APPLICATION FOR A DLNR DAM SAFETY
PERMIT NO. 78 – KITANO RESERVOIR (KA-0004)
DAM REMOVAL, KEKAHA, KAUAI, HAWAII
TMK: (4) 1-2-02-01

The Engineering Division (Division) hereby submits an application for your approval and authorization for the Chairperson and Department to stipulate conditions and issue a Dam Safety Permit for the subject application, KITANO RESERVOIR (KA-0004) – DAM REMOVAL, pursuant to Hawaii Revised Statutes Chapter 179D and current Administrative Rules.

APPLICANT:
Mr. James J. Nakatani, Executive Director
State of Hawaii, Department of Agriculture
Agribusiness Development Corporation
235 South Beretania Street, Room 205
Honolulu, HI 96813

LAND OWNER:
Mr. James J. Nakatani, Executive Director
State of Hawaii, Department of Agriculture
Agribusiness Development Corporation
235 South Beretania Street, Room 205
Honolulu, HI 96813

SUMMARY OF REQUEST:
Application for a Dam Safety Permit for the dam removal of the Kitano Reservoir (KA-0004), Kekaha, Kauai, Hawaii. (See Exhibit 1)

LOCATION: Kekaha, Kauai, Hawaii, TMK: (4) 1-2-02-01 (See Exhibit 2)

BACKGROUND:
The Kitano Reservoir, built around 1928 was used for irrigation purposes and is currently owned by the State of Hawaii, Department of Agriculture – Agribusiness Development Corporation (ADC). The dam is approximately 720-ft long and varies from 16-ft to 45-ft wide. The reservoir is generally circular in shape, approximately 520-ft long and 670-ft wide and has a maximum capacity of 86.9 ac-ft (at top of dam). The spillway consists of two (2) 42-corrugated steel arch culverts about 2.7-ft below the top of the crest. The low level outlet is controlled by a valve on the upstream side of the embankment however the valve is broken in the open position as a result of past vandalism. The reservoir has not retained water since 2006. The ADC has determined
storage of irrigation water is no longer required at Kitano Reservoir and are proposing to breach the empty reservoir for safety purposes.

The Kitano Reservoir has no natural upstream watershed. The area mauka of the reservoir is collected by the existing Kokee Ditch which conveys runoff around the reservoir and directs it to the Waipao Valley. When Kitano Reservoir was in operation it impounded water for irrigation purposes. Runoff from the Kokee Ditch could be manually diverted into the reservoir by opening and closing a series of gates. When the reservoir was full, excess runoff in the reservoir was discharged via the existing outlet pipe and spillway on the south returning it to the Kokee Ditch. Presently Kitano reservoir is not in operation and no upstream runoff is directed into the reservoir. The gate allowing inflow water from Kokee Ditch to enter the reservoir is closed and the Kokee Ditch runoff flows freely around the reservoir and continues into the Waipao Valley.

DESCRIPTION:
The proposed project will consists of mass grading to breach the manmade earth berm by excavating and removing a portion of the embankment. The resulting breach opening will have a bottom width of 20-ft and be trapezoidal with 2:1 side slopes. The invert of the channel will be lined with a concrete rubble masonry (CRM) apron to maintain soil stabilization during higher velocity storms. Excavated material from the dam removal will be placed in the reservoir bottom to ensure positive drainage through the dam breach to minimize ponding. The existing 18-in steel drain pipe will be filled with concrete and capped. The existing dual 42-in corrugated arch culvert spillway will be demolished and removed (See Exhibit 3).

CHAPTER 343-HRS – ENVIRONMENTAL ASSESSMENT:
The Department of Agriculture – Agribusiness Development Corporation conducted a HRS-343 environmental assessment evaluation of the project and concluded that the action is exempt from the preparation of an environment assessment pursuant to Exemption Class 8 on their Exemption list dated June 2, 2003 and will have minimal or no significant impact on the environment. (See Exhibit 4)

HAWAII REVISED STATUTES CHAPTER 6E-8 HISTORIC PRESERVATION REVIEW
The Division consulted with the State Historic Preservation Division (SHPD) for compliance with Chapter 6E-8 requirements. A SHPD review was conducted at the request of the County of Kauai, Department of Public Works, Clearinghouse Application No. CL-2015-026 Kitano Reservoir – Dam Breach Plan.

Based on the information provided, SHPD’s determination is no historic properties affected. (See Exhibit 5). In the event that historic properties, including human skeletal remains, structural remains, cultural deposits or features, or artifacts are uncovered please cease work in the vicinity of the find, protect the find from further disturbance, and immediately contact the State Historic Preservation Division at (808) 692-8015.

AGENCY CONSULTATION:
The Division distributed notices to various agencies for their comments on this application. A summary of their responses is included in Exhibit 6.
REMARKS:
The applicant/owner, State of Hawaii, Department of Agriculture, Agribusiness Development Corporation has completed a basis of design, plans and specifications and requests for the approval of a dam safety permit. The Division has reviewed the documents and concluded that it is sufficient for its intended purposes. Staff recommends approval of this permit application with the Dam Safety General Permit Conditions. (See Exhibit 8)

RECOMMENDATION:

That the Board:

1. Authorize the approval and issuance of the Dam Safety Permit for this project;

2. Authorize the Chairperson to issue a Dam Safety Permit for the removal of the Kitano Reservoir (KA-0004) (DLNR Dam Safety Permit No. 78) subject to such other terms and conditions as may be prescribed by the Chairperson to best serve the interests of the State; and

3. Authorize the Department to oversee performance of the permitted work and take appropriate action including but not limited to issuance of fines and/or revocation of the permit, if necessary.

