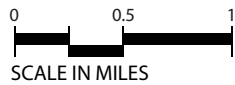


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LAND USE COMMISSION



Aerial Imagery Source: Google Earth, Airbus, Data SOEST/UHM, Date: 8/9/2022



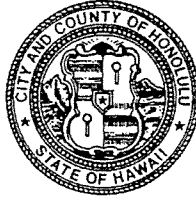
Makakilo Quarry Location Map

Exhibit "A"

DEPARTMENT OF PLANNING AND PERMITTING
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET, 7TH FLOOR • HONOLULU, HAWAII 96813
PHONE: (808) 768-8000 • FAX: (808) 768-6041
DEPT. WEB SITE: www.honolulu.gov • CITY WEB SITE: www.honolulu.gov

MUFI HANNEMANN
MAYOR



DAVID K. TANOUE
DIRECTOR

ROBERT M. SUMITOMO
DEPUTY DIRECTOR

2007/CUP-91(RY)

July 17, 2009

Mr. Lee Sichter
Belt Collins Hawaii, Ltd.
2153 North King Street, Suite 200
Honolulu, Hawaii 96819

Dear Mr. Sichter:

Subject: Conditional Use Permit No. 2007/CUP-91
Grace Pacific Corporation
92-1130 Pueonani Street - Makakilo
Tax Map Keys 9-2-3: Portion of 74 and 82; 9-2-2: Portion of 6

The Director of Planning and Permitting has **APPROVED** the above Conditional Use Permit application, subject to conditions. A copy of the Director's Findings, Conclusions, and Decision and Order, including the conditions of approval, are attached.

Any party (to the case) wishing to appeal the Director's action must submit a written petition to the Zoning Board of Appeals (ZBA) within 30 calendar days from the date of mailing or personal service of the Director's written decision (Zoning Board of Appeals' Rules Relating to Administrative Procedure, Rule 22-2, Mandatory Appeal filing deadline). Essentially, the Zoning Board of Appeals' rules require that a petitioner show that the Director based his action on an erroneous finding of a material fact, and/or that the Director acted in an arbitrary or capricious manner, or manifestly abused his discretion. Generally, the ZBA can only consider the evidence previously presented to the Director of Planning and Permitting. The filing fee for appeals to the ZBA is \$200 (payable to the City and County of Honolulu).

Failure to comply with ZBA Rule 22-2, Procedures for Appeals, may result in the dismissal of the appeal. Copies of the ZBA rules are available at the Department of Planning and Permitting. Appeals should be addressed to:

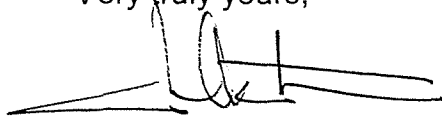
Zoning Board of Appeals
c/o Department of Planning and Permitting
650 South King Street, 7th Floor
Honolulu, Hawaii 96813

Exhibit "B"

Mr. Lee Sichter
Belt Collins Hawaii, Ltd.
July 17, 2009
Page 2

If you have any questions, please contact Raymond Young at 768-8049.

Very truly yours,

A handwritten signature in black ink, appearing to read 'David K. Tanoue', written over a horizontal line.

David K. Tanoue, Director
Department of Planning and Permitting

DKT:lh
Doc.706013

Attachment

DEPARTMENT OF PLANNING AND PERMITTING
OF THE CITY AND COUNTY OF HONOLULU

STATE OF HAWAII

IN THE MATTER OF THE APPLICATION)

OF)

GRACE PACIFIC CORPORATION)

FOR A)

CONDITIONAL USE PERMIT - MAJOR)

