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DEPARTMENT OF ENVIRONMENTAL SERVICES,
CITY & COUNTY OF HONOLULU

BEFORE THE LAND USE COMMISSION

OF THE STATE OF HAWAI'I

In the Matter of the Petition of	)	
	)	Docket No. _____
DEPARTMENT OF ENVIRONMENTAL SERVICES, CITY & COUNTY OF HONOLULU	)	
	)	PETITION FOR LAND USE DISTRICT BOUNDARY AMENDMENT; VERIFICATION; EXHIBITS "1" - "32"; and CERTIFICATE OF SERVICE
To Amend the Agricultural Land Use District Boundary into the Urban Land Use District for Approximately 200.622 Acres of Land at Waimānalo Gulch, Hono'uli'uli, 'Ewa, O'ahu, Tax Map Key Nos. (1) 9-2-003:072 and 073	)	

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PETITION FOR LAND USE DISTRICT BOUNDARY AMENDMENT

COMES NOW, DEPARTMENT OF ENVIRONMENTAL SERVICES, CITY & COUNTY OF HONOLULU ("Petitioner"), whose principal place of business is 1000 Uluohia Street, Suite 308, Kapolei, Hawai'i 96707, by and through its attorneys, CARRIE K.S. OKINAGA, Corporation Counsel, and GARY Y. TAKEUCHI and JESSE K. SOUKI, Deputies Corporation Counsel, and respectfully requests the Land Use Commission of the State of Hawai'i (the "Commission"), to amend the land use district classification of certain lands, hereinafter described, consisting of approximately 200.622 acres of land from the Agricultural District to the Urban District. This land use district classification amendment ("boundary amendment") is being requested to allow expansion of the Waimānalo Gulch Sanitary Landfill ("WGSL" or the "Landfill").

Petitioner is concurrently submitting a petition for a new State Special Use Permit ("SUP") to the Planning Commission and Department of Planning and Permitting ("DPP"), City & County of Honolulu. One of the petitions, the instant petition or the application for a new SUP, may eventually be withdrawn, depending on timing.

The boundary amendment petition and the SUP application are being filed concurrently because both the boundary amendment and SUP processes may be used to permit the desired Landfill expansion. Further, in previous proceedings regarding Petitioner's prior request for a two-year extension for the current Landfill SUP, although some members of the Commission have raised concerns that a boundary amendment proceeding may be more appropriate if approvals for further expansion of the Landfill are requested, the Commission approved an extension of only eighteen months (to November 1, 2009). Because a boundary amendment proceeding is typically a longer process than an SUP proceeding, Petitioner is also

submitting the aforementioned new SUP application with the Planning Commission and DPP to maximize the likelihood that the necessary approvals are timely obtained for the Landfill expansion. As noted, depending on the timing of the approval processes, one of the two petitions may eventually be withdrawn.

In support of Petitioner's request for a boundary amendment, Petitioner provides the following information:

I. DESCRIPTION OF THE PROPERTY

The land included in this Petition consists of approximately 200.622 acres, which includes two tax map key ("TMK") parcels located at Waimānalo Gulch, Hono'uli'uli, 'Ewa District, City & County of Honolulu, Island of O'ahu, State of Hawai'i. The TMK numbers are as follows: (1) 9-2-003:072 ("Parcel 72"), which comprises 82.555 acres, and (1) 9-2-003:073 ("Parcel 73"), which comprises 118.067 acres. Parcels 72 and 73 (collectively, the "Property") are illustrated by the maps attached hereto as Exhibits "1" and "2."[1]

Further detail and description of the Property is contained in Petitioner's Final Environmental Impact Statement ("EIS") dated October 10, 2008, which is attached hereto as Exhibit "3." The Final EIS was accepted by DPP on October 13, 2008. See Exhibit "4."

II. STANDING

Petitioner has standing to file this Petition for a Land Use District Boundary Amendment pursuant to Section 205-4(a), Hawai'i Revised Statutes ("HRS"), and Section 15-15-46(2), Hawai'i Administrative Rules ("HAR"), which entitles county departments or agencies of the county in which the Property is situated to petition the Commission for a district boundary amendment. Petitioner is a county agency of the county in which the Property is situated.

[1] All exhibits referenced herein are incorporated in this Petition by reference.

In addition, Petitioner has standing under HAR § 15-15-46(3), which allows any person with a property interest in the property sought to be reclassified to file a petition for a boundary amendment. The Property is owned by the City & County of Honolulu, and is under the control of Petitioner.

III. AUTHORIZED REPRESENTATIVE

Eric S. Takamura, Ph.D., P.E., Director of Petitioner, and Corporation Counsel are authorized to represent Petitioner in its Petition for a Land Use District Boundary Amendment and the proceedings thereon pursuant to HAR § 15-15-35(b). Pursuant to HAR § 15-15-50(c)(2), all correspondence and communications regarding this Petition should be addressed to the following:

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IV. AUTHORITY FOR RELIEF SOUGHT

This petition is filed pursuant to HRS Chapter 205, HAR Title 15, Chapter 15, and any other applicable statutes and rules. The Commission is authorized to grant the relief sought herein pursuant to the provisions of HRS Chapter 205, and all applicable statutes and rules governing the Commission.

V. RECLASSIFICATION SOUGHT AND PRESENT USE OF THE PROPERTY

Petitioner respectfully requests that the Commission amend the present classification of the Property from the Agricultural District to the Urban District. The Property is presently located entirely in the Agricultural District. See Exhibit "5." The Property is zoned by the City & County of Honolulu as AG-2 (General Agriculture). See Exhibit "6."

Approximately 107.5 acres of the Property are presently used for the Landfill, and includes municipal solid waste ("MSW") and ash cells, operational and maintenance areas, internal roads and infrastructure. See Exhibits "7" and "8." The 107.5 acres are presently utilized pursuant to an SUP granted by the Commission in Docket No. SP87-362. The waste acceptance deadline of the SUP was recently extended by the Commission on March 14, 2008, to allow the Landfill to continue accepting waste until November 1, 2009, or until the approved area reaches its permitted capacity, whichever occurs first. Waste Management of Hawaii, Inc. ("WMH") is the operator of the Landfill.

The remaining approximately 92.5 acres of the Property are proposed for the lateral expansion of the Landfill. See Exhibit "8." Specifically, the 92.5 acres are proposed to be used for additional landfill cells, stockpiling of landfill cover material and aggregate, utilities including access roadways and drainage controls, landscaping, and related landfill associated purposes. See Exhibit "9."

VI. CONFORMANCE OF THE PROPOSED ACTION TO STANDARDS FOR DETERMINING THE BOUNDARIES OF THE URBAN DISTRICT

HAR § 15-15-18 sets forth the standard used by the Commission for determining Urban District boundaries. The proposed reclassification conforms to those standards as shown by the following analysis:

A. Lands Characterized by "City-Like" Concentrations of People, Structures, Streets, Urban Level of Services and Other Related Land Uses

The region of 'Ewa surrounding the Landfill is composed of a mix of multiple land uses including residential, resort, recreational, business, commercial, and industrial uses. See Exhibit "10." Other land uses including businesses, parks, schools, and other facilities also operate in the region. As shown in Exhibit "2," the Ko Olina and the Kai Lani developments are located directly across Farrington Highway from the Landfill. The Makaīwa Hills development will be located adjacent to the Landfill on the East, and the Hawaiian Electric Company ("HECO") Kahe Power Generating Station is adjacent to the Landfill on the West.

The development of the Landfill occurred in 1989 prior to the rapid growth currently occurring in the 'Ewa region. Surrounding land uses were largely limited to industrial activities including the James Campbell Industrial Park and the HECO Kahe Power Generating Station. Today, with the development of the adjoining Ko Olina Resort, Nānākuli Homesteads, Honokai Hale, Makakilo, Kapolei, and other subdivisions, the area has experienced major development and a population increase over time. Although the proposed project will require an expansion of use of the existing facility and require transformation of the existing Waimānalo Gulch into space that will be used for landfilling, such use will be limited by the remaining space that is available at the site. With the eventual closure of the Landfill,[2] the Property is expected to be reclaimed for other public purposes compatible with area surroundings. These uses may include, but are not limited to, open space for park and recreational activities not unlike the Kaka'ako Community Park, which once served as a landfill in Honolulu. This practice will seek to restore use of the land for a public purpose and benefit.

[2] See Exhibit 11 for the preliminary closure sequence.

B. Proximity to Centers of Trading and Employment Except Where the Development Would Generate New Centers of Trading and Employment

The Landfill is situated within the 'Ewa Development Plan ("DP") Area. The 'Ewa DP Area is the fastest growing region on O'ahu and has nearly tripled its population over the 30-year period from 1970 to 2000. This compares to a 39 percent growth rate for O'ahu as a whole during this same period.