4. Authorize the Department to remove this dam from dam safety regulatory inventory and the requirements of Hawaii Revised Statutes Chapter 179D, upon satisfactory completion of the construction project.

Respectfully submitted,

CARTY S. CHANG
Chief Engineer

APPROVED FOR SUBMITTAL:

SUZANNE D. CASE
Chairperson

Exhibit(s):  1. Owner Permit Application  
2. Location map  
3. Construction Drawing pages  
4. Chapter 343-HRS Review  
5. HRS Chapter 6E-8 Review  
6. Agency Consultation  
7. Kitano Reservoir - photos  
8. General permit conditions
### DAM SAFETY PERMIT APPLICATION FORM

**Dam Name:** Kitano Reservoir  
**Project Type:** Removal

Fill in the following information for the specified dam safety permit project. One application shall be used for each dam or reservoir structure.

<table>
<thead>
<tr>
<th><strong>Project Information</strong></th>
<th><strong>Application Date</strong></th>
<th>January 5, 2017</th>
</tr>
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<tbody>
<tr>
<td><strong>Application Date</strong></td>
<td>January 5, 2017</td>
<td></td>
</tr>
<tr>
<td><strong>Applicant Name</strong></td>
<td>James J. Nakatani</td>
<td></td>
</tr>
<tr>
<td><strong>Licensed Engineer’s Name</strong></td>
<td>Kevin Medes</td>
<td></td>
</tr>
<tr>
<td><strong>Engineering Company</strong></td>
<td>R. M. Towill Corporation</td>
<td></td>
</tr>
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<table>
<thead>
<tr>
<th><strong>Dam Name</strong></th>
<th>Kitano Reservoir</th>
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<tbody>
<tr>
<td><strong>Dam ID No. (State) (if New Dam enter N/A)</strong></td>
<td>KA-0004</td>
</tr>
<tr>
<td><strong>Type of Project (check one)</strong></td>
<td>New Construction</td>
</tr>
<tr>
<td></td>
<td>Improvement (repair/rehabilitation/alteration)</td>
</tr>
<tr>
<td></td>
<td>Reduction (alteration to below regulatory jurisdiction)</td>
</tr>
<tr>
<td></td>
<td><strong>X</strong> Removal (breach, no pond)</td>
</tr>
<tr>
<td><strong>Dam/Reservoir Location (City)</strong></td>
<td>Kekaha</td>
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<tr>
<td><strong>Dam/Reservoir Location (Latitude/Longitude)</strong></td>
<td>22.028432 (lat) / -159.673562 (long)</td>
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<td><strong>TMK(s)</strong></td>
<td>(4) 1-2-02 : 01</td>
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<tr>
<td><strong>Island/County</strong></td>
<td>Kauai / Kauai</td>
</tr>
<tr>
<td><strong>State Land Use District (check all applicable)</strong></td>
<td><strong>X</strong> Agriculture</td>
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<tr>
<td></td>
<td>____ Rural</td>
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<tr>
<td></td>
<td>____ Urban</td>
</tr>
<tr>
<td></td>
<td>____ Conservation</td>
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<tr>
<th><strong>Application Package</strong></th>
<th><strong>Included (Y/N)</strong></th>
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<tr>
<td>1. Dam Safety Permit Application form (with each owners signature page)</td>
<td>Y</td>
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<tr>
<td>2. Design Report(s)</td>
<td>Y</td>
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<tr>
<td>3. Documentation for compliance with Chapter 343 Environmental Review</td>
<td>*N</td>
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<tr>
<td>4. Documentation for compliance with State Historic Preservation Division (SHPD)</td>
<td>**N</td>
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<tr>
<td>5. Construction Plans (2 sets)</td>
<td>Y</td>
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<td>6. Construction Specifications (2 sets)</td>
<td>N</td>
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<td>7. Construction Quality Assurance Plan</td>
<td>N</td>
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<td>8. Detailed Cost Estimate</td>
<td>Y</td>
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<tr>
<td>9. Filing fee calculation</td>
<td>Y</td>
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<td>10. Filing fee (check)</td>
<td>Y</td>
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<tr>
<td>11. Other Supporting Documents</td>
<td>N</td>
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<tr>
<td>12. Electronic copy of all of the above on CD/DVD</td>
<td>Y</td>
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*ADC will submit a declaration of exemption from Chapter 343 pending compliance letter from SHPD.*

**Construction plans were submitted to SHPD pending USACOE Jurisdictional Determination.**
**Hawaii Dam and Reservoir Safety Program**  
**DAM SAFETY PERMIT**

<table>
<thead>
<tr>
<th>Dam Name: Kitano Reservoir</th>
<th>Project Type: Removal</th>
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### Technical Information

<table>
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<tr>
<th>Drainage Area (sq. miles/ acres)</th>
<th>0.05 sq. miles / 32.3 acres</th>
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<tbody>
<tr>
<td>Type of Structure (Earthen/Concrete, etc.)</td>
<td>Earthen Dam</td>
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<td>Size Classification of Dam</td>
<td>Small</td>
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<tr>
<td>Hazard Classification</td>
<td>Proposed High</td>
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<tr>
<td>Purpose of Structure (Water supply, irrigation, recreation, real estate development, etc...)</td>
<td>Impoundment for irrigation water (not currently in use)</td>
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<tr>
<td>Maximum Capacity (existing volume)</td>
<td>70.8 ac-ft (spillway) / 86.9 ac-ft (top of dam)</td>
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<tr>
<td>Maximum Capacity (revised volume after project completed)</td>
<td>0.0 ac-ft</td>
</tr>
<tr>
<td>Year completed/last modified</td>
<td>Completed 1928</td>
</tr>
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### Description of Work to be performed (describe construction work to be done on dam and reservoir facility)

The project consists of mass grading to breach the man made earth berm of the Kitano Reservoir by excavating and removing a portion of the embankment. The resulting section will be trapezoidal with 2:1 side slopes and a bottom width of 20'. CRM will be placed for scour protection.

