RECORDING:

Conservation District Use Application (CDUA) KA-3724 for the Demolition and Removal of an Existing 0.2 Million Gallon (MG) Water Tank and the Installation a New 0.5 Million Gallon (MG) Water Tank and Additional Site Improvement at the Kukuiolono Park and Golf Course

APPLICANT:

County of Kaua'i
Department of Water

AGENT:

Esaki Surveying & Mapping, Inc.
1610 Haleukana Street
Lihu'e, Kaua'i, Hawai'i 96766

LANDOWNER:

County of Kaua'i and Walter D. McBryde Trust Estate

LOCATION:

Kalāheo, Island of Kaua'i

TAX MAP KEY:

(4) 2-3-005: Portions of 002, 006, and 025

AREA OF PARCEL:

161.72 Acres

USE:

4,738 Square Feet

SUBZONE:

General

DESCRIPTION OF AREA AND CURRENT USE:

The project site is located at the Kukuiolono Park and Golf course in the Kalāheo District, on the island of Kaua'i. The project site is further identified as Tax Map Keys (TMKs) (4) 2-3-005: portions of 002, 006, and 025. The parcel is located in the General Subzone of the Conservation District (see Exhibit 1).
Parcel 2 (Lot A) is the larger Kukuiolono Park and Golf Course property which includes a 9-hole golf course, Japanese garden, Hawaiian lava rock artifacts, and a pavilion. Parcel 6 is currently developed and consists of a 0.2 million gallon (MG) cast-in-place concrete tank that was originally constructed in the 1940's (see Exhibit 2). An underground storage tank (UST) was also discovered on Parcel 6. Parcel 25 (Lot B) is also developed and consists of a 0.25 MG tank that was installed by the County in 1968 (see Exhibit 3). Access to the project site is via the existing Kukuiolono Golf Course Road which is a paved private roadway and is depicted as Easement A-1 on Exhibit 4.

Soil within the area is comprised of Puhī silty clam loam (PnB, PnC) and Ioleau silty clay loam (IoD2). The Puhī series consist of deep, well drained soils that have very slow to rapid runoff depending upon slope, and moderately rapid permeability. These soils are mainly found in upland areas and have slopes ranging from 3 to 40 percent. The Ioleau series consists of very deep, well drained soils that have slow to rapid runoff depending on slope and slow permeability. These soils are also found mainly in upland areas and have slopes ranging from 2 to 35 percent.

DLNR, Commission on Water Resource Management (CWRM) has established groundwater hydrologic units to provide a consistent basis for managing ground water resources. Based on CWRM’s hydrologic unit maps, the project area is located within the Koloa sub-region which is estimated to have a sustainable yield of 30 MG per day. The overall Kalāheo area is identified as having a perched groundwater system. Groundwater is perched on top of layers of impermeable material such as dense volcanic rock, beds of weathered and solidified ash, or clay-bearing sediments.

There are no wetlands identified within the project area. There are also no coastal waters in the project area.

According to the Federal Flood Insurance Rate Maps (FIRM), the project site is located in Zone X which is defined as areas determined to be outside of the 0.2% annual chance flood plain. The project site is also located outside of the tsunami evacuation zone and is not threatened by any potential tsunami inundation.

Vegetation at the site consists of heavy ground cover and trees (camphor, eucalyptus, Philippine mahogany, and African tulip). There are no rare, threatened or endangered species or critical habitats located within the project area. Fauna that have been observed or are known to occur in the project area include the usual array of introduced birds and species of terrestrial fauna typical of similar habitats elsewhere on Kaua‘i. Avifauna introduced to the area include the red junglefowl, spotted dove, zebra dove, white-rumped shama, Japanese white-eye, common myna, northern cardinal, Java sparrow, and northern cardinal. The only migratory species that may occur in the area would be the Pacific golden plover or kōlea. On occasion, feral mammal species such as rats, mice, feral cats, and pigs occur in the area. There are also no rare, threatened, or endangered species of fauna known to exist on the project site.
An archaeological inventory survey (AIS) was conducted for the entire Kukuiolono Park and Golf Course which includes the project area. Three (3) archaeological sites were identified and are comprised of 22 features that were identified and recorded. One site included an assemblage of twentieth-century historic properties, including historic artifacts and historic structures attributed to the Estate of Walter D. McBryde, the military occupation of the park, and the use of the land by Kaua‘i Pineapple Co. The other sites were of traditional pre-contact Hawaiian stones and artifacts assembled by Walter D. McBryde and the graves of Walter D. McBryde and John P. Kamanuwai.

