300 sf (2.4 acres) and they will be grass lined to a depth of 18 inches (Figures 28a29a and 28b29b). Depending on the porosity of the soil, they may be filled prepared with gravel at the low point or sand as a base course to maximize infiltration.

The Petitioner will develop an appropriate monitoring protocol in cooperation with the State DOH to build on past monitoring efforts of the TMDL program, and to evaluate long-term the success of the Petition Area's retention areas in helping to meet the necessary load reductions for Kāwā Stream that are associated with the Petition Area. The monitoring program would include the following: establish a baseline monitoring station at Station 16 (DOH's Monitoring Station 6) in order to evaluation potential changes to dry and wet season baseflow water quality resulting from the project; and quarterly groundwater monitoring during construction activities and for the first three years of operation of the expanded cemetery. In order to re-establish the baseline (pre-construction) water quality conditions at Station 16, a minimum of four rounds of sampling would be conducted prior to the initiation of construction. The streamflow volume would be measured at the time of sampling, and samples would be analyzed for pH, temperature, salinity, conductivity, TN, TP, and TSS. The data collected would be compared to the dry and wet season baseline water quality data collected by DOH between 1999 and 2000.

From a maintenance standpoint, the retention areas will be designed so that, to the maximum extent possible, they will be mowable turf grass. The areas that can not be maintained in that manner due to soil moisture or gradient will be vegetated with native and ornamental grasses which can be easily removed and replaced if silt or vegetation buildup removal is required to keep the retention area at maximum efficiency. The maintenance regime will be kept within the normal cemetery operational practices to ensure constant and easy upkeep.

## 6.5 SOLID WASTE

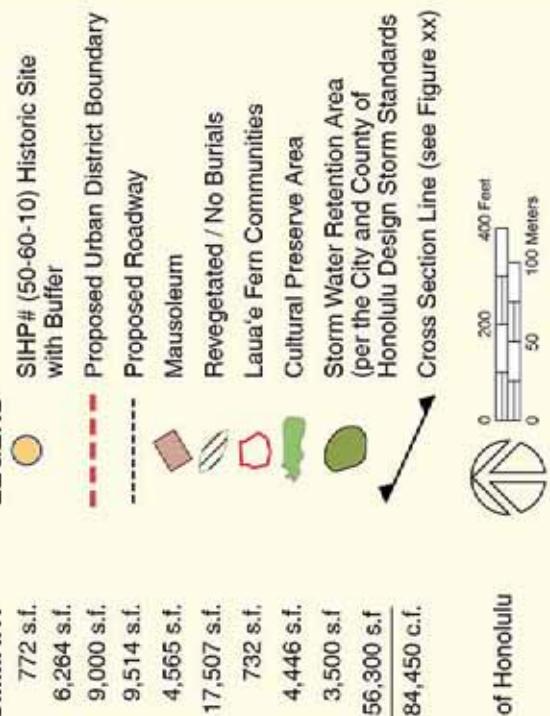
### 6.5.1 Affected Environment

A refuse collection service does not presently serve the Petition Area, as the site is undeveloped and does not generate solid wastes. Currently, HMP utilizes the private refuse company Verizon O'ahu Waste, and composts their its green waste. Honolulu O'ahu Waste picks up solid waste at HMP 3 days per week and delivers it to Honolulu Program of Waste Energy Recovery (H-POWER). The City and County currently operates three solid waste transfer stations and waste is then taken to either the landfill site in Waimanalo Gulch or the Honolulu Program of Waste Energy Recovery (H-POWER) waste energy recovery facility on the leeward side of O'ahu. The City and County is currently exploring alternative means of handling solid waste as an ongoing City and County-wide concern. Other programs being implemented are recycling and reuse of green waste. HMP's operational program protocol does not remove grass clippings from the site. They are left in place to decay.

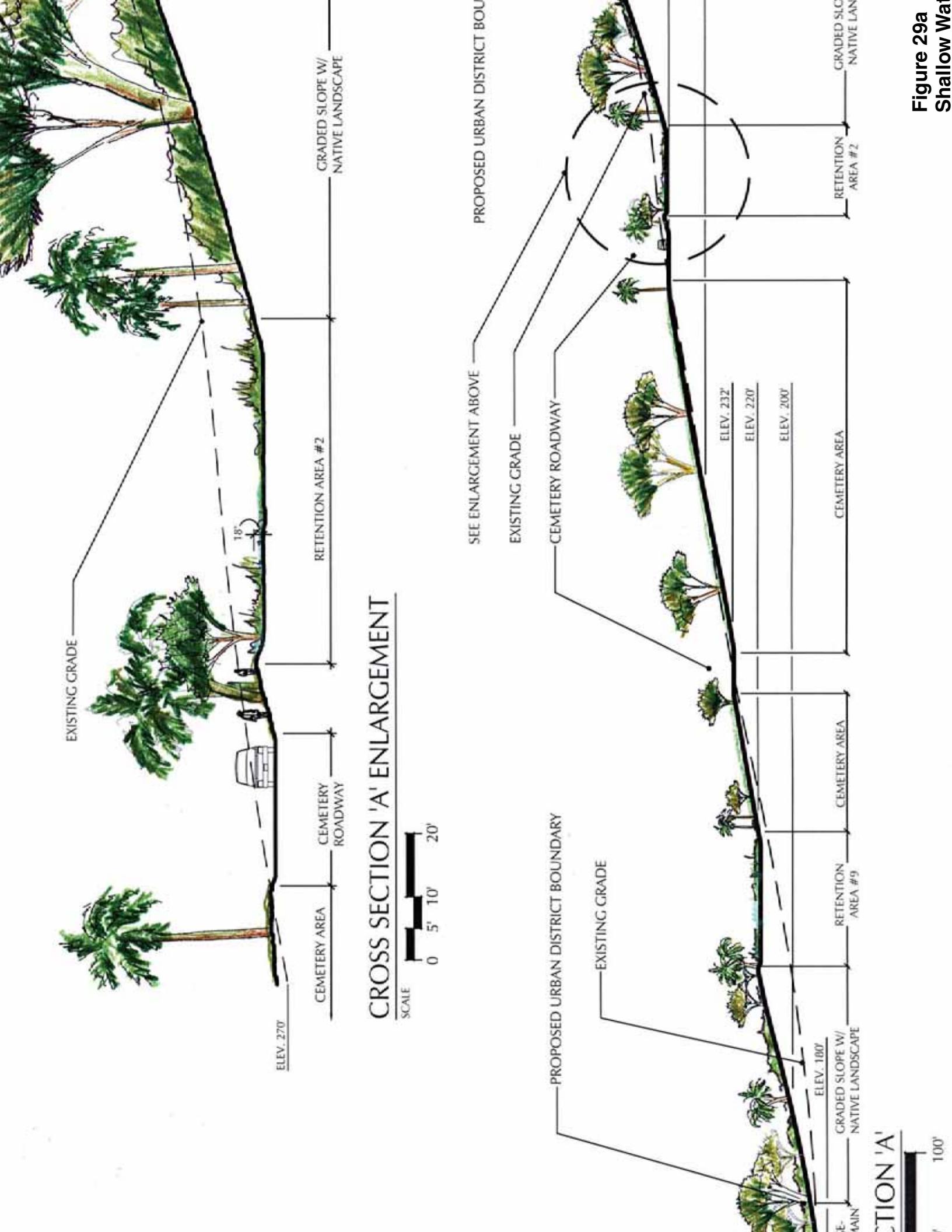
PUHAI  
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Park Life Plan Ltd.

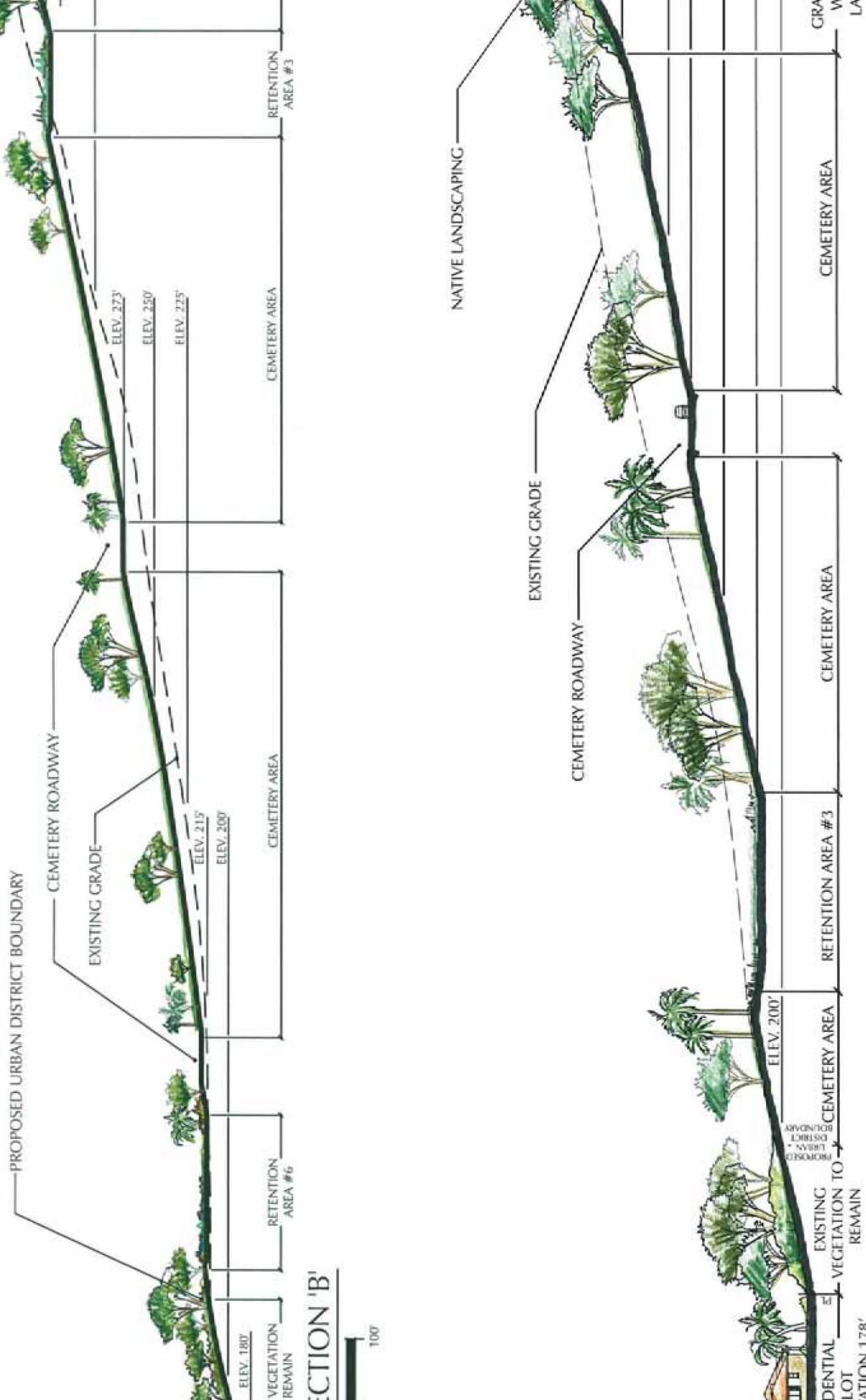
## LEGEND



**Figure 29a**  
Shallow Wat-



**Figure 29b**  
Shallow Wat-



### 6.5.2 Probable Impacts

The Revised Proposed Action will be a new source of solid waste during construction and after development. Construction wastes will primarily be made up of vegetation, rocks, and debris resulting from clearing the site prior to construction. Construction waste will be collected by construction contractor and delivered to Nanakuli Landfill. On O'ahu, the typical range of per capita solid waste generation is 9.0 pounds per capita per day. The solid waste composition for the 20-lot subdivision is expected to be typical for a municipal source. It is anticipated that refuse generated by the proposed residential development will be collected by the City and County refuse collection service.

Generation of construction wastes due to clearing of the site will be short term and in accordance with Federal and State regulations. Operational period waste will be collected via the private waste hauler Verizon O'ahu Waste, and continue to be taken to the H-POWER facility. Green waste will continue to be left in place after mowing activities, and HMP will further contribute to waste reduction by establishing a compost program for all green waste produced on its property. Because residential development will no longer be part of the Revised Proposed Action, the cemetery expansion will have minimal impact on the increase in generation of non-combustible solid waste on O'ahu.

No mitigation is required.

## 6.6 POWER AND COMMUNICATIONS

### 6.6.1 Affected Environment

The Petition Area does not have any existing power or communications facilities as it is currently undeveloped property. An overhead easement from 1964 exists over the Garden View end of HMP off Kumakua Place, just adjacent to the Petition Area. Currently, an underground line enters the Garden View section off of Kumakua Place and traverses several hundred feet before ending at a 7.2 kilo Volt transformer.

### 6.6.2 Probable Impacts

It is anticipated that Hawaiian Electric Company (HECO) and Hawaiian Telcom will provide the necessary electrical and telephone service to the Petition Area. It is estimated that power requirements will be in the range of 4 to 5 kilo Watts per residential unit, depending on use of air conditioning. Coordination with HECO and Hawaiian Telcom will continue as the project progresses. Since the 20-lot subdivision will not be developed, no impacts are anticipated to telephone services.

Use of energy-efficient lighting will be employed whenever possible, but the project is not expected to require much lighting, either indoor or outdoor. The mausolea will be outdoor structures, and the proposed restroom will have a skylight so that no electrical lighting is required. Since the cemetery closes at dusk, the only lighting necessary will be for limited security lighting. If utilized, the lighting will be shielded to control light spill, and will use energy efficient light bulbs.

No mitigation is required.

## 6.7 SCHOOLS

### 6.7.1 Affected Environment

The Petition Area is in the Castle Complex of public schools, administered by the State Department of Education. Schools in the Castle Complex include eight elementary schools ('Ahuimanu, Ben Parker, He'eia, Kahalu'u, Kane'ohe, Kapunahala, Pu'ohala, and Waiahole), S.W. King Intermediate School, and James B. Castle High School. Schools in the service area of the Petition Area include Kane'ohe Elementary School, S.W. King Intermediate School, and James B. Castle High School. Current student enrollment of 1,552 for 2007 for Castle High is below existing capacity of 1,763, and is projected to drop to 1,285 by 2012. In 2007, King Intermediate was below its student capacity of 1,106, with 708 students, and enrollment is projected to drop to 574 by 2012. Kaneohe Elementary School below its capacity of 662 with 614 students in 2007 and enrollment is projected to drop to 551 by 2012 (State of Hawai'i Department of Education 2008a).

### 6.7.2 Probable Impacts

~~Based upon Department of Education Office of Information Technology Services, the 20 single family homes of the Petition Area will generate requirements for an additional 10 students. For elementary school (K-6), 6 students; middle school (7-8), 2 students; and high school (9-12), 2 students. The proposed action will not have a significant impact to the schools in the area, all of which are projected to stay below capacity through the 2012 timeframe. Since the 20-lot subdivision will not be developed, no impacts are anticipated to requirements for education services, and no mitigation is required.~~

## 6.8 PARKS AND RECREATIONAL FACILITIES

### 6.8.1 Affected Environment

There are currently no public parks or recreational facilities within the Petition Area. HMP grounds are used by neighboring residents for walking, jogging, and dog walking every day, morning and afternoon. The rolling terrain within HMP cemetery offers scenic views of the Ko'olau Mountains, Kaneohe town, and Kaneohe Bay which encourages some residents to visit the cemetery for restful breaks during lunch period or at other times during the work day. Unauthorized recreational use of the Petition Area includes paintball and hiking. The total acreage of public parks and recreational facilities within a one-mile radius of the Petition Area is approximately 616 acres, and consists of: Kaluapuhi Neighborhood Park; Pali Golf Course (a municipal course); Ho'omaluhia Botanical Garden; Kaneohe Bayview Neighborhood Park; Puohala Neighborhood Park; and Kaneohe Community Park. Facilities within a two-mile radius of the Petition Area provide approximately 50 acres of park and recreational space, and include: Kawai Nui Marsh; Ke'a'lau Neighborhood Park; Kaneohe Civic Center Neighborhood Park; Kapunahala Neighborhood Park; and Kaneohe District Park.

There is some documentation on the internet that a 1/4 mile section of an unofficial and unmaintained trail traverses a portion of the property and connects to Lipalu Street.

### 6.8.2 Probable Impacts

The Petition Area-Former Proposed Action would havewill generated a demand for additional park facilities to serve the new populationresidents of the 20-lot subdivision. A review of the City and County of Honolulu Park Dedication Rules and Regulations (February 1996) indicates a need for 350 sf of parks and playgrounds per dwelling unit, which equates to 7,000 sf (0.16 acres) of park based on the formerly proposed 20-lot single family residential development. Additional area will become available for neighboring residents for walking, jogging, etc.

Recreational trail use through private property such as the Petition Area is not protected.  
The Petitioner has coordinated with DLNR, Na Ala Hele Trail and Access Program on the appropriate approach to the trail that appears to traverse part of the Petition Area.  
While HMP has no obligation to maintain or provide amenities for the trail, HMP will work to reasonably accommodate official hiking trails as long as respect for families is shown.

### 6.8.3 Mitigation

The Petitioner will provide in-lieu payment for the fair market value of the 7,000 sf of required park and playground space, as required per City and County of ROH Section 22-7.6.  
Since no residential uses are included in the Revised Proposed Action, no mitigation is required.

## 6.9 POLICE PROTECTION

### 6.9.1 Affected Environment

The Petition Area falls within the jurisdiction of the City and County of Honolulu Police Department (HPD) District 4 (Kāne'ohe/Kailua/Kahuku) command. District 4 is HPD's largest patrol area, extending from Makapu'u Point to Kawela Bay on the North Shore of O'ahu.

### 6.9.2 Probable Impacts

There are not expected to be substantial impacts to police protection from the Revised Proposed Action. The HPD reviewed the EISPN and responded that the Former Proposed Action should have no significant impact on the HPD facilities and operations.

No mitigation is required.

## 6.10 FIRE PROTECTION

### 6.10.1 Affected Environment

The City and County of Honolulu Fire Department Battalion 3 provides fire protection services for Windward O'ahu from Makapu'u Point to Kawela Bay. The Kāne'ohe Fire Station Number 17 is located in the heart of Kāne'ohe town, approximately three miles from the Petition Area. The next closest station is 'Aikahi Fire Station Number 19, located on Kāne'ohe Bay Drive approximately four miles from the subject property. Station 17 serves as Battalion 3 headquarters and is equipped with an engine company and a ladder company. Station 19 is equipped with an engine company.

### 6.10.2 Probable Impacts

The proposed mausolea structures on the cemetery expansion area are considered Type V cast-in-place non-combustible structures with no assembly areas. As such they do not require fire protection. The proposed residential subdivision portion and cemetery comfort station will require fire protection facilities. The project will adhere to all fire protection requirements of the City and County of Honolulu Fire Department, including providing a fire apparatus access roads, water supply for fire protection, fire hydrants, and mains for fire flow. All civil engineering drawings will be submitted to Honolulu Fire Department for review and approval. ~~There are two options for providing potable water for the project.~~

~~Connecting to existing available water systems: A potable meter on Kumakua Place can provide sufficient potable water at acceptable pressure for fire flow requirements. This will entail upgrading the meter size and installing a main supply line across the cemetery to the subdivision location. This will be a privately maintained line due to the length and distance from the meter, and will be placed in an easement across the cemetery property to the subdivision.~~

~~On-site water system: Potable water will be stored in an 80,000 gallon tank located in the upper developed cemetery grounds at approximately the 330 foot elevation. This will allow adequate storage and gravity pressure for domestic and fire flow volumes in the subdivision. The water treatment facility and tank will be serviced by a small paved road from the internal cemetery road network. The storage tank will be set into grade and landscaped to reduce or eliminate visibility from offsite areas.~~

~~The final chosen water system for domestic usage will have adequate storage and pressure for fire flow requirements. Design and construction of the water system will meet all the requirements of the BWS. Access roads capable of supporting the Department's fire apparatus will be designed and built according to the City and County of Honolulu's Fire Department requirements. All roadway and water system designs will be submitted to the Fire Department for review and approval. All on-site fire requirements will be coordinated with the Fire Prevention Bureau of the Honolulu Fire Department.~~

## 6.11 EMERGENCY MEDICAL SERVICES

### 6.11.1 Affected Environment

The State of Hawai'i contracts with the City and County of Honolulu Department of Emergency Services to provide emergency medical services and emergency medical ambulance services on O'ahu. Ambulance units closest to the Petition Area are located at the Kāne'ohe Fire Station and the Kailua Fire Station. A Rapid Response Paramedic Unit providing additional coverage to Windward O'ahu is based at the Ka'a'awa Post Office.

### 6.11.2 Probable Impacts

There are not expected to be substantial impacts to emergency medical services from the Revised Proposed Action, and no mitigation is required.

## 7.0 CUMULATIVE IMPACTS

"Cumulative impact" is defined as the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time (40 CFR §1508.7; §11-200-2, HAR). Section 11-200-17, HAR requires the EIS, at a minimum, to address the interrelationships and cumulative environmental impacts of the Revised Proposed Action and other related projects.

Guidance for considering cumulative effects is set forth by the U.S .Council on Environmental Quality (1997). The geographic boundaries used for the cumulative impact analysis vary with the resource considered and range from the watershed up to the State-wide economy. The time frame for the analysis is limited to the foreseeable future, which generally corresponds to a twenty-year planning horizon (consistent with the City and County's planning horizon).

### 7.1 PLANNING CONTEXT

The Ko'olau Poko region has been identified as an area within the City and County to have limited/minimal growth. As noted in Chapter 3 and discussed in Section 5.1, the City and County *General Plan* objective is to have the Ko'olau Poko region support 11.6% of the island wide population by 2025; in 2000 it had 13.5% of O'ahu's population.

### 7.2 SUMMARY OF PROPOSED DEVELOPMENTS CONSIDERED IN THE CUMULATIVE IMPACT ANALYSIS

There are not expected to be many proposed developments considered in the vicinity of the Petition Area. The Pikoiloa neighborhood is stable and change is not likely in the area. The population numbers for the Ko'olau Poko region have been stable for the past 20 years, and are projected to drop from 13% of O'ahu's resident population to 10% by the year 2030.

The only known proposed developments nearby include 27 single-family residential units for Bay View Estates and two single family residential units presently under construction on Nāmoku Street. Sales and construction for Bay View Estates are currently ongoing.

### 7.3 ASSESSMENT

An assessment of potential cumulative effects for each resource area is provided below. In summary, the Revised Proposed Action and Alternatives, collectively, will not have a significant cumulative impact on the resource areas analyzed.

#### 7.3.1 Physical Environment

Climate, Topography and Slopes, Soils. The Revised Proposed Action will not have a cumulative effect on climate, topography, slopes, and soils. The topography and slopes within the Petition Area will be graded to provide suitable areas for gravesites and residential development. In general, the topographic profile of the Petition Area will

remain intact, although slopes will include changes in slope be evened out to eliminate sharp changes in contour. Some topographic features will be altered, but overall drainage flow patterns and drainage ways will remain in current configurations, and new contours will tie into existing contours to provide consistent topographic profiles. There is no apparent potential for hazards to the Petition Area associated with slope stability.

Groundwater Resources. The Revised Proposed Action will not have a significant cumulative effect on Groundwater Resources. Based on the sustainable yields of the Ko'olau Poko Aquifer System and the present unallocated and unused supplies, the available supply of water is sufficient to support the Petition Area. The proposed development will not be a potential source of contamination to the underlying groundwater and will cause no significant degradation of the potable-drinking water supply.

Natural Hazards. The Revised Proposed Action will not have a cumulative effect on Natural Hazards.

Biological Resources. The Revised Proposed Action will not have a cumulative effect on biological resources and will have a beneficial impact by increasing the native Hawaiian flora on the site and increasing foraging areas for migratory birds. The Petition Area does not support any federally threatened or endangered species.

Historic, Cultural, and Archaeological Resources. The Revised Proposed Action will not have a negative cumulative effect on historic, cultural, and archaeological resources. Resources have been analyzed and recorded, and appropriate mitigation will be implemented, including creation of a 9.4-acre cultural preserve that includes Kawa'ewa'e Heiau, other archaeological sites, and areas where the *laua'e* fern is found. Appropriate mitigation measures have been identified to minimize cumulative impacts to the historic Kawa'ewa'e Heiau, and the complex of sites in its vicinity. In addition, the Petitioner has stated the intent to work with appropriate groups and individuals to protect habitats which provide highly desired specimens of the *laua'e* fern for *hula* and *lei* gathering of plant material.

Scenic and Visual Resources. The Revised Proposed Action will not have a significant cumulative effect on scenic and visual resources. The views from Kamehameha Highway across the landscaped cemetery lawns through to the foothills separating Kāne'ohe and Kailua will be preserved. Some subtle alteration will occur, as the landscaped cemetery areas will extend up and across what is now a primarily overgrown non-native Schefflera/Java Plum Forest between the Ocean View Garden and Pohai Nani. In the area of the proposed cemetery expansion, the character of the open space will be changed from non-native forest to open lawns with scattered trees. The views of the proposed residential development will be changed from open space to both one- and two-story single family homes, similar in character to the existing adjacent residential neighborhoods. The mausoleums will not be visible from surrounding neighborhoods because of ample vegetative buffers and the topographic differences. Longer-range views of the mausolea will be mitigated by vegetative screening and appropriate selection of exterior and roof colors. The Petition Area will be marginally visible from the Pikoiloa neighborhood. This is a result of the difference in elevation between the street and the proposed development area and a planned generous vegetative buffer between

residential property lines and the Petition Area. The current concept plan indicates a minimum 50 ft buffer of existing vegetation between the adjoining residential property line and the cemetery areas. Some areas will include a graded transition slope and re-vegetated buffer of approximately 100 ft in addition to the existing vegetation buffer.

Air Quality. The Revised Proposed Action will not have a significant cumulative effect on air quality. The additional 20 residents planned for the Petition Area will not significantly increase vehicle and stationary emissions.

Noise. The Revised Proposed Action will not have a significant cumulative effect on noise. It will contribute construction period noise which is by its nature, short term. Operational period vehicle trips will continue to contribute to the overall regional traffic noise associated with major roadway facilities. Typically, the noise impact is confined to the major roadway corridors. Noise from these sources will meet DOH noise rules, which stipulate maximum permissible noise limits at the property line, and mitigation of mechanical noise will be incorporated into the project design. Traffic attributable to the cemetery accounts for less than 1% of the vehicles on Kamehameha Highway, and is expected to have a very minimal effect (approximately less than a one (1) decibel increase in noise level. Noise along roads in the neighboring residential areas is not expected to significantly increase due to the project.

### 7.3.2 Socio-Economic Environment

Population Impacts. The Revised Proposed Action will not have a cumulative impact on population. As noted, the Ko'olau Poko region's population is projected to decrease within the next two decades.

Housing. The Former Proposed Action wouldwill have had a beneficial cumulative impact on housing. DPP's 2006 Annual Report identified a future need for 820 primary resident housing units for the Ko'olau Poko region. Since no housing is included in the Revised Proposed Action, no cumulative impacts to housing are anticipated.

Employment. The Revised Proposed Action will provide a total of about 113 direct, full-time equivalent jobs as a function of the operation of the cemetery at build-out. In addition, it will provide about 270 direct full-time equivalent construction jobs over the 20-year period of implementing the phasing plan for the cemetery ~~and the 20-lot subdivision~~. A variety of vendors and suppliers will continue to support the cemetery and its clients. Overall, the Revised Proposed Action will have a beneficial cumulative impact on employment.

Fiscal Impacts. The Revised Proposed Action will have a positive cumulative fiscal impact as a result of the general excise taxes, personal and corporate income taxes, and property taxes to be paid ~~by future residents of the 20-lot subdivision~~, the cemetery, its employees, vendors, suppliers, and clients.

Traditional Customs and Practices. The Revised Proposed Action will not have a cumulative negative impact on traditional customs and practices. The cultural impact assessment suggests that there are three primary cultural concerns for the Petition Area: 1) preservation and protection of the Kawa'ewa'e Heiau and other cultural sites in the Petition Area; 2) gathering practices for *hula* and *lei* plants; and 3) the possibility of burial

sites in the Petition Area. Those interviewed for the CIA were divided about whether the proposed project would aid or hinder the efforts to care for the cultural sites, and impact the cultural gathering in the Petition Area. The conceptual site plan has been designed specifically to incorporate the known archaeological and cultural sites, with ample-a cultural preserve included as part of the Revised Proposed Action~~buffer zones included~~. Kawa'ewa'e Heiau, located approximately 100 ft to the west of the Petition Area, has been on the National Register of Historic Places since 1972. A 100 ft buffer has been established around this historic property within property owned by the Petitioner. Cooperative efforts will continue with concerned "caretaker" groups to: 1) ensure there are no significant negative impacts to the *heiau* and nearby sites; 2) develop an agreement to guarantee long-term access to the *heiau*; and 3) develop an agreement that identifies important habitat for the *laua'e* fern and ensures access to these sites. Taken on the whole, these measures will complement other on-going efforts in the Kāne'ohe region to protect important cultural sites and allow a better comprehensive understanding of the inter-relationship of these sites.

### 7.3.3 Public Facilities and Services

Transportation. The Revised Proposed Action will not have a significant cumulative impact on transportation facilities. The LOS for the Haleka Street/Kamehameha Highways/Cemetery Drive intersection ~~warrants a traffic signal~~will reach LOS F without implementation of the Revised Proposed Action. General increases in background traffic counts will continue, thereby emphasizing the need for signalization of this intersection. HMP will work in coordination with the State of Hawai'i Department of Transportation Traffic Branch to provide a traffic signal warrant study to determine whether intersection signalization is necessary subsequent to project approval by the Land Use Commission.

Utilities and Public Infrastructure Systems (Water Supply, Wastewater, Drainage, Solid Waste, Power and Communications). The Revised Proposed Action and Alternative will not have a significant cumulative impact on power and solid waste systems; and will have no cumulative impact on other Utilities and Public Infrastructure Systems. Project operation and maintenance protocols already involve recycling green waste. In addition, HMP commits to starting a compost program to recycle all of its green waste. Use of energy-efficient lighting will be employed whenever possible, but the project is not expected to require much lighting, either indoor or outdoor. The mausolea will be outdoor structures, and the proposed restroom will have a skylight so that no electrical lighting is required. Since the cemetery closes at dusk, the only lighting necessary will be for limited security lighting. If utilized, the lighting will be shielded to control light spill, and will use energy efficient light bulbs. Potable water commitments for new development are made by the BWS in consideration of maintaining safe sustainable yields of the potable aquifers. The available supply of water will be sufficient to support the Petition Area. The actual connection point for domestic services will depend on available supply when the connection is desired. The City and County is in the process of evaluating long-range land disposal options, as well as moving forward in implementing island wide curbside recycling programs to reduce the waste stream. HECO and Hawaiian Telcom maintain their own long-range master planning process to ensure new customers are provided for and levels of service are maintained for existing customers.

Public Services (Schools and Libraries Recreational Facilities, Police, Fire and Emergency Services). The Revised Proposed Action will not have a significant cumulative impact on Public Services. Schools in the area have adequate room to support the estimated demand of 10 students from the 20 lot residential portion of the project. The Petition Area will provide an in-lieu payment for 0.6 acres of parklands and recreation facilities as required by the County Park Dedication Ordinance. City and County real property taxes raised by the development of the Petition Area will underwrite marginal increased demands placed on police, fire, and emergency services. will not be impacted because no new housing units will be constructed.

## 8.0 ALTERNATIVES TO THE PROPOSED ACTION

In addition to the Former Proposed Action (urbanization of the approximately 56.6-acre Petition Area for expansion of the HMP cemetery and development of a 20-lot residential subdivision), four alternatives were considered, and a fifth alternative of constructing on another site was considered and dismissed from further analysis.

The option of alternative locations for the Former Proposed Action was considered but dismissed from further analysis due to the following: the Petitioner does not own other land on O'ahu; use of land in another location will compete with both urban and agricultural uses on the new site; land in another location will not have the needed existing supporting infrastructure (administration space, chapel, grounds maintenance facilities, crematorium); and selecting another site ignores the synergistic and energy efficient aspects of expanding in an area already developed with cemetery uses.

The following four development alternatives were considered for the Petition Area:

- No Action
- Cemetery Expansion with Residential Retirement Community Component
- Cemetery Expansion Only
- Larger Residential Community with Cemetery Expansion Component

Table 12 gives a comparative evaluation of the four alternatives.

### 8.1 NO ACTION

**Description.** The No Action Alternative assumes there will be no additional expansion of the HMP Cemetery, ~~or development of a 20-lot residential subdivision.~~

**Analysis.** The No Action Alternative will result in a future reduced supply and selection of interment choices available to the general public. This means that Hawai'i families will have to find alternative locations to inter loved ones and assumes that there is other space available for cemetery use elsewhere on O'ahu, or that other cemeteries will be developed in other locations. No environmental consequences are anticipated from this action in this location. No traffic impacts will occur in the immediate area, there will be no impact on utilities and no increase in storm water runoff. However, if burial space is developed elsewhere to accommodate projected demand, potential impacts similar to those anticipated for the Petition Area would be expected at other sites. In addition, as burials decline at HMP due to the declining inventory, general excise tax revenue will decline (\$577,947 in 2007) and approach zero. For these reasons this alternative was rejected.