### Anticipated effect of proposed structure on natural environment:

There will be no significant impact to downstream lots, street, and to the existing drainage pattern as a result of the proposed grading. The Kokee Ditch and Waipao Valley will see no change in runoff due to the proposed reservoir breach. Any runoff potentially diverted from the ditch through the reservoir breach would be returned to the Kokee Ditch downstream of the reservoir, matching the existing conditions.

List all parties who share ownership of the parcels where the dam and reservoir are located and identify their interest in the property. All owners herein listed below shall sign **Attachment 2 – Owner Signature** and concur with the work proposed within this application by the applicant.

### Owner Information

<table>
<thead>
<tr>
<th>Owner 1 Name:</th>
<th>James J. Nakatani</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company:</td>
<td>State of Hawaii, Department of Agriculture, Agribusiness Development Corporation</td>
</tr>
<tr>
<td>TMK:</td>
<td>(4) 1-2-02 : 01</td>
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<table>
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<tr>
<th>Owner 2 Name:</th>
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<tbody>
<tr>
<td>TMK:</td>
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<table>
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<tr>
<th>Owner 3 Name:</th>
<th>Company:</th>
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<tbody>
<tr>
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<table>
<thead>
<tr>
<th>Owner 4 Name:</th>
<th>Company:</th>
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<tr>
<td>TMK:</td>
<td></td>
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</tbody>
</table>
**Hawaii Dam and Reservoir Safety Program**  
**DAM SAFETY PERMIT**

### Attachment 1

**CONTACT INFORMATION**

<table>
<thead>
<tr>
<th>Applicant Information (primary contact for Dam Safety Permit process)</th>
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</thead>
<tbody>
<tr>
<td><strong>Applicant Contact Name</strong></td>
</tr>
<tr>
<td><strong>Firm/Company</strong></td>
</tr>
<tr>
<td><strong>Mailing Address</strong></td>
</tr>
<tr>
<td><strong>Telephone</strong></td>
</tr>
<tr>
<td><strong>Fax</strong></td>
</tr>
<tr>
<td><strong>Email</strong></td>
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</tbody>
</table>

I, _____________________________ James J. Nakatani, the applicant, hereby certify that the information herein is true and factual to the best of my knowledge. Signing below indicates that the applicant understands that, if the permit requested is granted by the Board of Land and Natural Resources, the proposed work is to be initiated and completed within five (5) years of the approval date, unless specifically permitted in the approved permit terms and conditions.

---

**Licensed Engineer Contact Information**

<table>
<thead>
<tr>
<th>Registered Hawaii Professional Engineer</th>
<th>Kevin Mendes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Registration No.</td>
<td>8200-C</td>
</tr>
<tr>
<td><strong>Firm/Company</strong></td>
<td>R. M. Towill Corporation</td>
</tr>
<tr>
<td><strong>Mailing Address</strong></td>
<td>2024 North King Street, Suite 200, Honolulu, HI 96819</td>
</tr>
<tr>
<td><strong>Telephone</strong></td>
<td>(808) 842-1133</td>
</tr>
<tr>
<td><strong>Mobile/Other</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Fax</strong></td>
<td>(808) 842-1937</td>
</tr>
<tr>
<td><strong>Email</strong></td>
<td><a href="mailto:kevinm@rmtowill.com">kevinm@rmtowill.com</a></td>
</tr>
</tbody>
</table>
Hawaii Dam and Reservoir Safety Program
DAM SAFETY PERMIT

Dam Name: Kitano Reservoir
Project Type: Removal

Attachment 2

OWNER SIGNATURE

A separate signature page is required for each and all owners of the dam and reservoir for the subject project. The Owner herein listed below concurs with the work proposed within this application by the applicant and by signing hereto, the owner of the land extends to the Board of Land and Natural Resources, and its designated representatives, a right-of-entry onto the project site to conduct any investigations or inspections required in compliance with the provisions of Chapter 13-190.1, Hawaii Administrative Rules. (Submit copies of this sheet for each owner)

<table>
<thead>
<tr>
<th>Owner Information</th>
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<tbody>
<tr>
<td>Owner Contact Name</td>
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<tr>
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<tr>
<td>Mailing Address</td>
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<td>Mobile/Other</td>
</tr>
<tr>
<td>Fax</td>
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<tr>
<td>Email</td>
</tr>
<tr>
<td>TMK for dam/reservoir property</td>
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Owner Signature

James J. Nakatani
Print Name of Owner

Signature of Owner

January 6, 2017
Date
Attachment 3

FEE REQUIREMENTS/FILING FEE CALCULATION

Payment of the filing fee is required pursuant to HRS §179D-6 and §13-190.1-50 for all applications. The Department shall accept and take action on the following applications and filings only if the fee shown for the application or filing is paid at the time the application or filing is submitted. The fee is based upon two percent of the total project costs associated with construction of the dam and appurtenant works integral to the design and safe operation of the dam.

The applicant or owner shall submit with the application for construction, enlargement, alteration, repair, or removal a fee calculation sheet and the application fee in the amount equal to two per cent of the estimated cost of construction including engineering costs. The estimated cost of the construction, enlargement, alteration, repair, or removal shall include the cost of all labor and materials entering into the construction of the dam and appurtenant works or reservoir, the cost of preliminary investigations and surveys, the cost of the construction plans properly chargeable to the cost of the dam or reservoir, and any and all other items entering directly into the cost of the construction, enlargement, alteration, repair or removal. The costs of right-of-way, detached powerhouses, electrical generating machinery, and roads and railroads affording access to the dam or reservoir shall not be included among the items used in the determination of cost.