FILE NO. 2007/CUP-91

FINDINGS OF FACT, CONCLUSIONS
OF LAW, AND DECISION AND ORDER

I. APPLICATION

A. Basic Information

APPLICANT:	Grace Pacific Corporation
LANDOWNER:	Puu Makakilo, Inc. James Campbell Company LLC D R Horton – Schuler Homes LLC
LOCATION:	92-1130 Pueonani Street, and two lots situated between Parcel 74 and the H-1 Freeway, Ewa, Oahu, Hawaii (Exhibit 1)
TAX MAP KEY:	9-2-3: (Portion of) 74 and (Portion of) 82 Access: 9-2-2: (Portion of) 6
LAND AREA:	488.4 Acres
ZONING DISTRICT:	AG-2 General Agricultural District (Exhibit 2)
EXISTING USE:	Quarry, manufacturing and processing, recycling facility, support facilities, and open space (Exhibit 3)

The application was processed in accordance with Sections 21-2.40-2 and 21-2.90 of the Land Use Ordinance (LUO).

B. Proposal

The applicant seeks to expand the excavation and buffer areas of the Makakilo Quarry (resource extraction) and extend its use and associated operations to the year 2032. The proposed expansion and time extension (hereinafter referred to as the "Project") involves the excavation of rock from sources found farther up the slopes of Puu Makakilo (also referred to as the "Puu") and related accessory uses and structures, including processing and stockpiling of aggregate, manufacturing of asphaltic concrete, recycling activities, sales and maintenance operations, and the construction of berms.

NOTE: Much of the processing, manufacturing and related accessory uses occur on the processing site located makai of the H-1 Freeway (Tax Map Key 9-1-16: 4) that was allowed by a previous Conditional Use Permit (72/CUP-15). The current request does not involve that site. The applicant is required to relocate all uses in the processing site either into the quarry mauka of the H-1 Freeway or to an off-site location such as Campbell Industrial Park by December 31, 2012 in compliance with Condition 4 of the Decision and Order of the Land Use Commission (LUC), dated November 7, 2008,¹ for Special Use Permit (SUP) No. SP73-147. Condition 4 also requires that the applicant return the processing site to landscaped open space by November 7, 2014. Accordingly, the Director of the Department of Planning and Permitting (DPP) has determined that the instant request for a Conditional Use Permit-Major (CUP-M) need not involve the processing site as the site is required to be vacated within three years. Therefore, a new CUP-M for resource extraction and related accessory uses on Parcel 4 would not be applicable.

The applicant indicates that at current levels of demand, the approved portion² of Makakilo Quarry contains an estimated 11 years of B-Grade rock reserves. A-Grade rock reserves have been depleted as of the date of this report. The applicant proposes to supply about 500,000 tons of A-Grade rock from the expansion area and 600,000 tons of B-Grade rock from the existing quarry and the expansion area annually for the next 24 years.

¹ Special Use Permit approval for the quarry expansion and processing site under LUC Docket No. SP73-147 covers both the quarry pit and buffer areas located mauka of the H-1 Freeway, the processing site located makai of the H-1 Freeway, and a tunnel beneath the freeway which conveys aggregate to the processing site. The LUC approval covers a total area of 541.5 acres.

² Approved by the DPP in 2004 pursuant to grading plan for a 102-acre excavation area. This expanded grading area, in excess of the SUP-approved 72-acre excavation area, is being considered as part of the instant application.

The following table (Table 1) summarizes the overall quarry's existing and proposed land areas.

Table 1 – Existing and Proposed Areas

Existing and Proposed Areas (approx. acres)³				
SUP Area Description	Existing	Proposed Additions	Total	TMKs Affected
Quarry Excavation and Berming Area (including recycling facility)	78.4	105.8	184.2	9-2-3: (Por.) 74 and (Por.) 82,
Buffer Area Surrounding Quarry (Passive Open Space, No Major Grading)	188.0	114.7	302.7	9-2-3: (Por.) 74 and (Por.) 82
Access Road (1,300 ft. x 50 ft. approx.)	1.5	0.0	1.5	9-2-2: Por. 6
Totals	267.9	220.5	488.4	--

Excavation will be as deep as 200 to 250 feet below existing grade to maximize extraction of known basaltic reserves. After closure of the quarry, the Applicant plans to have in place, final landforms with slopes no greater than 75 percent (75%) to promote long-term soil retention and landscaping and to blend the post-quarry land with the topography of the surrounding natural landforms and the Puu. A proposed final grading plan dated June 5, 2008, is attached as **Exhibit 4**. Cross-sections of the final grading plan are on file and are intended to illustrate the finished slope of the quarry after completion of quarrying and renaturalization.