Barbers Point NAS ("Kalaeloa"), with some 3,709 acres, was a major land use until closing in 1999. The airfield is now operated by the State Department of Transportation for general aviation, while the remainder of the Kalaeloa land is parceled among public and private users, including among others, the City & County of Honolulu, the Hawai'i National Guard, the State Department of Hawaiian Home Lands, the U.S. Coast Guard, and the U.S. Navy.

Plans to develop a "Second City" at Kapolei on the 'Ewa Plain responded in part to the problems associated with the concentration of activities in Honolulu, including traffic congestion, overtaxed infrastructure, and deteriorating urban spaces. Planning began in 1955, when Harland Bartholomew and Associates prepared the first 'Ewa region master plan for the Estate of James Campbell. The concept of a separate city emerged in 1974, and was officially sanctioned in 1977 when the Honolulu City Council approved the new General Plan with a Secondary Urban Center for O'ahu centered on the 'Ewa Plain. In 1986, the Estate proposed a detailed implementation plan for a city center, naming it the City of Kapolei. Since breaking ground in 1990, the region has been bustling.

Kapolei land uses include a large industrial complex, with areas for both heavy industry (in the 1,367-acre James Campbell Industrial Park) and light industry plus new technologies (in Kapolei Business Park) and areas for commercial and office development in the City of Kapolei urban center. A 2006 inventory of the Campbell Industrial Park showed there

were 251 businesses with about 4,500 workers. Approximately 85 percent of the parcels in the park are owned in fee by their tenants.

Kalaeloa Harbor located along the northern edge of the Campbell Industrial Park, was created in 1961 as a second harbor for O'ahu. South of the industrial area, about a mile offshore, are a buoy and pipeline designed to allow oil tankers to off-load their cargo without docking in the harbor. Steps are currently underway by Campbell Estate to construct a second industrial park at Kalaeloa Harbor. This industrial park would be built on a 332-acre parcel and construction is expected to begin in 2008 or 2009.

Over the years, residential areas developed along Farrington Highway and as of 1962, uphill in Makakilo. New residential development in Kapolei has been led by the State, as master developer of the Villages of Kapolei, beginning in the 1980's with its first Village, Kumu Iki. The Villages of Kapolei and adjoining developments have rivaled developments along Fort Weaver Road, to the east, and Mililani in Central O'ahu, as new residential areas emerged with aggressive growth through the last decade.

As noted above, the Property is located near the Ko Olina Resort which is a center of employment and tourism. Its coves provide recreational areas and frontage for hotels, and a 430-acre privately owned marina offers 330 full service slips for boats. Plans have called for as many as 8,700 housing units. These were planned with vacation markets in mind. Projects to date include a hotel, a time-share resort, and townhouse condominiums. One project, The Fairways at Ko Olina, was sold to the resident market, and newer projects have aimed at both second- and first- home buyers (The Coconut Plantation, Kai Lani, Ko Olina Kai). The newest project, the Beach Villas at Ko Olina, has 247 luxury units in beachside towers.

Paradise Cove, a private recreational facility providing luaus and entertainment on approximately 12 acres about half a mile southwest of the Landfill, is located on the shoreline adjacent to the Ko Olina Resort and serves guests of the resort, tourists with other accommodations on O'ahu and the neighbor islands, and the residents of O'ahu.

Finally, the Landfill's expansion will result in a net impact of the creation of approximately 651 direct, indirect and induced person-years[3] of employment.[4]

C. Availability of Basic Services such as Schools, Parks, Wastewater Systems, Solid Waste Disposal, Drainage, Water, Transportation Systems, Public Utilities, and Police and Fire Protection

Expansion of the Landfill will not affect the availability, nor will it increase the demand for schools or parks located in the region. The Landfill is currently served by an existing on-site wastewater disposal system which handles domestic flows from the administrative and service buildings of the site. The continuation of use of this existing system will be adequate for the proposed project based on no major increases in wastewater flows or demands for the use of the system.

WGSL is the only permitted municipal solid waste landfill on the Island of O'ahu accepting refuse from the eight districts of 'Ewa, Wai'anae, Ko'olaupoko, Ko'olauloa, the Primary Urban Center, East Honolulu, Central O'ahu, and the North Shore. The Landfill also accepts overflow refuse from other island landfills (private and military), residual ash and residue from the Honolulu Program of Waste Energy Recovery ("H-POWER") facility, and rubbish that exceeds the H-POWER facility's capacity to accept or process.

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[3] Person years of employment is the number of full time equivalent positions required to complete the work defined by the estimated cost of construction during the specific period of time.

[4] Direct jobs/earnings/taxes are immediately involved with construction of a project or with its operations. Indirect jobs/earnings/taxes are created as businesses directly involved with a project purchase goods and services in the local economy. Induced jobs/earnings/taxes are created as workers spend their income for goods and services.

Expansion of the Landfill will involve a review of the existing drainage system and its capacity to handle the planned area of expansion. The proposed surface water plan is attached hereto as Exhibit "12." Design, engineering and construction will be reviewed by appropriate regulatory agencies, such as the State Department of Health ("DOH").

The proposed project will be served by the existing Board of Water Supply ("BWS") main along Farrington Highway. No major new construction involving the use of new water supply will be required for the lateral expansion of the Landfill.

According to the traffic impact report performed for the project, WGSL is not expected to itself generate new major transportation demands along Farrington Highway. See Appendix I to Exhibit "3." The demand for use of the area roadways would most likely be from increasing development in the area.

Electrical power is currently provided by HECO through overhead service lines. Communications service is currently provided by Hawaiian Telecom. Use and operation of the planned area of lateral expansion will be coordinated with HECO to minimize the possibility of a disruption of service. The existing power and communications facilities are expected to be sufficient for the proposed project. No adverse impacts are anticipated.

The current level of police and fire service provided to WGSL is expected to be sufficient. Petitioner and WMH will maintain fire apparatus access throughout the site to ensure that fire fighting vehicles and equipment are capable of mobilizing to all locations.

D. Sufficient Reserve Areas for Foreseeable Urban Growth

The Property is located in the 'Ewa district, an area of existing and planned residential development. The continued use of the Property as a landfill is not expected to affect

reserve areas for foreseeable urban growth, as set forth in the 'Ewa Development Plan, which is based upon growth patterns analyzed in the City's General Plan.

E. Land with Satisfactory Topography and Drainage, and Reasonably Free from the Danger of Any Flood, Tsunami, Unstable Soil Condition and other Adverse Environmental Effects

The Property begins at the north side of Farrington Highway just southeast of Kahe Point and extends approximately 1.2 miles inland up Waimānalo Gulch. The elevation of the Property at the southern end is approximately 50 to 70 feet above mean sea level ("msl") and rises to approximately 990 feet above msl at the northern end. Terrain on the lower end of the site slopes upward at about 8 percent, increasing to a maximum of approximately 18 percent on the upper end.

Relative elevations between the valley floor and the tops of the adjacent ridges range from about 60 feet to 240 feet. Waimānalo Gulch is approximately 1,000 feet wide from ridge to ridge at its widest point, and is about 500 feet wide at its narrowest point (near the confluence of the upstream tributaries). Site topography of the Property is shown on Exhibit "8."

Since construction of the Landfill in 1989, major changes have modified the gulch. This has included excavation and grading to construct landfill cells, access roadways, drainage control features, and building structures to support administration, operation and management of the site. These prior activities were primarily completed in the forward and eastern portions of the Landfill closest to the adjoining Farrington Highway.

The Landfill has been in operation for approximately 19 years and has been subject to ongoing technical studies and evaluations by independent technical consultants for the topographic, geologic and soils resources of the site to ascertain the performance and

environmental safety of the facility. These studies and evaluations have been used to improve the capacity, capability, and safe use of the site for a landfill.

The expansion project will change the topography of the site. The final design will be modified based on maintaining the stability of all cut slopes and will be reviewed by licensed professionals during construction. All slopes will be graded to meet required factors of safety and work will be done in accordance with all OSHA requirements. DOH engineers and staff are expected to review all aspects of the construction during the permit review and while construction is in progress.

The Federal Emergency Management Agency Flood Insurance Rate Map identifies the Property as within "Zone D," an area in which flood hazards are undetermined, but possible. See Exhibit "13."

According to the O'ahu Civil Defense Agency, the evacuation boundary for the project area runs along Farrington Highway. The location of the project site mauka of the highway is considered to be safe from wave action and is not identified as a location subject to inundation by a tsunami.

Drainage controls to handle storms have been implemented for the existing site. Future controls will be designed by the Petitioner and WMH to be consistent with the requirements of the State and City & County of Honolulu. See Exhibit "12." The measures are designed to reduce the potential for loss of soils, MSW, and ash due to a hurricane or related heavy storm.

Seismic risk at the project site is minimal. As is the case with the design of the current sanitary landfill, the proposed area of lateral expansion will meet the EPA Subtitle D (40 CFR Part 258) standard for stability.