An application shall not be considered by the department until the application fee is received. In the event the actual cost exceeds the estimated cost by more than 15 percent, a further fee shall be required by the board before final approval and shall be two per cent of the amount the actual cost exceeded the estimated cost of the construction, enlargement, alteration, repair, or removal. No further fee shall be required, if such fee is to be computed at less than twenty dollars ($20).

FILING FEE CALCULATION

<table>
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<tr>
<th>Description</th>
<th>Amount</th>
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<tbody>
<tr>
<td>Engineering costs (studies, plans, specifications, etc...)</td>
<td>$55,070</td>
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<tr>
<td>Estimated Construction cost</td>
<td>$261,970</td>
</tr>
<tr>
<td>Total estimated costs</td>
<td>$317,040</td>
</tr>
<tr>
<td>Initial Application fee = 2% x Total estimated costs</td>
<td>$6,341</td>
</tr>
</tbody>
</table>
NOTES FOR GENERAL CONSTRUCTION

1. All work shall be performed in the manner and at the time and rate as specified in Contract Documents. Deviations from the provisions of this Contract resulting in delay or inconvenience to the Contractor, or additional cost or expense to the Contractor, shall be charged to the Owner unless the Contractor shall have in writing consented to such delay, inconvenience or additional cost or expense.

2. The Contractor shall furnish and install all work required by the Contract Documents, unless otherwise specified. If any item is not specified in the Contract Documents, the Contractor shall make the determination of the work required and shall issue a written order to the Owner.

3. The Contractor shall be responsible for the proper performance of the work described in the Contract Documents. The Owner shall not be liable for any work which is not properly performed by the Contractor.

WATER POLLUTION AND EROSION CONTROL NOTES

1. The Contractor shall comply with the provisions of the Clean Water Act and other applicable federal, state, and local regulations concerning the protection of the environment. The Contractor shall take all necessary precautions to prevent any pollution or other environmental damage.

2. The Contractor shall be responsible for securing all necessary permits and licenses required by law for the performance of the work.

3. The Contractor shall provide adequate drainage and erosion control measures to prevent damage to the environment.

4. The Contractor shall ensure that all materials and equipment used in the performance of the work are in compliance with all applicable environmental regulations.

PUBLIC HEALTH, SAFETY AND COMPLIANCE

1. The Contractor shall comply with all applicable laws, regulations, and ordinances concerning public health and safety.

2. The Contractor shall provide adequate protection for the public during the performance of the work.

3. The Contractor shall take all necessary precautions to prevent injury to the public.

TEMPORARY DRAINAGE CONTROL MEASURES FOR GRAZING

1. The Contractor shall take all necessary precautions to prevent the spread of disease and contamination to the environment.

2. The Contractor shall provide adequate drainage and erosion control measures to prevent damage to the environment.

3. The Contractor shall ensure that all materials and equipment used in the performance of the work are in compliance with all applicable environmental regulations.

CONTRACTOR'S RESPONSIBILITY FOR EXISTING UTILITY LINES, TAPS AND SERVICES

1. The Contractor shall be responsible for the proper and safe installation of all new utility lines, taps, and services. The Contractor shall be responsible for any damage to existing utility lines, taps, and services caused by the Contractor's work.

2. The Contractor shall be responsible for securing all necessary permits and licenses required by law for the performance of the work.

3. The Contractor shall provide adequate drainage and erosion control measures to prevent damage to the environment.

4. The Contractor shall ensure that all materials and equipment used in the performance of the work are in compliance with all applicable environmental regulations.

ENVIROMENTAL PROTECTION NOTES

1. The Contractor shall comply with all applicable laws, regulations, and ordinances concerning public health and safety.

2. The Contractor shall provide adequate protection for the public during the performance of the work.

3. The Contractor shall take all necessary precautions to prevent injury to the public.
UNIFIED SOIL CLASSIFICATION

DESCRIPTION OF ROCK MATERIALS

NOTE
1. REFER TO SECTION 0020 FOR EARTHWORK REQUIREMENTS.
NOTE:
1. REFER TO SECTION 1200 FOR CATCHMENT REQUIREMENTS.
DECLARATION OF EXEMPTION
From the preparation of an environmental assessment under the authority of
Chapter 343, HRS and Chapter 11-200, HAR

Project Title: Kitano Reservoir Dam Breach

Project Number: DOASW02

Project Description: Decommissioning of the Kitano Reservoir Dam by
Excavation Removal of a Portion of the Earthen Embankment. Excavation Spoils
to be Backfilled with the Reservoir.

The Following Parties Have Been Consulted About This Declaration of
Exemption: R.M. Towill Corporation & Yogi Kwong Engineers, LLC

Exemption Class: Exemption Class 8

Exempt Item Number: Number 3.

Exempt Item Description: Demolition and/or removal of unusable, obsolete,
abandoned, or unauthorized structures or improvements on agricultural lands
and agricultural processing or marshalling facilities.

Date of Agency Exemption List: June 2, 2003

I have considered the potential effects of the above listed project as provided by
Chapter 343, HRS and Chapter 11-200, HAR. I declare that this project will
probably have minimal or no significant effect on the environment and is
therefore exempt from the preparation of an environmental assessment.