### 8.2 CEMETERY EXPANSION WITH RESIDENTIAL RETIREMENT COMMUNITY COMPONENT

**Description.** This alternative is similar in concept to the Former Proposed Action except the 20-lot subdivision would be replaced with a residential retirement facility similar to

**Table 12**  
**Comparative Evaluation of Alternatives to the Former Proposed Action**

<u>Land Use Summary</u>	<u>Former Proposed Action (acres)</u>	<u>Alternative 2 (acres)</u>	<u>Revised Proposed Action (Alternative 3) (acres)</u>	<u>Alternative 4 (acres)</u>
<u>Cemetery Area</u>	<u>33.8</u>	<u>33.8</u>	<u>35.6</u>	<u>11.4</u>
<u>Total Burial Areas</u>	<u>27.8</u>	<u>27.8</u>	<u>29.5</u>	<u>5.5</u>
<u>Internal Roadway</u>	<u>3.9</u>	<u>3.9</u>	<u>4.5</u>	<u>3.9</u>
<u>Drainage Retention Areas</u>	<u>1.8</u>	<u>1.8</u>	<u>1.3</u>	<u>1.8</u>
<u>Mausolea</u>	<u>0.3</u>	<u>0.3</u>	<u>0.3</u>	<u>0.2</u>
<u>Non-Cemetery Open Space</u>	<u>16.4</u>	<u>16.4</u>	<u>20.9</u>	<u>24.4</u>
<u>Historic Sites/Cultural Preserve</u>	<u>1.1</u>	<u>1.1</u>	<u>9.5</u>	<u>9.1</u>
<u>Lands to be revegetated</u>	<u>15.3</u>	<u>15.3</u>	<u>11.4</u>	<u>15.3</u>
<u>Residential Area</u>	<u>6.4</u>	<u>6.4</u>	<u>0</u>	<u>20.8</u>
<u>TOTAL Petition Area</u>	<u>56.6</u>	<u>56.6</u>	<u>56.5</u>	<u>56.6</u>

the adjacent Pohai Nani facility. These facilities could include senior living apartments, cottages, residential care facilities, and skilled nursing facilities. The overall design treatment for these new facilities would be similar to Pohai Nani, with a central residential tower of about seven stories (Figure 2930).

**Analysis.** This land use would appropriately respond to the growing demand for retirement housing. This alternative is viable due to the high demand in the future for retirement facilities similar to Pohai Nani. This alternative would require direct access through Lipalu Street which would impact traffic volume in the surrounding residential neighborhood. Impacts would be expected to be mostly similar to those from the Former Proposed Action outlined in this DEIS. Since no viable partner could be identified that was interested in pursuing this alternative, and because the Petitioner's core business does not include adult care facilities, this alternative was rejected.

### 8.3 CEMETERY EXPANSION ONLY

**Description.** This alternative entails development of 40.235.6 acres solely for cemetery area, with no residential component to the Proposed Action. Of the total 40.235.6 acres, 34.229.5 acres will be available for burial areas, providing even more space for O'ahu families to inter their loved ones (Figure 304a).

**LEGEND**

- SIHP# (50-60-10) Historic Site with Buffer
  - Proposed Urban District Boundary
  - Proposed Roadway
  - Mausoleum
  - Revegetated / No Burials
  - .8 ac.
  - .9 ac.
  - .8 ac.
  - .3 ac.
  - .8 ac.
  - .1 ac.
  - .4 ac.
  - .3 ac.
  - .6 ac.
- 0 200 400 Feet  
0 50 100 Meters



**Analysis.** This alternative reduces impervious surfaces to be developed, and total runoff generated during the 10-year storm event will would be expected to drop by 1820 cfs to a total of 500 cfs, an increase of 4.6% from the pre-development total of 478 cfs. As a result, the surface area required for retention areas will be reduced to 1.3 acres. Specifically, the road serving the former proposed 20-lot subdivision and the roof areas of future homes will be deleted from the development plan. Traffic impacts ~~would~~ will be reduced to adjacent residential neighborhoods as through traffic on Lipalu Street to the residential development ~~would~~ will be eliminated, with the removal of the Lipalu Street extension.

Impacts on the scenic and visual resources ~~would~~ will be limited, as the residential structures ~~would~~ will be absent and replaced by open space landscaped turf and scattered trees. To the extent possible, 11.4 acres which will be graded and revegetated, but not included in the expanded cemetery, will be landscaped with appropriate native and indigenous species. The Petition Area will be marginally visible in some areas, and completely shielded in others. Where the proposed new cemetery area is visible, it will appear as open landscape with scattered trees of intermediate height. The 9.4-acre cultural preserve will retain the same appearance as it currently has, as this area will not be altered except for a modest access road. Overall, the predominant viewplane will continue to be one of open space and the lush green of grass and trees. This character is represented by Figure 22b which demonstrates an oblique aerial view of the Petition Area, as seen from the northwest to the southeast, at an elevation of about 1,000 ft, which is a view that is not visible to the public.

Figure 23f depicts a before and after image as seen from Makamae Street at Lilipuna Road looking southeast. This viewpoint is approximately 1.9 miles from the Petition Area. The viewplane towards the Petition Area is predominately made up of residential housing in the foreground, with the green of the Oneawa Hills and Ko'olau Mountain Range still the principle background view. The proposed cemetery expansion area is slightly visible, but overall the viewplane is still characterized by the green backdrop of the Oneawa Hills. The roofs of the mausolea are visible, but are a minor element of the viewshed.

Under most viewing circumstances, the mausolea will not be visible from nearby surrounding neighborhoods because of ample vegetative buffers and topographic differences with the surrounding neighborhood. The project will include a minimum 50-foot buffer of existing vegetation between the adjoining residential property line and the cemetery areas. Some areas will include a re-vegetated buffer of approximately 100 ft in addition to the existing vegetation buffer. Figures 24, 29a, and 29b demonstrate the typical profiles of how the elevation difference and landscaped buffer will shield the Petition Area from view in the adjacent residential neighborhoods.

The potable water and wastewater demands ~~would~~ will become quite small, as the only need ~~would~~ will be to service the restroom facility at one mausoleum. In addition, the need for drinking water storage will not be necessary, and these facilities will be eliminated from the site plan. There would be no impact on Schools, Population, and Parks and Recreation facilities ~~would not have any impacts~~, and the beneficial impacts on housing ~~will be eliminated~~. This alternative would still have beneficial impacts on employment, and a positive fiscal impact ~~would~~ not exist.

The long-term result of this alternative meets most of the Petitioner's objectives for continued service to the community and operational security. After analysis and comments received through this EIS process, the Petitioner has determined this alternative is the preferred alternative. Table 13 below compares those resource areas that will have a change in impact from those expected from the Former Proposed Action.

**Table 13  
Comparative Evaluation of the Former Proposed Action and the Revised Proposed Action**

	<u>Former Proposed Action</u>	<u>Revised Proposed Action</u>
<u>Visual Resources</u>	<u>Minimal impact; some view of project from both near and far.</u>	<u>Minimal impact; view of cemetery and cultural preserve to be open space and green vegetation.</u>
<u>Housing</u>	<u>20 additional homes with affordable housing</u>	<u>No housing development</u>
<u>Employment</u>	<u>Construction-related: 270; On-going maintenance: 3-5</u>	<u>Construction-related: 270; On-going maintenance: 3-5</u>
<u>Fiscal</u>	<u>Property taxes from residential; continued taxes from cemetery sales</u>	<u>No property taxes from residential; continued taxes from cemetery sales</u>
<u>Traffic</u>	<u>Some increased traffic volume in adjacent residential area; Overall no change in LOS.</u>	<u>No traffic volume change in adjacent residential area; Overall no change in LOS.</u>
<u>Drinking Water</u>	<u>On-site water system with 80,000 gallon tank</u>	<u>0</u>
<u>Wastewater (mgd)</u>	<u>Mausoleum restroom: 0.013; residential subdivision: 0.04</u>	<u>Mausoleum restroom: 0.013</u>
<u>Drainage Increase (cfs)</u>	<u>42</u>	<u>22</u>
<u>Impervious Surfaces</u>	<u>10.6</u>	<u>4.8</u>
<u>Schools</u>	<u>10 additional students</u>	<u>0</u>

#### **8.4 LARGER RESIDENTIAL COMMUNITY WITH CEMETERY EXPANSION COMPONENT**

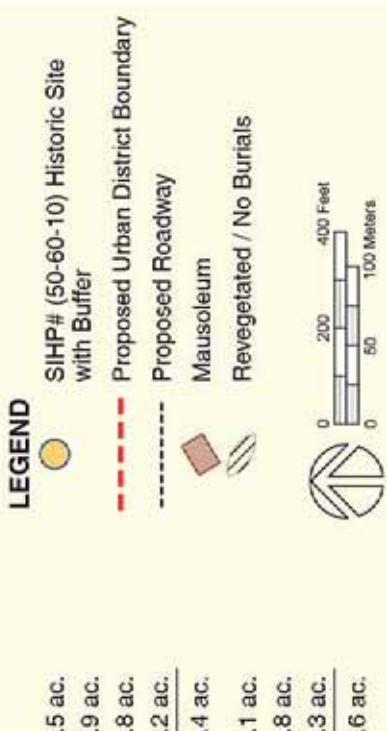
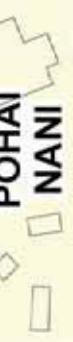
**Description.** This alternative would be predominantly a residential project, with a smaller portion made up of cemetery expansion. It would consist of 20.8 acres of a residential community, with approximately 80 residential lots and 5.5 acres of total burial areas (11.4 acres for cemetery area) (Figure 31). The area for historic sites would be 9.1 acres. Acreage for residential subdivision would continue to be through Lipalu Street.

**Analysis.** While serving the housing needs of O'ahu residents, this alternative provides less space for cemetery area and is less able to meet the interment needs of those on O'ahu. This alternative would impact traffic with large increases for Lipalu Street. Impacts would also increase for storm water runoff, utilities, schools, and visual resources. For these reasons, this alternative was rejected.

## Cemetery Expansion

ark Life Plan Ltd. Prepared by: Helber Hastert & Fee, Planners

## POHAI NANI



Figure

HAWAII VETERANS CEMETERY

## **9.0 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES**

Chapter 200 of Title 11, EIS Rules (§11-200-17(k), HAR) require the “identification of unavoidable impacts and the extent to which the action makes use of non-renewable resources during phases of the action, or irreversibly curtails the range of potential uses of the environment.”

The construction of the Revised Proposed Action will result in an irreversible and ir retrievable commitment of capital, land, labor, and energy for its design, development, and operation. The commitment of these resources, however, should be evaluated in light of expected benefits to the community accruing from the project. The Revised Proposed Action will irretrievably transform the subject property from its present non-native forest to a combination of landscaped cemetery open space, and revegetated native buffer areas, and residential housing.

The interment options and housing opportunities provided, the associated employment created, and public tax revenues generated by the project serve to counterbalance the loss of conservation land.

The Revised Proposed Action does not impact threatened or endangered biological resources or significant historic sites. In fact, historic sites, both in the Petition Area and near by, will be ensured to be cared for, with greater access to otherwise unknown historic sites. The Revised Proposed Action will not adversely affect rights customarily and traditionally exercised for subsistence, cultural and religious purposes and will have minimal or no impact on Hawaiian culture, its practices, and traditions because the Petitioner is committed to long-term agreements that preserve cultural sites (including habitat a cultural preserve area for gathering plant materials for *hula* and *lei* activities), and access to these sites.

## **10.0 RELATIONSHIP BETWEEN LOCAL SHORT-TERM USES OF THE ENVIRONMENT AND MAINTENANCE AND ENHANCEMENT OF LONG-TERM PRODUCTIVITY**

Chapter 200 of Title 11, EIS Rules (§11-200-17(j), HAR) require the description of the “relationship between local short-term uses of humanity's environment and the maintenance and enhancement of long-term productivity,” including discussions of the extent to which the Revised Proposed Action (1) involves trade-offs among short-term and long-term gains and losses; (2) forecloses future options, (3) narrows the range of beneficial uses of the environment, or (4) poses long-term risks to health or safety.

There will be a short-term loss due to air quality and noise impacts during project construction. There will be long-term productivity gains through the project's provision of desirable homes for O'ahu residents.

The Revised Proposed Action will increase the range of beneficial uses of the environment by providing a productive use for the Petition Area, increasing the space available for burials and crematory space, increasing the housing inventory for the O'ahu's families, providing an area for native habitat for both plant and animal species, ensuring the long-term protection and preservation of important historic and cultural sites, and access to these sites for Native Hawaiian practitioners, and providing net fiscal benefits to the County and State.

The Revised Proposed Action will not pose long-term risks to human health and safety. The project will comply with Federal, State, and County regulations governing the various aspects of project implementation. The Petition Area is not in a known flood hazard area and is outside the area affected by tsunami inundation.

## 11.0 PARTIES CONSULTED DURING THE PREPARATION OF THE DRAFT ENVIRONMENTAL IMPACT STATEMENT

### 11.1 PARTICIPANTS IN THE DEIS PREPARATION PROCESS

The Hawaiian Memorial Park Cemetery Expansion DEIS was prepared for the Petitioner, Hawaiian Memorial Life Plan Ltd., by Helber Hastert & Fee, Planners. The following list identifies individuals and organizations involved in the preparation of this report and their respective contributions.

#### **Helber Hastert & Fee, Planners**

Scott Ezer	Principal-in-Charge
Rachael Edinger	Principal Author
Rob James	Geographic Information System Specialist
Lori Chun	Graphic Design

#### Technical Consultants

<b>Subject</b>	<b>Consultant</b>
Market Assessment	Clark & Green Associates
Slope/Rock Hazard Study	Shinsato Engineering, Inc.
Civil Engineer/Drainage Report	SSFM International, Inc.
Botanical Resources Assessment	LeGrande Biological Surveys, Inc.
Avifaunal and Feral Mammal Field Survey	Philip L. Bruner
Archaeological Inventory Survey	Cultural Surveys Hawai'i, Inc.
Cultural Impact Assessment	Cultural Surveys Hawai'i, Inc.
Traffic Impact Study	Perazim Consulting LLC
Cemetery <u>Planning and Design/Landscape Architecture</u>	Clark & Green Associates

### 11.2 COMMUNITY OUTREACH

Project representatives have met or communicated with a variety of community members and government officials and agencies in preparing this DEIS. In March 2006, a meeting was held with staff from the State Land Use Commission to discuss permit requirements and the administration of Chapter 343, HRS. In January 2007, the applicant distributed letters to over 250 residents living within 300-ft of the Petition Area and to other residents in the region to invite them to attend community outreach meetings held in January and February of 2007, respectively.

The applicant made a presentation at these meetings in an effort to communicate directly with HMP's neighbors and community leaders about the long-term master plan for the cemetery. The meetings gave attendees the opportunity to view the proposed plan and ask questions about the project in the context of the actual site. Additionally, the meetings provided the opportunity to receive input from the community regarding the cemetery's early planning processes and to establish contact persons for subsequent points during the project's duration. Questions were raised on a variety of subject areas,

including: viewplanes; flooding; traffic impacts; security; ~~potable~~drinking water sources; historic and cultural resources; and project alternatives.

Follow up visits were made with some residents who attended the community meeting and expressed significant flooding and runoff concerns. In late February 2007, the preparers of this DEIS and the engineering consultant met with these residents at their homes to discuss what happens on and near their properties during heavy rains. These scheduled site visits provided personal accounts of storm incidents and gave the community members the opportunity to give first hand information about existing storm runoff conditions.

Beginning in March 2007, project representatives appeared before the Kaneohe Neighborhood Board (No. 30) to answer questions that had been raised as a result of the community meetings hosted by the applicant in January and February 2007. On a monthly basis, as necessary, project representatives have attended neighborhood board meetings to keep the board informed about the progress of the project.

SSFM International, Inc., the civil engineer for this project, consulted with BWS several times between October 2006 and March 2007 to discuss several aspects of domestic water sources for the proposed cemetery expansion and residential development, and have also conferred with the State Department of Transportation, Highways Division, and the City and County of Honolulu DPP, Wastewater Branch.

In July 2007, a facilitated meeting was held to address any additional concerns related to the project. This meeting was attended by the Petitioner, the preparer of this DEIS, and a community group (Hui O Pikoiloa) representative as well as nearly 200 other attendants. In addition, project representatives attended the April 2008 meeting of the Kaneohe Bay Regional Council to provide council members project information.

Important ideas that have surfaced via community outreach include:

- Drainage and flooding of areas down slope of Petition Area
- Protection of view planes
- Preservation of historic sites within Petition Area
- Preservation of Native Hawaiian gathering rights
- Access to Kawa'ewa'e Heiau

The Petitioner will continue to participate in community outreach during the preparation of the Final EIS.

### **11.3 PARTIES CONSULTED DURING THE PREPARATION OF THE DEIS**

The EISPN was published in the January 8, 2008 edition of *The Environmental Notice*, and the public comment period ran through February 7, 2008. Copies of the EISPN were sent to 49 agencies, organizations, and individuals to ensure that interested parties were notified of the forthcoming DEIS and that all relevant issues and concerns were addressed. Letters were distributed to a diverse group of parties believed to have an interest in the project. Comments were received from 29 of the 49 parties consulted

(See Table 142). Comments received in response to the EISPN were considered during the preparation of the DEIS. The parties who provided written comments on the EISPN are identified in the table by a checkmark (✓).

**Table 142**  
**Consulted Parties During Preparation of the EISPN**

Consulted Parties	Comments Received
<b>Elected Representatives</b>	
Representative Ken Ito	
Councilmember Barbara Marshall	
Representative Cynthia Thielen	
Senator Jill Tokuda	
<b>Federal Agencies</b>	
Department of Agriculture, Soil Conservation Service	
Department of Defense	
Department of the Army, Army Corps of Engineers	
Department of the Interior	
Fish and Wildlife Service	
Geological Survey	✓
<b>State Agencies</b>	
Department of Accounting and General Services	✓
Department of Agriculture	
Department of Business, Economic Development, and Tourism	
Land Use Commission	
Office of Planning	✓
Department of Health	
Office of Environmental Quality Control	
Department of Land and Natural Resources	✓
Historic Preservation Division	✓
Department of Transportation	✓
Office of Hawaiian Affairs	✓
Department of Hawaiian Home Lands	✓
University of Hawai'i	
Environmental Center	
<b>City and County of Honolulu Agencies</b>	
Honolulu Fire Department	✓
Department of Planning and Permitting	✓
Honolulu Police Department	✓
Department of Environmental Services	
Department of Transportation Services	✓
Department of Design and Construction	✓
Department of Community Services	
Department of Parks and Recreation	✓
<b>Public Utilities</b>	
Hawaiian Telcom	
Hawaiian Electric Company	✓
Honolulu Board of Water Supply	✓
<b>Community Organizations/Individuals</b>	
Kailua Neighborhood Board #31	

Kāne'ohe Neighborhood Board #30	✓
Kāne'ohe Outdoor Circle	
Sierra Club	
Mr. Grant Yoshimori	✓
Rich McCreedy	✓
Julie McCreedy	✓
Ko'olau Poko Hawaiian Civic Club	✓
Mr. Charlie Ogata	
Queen Lili'uokalani Children's Center, Ko'olau Poko Unit	
O'ahu Island Burial Council	
Hui Mālama i Nā Kūpuna O Hawai'i Nei	
Ed Birdsong	✓
Donna Camvel	
Richelle & Aldon Kim	✓
Lianne Ching	✓
Eric Nakagawa	✓
Ernest Harris	✓
Kathleen O'Malley, Liam and Gary Gray	✓
Mavis Suda	✓
Livable Hawaii Kai Hui	✓

In addition to the parties listed above, copies of the EISPN were sent to the Kāne'ohe Regional Library, Kailua Library, DBEDT Library, the Legislative Reference Bureau, the Honolulu Department of Customer Service, and the University of Hawai'i Hamilton Library.

Comments received in response to the EISPN, as well as response letters replying to substantive comments, follow in the order listed in Table 142.

## DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM

### OFFICE OF PLANNING

Mailing Address: P.O. Box 2359, Honolulu, Hawaii 96804  
235 South Beretania Street, 8th Floor, Honolulu, Hawaii 96813



Ref. No. P-11997

*T.S. Scott Ezer*  
Scott Ezer  
December 20, 2007

Mr. Scott Ezer  
Helber, Haster & Fee, Planners  
1350 Maunakea Street, Suite 2590  
Honolulu, Hawaii 96813

Dear Mr. Ezer:

Subject: Hawaiian Memorial Park Cemetery Expansion  
Environmental Impact Statement Preparation Notice (EISPN)  
TMK(s): 4-5-033: 1 (portion); 56.6 acres  
Kaneohe, Koolauapoko, Island of Oahu  
State Land Use Commission (LUC) Docket No. A07-777

Thank you for sending the Office of Planning the EISPN for the above referenced proposal to reclassify lands from the State Conservation District into the State Urban District before the State LUC.

The Office of Planning will be coordinating the State's position on areas of cross-cutting State concern. I am writing to request that the DEIS consider the impacts of the proposed project on the following issues:

1. **Affordable Housing** – Increasing the supply of affordable housing is a critical State and County issue. Please discuss specifically how the petitioner plans to meet the County's affordable housing requirements.
2. **Water Supply** – Water resource protection is a critical State issue. If the proposed project is within a designated Water Management Area, please include information on the drinking water and non-potable water sources that will be available for the project.
3. **Public Health** – If the project will have a potential to generate hazardous materials or result in the possible contamination of the air, soil, or water, please discuss how public health and safety will be protected. Please discuss drainage issues with respect to the Kāwā Stream/TMDL (total maximum daily load) study.

c: Mr. Anthony Ching, LUC

*Mary Lou Kobayashi*  
Mary Lou Kobayashi  
Planning Program Administrator

Sincerely,

*Mary Lou Kobayashi*

4. **Cultural/Historic Resources** – Please include an inventory survey of cultural and historic sites, with monitoring and preservation plans approved by the State Historic Preservation Division. Please discuss how access for Native Hawaiians for traditional and customary practices will be preserved to include visual landmarks, if applicable. In particular, please discuss the Kawa'ewa'e heiau (National Historic Register No. 80-10-334) and any mitigation or preservation plans for the site and surrounding areas.
5. **Environmental, Recreational and Scenic Resources** – Please include an inventory of flora and fauna on the project site and any required protections. Your field observations should consider both wet and dry season surveys to capture the fullest range of flora and fauna. Please include a description of recreational uses on or near the project site. A description of scenic resources should also be included.
6. **Coastal Zone Management** – The State oversees protection of natural, cultural, and economic resources within the coastal zone. Please discuss how the proposed project will balance the competing values of economic development and preservation of coastal resources, including protection from hurricanes, storm surge, flood hazard, volcano, and soil erosion, as applicable.

The Office of Planning looks forward to receiving the DEIS with the potential impacts and mitigation measures for the above issues addressed. If you have any questions, please call Scott Derrickson in the Land Use Division at 387-2805.

May 23, 2008



Mary Lou Kobayashi  
Planning Program Administrator  
Office of Planning  
PO Box 2359  
Honolulu, HI 96804

Dear Ms. Kobayashi:

**Environmental Impact Statement Preparation Notice  
Hawaiian Memorial Park Cemetery Expansion**

**TMK (1) 4-5-033:1**

**Kāne'ohe, O'ahu, Hawai'i**

Thank you for your letter dated December 20, 2007 (Ref. No. P-11997) providing comments on the Environmental Impact Statement (EIS) Preparation Notice for the above-referenced project. For your ease of reference, we have included your comments in the order they appear in your letter, followed by our responses:

**1. Affordable Housing**

**Response:** The development will provide affordable housing opportunities in accordance with applicable City and County of Honolulu affordable housing requirements. The method of satisfying the affordable housing requirement will come from negotiation of the Affordable Housing Plan, approved by appropriate City and County of Honolulu agencies. The Plan could include a range of options, including sale of lots to qualifying affordable owners, construction of dwelling units elsewhere, or payment of an in-lieu fee. Exact provisions will be negotiated during the process of re-zoning the property.

**2. Water Supply**

**Response:** As will be discussed in Section 4.5 of the Draft EIS, the Petition Area is within a designated ground water management area. Any withdrawals in water management areas must be justified to obtain a use permit from the Commission on Water Resource Management (CWRM), as stated in §13-171-11, HAR. The Board of Water Supply (BWS) has the authority to allocate the use of water from their system within the limits approved by the CWRM for municipal purposes.

As will be discussed in Section 6.2 of the Draft EIS, discussions with the BWS have indicated that ample water quantities and pressure should exist in association with the Kumakua Place system to fully service the approximately 30 acres of turf landscaping at full build out for the cemetery expansion area. Domestic water will be required for both the 20-lot residential subdivision and the proposed cemetery comfort station. Options for providing potable water for these uses include: (1) connection to existing available water systems; and (2) creation of an onsite water system.

Options for irrigation include: (1) construction of non-potable on site wells on Hawaiian Memorial Park (HMP) property or near the Petition Area; and (2) connection to existing water systems, most of which are potable water sources, if a non-potable source cannot be found. Based on the Hawaii State Veterans Cemetery's satisfactory use of the non-potable wells near the Petition Area, it should be feasible to provide adequate water for irrigation using new onsite wells. If non-potable water is either unavailable or infeasible, a report of investigation including proposed irrigation demands will be submitted to BWS for their consideration of use of potable water. It should be noted that in a typical year, very little supplemental irrigation will be required for the cemetery landscape areas, especially after plant material and turf has established.

**3. Public Health**

**Response:** The project is not expected to have any impacts on air, soil, or water, nor to generate hazardous materials. Even though storm water runoff associated with the proposed project will be increased because of the added impervious surfaces of the roadways and mausoleums within the cemetery expansion area, and from the roadways and structures within the residential development, additional storm water runoff associated with the project will be retained on-site to County Standards. The exact effect of the Proposed Action on the TMDLs for Kāwā Stream is not certain. Because the project will utilize retention areas to retain runoff on site, it is probable that we can avoid increases for TSS, TN, and TP that could enter the Kāwā Stream system.

As suggested in the *Ko'olaupoko Watershed Regional Strategy Report* of 2007, other measures will be taken to ensure that HMP manages TMDLs in the future. HMP will work in cooperation with the Kāliau Bay Advisory Council to ensure groundwater impacts are minimized. HMP will maintain fertilizer maintenance logs as part of a fertilizer management plan. In addition, soil or tissue samples (grass) will be submitted to University of Hawai'i's Agricultural Diagnostic Service Center to test if fertilizer is necessary before the semi-annual fertilizer application.

#### 4. Cultural/Historic Resources

**Response:** The Archaeological Inventory Survey (AIS) prepared for the project will be discussed in Section 4.9 of the Draft EIS, and the survey attached as Appendix F. The Cultural Impact Assessment (CIA) will be discussed in Section 5.5 and the report attached as Appendix G.

Following resolution of mitigation measures in consultation with the State of Hawaii's Department of Land and Natural Resources Historic Preservation Division, it is anticipated that the proposed development will have "no effect" on the historic resources located within the Petition Area. The Kawa'ewae Heiau, a historic site on the National Register of Historic Places, is located outside the Petition Area. The Petitioner has stated his intent to continue to allow access to Native Hawaiian groups to maintain the *heiau* and will be working with affected groups to ensure this happens. The CIA, prepared for the Draft EIS identified that portions of the Petition Area are used for gathering of plant material for *hua* and *lei* adomment. The Petitioner has stated the intent to preserve and protect these areas, including the habitat for the *Iaua'e* fern that is gathered, and to allow continued access to them.

#### 5. Environmental, Recreational and Scenic Resources

**Response:** Both a flora and fauna assessment were conducted for the project. The Botanical Resources Assessment will be discussed in Section 4.7, and the entire report will be attached as Appendix D to the Draft EIS. The Avifaunal and Feral Mammal Field Survey will be discussed in Section 4.8, and attached as Appendix E. We have consulted with our technical consultants, and they do not believe it is necessary to conduct two surveys to capture the range of species present within the Petition Area and ensure appropriate impact analysis. There could be an effect on presence of migratory shorebirds such as Pacific Golden-Plover which are present from August to end of April. Fortunately the fauna survey was conducted in September when they were present. Recreational uses on or near the Petition Area will be described in Section 6.8, and scenic and visual resources will be discussed in Section 4.10 of the Draft EIS.

#### 6. Coastal Zone Management

**Response:** The Draft EIS will discuss the projects conformance with the objectives of the Coastal Zone Management Program in Section 3.15.

We appreciate your participation in this review process. Your letter and this response will be appended to the Draft Environmental Impact Statement.

Sincerely,

HELBER HASTERT & FEE, Planners



Scott Ezer  
Principal

cc: Jay Morford, Hawaiian Memorial Life Plan, Ltd  
Mike Green, Clark & Green Associates  
Bert Saruwatari, Land Use Commission, State of Hawai'i  
Office of Environmental Quality Control

POLICE DEPARTMENT  
CITY AND COUNTY OF HONOLULU  
801 SOUTH BERETANIA STREET • HONOLULU, HAWAII 96813  
TELEPHONE: (808) 528-3111 • INTERNET: [www.honolulupd.org](http://www.honolulupd.org)



January 14, 2008

Mr. Jay Morford  
Hawaiian Memorial Life Plan, Ltd.  
1330 Maunakea Street  
Honolulu, Hawaii 96813

Dear Mr. Morford:

This is in response to a letter from Helber Hastert & Fee Planners, Inc., requesting comments on the Environmental Impact Statement Preparation Notice for the Hawaiian Memorial Park Cemetery Expansion project in Koolauapoko.

This project should have no significant impact on the facilities or operations of the Honolulu Police Department.

If there are any questions, please call Acting Major Nyle Dolera of District 4 at 247-2166 or Mr. Brandon Stone of the Executive Office at 529-3644.

Sincerely,

BOISSE P. CORREA  
Chief of Police

By   
GREGORY LEFCOURT  
Acting Assistant Chief of Police  
Support Services Bureau

cc: OEQC  
Mr. Burt Saruwatari, Land Use Commission  
Ms. Rachael Edinger, Helber Hastert & Fee, Planners

*Serving and Protecting With Aloha*

Helber Hastert & Fee  
Planners, Inc.

May 23, 2008

Boisse P. Correa  
Chief of Police  
City and County of Honolulu  
Police Department  
801 South Beretania Street  
Honolulu, HI 96813

Dear Chief Correa:

**Environmental Impact Statement Preparation Notice**  
**Hawaiian Memorial Park Cemetery Expansion**

TMK (1) 4-5-033:1

Kāne'ohe, O'ahu, Hawai'i

Thank you for your letter dated January 14, 2008 (Ref. BS-KP) providing comments on the Environmental Impact Statement Preparation Notice for the above-referenced project. This letter is to acknowledge your determination that the proposed project should have no significant impact on the facilities or operations of your department.

We appreciate your participation in this review process. Your letter and this response will be appended to the Draft Environmental Impact Statement.

Sincerely,

HELBER HASTERT & FEE, Planners

Scott Ezr  
Principal

cc: Jay Morford, Hawaiian Memorial Life Plan, Ltd  
Mike Green, Clark & Green Associates  
Bert Saruwatari, Land Use Commission, State of Hawai'i  
Office of Environmental Quality Control

Pacific Guardian Center • 733 Bishop Street, Suite 2590 • Honolulu, Hawaii 96813  
Tel. 808.545.2055 • Fax 808.545.2050 • [www.hhf.com](http://www.hhf.com) • e-mail: info@hhf.com



## United States Department of the Interior

U.S. GEOLOGICAL SURVEY

Pacific Islands Water Science Center  
677 Ala Moana Blvd., Suite 415  
Honolulu, HI 96813

Phone: (808) 587-2400/Fax: (808) 587-2401

January 17, 2008



Mr. Jay Morford  
Hawaiian Memorial Life Plan, Ltd.  
1330 Maunakea Street  
Honolulu, Hawai'i 96813

Dear Mr. Morford:

Subject: Environmental Impact Statement Preparation Notice (EISPN) for Hawaiian Memorial Park Cemetery Expansion, O'ahu, Ko'olau Poko District, Tax Map Key No.: 4-5-033-001 por. 001

Thank you for forwarding the subject EISPN for review and comment by staff of the U.S. Geological Survey, Pacific Islands Water Science Center. We regret however, that due to prior commitments and lack of available staff, we are unable to review this document.

We appreciate the opportunity to participate in the review process.