The June 5, 2008 final grading plan includes the following grade modifications to further mitigate visual impacts of the quarry and enhance renaturalization of the quarry pit upon completion of the mining phase:

- A screening berm of up to about 40 feet above finish grade along the northern portion of the proposed expansion area and existing excavation areas to screen views of the northern and western pit walls from the westbound H-1 Freeway approach to Kapolei. The proposed berm will extend from the quarry pit access road to an elevation of about 725 feet along the northern ridgeline to blend the grade modifications with the existing ridgeline, thereby resulting in a more natural appearance. This berm also regrades a cut that created a level area where a former unfinished golf course clubhouse once stood.
- A smaller berm will be constructed between the quarry pit and the H-1 Freeway to further screen views of the quarry from motorists traveling on the H-1 Freeway.

³ All acreages utilize the approved acreages and locations as found in the record of the SUP.

- Renaturalization of grades of the former golf course clubhouse located in the upper valley of Puu Makakilo to restore conditions that existed prior to the golf course mass grading. The proposed contours are intended to introduce two to three swales at the uppermost portion of the quarry.

To mitigate the impacts of industrial processing uses on surrounding neighbors, the applicant will terminate the ready-mix concrete plant and relocate all other uses from the processing site either to the quarry pit or to Campbell Industrial Park (CIP) by December 31, 2012. The relocation plan involves both use of existing and new equipment. The applicant indicates that the 24-year time extension will allow for amortization of the costs associated with the relocation plan.

The initial facility to be removed is the Hot-Mix Asphalt (HMA) plant which was completed in June 2009. The finish crushing, screening plant, maintenance shop, and all other remaining uses are scheduled to be completely removed by December 31, 2012. The existing HMA plant has been relocated to CIP to accommodate night operations and a new HMA plant will be constructed in the quarry pit for day operations only. Thereafter, the applicant will landscape the entire Parcel 4 by 2014.

With respect to mining phasing (also referred to as exploitation, a process where topsoil is removed and the material of interest is extracted), the applicant submitted an excavation and landscape phasing plan (dated June 5, 2008) and a phasing matrix. Generally, the applicant proposes to install berms and landscaping along the perimeter of the lower half of the quarry pit in the first phase, 2009 to 2012, while continuing mining activities in the existing pit floor. Berming and landscaping of the upper half of the quarry would occur in the second phase, 2013 to 2017; while quarry excavation continues in the mid-section. The remaining upper sections of the quarry will be excavated in the third to fifth phases with final grades at the upper most portion of the Puu completed by 2032. The applicant notes that any acreage, volumes, and projected time frames are for illustrative purposes and actual market demand will largely determine the actual excavation phasing.

The applicant also submitted a renaturalization phasing plan dated June 5, 2008. The applicant states that phasing of the renaturalization plan is subject to actual market conditions for exploitation phasing.

The applicant submitted a list of proposed uses and structures and their approximate locations (**Exhibit 5**). A final list and map will be submitted one year after approval of the CUP-M.