Signature of Director
Or delegate: ______________________

Date: December 14, 2015

Original: Agency file
Copy: Project file
August 25, 2017

Paul Togioka
Department of Public Works, County of Kaua‘i
4444 Rice St., Suite 275
Lihue, Hawaii 96766
ptogioka@hawaii.gov

Dear Mr. Togioka:

SUBJECT: Chapter 6E-42 Historic Preservation Review – REVISED COMMENTS
Clearinghouse Application No. CL-2015-026 Kitano Reservoir – Dam Breach Plan
Waimea Ahupu‘a‘a, Kona District, Island of Kaua‘i
TMK: (4) 1-2-002:001 por.

This is a follow up letter to our letter dated October 13, 2015 (Log No. 2015.03389, Doc. No. 1510MN02) for Clearinghouse Application No. CL-2015-026 Kitano Reservoir – Dam Breach Plan, in which SHPD requested the applicant/landowner (1) provide a scope of work, and (2) indicate whether the project would require a U.S. Army Corps of Engineers (Corps) permit and if so, (3) indicate whether the USACE had initiated National Historic Preservation Act (NHPA) Section 106 consultation. According to the submittal, the State of Hawaii Department of Agriculture (DOA) proposes to grade approximately 1.28 acres of the property, including excavating 4,550 cubic yards and excavating approximately 3,700 cubic yards of embankment.

Our office received the requested information via email on May 17, 2017 (Michael Nakamura [RM Towill, on behalf of DOA] to Stephanie Hacker [SHPD]. The additional information consisted of a scope of work which includes mass grading to breach the man-made earth berm, installation of grouted rip rap, backfilling of existing 18-inch steel drain pipe with concrete, and demolition of an existing 42-inch arch culvert spillway. The additional information specifies that the Kitano Reservoir is currently dry and not in operation. In addition, a copy of the following Corps document: USACOE, Approved Jurisdictional Determination for Kitano Reservoir, Kokee, Island of Kauai, Army File No. POH-2015-00064 (January 11, 2017). This document indicates the Corps has determined that the Kitano Reservoir is not a water of the U.S. and is not subject to the regulatory jurisdiction of Corps pursuant to Sections 10 and 404.

A review of SHPD records indicates that no archaeological inventory survey has been conducted and no historic properties have been identified within the subject parcel. SHPD records also indicate that the above parcel has undergone extensive grubbing and grading. SHPD previously made a no historic properties affected for the above parcel on September 17, 2013 (Log No. 2013.02764, Doc. No. 1307GC21).

Based on the information provided, SHPD’s determination is no historic properties affected. The permitting process may continue.

Please attach the following to the permit: In the event that historic properties, including human skeletal remains, structural remains, cultural deposits or features, or artifacts are uncovered please cease work in the vicinity of the find, protect the find from further disturbance, and immediately contact the State Historic Preservation Division at (808) 692-8015.
Paul Togioka  
August 28, 2017  
Page 2  

Please contact me at (808) 692-8019 or at Susan.A.Lebo@hawaii.gov if you have any questions regarding this letter.

Aloha,

Susan A. Lebo, PhD  
Archaeology Branch Chief  

cc: Mike Nakamura, RM Towill (MikeN@rmtowill.com)
### Dam Safety Permit - Agency Consultation summary:

**Permit No. 78 – Kitano Reservoir (KA-0004) – Dam removal**

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<th>Date Returned</th>
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<tr>
<td>Commission on Water Resources Management</td>
<td>9/19/2017</td>
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FROM: Carty Chang, Chief Engineer

SUBJECT: Dam Safety Permit – Agency Consultation  
Kitano Reservoir (KA-0004)  
Dam Safety Permit No. 78, Dam Removal

LOCATION: Kauai, TMK: (4) 1-2-002:001

APPLICANT: James J. Nakatani, State of Hawaii, Department of Agriculture, Agribusiness Development Corporation

Transmitted for your review and information are the attached documents on the subject Dam Safety Permit application. Please return to our office a signed copy of this transmittal with one of the choices below checked along with any comments by October 31, 2017. If no response is received by this date, we will assume your agency has no comments. If you have any questions, please contact Denise Manuel of my staff at (808) 587-0246 or denise.m.manuel@hawaii.gov.

1. Dam Safety Permit Application
2. Plan set (selected sheets)
3. DLNR Dam Facility Data sheet

( ) We have no comments  
(x) Comments are attached (separate document)  
( ) Comments are noted below

Signed: /s/Jeffrey T. Pearson, P.E.  
Print name: Deputy Director  
Agency: CWRM  
Date: October 27, 2017

Comments:
TO: Carty Chang, Chief Engineer  
Engineering Division

FROM: Jeffrey T. Pearson, P.E., Deputy Director  
Commission on Water Resource Management

SUBJECT: Dam Safety Permit - Agency Consultation - Kitano Reservoir (KA-0004) - Dam Safety Permit No. 78, Dam Removal

FILE NO.: RFD.4677.2  
TMK NO.: (4) 1-2-002:001

Thank you for the opportunity to review the subject document. The Commission on Water Resource Management (CWWRM) is the agency responsible for administering the State Water Code (Code). Under the Code, all waters of the State are held in trust for the benefit of the citizens of the State, therefore all water use is subject to legally protected water rights. CWWRM strongly promotes the efficient use of Hawaii's water resources through conservation measures and appropriate resource management. For more information, please refer to the State Water Code, Chapter 174C, Hawaii Revised Statutes, and Hawaii Administrative Rules, Chapters 13-167 to 13-171. These documents are available via the Internet at http://dlnr.hawaii.gov/cwrm.

Our comments related to water resources are checked off below.

☐ 1. We recommend coordination with the county to incorporate this project into the county's Water Use and Development Plan. Please contact the respective Planning Department and/or Department of Water Supply for further information.