Sincerely,

Gordon Tribble  
Center Director

cc: Office of Environmental Quality Control  
235 South Beretania Street, Suite 702  
Honolulu, Hawai'i 96813

Mr. Burt Saruwatari  
State of Hawai'i, Land Use Commission  
P.O. Box 2359  
Honolulu, Hawai'i 96804-2359  
Ms. Rachael Edinger, Project Planner  
Helber Hastert & Fee, Planners  
733 Bishop Street, Suite 2590  
Honolulu, Hawai'i 96813

cc: Jay Morford, Hawaiian Memorial Life Plan, Ltd  
Mike Green, Clark & Green Associates  
Bert Saruwatari, Land Use Commission, State of Hawai'i  
Office of Environmental Quality Control

Pacific Guardian Center • 733 Bishop Street, Suite 2590 • Honolulu, Hawaii 96813  
Tel. 808.545.2055 • Fax 808.545.2050 • www.hhf.com • e-mail: info@hhf.com



LINDA LINGLE  
GOVERNOR

BRENNON T. MORIOKA  
INTERIM DIRECTOR

Dputy Directors  
MICHAEL D. FORMAY  
FRANCIS PAUL KEENO  
BRIAN H. SEIGUCHI

IN REPLY REFER TO:

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
869 PUNCHBOWL STREET  
HONOLULU, HAWAII 96813-5097  
STP 8.2744

January 18, 2008

TO: MARY LOU KOBAYASHI, PLANNING PROGRAM ADMINISTRATOR  
DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM  
*Fax - 808-545-2055*  
FROM: *Jr.* BRENNON T. MORIOKA, PH.D., P.E.  
INTERIM DIRECTOR OF TRANSPORTATION  
SUBJECT: HAWAIIAN MEMORIAL PARK CEMETERY EXPANSION  
ENVIRONMENTAL IMPACT STATEMENT PREPARATION NOTICE  
(EISPN)  
PETITION FOR LAND USE DISTRICT BOUNDARY AMENDMENT  
DOCKET NO. A07-777

Thank you for providing the subject EISPN and petition for our review. The State Department of Transportation's (DOT) comments are as follows:

1. The subject project may produce traffic impacts on Kamehameha Highway at two highway connections: 1) the existing main entrance to the cemetery, and 2) the Mokulele Drive intersection with Kamehameha Highway.
2. We understand that a Traffic Impact Analysis Report (TIAR) of the project's individual and cumulative impacts is being prepared, and that the TIAR will be included in the forthcoming Draft EIS. The DOT Highways Division is particularly interested in this TIAR and its recommended mitigation measures.
3. The Draft EIS should include a detailed description of the project's components, units, phasing and timetables. The overall project should be discussed relative to the past, current and future development projects in the area.
4. Please consider the DOT an interested party and forward at least four (4) copies of the Draft EIS to the above address, attention Statewide Transportation Planning Office.

We appreciate the opportunity to provide comments.

c: Land Use Commission  
Helber Hastert & Fee

BRENNON T. MORIOKA  
Planners, Inc.

IN REPLY REFER TO:

May 23, 2008

Environmental Impact Statement Preparation Notice  
Hawaiian Memorial Park Cemetery Expansion  
TMK (1) 4-5-033:1  
Kāne'ohe, O'ahu, Hawai'i

Thank you for your letter dated January 18, 2008 (STP 8.2744) providing comments on the Environmental Impact Statement (EIS) Preparation Notice for the above-referenced project. For your ease of reference, we have included your comments in the order they appear in your letter, followed by our responses:

1. The subject parcel may produce traffic impacts on Kamehameha Highway at two highways connections: existing main entrance to the cemetery and the Mokulele Drive intersection with Kamehameha Highway.
- Response: Traffic impacts, including those at the existing main entrance to Hawaiian Memorial Park and at the intersection of Mokulele Dr. and Kamehameha Highway have been analyzed as part of the Traffic Impact Analysis Study, which is discussed in Section 6.1.2 of the Draft EIS, and included in the Draft EIS as Appendix H. Currently, the overall intersection of Mokulele Drive with Kamehameha Highway operates at a Level of Service (LOS) C for both AM and PM Peak; future conditions with or without the project are projected to be LOS C. The existing main entrance to the cemetery-the primary driveway- operates at a LOS C for the AM Peak; E for the PM peak for the overall westbound approach. Future conditions with or without the project are expected to be C for the AM Peak and F for the PM Peak.
2. We understand that a Traffic Impact Analysis Report (TIAR) of the project's individual and cumulative impacts is being prepared and will be

Mr. Brennan T. Morioka  
Hawaiian Memorial Park Cemetery Expansion  
Environmental Impact Statement Preparation Notice  
May 23, 2008  
Page 2

included in the forthcoming Draft EIS, along with appropriate mitigation measures.

3. The Draft EIS should include a detailed description of the project's components, units, phasing and timetables. The overall project should be discussed relative to the past, current and future development projects in the area.

Response: These issues will be described in the Draft EIS.

4. Please consider the DOT an interested party and forward at least four copies of the Draft EIS to the Statewide Transportation Planning Office.

Response: The DOT is included as a consulted party, and four (4) copies of the DEIS will be forwarded to your offices.

We appreciate your participation in this review process. Your letter and this response will be appended to the Draft Environmental Impact Statement.

Sincerely,

HELBER HASTERT & FEE, Planners

  
Scott Ezer  
Principal

cc: Jay Morford, Hawaiian Memorial Life Plan, Ltd  
Mike Green, Clark & Green Associates  
Bert Saruwatari, Land Use Commission, State of Hawai'i  
Office of Environmental Quality Control



LINDA LINGLE  
GOVERNOR  
STATE OF HAWAII

MICAH A. KANE  
CHAIRMAN  
HAWAIIAN HOMES COMMISSION  
BEN HENDERSON  
DEPUTY TO THE CHAIRMAN  
KAILANA H. PARK  
EXECUTIVE ASSISTANT

STATE OF HAWAII  
DEPARTMENT OF HAWAIIAN HOME LANDS

P.O. BOX 1879  
HONOLULU, HAWAII 96805

January 18, 2008

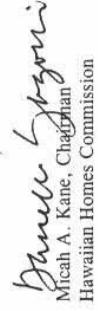


RECEIVED  
JAN 21 2008  
HELBER HASTERT & FEE  
PLANNERS

Dear Mr. Morford:  
Thank you for the opportunity to review the Environmental Impact Statement Preparation Notice report dated November 2007 for the proposed Hawaiian Memorial Park Cemetery Expansion in Kaneohe, Oahu. The Department of Hawaiian Home Lands has no comments.

Should you have any questions, please call the Planning Office at (808) 586-3836.

Aloha and mahalo,

  
Micah A. Kane, Chairman  
Hawaiian Homes Commission

cc: Office of Environmental Quality Control  
Land Use Commission  
Helber Hastert & Fee, Planners



## DEPARTMENT OF PARKS AND RECREATION

## CITY AND COUNTY OF HONOLULU JUN 21 2008

KAPOLEI HALE, 1000 ULUOHA STREET, STE. 308 • KAPOLEI, HAWAII 96707  
Phone: (808) 788-3003 • FAX: 788-3053 • Internet: www.honolulu.govMUFI HANNEMANN  
MAYOR

May 23, 2008

Micah A. Kane  
Chairman  
State of Hawaii  
Department of Hawaiian Home Lands  
PO Box 1879  
Honolulu, HI 96805

Dear Mr. Kane:

**Environmental Impact Statement Preparation Notice**  
**Hawaiian Memorial Park Cemetery Expansion**  
**TMK (1) 4-5-033:1**

Kāne'ohe, O'ahu, Hawai'i

Thank you for your letter dated January 18, 2008 regarding the Environmental Impact Statement Preparation Notice for the above-referenced project. This letter is to acknowledge that you have no comments at this time.

We appreciate your participation in this review process. Your letter and this response will be appended to the Draft Environmental Impact Statement.

Sincerely,

HELBER HASTERT & FEE, Planners

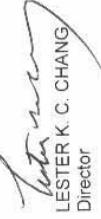
  
Scott Ezer  
Principal

cc: Jay Morford, Hawaiian Memorial Life Plan, Ltd  
Mike Green, Clark & Green Associates  
Bert Saruwatari, Land Use Commission, State of Hawai'i  
Office of Environmental Quality Control

Pacific Guardian Center • 733 Bishop Street, Suite 2590 • Honolulu, Hawaii 96813  
Tel: 808.545.2055 • Fax: 808.545.2050 • www.hhf.com • e-mail: info@hhf.com

LKCC:mk  
(243811)  
cc:  
Mr. Burt Saruwatari, Land Use Commission, State of Hawaii  
Ms. Rachael Edinger, Helber Hastert & Fee

Sincerely,

  
LESTER K. C. CHANG  
Director

Helber Hastert & Fee  
Planners, Inc.

May 23, 2008

Lester K.C. Chang  
Director  
City and County of Honolulu  
Department of Parks and Recreation  
Kapolei Hale, 1000 Uluohia Street  
Kapolei, HI 96707

Dear Mr. Chang:

**Environmental Impact Statement Preparation Notice  
Hawaiian Memorial Park Cemetery Expansion  
TMK (1) 4-5-033-1  
Kāne'ohe, O'ahu, Hawai'i**

Thank you for your letter dated January 18, 2008 providing comments on the Environmental Impact Statement (EIS) Preparation Notice for the above-referenced project. The project will provide in-lieu payment for the fair market value of the 7,000 square feet of park and playground space, as required per City and County of Honolulu Revised Ordinances Section 22-7.6. A description of this proposal will be included in Section 6.8.3 of the Draft EIS.

We appreciate your participation in this review process. Your letter and this response will be appended to the Draft Environmental Impact Statement.

Sincerely,

HELBER HASTERT & FEE, Planners

  
Scott Ezer  
Principal

cc: Jay Morford, Hawaiian Memorial Life Plan, Ltd  
Mike Green, Clark & Green Associates  
Bert Saruwatari, Land Use Commission, State of Hawai'i  
Office of Environmental Quality Control

Pacific Guardian Center • 733 Bishop Street, Suite 2590 • Honolulu, Hawaii 96813  
Tel: 808.545.2055 • Fax: 808.545.2050 • www.hhf.com • e-mail: info@hhf.com



LINDA LINGLE  
GOVERNOR

RUSS K. SAITO  
COMPTROLLER  
BARBARA A. ANNS  
DEPUTY COMPTROLLER

STATE OF HAWAII  
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES

P.O. BOX 119, HONOLULU, HAWAII 96810

(P)1020.8



JAN 2 2 2008

Mr. Jay Morford, AICP  
Hawaiian Memorial Life Plan, Ltd.  
1330 Maunaakea Street  
Honolulu, HI 96813

Dear Mr. Morford:

Subject: Hawaiian Memorial Park Cemetery Expansion  
Oahu, Koolauopoko District  
TMK: 4-5-033-001 por. 001  
Environmental Impact Statement Preparation Notice (EISPNT)

Thank you for allowing us to comment on the Hawaiian Memorial Park Cemetery Expansion. This project does not directly impact any of the Department of Accounting and General Services' projects or existing facilities, and we have no comments to offer at this time.

If you have any questions, please call me at 586-0400 or have your staff call Mr. Bruce Bennett of the Public Works Division at 586-0491.

Sincerely,

  
RUSS K. SAITO  
State Comptroller

c: Mr. Laurence K. Lau, DOH-OEQC  
Mr. Burt Saruwatari, DBEDT-SLUC  
Ms. Rachael Edinger, Helber, Hastert & Fee, Planners

Helber Hastert & Fee  
Planners, Inc.

May 23, 2008

Russ K. Saito  
State Comptroller  
State of Hawaii  
Department of Accounting and General Services  
PO Box 119  
Honolulu, HI 96810

Dear Mr. Saito:

**Environmental Impact Statement Preparation Notice  
Hawaiian Memorial Park Cemetery Expansion  
TMK (1) 4-5-033:1  
Kane'ohē, O'ahu, Hawai'i**

Thank you for your letter dated January 22, 2008 (P)1020-8 providing comments on the Environmental Impact Statement Preparation Notice for the above-referenced project. This letter is to acknowledge your determination that the proposed project does not directly impact the projects or existing facilities of your Department, and that you have no comments to offer at this time.

We appreciate your participation in this review process. Your letter and this response will be appended to the Draft Environmental Impact Statement.

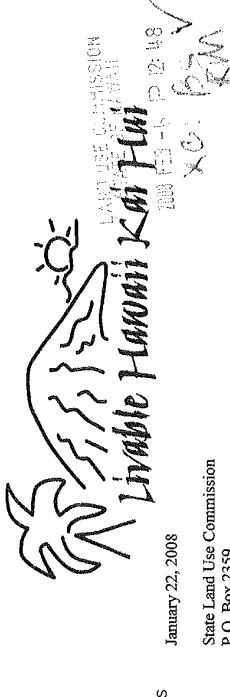
Sincerely,

HELBER HASTERT & FEE, Planners

*Scott Ezer*  
Scott Ezer  
Principal

cc: Jay Morford, Hawaiian Memorial Life Plan, Ltd  
Mike Green, Clark & Green Associates  
Bert Saruwatari, Land Use Commission, State of Hawai'i  
Office of Environmental Quality Control

Pacific Guardian Center • 733 Bishop Street, Suite 2590 • Honolulu, Hawaii 96813  
Tel: 808.545.2055 • Fax: 808.545.2050 • www.hlf.com • e-mail: info@hlf.com



BOARD  
OF  
DIRECTORS

January 22, 2008

State Land Use Commission  
P.O. Box 2359  
Honolulu, HI 96804

Re-TMK: 14-05-033 : portion of 001  
Applicant: Hawaiian Memorial Life Plan Ltd.

Elizabeth Reilly  
President

Dear Sir/Madam:

Marian Grey  
Vice President

Livable Hawai'i Kai Hui (LHKH) is a non-profit, bipartisan community action group. We strive to promote sensible growth and respect for the land as well as upholding the integrity of the East Honolulu Sustainable Communities Plan.

Hawaiian Memorial Park is the final resting place for over 30,000 people, including many family members in our organization. There are two components to the Proposed Action: (1) expansion of the cemetery; and (2) development of 20 single-family residential lots. While the Project Area is bounded by residential housing, the proposed development of 20 single-family homes would require an amendment to the current zoning and Koatapoko Sustainable Communities Plan. LHKH is opposed to spot zoning in favor of developments, especially ones that take conservation land away from the community.

On July 23, 2007, over 300 people packed a meeting room to hear about this proposal and many residents were not swayed by the need for added cemetery plots. Residents said the proposed residential development would create more flooding issues, affect at least 12 archaeological sites, disturb Hawaiian bird habitat and cause property values to fall. Residents also voiced concerns about traffic, crime and the loss of cultural sites and conservation land. Several stated that a zone change could set a bad precedent and even potentially place the residents below in danger.

In 2002, the state of Florida sued developer Service Corporation International (SCI) alleging that the company buried remains in the wrong places and destroyed vaults, caskets and remains at two cemeteries in the state. SCI, the nation's largest funeral company, is also battling lawsuits filed on behalf of families that accuse the company of desecrating graves and destroying remains at its Memorial Gardens cemeteries in Fort Lauderdale and West Palm Beach. In a story dated January 8, 2006 in the Houston Chronicle, class-action lawsuits have been filed accusing SCI of conspiring with competitors, independent funeral homes and the country's largest casket maker to fix prices, drive independent retailers out of business and overcharged consumers by "hundreds of millions, if not billions, of dollars."

It is for these reasons that LHKH requests the applicant and developer SCI's zoning amendment, sustainable communities plan amendment, construction and building permits all be denied.

Sincerely,

*Gayle Carr*  
Gayle Carr, Secretary

cc: Office of Environmental Quality Control (235 South Beretania St., Suite 702, Hon. HI 96813)  
Helber Hastert & Fee, Planners (733 Bishop Street, Suite 2590, Honolulu, HI 96813)

Livable Hawaii Kai Hui ~ 6600 Kalanianaole Highway ~ Suite # 116 ~ Honolulu, HI ~ 96825  
Phone: 808.864-8081 P.O. Box 25493 Fax: 808.395.8556  
email: [www.hawaiikaihui.org](http://www.hawaiikaihui.org)

May 23, 2008

Gayle Carr, Secretary  
Livable Hawaii Kai Hui  
6600 Kalanianaole Highway  
Honolulu, HI 96825

Dear Ms. Carr:

**Environmental Impact Statement Preparation Notice  
Hawaiian Memorial Park Cemetery Expansion  
TMK (1) 4-5-033:1**

Kāne'ōhe, O'ahu, Hawai'i

Thank you for your letter dated January 22, 2008 providing comments on the Environmental Impact Statement (EIS) Preparation Notice for the above-referenced project. For your ease of reference, we have included your comments in the order they appear in your letter, followed by our responses:

1. Opposed to spot zoning in favor of development, especially ones that take conservation land away from the community.

Response: Spot zoning is a term that applies to land that is literally the only property in an area with a certain designation. In the case of Hawaiian Memorial Park, the Petition Area is adjacent to land that is already zoned P-2 Preservation District to accommodate the same use; cemetery.

2. At the July 2007 community meeting, residents expressed concern about the project, including flooding, archaeological sites, Hawaiian bird habitat, property values, traffic, and crime.

Response: The intent of the Draft EIS is to disclose the anticipated impacts of the Proposed Action, and to offer mitigation for those items where significant impact is anticipated. The Draft EIS will provide detailed information on topics of concerns expressed by residents, as well as all other subjects as stipulated by Chapter 343 and Hawaii Administrative Rules, Title 11, Chapter 200.

3. SCI is involved with a 2002 Florida lawsuit.

Response: All of the actions you refer to are either allegations or stories about impending lawsuits that do not involve Hawaiian Memorial Life Plan Ltd. We believe that Hawaiian Memorial Park has been a good neighbor and community asset performing a vital service for the residents of Hawaii. We appreciate your participation in this review process. Your letter and this response will be appended to the Draft Environmental Impact Statement.

Sincerely,

HELBER HASTER & FEE, Planners



Scott Ezer  
Principal

cc: Jay Morford, Hawaiian Memorial Life Plan, Ltd  
Mike Green, Clark & Green Associates  
Bert Saruwatari, Land Use Commission, State of Hawaii  
Office of Environmental Quality Control

January 25, 2008

Jay T. Morford  
Hawaiian Memorial Life Plan, Ltd.  
1330 MaunaKea Street  
Honolulu, HI 96813

Dear Mr. Morford:

Subject: LUC Docket No. A07-7777

The following comments concern the recently released EISPN for the expansion of your Hawaiian Memorial Park cemetery. I am not a resident in the PikoIoa subdivision adjacent to the project area, however, I live down slope of the same ridge line (Oneawa Hills) on which the HMP Conservation District land (CDL) is located. My home is at the base of a gulch draining the steep cliff area of the CDL to the north of Pohai Nani. I have gained broad experience with the topography and wildlife of this land as the result of my efforts to protect our home and property from massive flooding for several years. It is with the benefit of this background that I respectfully submit these comments.

The EISPN summarizes 4 Alternatives to the Proposed Action. I believe Alternative II is the proper path for HMP to follow if it can be shown in the DEIS that the available supply of burial plots will be exhausted in the near-term and demographic and mortality studies support the Proposed Action. The existing cemetery is an asset in this area, is nicely maintained and should be the model for the proposed expansion. But the expansion must be done without detriment to the adjacent community's standard of living, property values, personal security and with proof that storm water runoff will be properly contained. A comprehensive drainage maintenance plan is also necessary.

Regarding storm water runoff, I have photographic evidence that may dispute the 2007 PER comments in Section 3.4 relating to anecdotal reports. I can argue the 1-hour, 10-year storm plan (Section 4.4) is not adequate. This design spec is inconsistent with our stormy weather over the last 3-4 years, particularly during slow moving thunderstorms.

The following quote is from the DLNR OCCL Recommendation document regarding a Conservation District Use Application (CDUA). The Recommendation is dated January 12, 2007. It is CDUA OA - 3366 dealing with the land to the north of Pohai Nani. The soil, slope and runoff hazard analysis for this CDUA indicates these factors were analyzed to be about the same are those described in your CDUA. This analogy is worth consideration because it involves similar land characteristics.

Jay T. Morford  
Page 2

**Quote:** During heavy rainfall, drainage in this particular region appears to be a problem. Comments received have stated that neighboring properties have been flooded; there are no drainage easements for the property, and the City provides sand bags to keep water from the homes along Kokokahi Place when street drainage overflows. Furthermore, the soil is characterized by a rapid to very rapid runoff rate, and the erosion hazard is severe. Unquote.

The EISPN states the primary method proposed to manage the cemetery's storm water runoff will be a system of retention areas (Section 2.2, page 2-6 in the booklet). I call your attention to the dam failure disaster on Kauai, for example. Inspection and maintenance problems were largely to blame as I recall. EISPN Section 4.4 refers to sediment being allowed to settle in an 18-inch deep "pond". I expect a shallow pond will require frequent removal of sediment during the rainy season.

These retention areas will be a year-round haven for feral pigs. Many roam Oneawa Hills and they seem to thrive in wet, muddy conditions. Section 3.7.1 made note of how feral pigs degrade vegetation, uproot understory plants and cause soil disturbance. I have personally experienced all of this destruction as has HMP around the burial plots. These pigs require regular attention to control, trapping and removal.

I would like to request the DEIS be specific about the retention areas, how they will be made "pig proof" (perhaps concrete walls) and how they will be fenced to protect against pigs. Fencing can become clogged with debris, which will divert water flow. Another issue is the 24 foot height of the typical mausoleum. I question the use of such large structures because of their anticipated prominence in an otherwise undisturbed nature tree covered hillside. I realize the sight line will depend on building site elevation and, of course, the origin of the sight line. I anticipate such detail will be in the DEIS. It will be interesting to learn how demographic and mortality studies support the necessity for what I think are overly large and consuming structures.

My last request before leaving the Alternative III Proposed Action matter has to do with the right of the community to know something about HMP's business plan concerning where HMP will market the features of the proposed expanded cemetery. Will plots, crypts and niches be reserved for Hawaii residents only? Please provide details about the anticipated locations and numbers of small private or family mausolea structures throughout the cemetery. The DEIS should contain more detail about special features, garden walls, walkways, and monuments mentioned in Section 2.2. The location of these items will be an important factor in the landscape proposed to be changed.

What is the trend in your Hawaii business plan regarding cremated versus casketed remains? Is there a trend in the scattering of ashes - water versus land?

Jay T. Morford  
Page 3

Reclassification of Conservation District land for residential purposes is a matter quite different from the use of such land for the quiet, serene and typically well maintained appearance of burial plots. I suppose the residential component of the Proposed Action because of drainage concerns similar to those mentioned above (plus additional comments to follow) and what I consider to be a lack of reliable infrastructure. My reasons are primarily related to storm water runoff and wastewater treatment issues.

The Hols-GIS system shows there may be no storm drain easements available to the proposed residential area directly from Namoku Street. In fact, it appears the only storm drain that reaches all the way to TMK No. 4-5-033-001 is the one at the end of Lipaiu Street. All additional runoff created by the proposed residential improvements, including the subdivision connecting road, would have to be drained to the Lipaiu Street culvert. Obviously, this adds to the additional flow created by the proposed cemetery expansion. It follows that any structure or roadway will reduce undisturbed land space now serving as absorption area. If necessary, I will be happy to study the subdivision's engineering as-built drawings to confirm the storm drain design.

I noticed in the EISPN the City and County of Honolulu Department of Planning and Permitting has approved a connection to the existing 8-inch sanitary sewer line in Lipaiu Street. Prior to reclassification of the land area proposed for residential use, I ask the Land Use Commission (LUC) to confirm and consider the following information relative to the condition of existing wastewater treatment facilities:

- The U.S. Environmental Protection Agency (EPA) has a pending action that might require replacement of old sewer lines from the Kaneohe pre-treatment plant to the Kailua treatment plant.

- There may be problems with the Kaneohe pre-treatment plant lift station that may have caused untreated (untreated) waste to spill into Kaneohe Bay.

- The smaller lift station in Kaneohe handles only raw sewage. Some may have spilled into Kaneohe Bay.

- Odor complaints from residents and a school near the Kailua treatment plant are being investigated. This may be a long term problem.

- The EPA has scheduled a March 12 public hearing on a proposed decision not to renew a variance permit to exempt the Sand Island plant from full secondary-treatment requirements. The issue involves hundreds of millions of dollars.

- Apparently there are unresolved EPA issues concerning whether the Honouliuli Plant's out-fall waste discharge meets the required standards.

- A Star-Bulletin article on January 20 spoke to the need for \$49 million to shut down archaic sewage disposal systems at public schools across the state.

Jay T. Morford  
Page 4

Sewage spills, odor complaints, and EPA actions have all been newsworthy in the not too distant past. The wastewater main replacement project in the Waikiki Special District is another good example of our deteriorating systems. My point is that a LUC reclassification of this CDL to allow residential development (R-7.5) on Oahu, which is an island already overburdened by wastewater treatment problems, will be ill-advised. We are all aware of constant water main breaks due in large measure to aging pipes. During the last several years, I have been without water twice because of a break within 10 feet of our water meter and another break less than 100 yards away in the main under Namoku Street. Add to this the budget difficulties facing our new legislative session and it becomes hard to see much relief in sight for our ailing infrastructure. Finally, I encourage Hawaiian Memorial Life Plan, Ltd to consider the benefit to the community of agreeing to dedicate in perpetuity for undisturbed conservation use only all of the CDL included in the Proposed Action not reclassified by the LUC.

Thank you for studying all of the information provided above. I look forward to your detailed response in the DEIS and trust it will reinforce my support for Alternative III.

Sincerely,

*Edward M. Birdsong*

Edward M. Birdsong  
45-161 Neepapa Place, Kaneohe  
808-234-0501

c: Office of Environmental Quality Control  
Land Use Commission, State of Hawaii  
Heber, Haste & Fee, Planners  
DNR Office of Conservation and Coastal Lands  
Kaneohe Neighborhood Board HMP Standing committee

May 23, 2008

Ed Birdsong  
45-161 Neepapa Place  
Kaneohe, HI 96744

Dear Mr. Birdsong:

Environmental Impact Statement Preparation Notice  
Hawaiian Memorial Park Cemetery Expansion  
TMK (1) 4-5-033:1

Kāne'ohe, O'ahu, Hawai'i

Thank you for your letter dated January 25, 2008 providing comments on the Environmental Impact Statement (EIS) Preparation Notice for the above-referenced project. For your ease of reference, we have included your comments in the order they appear in your letter, followed by our responses:

1. I believe Alternative III is the proper path for HMP to follow if it can be shown in the DEIS that the available supply of burial plots will be exhausted in the near-term and demographic and mortality studies support the Proposed Action.

Response: We note your support of Alternative III, Cemetery Expansion with no Residential Community. Appropriate demographic data is presented in the Draft EIS to support the need for the Proposed Action.

2. The expansion must be done without detriment to the adjacent community's standard of living, property values, personal security and with proof that storm water runoff will be properly contained. A comprehensive drainage maintenance plan is also necessary.

Response: There are numerous cemeteries throughout O'ahu, with the majority of them located within existing residential neighborhoods, with hundreds of dwelling units adjacent to them. They are integral features of the fabric of our community and people have accepted them as neighbors. This is also the case for Hawaiian Memorial Park (HMP). In fact, Parkview subdivision was developed well after the development of HMP, and this neighborhood seems to be thriving. In fact, HMP is used by its neighbors as a park by walkers, runners, and others who enjoy the open space and quiet in a passive manner. There is a strong argument to be made that HMP is an amenity for its neighbors.



According to Honolulu Police Department Community Affairs Division, new developments and roads are not a factor in increasing crime, and in fact, crime has been going down in the last 10 years. The project will retain any increases in storm water runoff onsite, and a drainage plan will be prepared. A more detailed description of these items is presented in the Draft EIS in Section 6.4.

3. I have photographic evidence that may dispute the 2007 PER comments relating to anecdotal reports, and can argue that the 1-hour, 10-year storm plan is not adequate. This design spec is inconsistent with our stormy weather over the last 3-4 years.

Response: The City and County of Honolulu Department of Planning and Permitting Rules relating to Storm Drainage Standards of January 2000 require that we shall retain on-site any increase in runoff created by the proposed project. The Drainage Standards state that rainfall intensity for the 10-year 1-hour storm is 2.5 inches per hour. According to hourly precipitation data kept by NOAA's National Climatic Data Center, the 40-day storm that occurred in February/March 2006 did not include a 10-year storm event: no day of that storm reached 2.5 inches per hour. A significant contributing factor to flooding during this period was the level of ground saturation that prevented percolation.

4. DLNR OCCL quote from January 2007 for land to the north of Pohai Nani that should be considered because it involves similar land characteristics.

Response: The proposed methods of storm water management will be a system of retention areas that will intercept runoff attributable to the proposed project. These improvements will prevent this runoff from entering property downslope. A more detailed description of drainage and stormwater management will be presented in the Draft EIS. While the situation you quote in your letter does suffer from problems associated with runoff, it is in a different location with different circumstances. Runoff is an important concern for HMP as a neighbor, and we have consistently stated its primacy as a design objective.

5. The EISPN states the primary method proposed to manage cemetery's storm water runoff will be a system of retention areas. I call your attention to the dam failure on Kauai for example... I expect a shallow pond will require frequent removal of sediment during the rainy season... Also, these retention areas will be a year-round haven for feral pigs, which

cause a variety of problems and require regular attention to control, trapping and removal. I would like to request the DEIS be specific about the retention areas, how they will be made pig-proof.

**Response:** Engineering design for the Petition Area will adhere to City and County of Honolulu DPP Rules relating to Storm Drainage Standards of January 2000. These rules are followed for design of drainage systems and hydraulic/hydrology calculations, and they mandate that any increase in storm water runoff generated by new development not affect properties down-stream.

Retention areas are included in the Concept Plan as the preferred method to control runoff. The retention areas hold storm water and allow sediment to settle. The areas will be scattered throughout the cemetery to provide the required amount of storage, and will be designed in a manner that allows them to blend in with the landscaped cemetery grounds (Figure 27). The size of the retention areas will vary from 5,000 to 20,000 square feet and they will be grass lined to a depth of 18 inches (Figures 28a and 28b).

From a maintenance standpoint, the retention areas will be designed so that, to the maximum extent possible, they will be mowable turf grass. The areas that cannot be maintained in that manner due to soil moisture or gradient will be vegetated with native and ornamental grasses which can be easily removed and replaced if silt or vegetation buildup removal is required to keep the retention area at maximum efficiency. The maintenance regime will be kept within the normal cemetery operational practices to insure constant and easy upkeep.

To date, HMP has no known problem with pigs and burial plots, although we do recognize they are present in the area. No one has a greater vested interest in the proper design and maintenance of these retention areas than HMP, both for appearance and nuisance issues, as well as off-site liability.

6. Another issue is the 24 foot height of the typical mausoleum. I question the use of such large structures and their affect on view planes from the surrounding areas. Also interested to learn the demographic and mortality studies that support the necessity for them.

**Response:** The impacts on view planes from the Proposed Action will be described in Section 4.10, Scenic and Visual Resources, and will be demonstrated in several graphic figures in the Draft EIS. The mausoleums

will not be visible from surrounding neighborhoods because of ample vegetative buffers and topographic differences with the surrounding neighborhood. The Petition Area will be marginally visible in some areas, and completely shielded in others. The current concept plan indicates a minimum 50 foot buffer of existing vegetation between the adjoining residential property line and the cemetery areas. Some areas will include a graded transition slope and re-vegetated buffer of approximately 100 feet in addition to the existing vegetation buffer. Figures 24, 28a, and 28b will show typical profiles of how the elevation difference and landscaped buffer will shield the Petition Area from view in the adjacent residential neighborhoods. Section 5.1 of the Draft EIS will detail the demographic data you refer to.

7. Will plots, crypts and niches be reserved for Hawaii residents only? What is the trend in your Hawaii business plan regarding cremated versus casketed remains? Is there a trend in the scattering of ashes-water versus land?

**Response:** HMP serves almost exclusively Hawai'i residents, but does not exclude non-residents from its services. The Draft EIS will discuss the trends in disposition in Section 5.1. The manner in which Hawai'i residents choose for burial or final treatment has been changing. While burial used to be almost equal to cremation, cremation has risen to over twice the percentage of burials, although this trend seems to have leveled off in the last few years. No data is kept on how many cremated remains are scattered. HMP currently completes almost 700 interments and 200 inurnments per year on average.

8. Please provide details about the anticipated locations and numbers of small private or family mausolea structures throughout the cemetery, as well as more detail about special features, garden walls, walkways, and monuments.

**Response:** The small private or family mausolea structures will be rare occurrences, but number and locations are not restricted. Normally any structures will be less than 3 feet tall. The small private or family mausolea structures may be placed throughout the cemetery grounds with special features, statuary, low garden walls, walkways, and monuments. The existing Ocean View Garden has many examples of these features, and we invite you to visit them first hand. The Draft EIS will also have images of existing facilities at Ocean View Gardens.