C. Quarry Operations

1. Mining Process and Hours of Operations

Quarry operations involve rock extraction and processing into aggregate and other materials used to manufacture products such as hot-mix asphalt and concrete mix. The extraction process involves removing topsoil (also referred to as overburden) averaging 20 feet thick in three- to five-acre blocks with a bulldozer or excavator. The overburden is used for berm or ramp construction in the quarry or sold as general fill. The underlying rock is drilled in a grid to accept explosives in which detonation is controlled to yield about 5 to 15,000 tons of 'shot-rock.' The loose rock is hauled to a primary crusher in the pit which reduces the boulders to about four inches in diameter (also referred to as 'surge'). A-Grade surge is then transported by conveyor belt under the H-1 Freeway to the processing plant makai of the freeway for further processing. B-Grade surge is further processed into base course at the southern portion of the pit. By 2012, all processing activities on Parcel 4 will be performed in the quarry or in CIP. The manufacture of ready-mix concrete will be terminated no later than 2012.

The applicant provided the following information relating to its hours of operations (Table 2).

Table 2 – Hours of Operations

Activity	Existing Hours	Proposed Hours	Comments
Excavation and Crushing	Mon-Sat 6:00 a.m. to 3:30 p.m.	Mon-Sat 6:00 a.m. to 6:00 p.m.	
Blasting	Mon-Fri 8:00 a.m. to 12:00 p.m.	No Change	Frequency of 4 to 5 blasts per week
Recycling	Shift 1: Mon-Sat 6:00 a.m. to 3:00 p.m. Shift 2: Mon-Sat 3:00 p.m. to 11:00 p.m. Note: Recycling facility is primarily for asphalt and concrete rubble	Mon-Sat 6:00 a.m. to 6:00 p.m. Unloading of cold-planed asphaltic concrete during re-paving jobs: Sun-Fri 6:00 p.m. to 10:00 p.m.	
Sales at Quarry	Mon-Sat 7:00 a.m. to 4:30 p.m.	Mon-Sat 6:00 a.m. to 6:00 p.m.	
Maintenance	Mon-Sat 3:00 p.m. to 6:00 p.m.	Mon-Sat 6:00 a.m. to 6:00 p.m.	

Currently, Parcel 74 has no quarry activities, since it serves as the buffer area between the pit, adjacent open space, and residential uses. Upon approval of the CUP, excavation on Parcel 82 will expand to include a portion of Parcel 74. Operational hours would be the same as activities located in Parcel 82.

Other existing operational details relating to number of employees, daily truck traffic, and types of on-site structures are summarized in Table 3.

Table 3 – Other Operational Details

Item Description	Existing	Proposed
Truck traffic	80-85 roundtrip dump loads per day	Traffic volume carried over from processing site to include Parcel 74
No. of employees on-site	28	All employees would work out of Parcels 74 and 82 after relocation of processing site uses
Structures	Primary crushing plant, recycle/B-Grade crusher, employee lounge, truck scale, explosive storage and preparation building located on western ridge	Existing primary crusher would be replaced by new combination primary and finish crusher at southern portion of pit by 2012; explosive storage would be relocated into excavation area

Parcel 74, used for buffer, has no permanent structures. The applicant has two employees on-site for security and landscaping. A portion of Palehua Road crosses the northern portion of Parcel 74.

II. FINDINGS OF FACT

On the basis of the evidence provided, the Director found:

A. Description of the Property

1. Site Description and Surrounding Uses

The irregular shaped site is located on the upper slopes of Puu Makakilo ("Puu") and includes the excavation pit, the buffer area, and an access roadway. It consists of 488.4 acres with slopes ranging from about 11 percent (11%) at the lower slopes of undisturbed portions of the Puu to about 40 percent (40%) on the highest elevation area of the Puu. The existing pit is located between two subtle ridgelines on the southeastern slopes of the Puu. Elevations of the Project site range from 240 feet within the pit to 972 feet at the top of the Puu. See **Exhibit 1**.

Makakilo residential community and undeveloped open space zoned P-2 General Preservation District is located to the west and northwest. Open space zoned for agricultural use is located to the northeast. The H-1 Freeway abuts the Project on the east and southeast.

2. Climate and Wind Patterns

The climate of lower Makakilo is characterized by warm and dry conditions. Rainfall ranges from one inch per year during the dry season to four inches per year during the wet season. Average daily temperatures range from upper-60 degrees to mid-70 degrees Fahrenheit.