In the vicinity of the project, there are no major air pollution generators. Air pollution at the site is mostly due to vehicles accessing the site and general maintenance equipment.

Ambient noise at the project site is normally due to local traffic and the Kukuiolono Park and Golf Course. Maintenance vehicles and equipment are occasional noise sources.

There is no public wastewater collection and disposal system in the project area. Non-residential solid waste disposal in the area is provided by a private waste disposal company. Collected refuse is delivered to the Kekaha landfill for disposal. Electricity is provided to the site via overhead distribution lines located on utility poles along Papalina Road.

**PROPOSED USE:**

The County of Kaua‘i, Department of Water (DOW) is proposing to replace an existing and inactive 0.2 MG tank with a larger, 0.5 MG tank to increase water storage within the Kalāheo service area (see Exhibit 4, 5, & 6). The inactive 0.2 MG tank, which is located on Parcel 6, is proposed to be demolished. Once the tank is removed, the area will be re-grassed and included as a part of the larger Kukuiolono Park and Golf Course for use by the public. The new 0.5 MG tank will be installed on Parcel 25, adjacent to the existing 0.25 MG tank, thus consolidating the use onto one parcel. The tank will sit on top of a concrete pad and will be approximately 78 feet in diameter and 15.2 feet in height. Installation of the tank will require the removal of approximately ten (10) Eucalyptus (*Eucalyptus robusta*) and China berry/Pride of India (*Melia azedarach*) trees, both of which are identified by the Pacific Island Ecosystems at Risk as invasive species.

The purpose of the proposed project is to allow the DOW to meet the expanding needs of County customers and the public by providing municipal water service to customers in the Kalāheo, Lāwa‘i, and ‘Ōma‘o areas.

The proposed project also includes the following improvements:

1. Removal of an underground storage tank (UST) on Parcel 6;
2. Installation of a 1,000 gallon above-ground diesel tank to supply a generator with fuel to provide back-up power in the event of a power outage;
3. Construction of a ten (10) foot wide roadway/drain swale around the new tank and existing 0.25MG tank on Parcel 25. The new roadway will connect to the existing private, paved Golf Course Club House access road (Easement A-1);

4. Installation of new fencing to surround/secure the new and existing water tanks;

5. Construction of two (2), concrete masonry unit (CMU) retaining walls on the uphill/south side of the tanks. Construction will require excavation and grading at the site. The wall nearest the existing 0.25 MG water tank will be approximately 240 linear feet (l.f.) while the wall nearest the new 0.5 MG tank will be approximately 117 l.f. Neither wall is anticipated to exceed 9-feet in height.

6. Installation of a new water system piping. The old piping will be abandoned in place;

7. Installation of a new Supervisory Control and Data Acquisition (SCADA) system to monitor and control tank levels, pumps, and control valves; and

8. Installation of new electrical lines to connect the new tank to the existing system.

OTHER ALTERNATIVES CONSIDERED:

Alternative 1- Larger Tank: A larger tank would not be practical due to size constraints of the site.

Alternative 2 – Smaller Tank: Because the Kalâheo water service area has deficient water storage, a smaller tank would not help meet the storage capacity needs of existing and future demands in the area. Furthermore, reducing the size of the tank would not significantly reduce the environmental impacts associated with the project. For these reasons, this is an unacceptable alternative.

Alternative 3 – No Action: The existing 0.2 MG tank is currently inactive and in need of replacement. This alternative should not be considered because the 0.2 MG tank is in disrepair and in need of replacement. The importance of the Kalâheo service area’s need for additional storage capacity make prompt action on DOW’s part essential in order to maintain the safety and adequacy of its system.

Alternative 4 – Delayed Action: Delaying the project could negatively affect DOW customers in the Kalâheo service area if a problem arose with storage elsewhere in the system. This could potentially leave the area without adequate water reserves.

Alternative 5 – Increasing Tank Size: As the existing 0.2 MG tank is in disrepair and in need of replacement, this alternative was immediately dismissed from consideration.