F. Land Contiguous with Existing Urban Areas Shall be Given More Consideration than Non-Contiguous Land, and Particularly when Indicated for Future Urban Use on State and County General Plans

The Property is contiguous with existing urban areas. As shown on Exhibit "5," the Property is surrounded on three sides by land within the Urban District, and the land mauka of the Property is within the Agricultural District. Because the Property is contiguous with existing urban areas, it should be given due consideration for reclassification. In addition, the Property is consistent with State and County General Plans as described in the next section.

G. Lands in Appropriate Locations for New Urban Concentrations and Consideration to Areas of Urban Growth as Shown on State and County General Plans

1. Hawai'i State Plan

The proposed project maintains consistency with the provisions of the Hawai'i State Plan as follows:

> **Section 226-6(b) To achieve the general economic objectives, it shall be the policy of this State to:... (14) Promote and protect intangible resources in Hawaii, such as scenic beauty and the aloha spirit, which are vital to a healthy economy...**

The proposed project provides for the safe and effective disposal of municipal solid waste for all the communities of O'ahu. This waste, if not properly managed, could affect O'ahu's islandwide "... scenic beauty and the aloha spirit, which are vital to a healthy economy."

> **Section 226-11(b) To achieve the land-based, shoreline, and marine resources objectives, it shall be the policy of this State to: (1) Exercise an overall conservation ethic in the use of Hawaii's natural resources...**

The proposed project is based on the use of an existing City-owned facility and is an effort to conserve the limited and precious land resources of O'ahu. Conservation practices

are supported through the promotion of recycling and the generation of energy through H-POWER. The Landfill is the only permitted repository for the residue and ash resulting from H-POWER operations. Future plans also call for the use of landfill gas to one day be used in the generation of electricity.

> **Section 226-11(b) To achieve the land-based, shoreline, and marine resources objectives, it shall be the policy of this State to:... (2) Ensure compatibility between land-based and water-based activities and natural resources and ecological systems. (3) Take into account the physical attributes of areas when planning and designing activities and facilities. (4) Manage natural resources and environs to encourage their beneficial and multiple use without generating costly or irreparable environmental damage. (5) Consider multiple uses in watershed areas, provided such uses do not detrimentally affect water quality and recharge functions. (6) Encourage the protection of rare or endangered plant and animal species and habitats native to Hawai'i... (8) Pursue compatible relationships among activities, facilities, and natural resources...**

Factors taken into account in the assessment of WGSL include: a relatively dry climate; the absence of drinking/potable groundwater resources that could be adversely affected by a landfill; and the absence of known threatened or endangered species. Protection against potential "costly or irreparable environmental damage" will involve the use of mitigative measures and practices.

There is limited space available for facilities such as a landfill due to Federal and State requirements. The Final EIS proposes mitigative measures and other practices that reflect the Petitioner and WMH's commitment for a well run facility that avoids or minimizes the potential for adverse effects.

> **Section 226-12 (b) To achieve the scenic, natural beauty, and historic resources objective, it shall be the policy of this State to: (1) Promote the preservation and restoration of significant natural and historic resources... (3) Promote the preservation**

of views and vistas to enhance the visual and aesthetic enjoyment of mountains, ocean, scenic landscapes, and other natural features. (4) Protect those special areas, structures, and elements that are an integral and functional part of Hawaii's ethnic and cultural heritage. (5) Encourage the design of developments and activities that complement the natural beauty of the islands.

The preservation and restoration of natural and historic resources has been addressed through special studies of flora, fauna, archaeological, and cultural resources, and through the development of mitigative measures. According to special studies conducted as a part of the EIS process, no known threatened or endangered species were observed at the site. See Appendices E, F and L to Exhibit "3."

A cultural impact assessment and archaeological inventory study were also conducted as a part of the EIS process. See Appendices G and H to Exhibit "3." An existing archaeological site was found in the form of three stone uprights along the southwestern edge of the Property. See Exhibits "14," "15," "16" and "17." To address this discovery, coordination for an appropriate preservation plan is in progress. Petitioner is working with the State Historic Preservation Division ("SHPD") to provide appropriate treatment. The Petitioner will comply with all required provisions of Chapter 6E, HRS, and other provisions of law governing archaeological preservation and protection.

View impacts involve mauka views toward the Property. While it is not possible to shield from view the location and features of the entirety of WGSL, the potential for visual impacts during operation of the Landfill will be minimized and mitigated with vegetative controls including the use of hydromulching, and plantings of grass, dryland shrubs, and trees, as provided in the project's landscaping plan.

> **Section 226-14 Objective and policies for facility systems--in general. (a) Planning for the State's facility systems in general shall be directed towards achievement of the objective of water, transportation, waste disposal, and energy and telecommunication systems that support statewide social, economic, and physical objectives. (b) To achieve the general facility systems objective, it shall be the policy of this State to: (1) Accommodate the needs of Hawaii's people through coordination of facility systems and capital improvement priorities in consonance with state and county plans...**

The proposed project represents a major capital project necessary for the disposal of MSW and refuse on O'ahu. The project will serve all of O'ahu's residents and visitors and is an essential part of the City & County of Honolulu's refuse management system. Having a landfill for waste disposal is a necessity. The WGSL is a valuable resource for O'ahu as there are no other permitted municipal solid waste landfills on O'ahu.

> **Section 226-14 (b) To achieve the general facility systems objective, it shall be the policy of this State to:... (2) Encourage flexibility in the design and development of facility systems to promote prudent use of resources and accommodate changing public demands and priorities...**

The proposed project will allow flexibility in the development and adoption of future initiatives that will reduce dependency on landfills: (1) the future adoption of new technologies will require sufficient time for operational viability; (2) there are no existing refuse technologies that do not themselves result in the generation of some refuse that cannot be further recovered, recycled, or otherwise reused;[5] (3) any reasonable, cost-effective effort to reduce the volume of refuse being landfilled would benefit O'ahu through an extension of the life of the Landfill, and landfill capacity that is not used would forestall the need to seek another landfill location; and (4) the Landfill serves as a public resource in the event of a man-made disaster, or a natural disaster such as a hurricane, earthquake or tsunami. A location for the disposal of debris

[5] For these forms of waste, a landfill is the most viable method of disposal.

resulting from a man-made or natural disaster would be required to meet public health and safety requirements during recovery.

> **Section 226-14 (b) To achieve the general facility systems objective, it shall be the policy of this State to:... (3) Ensure that required facility systems can be supported within resource capacities and at reasonable cost to the user...**

The proposed project represents the effort to expand an existing public facility that is owned by the City & County of Honolulu. The expansion will be supported within the existing resource capacity of the site and at reasonable taxpayer cost.

> **Section 226-15 Objectives and policies for facility systems--solid and liquid wastes. (a) Planning for the State's facility systems with regard to solid and liquid wastes shall be directed towards the achievement of the following objectives: (1) Maintenance of basic public health and sanitation standards relating to treatment and disposal of solid and liquid wastes... (b) To achieve solid and liquid waste objectives, it shall be the policy of this State to:... (2) Promote re-use and recycling to reduce solid and liquid wastes and employ a conservation ethic. (3) Promote research to develop more efficient and economical treatment and disposal of solid and liquid wastes.**

The proposed project will facilitate the maintenance of public health and sanitation standards with regard to the disposal of MSW and refuse. Although the proposed project does not in itself involve recycling, Petitioner, through its Integrated Solid Waste Management Plan ("ISWMP") identifies recycling and materials recovery efforts to reduce O'ahu's overall dependency on the need for landfills.

Petitioner has promoted the investigation and adoption of technology based methods that have proven to be efficient and economic in the reduction and treatment of solid waste. Examples include a sewage sludge digester facility and efforts to expand H-POWER.

Section 226-104 (b) Priority guidelines for regional growth distribution and land resource utilization: (2) Make available marginal or non-essential agricultural lands for appropriate urban uses while maintaining agricultural lands of importance in the agricultural district.

The proposed project involves the use of agricultural land that has not been classified by the Agricultural Lands of Importance to the State of Hawai'i ("ALISH") system. See Exhibit "18." The non-essential agricultural nature of the land can be considered as supporting an appropriate urban use that would allow for the maintenance of other, more important agricultural lands.

Additionally, the 'Ewa DP designated the Property for urban use. Thus, as a longstanding landfill, the Property is considered non-essential for agricultural purposes.

Section 226-104 (b) Priority guidelines for regional growth distribution and land resource utilization:... (9) Direct future urban development away from critical environmental areas or impose mitigating measures so that negative impacts on the environment would be minimized... (12) Utilize Hawaii's limited land resources wisely, providing adequate land to accommodate projected population and economic growth needs while ensuring the protection of the environment and the availability of the shoreline, conservation lands, and other limited resources for future generations... (13) Protect and enhance Hawaii's shoreline, open spaces, and scenic resources.