Wind speed averages range from a low of 9 to a high of 13 miles per hour. The predominant wind direction is from the northeast to the southwest (trade winds). The communities of Makakilo, Kapolei Villages, and Kapolei Knolls are located downwind of the Project during predominant wind patterns. During other times, wind conditions are light and variable and influenced by the area's topography or by occasional Kona storm events.

3. Access

Access to the quarry is via Palehua Road, a private paved roadway that connects the quarry to Farrington Highway via an underpass at the H-1 Freeway. Because the North-South Road Interchange is under construction, the underpass has limited access for truck traffic to and from the quarry. Upon completion of the North-South Road Interchange, traffic to and from the quarry would be accommodated at the new interchange.

B. Other Permits and Approvals

1. Conditional Use Permits

Pursuant to the Comprehensive Zoning Code, on April 17, 1973, the City Council passed Resolution No. 95 granting a Conditional Use Permit 72/CUP-15 to Pacific Concrete and Rock Company, Ltd. (also referred to as PCR). This would allow the establishment of a quarry and related facilities on a 72-acre site mauka of the H-1 Freeway for excavation of rock and primary processing facilities and a 35-acre site makai of the H-1 Freeway for material processing, concrete batching, stockpiling, and related support facilities. In addition, the approval referenced 188 acres as a buffer surrounding the quarry site.

In accordance with Condition 2 of the CUP, the applicant submitted a grading plan (dated April 15, 2004), which was approved by DPP on

April 23, 2004. The approved grading plan showed the extent of the excavation area, access roads and accessory uses, and structures mauka of the H-1 Freeway, which together total about 102 acres.

On February 14, 1989, the DPP approved a Conditional Use Permit (No. 88/CUP1-30) for an 18-hole golf course proposed by Finance Realty, Ltd., on the slopes of Puu Makakilo (portion of Tax Map Key 9-2-3: 74). Subsequent to acquiring the golf course property from Finance Realty, Ltd. in 1995, the applicant determined that golf course development was infeasible and requested the DPP to rescind the CUP. On November 14, 2006, the DPP rescinded the golf course CUP.

2. Zoning Variance

On September 13, 2002, the DPP approved Zoning Variance No. 2002/VAR-51 to allow the applicant to establish an asphalt and concrete recycling facility in the quarry pit, subject to conditions (one of which relate to relocation of stockpiles in the processing site makai of the H-1 Freeway and replacement with landscaping). The stockpile relocation/landscaping requirement, which has been completed, was in response to dust concerns raised by adjoining residents.

3. Special Use Permit

On March 23, 1973, the State Land Use Commission (LUC) approved Special Permit No. SP73-147⁴ to allow PCR to establish a rock quarry at Puu Makakilo and a sanitary landfill⁵ at Puu Palailai located about 1.5 miles to the southwest of Makakilo Quarry, subject to conditions. The existing Special Use Permit approved a 72-acre excavation area and a 35-acre processing area.

On November 7, 2008, the LUC approved an amendment to Special Permit No. SP73-147 for an expansion of the quarry and buffer area and to extend the life of the quarry operation until 2032, subject to 16 conditions (**Attachment 1**). Conditions of approval cover submittal of a new site plan, a fire protection and control plan, a renaturalization plan showing landscaping details, cessation of operations by December 31, 2032, closure of the processing site, hours of operation, limitations on the use of the buffer area Parcel 74, dust control measures, updates to the drainage plan, annual reports, submittal of a beneficial reuse plan and subsequent updates, and standard conditions.

⁴ Land Use Commission file number. City & County of Honolulu, Department of Planning and Permitting, file number for the same project is 72/SUP-1 and was approved by the Planning Commission on February 28, 1973. SUP file No. 72/SUP-1 has since been superseded by 2007/SUP-6.

⁵ Puu Palailai landfill was formerly Pacific Concrete and Rock Co., Ltd.'s quarry.