Alternative 6 – Different location: The proposed site is located near an existing tank site making this location the most ideal and practical since it would allow a more efficient water system operation and maintenance. An alternative tank site would not be the most viable since it would not allow for the consolidation of DOW facilities. Also, the development of a new tank site would result in further postponement of this system upgrade.
SUMMARY OF COMMENTS

The Office of Conservation and Coastal Lands referred the application to the following agencies and organizations for review and comment:

**State**
- DLNR, Division of Aquatic Resource
- DLNR, Division of Conservation and Resource Enforcement
- DLNR, Division of Forestry and Wildlife
- DLNR, Engineering Division
- DLNR, Historic Preservation Division
- DLNR, Land Division
- Office of Hawaiian Affairs
- Department of Health

**Department of Land and Natural Resources -**

*Division of Aquatic Resources (DAR):* DAR has no aquatic resources concerns at this time.

*Land Division Comments:* No Comments

**ANALYSIS**

Following review of the application, representatives of the Applicant were notified by letter dated March 24, 2015, of the following:

1. The proposed project is an identified land use within the Conservation District, pursuant to Hawai‘i Administrative Rules (HAR) § 13-5-22 *Identified land uses within the protective subzone, P-8 STRUCTURES AND LAND USES, EXISTING; (D-1) Major alteration of existing structures, facilities, uses, and equipment or topographical features which are different from the original use or different from what was allowed under the original permit.* Please be advised, however, that this finding does not constitute approval of the proposal;

2. Pursuant to §13-5-40, HAR, a Public Hearing will not be required;

3. In conformance with Chapter 343, Hawai‘i Revised Statutes (HRS), as amended, and HAR, Title 11, Department of Health, Chapter 200, Environmental Impact Statement Rules, an Environmental Assessment for the project was prepared and a Finding of No Significant Impact (FONSI) was issued by the County of Kaua‘i on July 30, 2014.

4. The proposed project is not located within the Special Management Area (SMA).

The Final EA/Finding of No Significant Impact (FONSI), issued by the DOW, was published in the August 23, 2014 edition of the Office of Environmental Quality Control’s *The Environmental Notice.*
The following discussion evaluates the merits of the proposed land use by applying the criteria established in Section 13-5-30, HAR.

1. *The proposed land use is consistent with the purpose of the Conservation District.*

The objective of the Conservation District is to conserve, protect, and preserve the important natural and cultural resources of the State through appropriate management and use to promote their long-term sustainability and the public health, safety, and welfare.

The proposed project will not change the existing use of the site, though it will enhance the proper use and management of Kaua‘i’s natural water resources by improving and expanding the existing municipal water system for the County’s customers in Kalāheo, Lāwa‘i, and ʻŌma‘o. By demolishing the existing, abandoned water tank, this project will also eliminate an unsightly structure and return that portion land to a more natural state by being grassed so that it blends in with the surrounding environment.

2. *The proposed land use is consistent with the objectives of the subzone of the land on which the use will occur.*

The project site is located in the General subzone. The objective of this subzone is to designate open space where specific conservation uses may not be defined, but where urban use would be premature.

The proposed project is an identified land use within the Conservation District, pursuant to HAR §13-5-22 *Identified land uses within the protective subzone, P-8 STRUCTURES AND LAND USES, EXISTING; (D-1) Major alteration of existing structures, facilities, uses, and equipment or topographical features which are different from the original use or different from what was allowed under the original permit.* The proposed use requires a Board Permit. In addition, the removal the inactive, derelict tank and replacement of it with a new tank on the same site as the existing operating tank will consolidate the use onto one contiguous area and will thereby reduce the area impact as well as the negative visual impact upon the existing open space.

3. *The proposed land use complies with provisions and guidelines contained in Chapter 205A, HRS, entitled "Coastal Zone Management," where applicable.*

The project area is not located within the Special Management Area (SMA). However, the proposed land use complies with following Coastal Zone Management guidelines as follows:

(1) *Recreational Resources:* This project proposes the demolition of an existing, now abandoned 0.2 MG tank on Parcel 6. The removal of this tank will allow for the area to be re-grassed and available for public use as a part of the Kukuiolono Park and Golf Course.
(2) **Historic Resources:** As mentioned earlier, an AIS was prepared for the entire Kukioilo Park and Golf Course. Three (3) archaeological sites were designated within the park. One site included an assemblage of twentieth-century historic properties, including historic artifacts and historic structures attributed to the Estate of Walter D. McBryde, the military occupation of the park, and the use of the land by Kau'a'i Pineapple Co. The other sites were of traditional pre-contact Hawaiian stones and artifacts assembled by Walter D. McBryde and the graves of Walter D. McBryde and John P. Kamanuwai. However, none of these sites are located within the current project area.