9. I oppose the residential component of the Proposed Action because of drainage concerns and what I consider to be a lack of reliable infrastructure. It appears there may be no storm drain easements available to the proposed residential area directly from Namoku Street.

Response: Our Preliminary Engineering Report noted that the existing storm water system within the adjacent subdivisions is already at or near full capacity. Thus the volume of increased drainage runoff attributable to the proposed project will be retained onsite. Please refer to Section 6.4 Drainage of the Draft EIS for more elaboration on this topic. We note your opposition to the residential component.

10. I noticed the City and County of Honolulu Department of Planning and Permitting has approved a connection to the existing 8-inch sanitary sewer line in Lipalu Street. I ask that several items be taken in account, including: EPA pending action that might require replacement of sewer lines from the Kaneohe pre-treatment plant to the Kailua plant; problems with Kaneohe pre-treatment plant; odor complaints; island wide problems with sewage and treatment.

Response: We acknowledge that the municipal sewer system for O'ahu has been under criticism in the last several years as a result of aging infrastructure and repeated breaks and spills. We also acknowledge that the current City administration is painfully aware of these shortcomings and has embarked on an aggressive repair program throughout O'ahu, including Kailua and Kāne'ohe. This program will last several years, and we are confident there will be an improvement in system performance.

11. The area has constant water main breaks and the infrastructure is ailing.

Response: We note your comment that the infrastructure is ailing in the area. Several improvement projects are underway to strengthen the sewage capacity of the region, including sewer manhole and pipe structural rehabilitation, rehabilitation of mains, manholes, and laterals, improvements to the treatment plant itself to address reliability issues, plant capacity, and odor and noise issues.

12. I encourage Hawaiian Memorial Life Plan Ltd. to consider the benefit to the community of agreeing to dedicate in perpetuity for undisturbed conservation use only all of the CDL included in the Proposed Action not reclassified by the LUC.

Response: HMP's land will remain in conservation and they do not anticipate requesting a land use change for any additional land. The intent of this current process is to look at the entire property at one time and create a master plan for the entire property. We will investigate what is necessary to dedicate the balance of the property to Conservation Use.

We appreciate your participation in this review process. Your letter and this response will be appended to the Draft EIS.

Sincerely,

HELBER HASTERT & FEE, Planners



Scott Ezer  
Principal

cc: Jay Morford, Hawaiian Memorial Life Plan, Ltd  
Mike Green, Clark & Green Associates  
Bert Sariwatai, Land Use Commission, State of Hawai'i  
Office of Environmental Quality Control  
DLNR Office of Conservation and Coastal Lands  
Kaneohe Neighborhood Board HMP Standing committee

Ernest J. Harris  
45-170 Ohaha Place  
Kaneohe, HI 96744  
January 29, 2008

Mr. Jay Morford  
General Manager  
Hawaiian Memorial Life Plan, Ltd.  
1330 Maunakea Street  
Honolulu, HI 96813

My wife and I are the current and only residents of Kaneohe at 45-170 Ohaha Place 96744 for the past 43 years. The storm system currently moving run off water from the mountain ridge passes through our property to the drainage system since construction of the Pikoiloa Subdivision. The original system was inadequate and had to be redesigned and made larger. We have experienced flooding from the 45 day rains last year and the flooding which occurred in 1965 and 1969. The proposed drainage system increase from 478 cfs to 520 cfs for the proposed cemetery expansion and residential development will have a direct negative impact on our property from flooding. The increased runoff generated by the development drainage system proposed for the cemetery expansion will increase flooding of our property. The trees, shrubs and vegetation in the conversation district holds the watershed in place. Destruction of the conversation zone by the cemetery expansion will increase flooding down stream because the storm water runoff from the mausoleums and roadways cannot be handled by the current or proposed storm water runoff system.

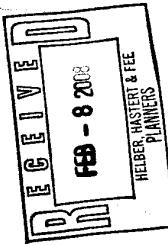
In the EIS page 7-1 entitled "Parties Consulted During the Preparation of the Preparation Notice", a statement is made about follow up visits to residents at their homes to see what happens at their properties during heavy rains. No contacts were made with us to hear our experience of what happens during heavy rains and flooding where the storm drain passes through our property. The existing drainage is overtaxed during heavy rains and the releasing of water from the increased run off generated by the proposed development will cause catastrophe flooding of the existing drainage system.

We are opposed to the cemetery expansion because of destruction of the conversation district and the flood damage it will do to our property.

Sincerely,

Ernest J. Harris

CC  
Office of Environmental Quality Control  
Burt Sanuwatari  
Rachael Edinger



Helber Hastert & Fee  
Planners, Inc.

May 23, 2008

Ernest J. Harris  
45-170 Ohaha Place  
Kaneohe, HI 96744

Dear Mr. Harris:

**Environmental Impact Statement Preparation Notice**

**Hawaiian Memorial Park Cemetery Expansion**

TMK (1) 4-5-033-1

Kāne'ohe, O'ahu, Hawai'i

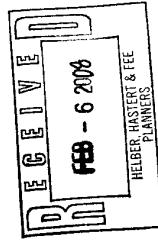
Thank you for your letter dated January 29, 2008 providing comments on the Environmental Impact Statement (EIS) Preparation Notice for the above-referenced project. For your ease of reference, we have included your comments in the order they appear in your letter, followed by our responses:

1. The storm system currently moving run off water from the mountain ridge passes through our property to the drainage system. The original system was inadequate and had to be redesigned and made larger. We have experienced flooding from the 45 day rains last year as well as in 1965 and 1969. The proposed drainage system increase for the proposed project will have a direct negative impact on our property from flooding. Flooding will increase down stream because the current or proposed storm water runoff system cannot handle the mausoleum and roadway runoff.

Response: First, we want you to know that we are aware of the flooding concerns in your neighborhood, and the design of the project will incorporate features to prevent the development from increasing your exposure to these events.

Engineering design for the Petition Area will adhere to City and County of Honolulu Department of Planning and Permitting Rules relating to Storm Drainage Standards of January 2000, that state all increased runoff generated by the proposed development will be retained onsite. Retention areas are included in the Concept Plan as the preferred method to control runoff. The retention areas hold storm water and allow sediment to settle as storm water percolates. The areas will be scattered throughout the cemetery to provide the required amount of storage. The size of the retention areas will vary from 5,000 to 20,000 square feet and they will be grass lined to a depth of 18 inches (see Figures 27a and 27b of the Draft EIS).

Grant Yoshimori  
45-464 Lipaihi Street  
Kaneohe, HI 96744  
January 29, 2008



2. The EIS page 7-1 has a statement that follow up visits to residents at their homes to see what happens at their property during heavy rains. No contacts were made with us to hear our experience of what happens during heavy rains and flooding where the storm drain passes through our property.

Response: Our very first meeting with area residents was on January 31, 2007, at Windward Community College. When preparing for this meeting, we believed that drainage and flooding would be subjects of concern for the neighborhood around the cemetery. We heard a few stories that night about flooding. In the following weeks we contacted many property owners, and we were able to inspect several properties with a history of flooding. We were then able to document the period of time (early 1960s) when the subdivision was created, and drainage systems designed. When we tried to reach additional homeowners, our requests to visit and analyze the situation were declined. We would love to be able to visit your property, if you are interested. The only way to obtain a more detailed understanding of the dynamics affecting local flooding involves first hand observation. I invite you to call me at 545-2055 to arrange such a visit.

3. We are opposed to the cemetery expansion because of destruction of the conservation district and the flood damage it will do to our property.

Response: We note you are opposed to the cemetery expansion, and direct you to the answer to #1 for an answer as to why we believe the project will not cause flood damage to your property.

We appreciate your participation in this review process. Your letter and this response will be appended to the Draft EIS.

Sincerely,

HELBER HASTERT & FEE, Planners

Scott Ezer  
Principal

cc: Jay Morford, Hawaiian Memorial Life Plan, Ltd  
Mike Green, Clark & Green Associates  
Bert Sanuwatari, Land Use Commission, State of Hawai'i  
Office of Environmental Quality Control

Dear Mr. Morford:

I'd like to thank you for giving us the opportunity to comment on the Hawaiian Memorial Environmental Impact Statement Preparation Notice. I have several concerns about the project and appreciate the opportunity to voice these concerns.

Here are my comments to the EISPN.

- Please provide a map showing the areas to be graded.
- Please include a map showing which areas will be rezoning from P-1 Restricted Preservation District to the P2 General Preservation District and R-7.5 Residential District.
- Page 2-4: What are the dimensions, number, and locations of "small private or family mausolea" structures? Is there a limit of number, size, and density?
- Page 4-2: "The Proposed Action will not significantly impact views..." I strongly disagree with this statement. It is a subjective developer-biased opinion and not a fact-based objective description. We feel strongly that the development does significantly impact views.
- Page 4-2: The area is described as "primarily overgrown non-native scrub..." I disagree with the categorization of the area's vegetation as "scrub." The definition of scrub is "low trees or shrubs." The area is covered by a lush, thick forest with many tall old-growth trees. The area is not covered by "scrub."
- Page 4-3: States the mausoleums "will not be visible from surrounding neighborhoods". This clearly is a lie. The mausoleums are situated at the high-elevations of the development and will be extremely visible from much of Kaneohe, in addition to being visible from the surrounding neighborhoods.

HAWAIIAN MEMORIAL PARK INFORMATIONAL MEETING

WINDWARD COMMUNITY COLLEGE

JULY 23, 2007  
7 TO 9 PM

- Page 4-3: Section 4.7.1 again inappropriately uses the term "scrub."

- Page 7-1: I found this section particularly misleading.

The fifth paragraph makes it appear that "project representatives" proactively appeared before the Kaneohe Neighborhood Board, and addressed the neighborhood concerns of "viewplanes, flooding, traffic impacts, security, potable water, historic and cultural resources, and project alternatives." Our concerns were never addressed adequately at the Neighborhood Board meetings, nor have they been addressed to date.

The final paragraph mentions the July 2007 meeting, implying that the community's concerns were addressed. This is far from the truth. We estimate that there were OVER 200 people attended the meeting. A majority of people are in opposition to the project. Attached are the minutes from the July 23<sup>rd</sup> meeting against the development. The raised issues are still not addressed by the developer or by this EISPN.

Thank you again for the opportunity to comment. I hope that you will reconsider selection of Alternative 1 -- keeping the land in the State Land Use Conservation District, and in the Honolulu City and County's P-1 Restricted Preservation District.

Sincerely,



Grant Yoshimori

- cc: Office of Environmental Quality Control  
Land Use Commission, State of Hawaii  
Helber Hastert & Fee, Planners
- The meeting began with a welcome by Kris DeRego chair of the Kaneohe Neighborhood board sub-committee on the Hawaiian Memorial Park (HMP) expansion proposal. Kris turned the meeting over to the facilitator who went over the agenda the guidelines for the meeting and the taping of the meeting. The taping was done for the purposes of the Neighborhood Board and none of it will be used publicly without consent of all parties. The facilitator also extended a mahalo to the planning committee for the meeting and noted that the purpose of the meeting set by the planning committee was "Sharing HMP's updated expansion plan and gathering community comments and concerns".
  - HMP Presentation
  - What follows are just brief highlights of the presentation given by HMP. The following key points were shared:
    - The HMP opened in 1961
    - 80 acres are now developed
    - There is a need to plan for the needs of the community for the next 20 years
    - In 1990, the State population was 1.1 million; 219,000, or 20% of the population were over age 55. In 2030 it is estimated that the number of persons over 55 will increase to almost 500,000 people, or 31% of the total population of 1.6 million
    - In 1980 there were 5,200 deaths and it 2004 the number rose to 9,252
    - The parcel proposed for expansion is 166 acres (8 of those acres are actually in cemetery use now, referred to as Ocean View Garden) but only 56 acres is intended to be included in the petition for urban designation. About 28 acres is actually being planned for burial use. The rest of the parcel (102 acres would remain in the Conservation District
    - The site is currently designated as state conservation and would have to be changed by the Land Use Commission (LUC) to urban to allow for the cemetery use
  - The Ko'olaupoko Sustainable Communities Plan would also need to redesignate the 56 acres to the category of "major parks, golf course and cemetery use"
  - After that the zoning would have to be changed to P-2 Preservation District
    - None of these processes have been started at this point
    - The proposal also includes a 20 house subdivision which is a lower density than the area could accommodate if it were maximized – housing is generally allowed on up to 20% slope land
    - A significant portion of the 56 acres would be re-vegetated after grading, and not used for burials
  - Of the 56 acres proposed for cemetery use only 28 would actually be used for burials and mausoleums – providing 28 to 30 thousand plots and 4 mausoleum buildings

- Planning issues and concerns identified by HMP to date are engineering issues (grading and drainage), Visual Impacts (the need for planting buffers etc.), Archeological issues (the need for preservation and continuing cultural use of the sites on property) and traffic issues
- Adjacent subdivision was done in 1964 by Castle Ranch as a leasehold – unbuildable because of slope – each property has an easement and is responsible for maintaining the drainage swales built by the ranch on the hillside behind the property – each owner maintains these swales differently and some are overgrown
- HMP would like to understand what is happening on the various properties so that they could better design the drainage system for the expansion to meet the needs of the homeowners
- The plan is to provide for a number of drainage swales to keep water off the residential properties
- Extensive landscaped buffers are planned to prevent any line of sight issues between the cemetery and the subdivision
- Cultural Survey Hawaii has relocated all of the sites in the Bishop Museum 1989 survey and with the use of GPS has managed to accurately locate the sites which was not done with the earlier study which lacked this technology
- The first step in moving the expansion forward would be an EIS preparation starting with a Preparation Notice – next would be the LUC redistricting action then the Sustainable Communities Plan change and finally the zoning change

Question posed by those attending after the presentation included:

- Q: If you are building a new street why do you say there will be no more traffic?  
 A: No more traffic was in reference to the flow of traffic at the cemetery – the 20 unit housing subdivision would create more traffic – impacts would depend on where access is located

- Q: Still confused if more burials why would there be less traffic?  
 A: Visits to burials decrease over time so that the number remains fairly constant even when new burials are added

- Q: If the issue is a growing need for interment sites why the houses?  
 A: To offset the cost of development and lower the cost of burials to the cemetery users.

- Q: If you do not get permission to expand what would happen to the existing cemetery?  
 A: It would continue to operate until capacity is reached and then it would be maintained as a cemetery into the future

- Q: How much of the proposed parcel will you be rezoning?  
 A: 56 acres – the balance would stay in open space

- C: The existing and future drainage and grading will impact what water comes into my yard – I am against the project
    - Q: Have you looked at burial alternatives – cremation etc. and what about crime?  
 A: The mausoleums are proposed to deal with the increase in people choosing cremation – not sure on crime impact, although the Park will have security
    - C: The urban growth boundaries set by the Sustainable Community Plan should be taken seriously – if you shift and especially if you shift to add housing you are setting a bad precedence
      - Q: What will be the visual impact of the housing development on Pohai Nani retirement home?  
 A: Do not know will have to look into that as we move forward
      - Q: What about the current visual impact on the subdivision especially with views of the pagoda?  
 A: HMP is aware of the problem and trying to deal with creating an appropriate buffer
    - Q: You said you wanted to understand what is going on drainage wise on the adjacent property – what happens if you can not get access to these properties does the project stop?  
 A: No – we would design to code and for the best system to relieve flooding that we can based on the knowledge we have
- Grant Yoshimori made a presentation on behalf of Hui O' Piko 'Iloa which he co-chairs. The following are key points of that presentation.
- There is a petition against the project please sign if you are opposed
  - HMP would like you to think this is a slam dunk – but it is not graveyards and houses are not allowed in conservation districts
  - Exempts from HRS 205 regarding purposes for conservation lands were offered (this is available on line for anyone that wants full text)
    - Protect water quality (the graveyard is identified as a polluter of Kawa Stream)
    - Preserve scenic areas (this is a very scenic area as viewed from many locations)
    - Preserve historic resources (several have been identified in this area and I believe there are more)
      - Conserving indigenous and endemic plants
      - Conserve fish and wildlife (continued pollution of the stream which drains to the bay will impact fish – cutting of trees will impact birds)
      - Prevent flood and erosion (this area protects our neighborhood)
      - Enhance scenic resources and surrounding neighborhoods (this area definitely does that)
  - HMP purchased the land knowing it was conservation and they should honor that

- HMP enjoys a tax status that allows it to pay less taxes the residents abutting its property
- I appreciate them so far with their existing project and they need to stop proposing this expansion

Questions and comments on the project continued at this point.

OI: An oli was offered by a halau that was present regarding the importance of the historic sites – the halau also offered the following comments:

- The sites need to be preserved
- Need to maintain access for gathering and cultural practices
- Cemetery use is not appropriate around ancient housing sites
- Kawa stream runoff with additional fertilizers and other pollutes will further degrade the cultural significance of the area
- Malama aina – don't take away the forest – enjoy the trees and the birds
- Visual impact of the Chinese temple is an example on how this use impedes on the cultural significance of the area
- We deserve the opportunity to walk where our ancestors have walked

C: I resent the fact that the presentation set the tone that they are doing us a favor – all of their statistics are projections not fact – no favor by providing future cemetery use in exchange for 20 houses

C: HMP keeps saying how it will be and what it will do for the community as if they were more important – well they are no more important just because they own a lot of land – knew conservation when they purchased need to abide by that

C: I am concerned that they could show us nothing about the proposed houses – infrastructure etc.

C: I have lived here a long time and have seen first hand the flooding issues – water streaming out of the hill – the necessity to put up a retaining wall to keep the dirt from crushing the house – others not so fortunate one house was crushed by a landslide and everything was lost – people have had to relocate while their houses were repaired from flooding – mother nature is going to do what she wants – this project would make the flooding worse and should not go forward

C: There is little preservation land left in the area and HMP needs to change their attitude about it

C: Conservation and preservation are not lightly taken in our community and HMP needs to honor this

Q: Did you say you were planning to put retentions basins on the hill to prevent flooding?  
A: Yes

- this would indicate that you know existing system can not handle drainage – I do not want to live below a retention basin – would be like living below Kaloko Dam
- They say they want to be good neighbors and good neighbors do not cut down trees and throw them in the drainage way – I have seen them do this

OI: They keep cutting trees which impacts our view of the cemetery – this is not being a good neighbor

- Once you allow conservation land to be opened to housing your have a foot in the door and will lose it all
- Don't expect government to protect this – they allow illegal things to happen and just levy fines afterward – money talks
- You should be looking at creative alternatives to the traditional ways cemetery operate

C: I am retired now and for many years worked as a scientist on ocean ecosystems – we are just starting to see a glimmer of improvement in the reef life in Kaneohe Bay – we need to continue to reduce the pollution going into the Bay not support uses that have the potential to increase it

- Heavy rains in the past have caused waterfalls from the HMP property
- Currently Kawa stream is not maintained what will happen if more runoff and pollutants end up there

Q: Has HMP applied for any permits in the last 10 years?  
A: To the best of my knowledge no and I will check

- On the subject of crime every time I have had something happen at my house HMP has either been an entry point or an escape point for the activity
- If you google SCI you will see that they are the largest in the world and are not interested in being a good neighbor
- HMP should encourage cremation and increase their density this way so that they can live within their current area

C: They can not assure us that they will not decrease our property values

**Helber Hastert & Fee  
Planners, Inc.**

Q: How can you not destroy the historic sites – if you touch them you destroy them  
A: Have to rely on experts to understand what is important and the protocols – HMP  
wants cultural use to continue – need to talk more about how that appropriately  
happens

C: I don't trust that they will only use 34% and not 100%

C: Both elected officials present (Senator Jill Tokuda and Representative Ken Ito)  
made comments in support of the community and against the project prior to the  
close of the meeting



May 23, 2008

Grant Yoshimori  
45-4641 Lipai Street  
Kane ohe, HI 96744

Dear Mr. Yoshimori:

**Environmental Impact Statement Preparation Notice  
Hawaiian Memorial Park Cemetery Expansion  
TMK (1) 4-5-033-1  
Kāne'ohe, O'ahu, Hawai'i**

Thank you for your letter dated January 29, 2008 providing comments on the  
Environmental Impact Statement (EIS) Preparation Notice for the above-referenced  
project. For your ease of reference, we have included your comments in the order  
they appear in your letter, followed by our responses:

1. Please provide a map showing areas to be graded.

Response: A map showing the Conceptual Grading Plan will be included in  
Appendix F of the Draft Preliminary Engineering Report, which will be  
included in the Draft EIS as Appendix C.

2. Please include a map showing which areas will be rezoning from P-1 to P-2  
and R-7.5.

Response: A map showing the areas to be rezoned to P-2 and R-7.5 will be  
included in the Draft EIS as Figure 11.

3. What are the dimensions, number, and locations of small private or family  
mausolea structures? Is there a limit of number, size, and density?

Response: The small private or family mausolea structures are modest in  
size and scope. Typical areas devoted to these facilities will be shown in  
Figure 6 of the Draft EIS. These images are taken from the existing Ocean  
View Gardens areas of Hawaiian Memorial Park (HMP). We invite you to visit  
them on your own. They comprise a small percentage of the inventory of  
HMP.

4. I strongly disagree that the Proposed Action will not significantly impact  
views.

Response: Aesthetic interpretation of views is an individual experience. By retaining significant buffers and revegetating with native species, a large portion of the Petition Area will look similar as it does today. In addition, a generous number of trees will be scattered throughout the new cemetery and residential subdivision. Illustrative representative changes in views can be found in Figures 22 and 23 of the Draft EIS. The Draft EIS will contain further information on the proposed action's impacts on views in Section 4.10, Scenic and Visual Resources. HMP has vested interest in providing a pleasant and attractive appearance for the expansion area.

5. The area is described as scrub, and I disagree with the categorization of the area's vegetation as scrub. The area is covered by lush, thick forest with many tall old-growth trees.

Response: Section 4.7, Flora, in the Draft EIS will describe the existing vegetation in detail, and the entire botanical survey is included as Appendix D. According to a system of eco-types to describe local flora, the Petition Area is a highly disturbed Schefflera/Java Plum Forest made up of only 7% native species. The existing vegetation is dominated by an alteration of native plant habitat, and the Schefflera/Java Plum Forest trees are non-native, fast growing, invasive species. They are not considered "old-growth", as the trees are not native, and, in fact they are not even old, they grow quickly as most invasive species do. An old-growth forest in Hawai'i would consist of large koa and ohia lehua trees.

6. Mausoleums will be extremely visible from much of Kaneohe and the surrounding neighborhoods.

Response: The impacts on view planes from the Proposed Action will be described in Section 4.10, Scenic and Visual Resources, and will be shown in Figures 22 and 23 of the Draft EIS. The mausoleums will not be visible from surrounding neighborhoods because of ample vegetative buffers, accent landscaping surrounding the mausolea, and the topographic differences. The Petition Area will be marginally visible in some areas, and completely shielded in others due to the difference in elevation between the street and the proposed development area and a planned generous vegetative buffer between residential property lines and the subject parcel. The current concept plan indicates a minimum 50 ft buffer of existing vegetation between the adjoining residential property line and the cemetery areas. Some areas will include a graded transition slope and re-vegetated buffer of approximately 100 ft in addition to the existing vegetation buffer. Figure 24 of the Draft EIS will show a typical profile of how the elevation difference and landscaped buffer will shield the Petition Area from view in the adjacent residential neighborhoods.

Response: Aesthetic interpretation of views is an individual experience. By retaining significant buffers and revegetating with native species, a large portion of the Petition Area will look similar as it does today. In addition, a generous number of trees will be scattered throughout the new cemetery and residential subdivision. Illustrative representative changes in views can be found in Figures 22 and 23 of the Draft EIS. The Draft EIS will contain further information on the proposed action's impacts on views in Section 4.10, Scenic and Visual Resources. HMP has a vested interest in providing a pleasant and attractive appearance for the expansion area.

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7. Disagree with the paragraphs in Chapter 7 regarding meetings with the Kaneohe Neighborhood Board and the Community meeting of July 2007.

Response: I believe you may misunderstand the purpose of an EIS Preparation Notice (EISPN). At this point in the process we are still assembling information. Not only are we preparing several studies specific to this property, we are also reviewing comments on the EISPN from government agencies. As a result of the EISPN, we will be able to provide more detailed information in the Draft EIS. I am sorry you have chosen to interpret the language of the fifth paragraph on page 7-1 as you have. As we have mentioned many times in meetings with you, many of the detailed studies necessary for fuller discussion of the cemetery expansion were not complete prior to our public meetings in January/February 2007, nor before our appearances before the Kaneohe Neighborhood Board, or meeting sponsored or facilitated by the neighborhood board. We never claimed otherwise, and I believe we clearly explained to the neighborhood board what the process would entail as more information became available. A significant body of information will be presented in the forthcoming Draft EIS. The process that follows through the Land Use Commission is a long one and allows for a thorough review of the project in a public forum. I have read and re-read this paragraph several times, and I do not believe we claim that we "addressed all of your concerns." We have answered many questions, and we resolve to provide more information as we proceed.

We appreciate your participation in this review process. Your letter and this response will be appended to the Draft Environmental Impact Statement.

Sincerely,

HELBER HASTERT & FEE, Planners

  
Scott Ezer  
Principal

cc: Jay Morford, Hawaiian Memorial Life Plan, Ltd  
Mike Green, Clark & Green Associates  
Bert Saruwatari, Land Use Commission, State of Hawai'i  
Office of Environmental Quality Control

DEPARTMENT OF DESIGN AND CONSTRUCTION  
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET, 11<sup>th</sup> FLOOR  
HONOLULU, HAWAII 96813  
Phone: (808) 768-8450 • Fax: (808) 523-4587  
Web site: [www.honolulu.gov](http://www.honolulu.gov)



MUFI HANNEMANN  
MAYOR

February 1, 2008

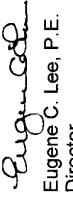
Mr. Scott Ezer, Principal  
Helber Hastert and Fee, Planners  
733 Bishop Street, Suite 2590  
Honolulu, Hawaii 96813

Dear Mr. Ezer:

Subject: Environmental Impact Statement Preparation Notice  
Hawaii Memorial Park Cemetery Expansion  
Oahu, Ko'olau Pōko District  
TMK: 4-5-033-001 par. 001

Thank you for giving us the opportunity to comment on the above Environmental Impact Statement Preparation Notice.  
The Department of Design and Construction does not have any comments to offer at this time.

Very truly yours,

  
Eugene C. Lee, P.E.  
Director

ECL:It (243758)

Helber Hastert & Fee  
Planners, Inc.

May 23, 2008

Eugene C. Lee, P.E.  
Director  
City and County of Honolulu  
Department of Design and Construction  
650 S. King Street 11<sup>th</sup> Floor  
Honolulu, HI 96813  
Dear Mr. Lee:

**Environmental Impact Statement Preparation Notice**  
**Hawaiian Memorial Park Cemetery Expansion**  
TMK (1) 4-5-03:1

Kāne'ohe, O'ahu, Hawai'i

Thank you for your letter dated February 1, 2008 regarding the Environmental Impact Statement Preparation Notice for the above-referenced project. This letter is to acknowledge that you have no comments to offer at this time. We appreciate your participation in this review process. Your letter and this response will be appended to the Draft Environmental Impact Statement.

Sincerely,

HELBER HASTERT & FEE, Planners

  
Scott Ezer  
Principal

cc: Jay Morford, Hawaiian Memorial Life Plan, Ltd  
Mike Green, Clark & Green Associates  
Bert Saruwatari, Land Use Commission, State of Hawai'i  
Office of Environmental Quality Control

Pacific Guardian Center • 733 Bishop Street, Suite 2590 • Honolulu, Hawaii 96813  
Tel: 808.545.2055 • Fax: 808.545.2050 • www.hhfc.com • e-mail: info@hhfc.com

**CITY AND COUNTY OF HONOLULU**

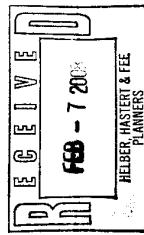
636 South Street  
Honolulu, Hawaii 96813-5007  
Phone: 808-723-7139 Fax: 808-723-7111 Internet: www.honolulu.gov/hfd



MUFI HANNEMANN  
MAYOR

KENNETH G. SILVA  
FIRE CHIEF  
ALVIN K. TOMITA  
DEPUTY FIRE CHIEF

February 1, 2008



Mr. Jay Morford  
Hawaiian Memorial Life Plan, Ltd.  
1350 Mauna Kea Street  
Honolulu, Hawaii 96813

Dear Mr. Morford:

Subject: Hawaiian Memorial Park Cemetery Expansion  
Oahu, Ko Olau Poko District  
Tax Map Key: 4-5-033: 001

In response to a letter from Mr. Scott Ezer of Helber Hastert & Fee Planners, Inc. dated January 8, 2008, regarding the above-mentioned subject, the Honolulu Fire Department (HFD) reviewed the material provided and requires that the following be compiled with:

1. Provide a fire apparatus access road for every facility, building, or portion of a building hereafter constructed or moved into or within the jurisdiction when any portion of the facility or any portion of an exterior wall of the first story of the building is located more than 150 feet (45.720 mm) from a fire apparatus access road as measured by an approved route around the exterior of the building or facility. (1997 Uniform Fire Code, Section 902.2.1.)
2. Provide a water supply, approved by the county, capable of supplying the required fire flow for fire protection to all premises upon which facilities or buildings, or portions thereof, are hereafter constructed or moved into or within the county.

On-site fire hydrants and mains capable of supplying the required fire flow shall be provided when any portion of the facility or building is in excess of 150 feet (45.720 mm) from a water supply on a fire apparatus access road, as measured by an approved route around the exterior of the facility or building. (1997 Uniform Fire Code, Section 903.2, as amended.)

Mr. Jay Morford  
Page 2  
February 1, 2008

3. Submit civil drawings to the HFD for review and approval.

Should you have any questions, please call Acting Battalion Chief Jason Takara of our Fire Prevention Bureau at 723-7151.

Sincerely,



KENNETH G. SILVA  
Fire Chief

KGS/SK:bh

cc: Office of Environmental Quality Control  
Burt Saruwatai, State Land Use Commission  
Rachael Edinger, Helber Hastert & Fee Planners, Inc. ✓

Helber Hastert & Fee  
Planners, Inc.

May 23, 2008



Kenneth G. Silva

Fire Chief  
City and County of Honolulu  
Honolulu Fire Department  
636 South Street  
Honolulu, HI 96813-5007

Dear Chief Silva:

**Environmental Impact Statement Preparation Notice  
Hawaiian Memorial Park Cemetery Expansion  
TMK (1) 4-5-033:1  
Kāne'ohe, O'ahu, Hawai'i**

Thank you for your letter dated February 1, 2008 providing comments on the Environmental Impact Statement (EIS) Preparation Notice for the above-referenced project. For your ease of reference, we have included your comments in the order they appear in your letter, followed by our responses:

1. The project must provide a fire apparatus access road for every facility, building, or portion of building construction or moved into or within the jurisdiction when any portion of the facility or any portion of an exterior wall of the first story of the building is located more than 150 feet from a fire apparatus access road.
2. Provide water supply capable of supplying the required fire flow for fire protection. On-site fire hydrants and mains capable of supplying fire flow shall be provided as required by 1997 Uniform Fire Code.
- Response: The project will adhere to all fire protection requirements of the City and County of Honolulu Fire Department, including providing a fire apparatus access roads. Section 6.10 of the Draft EIS, and a Preliminary Engineering Report (Appendix C) will provide details for these issues.
3. Submit civil drawings to the HFD for review and approval.
- Response: Civil drawings will be submitted to the HFD for their review and approval when construction drawings are prepared.

Pacific Guardian Center • 733 Bishop Street, Suite 2590 • Honolulu, Hawaii 96813  
Tel. 808.545.2055 • Fax 808.545.2050 • www.hhf.com • e-mail: info@hhf.com

Chief Kenneth G. Silva  
Hawaiian Memorial Park Cemetery Expansion  
Environmental Impact Statement Preparation Notice  
May 23, 2008  
Page 2

We appreciate your participation in this review process. Your letter and this response will be appended to the Draft Environmental Impact Statement.

Sincerely,

HELBER HASTERT & FEE, Planners



Scott Ezer  
Principal

Richelle and Aldon Kim  
45-458 Lipalu Street  
Kaneohe, HI 96744  
February 2, 2008

We appreciate your participation in this review process. Your letter and this response will be appended to the Draft Environmental Impact Statement.

Sincerely,

HELBER HASTERT & FEE, Planners



Scott Ezer  
Principal

cc: Jay Morford, Hawaiian Memorial Life Plan, Ltd  
Mike Green, Clark & Green Associates  
Bert Saruwatari, Land Use Commission, State of Hawai'i  
Office of Environmental Quality Control

Chief Kenneth G. Silva  
Hawaiian Memorial Park Cemetery Expansion  
Environmental Impact Statement Preparation Notice  
May 23, 2008  
Page 2

We appreciate your participation in this review process. Your letter and this response will be appended to the Draft Environmental Impact Statement.