The proposed project has been evaluated with regard to the potential for adverse effects to critical environmental features or habitat. There are no known threatened or endangered species present and as appropriate, mitigative measures are proposed to minimize, mitigate, or otherwise reduce the potential for adverse environmental impacts. WGSL has the potential to continue to support O'ahu's refuse disposal requirements for the next approximately 15 years. This use would reduce the need to use of other locations until such time that the present site has reached capacity.

2. City & County of Honolulu General Plan

The proposed project is consistent with the following General Plan objectives and policies:

I. Population

...

Objective B: To plan for future population growth. Policy 1: Allocate efficiently the money and resources of the City and County in order to meet the needs of Oahu's anticipated future population. Policy 2: Provide adequate support facilities to accommodate future growth in the number of visitors to Oahu.

Although the proposed project does not directly influence future population growth, it represents an important public facility serving the island of O'ahu by providing a location and means for the disposal of municipal solid waste. In this regard the project is a necessary use of resources to meet future population needs and growth in the number of visitors.

III. Natural Environment

Objective A: To protect and preserve the natural environment; Policy 1: Protect Oahu's natural environment, especially the shoreline, valleys, and ridges, from incompatible development; Policy 2: Seek the restoration of environmentally damaged areas and natural resources; and Policy 4: Require development projects to give due consideration to natural features such as slope, flood and erosion hazards, water- recharge areas, distinctive land forms, and existing vegetation.

The proposed project will require an expansion of use and require transformation of the existing site into space that will be used for landfilling. With the eventual closure of the site, the land is expected to be reclaimed for other purposes that may be considered compatible with the surrounding areas, such as park space, a public purpose and benefit. The preliminary closure sequence is attached hereto as Exhibit "11."

V. Transportation & Utilities

...

Objective B: To meet the needs of the people of Oahu for an adequate supply of water and for environmentally sound systems of waste disposal... Policy 3: Encourage the development of new technology which will reduce the cost of providing water and the cost of waste disposal. Policy 4: Encourage a lowering of the per-capita consumption of water and the per-capita production of waste. Policy 5: Provide safe, efficient, and environmentally sensitive waste-collection and waste-disposal services. Policy 6: Support programs to recover resources from solid-waste and recycle wastewater. Policy 7: Require the safe disposal of hazardous waste.

The proposed project is designed to serve as an environmentally sound method for the disposal of MSW and ash. New technology based solutions will continue to be evaluated by Petitioner. At this time however, there are no new technologies with proven reliability and performance or that would completely eliminate the generation of waste by-products that would require disposal. See Appendix K to Exhibit "3."

The recovery of resources from solid waste is already occurring through the recycling of waste materials into energy through the Petitioner's H-POWER facility. Plans for the expansion of the H-POWER have been proposed by the Petitioner. It is possible that in the future, as new and emerging technologies demonstrate feasibility of application for the City & County of Honolulu, such technologies will be adopted. At this time, however, there are no proven feasible alternatives that could by themselves eliminate the need for landfilling.

WGSL does not accept hazardous waste.

VIII. Public Safety

...

Objective B: To protect the people of Oahu and their property against natural disasters and other emergencies, traffic and fire

hazards, and unsafe conditions... Policy 2: Require all developments in areas subject to floods and tsunamis to be located and constructed in a manner that will not create any health or safety hazard... Policy 8: Provide adequate search and rescue and disaster response services...

In the event of a public emergency involving a man-made disaster or a natural disaster such as a hurricane, tsunami or earthquake, WGSL will serve as a repository for disaster debris. This use will promote public safety and public health through the proper disposal of debris and waste that could otherwise accumulate in populated areas.

3. City & County of Honolulu 'Ewa Development Plan

The current 1997 'Ewa DP's Public Facilities Map depicts a landfill symbol in the location of the Property. See Exhibit "19." The 'Ewa DP discusses the analysis and recommendations of the ISWMP, prepared by the Department of Public Works and last adopted by the Honolulu City Council in 1995. The 'Ewa DP states that the ISWMP identified the Waimānalo Gulch as having potential for expansion; however, siting and/or expansion of sanitary landfills should be analyzed and approved based on islandwide studies and siting evaluations.

The proposed project will be evaluated for consistency with the updated 'Ewa DP, as appropriate, upon completion of the 'Ewa DP five-year review. The Public Review Draft of the 'Ewa DP (October 2008) is available on DPP's website at: http://honoluludpp.org/Planning/ewa/ewa5yr/PublicReviewDraft/EwaDPPublicReviewDraft_Oct08.pdf. As with the current 'Ewa DP, the Public Review Draft of the 'Ewa DP Public Facilities map depicts a landfill symbol for the Property. See Exhibit "20."

A public review workshop was held on Saturday, October 25, 2008, and the deadline for comments on the Public Review Draft is January 30, 2009. See

http://honoluludpp.org/Planning/ewa/ewa5yr/PublicReviewDraft/EwaDPStatusRpt_Oct08.pdf. The Petitioner will submit comments, as necessary.

H. May Include Lands Which Do Not Conform to the Standards in Paragraphs (1) to (5) of HAR § 15-15-18: (a) When Surrounded by or Adjacent to Existing Urban Development; and (b) Only When Those Land Represent a Minor Portion of this District

While Petitioner believes the Property conforms with the standards in paragraphs (1) to (5) of HAR § 15-15-18, it is important to note that the Property is surrounded by existing urban developments such as the HECO Kahe Power Generating Station to the Northwest, the Makaīwa Hills development to the East, and the Kai Lani and Ko Olina developments to the South. See Exhibits "2" and "10."

The impacts on agriculture are not significant given that (1) the Property represents a very minor percentage of the estimated 128,810 acres of land in the Agricultural District on O'ahu, and of the estimated 1,930,224 acres of land in the Agricultural District in the State of Hawai'i;[6] (2) the Property is not suited for agricultural production because of its steep slopes and mostly rocky soil;[7] and (3) the Property has a relatively dry climate.

I. Shall Not Include Lands, the Urbanization of Which Will Contribute Toward Scattered Spot Urban Development, Necessitating Unreasonable Investment in Public Infrastructure or Support Services

Urbanization of the Property will not contribute to scattered spot urban development given the surrounding urban development. The proposed use will not necessitate an unreasonable amount of new public investment in infrastructure facilities or public service since a portion of the Property has been used for a landfill for nearly 20 years. While the proposed project will involve the development of support infrastructure including drainage,

[6] See Exhibit "21."

[7] See Exhibit "22."

access roadways, landfill gas and leachate collection systems, perimeter monitoring systems, and other related landfill features, such investment is not unreasonable since the Property will support the only MSW landfill for the entire island of O'ahu.

J. May Include Lands with a General Slope of Twenty Percent or More if the Commission Finds that those Lands are Desirable and Suitable for Urban Purposes and that the Design and Construction Controls, as Adopted by any Federal, State, or County Agency, are Adequate to Protect the Public Health, Welfare and Safety, and the Public's Interests in the Aesthetic Quality of the Landscape

The Property begins at the north side of Farrington Highway just southeast of Kahe Point and extends approximately 1.2 miles inland up Waimānalo Gulch. The elevation of the Property at the southern end is approximately 50 to 70 feet above msl and rises to approximately 990 feet above msl at the northern end. Terrain on the lower end of the Property slopes upward at about 8 percent, increasing to a maximum of approximately 18 percent on the upper end. Thus, the general slope of the Property is less than 20 percent.

Nevertheless, the final design of the Landfill will be based on maintaining the stability of all cut slopes and will be reviewed by registered professionals during construction. All slopes will be graded to meet required factors of safety and work will be done in accordance with all OSHA requirements. DOH engineers and staff are expected to review all aspects of the construction during the permit review and while construction is in progress.

VII. PETITIONER'S INTEREST IN PROPERTY

The Property is owned by the City & County of Honolulu, and under control of Petitioner.[8] See Exhibits "23" and "24."

[8] Section 6-803(e) of the Revised Charter of the City & County of Honolulu 1973 (2000 ed.) provides that the Director of Petitioner shall "Develop and administer solid waste collection, processing and disposal systems." Pursuant to this section, Petitioner oversees the Landfill.

VIII. PROPOSED USE

The Landfill is an essential and necessary City & County of Honolulu facility that provides municipal solid waste disposal for all the communities of O'ahu. Refuse that is disposed of at the Landfill includes MSW; recycling residue; and H-POWER ash and residue. WGSL has been in operation since 1989 and has capacity remaining with the unused 92.5 acres of the approximately 200.622-acre Property for an estimated minimum life of approximately 15 years. This will extend the use of the site beyond November 1, 2009, the date on which the current amended SUP prohibits further acceptance of waste at WGSL.

In addition to the expansion of the area of landfilling, the proposed project will involve the development of landfill associated support infrastructure (e.g., drainage, access roadways, landfill gas and leachate collection and monitoring systems, stockpile sites and other related features), a public drop off center, and a landfill gas-to-energy ("LFGTE") system.