☐ 2. We recommend coordination with the Engineering Division of the State Department of Land and Natural Resources to incorporate this project into the State Water Projects Plan.

☐ 3. We recommend coordination with the Hawaii Department of Agriculture (HDOA) to incorporate the reclassification of agricultural zoned land and the redistribution of agricultural resources into the State's Agricultural Water Use and Development Plan (AWUDP). Please contact the HDOA for more information.

☐ 4. We recommend that water efficient fixtures be installed and water efficient practices implemented throughout the development to reduce the increased demand on the area's freshwater resources. Reducing the water usage of a home or building may earn credit towards Leadership in Energy and Environmental Design (LEED) certification. More information on LEED certification is available at http://www.usgbc.org/leed. A listing of fixtures certified by the EAP as having high water efficiency can be found at http://www.epa.gov/watersense.

☐ 5. We recommend the use of best management practices (BMP) for stormwater management to minimize the impact of the project to the existing area's hydrology while maintaining on-site infiltration and preventing polluted runoff from storm events. Stormwater management BMPs may earn credit toward LEED certification. More information on stormwater BMPs can be found at http://planning.hawaii.gov/czm/initiatives/low-impact-development/

☐ 6. We recommend the use of alternative water sources, wherever practicable.

☐ 7. We recommend participating in the Hawaii Green Business Program, that assists and recognizes businesses that strive to operate in an environmentally and socially responsible manner. The program description can be found online at http://energy.hawaii.gov/green-business-program.

☐ 8. We recommend adopting landscape irrigation conservation best management practices endorsed by the Landscape Industry Council of Hawaii. These practices can be found online at

9. There may be the potential for ground or surface water degradation/contamination and recommend that approvals for this project be conditioned upon a review by the State Department of Health and the developer's acceptance of any resulting requirements related to water quality.

10. The proposed water supply source for the project is located in a designated water management area, and a Water Use Permit is required prior to use of water. The Water Use Permit may be conditioned on the requirement to use dual line water supply systems for new industrial and commercial developments.

11. A Well Construction Permit(s) is (are) are required before the commencement of any well construction work.

12. A Pump Installation Permit(s) is (are) required before ground water is developed as a source of supply for the project.

13. There is (are) well(s) located on or adjacent to this project. If wells are not planned to be used and will be affected by any new construction, they must be properly abandoned and sealed. A permit for well abandonment must be obtained.

14. Ground-water withdrawals from this project may affect streamflows, which may require an instream flow standard amendment.

15. A Stream Channel Alteration Permit(s) is (are) required before any alteration can be made to the bed and/or banks of a stream channel.

16. A Stream Diversion Works Permit(s) is (are) required before any stream diversion works is constructed or altered.

17. A Petition to Amend the Interim Instream Flow Standard is required for any new or expanded diversion(s) of surface water.

18. The planned source of water for this project has not been identified in this report. Therefore, we cannot determine what permits or petitions are required from our office, or whether there are potential impacts to water resources.

OTHER: The Kitano Reservoir is not located on or within a natural stream channel, thus a Stream Channel Alteration Permit and/or Stream Diversion Works Permits will not be required for removal of the Kitano Reservoir Dam (Dam Safety Permit No. 78).

If you have any questions, please contact Dean Uyeno of the Commission staff at 587-0234.
"DOC Reviews (2) RFD.4694.8 State Land Use Boundary Amendment/RFD.4677.2 Kitano Reservoir" History

Document created by Kathy Yoda (kathy.s.yoda@hawaii.gov)
10/27/2017 - 9:56:24 AM HST - IP address: 132.160.239.30

Document emailed to Jeffrey Pearson (jeff.pearson@hawaii.gov) for signature
10/27/2017 - 9:57:12 AM HST

Document viewed by Jeffrey Pearson (jeff.pearson@hawaii.gov)
10/27/2017 - 5:06:59 PM HST - IP address: 98.155.140.187

Document e-signed by Jeffrey Pearson (jeff.pearson@hawaii.gov)
Signature Date: 10/27/2017 - 5:08:35 PM HST - Time Source: server - IP address: 98.155.140.187

Signed document emailed to all eligible parties.
10/27/2017 - 5:08:35 PM HST
October 11, 2017

TO: Carty Chang, Chief Engineer – Engineering Division

FR: Sheri S. Mann, Kauai Branch Manager – Division of Forestry & Wildlife

RE: Dam Safety Permit Application – Agency Consultation, Kitano Reservoir, Kauai, Hawaii, (KA-0004)

Dear Mr. Chang:

The Department of Land and Natural Resources, Kauai Division of Forestry and Wildlife (DOFAW) is in receipt of your letter dated September 19, 2017, requesting comments on the subject Dam Safety application for the Kitano Reservoir, Kauai, Hawaii. Our comments and recommendations are below.

**Hawaiian Hoary Bat – (HHB)**

The Hawaiian hoary bat (*Lasius cinerus semotus*) is federally and state listed as endangered and is known to roost throughout the island of Kauai in mixed native and non-native forest habitat. During the birthing and pupping season of June to September 15, HHB often occupy trees greater than 15 feet or 4.6 meters in height to raise their young. To minimize impacts to HHB, it is recommended that earthworks involving or impacting trees of this size be done outside of the pup rearing season (September 16 to May 31).

If a tree that is greater than 15 feet in height needs to be trimmed or removed inside the pup rearing season, it is recommended that a wildlife biologist that is knowledgeable in Hawaiian bats be hired to survey the tree(s) prior to tree cutting. Additionally, attached is a general guideline pertaining to HHB habitat that may be of interest to you.