(3) **Scenic and Open Space Resources:** By removing the existing derelict 0.2 MG tank from Parcel 60 and re-grassing the area similar to that of the golf course will improve the visual impact on the surrounding area. In addition, construction of the new 0.5 MG tank on the same site (Parcel 25) as the operating 0.25 MG tank and consolidating the use onto one contiguous area and will thereby reduce the area impact and create a new open space resource where the demolished tank once was.

(4) **Coastal Ecosystems:** While the project is not located near any shoreline, it will replace old, possibly leaky water pipes. The new pipes should minimize potential leaking, uncontrolled water release, and possible adverse effects on the reefs and ocean waters.

(5) **Economic Uses:** The proposed project will provide support to public facilities by providing an additional, secure municipal water storage source for local customers.

(6) **Coastal Hazards:** Drainage from the tanks/tank site will be inspected to make sure that construction and operation will not cause erosion or other coastal hazards. Best Management Practices (BMPs) will be used during construction to control and minimize potential silt/water release from the site which could make its way to a stream or the ocean during a heavy rain event.

(7) **Managing Development & (8) Public Participation:** As a part of this permit process, the State and County agencies, as well as the public was notified of this application and was given the opportunity to comment.

(9) **Beach Protection:** The proposed project will use BMPs during construction and proper engineering for drainage to minimize any potential erosion which could be released into a stream or beach during a heavy rain event.

(10) **Marine Resources:** By minimizing potential run-off during construction, grasping the site and providing proper drainage post construction, this project will ensure there is no run-off or silt making its way to the ocean and thus minimizing potential impacts to marine resources.
4. The proposed land use will not cause substantial adverse impacts to existing natural resources within the surrounding area, community, or region.

The demolition/removal of the 0.2MG tank and re-grassing of Parcel 6 will improve the natural resources of the area by returning a once developed parcel back to open space land to be used by the public as a part of the Kukuiolono Park and Golf Course. In addition, the new tank will be in a location that is further away from public view and the existing road and will be partially screened by existing trees and behind the existing 0.25 MG tank. The northern side of Parcel 25 falls away to a ravine, so visual impact from that side will also minimal. No threatened or endangered flora or fauna are present on the site and there are no federally listed critical habitats present. In addition, there are no historic properties present.

5. The proposed land use, including buildings, structures and facilities, shall be compatible with the locality and surrounding area, appropriate to the physical conditions and capabilities of the specific parcel or parcels.

As stated previously, the when the 0.2MG tank on Parcel 6 is demolished and removed from the site, the parcel will be re-grassed and returned back to open space land to be used by the public as a part of the surrounding Kukuiolono Park and Golf Course. In addition, the new tank will be in a location that has already been developed with a similar use. Further, Parcel 25 was previously designated as the location for an additional, new water tank as approved by CDUP KA-3475. As the project aims to consolidate an existing use in a contiguous area, this land use is compatible and appropriate for the area.

6. The existing physical and environmental aspect of the land, such as natural beauty and open space characteristics, will be preserved or improved upon, which ever is applicable.

As mentioned earlier the proposed project will preserve and improve the visual and open space characteristics of the area by demolishing and removing an abandoned, derelict 0.2MG tank and returning a once developed parcel (Parcel 6) back to open space land to be used by the public as a part of the Kukuiolono Park and Golf Course.

7. Subdivision of the land will not be utilized to increase the intensity of land uses in the Conservation District.

No subdivision of land is proposed.