IX. DESCRIPTION OF PROPERTY AND SURROUNDING AREAS

The Landfill is located approximately 15 miles northwest of Honolulu International Airport and two miles southeast of Nānākuli. The Property begins at the north side of Farrington Highway just southeast of Kahe Point and extends approximately 1.2 miles inland up Waimānalo Gulch. See Exhibits "1" and "10."

The Landfill became operational in September 1989, and the Property comprises an area of approximately 200.622 acres. Approximately 107.5 acres of the site are comprised of used landfill area, operational and maintenance area, internal roadway area, and the current permitted space in use for landfill operations. The remaining acreage of the site comprising 92.5 acres is proposed to be used for the future expansion of the site, but is currently vacant. A breakdown of this site acreage is provided below:

Existing and Proposed Use of Waimānalo Gulch Property

Acreage	Description
60.5	Existing Landfill Area
20	Administrative and Operational Support
6	Roadway and Drainage Area Improvements
86.5	Subtotal
21	2003 Expansion Area
107.5	Subtotal
92.5	2008 Planned Expansion Area (Approximately ~37 Acres Active Landfill Cells Plus Related Uses, e.g., roads and infrastructure)
200	Total Approximate Area of Site

The 92.5 acre area is proposed for uses that include construction of landfill cells; earthwork to support construction of an access roadway, drainage controls, berms and stability slopes; and excavation, processing and stockpiling of cover material and aggregate. The proposed expansion project will be subject to a minimum 100-foot buffer inside of the perimeter of the Property boundary to reduce the potential for impacts to neighboring properties. The buffer is intended to remain in an undeveloped condition.

According to the ALISH system, the subject site is not classified as one of three types of agricultural land: Prime Agricultural Land, Unique Agricultural Land and Other Important Agricultural Lands. See Exhibit "18."

The University of Hawai'i Land Study Bureau's Detailed Classification has classified the productivity of the land underlying the proposed project as "E." This classification system rates lands on a scale of "A" to "E," reflecting land productivity characteristics. Lands

designated "A" are considered to be of highest productivity, with "E" rated lands ranked the lowest.

The Federal Emergency Management Agency Flood Insurance Rate Map identifies the Property as within "Zone D," an area in which flood hazards are undetermined, but possible. See Exhibit "13." The West Side Drainage Diversion Channel will be designed to pass run-on in accordance with applicable standards. Run-on from areas outside the footprint on the east side of the Landfill is relatively minor and will be carried along with run-off from the Landfill via a buried HDPE pipeline to the existing sedimentation basin. See Exhibit "12."

X. IMPACTS ON RESOURCES OF THE AREA

A. Environment

The proposed expansion of the Landfill is not expected to have significant adverse impacts on the environment with appropriate mitigation measures, as described in Exhibit "3."

B. Agriculture

Approximately 200.622 acres of land would be removed from the Agricultural District. This acreage, however, represents a very minor portion of the Agricultural District on the island of O'ahu and in the State of Hawai'i. See Exhibit "21." Further, given the Property's continuous use as a landfill for the past 19 years and its proximity to existing residential and industrial uses, development of the Property for the proposed expansion is reasonable, appropriate and will not significantly impact agriculture on the island of O'ahu.

C. Recreational

The Property is not located on the coastline or shoreline and does not involve the use of coastal resources. The site is not in a location suitable for the development of new

shoreline recreational opportunities. However, with the eventual reclamation of the site, future recreational park opportunities may one day become available.

D. Cultural and Historic

An Archaeological Inventory Survey ("AIS") of the proposed expansion area was conducted by Cultural Surveys Hawai'i ("CSH") in 2007 and 2008. See Appendix G to Exhibit "3." The purpose of the AIS was to document all historic properties within the 92.5-acre area of the proposed project known as the Area of Potential Effect. The inspection of the site identified one historic property: State Inventory of Historic Properties ("SIHP") # 50-80-12-6903. The site is of pre-contact origin, and consists of three large upright boulders potentially utilized as trail or boundary markers. See Exhibits "14," "15," "16" and "17."

According to CSH the consultation effort determined no clear consensus regarding the function of the three stone uprights. However, all of the cultural consultants indicated that the stones were significant and that they were likely used by traditional Native Hawaiian cultural practitioners in the past. All cultural consultants also felt the stones should be preserved in place if at all possible because their significance and function are likely tied to their current location. If preservation in place is not an option, most were in favor of temporary relocation to the Battery Arizona site, with movement of the stones back to as near as possible to their original location once the Landfill is closed. See Exhibit "25."

A Cultural Impact Assessment ("CIA") of the proposed project site was conducted by CSH in 2007 and 2008. See Appendix H to Exhibit "3." The purpose of the CIA is to consider the effects the proposed project may have on traditional cultural practices and resources.

In addition to previous use activities, the importation of landfill material since 1989 has most likely further eliminated any historic properties and plant resources related to Hawaiian cultural practices and beliefs that may have been present at the project site. The presence of the Landfill over the last fifteen years has already precluded any traditionally established access to *mauka* areas through Waimānalo Gulch.

The ʻili of Waimānalo has been described by community participants in the CIA as a sacred area of great cultural importance. Community participants express concern about the Huakaʻi Pō Kāne (Night Marchers). According to kūpuna, the path of the Night Marchers in this area runs from mauka to makai. Hawaiian cultural belief is that these paths are significant and must not be impeded for fear of retribution from spirits of the departed.

E. Scenic

The majority of the proposed project will not be visible from most vantage points along the Farrington Highway in the Waiʻanae or Kahe Point directions. The existing Kahe Point ridge line provides some screening of views of the Landfill, including the proposed expansion area. While some potential view plane impacts are anticipated, mitigation measures have been proposed to eliminate or reduce the potential for adverse impacts.

The general area that fronts Waimānalo Gulch (i.e., from the Kai Lani subdivision to Ko Olina Beach Club) is expected to be potentially impacted because some activities can be seen from areas within this "view corridor." Mitigation to reduce visual impacts has been initially implemented. Further landscaping will be implemented to address the dry conditions of the site that have hindered prior hydromulching and plantings. Landscaping and the further use of irrigation will be used to promote vegetative growth similar to that found on the adjoining hillsides.

Views of refuse and construction vehicles in transit to and from the active areas of landfilling will be addressed with carefully located interior roads using the terrain to screen the vehicles. Carefully placed landscaping elements including trees or other tall vegetation will also be implemented.

Views toward the Landfill along Farrington Highway, from the Wai'anae side of the Landfill, will be addressed with landscaping treatment, as appropriate, that will include the use of landscaping elements along the western ridge of WGSL adjoining the Kahe Power Generating Station. This will require careful placement of landscaping elements to maintain views toward the ridgeline to respect the Huaka'i Pō Kāne (procession of the night marchers) view plane.

As much as possible, native trees, shrubs and groundcover will be integrated into the landscaping plan.

F. Flora and Fauna

The results of the botanical survey indicate no special concerns or legal constraints related to botanical resources at Waimānalo Gulch. No adverse effects to the flora resources at WGSL are anticipated.

Native and migratory birds were not observed at the Property. There are no unique habitats. Similar areas occur all along the leeward side of O'ahu. No adverse effects to the faunal resources at WGSL are anticipated.

G. Groundwater

There are no drinking/potable groundwater resources that could be adversely affected by the Landfill. Waimānalo Gulch is located in the Makaīwa Aquifer System as defined by the Commission on Water Resource Management Water Resource Protection Plan, Volume

II. Although no groundwater is developed in the Makaīwa Aquifer System and near Waimānalo Gulch, several monitoring wells and test holes have been drilled in the lower part of the valley and neighboring Kahe Point Area. See Exhibit "26."

Groundwater found below and surrounding the Landfill is not designated as a groundwater recharge area by the City & County of Honolulu BWS. Exhibit "27" indicates areas identified by BWS which may be acceptable for landfill development. The proposed expansion area and existing Landfill site are outside of the groundwater recharge zone, in the area designated as the "Pass Zone." The Pass Zone is an area where sanitary landfills and shallow waste disposal systems are generally permitted.

The Property is also consistent with DOH's Underground Injection Control ("UIC") program established in 1984. The purpose of the program is to protect the State's drinking/potable groundwater resources from pollution by subsurface wastewater disposal. The program regulations are accompanied by UIC maps which demarcate a boundary line known as the "UIC Line." See Exhibit "28." Lands that are makai of this line are not restricted from subsurface disposal by underground injection. The Property is located makai of the UIC line.

There is potential for leachate from the Landfill entering brackish groundwater in the area of the Landfill. Mitigation to address this issue is currently provided through the existing Leachate Collection and Removal System ("LCRS") design. As required, the LCRS system design will be modified to ensure against the potential for adverse effects to groundwater and hydrogeological resources of the site.