Sincerely,

HELBER HASTERT & FEE, Planners



Scott Ezer  
Principal

Richelle and Aldon Kim  
45-458 Lipalu Street  
Kaneohe, HI 96744  
February 2, 2008

Mr. Jay Morford  
General Manager  
Hawaiian Memorial Life Plan, Ltd.  
1330 Maunakea Street  
Honolulu, HI 96813

Dear Mr. Morford:

As concerned members of the Kaneohe community, we are writing this letter to you in response to your EISPN that has been filed with the Land Use Commission. We are opposed to any re-zoning of the land for expansion of the graveyard and residential homes.

Although, we are opposed to the expansion of the graveyard, and any re-zoning of the lands, we can understand this portion of your proposal since you are a cemetery developer. We see the potential need for the grave sites and in fact have several family members buried at Hawaiian Memorial Park. BUT, we want to keep the land undeveloped to preserve the beauty of Kaneohe lush and forested.

We are deeply opposed to the re-zoning for the residential subdivision. As a realtor/associate working for a local developer, I understand development and the things that go along with development, but are concerned that your plans to expand the graveyard and build 20 single family homes are just the beginning to re-developing more of the 56 acres into single family homes than you are currently revealing. Therefore we oppose the re-zoning into residential.

You state that there will be 20 single family homes with 7000-8000 square foot lots. This only equates to about 3.7 acres. Even if you add an additional 20% square footage for roadways and landscaping, etc this would only equate to about 4.4 acres for the residential subdivision. You are asking for 6.4 acres to be re-zoned. This leads us to believe that once you re-zone the 6.4 acres, you will alter your residential development plans to maximize the use of the zoning by increasing the number of homes to be built. This would potentially allow you to build an additional 9-10 homes. We do not feel you have been clear about what the homes will look like and how the homes will be laid out in conjunction to the graveyard. Again, we are strongly against the re-zoning for the residential subdivision at 6.4 acres.

We are also concerned about the additional 1.1 acres being preserved for historical sites and the 15.3 acres that you state will be temporarily disturbed and re-vegetated. Currently, the Hawaiian historical sites that encompass the area are not only defined in the structures noted by your archaeologists, they also encompass the

surrounding lands leading up to the sites. We do not feel this only covers 1.1 acres. The disturbance of the lands leading to the historical sites changes the entire definition of the historical value and is inherently much more than 1.1 acres.

The current vegetation is home to the some of the most lush and fertile Hawaiian Ferns- Lau'a e found anywhere on the Windward side. Once you destroy the ecosystem growing these ferns it will change the land. Your revegetation will not be able to bring back this synergy. You will be destroying this forestry forever. We are disappointed that you will cause the end of this ecosystem by your re-development.

This also leaves the 15.3 acres subject to additional re-development in the future. If the re-zoning for residential gets approved for your initial 6.4 acres, then potentially the additional 15.3 acres that was left open could be brought up for re-zoning to residential in the future, since you are not planning to use it for the graveyard expansion at this time. Again, we are deeply opposed to the re-zoning of the land to residential for these reasons.

In conclusion, we do not want any change in zoning for your graveyard development or residential development. We live on the end of a quiet street and your development will change the traffic patterns of the cemetery and residential subdivision to create a main thoroughfare right past our home. We do not want this to happen, leave our conservation lands alone!

Sincerely,

*Richelle & Aldon Kim*

**Richelle and Aldon Kim**

cc: Office of Environmental Quality Control  
Land Use Commission, State of Hawaii  
Helber Hastert & Fee, Planners

- Environmental Impact Statement Preparation Notice  
Hawaiian Memorial Park Cemetery Expansion  
TMK (1) 4-5-033:1  
Kāne'ohe, O'ahu, Hawai'i
- Dear Mr. and Mrs. Kim:
- Thank you for your letter dated February 2, 2008 providing comments on the Environmental Impact Statement (EIS) Preparation Notice for the above-referenced project. For your ease of reference, we have included your comments in the order they appear in your letter, followed by our responses:
1. We are opposed to any re-zoning of the land for expansion of the graveyard and residential homes and are deeply opposed to the residential portion.
  - Response: We note your opposition to the Proposed Action.
  2. We are concerned your plans will expand to more than the 20 single family homes, and the acreage does not equate to an amount for only 20 homes. We do not feel you have been clear about what the homes will look like and how the homes will be laid out in conjunction to the graveyard.
  - Response: There is an area surrounding the 20-lot subdivision that will be revegetated, and is included in the area occupied by the subdivision. There is NO intention of increasing the number of residential lots beyond 20, and the landowner is willing to have a limit placed on the property as a condition of approval. The Proposed Action will not develop house and lots; only lots for sale will be developed. The concept plan included in the Draft EIS provides a concept of how the project lots will be developed.
  3. We are concerned about the additional 1.1 acres being preserved for historical sites and the 15.3 acres to be revegetated. The area for historic sites should also include the surrounding lands.

**Response:** We understand the need for buffers for the historic sites. Mitigation for the historic sites will be described in Section 4.9.3 of the Draft EIS. An Archaeological Inventory Survey will be included as Appendix F in the Draft EIS and contains a number of recommended mitigation measures. This report has been submitted to the Department of Land and Natural Resources, State Historic Preservation Division, for review and acceptance.

4. The current vegetation is home to some of the most lush and fertile Hawaiian ferns. The project will destroy the ecosystem of these ferns.

**Response:** A Cultural Impact Assessment (CIA) was conducted for the Draft EIS and this study identified that portions of the Petition Area are used by *hula* practitioners to gather plants for adornment. The *lau'a'e* fern is specifically mentioned as the species gathered (it is interesting to note that the *lau'a'e* is an introduced, not native species). The landowner is committed to preserving sufficient land area so that this practice can be continued. On-going cultural practices, such as gathering of *hula* and *lei* plants, will be recognized and accommodated (subject to safety and liability issues) as provided by law.

The availability, abundance, and quality of the *lau'a'e* ferns will be protected through creation of plant gathering *kīpuka*, including maintenance of an intact overstory. These measures are discussed in the CIA appended to the Draft EIS.

5. The 15.3 acres for revegetation could be re-zoned to residential in the future.

**Response:** As noted in our answer to question #2 above, there is NO intention of increasing the number of residential lots beyond 20. The revegetated areas will be part of the area associated with the cemetery and are important to retain buffer areas with adjacent neighbors.

6. The project will change the traffic patterns of the cemetery and residential subdivision will create a main thoroughfare right past our home.

**Response:** The results of the Traffic Impact Analysis Study completed for the project will be described in detail in Section 6.1, Transportation, of the Draft EIS, and the full Traffic Analysis will be included as Appendix H in the Draft EIS. Level of Service (LOS) conditions, which are rated from A to F (best to worst), were computed for all intersections near the Petition Area. LOS represents a qualitative measure of traffic operating conditions, and considers speed, travel time, freedom to maneuver, types

of traffic controls, and interruptions as well as driver comfort and convenience. The traffic survey found that for the unsignalized intersection of Nanoku Street and Lipalu Street, there is little or no delay, with LOS A conditions during the morning and afternoon peak hours. The LOS is expected to continue to be A (free flow with no congestion or delay) with or without the proposed project. There will be a general increase in traffic along Lipalu Street.

4. We appreciate your participation in this review process. Your letter and this response will be appended to the Draft EIS.

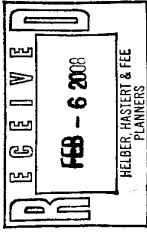
Sincerely,

HELBER HASTERT & FEE, Planners



Scott Ezer  
Principal

cc: Jay Mortord, Hawaiian Memorial Life Plan, Ltd  
Mike Green, Clark & Green Associates  
Bert Saruwatari, Land Use Commission, State of Hawai'i  
Office of Environmental Quality Control



February 3, 2008

Liam Gray  
45-426 Ohaha Street  
Kaneohe, HI 96744

Mr. Jay Morford  
General Manager  
Hawaiian Memorial Life Plan, Ltd.  
1330 Maunakea Street  
Honolulu, HI 96813

Dear Mr. Morford:

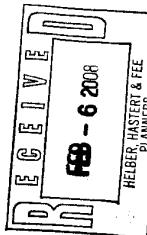
As a long time resident of the Pikoiloa neighborhood I am writing to let you know that I am gravely concerned about your company's plans to expand the Hawaiian Memorial Cemetery. Not only will the development change the natural environment that led us to purchase our property, but there are serious issues involving flooding, traffic flow, and the destruction of one more conversation area.

Our property has flooded numerous times even with the existing vegetation and believe that the expansion of the cemetery will make things worse. My family and I are praying that you will be a good neighbor and honor the concerns of your community.

Sincerely,

*Liam Gray*  
Liam Gray

cc: Office of Environmental Quality Control  
Land Use Commission, State of Hawaii  
Helber Hatert, and Fee, Planners



February 3, 2008

Gary L. Gray  
45-426 Ohaha Street  
Kaneohe, HI 96744

Mr. Jay Morford  
General Manager  
Hawaiian Memorial Life Plan, Ltd.  
1330 Maunakea Street  
Honolulu, HI 96813

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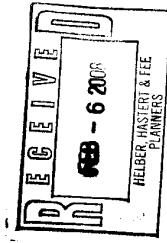
Sincerely,

*Gary L. Gray*  
Gary L. Gray

cc: Office of Environmental Quality Control  
Land Use Commission, State of Hawaii  
Helber Hatert, and Fee, Planners

Helber Hastert & Fee  
Planners, Inc.

February 3, 2008



Kathleen A. O'Malley  
45-426 Ohaha Street  
Kaneohe, HI 96744

Mr. Jay Morford  
General Manager  
Hawaiian Memorial Life Plan, Ltd.  
1330 Maunakea Street  
Honolulu, HI 96813

Dear Mr. Morford:

As a long time resident of the Pikoiloa neighborhood I am writing to let you know that I am gravely concerned about your company's plans to expand the Hawaiian Memorial Cemetery. Not only will the development change the natural environment that led us to purchase our property, but there are serious issues involving flooding, traffic flow, and the destruction of one more conversation area.

Our property has flooded numerous times even with the existing vegetation and believe that the expansion of the cemetery will make things worse. My family and I are praying that you will be a good neighbor and honor the concerns of your community.

Sincerely,

*Kathleen A. O'Malley*  
Kathleen A. O'Malley

cc: Office of Environmental Quality Control  
Land Use Commission, State of Hawaii  
Helber Hastert, and Fee, Planners

May 23, 2008

Kathleen O'Malley  
Liam Gray  
Gary Gray  
45-426 Ohaha Street  
Kaneohe, HI 96744

Dear O'Malley/Gray household:

**Environmental Impact Statement Preparation Notice  
Hawaiian Memorial Park Cemetery Expansion  
TMK (1) 4-5-033-1  
Kāne'ohe, O'ahu, Hawai'i**

Thank you for your letter dated February 3, 2008 providing comments on the Environmental Impact Statement (EIS) Preparation Notice for the above-referenced project. For your ease of reference, we have included your comments in the order they appear in your letter, followed by our responses:

1. Concern about the Proposed Action and how it will change the natural environment and affect traffic flow, and the destruction of one more conservation area.
2. Our property has flooded numerous times even with existing vegetation and the project will make things worse.

Response: In regard to your concerns about flooding, the Draft EIS (DEIS) will include a Preliminary Engineering Report (PER) which discusses drainage issues. A detailed description of drainage and flooding will be found in Sections 4.6 and 6.4 of the DEIS. The most important aspect of this analysis is an understanding that the project must include mitigation to prevent any increase in storm water runoff attributable to the project as a result of the design storm (10-year event), which must be retained on site. The engineering solution to achieve this requirement will be the use of retention areas scattered throughout the property at a depth of 18 inches. There are 10 retention areas being proposed ranging in size from 5,000 square feet to 20,000 square feet (See Figures 27, 28a, and 28b of the DEIS).

In regard to traffic flow, a Traffic Impact Analysis was prepared for the DEIS, and will be included as Appendix H. A full discussion of traffic

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Tel. 808.545.2055 • Fax 808.545.2050 • www.hhf.com • e-mail: info@hhf.com



impacts will be included in Section 6.1 of the DEIS. As a general conclusion, the contribution of traffic volume associated with the cemetery expansion is not significant, and does not affect the Level of Service on nearby roadways to the point that mitigation is required.

The expansion will only affect 1/3 of the total parcel area where the project is located. The remainder of the property will remain undisturbed. With appropriate landscaping, including planting of trees, the developed area will retain an open characteristic.

We appreciate your participation in this review process. Your letter and this response will be appended to the DEIS.

Sincerely,

*Scott Ezer*  
Scott Ezer  
Principal

HELBER HASTERT & FEE, Planners

cc: Jay Morford, Hawaiian Memorial Life Plan, Ltd  
Mike Green, Clark & Green Associates  
Bert Saruwatari, Land Use Commission, State of Hawai'i  
Office of Environmental Quality Control

impacts will be included in Section 6.1 of the DEIS. As a general conclusion, the contribution of traffic volume associated with the cemetery expansion is not significant, and does not affect the Level of Service on nearby roadways to the point that mitigation is required.

The expansion will only affect 1/3 of the total parcel area where the project is located. The remainder of the property will remain undisturbed. With appropriate landscaping, including planting of trees, the developed area will retain an open characteristic.

We appreciate your participation in this review process. Your letter and this response will be appended to the DEIS.

Dear Jay Morford:

The Office of Hawaiian Affairs (OHA) is in receipt of a January 8, 2008 letter and accompanying Environmental Impact Statement Preparation Notice (EISP/N) sent by your planning consultant, Helber, Hastert & Fee Planners, Inc.

While we have no specific comments on the EISP/N, we would like to request a copy of the draft Environmental Impact Statement and the opportunity to participate in the environmental review and consultation process.

Thank you again for initiating consultation at this early stage. Should you have any questions, please contact Keola Lindsey, Lead Advocate-Culture at (808) 594-1904 or [keola@oha.org](mailto:keola@oha.org).

'O wau iho no,

*Chyde W. Nāmu'o*  
Chyde W. Nāmu'o  
Administrator

C: Office of Environmental Quality Control  
Helber Hastert & Fee Planners, Inc.  
Department of Business, Economic Development & Tourism- Office of Planning  
Land Use Commission, State of Hawai'i

Helber Hastert & Fee  
Planners, Inc.

May 23, 2008

Clyde W. Nāmu'o  
Administrator  
State of Hawaii  
Office of Hawaiian Affairs  
711 Kapi'olani Blvd. Suite 500  
Honolulu, HI 96813

Dear Mr. Nāmu'o:

**Environmental Impact Statement Preparation Notice**  
**Hawaiian Memorial Park Cemetery Expansion**

TMK (1) 4-5-033-1

Kane'ohe, O'ahu, Hawai'i

Thank you for your letter dated February 5, 2008 regarding the Environmental Impact Statement Preparation Notice for the above-referenced project. This letter is to acknowledge that you have no specific comments to offer at this time. You will be included as a consulted party during preparation of the Draft Environmental Impact Statement.

We appreciate your participation in this review process. Your letter and this response will be appended to the Draft Environmental Impact Statement.

Sincerely,

HELBER HASTERT & FEE, Planners

  
Scott Ezer  
Principal

cc: Jay Morford, Hawaiian Memorial Life Plan, Ltd  
Mike Green, Clark & Green Associates  
Bert Sanuwatari, Land Use Commission, State of Hawai'i  
Office of Environmental Quality Control

Pacific Guardian Center • 733 Bishop Street, Suite 2590 • Honolulu, Hawaii 96813  
Tel: 808.545.2055 • Fax: 808.545.2050 • www.hhf.com • e-mail: info@hhf.com

Rich McCready  
45-423 Ohana St  
Kaneohe, HI 96744  
February 5, 2008

Mr. Jay Morford  
General Manager  
Hawaiian Memorial Life Plan, Ltd.  
1330 Maunakea Street  
Honolulu, HI 96813

Dear Mr. Morford:

I have some comments concerning the EISPN that I received January 7, 2008.

RE: 2.5 Alternatives Considered

I am in favor of Alternative I, because an island the size and population of Oahu should not continue to use the remaining undeveloped land for cemetery use. Other places in the world, such as Japan and the U.K., that have large populations and limited land, have chosen cremation. Oahu needs to make choices that preserve the land.

Educating people about the benefits of cremation is a better place to focus our efforts. Baby boomers, that are starting to die, are a flexible minded generation that can make the transition from burial to cremation.

If there needs to be more burial space on Oahu, it should be developed in the Kapolei second city area, where the land is flatter and all the problems associated with the heavy rainfall on the windward side of the island can be avoided.

For the past year I have listened to the presentations made by the planners of this project. They have stated they are trying to provide a needed service for the community. The best way they can help the community is to become the best facility in the Pacific that helps families cremate their loved ones.

The project area should be acquired by a program such as the State of Hawaii Legacy Lands Program to keep the cultural sites intact, and the hillside covered in trees.

For the past year I have been very involved in neighborhood board meetings and have talked with hundreds of people in the community concerning this proposed project. I can testify that there is widespread opposition to this project.

I urge all the parties involved in the process of studying this project to choose the alternative that is best for the long term sustainability of Oahu, and that is Alternative I.

Helber Hastert & Fee  
Planners, Inc.

May 23, 2008

Rich McCreedy  
45-423 Ohana Place  
Kaneohe, HI 96744

Dear Mr. McCreedy:

Sincerely,  
  
Rich McCreedy

**Environmental Impact Statement Preparation Notice  
Hawaiian Memorial Park Cemetery Expansion**

TMK (1) 4-5-033-1

Kāne'ohe, O'ahu, Hawai'i

Thank you for your letter dated February 5, 2008 providing comments on the Environmental Impact Statement Preparation Notice for the above-referenced project. For your ease of reference, we have included your comments in the order they appear in your letter, followed by our responses:

1. I am in favor of Alternative 1.  
Response: We note that you are in favor of Alternative 1, the No Action Alternative.
2. Educating people about the benefits of cremation is a better place to focus efforts.  
Response: Your comment is noted. The trend over the past 25 years has seen an increased percentage of cremation as a choice for remains. However, even with increases in cremation, the number of burials today still exceed what they were 20 years ago. Although a larger number of people are choosing cremation, the cultural desire for casketed ground burial is a decision based on family tradition and heritage, religious, and cultural beliefs. Demand will remain strong for the foreseeable future.
3. If more burial space is needed on O'ahu, it should be developed in Kapolei where the land is flatter and problems associated with heavy rainfall on the windward side of the island can be avoided.  
Response: Your comment is noted. Developing burial space in Kapolei would take that available flat land out of use as housing inventory, which is

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the preferred area for development of housing. Also, construction of a new cemetery in Kapolei would require development of all new infrastructure on-site to support the new development. This infrastructure already exists at Hawaiian Memorial Park (HMP). HMP provides a convenient place for Windward and Honolulu communities for initial interment and subsequent visitations. Many of these visitors are elderly and ease of travel is a vital aspect of their need for this expansion. Also, there is a significant community heritage (i.e., existing interments of family members) with built-up demand that provides a desire to have a final resting place near other family members.

4. The project area should be acquired by a program such as the State of Hawaii Legacy Lands Program.

Response: Your comment is noted. The landowner has not been contacted in this regard and must continue to progress with the project.

We appreciate your participation in this review process. Your letter and this response will be appended to the Draft Environmental Impact Statement.

Sincerely,

HELBER HASTERT & FEE, Planners

Scott Ezer

Principal

cc: Jay Morford, Hawaiian Memorial Life Plan, Ltd  
Mike Green, Clark & Green Associates  
Bert Saruwatari, Land Use Commission, State of Hawaii  
Office of Environmental Quality Control

Laura H. Thielen  
Chairperson  
Commission on Water Resource Management



STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
LAND DIVISION

POST OFFICE BOX 621  
HONOLULU, HAWAII 96809

February 6, 2008

Hawaiian Memorial Park Life Plan, Ltd.

1330 Maunaakea Street  
Honolulu, Hawaii 96813

Attention: Mr. Jay Morford

State Land Use Commission

Box 2359  
Honolulu, Hawaii 96804



Gentlemen:

Subject: Environmental Impact Statement Preparation Notice for Hawaiian  
Memorial Park Cemetery Expansion

Thank you for the opportunity to review and comment on the subject matter. The Department of Land and Natural Resources' (DLNR) Land Division distributed or made available a copy of your report pertaining to the subject matter to DLNR Divisions for their review and comment.

Other than the comments from Land Division, Engineering Division, Office of Conservation & Coastal Lands, Division of Aquatic Resources, Division of Forestry & Wildlife, the Department of Land and Natural Resources has no other comments to offer on the subject matter. Should you have any questions, please feel free to call our office at 587-0433. Thank you.

Sincerely,

Morris M. Atta  
Administrator



LINDA LINGLE  
GOVERNOR OF HAWAII

STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
LAND DIVISION

POST OFFICE BOX 621  
HONOLULU, HAWAII 96809

January 11, 2008

MEMORANDUM

*From:*

DLNR Agencies:  
 Div. of Aquatic Resources  
 Div. of Boating & Ocean Recreation  
 Engineering Division  
 Div. of Forestry & Wildlife  
 Div. of State Parks  
 Commission on Water Resource Management  
 Office of Conservation & Coastal Lands  
 Land Division - Oahu District

*To:*  
*Morris M. Atta*

SUBJECT: Environmental Impact Statement Preparation Notice - Hawaiian Memorial Park  
Cemetery Expansion

LOCATION: Kaneohe, Oahu, TMK: (1) 4-5-33:1

APPLICANT: Helber Haster & Fee, Planners on behalf of Hawaiian Memorial Life Plan, Ltd.  
Transmitted for your review and comment on the above referenced document. We would  
appreciate your comments on this document. Please submit any comments by  
February 1, 2008.

If no response is received by this date, we will assume your agency has no comments. If  
you have any questions about this request, please contact my office at 387-0433. Thank you.

Attachments

- We have no objections.
- We have no comments.
- Comments are attached.

Signed: *Morris M. Atta*  
Date: 1/15/08

DEPARTMENT OF LAND AND NATURAL RESOURCES  
LAND DIVISION

MEMORANDUM

To:

Morris Atta  
Administrator  
Charlene Unoki  
Assistant Administrator

Date:

February 6, 2008

Re: Environmental Impact Statement Preparation Notice - Hawaiian  
Memorial park Cemetery Expansion, Kaneohe, Oahu, Tax Map Key: (1)  
4-5-33:1

The following recommendations should be included in any comments regarding the  
above-referenced project:

1. If any portion of the project includes hillsides or cliffs with a slope grade of 20%  
or greater, a slope study to determine the risks of rockfalls or landslides should be  
required as a condition of approval.
2. If a rockfall or landslide risk is determined or is suspected to exist, the developer  
should be required to create a hazard buffer zone in areas susceptible to such  
hazards that is of sufficient width to protect the health and safety of future  
homeowners in the vicinity of those risks.
3. If a rockfall or landslide risk is determined or is suspected to exist, the developer  
should be required to provide a written disclosure of those risks to all potential  
homeowners.

Should you have any questions, please call me at 587-0426.

**Helber Hastert & Fee  
Planners, Inc.**

Mr. Morris Atta  
Hawaiian Memorial Park Cemetery Expansion  
Environmental Impact Statement Preparation Notice  
May 23, 2008  
Page 2

May 23, 2008



Morris Atta  
Administrator  
DLNR, Land Division  
PO Box 621  
Honolulu, HI 96809

Dear Mr. Atta:

**Environmental Impact Statement Preparation Notice  
Hawaiian Memorial Park Cemetery Expansion**

TMK (1) 4-5-033:1  
Kāne'ohe, O'ahu, Hawaii

Thank you for your letter dated February 6, 2008 providing comments on the Environmental Impact Statement (EIS) Preparation Notice for the above-referenced project. For your ease of reference, we have included your comments in the order they appear in your letter, followed by our responses:

1. If any portion of the project includes hillsides or cliffs with a slope grade of 20% or greater, a slope study to determine the risks of rockfalls or landslides should be required as a condition of approval.

Response: A report on rockfall hazards and slope stability was prepared for the Draft EIS, and will be discussed in Section 4.6 of the Draft EIS. The report will be attached to the Draft EIS as Appendix B.

2. If a rockfall or landslide risk is determined or is suspected to exist, the developer should be required to create a hazard buffer zone in areas susceptible to such hazards that is of sufficient width to protect the health and safety of future homeowners in the vicinity of those risks.

Response: As will be discussed in Section 4.6 of the Draft EIS, the slope stability analysis determined that there is no apparent potential for hazards to the Petition Area that may be associated with slope stability. There is a potential for hazards associated with rockfall. These hazards can be mitigated using available technology. Mitigative measures may include one or a combination of the following: 1) securing the existing boulders using netting or chaining; 2) removal of the boulders; 3) installation of fencing uphill from proposed improvements; and 4) constructing a buffer zone between the rockfall hazard source and the proposed improvement.

The choice of mitigative measure will depend on the specific site condition.

3. If a rockfall or landslide risk is determined or is suspected to exist, the developer should be required to provide a written disclosure of those risks to all potential homeowners.

Response: The developer will provide a written disclosure of any rockfall risks to all potential homeowners.

We appreciate your participation in this review process. Your letter and this response will be appended to the Draft Environmental Impact Statement.

Sincerely,

HELBER HASTERT & FEE, Planners

Scott Ezer  
Principal

cc: Jay Morford, Hawaiian Memorial Life Plan, Ltd  
Mike Green, Clark & Green Associates  
Bert Saruwatari, Land Use Commission, State of Hawai'i  
Office of Environmental Quality Control



**STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
LAND DIVISION**

POST OFFICE BOX 621  
HONOLULU, HAWAII 96809

LINDA LINGLE  
GOVERNOR OF HAWAII



RECEIVED  
LAND DIVISION  
2008 JAN 18 P 1:45

DEPT. OF LAND &  
NATURAL RESOURCES  
STATE OF HAWAII

January 11, 2008

**MEMORANDUM**

TO: DILNR Agencies:

- Div. of Aquatic Resources
- Div. of Boating & Ocean Recreation
- Div. of Conservation & Coastal Lands
- Div. of Engineering Division
- Div. of Forestry & Wildlife
- Div. of State Parks
- Commission on Water Resource Management
- Office of Conservation & Coastal Lands
- Land Division - Oahu District

*Morris M. Atta*

FROM: Morris M. Atta, Ph.D.  
SUBJECT: Environmental Impact Statement Preparation Notice - Hawaiian Memorial Park  
Cemetery Expansion

LOCATION: Kaneohe, Oahu, TMK: (1) 4-5-33-1  
APPLICANT: Heber Fastert & Fee, Planners on behalf of Hawaiian Memorial Life Plan, Ltd.

Transmitted for your review and comment on the above referenced document. We would appreciate your comments on this document. Please submit any comments by February 1, 2008.

If no response is received by this date, we will assume your agency has no comments. If you have any questions about this request, please contact my office at 587-7433. Thank you.

Attachments

- We have no objections.
- We have no comments.
- Comments are attached.

Signed: *C. T. Hsieh*  
Date: 1/17/08

Should you have any questions, please call Ms. Suzie S. Agram of the Planning Branch at 587-0258.

Signed: *C. T. Hsieh*  
ERIC T. HIRANO, CHIEF ENGINEER  
Date: 1/17/08

**DEPARTMENT OF LAND AND NATURAL RESOURCES**

**ENGINEERING DIVISION**

**LA/MorrisAtta**  
Ref: EISPNMemorialPark  
Oahu,54

**COMMENTS**

- (X) We confirm that the project site, according to the Flood Insurance Rate Map (FIRM), is located in Zone D. The National Flood Insurance Program does not have any regulations for developments within Zone D.
- ( ) Please take note that the project site, according to the Flood Insurance Rate Map (FIRM), is located in Zone \_\_\_\_\_.  
Please note that the correct Flood Zone Designation for the project site according to the Flood Insurance Rate Map (FIRM) is Zone D. The National Flood Insurance Program does not have any regulations for development within Zone D.
- ( ) Please note that the project must comply with the rules and regulations of the National Flood Insurance Program (NFIP) presented in Title 44 of the Code of Federal Regulations (44CFR), whenever development within a Special Flood Hazard Area is undertaken. If there are any questions, please contact the State NFIP Coordinator, Ms. Carol Tyau-Beam, of the Department of Land and Natural Resources, Engineering Division at (808) 587-0267.
- ( ) Please be advised that 44CFR indicates the minimum standards set forth by the NFIP. Your Community's local flood ordinance may prove to be more restrictive and thus take precedence over the minimum NFIP standards. If there are questions regarding the local flood ordinances, please contact the applicable County NFIP Coordinators below:  
  - ( ) Mr. Robert Sumimoto at (808) 768-8097 or Mr. Mario Siu Li at (808) 768-8098 of the City and County of Honolulu, Department of Planning and Permitting.
  - ( ) Mr. Kelly Gomes at (808) 961-8327 (Hilo) or Mr. Kieran Emiler at (808) 327-3330 (Kona)
  - ( ) Mr. Francis Cerizco at (808) 270-7771 of the County of Maui, Department of Public Works.
  - ( ) Mr. Mario Antonio at (808) 241-5620 of the County of Kauai, Department of Public Works.
- ( ) The applicant should include water demands and infrastructure required to meet project needs.  
Please note that projects within State lands requiring water service from the Honolulu Board of Water Supply system will be required to pay resource development charge, in addition to Water Facilities Charges for transmission and daily storage.  
The applicant should provide the water demands and calculations to the Engineering Division so it can be included in the State Water Projects Plan Update.
- ( ) Additional Comments: \_\_\_\_\_  
( ) Other: \_\_\_\_\_

Helber Hastert & Fee  
Planners, Inc.

May 23, 2008

Eric T. Hirano  
Chief Engineer  
DLNR, Engineering Division  
PO Box 621  
Honolulu, HI 96809

Dear Mr. Hirano:

**Environmental Impact Statement Preparation Notice  
Hawaiian Memorial Park Cemetery Expansion**

TMK (1) 4-5-033:1

Kane'ohe, O'ahu, Hawai'i

Thank you for your letter dated January 17, 2008 (Ref.: EISPNMemorialParkOahu.594) providing comments on the Environmental Impact Statement Preparation Notice for the above-referenced project. We note that you confirm the project site is located in the Flood Insurance Rate Map Zone D, and the National Flood Insurance Program does not have any regulations for developments within Zone D.

We appreciate your participation in this review process. Your letter and this response will be appended to the Draft Environmental Impact Statement.

Sincerely,

HELBER HASTERT & FEE, Planners

  
Scott Ezer  
Principal

cc: Jay Morford, Hawaiian Memorial Life Plan, Ltd  
Mike Green, Clark & Green Associates  
Bert Saruwatari, Land Use Commission, State of Hawaii  
Office of Environmental Quality Control

O-2 - 11-08; 03 : 22PM ; HAWAIIAN MEMORIAL LIFE PLAN

# 6/ 40



STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
Office of Conservation and Coastal Lands  
POST OFFICE BOX 621  
HONOLULU, HAWAII 96809

REF:OCCL:MC

MEMORANDUM:

RECEIVED  
LAND DIVISION  
LAURA M. THIBLEN  
BOARD OF LAND AND NATURAL RESOURCES  
COMMISSIONER ON WATER RESOURCES MANAGEMENT  
RUSSELL Y. SUJID  
PRESIDENT  
KENT C. KAWAHARA  
DIRECTOR, WATER  
ADVISORY COMMITTEE  
ROBERT W. COOPERATION  
MANAGER OF CONSERVATION  
COMMISSIONER ON LAND USE  
CONSERVATION AND NATURAL RESOURCES  
FEDERAL AND STATE  
KAREN A. SAWADA  
DIRECTOR, STATE LAND  
LAWRENCE L. CHAPMAN  
DIRECTOR, STATE PARKS

3800 FEB -5 A 10:21  
Correspondence FA-08-13

SUBJECT: Environmental Impact Statement Preparation Notice

Hawaiian Memorial Park Cemetery Expansion and Residential Subdivision  
TMRKS: (1) 4-5-33:1  
LOCATION: Kāne'ohe, Ko'olauapoko, O'ahu  
The Office of Conservation and Coastal Lands (OCCL) has reviewed the Environmental Impact Statement Preparation Notice (EISPN) for the Hawaiian Memorial Park Cemetery Expansion and Residential Subdivision. The project involves lands in the State Land Use Conservation District.

OCCL concur that the proposed project does not involve identified land uses in the project area, in fact, appears to contain lands in both the General and Limited subzones.  
HAR §13-5 states that the objective of the General Subzone is to designate open space where specific conservation uses may not be defined, but where urban use would be premature; and that the objective of the Limited Subzone is to limit uses where natural conditions suggest constraint on human activities.

OCCL would like to see the EIS more fully explain why the applicant feels that these objectives are no longer applicable to the parcel in question. We will reserve further comments on this matter for the Draft EIS.

Please contact Michael Cain at 587-0048 should you have any questions on this matter.