8. The proposed land use will not be materially detrimental to the public health, safety and welfare.

The project will improve public health, safety, and welfare by improving the current municipal water system and adding to the County’s water storage for the residents of Kalâheo, Lâwa‘i, and ‘Ôma‘o. Also, the existing 0.2 MG tank is known to have lead paint. Therefore the removal of the 0.2 MG tank will improve public safety by ensuring no children or people inadvertently ingest the pain and potentially get lead
CULTURAL IMPACT ANALYSIS:

In Ka Pa‘akai O Ka ʻĀina v. Land Use Commission, 94 Haw. 31 (2000), the Hawai‘i Supreme Court laid out a framework for assessing cultural impacts. An assessment must include:

1. The identity and scope of “valued cultural, historic, or natural resources” in the area, including the extent to which traditional and customary native Hawaiian rights are exercised in the petition area;
2. The extent to which those resources – including traditional and customary native Hawaiian rights – will be affected or impaired by the proposed action; and
3. The feasible action, if any, to be taken by the (agency) to reasonably protect native Hawaiian rights if they are found to exist.

As discussed earlier, an AIS was prepared for the entire Kukuiolono Park and Golf Course. Three (3) archaeological sites were designated within the park. One site included an assemblage of twentieth-century historic properties, including historic artifacts and historic structures attributed to the Estate of Walter D. McBryde, the military occupation of the park, and the use of the land by Kaua‘i Pineapple Co. The other sites were of traditional pre-contact Hawaiian stones and artifacts assembled by Walter D. McBryde and the graves of Walter D. McBryde and John P. Kamanuwai. However, none of these sites are located within the current project area. In addition, the project will not impact any of the sites within the overall park nor will access to these sites be impacted.

As the project site has been previously disturbed and as the properties involved have been utilized as tank sites since the 1940s and 1960s, no impact on traditional and customary Native Hawaiian rights. Access to the project site has been and will continue to be restricted by fencing as the area surrounding the existing 0.25 tank on Parcel 25 is currently fenced and the project proposes to expand the fenced area to include the new 0.5 MG tank.

Should any historic resources or human skeletal remains be discovered during construction, all construction work in the vicinity of the find will immediately stop, be protected from additional disturbance, and the State Historic Preservation Division contacted immediately.

In addition, during the processing of the application, no comments were received from native practitioners, the Office of Hawaiian Affairs, or SHPD.

Based on the information provided by the applicant as well as the AIS that was prepared, Staff believes that the project will have no significant impacts on cultural or historical resources in the project area.
DISCUSSION

The proposed facilities will support the upgrade of the DOW’s water system servicing the Kalāheo, Lawa‘i, and ʻŌma‘o areas. The upgrade is necessary as Kalāheo lacks sufficient potable water storage and should another problem occur somewhere else in the system.

The proposed project will remove an existing, abandoned structure on Parcel 6, which then can be returned as Open Space land to be used by the public once it has been re-grassed to blend in with the surrounding Kukuiolono Park and Golf Course area. Additionally, there are no cultural resources within the project site. View planes in the area will also be maintained.

Staff, therefore, recommends the following:

RECOMMENDATION

That the Board of Land and Natural Resources APPROVE the County of Kaua'i, Department of Water 0.5 MG Water Tank Project located at the Kukuiolono Park and Golf Course, Kōloa District, Island of Kaua'i, TMK (4) 2-3-005: portions of 002, 006, & 025 subject to the following conditions:

1. The applicant shall comply with all applicable statutes, ordinances, rules, and regulations of the Federal, State and County governments, and the applicable parts of Section 13-5-42, Hawaii Administrative Rules;

2. The applicant, its successors and assigns, shall indemnify and hold the State of Hawai‘i harmless from and against any loss, liability, claim, or demand for property damage, personal injury, and death arising out of any act or omission of the applicant, its successors, assigns, officers, employees, contractors, and agents under this permit or relating to or connected with the granting of this permit;

3. The applicant shall comply with all applicable Department of Health administrative rules;

4. Where any interference, nuisance, or harm may be caused, or hazard established by the use the applicant shall be required to take measures to minimize or eliminate the interference, nuisance, harm, or hazard within a time frame and manner prescribed by the Chairperson;