H. Air Quality

Air quality is not anticipated to be adversely affected by the project. The following have been evaluated:

Dust - Airborne dust will be the primary air pollutant. To reduce and mitigate the potential for the release of fugitive dust preventative measures will be practiced by the operator in accordance with the provisions of HAR, Chapter 11-60.1-33, Fugitive Dust. The generation of adverse dust levels from controlled blasting is not anticipated. This is based on the limited yield of the charge, subsurface placement, and nature of the controlled blasting which is designed to fracture rock and not displace earthen material.

Odor - Odors associated with the proposed project include vehicular odor, odors from the hauling of waste to the Landfill, and odors as a result of landfill gas emissions.

Vehicular Odors and Exhausts - Exhaust emissions are mitigated by commercial and private vehicle operators' compliance with HAR, Chapter 60-1, Air Pollution Control, Subpart 1.34, Motor Vehicles. The site operator will also ensure that all vehicles and equipment associated with its landfill operations are properly muffled and maintained in good operating condition.

Odors from Waste Hauling - Potential sources of odor include the delivery of refuse vehicles containing putrescible waste, sewage solids that cannot be further processed by wastewater treatment plants, and other types of waste. On site odor management will involve: (1) refuse vehicle processing and control, (2) limiting the size of the daily disposal area, and (3) use of an odor neutralizing system.

Solid sewage sludge from the Sand Island Wastewater Treatment Plant ("SIWWTP") that was previously disposed of at WGSL is currently undergoing treatment in a waste digester that has been installed at the SIWWTP. This system is fully operational and has further decreased this source of odorous waste from the Landfill by significantly decreasing the disposal of treated sludge solids.

Stabilized, dewatered sludge from the Hono'uli'uli, Wai'anae, Kailua Regional, and Kahuku Wastewater Treatment Plants, as well as from private sources, is landfilled at WGSL. Petitioner is in the process of seeking beneficial uses for the stabilized, dewatering sludge from the Hono'uli'uli WWTP.

Landfill Gas Associated Odor - The generation of landfill gas is controlled by use of a landfill gas collection and control system that was installed in 2005. The system is operating in accordance with requirements and no adverse effects due to the performance of the system to address landfill gas associated odor are anticipated.

Landfill Associated Gases - Landfill gases at WGSL are monitored in compliance with RCRA Subtitle D regulations, HAR Chapter 11-58, and the Landfill's Solid Waste Permit (No. LF-0054-02). The monitoring regularly assesses the Landfill and requires an appropriate response to address any exceedances in allowable standards. DOH may also establish other requirements. No adverse effects from landfill associated gases including methane, hydrogen, and other potential emissions are anticipated.

I. Acoustic Characteristics

The potential for adverse effects as a result of noise generated by the proposed project is not anticipated. The following have ben evaluated:

Construction Vehicles and Equipment - Vehicles and equipment will produce noise. Mitigation of short-term potential construction impacts will involve compliance with the provisions of HAR Chapter 11-43, Community Noise Control. All internal combustion powered vehicles and equipment will be equipped with mufflers or other noise attenuation devices as required.

Construction Activity - Noise associated with construction activities are not anticipated to result in adverse effects to the surrounding area and region. Portions of the work that may affect the adjoining Makaīwa Gulch and the future planned Makaīwa Hills development will be buffered by a ridge separating the two gulches. Other practices will be employed by WMH in coordination with the developers of Makaīwa Hills.

Rock Crushing - Rocks and boulders too large for use will be reduced in size with a rock crusher. Potential impacts include the generation of noise and dust, and visual impacts that could result if views of rock crushing equipment and machinery are readily visible from across the Farrington Highway and coastal shoreline.

Generation of noise will be within a relatively isolated portion of Waimānalo Gulch. The ridge between Waimānalo Gulch and Makaīwa Gulch will also serve to help to reduce potential noise impacts from the planned future Makaīwa Hills development. Other mitigation includes the scheduling of rock crushing only during normal operating hours.

Controlled Blasting - Blasting will involve not more than one blast per day on an infrequent basis consisting of approximately one to three days per week, taking place toward the end of the work day. Potential noise effects are not expected to affect the Makaīwa Hills development or surrounding community along Farrington Highway.

XI. AVAILABILITY OR ADEQUACY OF PUBLIC SERVICES OR FACITILITES

As discussed above in Section VI.C., expansion of the Landfill is not expected to impact the availability or adequacy of public services and facilities. The Landfill has been in operation since 1989. Denial of this Petition, without some other means of permitting the continued use of the Landfill, will negatively affect the availability of solid waste disposal for the entire island.

XII. LOCATION OF THE PROPOSED USE IN RELATION TO ADJACENT LAND USE DISTRICTS AND ANY CENTERS OF TRADING AND EMPLOYMENT

As mentioned above in Section VI.F., the Property is surrounded on three sides by land in the Urban District. See Exhibit "5." The Ko Olina and the Kai Lani developments are located within the Urban District and directly across Farrington Highway from the Landfill. The Makaīwa Hills development is located within the Urban District and will be located adjacent to the Landfill on the East, and the HECO Kahe Power Generating Station is located within the Urban District and adjacent to the Landfill on the West.

Also discussed above in Section VI.B. is a description of the centers of trading and employment in close proximity to the Landfill.

XIII. ECONOMIC IMPACTS OF THE PROPOSED USE

The proposed project provides for the safe and effective disposal of municipal solid waste for all the communities of O'ahu. This waste, if not properly managed or without a landfill, could affect O'ahu's islandwide scenic beauty, and public health and safety, which are vital to a healthy economy.

A. Construction Costs

Expansion of WGSL is expected to take 10 years to complete. This expansion will result in an increase in the capacity of the Landfill and is expected to increase the life expectancy of the Landfill by 15 or more years.

Pending the receipt of final engineering figures, the construction of the expansion has been estimated at $86,000,000 over ten years, with expenditures spread consistently over those ten years. The construction estimates were determined through discussions with officials from WMH, the current operator. The expansion is planned in several stages. Each stage and year of construction will result in approximately the same level of construction spending.

B. Effect on Employment

Construction spending will create jobs and spending in related industries. Direct jobs created as a result of this project will include some 746 person-years of employment over the ten-year construction period. Indirect and induced jobs will also created throughout the state. These are likely to be concentrated in commercial and/or industrial centers, rather than near a job site. In addition, this project will support some 328 indirect and 720 induced person-years of employment. In total, approximately 1,795 person-years of employment[9] will be created as a result of the Landfill's expansion.

This, however, is not the net impact of the project. The project will result in a reallocation of funds that could be otherwise spent in other areas of the economy. The cost of construction is generated by revenue received from tip fees and these fees are passed on to Hawai'i consumers; therefore, one must account for the negative impact associated with this project. Since tip fees are passed on to consumers, it can be inferred that the proposed expansion will have a negative impact on personal consumer expenditures. A reduction in personal consumer expenditures results in a negative impact on jobs, earnings, and tax revenues. Over 10 years, approximately 1,143 direct, indirect and induced person-years of employment will be lost.

Nevertheless, the expansion of the Landfill will result in a net positive impact. Despite any negative impact associated with the expansion, some 651 direct, indirect and induced person-years of employment will be created.[10]

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[9] Totals do not add due to rounding.

[10] 1,795 person-years of direct, indirect and induced employment created
- 1,143 person-years of direct, indirect and induced employment lost
651 net person-years of direct, indirect and induced employment created

(Totals do not add due to rounding.)

Additionally, without a landfill option, the cost of off-island shipment of waste in lieu of landfilling would be much higher. Further, the potential negative economic impact of not having a permitted solid waste landfill option for MSW on Oahu could be significant, as all businesses rely on having adequate solid waste management programs, including a landfill, in place.

C. Earnings

Positive workforce earnings associated with the project's construction will amount to $59.6 million in direct earnings and $40.1 million indirect and induced earnings. The total positive impact on direct, indirect, and induced earnings associated with all construction will be about $99.8 million.

As with employment, this project will also have negative impacts on workforce earnings. A total negative impact on earnings of approximately $36.5 million can be expected. On balance, however, the proposed project will result in an overall positive impact on workforce earnings. In total, approximately $63.3 million in earnings will be generated. These earnings will boost the local economy, as many of the dollars will be used to purchase goods and services from other industries.

D. State of Hawai'i Fiscal Impacts

Construction spending, as a result of the expansion of the Landfill, is estimated to have a positive impact on state tax revenues. The expansion cost is estimated at $86 million and the planned construction would result in $3.2 million in direct state tax revenues. The indirect and induced impact of this project will result in $6.2 million in state tax revenues. In total, the project would result in an estimated positive impact of $10.4 million in state tax revenues.

Approximately $6.6 million in state tax revenue will be lost as a result of this project. In total, there will be a net positive impact in state tax revenues of approximately $3.8 million during the 10 years of construction.