**Helber Hastert & Fee  
Planners, Inc.**

Mr. Sam Lemmo  
Hawaiian Memorial Park Cemetery Expansion  
Environmental Impact Statement Preparation Notice  
May 23, 2008  
Page 2

May 23, 2008



**Samuel J. Lemmo  
Administrator  
DLNR, Office of Conservation and Coastal Lands  
PO Box 621  
Honolulu, HI 96809**

Dear Mr. Lemmo:

**Environmental Impact Statement Preparation Notice  
Hawaiian Memorial Park Cemetery Expansion  
TMK (1) 4-5-033:1  
Kāne ohe, O'ahu, Hawai'i**

Thank you for your letter dated February 5, 2008 (OA-08-158) providing comments on the Environmental Impact Statement (EIS) Preparation Notice for the above-referenced project. For your ease of reference, we have included your comments in the order they appear in your letter, followed by our responses:

1. OCCL concurs that the proposed project does not involve identified land uses in the Conservation District

Response: We note your concurrence that the proposed project does not include identified land uses in the Conservation District.

2. The EISPN states that the 56.6 acres are in the General Subzone. OCCL records indicate that the project area, in fact, appears to contain lands in both the General and Limited Subzones.

Response: The Draft EIS will state that the project area contains lands currently in both the General and Limited Subzones. This will be reflected on Figure 8 of the Draft EIS.

3. HAR 13-5 states the objective of the General subzone is "to designate open space where specific conservation uses may not be defined, but where urban use would be premature"; and that the objective of the Limited Subzone is "to limit uses where natural conditions suggest constraint on human activities." OCCL would like to see the EIS more fully explain why the applicant feels that these objectives are no longer applicable to the parcel in question.

Response: The need for the Proposed Action will be outlined in the Draft EIS in Section 1.8. In addition, Section 3.1.3 discusses the Proposed Action in the context of the standards to determine whether land is appropriately situated to be considered for the State Urban District.

The physical characteristics of the Petition Area have been described as a highly disturbed Schefflera/Java Plum Forest. Only seven percent of the plant species identified on-site are native. The property does not function as a forest reserve for recharge purposes. The property will remain predominantly in vegetated open space, and the existing significant historic sites and cultural practices will be preserved and retained.

We appreciate your participation in this review process. Your letter and this response will be appended to the Draft EIS.

Sincerely,

**HELBER HASTERT & FEE, Planners**

**Scott Ezer  
Principal**

cc: Jay Morford, Hawaiian Memorial Life Plan, Ltd  
Mike Green, Clark & Green Associates  
Bert Sanuwatari, Land Use Commission, State of Hawai'i  
Office of Environmental Quality Control



LINDA LINGLE  
GOVERNOR OF HAWAII



STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
LAND DIVISION

POST OFFICE BOX 621  
HONOLULU, HAWAII 96809

January 11, 2008

MEMORANDUM

TO:

- DLNR Agencies:  
 Div. of Aquatic Resources  
 Div. of Boating & Ocean Recreation  
 Engineering Division  
 Div. of Forestry & Wildlife  
 Div. of State Parks  
 Commission on Water Resource Management  
 Office of Conservation & Coastal Lands  
 Land Division – Oahu District

FROM: *Morris M. Atta*

RECEIVED  
LAND DIVISION

2008 JAN 15 A 9 46

DEPT. OF LAND &  
NATURAL RESOURCES  
STATE OF HAWAII

SUBJECT: Environmental Impact Statement Preparation Notice – Hawaiian Memorial Park Cemetery Expansion

LOCATION: Kaneohe, Oahu, TMK: (1) 4-5-33-1

APPLICANT: Helber Hastert & Fee, Planners on behalf of Hawaiian Memorial Life Plan, Ltd.

Transmitted for your review and comment on the above referenced document. We would appreciate your comments on this document. Please submit any comments by February 1, 2008.

If no response is received by this date, we will assume your agency has no comments. If you have any questions about this request, please contact my office at 587-0433. Thank you.

Attachments

- We have no objections.  
 We have no comments.  
 Comments are attached.

Signed: *Paul J. Connolly*

Date: PAUL J. CONNOLY, ADMINISTRATOR

DIVISION OF FORESTRY AND WILDLIFE  
JAN 14 2008

cc: Jay Morford, Hawaiian Memorial Life Plan, Ltd  
Mike Green, Clark & Green Associates  
Bert Sariwatai, Land Use Commission, State of Hawaii  
Office of Environmental Quality Control

Pacific Guardian Center • 733 Bishop Street, Suite 2590 • Honolulu, Hawaii 96813  
Tel. 808.545.2055 • Fax 808.545.2050 • www.hlf.com • e-mail: info@hlf.com

Helber Hastert & Fee  
Planners, Inc.

May 23, 2008

Paul J. Connolly  
Administrator  
DLNR, Division of Forestry and Wildlife  
PO Box 621  
Honolulu, HI 96809

Dear Mr. Connolly:

**Environmental Impact Statement Preparation Notice  
Hawaiian Memorial Park Cemetery Expansion  
TMK (1) 4-5-033-1**

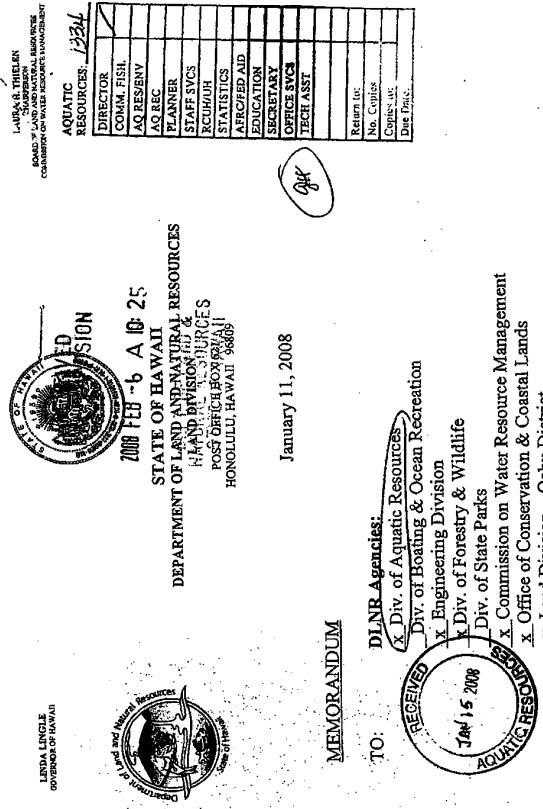
Kaneohe, Oahu, Hawaii

Thank you for your letter dated January 14, 2008 (OA-08-158) on the Environmental Impact Statement Preparation Notice for the above-referenced project. We note that you have no objections to the Proposed Action at this time.

We appreciate your participation in this review process. Your letter and this response will be appended to the Draft Environmental Impact Statement.

Sincerely,

HELBER HASTERT & FEE, Planners  
  
Scott Ezer  
Principal



STATE OF HAWAII  
Department of Land and Natural Resources  
DIVISION OF AQUATIC RESOURCES

MEMORANDUM

TO: Dan A. Polhamus, Administrator

FROM: Glenn R. Higashi, Aquatic Biologist *G.R.H.*

SUBJECT: Environmental Impact Statement Preparation Notice for Hawaiian Memorial Park  
Cemetery Expansion

Comments  
Requested By: Morris M. Atta  
Land Division  
Date of Request: 1/11/08 Date Received: 1/15/08

Summary of Project:

Title: Environmental Impact Statement Preparation Notice for  
Hawaiian Memorial Park Cemetery Expansion  
Project By: Hawaiian Memorial Life Plan, Ltd.  
Location: Kaneohe, Oahu - TMK: (1) 4-5-33:1

Brief Description:

The applicant, Hawaiian Memorial Life Plan Ltd, is submitting this Environmental Impact Statement Preparation Notice (EISPN) in support of a State Land Use District Boundary Amendment petition to reclassify a portion of the Project Area from the State Land Use Conservation District to the Urban District to expand the acreage of the existing Hawaiian Memorial Park cemetery and develop a 20-unit residential subdivision.

The proposed action involves 33.8 acres for use as cemetery areas, 1.1 acres for the preservation of historic sites, 6.4 acres for a proposed 20-unit residential subdivision, and 15.3 acres of land to be temporarily disturbed and re-vegetated. The total project area occupies 38% of the remaining 158 acres of parcel 1 that are designated in the State Land Use Conservation District; the remaining 64% of the land will remain undisturbed. The multi-phased Concept Plan created for this project reflects carefully considered design elements to best complement the physical, social, and scenic characteristics of the region.

Comments:

The Division of Aquatic Resources (DAR) has no objections to the reclassification of a portion of the project area from conservation to urban land. Since no perennial streams exist on or adjacent to this parcel, the possibility for adverse impact to aquatic resources appears remote.

If no response is received by this date, we will assume your agency has no comments. If you have any questions about this request, please contact my office at 587-0433. Thank you.

Attachments

- ( ) We have no objections.
  - ( ) We have no comments.
  - ( X ) Comments are attached.
- Signed: *[Signature]*  
Date: 2/4/08

Helber Hastert & Fee  
Planners, Inc.

May 23, 2008

Dan A. Polhemus  
Administrator  
DLNR, Division of Aquatic Resources  
PO Box 621  
Honolulu, HI 96809

Dear Mr. Polhemus :

**Environmental Impact Statement Preparation Notice  
Hawaiian Memorial Park Cemetery Expansion**

TMK (1) 4-5-033:1

Kāne'ohe, O'ahu, Hawai'i

Thank you for your letter dated February 4, 2008 providing comments on the Environmental Impact Statement (EIS) Preparation Notice for the above-referenced project. This letter is to acknowledge that you have no objections to the Proposed Action at this time.

In regard to your comment on perennial streams, according to several sources, including the Commission on Water Resource Management's Hawaii Stream Assessment, Kāwā Stream is a perennial stream that exists near the Petition Area. Section 6.4 of the Draft EIS will include a detailed description of Kāwā Stream and the potential impacts and proposed mitigation measures in relation to the Proposed Action.

We appreciate your participation in this review process. Your letter and this response will be appended to the Draft EIS.

Sincerely,

HELBER HASTERT & FEE, Planners

  
Scott Ezer  
Principal

cc: Jay Morford, Hawaiian Memorial Life Plan, Ltd  
Mike Green, Clark & Green Associates  
Bert Saruvatari, Land Use Commission, State of Hawai'i  
Office of Environmental Quality Control |  
Pacific Guardian Center • 733 Bishop Street, Suite 2590 • Honolulu, Hawaii 96813  
Tel. 808-545-2055 • Fax 808-545-2050 • www.hhfp.com • e-mail: info@hhfp.com

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808-247-7976

Richard McCreedy

808-247-7976 P.2

Richard McCreedy

808-247-7976 P.3

Eric S. Nakagawa  
45-420 Ohaha St.  
Kaneohe, HI 96744  
February 6, 2008

Mr. Jay Morford  
General Manager  
Hawaiian Memorial Life Plan, Ltd.  
1330 Maunaakea Street  
Honolulu, HI 96813

Dear Mr. Morford:

I am a 45 year Kaneohe resident and have enjoyed the beauty of the hillside involved in this proposed expansion of Hawaiian Memorial Park (HMP). Besides the obvious visual impact from parts of Kaneohe and the views you see entering Kaneohe from Likelee and H-3 (I strongly disagree with the EISPN document's statement that "the Project Area is marginally visible"), there are two major concerns I have with this proposed expansion of HMP. the environmental impact on Kaneohe Bay and the potential of flooding of residential property downhill from the proposed expansion site.

As you are probably aware, storm run-off from the Veteran's Cemetery, HMP, and nearly all residential developments east of Kam Hwy down to Kaneohe Bay Drive and the Bay View Golf Course, all flow into Kaneohe Bay via Kawa Stream. Grading the land for the expansion will allow storm run-off to enter Kaneohe Bay.

In a Kawa Stream Assessment Report by AFCOS Inc (Environmental Consultant) and Oceanair (Engineering Consultant) in 2001, the report stated that, and I quote: "measurements and observations suggested that a significant source of turbidity in the stream during storms in 1999-2000 wet season came from a construction project underway at Hawaiian Memorial Park." This project they are referring to is the construction of a drain culvert at HMP. For those of you who do not know, turbidity is the term used to quantify the amount of suspended solids in the water. This report also states that "turbidity in the stream are excessive following heavy rainfall, but urban storm drains in this watershed may not be as significant a source as newly graded land."

Kaneohe Bay has suffered enough from the years of run-off entering the bay, during the development of Kaneohe as we know it today. It is time to stop. Kaneohe Bay once flourished with marine life. Today, it is still trying to heal itself from the years of run-off entering the Bay.

The second major concern that I have is the construction of retention basins that will be created to solve the run-off issues. The EISPN document states that the existing drainage infrastructure cannot accommodate the expected increase in flow. These retention basins are said to be designed 18" high with a capacity to hold 1 hour of rainfall

Mr. Jay Morford  
February 6, 2008  
Page 2

of a 10 year storm. I am aware that the City and County of Honolulu's Drainage System Standards allows for a 10 year storm criteria for areas less than 100 acres, but, the increase run-off of 42 cfs equates to approximately 1,134,000 gallons per hour of additional run-off. What happens when we get heavier rainfall for a longer period? Where does the water go?

One would logically think that retention basins would not be constructed uphill of a populated subdivision. My neighbors and I do not want these ponds of water built above our homes. We do not want a repeat of the tragic event of the failure of the Koloko dam. We do not want to experience what the people of New Orleans went through with Katrina when levees failed.

When is our next hurricane? When is our next 20, 30, 50 or 100 year storm?

I, as the rest of the Pikoiloa community, do not want to gamble with our family's lives or our homes.

Sincerely,

  
Eric S. Nakagawa and Family

cc: Office of Environmental Quality Control  
Land Use Commission, State of Hawaii  
Helfer Hastert & Fee, Planners

May 23, 2008

Mr. Eric Nakagawa  
Hawaiian Memorial Park Cemetery Expansion  
Environmental Impact Statement Preparation Notice  
May 23, 2008  
Page 2



Eric Nakagawa  
45-420 Ohana St.  
Kaneohe, HI 96744

Dear Mr. Nakagawa:

Environmental Impact Statement Preparation Notice  
Hawaiian Memorial Park Cemetery Expansion

TMK (1) 4-5-033:1

Kāne'ohe, O'ahu, Hawaii

Thank you for your letter dated February 6, 2008 providing comments on the Environmental Impact Statement (EIS) Preparation Notice for the above-referenced project. For your ease of reference, we have included your comments in the order they appear in your letter, followed by our responses:

1. I strongly disagree with the EISPN statement that the Project Area is marginally visible.

Response: The impacts on view planes from the Proposed Action will be described in Section 4.10, Scenic and Visual Resources of the Draft EIS. The Petition Area will be marginally visible in some areas, and completely shielded in others due to the difference in elevation between the street and the proposed development area and a planned generous vegetative buffer between residential property lines and the subject parcel which include retaining almost all existing vegetation within the immediate area of the shared property line between the cemetery and its neighbors. The current concept plan indicates a minimum 50 foot buffer of existing vegetation between the adjoining residential property line and the cemetery areas. Some areas will include a graded transition slope and vegetated buffer of approximately 100 feet in addition to the existing vegetation buffer. Figures 24, and 28a and 28b in the Draft EIS will show a typical profile of how the elevation difference and landscaped buffer will shield the Petition Area from view in the adjacent residential neighborhoods. We will also include photographic analysis from selected viewing points.

2. Storm runoff from HMP and surrounding areas runs into Kawa Stream and Kaneohe Bay, creating impacts to marine life.
- Response: We are aware that dealing with sediment runoff is a regional issue and an important one. The increased runoff generated by the proposed development will be retained onsite to County standards. Section 6.4 of the Draft EIS will discuss drainage and associated impacts in detail, including the relationship between the cemetery and Kawa Stream and Kāne'ohe Bay.

3. The second major concern I have is the construction of retention basins that will be created to solve run-off issues. The City and County of Honolulu's Drainage standards allow for a 10 year storm criteria for areas less than 100 acres. What happens to residences down slope when we get heavier rainfall for a longer period?

Response: As will be described in Section 6.4, Drainage, of the Draft EIS, engineering design for the Petition Area will adhere to City and County of Honolulu DPP Rules relating to Storm Drainage Standards of January 2000. These rules are followed for design of drainage systems and hydraulic/hydrology calculations, and they mandate that any increase in storm water runoff generated by new development not affect properties downstream. As you indicate in your comment, any increased runoff generated by the Proposed Action will be retained onsite for the duration of the 1-hour, 10-year storm.

Retention areas or swales are included in the Concept Plan as the preferred method to control runoff. The retention areas hold storm water and allow sediment to settle and storm water to percolate. The areas will be scattered throughout the cemetery to provide the required amount of storage. The size of the retention areas will vary from 5,000 to 20,000 square feet and they will be grass lined to a depth of 18 inches (see Figures 28a and 28b of the Draft EIS). Depending on the porosity of the soil, the trenches will be filled with gravel at the low point.

In regard to your question about heavier rainfall over a longer period, there will eventually be storm events in excess of engineering design standards that will not be accommodated by the proposed retention areas. In that case, run-off will sheet flow across the property as it does currently.

Mr. Eric Nakagawa  
Hawaiian Memorial Park Cemetery Expansion  
Environmental Impact Statement Preparation Notice  
May 23, 2008  
Page 3

We appreciate your participation in this review process. Your letter and this response will be appended to the Draft Environmental Impact Statement.

Sincerely,

HELBER HASTERT & FEE, Planners



Scott Ezer  
Principal

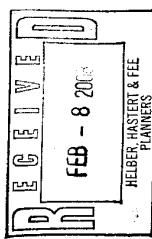
Julie McCready  
45-423 Ohaha Street  
Kaneohe, HI 96744  
February 6, 2008

Mr. Jay Morford  
General Manager  
Hawaiian Memorial Life Plan, Ltd.  
1330 Maunakea Street  
Honolulu, HI 96813

Dear Mr. Morford:

The Hawaii 2050 Sustainability Summit in October 2007 brought concerned individuals together to address prevalent issues necessary for Hawaii's long-term future. I was encouraged and inspired by our community leaders and constituents who shared common goals for these beloved islands. Sustainability remains the key word.

cc: Jay Morford, Hawaiian Memorial Life Plan, Ltd  
Mike Green, Clark & Green Associates  
Bert Saruwatari, Land Use Commission, State of Hawai'i  
Office of Environmental Quality Control



Goal #3 of the Sustainability Plan draft reminds us "The environment and our natural resources are responsibly and respectfully used, replenished and preserved for future generations." It is with these concerns in mind that I would like to address comments in the EISPN for the proposed expansion of Hawaiian Memorial Park. I ask you to consider Alternative 1: No Action Alternative.

#### 4.3 Soils

Groundwater is a resource of immense value that is heavily used on Oahu. How will you prevent the contamination of soil and groundwater around plots as rainwater infiltrates decaying caskets? What groundwater resource management will be integrated into your planning?

#### 4.4 Hydrogeology / Drainage

Total storm water runoff is expected to increase. Present storm water runoff from the Project Area sheetflows into various valleys, channels, etc. before discharging into Kawa Stream or various storm pipe networks terminating in Kaneohe Bay.

U.S. Geological Survey, Fact 045-03 states, "In areas disturbed by construction or landslides, erosion may produce thousands of tons of sediment per square mile annually. Erosion and sediment transport (1) increase turbidity, reduce in stream water quality, and impair aquatic habitat; (2) transport absorbed contaminants to coastal receiving waters, and (3) smother coral reefs.

Your proposed development requires the deforestation and grading of approximately 40.2 acres and replacing it with residential homes and open lawn space of a cemetery. It has been noted (Kawa Stream TMDL Project) that a similar cemetery construction project underway at Hawaiian Memorial Park during the storms of 1999 – 2000 contributed significantly to pollutants in Kawa Stream. Graded fill banks and improperly designed silt fences were partly to blame. How will you prevent further turbidity and contamination of Kawa Stream and

ultimately, Kaneohe Bay, without further exacerbating the problem of an already fragile ecosystem?

The trees on our hillside offer a wind break and have a cooling effect on our neighborhood. An article in the Honolulu Advertiser dated 2/03/08, "Dying Forests Feed Global Warming" confirm the fact the trees are essential to our livelihood. How can you ensure that the cutting of our heavily wooded hillside will not affect the microclimate of our subdivision?

Kaneohe Bay was designated as a Sustainability Hotspot in 1989 by the Department of Land and Resources. Even then, DLNR was interested in the amount of sediment, heavy-metal pollution and nutrients that were coming into Kaneohe Bay and how it affected the corals, limu species, and honu. The Kaneohe Bay Master Plan was drafted in 1992 and the concerns remain real and valid.

I would also like to draw to your attention an article in Honolulu Advertiser, 1/24/08, "It's the Year of the Coral Reef - State and counties launch environmental programs to protect coral reefs". What pollution controls will you have in place to control erosion, sedimentation and contamination in our coastal waters and coral reefs?

#### 4.11.2. Wastewater

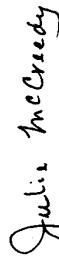
The existing 8-inch sanitary sewer line in Lipalu Street has excess capacity to accommodate the flows of the proposed development. This connection has been approved by the City and Council of Honolulu Department of Planning and Permitting.

Mr. Ed Birdsong, addressed this issue in his letter dated, January 25. He mentioned that there has been "odor complaints from residents and a school near the Kaihua Treatment Plant." I can attest to this fact because I teach at Aikahi Elementary. In the past two years, there have been over a dozen phone calls to the Department of Health complaining of the offensive stench that permeates the air from the Kaihua Wastewater Treatment Center. There are days that students and teachers would prefer to stay indoor with windows and doors closed instead of exposing themselves to "Bad Air."

It is common knowledge that Hawaii's public infrastructures are deteriorating. We are all aware of the costly budget it will take to repair our sewers and the sewer fees that will follow to undertake such a project. How can our existing, overtaxed sewer system accommodate more housing and restrooms?

Unless we make a conscientious effort to balance economic prosperity and environmental stewardship, our fragile ecosystem will be lost forever. Our island lands are finite. Your proposal to desecrate our Manini Ridge side proves to be contrary to the philosophy of sustainability that we are trying so hard to attain in Hawaii. Please consider what future generations of Hawaii will inherit from us. : (

Sincerely,



Julie McCready

cc: Office of Environmental Quality Control  
Land Use Commission, State of Hawaii  
Heilbert Haster & Fee, Planners

May 23, 2008

Julie McCready  
45-423 Ohana Place  
Kāne'ōhe, HI 96744

Dear Ms. McCready:

**Environmental Impact Statement Preparation Notice  
Hawaiian Memorial Park Cemetery Expansion**

TMK ('1) 4-5-033:1

Kāne'ōhe, O'ahu, Hawai'i

Thank you for your letter dated February 6, 2008 providing comments on the Environmental Impact Statement (EIS) Preparation Notice for the above-referenced project. For your ease of reference, we have included your comments in the order they appear in your letter, followed by our responses:

1. Ask you to consider Alternative 1: No Action Alternative.

Response: We note your support of the No Action Alternative.

2. Groundwater is a resource of immense value. How will you prevent contamination of soil and groundwater around plots? What groundwater resource management will be integrated into your planning?

Response: Potential impacts and mitigation measures for groundwater will be explained in Section 4.5, Groundwater Resources, of the Draft EIS. Impacts on groundwater are expected to be minimal. As suggested in the 2007 *Ko'olaupoko Watershed Regional Strategy Report* by the Kailua Bay Advisory Council (KBAC), Hawaiian Memorial Park will work in cooperation with KBAC to ensure groundwater impacts are minimized. Hawaiian Memorial Park (HMP) will maintain fertilizer maintenance logs as part of a fertilizer management plan. In addition, soil or tissue sampling will be submitted to University of Hawaii's Agricultural Diagnostic Service Center to test if fertilizer is necessary before the bi-annual fertilizer application.

We have researched the issues related to potential groundwater impact and cemeteries. Recent studies have determined that the modern embalming practices utilizing small amounts of organic decomposable fluids, coupled with the universal use by most cemeteries including HMP



of concrete outer burial containers for all casketed ground burials, create no significant soil or groundwater contamination potential.

3. Total storm water runoff is expected to increase. Proposed project requires deforestation and grading of approximately 40.2 acres to be replaced by residential homes and open lawn space of a cemetery. It has been noted in Kawa Stream TMDL Project that a similar cemetery construction project in 1999 and 2000 contributed significantly to pollutants in Kawa Stream. How will you prevent further turbidity and contamination of Kawa Stream and Kaneohe Bay?

Response: Impacts and mitigation relating to storm water runoff will be explained in Section 6.4, Drainage, of the Draft EIS. Engineering design for the Petition Area will adhere to City and County of Honolulu Department of Planning and Permitting Rules relating to Storm Drainage Standards of January 2000. These rules are followed for design of drainage systems and hydraulic/hydrology calculations, and they mandate that any increase in storm water runoff generated by new development not affect properties down-stream. Retention areas are included in the Concept Plan as the preferred method to control runoff. The retention areas will hold storm water and allow sediment to settle and not reach Kawa Stream. The retention areas will be scattered throughout the cemetery to provide the required amount of storage and will vary from 5,000 to 20,000 square feet in size. They will be grass lined to a depth of 18 inches (see Figures 28a and 28b of the Draft EIS).

The exact effect of the Proposed Action on the TMDLs for Kawa Stream is not certain. Because the project will utilize retention areas to retain runoff on site, it is possible that some of the Total Suspended Solids, Total Nitrogen, and Total Phosphorous that currently enter the Kawa Stream system will be averted.

Erosion control measures will minimize potential sediment runoff to existing drainage facilities, reducing the soil loss to acceptable levels. During construction, the contractor will use mulching to provide the necessary erosion control as they proceed.

In addition, as suggested in the *Ko'olaupoko Watershed Regional Strategy Report*, and discussed in #2 above, Hawaiian Memorial Park (HMP) will work in cooperation with Kailua Bay Advisory Council to ensure groundwater impacts are minimized. HMP will maintain fertilizer maintenance logs as part of a fertilizer management plan. In addition, soil or tissue sampling will be submitted to University of Hawaii's Agricultural Diagnostic Service Center to test if fertilizer is necessary before the bi-annual fertilizer application.

Diagnostic Service Center to test if fertilizer is necessary before the bi-annual fertilizer application.

4. Trees on our hillside offer a wind break and have a cooling effect on our neighborhood. How can you ensure that the project will not affect the microclimate of our subdivision?

Response: The effect of vegetation on climatic conditions is generally accepted. There is certainly a different ambient condition between a forest and a busy intersection in Honolulu. Some of the factors known to impact microclimate are: sunlight exposure, wind exposure, precipitation, temperature (air and soil), and moisture content (air and soil). In the circumstance of the proposed HMP expansion, portions of the terrain will be characterized by a change from a forested area dominated by introduced species to an environment characterized by turf grass and groupings of trees. There are inferences that can be drawn about what this will do to change the microclimate in the immediate vicinity of the cemetery expansion. Studies have shown differential temperatures in transition from forest to turfied areas with slightly higher temperatures in the turfed area. However, the interface between the proposed cemetery expansion and existing residences will be tempered by the retention of a vegetative buffer that will average at least 50 feet. This will provide both a wind break and a visual buffer for HMP neighbors. It is doubtful there will be appreciable change in microclimate for area residents.

5. What pollution controls will you have in place to control erosion, sedimentation, and contamination in our coastal waters and coral reefs?

Response: As will be described in Section 4.3, Soils, of the Draft EIS, both temporary and permanent erosion control measures will be implemented as BMPs during construction. During construction, the contractor will use mulching to provide the necessary erosion control as they process. Also, construction will begin during dry months of the year. Temporary erosion control measures could include: using silt fences, stabilized construction entrances, catch basin and inlet protection, and dust control. Proper grading, pavement, and permanent grassing and landscaping over all open areas created by the grading operations will minimize soil loss from the site to acceptable levels. Permanent erosion control measures will include grading to provide proper drainage. Exposed areas will be paved or grased and/or landscaped to match adjacent landscaping. Grass sod will be planted to minimized erosion, and the retenion areas will capture storm water runoff and permit sediment to settle instead of reaching Kāwā Stream.

6. Regarding the sanitary sewer line for the project, there have been odor problems with the Kailua Treatment Plant. How can our existing sewer system accommodate more housing and restrooms?

Response: The capacity of the sewer system is monitored and managed by the City and County of Honolulu DPP, who have approved a connection to access the existing 8-inch sanitary sewer line in Lipalu Street for the project. Development of the Petition Area will not commence until DPP confirms that adequate capacity exists and approves the project sewer master plan and sewer connection permit.

We appreciate your participation in this review process. Your letter and this response will be appended to the Draft Environmental Impact Statement.

Sincerely,

HELBER HASTERT & FEE, Planners



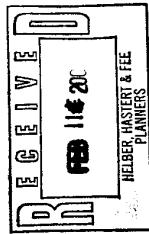
Scott Ezer  
Principal

cc: Jay Morford, Hawaiian Memorial Life Plan, Ltd  
Mike Green, Clark & Green Associates  
Bert Saruwatari, Land Use Commission, State of Hawai'i  
Office of Environmental Quality Control

Mavis Suda  
45-448 Ohaha Street  
Kaneohe, HI 96744  
February 7, 2008

Mr. Jay Morford  
General Manager

Hawaiian Memorial Life Plan, Ltd.  
1330 Maunakea Street  
Honolulu, HI 96813



Mr. Jay Morford  
February 6, 2008  
Page 2

Sincerely,

Mavis Suda

General Manager  
Hawaiian Memorial Life Plan, Ltd.  
1330 Maunakea Street  
Honolulu, HI 96813

cc: Office of Environmental Quality Control  
Land Use Commission, State of Hawaii  
Helber Haster & Fee, Planners

Dear Mr. Morford:

In regards to your recently released EISPN for the expansion of Hawaiian Memorial Park (HMP) cemetery in Kaneohe, I am very concerned with our private property security because your project will essentially enable easy access and scouting points for potential vandals. Currently, the area behind our private homes has tall trees and bushes that make it difficult for vandals to walk down the hillside or view the status of a home. Unfortunately, your company never provided a physical demarcation border to deter vandals. A physical demarcation, such as a chain link fence, would clearly mark the boundary between private homeowners and HMP.

My past relations with your company have been very frustrating. HMP is not a good neighbor and I've collected several empty promises. Back on May 19, 2005, Scott Sells responded to my numerous phone calls and correspondence related to concerns over HMP's impact to my property. He promised to address these issues:

- HMP employees trespassed onto my property.
- HMP employees destroyed City & County of Honolulu TMK survey pin (boundary line).
- HMP employees cut trees on my property.
- HMP employees left tree cuttings and debris on my property. Large logs were stacked neatly in the gutter (on my property) of which prevents runoff down into my backyard.
- Mr. Sells promised to conduct and pay for a property boundary survey to re-establish the demarcation line between my property and HMP.

To date, my property demarcation line has not been replaced. What will prevent you from cutting neighboring private owners' trees that block the oceanview of your clients? Another, "Oops, I'm so sorry." It will take decades for re-growth of the natural vegetation that HMP destroyed. Please do not further destroy the natural beauty we have in Hawaii to bring loose change for the corporation in Texas.

May 23, 2008

Mavis Suda  
45-448 Ohaha Street  
Kāne'ohe, HI 96744

Dear Ms. Suda:

**Environmental Impact Statement Preparation Notice**  
**Hawaiian Memorial Park Cemetery Expansion**

TMK ('1) 4-5-033:1

Kāne'ohe, O'ahu, Hawai'i

Thank you for your letter dated February 7, 2008 providing comments on the Environmental Impact Statement (EIS) Preparation Notice for the above-referenced project. For your ease of reference, we have included your comments in the order they appear in your letter, followed by our responses:

1. I am very concerned with our private property security.
2. My past relations with your company have been frustrating; HMP is not a good neighbor and there are several issues on HMP's impact to my property.

**Response:** According to Honolulu Police Department Community Affairs Division, there is no correlation between new developments or roads and an increase in crime. Overall, as a general rule, crime has been decreasing in the last 10 years throughout O'ahu. In addition, Hawaiian Memorial Park will continue with private security for the cemetery.

**Response:** Hawaii Memorial Park (HMP) property boundaries were identified during the Department of Land and Natural Resources investigation last year. In the past there may have been an issue of HMP employees going on private property, but we believe this has not been the case in the recent past. Currently, HMP is not aware of TMK survey pins being destroyed or any of the other items mentioned in your letter. In the future, if you have any concerns regarding HMP as a neighbor, we urge you to contact Mr. Jay Morford by telephone at 808.522.5233.