4. Environmental Impact Statement

On January 13, 1973, the Governor accepted the Environmental Impact Statement (EIS) for the establishment of the quarry and processing facility. The current application to expand the excavation area and extend the life of the quarry is not subject to environmental disclosure requirements of the Environmental Impact Law, Chapter 343, Hawaii Revised Statutes.

An existing tunnel and conveyor equipment beneath the H-1 Freeway was disclosed in the 1973 EIS. No changes are proposed to the tunnel that would increase the intensity of this use. Moreover, upon closure of the processing site, the conveyor equipment would be removed and the tunnel will remain for accommodating existing water and power lines from sources⁶ located in the makai site.

C. Public Agency Comments

The following public agencies were requested to evaluate the proposed quarry expansion:

1. City

- a. Board of Water Supply (BWS)
- b. Department of Environmental Services (ENV)
- c. Honolulu Fire Department (HFD)
- d. Honolulu Police Department (HPD)
- e. Department of Transportation Services (DTS)

2. State

- a. Department of Agriculture (DOA)
- b. Department of Business, Economic Development and Tourism (DBEDT)
- c. State Land Use Commission (LUC)
- d. Department of Business, Economic Development and Tourism, Office of Planning (OP)
- e. Department of Land and Natural Resources (DLNR)
- f. Department of Land and Natural Resources, State Historic Preservation Division (SHPD)
- g. Department of Health (DOH)
- h. Department of Transportation (DOT)

⁶ A well source located in the makai site provides up to 168,000 gallons per day of water for washing, dust control, and irrigation. A HECO substation is located in the makai site and will remain in place upon removal of the site's quarry operations.

3. Federal

- a. Department of Agriculture, Soil Conservation Service (SCS)
- b. United State Navy (USN)

No objections were raised by the public agencies. Comments submitted by agencies are attached as **Attachment 2**.

During a site visit on October 31, 2006, DPP staff observed at approximately 11:30 a.m., a large plume of dust rising out of the quarry. Apparently, the dust plume was due to blasting, and extended a few hundred feet into the air and traveled downwind well beyond the quarry boundary. In addition, other members of the community submitted photos of a dust plume rising out of the quarry pit, apparently from a blast event. However, another blast event observed by DPP staff generated very little dust and did not seem to have an impact on surrounding residents. The applicant explained that on occasion, dust generated by blasting may drift beyond the quarry site.

In addition, the DPP also raised the concern that the proposed expansion and relocation of the quarry would trigger potential rockfall hazards to surrounding properties due to vibrations from drilling, blasting and/or other quarry operations. In December 2004, a large boulder dislodged from quarry operations, fell onto the H-1 Freeway, and disrupted traffic for many hours.

D. Community Concerns

Copies of the CUP application were transmitted to the Makakilo-Kapolei-Honokai Hale Neighborhood Board (NB) No. 34. In its letter of April 6, 2009, the NB affirmed its position of support for the Project taken in September 2006 with the understanding that the applicant has taken significant steps to mitigate impacts and that it serves a vital role in supplying aggregate for the area's transportation infrastructure improvement projects.

Pursuant to LUO Section 21-2.40-2 of the LUO, the applicant notified owners of properties located within 300 feet of the Project's site boundaries of the pending CUP application. The applicant submitted an affidavit, dated December 22, 2006, confirming that it had complied with the notification requirement. The applicant also posted "notice of pending permit" signs along the Farrington Highway and Pueonani Street frontages and at the intersection of Makakilo Drive and Kulihi Street on May 26, 2009, which was 14 days prior to the scheduled public hearing date.

In addition, informational and public hearing notices were sent by the DPP to various community organizations, public officials, the NB, and surrounding property owners. The DPP received seven letters in support of the proposal, two letters in opposition to the proposal, and two letters stating no objections

provided the applicant reduces the intensity of their blast charges such that shockwaves do not impact nearby dwellings.