XIV. NEED FOR RECLASSIFICATION

Reclassification of the Property from its current Agricultural designation to the Urban designation is necessary in order for Petitioner to continue to use the Property as a landfill. Alternatively, an SUP to use the Property as a landfill may be obtained.[11]

The proposed project is required to address the municipal waste disposal needs of the island of O'ahu. A condition of the approved SUP, Docket No. SP87-362, had required closure of the site from the acceptance of refuse on or before May 1, 2008. In March 2008, this period of time was extended by the State Land Use Commission for a period of 18 months or to November 1, 2009, (1) to allow for use of the remaining capacity within the approved 107.5 acres, contingent on no unexpected natural or man-made events that would prematurely exhaust this capacity[12], and (2) to allow for the necessary time to complete the entitlement process for the expansion project due to a delay in completing the EIS caused by the discovery of the stone uprights. Although the extension of time will allow for more efficient use of the space remaining within the existing permitted area, that space will eventually reach capacity.

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[11] As noted above, Petitioner is concurrently submitting a petition for a new SUP to the Planning Commission and DPP, City & County of Honolulu. One of the petitions, the instant petition or the application for a new SUP, may eventually be withdrawn, depending on timing.

[12] These unexpected events primarily include a hurricane, tsunami, or earthquake induced event where the landfill would be utilized in an emergency to serve in the cleanup and recovery effort for the disposal of storm and disaster generated debris.

WGSL receives solid waste from all of O'ahu. As an annual average, approximately 800 tons[13] per day from MSW and recycling residue, and approximately 600 tons per day from ash and residue, from H-POWER, for a total of approximately 1,400 tons daily, is accepted or delivered.[14] Actual annual tonnages can vary significantly depending on numerous factors. The closure of the Landfill upon the exhaustion of the existing area of use without a means of disposal of municipal, recycling, and H-POWER refuse is not practical because it would fail to provide for the islandwide sanitary treatment of municipal generated waste essential to the maintenance of public health and safety, and necessary for O'ahu's economic well-being.

Petitioner is responsible for the disposal and management of refuse in the City & County of Honolulu, and proposes to address this requirement by utilizing the remaining 92.5 acres of the existing Waimānalo Gulch for future landfilling. This area of expansion will extend the life of the site for an estimated minimum period of 15 additional years.

XV. CONFORMANCE WITH HAWAI'I STATE PLAN

As discussed above in Section VI.G.1. in greater detail, the proposed project maintains consistency with the provisions of the Hawai'i State Plan.

XVI. CONFORMANCE WITH THE COASTAL ZONE MANAGEMENT PROGRAM

The following is an assessment of the project with respect to the Coastal Zone Management Program ("CZMP") objectives and policies set forth in HRS Section 205(A)-2.

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[13] This includes a small amount of recycling residue associated with waste generated from the recycling effort. Department of Environmental Services, August 2006.

[14] Figure is approximate. In FY 2006, WGSL averaged 930 tons per day of MSW and 460 tons per day of ash and residue.

A. Recreational Resources

The proposed facility is not located on the coastline or shoreline and does not involve the use of coastal resources. The site is not in a location suitable for the development of new shoreline recreational opportunities or to dedicable shoreline areas with recreational value. However, with the eventual reclamation of the site, future recreational park opportunities may one day become available.

B. Historic Resources

Archaeological investigation of the site has resulted in the discovery of three stone uprights in early 2007. See Exhibits "14," "15," "16" and "17." To address the uprights: (1) the SHPD was notified to report the discovery and to ascertain further actions or requirements to ensure no disturbance; and (2) notification and coordination with appropriate parties as determined by SHPD that includes the Office of Hawaiian Affairs and SHPD-designated cultural informants from the area. The process of coordination to develop an appropriate preservation plan to preserve the uprights is in progress.

C. Scenic and Open Space resources

The majority of the proposed project will not be visible from most public vantage points along the Farrington Highway in the Wai'anae or Kahe Point directions. The existing Kahe Point ridge line provides screening of views of the Landfill, including the proposed expansion area.

The general area that fronts Waimānalo Gulch from the Kai Lani subdivision to Ko Olina Beach Club will be potentially impacted. Mitigation to reduce visual impacts has been initially implemented and will be modified for the proposed project. The existing site has a 400-foot-wide vegetative buffer strip along the eastern portion of the site with a north-south

separation of 800 to 1,000 feet. The existing Landfill has been hydromulched to begin the growth of grasses. The landscaping effort, once established, will resemble vegetation on adjoining hillsides. In time, plant species in the surrounding areas are expected to spread into the closed areas of the Landfill through natural seeding.

D. Coastal Ecosystems

The proposed project is not expected to have any adverse effects on coastal or marine coastal ecosystems. The location of the project is mauka of the shoreline and the Farrington Highway.

E. Economic Uses

Although the proposed project is not a coastal dependent facility, the location of the project site was based on selection criteria and governmental regulations that establish the suitability of the site for use as a landfill. This land use is not expected to affect the location or expansion of future coastal dependent developments, including the Disney Resort.

F. Coastal Hazards

The potential for hazards from storm wave, tsunami, hurricane, wind, flood erosion, subsidence, and point and nonpoint source pollution are addressed through adherence to the Landfill's site operating manual and all required regulatory permits. Coastal flooding is not anticipated based on the location of the project inland and upgradient of the Farrington Highway.

G. Managing Development

WGSL is in the State Agricultural District. See Exhibit "5." The zoning is AG-2, General Agricultural. See Exhibit "6." Land uses are subject to regulation by the State and City & County of Honolulu. All improvement activities will comply with State and City & County of Honolulu environmental rules and regulations.

H. Public Participation

Public involvement consisted of public notification of the project as provided in the Office of Environmental Quality Control Bulletin. See Section 13 of Exhibit "3." Those who provided written public comments to the draft EIS were provided with a written response, and as appropriate, mitigation measures will be developed to address issues and concerns. Additionally, the public will be informed of the public hearings on this Petition as well as on the new SUP Application, as required by rule or statute.

I. Beach Protection

The proposed project is not located along the shoreline or beach. No structures are proposed seaward of the shoreline. Control of erosion will be based on conformance to standards of the City regulating the control of erosion.

J. Marine Resources

The proposed project does not involve or utilize marine resources.

K. Special Management Area

The CZMP is supplemented by the Special Management Area ("SMA") regulatory process that controls development along the shoreline and generally requires a permit from the County for activities in the SMA. According the City & County of Honolulu's SMA Boundary Map for the 'Ewa area, the proposed project site is located outside of the SMA and is, therefore, not subject to SMA regulation. See Exhibit "29."

XVII. CONFORMANCE WITH COUNTY GENERAL PLAN, COMMUNITY PLAN AND ZONING DESIGNATION

As discussed above in Sections VI.G.2. and VI.G.3. above, the proposed expansion is consistent with the City & County of Honolulu's General Plan and the 'Ewa DP.

The zoning designation of the project site is AG-2 General Agricultural District. See Exhibit "6."[15] According to the Land Use Ordinance, the existing facility and the proposed expansion will be considered a "public use"[16] under the Land Use Ordinance, and is a principal permitted use as "public uses and structures" are deemed permitted uses in every zoning district, without the need for a zoning permit. See Land Use Ordinance at Table 21-3.

XVIII. DEVELOPMENT OF THE PROPERTY

Construction of the expansion area of WGSL will be accomplished within ten years after the date of the Commission's approval. This expansion will result in an increase in the capacity of the Landfill and is expected to increase the life expectancy of the Landfill by 15 or more years.

XIX. HAWAIIAN CUSTOMARY AND TRADITIONAL RIGHTS

The Landfill was established in 1989. In addition to previous use activities, the importation of solid waste and landfill material has most likely minimized access to any historic properties and plant resources related to Hawaiian cultural practices and beliefs that may have been present within the bounds of the Property. Additionally, the Landfill now occupies 107.5 acres of the Property and has greatly altered the historic landform and plant resources once present at the current landfill.

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[15] Recently, on September 29, 2008, the Mayor approved a zone change to the Makaīwa Hills development project area. See Exhibit "30."

[16] "Public uses and structures" are defined as:

> [U]ses conducted by or structures owned or managed by the federal government, the State of Hawaii or the city to fulfill a governmental function, activity or service for public benefit and in accordance with public policy. Excluded are uses which are not purely a function, activity or service of government and structures leased by government to private entrepreneurs or to non profit organizations. Typical public uses and structures include: libraries, base yards, satellite city halls, public schools and post offices.

LUO § 21-10.1.

The accessibility of Hono'uli'uli lands, including the Property, to the Hawaiians for gathering or other cultural purposes was radically curtailed during the second half of the nineteenth century. By the 1870s, herds of cattle grazing across the 'Ewa Plain likely denuded the landscape of much of the native vegetation. Subsequently, during the last decade of the nineteenth century, the traditional Hawaiian landscape was further distorted by the introduction and rapid development of commercial sugar cane cultivation. Throughout the twentieth century sugar cane cultivation was the dominating land use activity within the 'Ewa Plain. Cane cultivation – and the sense that the 'Ewa Plain was private property – restricted access inside the project area to employees of 'Ewa Plantation.