**Hawaiian Waterbirds and Hawaiian Goose**

Kitano Reservoir previously supported feeding habitat for the Federal and State endangered Hawaiian duck (*Anas wyvilliana*). However, the reservoir has been dry for the past 6 or 7 years and no longer supports native waterbirds.

There are no records of the Federal and state endangered Hawaiian coot (*Fulica alai*), Hawaiian moorhen (*Gallinula chloropus sandvicensis*), Hawaiian stilt (*Himantopus mexicanus*) and Hawaiian goose (*Branta sandvicensis*) using the Kitano Reservoir.
October 11, 2017

Carty Chang, Chief Engineer
Engineering Division
Department of Land and Natural Resources
P.O. Box 373
Honolulu, HI 96809
carty.s.chang@hawaii.gov

Dear Mr. Chang:

SUBJECT: Chapter 6E-8 Historic Preservation Review –
Kitano Reservoir (KA-004) – Agency Consultation
Dam Safety Permit No. 78, Dam Removal
Wai‘anae Hupuna‘a, Kona District, Island of Kau‘ai
TMK: (4) 1-2-002:001 por.

Thank you for the opportunity to comment on the Kitano Reservoir (KA-004) Dam Safety Permit No. 78, Dam Removal (Log No. 2017.02107), which the State Historic Preservation Division (SHPD) received on September 19, 2017 from the Department of Land and Natural Resources, Engineering Division. The Department of Agriculture (DOA) proposes to breach a 1.28-acre portion of the 4.8-acre earthen dam. The dam is currently dry and not in operation. The scope of work includes grading approximately 1.28 acres of the embankment and installing of a CRM for scour protection.

A review of SHPD records indicates that our division commented on County of Kauai Clearinghouse Application No. CL-2015-026, Kitano Reservoir-Dam Breach Plan, Revised Comments on August 25, 2017 (Log No. 2015.03389, Doc. No. 1708GC15). SHPD’s determination was no historic properties affect for the proposed dam breach.

Based on the available information, SHPD’s determination is no historic properties affected. The permitting process may continue.

Please attach to the permit: In the unlikely event that subsurface historic resources, including human skeletal remains, structural remains, cultural deposits, artifacts, sand deposits, or sink holes are identified during the demolition and/or construction work, cease work in the immediate vicinity of the find, protect the find from additional disturbance, and contact the State Historic Preservation Division, at (808) 692-8015.

Please contact me at (808) 692-8019 or at Susan.A.Lebo@hawaii.gov for any concerns regarding this letter.

Aloha,

Susan A. Lebo, PhD
Archaeology Branch Chief

cc: Denise Manuel – DLNR-Engineering (denise.m.manuel@hawaii.gov)
STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
ENGINEERING DIVISION
POST OFFICE BOX 373
HONOLULU, HAWAII 96809
SEP 19 2017

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FROM: Carty Chang, Chief Engineer

SUBJECT: Dam Safety Permit – Agency Consultation
Kitano Reservoir (KA-0004)
Dam Safety Permit No. 78, Dam Removal

LOCATION: Kauai, TMK: (4) 1-2-002:001

APPLICANT: James J. Nakatani, State of Hawaii, Department of Agriculture, Agribusiness Development Corporation

Transmitted for your review and information are the attached documents on the subject Dam Safety Permit application. Please return to our office a signed copy of this transmittal with one of the choices below checked along with any comments by October 31, 2017. If no response is received by this date, we will assume your agency has no comments. If you have any questions, please contact Denise Manuel of my staff at (808) 587-0246 or denise.m.manuel@hawaii.gov.

1. Dam Safety Permit Application
2. Plan set (selected sheets)
3. DLNR Dam Facility Data sheet

( ) We have no comments
( ) Comments are attached (separate document)
( ) Comments are noted below

Signed: 
Print name: Wesley T. Matsunaga
Agency: DLNR Land Div
Date: 10/30/17

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**TO:** Carty Chang, Chief Engineer

**SUBJECT:** Dam Safety Permit – Agency Consultation

Kitano Reservoir (KA-0004)

Dam Safety Permit No. 78, Dam Removal

**LOCATION:** Kauai, TMK: (4) 1-2-002:001

**APPLICANT:** James J. Nakatani, State of Hawaii, Department of Agriculture, Agribusiness Development Corporation

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( ) Comments are attached (separate document)
☑ Comments are noted below

Signed: [Signature]
Print name: ALEX O. ROY
Agency: DLNR - OCCL
Date: 9-27-17

Comments: **WATER IS NOT LOCATED IN SLU CONSERVATION DISTRICT**
TO:

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FROM: Carty Chang, Chief Engineer

SUBJECT: Dam Safety Permit – Agency Consultation
Kitano Reservoir (KA-0004)
Dam Safety Permit No. 78, Dam Removal

LOCATION: Kauai, TMK: (4) 1-2-002:001

APPLICANT: James J. Nakatani, State of Hawaii, Department of Agriculture, Agribusiness Development Corporation

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We have no comments

Comments:

Signed: [Signature]
Print name: [Signature]
Agency: DPW, County of Kauai
Date: 10/24/2017
Kitano Reservoir (KA-0004)
Erosion Gullies and Trees on the Upstream Slope
Kitano Reservoir (KA-0004)
Right Side of Embankment - Wide Dam Crest

Kitano Reservoir (KA-0004)
Trees and Erosion Gullies on the Upstream Slope

Kitano Reservoir
Exhibit 7
Kitano Reservoir (KA-0004)
Catwalk Metal Support Structure - 90% Deterioration - Unsafe

Kitano Reservoir (KA-0004)
Catwalk Access - Catwalk in Disrepair
Kitano Reservoir (KA-0004)
Right Side Spillway CMP Partially Silted In

Kitano Reservoir (KA-0004)
Upstream Slope - Erosion Gully from Motocross Activities

Kitano Reservoir

Exhibit 7
DAM SAFETY PERMIT GENERAL CONDITIONS

APPROVAL OF PLANS AND SPECIFICATIONS FOR DAM AND RESERVOIR CONSTRUCTION, ENLARGEMENT, REPAIR, ALTERATION OR REMOVAL

The following General Conditions shall be adhered to for all Dam Safety permits unless otherwise authorized in writing.