E. Public Hearing

On June 9, 2009, pursuant to Section 2.40-2(c)(6) of the LUO, a public hearing was held by the DPP to consider the request. Eight persons presented public testimony. Five persons supported the proposal and indicated that the rock is needed for the construction of affordable housing and that the quarry was an asset to the community. Testimony in opposition to the proposal included concerns about noise, fumes, dust, and traffic impacts to surrounding residents. The Villages of Kapolei Association opposed the establishment of a new HMA plant in the quarry, due to the potential for air quality impacts. The applicant responded that relocating the HMA and all other industrial activities from the makai site to the quarry will mitigate most dust, noise, fumes, and traffic impacts on surrounding dwellings.

III. ANALYSIS

The Director of Planning and Permitting may allow a conditional use upon finding that the proposed use satisfies the following criteria:

A. The proposed use is permitted as a conditional use in the underlying zoning district and conforms to the requirements of the Land Use Ordinance (LUO).

Resource extraction is a permitted use within the AG-2 General Agricultural District with an approved Conditional Use Permit – Major (CUP-M).

1. LUO Section 21-3.50-4, AG-2 General Agricultural District Development Standards

The following table (Table 4) summarizes the AG-2 General Agricultural District standards.

Table 4 – AG-2 General Agricultural District Standards

LUO Standards	LUO Provision	Project Site
Minimum lot area	3 acres for major livestock production, 2 acres for all other uses	488.4 acres
Minimum lot width/depth	150 feet	2500 feet/1600 feet
Yards Front	15 feet	15 feet minimum
Side and Rear	10 feet	15 feet minimum
Maximum building area (percent of zoning lot)	10 percent	To be provided
Maximum height	15 to 25 feet	To be provided
Height setbacks	Per Sec. 21-3.50-4(c)	To be provided

The proposed project meets the development standards relating to lot area, lot width, depth, and yards for the AG-2 General Agricultural District. The applicant states that structures and/or equipment will meet development standards of the AG-2 General Agricultural District.

2. LUO Section 21-5.520, Specific Use Standards for Resource Extraction

- a. *Blasting operations shall be restricted to Mondays through Fridays between 8:00 a.m. and 5:00 p.m.*

Blasting is proposed to occur from Monday to Friday between 8:00 a.m. to 12 noon which **will be a condition of the CUP**.

- b. *The plan to be submitted with the application for a conditional use permit shall include a plan for development of the property which shall consist of two phases: the exploitation phase and the reuse phase.*

The applicant submitted the required plans showing the exploitation phase, Figure 7 – Proposed Quarry Phasing Plan, and reuse phase, Figure 8 – Renaturalization Phasing Plan. Figure 5 – Proposed Grading and Landscape Plan indicates the final grades upon completion of its renaturalization phase.

- c. *The plan for the exploitation phase shall show the proposed development as planned in relation to surrounding property within 300 feet, and shall include topographic surveys and other materials indicating existing conditions (including drainage) and the*

conditions (including topography, drainage and soils) which shall exist at the end of the exploitation phase. Contour intervals for topography shall be five feet in areas where slope is greater than ten percent, two feet in areas where slope is ten percent or less.

The applicant provided the required plans showing the Project's site existing conditions, including drainage patterns, soil type, and topography; and an approximation of the conditions of the site at the end of the exploitation phase. **As a condition of approval, additional contour intervals of two feet should be required for those areas where the finish grade would equal less than a ten percent slope.**

- d. *The plan for the reuse phase shall indicate how the property is to be left in a form suitable for reuse for purposes permissible in the district, relating such reuses to uses existing or proposed for surrounding properties. Among items to be included in the plan are feasible circulation patterns in and around the site, the treatment of exposed soil or subsoil (including measures to be taken to replace topsoil or establish vegetation in excavated areas) in order to make the property suitable for the proposed reuse, treatment of slopes to prevent erosion, and delineation of floodways and floodplains (if any) to be maintained in open usage. In the plan for reuse, intermittent lakes and marshes shall not be allowed, except in areas included in flood hazard districts and if situated more than 1,000 feet from the nearest residential, apartment, apartment mixed use, or resort zoning district boundary.*