The 'ili of Waimānalo (including Makaīwa, Lanikūhonua, Ko Olina, and the uplands) has been described by community participants in the EIS process for the project as a sacred area of great cultural importance. Many of the individuals contacted or interviewed for the EIS have expressed concerns about cultural impacts within and beyond the boundaries of the proposed project area. These concerns are based on a traditional view of the Hawaiian landscape as a continuum, in which the 'ili of Waimānalo is perceived in unbroken relationship between mauka and makai lands and to the ocean beyond. This relationship is reflected in the oral traditions mentioned by the people of this land, the sites documented within the project area, as well as the many sites mauka and makai. The current project area is located along an ancient pathway between the mauka and the makai, i.e., the uplands and the coast. Both of these two general areas contain diverse and abundant resources. This pathway is traversed by Hawaiian ancestors in both the physical and the spiritual form. The makai area was rich in estuarine and marine resources including a canoe landing, a ko'a, ki'i pōhaku as well as lo'i that sustained a thriving fishing village. The mauka area is covered with numerous religious cultural sites.

Community participants have expressed concern about the Huaka'i Pō Kāne, also known as the Night Marchers, a monthly procession of the spirits of the dead. According to kūpuna, the trail of the Night Marchers in this area runs from mauka to makai. Hawaiian cultural belief is that these trails are significant and must not be impeded for fear of retribution from spirits of the departed. This type of cultural tradition often goes unacknowledged because it is not an accepted part of the dominant Western culture; however it is very real for many people in Native Hawaiian communities. Hawaiian culture acknowledges a spiritual aspect to nature and interprets it in a way that has made certain Kānaka Maoli (native born) very sensitive to natural phenomena.

Based on the information gathered during the course of the EIS process and presented in the EIS, the evidence indicates that the proposed project will affect certain traditional Native Hawaiian stone uprights (SIHP # 50-80-12-6903), as identified in the CSH Archaeological Inventory Survey for the proposed project (CSH, 2008).

> 1. If cultural site SIHP # 50-80-12-6903 needs to be removed, a cultural monitor should respectfully care it for. Douglas McDonald Philpotts, Shad Kane, William Ailā, and Eric Enos all agree that the upright *pōhaku* should be removed from its original place during construction, then reunited with its former space and preserved in place. The removal of the *pōhaku* should be conducted in a cultural manner with a cultural monitor and the proper protocols. There should be a preservation plan in place for future cultural access and these community members should be involved in the mitigation process. (CSH, 2008).

Petitioner and WMH propose that the stone uprights be relocated based on the preparation of an Archaeological Monitoring Plan that will be reviewed and approved by the SHPD. Guidance concerning the use of an archaeological monitor to maintain cultural sensitivity and the use of proper protocols will be sought from the SHPD and selected community informants identified by SHPD and CSH. The Archaeological Monitoring Plan will

include a preservation plan for future cultural access that will incorporate the input of the community informants.

The primary provisions of this approach are that: (1) the period of time for the relocation of the stone uprights would coincide with the use of the area of lateral expansion, a period of approximately 15 years; and (2) although it may not be possible to relocate the stone uprights in the exact same location, Petitioner and WMH intend to maintain consultation with the SHPD and community for the final resting place for the stone uprights. The maintenance of access will be provided.

> 2. The traditional view of the Hawaiian landscape as a continuum should be taken into consideration during the planning process. Waimānalo Gulch is perceived as an unbroken relationship between *mauka* and *makai* lands. This relationship is reflected in the traditions of the Waimānalo area mentioned by the community contacts. In this view, any future activity within the landfill property will further distort and diminish the traditional landscape. (CSH, 2008).

The mauka lands of the Waimānalo Gulch have been bisected by the Farrington Highway as the ahupua'a transitions to makai lands along the coastline. Although it may not be possible to completely recover the traditional relationship that was once established between these lands, there are three important cultural properties described in the CIA that can be addressed with appropriate and culturally sensitive treatment. These properties include: (1) cultural site SIHP # 50-80-12-6903; (2) the legend of the Huaka'i Pō Kāne; and (3) a series of six natural caves and rock overhangs. Petitioner and WMH acknowledge these features as an important part of the Hawaiian landscape and will provide for their appropriate treatment as a part of the mitigative measures.

> 3. The huaka'i pō (procession of the night marchers) view plane should be taken into account in the planning process. Several community participants in this study stated that it is very

> important to keep the pathway clear of visual and structural blockage from mauka to makai on the east ridge of Waimānalo Gulch and the west ridge of Makaīwa Gulch, in order to allow the huaka'i pō to continue. Several participants in this study cited the establishment of visual and physical buffer zones to protect the huaka'i pō. CSH recommends this topic should be addressed in greater detail through further consultation with the community. (CSH, 2008).

Petitioner and WMH will consult with the community informants identified in the CSH study to mitigate or reduce the potential for visual blockage of the west and east ridgelines of the Waimānalo Gulch. A starting point for this discussion would be through the WGSL Oversight Advisory Committee. However, in order to maintain cultural sensitivity, Petitioner and WMH would remain open to other suggested venues by the community informants to further discuss and implement appropriate measures for protection of the Huaka'i Pō Kāne.

> 4. A series of six natural caves and rock overhangs located in the northwestern portion of the project area were examined and documented by CSH during an archaeological inventory survey (Dalton and Hammatt 2008). Subsurface testing (excavation) was conducted at two of these features; most do not contain substantial sedimentary deposits. No significant cultural material was observed or discovered at any of these six caves and overhangs; thus, they have not been designated historic properties. However, at least one community participant has voiced concerns about possible disturbances to burials in these caves. CSH recommends cultural monitoring of any proposed disturbance to these caves by qualified native Hawaiians familiar with the project area. (CSH, 2008).

Petitioner and WMH propose the use of an archaeological monitor during construction activities that may affect the northwestern portion of WGSL. Prior to the start of work the archaeological monitor will be tasked with (1) reviewing the construction plans for the use of the area of the caves, and (2) consultation with community informants including native Hawaiians who are familiar with the project area. Although burials were not encountered at the time of the AIS, it is always possible that burials might be discovered in the course of earthwork.

In the unlikely event of the discovery of a burial work in the immediate area will cease and the SHPD will be notified by the archaeological monitor. Instructions and guidance for future steps will be obtained from the SHPD.

> 5. Although the land has been dramatically altered, there remains a possibility that burials and other archaeological sites may be present in and around the proposed project area. Efforts need to be made to insure adequate archaeology and cultural monitoring are conducted at this project site. In addition to this cultural impact assessment, CSH is conducting an Archaeological Inventory Survey for this project area that was ongoing at the time of this report's completion (Dalton and Hammatt 2008); its findings and recommendations should be faithfully carried out in accordance with applicable laws and administrative rules governing historic preservation work in the State of Hawai'i. (CSH, 2008).

In the unlikely event of the discovery of a burial, work in the immediate area will cease until appropriate coordination with the SHPD has been completed. As required, the applicable provisions of law including HRS, Chapter 6E, and HAR, Chapter 13-300 (regarding burials) to maintain the protection of archaeological and cultural resources will be provided by Petitioner and WMH.

> 6. CSH recommends that community members be further consulted about these and other concerns throughout the planning process. Addressing these cultural concerns is part of the City & County of Honolulu's "good faith" effort to minimize the impact of the proposed project on Hawaiian culture, its practices and traditions. (CSH, 2008).

Petitioner and WMH will continue to consult with the community regarding archaeological, cultural, and other environmental matters involving the operation of the existing WGSL and the proposed lateral expansion project. A number of mitigative measures to provide community consultation are provided and are cited elsewhere in the Final EIS, attached hereto as Exhibit "3." The mitigative measures as cited in the Final EIS are intended to address the potential for adverse cultural impacts.

XX. WRITTEN COMMENTS FROM AGENCIES, ORGANIZATIONS AND INDIVIDUALS

To date, there are no written comments from the various agencies and organizations with respect to the proposed reclassification. Comments received in response to the EIS Preparation Notice and the Draft EIS which describe the proposed expansion are included within the Final EIS (Exhibit "3") as Sections 15 and 16, respectively.

XXI. NOTIFICATION OF PETITION FILING AND SERVICE OF PETITION

Attached as Exhibits "31" and "32" are true and correct copies of the notification of the filing of this Petition and the affidavit required by HAR § 15-15-50(c)(5)(C), respectively.

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XXII. CONCLUSION

Petitioner respectfully prays for an Order Amending Land Use District Boundary of the Petition Area from the Agricultural District to the Urban District.

DATED: Honolulu, Hawai'i, December 2, 2008.

Department of Environmental Services,
City & County of Honolulu

By: _____
Eric S. Takamura, Ph.D., P.E.
Its Director