1. Actual construction, enlargement, repair, alteration or removal shall be completed within 5 years of issuance of the permit application approval unless an extension authorized in writing by the Board is issued.

2. Prior to the start of work the owner or applicant shall provide a construction engineer to ensure compliance with the approved plans and specifications and who shall have ultimate responsibility for the supervision of all inspection tasks. The construction engineer may assign some inspection tasks to a duly authorized agent under the construction engineer's supervision. The engineer shall be licensed in the State of Hawaii.

3. The construction engineer shall maintain a record of construction that at a minimum, shall include, daily activity, and progress reports, all test results pertaining to construction; photographs sufficient to provide a record of foundation conditions and various stages of the construction through completion, all geologic information obtained; and construction problems and remedies.

4. A construction quality assurance plan shall be prepared and submitted to the Department for approval prior to the start of construction, which details the minimum requirements of the construction engineer's observation of construction.

5. A construction schedule, which includes the notice to proceed date and estimated project duration and a construction emergency action plan shall be submitted prior to the preconstruction meeting.

6. A preconstruction meeting shall be held subsequent to submitting the quality assurance plan, construction schedule and construction emergency action plan, but not later than 14 days prior to the start of construction. All parties actively involved in the construction should be requested to attend, such as the dam owner, the design engineer, the construction engineer, the contractor and the Department.

7. The Department shall be notified 5 calendar days prior to the commencement of construction.

8. Any changes from the approved plans and specifications shall be approved by the design engineer and a change order, including details and supporting calculations, must be provided to the Department. Major changes must be submitted in writing with supporting documentation and approved in writing by the Department. No work shall be initiated until the approval by the Department or Board is received. Minor changes may be transmitted verbally and approved by the Department verbally provided that documentation of the change is provided to the Department within 10 days of the approval.

Rev: August 2017
9. For new dam construction and for dams and reservoirs that have lowered the water level or have been drained to facilitate construction, the construction engineer shall file and obtain approval of a filling plan with the Department. The applicant/owner shall not proceed with the filling of the reservoir until it receives permission from the Department. The construction engineer shall provide documentation of monitoring during the filling operation.

10. Prior to the filling of the reservoir, the construction engineer shall submit one copy each of the approved Operations Manual and the approved Emergency Action Plan for the facility upon completion of the project as applicable.

11. The construction engineer shall give the Department at least ten days advanced notice of initial materials placement of the dam’s foundation, in the cutoff trench, outlet backfill, outlet foundation, and any appurtenance requested by the Department in the approval of the plan for construction observation, to allow for observation by the Department.

12. Notice of substantial completion shall be issued by the construction engineer to the Department stating that the permitted improvements are functionally complete such that filling of the reservoir can be initiated with an approved filling plan.

13. The construction engineer shall give the Department fifteen (15) calendar days advance written notice prior to the project’s final construction inspection. The construction engineer shall coordinate with the Department to conduct this inspection in the presence of the Department’s dam safety personnel.

14. The construction engineer shall provide notice at least ten (10) days prior to initiating filling the reservoir, unless agreed at the final inspection.

15. If conditions are revealed which will not permit the construction, enlargement, repair, alteration, or removal of a safe dam or reservoir, the application for approval for construction, enlargement, repair, alteration, or removal shall be revoked.

16. A topographic survey of completed work including all monuments, inverts, crest alignment, spillways, and significant appurtenant features, when required by the Department shall be completed.

17. The applicant/owner shall utilize appropriate erosion control best management practice measures during construction to minimize turbidity (such as scheduling of work during period of low stream flow) and prevent debris and construction materials, including concrete, petroleum products, and other pollutants from enter the waters of the State. Construction related water and debris should be properly disposed of in a legal and environmentally safe manner and in accordance with the Department of Health and other Federal regulations.

18. The applicant/owner shall submit a copy of the dam safety application and the plans and specifications of the proposed improvements to the County Engineer of the County for which the dam resides for compliance with County codes.

19. Within fifteen (15) calendar days of completing the project, the applicant/owner or its representative shall provide the Department with a confirmation letter of compliance, signed and stamped by the construction engineer, indicating that the construction
was completed in accordance to approved plans and specifications including any field changes. The construction engineer shall submit the remaining construction completion documents which may include, but not be limited to, as-constructed drawing, final construction report, topographic survey, record of the location of permanent monuments, log of recorded water levels and other readings from the refilling operation, long-term instrumentation monitoring plan, and affidavit showing the actual cost of construction including engineering costs, within 60 calendar days of the submittal of the final construction inspection.

20. Construction completion documents and the construction engineer's certification shall be provided to the Department within 60 days of the final construction inspection. The Department will review the submitted items and furnish acceptance or denial within 60 days of receipt of satisfactorily completed construction completion documents and close out the dam safety permit.

21. This permit does not relieve the applicant/owner of their obligations to comply with all applicable Federal, State, and County regulations.

22. In the unlikely event that subsurface historic resources, including human skeletal remains, structural remains, cultural deposits, artifacts, sand deposits, or sink holes are identified during the demolition and/or construction work, cease work in the immediate vicinity of the find, protect the find from additional disturbance, and contact the State Historic Preservation Division at (808) 692-8015.