Sincerely,

HELBER HASTERT & FEE, Planners



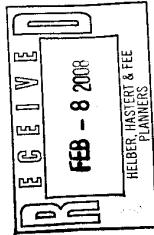
Scott Ezer  
Principal

cc: Jay Morford, Hawaiian Memorial Life Plan, Ltd  
Mike Green, Clark & Green Associates  
Bert Saruwatari, Land Use Commission, State of Hawai'i  
Office of Environmental Quality Control



KO'OLAUPOKO HAWAIIAN CIVIC CLUB

Page 2  
February 7, 2008



February 7, 2008

Mr. Jay Morford  
Hawaiian Memorial Life Plan, Ltd.  
1330 Maunakea Street  
Honolulu, HI 96817

Re: Proposed Expansion of HMP Cemetery – Impact Upon Kawa'ewa'e Heiau

Dear Mr. Morford:

We are writing you to express our concern regarding potential impacts of your proposed cemetery expansion on the Kawa'ewa'e Heiau complex, located on your property here in Kane'ohe.

Members of the Ko'olaupoko Hawaiian Civic Club recently accompanied your archaeological consultant on field visits to the area, and have offered comments regarding the cultural landscape that would be encompassed as part of this heiau.

As you know, this heiau is on the State Register of Historic Places, and we hope you will take this into account as you consider how to proceed with your project.

Our members report that, in their site visits to the area immediately surrounding the walled structure more commonly referred to as Kawa'ewa'e Heiau, there are features which appear to be associated with the heiau. A temple of this status and size, believed to have been built either in the time of Chief Olopana or earlier, and at which human sacrifice was conducted, would have had associated components such as a hale o papa (for the Chief's wives) and a Hale for the priests who cared for the heiau.

It is known that Olopana visited at and stayed at this heiau; as such, not only would he have brought a large entourage with him, it would have served as a kind of temporary government headquarters, where the people could come and make their appeals for help or resolution of problems. The significance of this site is indisputable.

There are features that were seen in the surrounding area which may be adversely affected by your current plan, and we ask your kokua to re-configure your plan in order to protect these areas. The two features in particular would be the hale o papa (a terraced area with two large guardian pohaku at either corner) and the lower circle of stones under a grove of trees near Lipali Street, below and mauka of the hill ascendant to Kawa'ewa'e, where the priests and representatives of the chief would receive the appeals of the po'e kanaka. There is also another feature, which appears to be a kia'i, or Kane stone, which we feel is significant.

I am enclosing comments offered to your archaeological consultant regarding our field visit with them to the area around Kawa'ewa'e Heiau.

We appreciate your consideration of our request to protect and preserve the complex of Kawa'ewa'e Heiau.

If you have any questions or wish to discuss this with us further, please contact me at 226-4195, email: malamapono@aol.com, or our History and Heritage chairperson, Donna Camvel, at 358-1354 or via email at: tolekaa@hawaii.rr.com.

Malamapono,

*Mahelani Cypher*  
MAHEALANI CYIPHER  
President

cc: Office of Environmental Quality Control  
Land Use Commission, State of Hawai'i  
Helber Hastert & Fee, Planners

P.O. Box 664  
Kaneohe, HI 96744  
Ph. (808) 235-8111  
koolapokohce.org

## MAHEALANI CYPHER

P.O. Box 4749  
Kane'ohe, HI 96744

September 11, 2007

Ms. Lisa Gollin, Projects Manager  
Cultural Impact Assessments  
Cultural Surveys Hawaii I, Inc.  
Post Office Box 1114  
Kailua, HI 96734

Re: Comments Regarding Your Notes Concerning our Site Visit  
to IMK (1) 4-5-033-001, Hawaiian Memorial Park Expansion

Dear Ms. Gollin:

Mahalo for this opportunity to comment on your field notes of our recent site visit to the property on which Hawaiian Memorial Park is contemplating making improvements. My comments are as follows:

1. Overall: You are correct in noting that all of us who visited the area agree that it has connection with Kawa'ewa'e Heiau, a religious site sacred to native Hawaiians. As such, the surrounding area would also have religious significance as part of the heiau complex. With a luakini heiau as prominent as Kawa'ewa'e, there is little doubt that there would have been associated sections of the property nearby that complete the full operation of the heiau in keeping with its use and purpose. Its connection with Chief Olopana and Kamapua'a, for example, would further support its having a complex of associated compartments – not just a Hale for the kahuna – to include the Hale o Papa and other key elements. (see item #5)

2. Pohaku: you refer to certain stones as "pohaku", although my understanding is that stand-alone pohaku that had religious significance were usually known as "pohaku o Kane", which we consider to be religious shrines and places of worship. At the site referred to as "CSH 5", you mention a stone by itself as a "pohaku" when it is likely to have been a "pohaku o Kane". I am not sure it would have marked the location of a caretaker's Hale or the home of the kahuna (priests), but that is possible. But Pohaku o Kane were generally just outside the door of many Hale, serving as a family protector or shrine. In the case of the two pohaku seen at the area designated as "CSH 2", I concur with Donna Camvel's thinking that these serve as guardians and hence would be "pohaku ki'ai". The

proximity of the two stones in a site which appears to have multi-level platforms, the size and shape of the two stones, indicated to me (and possibly to Donna Camvel) that this was a very important site. These pohaku ki'ai may even have guarded the women of the Hale o Papa, as the chiefess would have lived there and had the elevated status to warrant placement of such stones near her worship area.

3. Mo'olelo about Olopana and Kamapua'a: I believe the story I shared with you about Kamapua'a overcoming Olopana at Kawa'ewa'e was learned from a translation provided by historian Dr. Liliikalani Kame'elechihwa in her book, "Kamapua'a".

4. Holua slides: I recall I pointed out to you the two slopes, covered with trees and brush, just mauka of Kawa'ewa'e, where I believe the holua slides once were used by the chiefs for recreation. If the brush and trees were cleared and soft grasses re-planted on those slopes, they would adequately serve as fine holua slide areas. It is likely the nearby cemetery land once contained springs and ti leaf groves, and could have been the source of water needed to wet the slopes.

5. Location and Relationship to broader Kane'ohe ahupua'a and other heiau: Standing upon Kawa'ewa'e Heiau, it is clear that the heiau was constructed strategically to be in the sight-line with Kukuiokane Heiau, the largest and most important heiau in the Kane'ohe region. Also clearly visible from Kawa'ewa'e are the peaks of Pu'u Ma'eli'eli and 'Ohuhulehi, and the island known as Moku o Lo'e (Coconut Island). Also clear from this site are the peaks of Konahuanui and Keahiakahoehoe, all of which bring stronger mana to elevate the spiritual and religious strength or power of Kawa'ewa'e. Our mo'olelo tells us that the great chief Olopana (and others) occupied or visited at Kawa'ewa'e for some time; hence, it would have been a place where the poi'e Kahiko (people of ancient times) brought their pleas for kokua, for resolution of disputes, or other requests for help. A great chief's presence indicates the complex had to be quite extensive to support his entourage, his retainers and those who served the chief. Food had to be gathered by the kahuna and others from the surrounding area, and these goods had to be managed by the priests and their helpers at Kawa'ewa'e. It was a thriving mini-community of its own within the 'ili of Kawa'ewa'e. Therefore, the location, prominence and connection with other major sites, and the historical record of Olopana's presence, tell me that the heiau was not limited to the rock lined walls atop the ridge of Kawa'ewa'e, but had to contain an entire complex of associated structures and dwellings that housed and accommodated all who would be needed for a heiau of this prominence.

6. Mango trees: I still maintain that the mango trees were chosen by some kahuna to mark important religious sites. This occurred after the heiau were torn down or

burned by the Priest Hewahewa following the breaking of the kapu system. Your recollection of what I told you – my “mango tree theory” – is very good rendering – mahalo. It’s not just the planting of the trees that was interesting; but how the trees were planted, often in a circle around what may have been the piko, or center of mana in that heiau.

I recall in the mid-1980s, I took a group of kupuna (elders) from Kāne’ōhe to see Kukuiokane Heiau. We stood in the fern-covered open center of a grove of large old mango trees that seemed to have been planted in this oval orientation, down the slope of Punalu’u mauka (some say it was ‘ilī Kihapa’i). After our pule (prayers) were said, the kupuna stood quietly, observant and calm. Later, they told me they felt the mana of the heiau was strongest here, in the piko, in the center of this circular grove of ancient mango trees. Although the mango is an alien species here on O’ahu, its appearance here a few short years after the heiau were destroyed would have been convenient and desirable to those kahunas wishing to mark their sacred sites with a tree that they were told would survive for a very long time.

7. Recommendation: It is my recommendation that the landowner consider integrating its plans with the religious significance of the area surrounding Kawa’ewa’ehēiau’s walled enclosure, ensuring that the more obvious and significant cultural properties are buffered and protected from any roadways, bulldozing or other intrusive activity. In all likelihood, there are burials in the area, probably pre-contact, and this should be addressed through other research. Although the area in modern times was used for farming and urban activities, the radius in the currently undeveloped landscape adjacent to the walled section of Kawa’ewa’ehēiau is relatively undisturbed (except from dirt-bikers and others) and was probably kept that way for a good reason. I request to be further consulted, should you proceed with additional research for the current or expanded project area.

Again, thank you for this opportunity to offer comment.

Malamapono,



MAHEALANI CYPHER  
Cultural Interpreter

Helber Hastert & Fee  
Planners, Inc.

May 23, 2008



**Environmental Impact Statement Preparation Notice  
Hawaiian Memorial Park Cemetery Expansion  
TMK (1) 4-5-033-1**

Kāne’ōhe, O’ahu, Hawai‘i

Thank you for your letter faxed on February 8, 2008 providing comments on the Environmental Impact Statement (EIS) Preparation Notice for the above-referenced project. For your ease of reference, we have included your comments in the order they appear in your letter, followed by our responses:

1. As you know, the Kawa’ewa’ehēiau is on the State Register of Historic Places and we hope you will take this into account as you consider how to proceed with your project.  
  
Response: The Kawa’ewa’ehēiau is actually not listed on the State Register of Historic Places, but is listed on the National Register of Historic Places. As part of the Archaeological Inventory Survey (AIS) completed for the project, the heiau has been evaluated as significant under both Criterion D and E of the Hawai‘i Register of Historic Places and the landowner has made a commitment to have it registered with the State of Hawai‘i!
2. There are features that appear to be associated with the heiau in the area immediately surrounding the heiau.  
  
A temple of this status and size would have had associated components. The significance of this site is indisputable.

Response: Section 4.9 of the Draft EIS (DEIS) will discuss the findings of the AIS, and the entire report will be included in the DEIS as Appendix F. Appropriate actions will be implemented to ensure protection of the historic sites. The project will recognize that the Kawa’ewa’ehēiau is part of a complex of cultural sites, not a discrete site. The plans and design for the cemetery will be integrated with the significance of the area surrounding the

Pacific Guardian Center • 733 Bishop Street, Suite 2590 • Honolulu, Hawaii 96813  
Tel. 808.545.2055 • Fax 808.545.2050 • www.hhf.com • e-mail: info@hhf.com

**fax**

Kawa'ewa'e Heiau and significant archaeological sites and cultural features of the landscape will be buffered and protected from any roadways, grading, or other intrusive activity. Additionally, the *heiau* complex will be protected and seen in relationship to other sacred sites in the Ko'olau-Poko District. All significant archaeological sites within and near the Petition Area will be preserved with appropriate buffer zones.

All cultural and archaeological sites in and near the Petition Area will be investigated, preserved, and protected through the creation of *kīpukas* as appropriate. The *kīpuka* will be designed in careful consideration of site boundaries and in relationship to contiguous sites.

3. Features seen in the surrounding area may be adversely affected by your current plan and we ask you to re-configure the plan in order to protect these areas. Features include a terraced area with two large guardian pohaku at either corner, and a lower circle of stones under a grove of trees near Lipau Street.

Response: Please see answer to Question #2 above. Appropriate actions will be implemented to ensure protection of the historic sites.

We appreciate your participation in this review process. Your letter and this response will be appended to the Draft EIS. We look forward to working with you and other members of the Ko'olaupoko Hawaiian Civic Club to make certain that these important sites at Pikoiloa are preserved, protected, and maintained.

Sincerely,

HELBER HASTERT & FEE, Planners

  
Scott Ezer  
Principal

cc: Jay Morford, Hawaiian Memorial Life Plan, Ltd  
Mike Green, Clark & Green Associates  
Bert Saruwatari, Land Use Commission, State of Hawai'i  
Office of Environmental Quality Control

**Subject: Proposed Expansion of Hawaiian Memorial Park**

**ATTN: Rachael Edinger**

**Date: February 7, 2008**

**To: Helber Hastert & Fee,**

**From: Lianne Ching**

**Planners**

**Phone Number:** 234-6388

**Fax Number:** 545-2050

**Comments:**

*Please find a 4 page letter which states my comments on the proposed expansion of Hawaiian Memorial Park. I appreciate your time and consideration.*

**February 7, 2008**

**Heiber Hastert and Fee, Planners**  
**733 Bishop Street, Suite 2590**  
**Honolulu, HI 96813**

**Attn: Rachael Edinger**

**Dear Ms. Edinger:**

I am writing on behalf of my family, my neighborhood of Pliko, my halau, and my ancestors. I am opposed to the proposed expansion of Hawaiian Memorial Park (HMP) which includes now up to 20 residential lots. Funny....the number of homes planned seems to keep changing.

The area that you plan to use for the expansion is land which runs along the hillside just across the street from my home. It would run from the Ocean View section of the graveyard all the way across to Pohai Nani. On that end of the project is where the proposed residential lots will be.

A good portion of that land is deemed conservation land. I believe this was for a reason. One major issue that has always been a concern for residents along this hillside is drainage and flooding. Recent heavy rains within the past year or two have proven that this concern is very real when a home on Namoku Street was thoroughly flooded and damaged because of water overflowing from a drainage conduit that runs behind the home on this same hillside and land that HMP proposes to put mausoleums and graves and various foliage on. This will only add to the run-off and flooding problems that already exist.

At a community meeting that the owners of HMP held last year (which by the way was standing room only), we were told that improvements would be made to the current drainage system when they make their expansion. To date, no one has seen what the proposed "improvements" are. They also said they would not be responsible for maintaining their "improvements".

This green band of hillside is one of the last green open spots in Kane'ohe. The wildlife and foliage in the area is lush and beautiful. It adds to the "country" of Kane'ohe. The 'ohe (bamboo) that grows here is strong yet graceful. The birds that you can hear singing here adds to the sense of calm and peacefulness. The gentle rustling of the various trees soothes me to sleep sometimes..... When we purchased our home here about 5 years ago, it was for this very reason. Our immediate neighborhood is quiet and safe. I looked forward to coming home after working a 15 hour night shift filled with alarms and bells so that I could sit in my garage with a cup of coffee and greet the day with the birds chirping and the trees waving to me. I still look forward to this every morning. The feeling is the same at twilight. With the access to their development being just down the street from my home, the increased traffic will only ruin the quietness and safety of our neighborhood. Not to mention the increase in crime which will come along with the traffic.

If HMP goes forward with the proposed development, we will loose yet another piece of paradise to Greedy developers for the sole purpose of money.  
 -Auwe for the birds and natural plants and aquatic animals that live in the stream which runs through this hillside. We will see them no more, we will not hear their songs anymore, my children will not be able to walk the land where their ancestors lived and worked, and the stream bed will become littered with the poisonous run off from the graveyard.

The owners of HMP plan to use a side street just down the road from my home for access to the new homes and the graveyard. This is Lipalu Street. Currently, it is a street that ends in a cul de sac. At this end of their hillside property, is a helau

- Kawaewae Helau. It is a luakini helau; a sacrificial helau. It was built somewhere near the beginning of the 12<sup>th</sup> century. It was made famous in the stories of Chief 'Olopana and the pig god Kamapua'a. It is a registered historic site both in Hawaii and nationally. Kawaewae helau is just one of many historical sites on this hillside noted and mapped out in a study done by the Bishop Museum and by Cultural Surveys Hawaii.

In this same area grows some of the most green and sweet smelling laua'e ferns that I have ever seen. The lush green trees in this area protect the hardy ferns from the sunlight during the day thus allowing it to stay green and fragrant. The only other place that I know of that have laua'e of similar quality, is up at the Pali – which is not very accessible because of where it grows.

Being of Native Hawaiian descent and a practitioner of the art of hula, this spot to pick ferns for our adornment for hula is very accessible for my halau and other halau in the area. It is an important part of being a dancer. It has extra special significance in that it is near so many culturally important historical sites. This gives it more mana. It is only proper that being from a halau in Kane'ohe, I should dance with a lei made from material gathered in Kane'ohe. There are not very many places that have such beautiful dark green laua'e AND that is accessible for dancers to get to.

If HMP goes through with their proposed expansion, it will desecrate the land that these culturally significant sites sit on. Access will no longer be possible. The trees will be destroyed and, thus, the beautiful ferns. It will not be possible for me, as a dancer, to practice hula to its fullest. I will not be able to practice my right as an indigenous person (kanaka maoli), which is guaranteed by the United States Government, to gather ferns and other material needed to practice the art of hula. Access for my future generations and generations of other kanaka maoli to study the helau and sites of our ancestors will be denied because they will not exist anymore. Instead, in their place, will be mausoleums and head stones. To the Hawaiian people, we are one with the land. To desecrate the land, to not malama the 'aina (take care of the land), is a slap in our face. This is something that you, not of Native Hawaiian descent, will never understand.

I am not against development. But I do oppose this expansion of Hawaiian Memorial Park in this particular area for all of the above reasons. This strip of Greenery is one of a small number of natural resources remaining in the area. There are many trails that run along this small hillside which are used by many people.

Please stop this development. Please keep the land conservation land. Please do your part to malama the 'aina. In turn, the 'aina and the people, will take care of you.

Mahalo nui for your time and consideration regarding this matter.

Aloha –

*Lianne Mahealani Ching*

Lianne Mahealani Ching

May 23, 2008

Lianne Ching  
45-431 Ohana St.  
Kāne'ohe, HI 96744

Dear Ms Ching:

**Environmental Impact Statement Preparation Notice**  
**Hawaiian Memorial Park Cemetery Expansion**

TMK (1) 4-5-033:1

Kāne'ohe, O'ahu, Hawai'i

Thank you for your letter dated February 7, 2008 providing comments on the Environmental Impact Statement (EIS) Preparation Notice for the above-referenced project. For your ease of reference, we have included your comments in the order they appear in your letter, followed by our responses:

1. I am opposed to the proposed expansion of Hawaiian Memorial Park (HMP) which includes now up to 20 residential lots.

Response: We note your opposition to the Proposed Action.

2. One major issue that has always been a concern for residents along this hillside is drainage and flooding. Recent heavy rains within the past year or two have proven that this concern is very real when a home on Namoku Street was flooded and damaged because of water overflowing from a drainage conduit that runs behind the home on this same hillside and land that HMP proposed to put mausoleums and graves and various foliage on. This will only add to the run-off and flooding problems that already exist.

Response: In regard to your concerns about flooding, the Draft EIS (DEIS) will include a Preliminary Engineering Report (PER) which discusses drainage issues. A detailed description of drainage and flooding can be found in Sections 4.6 and 6.4 of the DEIS. The most important aspect of this analysis is an understanding that the project must include mitigation to prevent any increase in storm water runoff attributable to the project as a result of the design storm (10-year event), which must be retained on site. The engineering solution to achieve this requirement will be the use of retention areas scattered throughout the property at a depth of 18 inches. There are now 10 retention areas



proposed, ranging in size from 5,000 square feet to 20,000 square feet (See Figures 27, 28a, and 28b of the DEIS).

3. At a community meeting that the owners of HMP held last year, we were told that improvements would be made to the current drainage system when they make their expansion. To date, no one has seen what the proposed "improvements" are. They also said they would not be responsible for maintaining their "improvements".

Response: For clarification, we would like to point out that the proposed project does not include any improvements that currently service individual residential properties, nor were any such representations made. The proposed project does include improvements on the project site that will alleviate storm water runoff that is attributable to development on that property. See answer to #2 above.

4. This green band of hillside is one of the last green open spots in Kaneohe. The wildlife and foliage in the area is lush and beautiful. If HMP goes forward with the proposed development, we will lose yet another piece of paradise.

Response: The proposed project will include revegetation with appropriate native and indigenous species. Some Polynesian-introduced plants may be used as well. Spreading foliage trees along the bottom reaches of the transition slopes and buffer areas adjacent to the residential uses will keep the sense of open space and lush vegetation. Species may include: *ko'a*, *kukui*, and *loulou palms*, *ohia lehua*, *lona mea*, *koki'o kea*, *hō'awa*, *a'ali'i*, *maile*, and *naio*. In addition, landscaping for the cemetery expansion will result in hundreds of new trees, which should create a better landscape appearance for the expansion area.

5. Our neighborhood is quiet and safe. With access to their development being just down the street from my home, increased traffic will ruin the quietness and safety of our neighborhood and crime will increase along with the traffic.

Response: The results of the Traffic Impact Analysis Study completed for the project will be described in detail in Section 6.1, Transportation, of the DEIS, and the full Traffic Report will be included as Appendix H in the DEIS. Level of Service (LOS) conditions, which are rated from A to F (best to worst), were computed for all intersections near the Petition Area. LOS represents a qualitative measure of traffic operating conditions, and

considers speed, travel time, freedom to maneuver, types of traffic controls, and interruptions as well as driver comfort and convenience.

The traffic survey found that for the unsignalized intersection of Namoku Street and Lipalu Street, there is little or no delay with LOS A conditions during the morning and afternoon peak hours. The LOS is expected to continue to be A (free flow with no congestion or delay) with or without the proposed project. For the intersection of Mokulele Drive and Namoku Street, Mokulele Drive has an LOS of A and Namoku has an LOS of B; no change is expected to occur with or without the proposed project. We do recognize that the number of vehicles utilizing Lipalu Street will increase.

According to Honolulu Police Department Community Affairs Division, there is no correlation to an increase in crime and new developments on roads. Overall, as a general rule, crime has been decreasing in the last 10 years throughout O'ahu.

6. The area near and around the Kawa'ewa'e Heiau has some of the most green and sweet smelling lauae ferns. The lush green trees in this area protect the hardy ferns from the sunlight during the day allowing it to stay green and fragrant. This area is very accessible for my hau and other halau in the area. The proposed project will destroy access to the heiau and the lauae ferns.

Response: As a result of the completion of a Cultural Impact Assessment (CIA) for this DEIS, we are aware that portions of the project site are used by hula practitioners, including your halau, to gather the lauae ferns found there. Mahalo for including this information in your letter. We want you to know that the landowner (Hawaiian Memorial Life Plan, Ltd.) is also aware of these activities and is committed to having them continue.

The proposed action will not destroy access to the lauae, the heiau, or any of the other sites in or near the Petition Area. On-going cultural practices, such as gathering of hula and lei plants, will be recognized and accommodated (subject to safety and liability issues) as provided by law. The areas where the hula plant lauae (*Phymatosorus grossus*) is most concentrated will be protected to the degree feasible and practicable. The availability, abundance, and quality of the lauae ferns will be protected through creation of plant gathering kipuka, including maintenance of an intact overstory. This will be discussed further in the DEIS in Section 4.9, Historic, Cultural, and Archaeological Resources and Section 5.5, Traditional Customs and Practices.

We appreciate your participation in this review process. Your letter and this response will be appended to the Draft Environmental Impact Statement.

Sincerely,

HELBER HASTERT & FEE, Planners



Scott Ezer  
Principal

cc: Jay Morford, Hawaiian Memorial Life Plan, Ltd  
Mike Green, Clark & Green Associates  
Bert Saruwatari, Land Use Commission, State of Hawai'i  
Office of Environmental Quality Control

**CITY AND COUNTY OF HONOLULU**  
DEPARTMENT OF PLANNING AND PERMITTING  
610 SOUTH KING STREET • HONOLULU, HAWAII 96813  
TELEPHONE: (808) 761-8000 • FAX: (808) 527-6743  
INTERNET: [www.honolulu.gov](http://www.honolulu.gov) • DEPT. WEB SITE: [www.honoluluipp.org](http://www.honoluluipp.org)



MUFI HANNEMANN  
MAYOR

HENRY ENG, FAICP  
DIRECTOR

DAVID K. TANOUKE  
DEPUTY DIRECTOR

2008/ELOG-70 (mw)

February 14, 2008

Mr. Jay Morford  
Hawaiian Memorial Life Plan, Ltd.  
1330 Maunakea Street  
Honolulu, Hawaii 96813

Dear Mr. Morford:

Subject: EIS Preparation Notice for the Hawaiian Memorial Park

In response to your January 8, 2008 request for comments on this project's EIS/SPN, we have the following comments. The draft EIS should include or address the following:

1. **Before-and-after illustrations showing how the grading, construction, and landscaping will change the project area's slopes, appearance, and scenic value.** We suggest at least four (4) vantage points, starting with a side-on aerial perspective of the entire hillside project area, followed by close-ups that show how the development will fit in with neighboring uses at the northern and southern ends of the project site and on its western edge, at the proposed Lipai Street entrance.
2. **The impacts of changing the grade of the entire site and removing 73 percent (73%) of the scrub forest that blankets the site.** The site is a windy, high-rainfall area, so all permanent impacts should be discussed, including:
  - (1) soil stability and the possibility of ground-subsidence problems (reportedly experienced at the lower-level cemetery plots), (2) stormwater flow, percolation, and drainage, and (3) wind impacts on neighboring properties due to the loss of forest coverage and the introduction of human activities (such as lawn maintenance using pesticides).
3. **How the project conforms to County as well as State plans** (Section 3-13). Your November 28, 2007 Petition to the State Land Use Commission states that the draft EIS will fully assess the project's conformity to the State Plan and to the State Land Use Law; similar assessments are needed for the City's General Plan and its regional Koolaupoko Sustainable Communities Plan (SCP). The

Mr. Jay Morford  
Hawaiian Memorial Life Plan, Ltd.  
February 14, 2008  
Page 2

assessment should address the project site as: (1) a natural forest area that acts as a watershed and recharge area; (2) a prominent scenic resource; (3) an area of steep slopes (most of the project site slopes more than 20 percent (20%)); (4) a hillside that helps define the edge of the urbanized area of Kaneohe; (5) outside the Koolaupoko SCP's Urban Growth Boundary (UGB), which is not supposed to be altered until at least the year 2020; and (6) part of the Oneawa Hills area, which SCP policy states should be specifically excluded from the UGB. (Policies 1-2 are from the State Conservation Plan; policies 2-6 are from the Koolaupoko SCP).

In addition, please revise the discussion of the Koolaupoko SCP in Section 3-13. It seems to misinterpret the phrase "within the current inventory of Hawaiian Memorial Park", which refers to the areas available for cemetery use at the time the SCP was adopted.

Also, given the project's controversial nature, we suggest that the EIS lay out more than one (1) option for revising the Koolaupoko SCP. One (1) such option would be to redefine the Preservation Boundary to allow cemeteries, which would apply only to Alternative III among the alternatives considered.

4. The EIS should also serve as a "project master plan" for the zone change you will be seeking. The requirements for this can be found in the ordinance language adopting the Koolaupoko SCP, especially Section 24-6-1, Definitions.
5. The EIS should revise Table 2, "Required Land Use Approvals" in Section 2.4 to list "Approval of the Cemetery's Location and Boundaries" by the Honolulu City Council. State law requires such a measure to be adopted. A recent example of this is City Council Resolution 07-397.
6. Address in Section 4.4 all of the specific City requirements on post-construction stormwater quality, in accordance with Section II of the City's "Rules Relating to Storm Drainage Standards."
7. Discuss proposed drainage infrastructure improvements in Sections 3-11 and 4-11.
8. Discuss in Sections 3-5 and 4-5 whether there are any hazards associated with rockfall and/or slope stability that may impact the project site, and if so, describe potential mitigation measures in Chapter 4. A detailed geotechnical report will be required at a later date.

Mr. Jay Morford  
Hawaiian Memorial Life Plan, Ltd.  
February 14, 2008  
Page 3

Should you have any questions, please call Mike Watkins of our Planning Division at 768-8044, or, if you have questions on comments 6-8, call Leonard Furukawa of our Site Development Division at 768-8105.

Very truly yours,



Henry Eng, FAICP, Director  
Department of Planning and Permitting

HE:is

cc: State Land Use Commission  
Office of Environmental Quality Control  
Office of Planning  
Helber Hastert & Fee, Planners

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Helber Hastert & Fee  
Planners, Inc.

May 23, 2008



Henry Eng  
Director  
Department of Planning and Permitting  
650 South King St, 7<sup>th</sup> Floor  
Honolulu, HI 96813

Dear Mr. Henry Eng:

**Environmental Impact Statement Preparation Notice  
Hawaiian Memorial Park Cemetery Expansion  
TMK (1) 4-5-033:1  
Kāne'ohe, O'ahu, Hawai'i**

Thank you for your letter dated February 14, 2008 (2008/ELOG-70 (mw)) providing comments on the Environmental Impact Statement (EIS) Preparation Notice for the above-referenced project. For your ease of reference, we have included your comments in the order they appear in your letter, followed by our responses.

1. Before-and-after illustrations including 4 vantage points should be presented showing how the grading, construction, and landscaping will change the project area's slopes, appearance, and scenic value.

Response: We have prepared a wide variety of graphic exhibits for the Draft EIS in an attempt to document the visual impacts associated with the Proposed Action. These include:
  - "before" and "after" oblique aerial perspective
  - "before" and "after" views from a neighborhood location
  - sections of the property from adjacent residential neighborhoods to proposed mausoleaIt should be noted that the Petition Area cannot be seen from a majority of the neighborhood because of existing vegetation (which will remain) and differences in topography. A full discussion of visual impacts will be found in Section 4.10 of the Draft EIS.
2. Impacts of changing the grade of the entire site and removing 73% of the scrub forest that blankets the site. Discuss:
  - a. soil stability and possibility of ground-subsidence problems
  - b. stormwater flow, percolation, and drainage

- c. wind impacts on neighboring properties due to loss of forest coverage and introduction of human activities

Response a: Section 4.3, Soils, of the Draft EIS will discuss impacts and mitigation for soil stability. The slope stability study completed for the project will be discussed in Section 4.6 of the Draft EIS, and will be attached as Appendix B.

Response b: Section 6.4 will address percolation, stormwater, and drainage. As a result of the cemetery expansion and residential development, total storm water runoff attributable to the Petition Area is expected to increase from 478 cfs to 520 cfs. This represents an increase of about 8.7%. Runoff will be retained on-site according to County standards, with the use of retention areas.

Response c: The effect of vegetation on air flow and microclimate is generally accepted. Some of the factors known to impact microclimate are: sunlight exposure, wind exposure, precipitation, temperature (air and soil), and moisture content (air and soil). In the circumstance of the proposed HMP expansion, portions of the terrain will be characterized by a change from a forested area dominated by introduced species to an environment characteristic of turf grass and scattered groupings of trees. However, the interface between the proposed cemetery expansion and existing residences will be tempered by the retention of a vegetative buffer that will average at least 50 feet (See Figures 24 and 28a and 28 b). The trees proposed for the cemetery, and the retention of the existing vegetative buffer will provide a wind break for HMP's neighbors. There should be little change to climate in the vicinity of the cemetery.

3. How does the project conform to County as well as State plans, including conformance with the City's General Plan and the Koolauapoko Sustainable Communities Plan. Assessment should address the project site as:
- Natural forest area that acts as a recharge area
  - A prominent scenic resource
  - An area of steep slopes
  - A hillside that helps define the edge of urbanized Kaneohe
  - Outside the Urban Growth Boundary for Koolauapoko which is not to be altered until at least 2020
  - Part of the Oneawa Hills area, which is to be excluded from the UGB

c. wind impacts on neighboring properties due to loss of forest coverage and introduction of human activities

Response: Chapter 3 of the Draft EIS will discuss in detail how the Proposed Action conforms to relevant land use plans, policies, and controls.

- Please revise the discussion of the Koolauapoko SCP referring to the 'inventory' of Hawaiian Memorial Park.

Response: The discussion of the Ko'olau Poko SCP and the 'inventory' of HMP will be revised in the Draft EIS.

- Layout more than one option for revising the Koolauapoko SCP.

Response: Section 3.2.2 of the Draft EIS will be updated to include other options for revising the Ko'olau Poko SCP. Options for revision include:

- If the State Land Use Commission boundary is amended from Conservation to Urban, the Urban Community Boundary could then be moved to include the Petition Area. While the current SCP states that the boundaries should remain fixed through the year 2020, there are mechanisms in place for requesting changes to the SCP. Also, the SCPs are mandated to be reviewed and updated every five years (Sec. 24-6.10 of Ordinance 00-47). During this update, all existing language and land use maps are open to revision.
- The language of the SCP that describes the Urban Community Boundary could be amended to state that it is intended to include Oneawa Hills to an elevation of 400 ft, or include HMP's modest expansion, instead of excluding Oneawa Hills completely.
- The definition of the Preservation Boundary could be amended to allow cemetery use.
- The EIS should also serve as a 'project master plan' for the zone change you will be seeking.

Response: The Draft EIS will be written so that it may serve for the future zone change required.

- The EIS should revise Table 2, "Required Land Use Approvals" to list "Approval of Cemetery's Location and Boundaries" by the Honolulu City Council.