5. Before proceeding with any work authorized by the Board, the applicant shall submit four (4) copies of the construction and grading plans and specifications to the Chairperson or his authorized representative for approval for consistency with the conditions of the permit and the declarations set forth in the permit application. Three (3) of the copies will be returned to the applicant. Plan approval by the Chairperson does not constitute approval required from other agencies;
6. Any work done or construction to be done on the land shall be initiated within one year of the approval of such use, in accordance with construction plans that have been signed by the Chairperson, and, unless otherwise authorized, shall be completed within three (3) years of the approval. The applicant shall notify the Department in writing when construction activity is initiated and when it is completed;

7. The applicant shall take appropriate measures to mitigate the impacts of erosion and siltation, and prevent oil, fuel, or cement products from falling, blowing, or flowing on Conservation lands and ocean waters. All work will be scheduled during periods of low rainfall;

8. All representations relative to best management practices and mitigation set forth in the final environmental assessment, including responses to comments for the proposed uses, are incorporated as conditions of the permit;

9. All exterior light fixtures must be shielded during construction and operations of the project;

10. In the event that unrecorded historic remains (i.e., artifacts, or human skeletal remains) are inadvertently uncovered during construction or operations, all work shall cease immediately in the vicinity and the remains shall be protected from further damage. State Historic Preservation Division (692-8015) shall immediately be contacted;

11. The applicant understands and agrees that this permit does not convey any vested rights or exclusive privilege;

12. In issuing this permit, the Department and Board have relied on the information and data that the applicant has provided in connection with this permit application. If, subsequent to the issuance of this permit, such information and data prove to be false, incomplete or inaccurate, this permit may be modified, suspended or revoked, in whole or in part, and/or the Department may, in addition, institute appropriate legal proceedings;

13. During construction, appropriate mitigation measures shall be implemented to minimize impacts to off-site roadways, utilities, and public facilities;

14. Cleared areas shall be re-vegetated within thirty (30) days of grading or construction completion unless otherwise provided for in a plan on file with and approved by the department;

15. The applicant shall obtain a county building or grading permit or both for the use prior to final construction plan approval by the department;

16. Other terms and conditions as may be prescribed by the Chairperson; and
17. Failure to comply with any of these conditions shall render this Conservation District Use Permit null and void.

Respectfully submitted,

Lauren Yasaka
Office of Conservation and Coastal Lands

Approved for submittal:

SUZANNE D. CASE, Chairperson
Board of Land and Natural Resources
EXHIBIT 8-PHOTOGRAPHS

View of 1940's Water Tank

VIEW OF EXISTING 1940'S DERELICT WATER TANK ON PARCEL 6 OF TMK (4) 2-3-05:06. NOTE PROXIMITY TO GOLFERS AND STATE OF TANK ROOFING STRUCTURE.

VIEW OF EXISTING 1940'S DERELICT WATER TANK. NOTE PROXIMITY TO PARK/GOLF COURSE ACCESS ROAD WHICH ENDS AT THE CLUBHOUSE AND RESTAURANT.
VIEW OF EXISTING 1968 WATER TANK ON LOT B OF TMK (4) 2-3-05:25 FROM THE GOLF COURSE ACCESS ROAD. NOTE TREES THAT WILL BE TRIMMED AS PART OF THIS PROJECT.

VIEW OF EXISTING 1968 WATER TANK. NOTE TANK IS SET AT A LOWER ELEVATION THAN THE ACCESS ROADWAY, FURTHER MINIMIZING POTENTIAL VISUAL IMPACT.
EXHIBIT 8-PHOTOGRAPHS

View of 1968 Water Tank and New Tank Site

VIEW OF AREA AND ACCESSORY STRUCTURES LOCATED ADJACENT TO EXISTING 1968 WATER TANK.

AREA INSIDE EXISTING FENCED AREA AND WHICH WILL BE IMPROVED TO ACCOMMODATE NEW WATER TANK.

VIEW OF AREA WHERE NEW WATER TANK WILL BE CONSTRUCTED ADJACENT TO THE EXISTING WATER TANK.
existing 8" C.I. to be removed
switchbox

existing 6" C.I. to be removed

valve box (to be removed)

valve box (to be removed)

valve box (to be removed)

existing tank (200,000 gal.) to be demolished

area = 3,745 sq. ft.

Parcel 6

EXHIBIT 5
PARCEL 25 (LOT B) SITE PLAN CLOSE UP

- new retaining wall
- new tank (50,000 gal.)
- new gate
- existing 8" washout & overflow
- new entrance

EXHIBIT 6