- Response: Table 2 will be incorporated into Section 1.2, Development Summary of the Draft EIS, and will list the required land use approvals for the Proposed Action. This section will include the Approval of Cemetery's Location and Boundaries required by Honolulu City Council.
8. Address all of the specific City requirements on post construction storm water quality, in accordance with Section II of the City's Rules Relating to Storm Drainage Standards.

Response: As will be described in Section 4.3 of the Draft EIS, the Proposed Action will follow all requirements of the City and County of Honolulu's Storm Drainage Standards. Temporary erosion control measures will include: using silt fences, stabilized construction entrances, catch basin and inlet protection, and dust control. Proper grading, pavement, and permanent grassing and landscaping over all open areas created by the grading operations will minimize soil loss from the site to acceptable levels. Permanent erosion control measures will include grading to provide proper drainage. Exposed areas will be paved or grassed and/or landscaped to match adjacent landscaping. Grass sod will be planted to minimized erosion. Also, retention areas will be incorporated for additional runoff treatment. From a maintenance standpoint, the retention areas will be designed so that, to the maximum extent possible, they will be mowable turf grass. The areas that cannot be maintained in that manner due to soil moisture or gradient will be vegetated with native and ornamental grasses which can be easily removed and replaced if silt or vegetation buildup removal is required to keep the retention area at maximum efficiency. The maintenance regime will be kept within the normal cemetery operational practices to ensure constant and easy upkeep.

9. Address proposed drainage infrastructure improvements.

Response: As will be described in Section 6.4, Drainage, of the Draft EIS, engineering design for proposed drainage infrastructure improvements will adhere to City and County of Honolulu requirements mandating that any increase in storm water runoff generated by new development not affect properties down-stream. Retention areas, which will be about 18 inches deep, are included in the Concept Plan as the preferred method to control runoff. The areas will be scattered throughout the cemetery to provide the required amount of storage, and will be designed in a manner that allows them to blend in with the landscaped cemetery grounds. Conceptual design suggests there will be approximately 10 retention areas ranging from 5,000 square feet to 20,000 square feet in size.

10. Discuss whether there are any hazards associated with rockfall and/or slope stability that may impact the project site, and if so, describe potential mitigation measures. A detailed geotechnical report will be required at a later date.

Response: Section 4.6 of the Draft EIS will include a discussion of rockfall hazards and slope stability, and potential mitigation measures. A report on these subjects prepared for the Draft EIS will be attached as Appendix B. We note that a detailed geotechnical report will be required at a later date.

We appreciate your participation in this review process. Your letter and this response will be appended to the Draft Environmental Impact Statement.

Sincerely,

HELBER HASTERT & FEE, Planners



Scott Ezer  
Principal

cc: Jay Morford, Hawaiian Memorial Life Plan, Ltd  
Mike Green, Clark & Green Associates  
Bert Saruwatari, Land Use Commission, State of Hawai'i  
Office of Environmental Quality Control

**BOARD OF WATER SUPPLY**

CITY AND COUNTY OF HONOLULU  
630 SOUTH BERETANIA STREET  
HONOLULU, HI 96843

February 19, 2008

Mr. Jay Morford  
Hawaiian Memorial Life Plan, Ltd.  
1330 Maunakea Street  
Honolulu, Hawaii 96813

Subject: The Environmental Impact Statement (EIS) Preparation Notice for the  
Proposed Hawaiian Memorial Cemetery Expansion. TMK-4-5-33:1

Thank you for your letter on the proposed cemetery expansion.

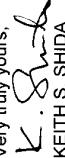
Water service cannot be made available to the proposed 20-lot residential subdivision. The parcels are located above the 172-foot elevation limit for the Windward 272-foot water system serving this area.

The existing water system is presently adequate to accommodate the domestic water requirements of the proposed cemetery expansion. However, please be advised that this information is based upon current data and, therefore, the Board of Water Supply reserves the right to change any position or information stated herein up until the final approval of your building permit. The final decision on the availability of water will be confirmed when the building permit is submitted for approval.

The developer should investigate the feasibility of using non-potable water for irrigation of the proposed cemetery expansion. If non-potable water is either unavailable or infeasible, a report of the investigation including proposed irrigation demands should be submitted to us before we will consider the use of potable water.

When water is made available, the applicant will be required to pay our Water System Facilities Charges for resource development, transmission and daily storage. The on-site fire protection requirements should be coordinated with the Fire Prevention Bureau of the Honolulu Fire Department.

If you have any questions, please contact Robert Chun at 748-5443.

Very truly yours,  
  
KEITH S. SHIDA  
Program Administrator  
Customer Care Division

cc: Office of Environmental Quality Control  
Mr. Burt Samwatari, Land Use Commission  
Ms. Rachael Edinger, Helber Hastert & Fee

*Water for Life . . . Ke Wai Ola*

MUFI HANNEMANN, Mayor  
RANDALL Y. S. CHUNG, Chairman  
SAMUEL T. HATA  
ALLY J. PARK  
ROBERT K. CUNDIFF  
MARC C. TILKER  
  
CRAIG NISHIMURA, Ex-Officio  
BRENNON T. MOROKA, Ex-Officio  
  
CLIFFORD P. LUM  
Manager and Chief Engineer  
  
DEAN A. NAKANO  
Deputy Manager and Chief Engineer

Helber Hastert & Fee  
Planners, Inc.

May 23, 2008

**Environmental Impact Statement Preparation Notice  
Hawaiian Memorial Park Cemetery Expansion**

TMK (1) 4-5-033:1

Kāne'ohe, O'ahu, Hawai'i

Thank you for your letter dated February 19, 2008 providing comments on the Environmental Impact Statement (EIS) Preparation Notice for the above-referenced project. For your ease of reference, we have included your comments in the order they appear in your letter, followed by our response:

1. Water service cannot be made available to the proposed 20-lot residential subdivision. The parcels are located above the 172-foot elevation limit for the Windward 272-foot water system serving this area.  
  
Response: We acknowledge that the proposed residential subdivision is located above the 172-foot elevation limit, and that the waterline at Lipalu Street will not have adequate pressure. We also note that the existing waterline is not large enough to handle the increase in water demand from the proposed subdivision. The water source serving Kamakua Place is coming from a different reservoir than Lipalu Street, and this 500 foot reservoir serving Kamakua Place could provide adequate water pressure for the proposed subdivision. This would entail upgrading the meter size and installing a main supply line across the Hawaiian Memorial Park cemetery to the subdivision location. In addition, a similar supply system could be constructed through Hawaiian Memorial Park from Kamehameha Highway or as an extension to the existing or upgraded cemetery system.

Pacific Guardian Center • 733 Bishop Street, Suite 2590 • Honolulu, Hawaii 96813  
Tel. 808.545.2055 • Fax 808.545.2050 • www.hhf.com • e-mail: info@hhf.com

2. The existing water system is presently adequate to accommodate the domestic water requirements of the proposed cemetery expansion. However, please be advised that this information is based upon current data and, therefore, the Board of Water Supply reserves the right to change any position or information stated herein up until the final approval of your building permit. The final decision on the availability of water will be confirmed when the building permit is submitted for approval.

Response: We note that the existing water system is presently adequate to accommodate the domestic water requirements of the proposed cemetery expansion and that final decision on the availability of water will be confirmed when the building permit is submitted for approval.

3. The developer should investigate the feasibility of using non-potable water for irrigation of the proposed cemetery expansion. If non-potable water is either unavailable or infeasible, a report of investigation including proposed irrigation demands should be submitted to us before we will consider use of potable water.

Response: As will be described in Section 6.2, Water Supply, of the Draft EIS, the project will investigate the feasibility of using non-potable water for irrigation of the proposed cemetery expansion. Windward Oahu, where the Petition Area is located, receives sufficient precipitation to minimize the need for supplemental irrigation of landscaping. During dry hot periods, particularly during establishment of new landscaping, irrigation will be required. The non-potable water option for irrigation would be construction of non-potable onsite wells on HMP property and within or near the expansion area. Based on Hawaii State Veterans Cemetery's satisfactory use of the non-potable wells near the Petition Area, it is hoped new onsite wells will be feasible to provide adequate water for irrigation.

4. When water is made available, the applicant will be required to pay our Water System Facilities Charges for resource development, transmission and daily storage.

Response: The applicant acknowledges that when water is available, Water System Facilities Charges will need to be paid for resource development, transmission, and daily storage.

5. The on-site fire protection requirements should be coordinated with the Fire Prevention Bureau of the Honolulu Fire Department.

Response: As will be discussed in Section 6.10, Fire Protection, of the Draft EIS, all on-site fire requirements will be coordinated with the Fire Prevention Bureau of the Honolulu Fire Department.

We appreciate your participation in this review process. Your letter and this response will be appended to the Draft Environmental Impact Statement.

Sincerely,

HELBER HASTERT & FEE, Planners

  
Scott Ezer  
Principal

cc: Jay Morford, Hawaiian Memorial Life Plan, Ltd  
Mike Green, Clark & Green Associates  
Bert Saruwari, Land Use Commission  
Office of Environmental Quality Control

DEPARTMENT OF TRANSPORTATION SERVICES  
**CITY AND COUNTY OF HONOLULU**

650 SOUTH KING STREET, 3RD FLOOR  
HONOLULU, HAWAII 96813

Phone: (808) 768-8305 • Fax: (808) 523-4734 • Internet: [www.honolulu.gov](http://www.honolulu.gov)



MUFI HANENMANN  
MAYOR

WAYNE YOSHIOKA  
DIRECTOR

RICHARD F. TORRES  
DEPUTY DIRECTOR

TP1/08-243890R  
TP12/07-242382R

February 21, 2008

Mr. Jay Morford  
Hawaiian Memorial Life Plan, Ltd.  
1330 Maunakea Street  
Honolulu, Hawaii 96813

Dear Mr. Morford:

Subject: Hawaiian Memorial Park Cemetery Expansion

Thank you for the January 8, 2008 letter from Helber, Hastert and Fee, Planners, requesting our review of and comments on the Environmental Impact Statement (EIS) Preparation Notice for the subject project.

We have the following comments for your consideration as you prepare the draft EIS:

1. We understand that a Traffic Impact Study is being conducted and we will provide comments after we review the draft EIS.
2. Based on the information provided thus far, the proposed project should not have a significant impact on public transit service.
3. Appropriate project notification should be provided to the area neighborhood board, as well as community residents, businesses, emergency personnel, bus personnel, etc. They should be apprised of the details of the proposed project and the impacts the project may have on the local street network area.

Mr. Jay Morford  
Page 2  
February 21, 2008

We look forward to reviewing the draft EIS. Should you have any questions regarding these comments, please contact Ms. Faith Miyamoto of the Transportation Planning Division at 768-8350.

Very truly yours,

WAYNE Y. YOSHIKAWA  
Director

cc: Office of Environmental Quality Control

Mr. Burt Saruwatari  
Land Use Commission, State of Hawaii

Ms. Mary Lou Kobayashi, Planning Program Administrator  
DBEDT - Office of Planning

✓ Ms. Rachael Edinger, Project Planner  
Helber Hastert & Fee, Planners

May 23, 2008



Wayne Y. Yoshioka  
Director  
City and County of Honolulu  
Department of Transportation Services  
650 South King Street 3<sup>rd</sup> floor  
Honolulu, HI 96813

Dear Mr. Yoshioka:

**Environmental Impact Statement Preparation Notice  
Hawaiian Memorial Park Cemetery Expansion  
TMK (1) 4-5-03:1**

Kāne'ohe, O'ahu, Hawai'i

Thank you for your letter dated February 21, 2008 (TP1/08-243890R and TP12/07-242382R) providing comments on the Environmental Impact Statement Preparation Notice (EISPN) for the above-referenced project. For your ease of reference, we have included your comments in the order they appear in your letter, followed by our responses:

1. We understand that a Traffic Impact Study is being conducted and we will provide comments after we review the draft EIS.

Response: A Traffic Impact Study has been completed, and the results will be discussed in the Draft EIS in Section 6.1, Transportation, and the entire study will be included as Appendix H.

2. Based on the information provided thus far, the proposed project should not have a significant impact on public transit service.

Response: We note that based on the information provided in the EISPN, the proposed project should not have a significant impact on public transit service. Public transit service will be discussed in the Draft EIS in Section 6.10.2.

3. Appropriate project notification should be provided to the area neighborhood board, as well as community residents, businesses, emergency personnel, bus personnel etc. They should be apprised of the details of the proposed project and the impacts the project may have on the local street network area.

Response: The distribution list for the Draft EIS will be included in Chapter 11 of the Draft EIS. The list includes: both the Kailua and Kaneohe Neighborhood Boards; any community residents or businesses who have provided comments or expressed an interest in the project; fire and police departments and both the City and County of Honolulu Transportation Division and the State Department of Transportation. Also, as discussed in Chapter 11, we have held three community meetings devoted to this project, and we have attended a number of Kaneohe Neighborhood Board meetings and committee meetings to discuss the project and answer questions.

We appreciate your participation in this review process. Your letter and this response will be appended to the Draft Environmental Impact Statement.

Sincerely,

HELBER HASTERT & FEE, Planners

Scott Ezer  
Principal

cc: Jay Morford, Hawaiian Memorial Life Plan, Ltd  
Mike Green, Clark & Green Associates  
Bert Saruwatari, Land Use Commission, State of Hawai'i  
Mary Lou Kobayashi, Office of Planning  
Office of Environmental Quality Control

Kris Derego-Coffield  
Chairperson  
Hawaiian Memorial Park Standing Committee  
Kaneohe Neighborhood Board  
46-063 Emepia Pl. #U101  
Kaneohe, HI 96744

February 21, 2008

Heiber, Hastert & Fee, Planners  
733 Bishop Street, Suite 2390  
Honolulu, HI 96813

Dear Sirs,

Pursuant to the publication of an environmental impact statement preparation notification in the *Environmental Notice* on January 8, 2008 relating to Hawaiian Memorial Life Plan, Ltd.'s petition to amend the conservation land use district boundaries into the urban land use district for approximately 56.6 acres of land currently adjacent to Hawaiian Memorial Park in Kaneohe, the Kaneohe Neighborhood Board's Hawaiian Memorial Park Standing Committee has noted, and is seeking response to, the following concerns:

- (1) Given that the cemetery expansion is expected to increase total stormwater runoff from 478 cfs to 520 cfs (an increase of 8.7 percent), is the onsite retention of increased runoff for the duration of a 1-hour, 10-year storm enough to mitigate hazardous flooding and erosion? In the past, Kaneohe has been known to suffer from prolonged deluges, which have caused significant structural and property damage to the Piko'Ioa community. Noting that the engineering design for the project area will adhere to City and County of Honolulu requirements mandating that any increase in stormwater runoff generated by new development not affect properties downstream, can the developer provide a detailed explanation of how the retention areas will be constructed to mitigate excess runoff? Furthermore, can the developer provide information regarding contingency plans in the event that runoff exceeds the anticipated production of a 1-hour, 10-year storm?
- (2) Noting that approximately 15.3 acres of the proposed 56.6 acre expansion will be revegetated with appropriate native plant material, can the developer provide information regarding which native species currently exist within the boundaries of the project area and what species will be used to revegetate? Will the use of any species adversely affect the potential saturation capacity of the project area's soil? From where will the species used for revegetation be obtained?
- (3) Will additional topographical maps that provide precise depictions of the dimensions of the proposed project area from varying perspectives maps be included within the draft environmental impact statement? Specifically, will maps be included that illustrate the height, depth and width of certain segments of the proposed projects, especially those depicted in Profile 2 (p.4-4) of the environmental impact statement preparation notification? Can topographical or schematic illustrations be provided regarding the 100 foot buffer surrounding Kawaewae He'au?

- (4) With regard to the 100 foot buffer surrounding Kawaewae He'au, what erosion control measures will be utilized to protect graded areas? Standard hydromulching will introduce grass that will compete with native vegetation, thereby making it difficult to establish a native ground cover. Will native ground cover be incorporated into the erosion control plans, which would be our own recommendation? Furthermore, what are the developer's plans regarding maintenance of the buffer, as well as the native species being used to revegetate the buffer? Invasive species and weeds are likely to be a problem at some point, and must be controlled if the revegetated plants are to be given a chance at survival.
- (5) Will further information be provided about the design and construction of the mausoleums contained in the proposal? Is it possible to obtain more information about the process of construction, exact location and design specifications of the mausoleums?
- (6) Can the developer explain the nature of significance of historic site 468SB? Also, can the developer explain why this site overlaps with one of the properties included in the proposed 20-lot residential subdivision?
- (7) What management practices will be used during the construction of the development, particularly during grading of Hawaiian Memorial Park's property? Can the developer provide details about how residents affected by the development may register concerns or complaints during any and all phases of construction?

The Kaneohe Neighborhood Board's standing committee devoted to the issue of the proposed Hawaiian Memorial Park expansion encourages the developer to consider the preceding list of questions during the enactment of the environmental impact statement, and looks forward to receiving any information from the developer that may answer the aforementioned concerns.

Sincerely,  
  
Kris DeRego  
Chairperson  
Kaneohe Neighborhood Board HMPSC

CC: Hawaii State Land Use Commission  
Honolulu Department of Permitting and Planning  
Hawaii State Department of Health (Clean Water Branch)

May 23, 2008



Kris Derego-Coffield  
Chairperson  
Hawaiian Memorial Park Standing Committee  
Kaneohe Neighborhood Board  
46-063 Emepela Pl. #J101  
Kaneohe, HI 96744

Dear Mr. Derego-Coffield:

**Environmental Impact Statement Preparation Notice**  
**Hawaiian Memorial Park Cemetery Expansion**  
**TMK (1) 4-5-033:1**  
**Kāne'ohe, O'ahu, Hawaii**

Thank you for your letter dated February 21, 2008 providing comments on the Environmental Impact Statement (EIS) Preparation Notice for the above-referenced project. For your ease of reference, we have included your comments in the order they appear in your letter, followed by our responses.

1. Is the onsite retention of increased runoff for the duration of a 1-hour, 10-year storm enough to mitigate hazardous flooding and erosion?

**Response:** Engineering design for the Petition Area will adhere to City and County of Honolulu DPP Rules relating to Storm Drainage Standards of January 2000, which require that we shall retain on site any increase in run off created by the proposed project for the 1-hour, 10-year storm event. These are the rules adopted by the County to mitigate storm water runoff and protect down slope properties from the effects of flooding, thus exercising the County's authority to protect the public health, safety and welfare. These are the operative engineering standards for the City and County, and we intend to strictly adhere to them. The retention areas hold storm water and allow sediment to settle before storm water percolates. The areas will be scattered throughout the cemetery to provide the required amount of storage. The size of the retention areas will vary from 5,000 to 20,000 square feet and they will be grass lined to a depth of 18 inches (see Figures 28a and 28b of the Draft EIS).

2. Provide information regarding which native species currently exist within the boundaries of the project area and which species will be used for revegetation-and where these species will be obtained from. Will the use of any species adversely affect potential saturation capacity of the soil?

**Response:** As will be discussed in Section 4.7 of the Draft EIS, only seven percent of the existing vegetation found on the project site is native. A botanical survey prepared for the Draft EIS noted infrequent occurrences of 'uhalo (*Waltheria indica*), halia (*Pandanus tectorius*), ka'e or sea bean (*Mucuna giganteana*), pala 'ā (*Sphenomeles chinensis*), and moa (*Pisolithum nudum*). Of the two endemic species, two koa (*Acacia koa*) trees were observed near the Kawa'ewa'e Heiau (outside of the Petition Area), and 'ākia (*Wikstroemia Oahuensis* var. *Oahuensis*) was documented along the edges of the Ocean View section of HMP and the upper elevations near the ridgeline.

Species to be used during revegetation could include: koa (*Acacia koa* A. Gray), kukui (*Aleurites moluccana*), loulu palms (*Pritchardia martii*), ohia 'lehua (*Metrosideros polymorpha*), lona mea (*Sapindus oahuensis*), kōkō 'kea (*Hibiscus arnottianus*), hō'awa (*Pithecellobium hosmeri*), 'ai'i (*Dodonaea viscosa*), maili (*Alyxia olivaeformis*), and naio (*Myoporum sandwicense*). The revegetated species will either be obtained from nearby nurseries or contract grown.

The saturation capacity of the soil could be affected during initial establishment of the new native species; once established there will not be any adverse effect.

3. Will additional topographical maps that provide precise depictions of the dimensions of the proposed project area from varying perspective maps be included in the Draft EIS? Specifically the height, depth, and width of those segments depicted in Profile 2 of the EISP. Can topographical or schematic illustrations be provided regarding the 100 ft buffer surrounding the Kawa'ewa'e Heiau?

**Response:** The Draft EIS will include additional scenic profiles (Figure 24) that illustrate the dimensional relationships of several view planes of the project from the Pikiola neighborhood. These profiles will be accompanied by scales and measurements.

- As for the buffer of the Kawa'ewa'e Heiau, the landowner intends to leave this area in an "as-is" condition, surrounded by existing vegetation including trees. Any plans to change the existing conditions of area would only occur if the caretakers of the heiau wish it to happen.
4. With regard to the 100 ft buffer surrounding the Kawa'ewa'e Heiau, what erosion control measures will be utilized to protect graded areas?

Response: A number of best management practices could be utilized for this area, including silt curtains, rapid revegetation, and temporary retention basins. Specific measures will be determined when final grading plans are submitted to the Department of Planning and Permitting for approval.

Standard hydro-mulching grass will compete with native ground cover. Will native ground cover be incorporated into erosion control plans?

What are the plans regarding maintenance of the buffer, as well as native species being used to revegetate the buffer?

Response: Please see answer to number 2 above for a list and discussion of the native species for revegetation, and number 3 above for discussion of the buffer. The native and Polynesian-introduced species will need some initial maintenance help when first planted. The ground cover and shrubs will especially need to be maintained until the overstory native plants are established. The species chosen for revegetation are intended to eventually be self-sufficient, with a minimum of management intervention and no irrigation.

In regard to ground cover, it is true that hydro-mulching comes first, as part of the erosion control plans. The next step for grounds maintenance would be the implementation of a landscape plan. For the re-vegetated areas, this will include many trees and shrubs. It is probable that the trees will create an overstory that would kill off the grasses planted during the erosion control. The shrubs would be shade tolerant capable of surviving as understory.

5. Will further information be provided about the design and construction of the mausoleums? Is it possible to obtain more information about the process of construction, exact location, and design specifications of the mausoleums?

Response: The proposed locations of the mausoleum will be shown on Figure 4 of the Draft EIS. The designs that will be shown in Figure 5 of the Draft EIS are typical of these structures. Construction materials will be primarily concrete.

6. Can the developer explain the nature of significance of historic site 4686B and why this site overlaps with one of the properties in the proposed 20-lot residential subdivision?

Response: The Draft EIS will describe Site 4686B, its significance, and recommendations that derived from the Archaeological Inventory Survey (AIS) completed for the project. According to the AIS, Site 4686 Feature B is a series of alignments that appears to have been badly disturbed due to

landscaping and rubbish piling. This structure is evaluated as significant under Criterion D of the Hawaii Register of Historic Places evaluation criteria. Site 4686 has been thoroughly documented with written descriptions, photographs, scale drawings, and recorded with GPS survey equipment and no further work is recommended. Sufficient information regarding location, function, age, and construction methods of this historic property has been generated by the AIS to mitigate any adverse effect caused by proposed development activities.

7. What management practices will be used during construction, especially grading of the property? Can the developer provide details about how residents affected by the development may register concerns or complaints during phases of construction?

Response: Section 4.3, Soils, of the Draft EIS will include a discussion of the grading concept for the project, including Best Management Practices and mitigation measures to be included. Residents are welcome to contact Mr. Jay Morford of Hawaiian Memorial Park with any concerns during phases of construction.

We appreciate your participation in this review process. Your letter and this response will be appended to the Draft Environmental Impact Statement.

Sincerely,

HELBER HASTERT & FEE, Planners



Scott Ezer  
Principal

cc: Jay Morford, Hawaiian Memorial Life Plan, Ltd  
Mike Green, Clark & Green Associates  
Bert Saruwatari, Land Use Commission, State of Hawaii  
Office of Environmental Quality Control  
Honolulu Department of Permitting and Planning  
Hawaii State Department of Health (Clean Water Branch)



Mr. Morford  
Page 2

LAWRENCE H. HELLEN  
GOVERNOR OF HAWAII  
BOARD OF LAND AND NATURAL RESOURCES  
COMMISSIONER IN WATER & RESOURCE MANAGEMENT  
RUSSELL V. TSUJI  
FIRST DEPUTY  
KEN C. KAWAHARA  
DEPUTY SECRETARY, WATER  
AQUATIC RESOURCES  
BOATING AND DOCKS, LAW ENFORCEMENT  
COMMISSIONER ON WATER & RESOURCE MANAGEMENT  
CONSERVATION AND NATURAL RESOURCES  
CONSERVATION AND PARKS  
ENVIRONMENTAL ENFORCEMENT  
FORESTS, ARBORETS & WILDLIFE  
HABITAT AND SPECIES  
HAWAII LAND BOARD & RESERVE COMMISSION  
STATE LANDS  
STAFF STAFF

**STATE OF HAWAII**  
**DEPARTMENT OF LAND AND NATURAL RESOURCES**  
601 KAMOKILA BOULEVARD, ROOM 555  
KAPOLEI, HAWAII 96707

February 27, 2008

LOG NO: 2008-0325  
DOC NO: 0802E034  
Archaeology

ED  
✓cc: Scot Ezer, Principal, Haster & Fee Planners, Inc.  
Pacific Guardian Center, 733 Bishop Street, Suite 2590, Honolulu, Hawai'i 96813

Dear Mr. Morford:

**SUBJECT:** Chapter 6E-42 Historic Preservation Review –  
Environmental Impact Statement (EIS) Preparation Notice – Hawaiian Memorial  
Park Cemetery Expansion  
Kane'ohe Ahupua'a, Kane'ohe District, Island of O'ahu  
TMK: (1) 4-5-033-001

Thank you for the opportunity to comment on the aforementioned project, which we received on January 15, 2008. The proposed undertaking involves the expansion of the Hawaiian Memorial park and the development of a 20-unit residential subdivision.

At this time we are unable to comment on the potential effects the proposed undertaking may have on archaeological/cultural features and/or human burials/remains that may be located in the project area. A stated in the EIS Preparation Notice, an archaeological inventory survey and a cultural impact statement were conducted of the project area.

We are awaiting the submission of the archaeological inventory survey (AIS) report to our office and will provide comments on the Draft EIS, provided that we are able to review the AIS prior to the expiration of the Draft EIS comment period.

On a final note, we received a copy of a letter addressed to you from Elizabeth Lau, President of the Ko'olauipoko Hawaiian Civic Club, dated December 11, 2007. The letter states that features, which appear to be associated with Kawa'ewa'e Heiau, are located in the area immediately surrounding the heiau. We are anticipating that the archaeological inventory survey and the cultural impact assessment address the concerns of Ms. Lau as well as the concerns of other individuals for whom these sites/features have cultural significance.

May 23, 2008

Nancy McMahon  
Acting Archaeology Branch Chief  
State Historic Preservation Division  
601 Kamokila Blvd Room 555  
Kapolei, HI 96707

Dear Ms. McMahon:

**Environmental Impact Statement Preparation Notice**  
**Hawaiian Memorial Park Cemetery Expansion**  
**TMK (1) 4-5-33:1**  
**Kāne'ohe, O'ahu, Hawai'i**

Thank you for your letter dated February 27, 2008 (LOG NO: 2008-0325) providing comments on the Environmental Impact Statement (EIS) Preparation Notice for the above-referenced project. For your ease of reference, we have included your comments in the order they appear in your letter, followed by our responses:

1. At this time we are unable to comment on the potential effects on archaeological/cultural features and/or human burials/remains that may be located in the project area.

2. We are awaiting the submission of the Archaeological Inventory Survey (AIS) to our office and will provide comments on the DEIS.

Response: We note you are awaiting the submission of the AIS and will provide comments related to the AIS during the review of the Draft EIS.

3. We received a copy of a letter addressed to us from the Kō'olaupoko Hawaiian Civic Club that features that may be related to the Kawa'ewa'e Heiau are located in the project area. We anticipate the AIS and Cultural Impact Assessment will address these concerns.

Response: Section 4.9 of the Draft EIS will discuss the findings and recommendations of the AIS and similarly, Section 5.5 will address the Cultural Impact Assessment. In addition, these reports will be appended to the Draft EIS. We believe the Draft EIS will address the concerns of Ms. Lau and others, in regard to cultural significance of sites within the project area.

EIS

April 23, 2008

Mr. Jay Morford  
April 23, 2008  
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- (3) Construction & Maintenance (Paul Nakagawa, 543-7062). Although it does not appear that HECO has facilities within the proposed project expansion area, if it is found and determined that any existing facilities will be directly impacted by this project, HECO will need continued access for operation and maintenance purposes. Should relocation of or additional facilities be required, a formal request should be submitted and coordinated through appropriate HECO departments.

To coordinate HECO's continuing input in this project, I suggest dealing directly with the points of contact noted above.

Re: Hawaiian Memorial Park Cemetery Expansion  
Koolaupoko, Oahu (TMK: 4-5-033-001, por. 001)

Thank you for the opportunity to comment on this project. HECO has no objections at this time. We apologize for the lateness of our response and understand that the following comments from our Engineering and Construction & Maintenance and Departments may not appear in the draft EIS.

- (1) Engineering/Transmission & Distribution (Michelle Yoshioka, 543-7082). HECO has no existing facilities within the subject property. We appreciate your efforts to keep us apprised of the planning process. As the project progresses, please continue to keep us informed. We will be better able to evaluate any effects on our system facilities further along in the project's development. We request that development plans show all affected HECO facilities and address any conflicts between the proposed plans and HECO's existing facilities. Please forward the pre-final development plans to HECO for review.

Should it become necessary to relocate or redesign HECO's facilities, or to add new facilities, please submit a request in writing immediately upon that determination, and we will work with you so that construction of the project may proceed as smoothly as possible to minimize any delays in or impacts on the project schedule. HECO shall not be responsible for any delay or damage that may arise as a result of insufficient notice for relocation of our facilities. Please note that there may be costs associated with any relocation work, and that such costs may be borne by the requestor.

- (2) Engineering/Project Management (Kerstan Wong, 543-7059). In the event that new facilities are required to serve this project, your consultant should include a brief description and environmental analysis of such requirements in the draft/final EIS.

Sincerely,

Kirk S. Tomita  
Senior Environmental Scientist

cc: Mr. Laurence Lau (OEQC/DOH)  
Mr. Burt Satuwatari (LUC)  
Ms. Rachael Edinger (Helbert, et al.)  
M. Yoshioka/M. Lum  
K. Wong  
P. Nakagawa



May 23, 2008



**Kirk S. Tomita**  
Senior Environmental Scientist  
Hawaiian Electric Company, Inc.  
PO Box 2750  
Honolulu, HI 96840

Dear Mr. Tomita:

**Environmental Impact Statement Preparation Notice**  
**Hawaiian Memorial Park Cemetery Expansion**  
**TMK (1) 4-5-033:1**  
**Kāne ohe, O'ahu, Hawai'i**

Thank you for your letter dated April 23, 2008 providing comments on the Environmental Impact Statement (EIS) Preparation Notice for the above-referenced project. For your ease of reference, we have included your comments in the order they appear in your letter, followed by our responses:

1. HECO has no existing facilities within the subject property. Please continue to keep us apprised as the project progresses. We request that development plans show all affected HEKO facilities and address any conflicts between proposed plans and HEKO facilities. Please forward the pre-final development plans to HEKO for review.

**Response:** We note that the Petition Area does not contain any existing HEKO facilities. You will be listed as a consulted party for the EIS, and will receive a copy of the Draft EIS once it is available. Development plans will show all affected HEKO facilities and address any potential conflicts. In addition, pre-final development plans will be forwarded to HEKO for review.

2. In the event that new facilities are required to serve the project, the Draft and Final EIS should include a brief description and environmental analysis of such requirements.

**Response:** The Draft EIS will discuss probably impacts related to power in Section 6.6 including a brief description and environmental analysis.

3. Although it does not appear that HEKO has facilities within the proposed project expansion area, if it is found and determined that any existing

facilities will be directly impacted by the project, HEKO will need continued access for operation and maintenance purposes.

**Response:** If any existing HEKO facilities are found to be directly impacted by the Proposed Action, the Petitioner will allow HEKO continued access to them for operation and maintenance as needed.

We appreciate your participation in this review process. Your letter and this response will be appended to the Draft Environmental Impact Statement.

Sincerely,

**HELBER HASTERT & FEE, Planners**

Scott Ezer  
Principal

cc: Jay Morford, Hawaiian Memorial Life Plan, Ltd  
Mike Green, Clark & Green Associates  
Bert Sanuwatari, Land Use Commission, State of Hawai'i  
Office of Environmental Quality Control  
Laurence Lau, Department of Health  
Paul Nakagawa, HEKO  
Kerstan Wong, HEKO  
Michelle Yoshioka, HEKO