Condition 10 of the LUC Decision and Order dated November 7, 2008, requires the submittal of a beneficial reuse plan for lands disturbed by the quarry operations. The reuse plan is required to address future land use options which are consistent with established land use policies for the site and surrounding area. At least one public access is required across the Project site. **The requirements of the above, including circulation patterns, treatment of exposed soil or subsoil, and erosion control should be incorporated into the beneficial reuse plan as a condition of CUP approval.**

3. LUO Section 21-4.70-1, Screening and Buffering Standards

The applicant proposes over 300 acres of land surrounding the quarry for open space to provide ample buffering from nearby residential uses and screening berms along the quarry's northern ridgeline and between the H-1 Freeway and the quarry pit to mitigate visual impacts of the quarry on

public vantage points. The large buffer would assist in mitigating most dust, noise, and vibration impacts on surrounding dwellings.

4. LUO Table 21-6.1, Off-Street Parking Requirements

Parking requirements for resource extraction are to be determined by the Director. The following is the applicant's parking proposal based on a November 4, 2008 Proforma Site Plan List of uses and structures to be established in the Project site:

Table 5 – Off-Street Parking

Building/Use	DPP Determined Requirement (Per Unit)	Parking Required
Area 1 Scale House 360 s.f. Security Office 1,000 s.f.	1 per 400 s.f.	3.4
Area 2 Sales Office 2,160 s.f. Field Offices 2,160 s.f. Testing Lab/Offices 1,440 s.f.	1 per 400 s.f.	14.4
Maintenance Shop 14,000 s.f.	1 per 300 s.f.	46.7
Area 3 Switch House 240 s.f. HMA Operator's House 500 s.f. HMA Shop 500 s.f.	1 per 400 s.f.	3.1
Area 4 (Equipment only - No parking requirements)		0
Total Required:		67.6
Rounded Up To:		68

Based on the above requirements, the total number of parking required for the facility is approximately 68 stalls.

The applicant did not provide a proposed parking or loading space plan. **Therefore, the applicant should be required to submit a parking and loading space plan to the Director for review and approval as a condition of approval.**

5. Signs

The applicant did not submit any proposal for signage. Signage must comply with LUO standards (unless modified by the Director).

B. The site is suitable for the proposed use considering size, location, topography, infrastructure, and natural features.

1. Size, Location, Topography, and Natural Features

The 488.4-acre site exceeds the minimum lot area required for the AG-2 General Agricultural District, and adequately accommodates the proposed industrial activities. The 302-acre buffer area provides sufficient setbacks for the active quarry and recycling facility from surrounding residential uses for most impacts.

The site's upslope topography and underlying A-Grade and B-Grade quality rock provide a convenient source for extracting quality rock as it adjoins the existing excavation area. In addition, the expansion area was found to have sufficient quantities of A-Grade and B-Grade rock for the next 24 years at the current rate of extraction.

2. Infrastructure

The applicant maintains that the proposal to expand quarry operations will not require an increase in public infrastructure services.

a. Access

The Project site is accessible from Palehua Road which connects to Farrington Highway. Upon completion of the North-South Road interchange with the H-1 Freeway, truck traffic to and from the quarry will have direct access to the H-1 Freeway with east and west bound travel lanes from the North-South Road. With the completion of the North-South Road, truck traffic would have access to surface roadways to Ewa and Kapolei neighborhoods makai of the H-1 Freeway. Presently, traffic along Palehua Road mauka of the H-1 Freeway is limited to vehicles egressing/ingressing to the quarry and surrounding agricultural lands, including roadway construction vehicles and equipment.

In the future, the extension of Makakilo Drive to the North-South Road interchange with the H-1 Freeway will likely replace Palehua Road as the main entrance into the quarry and will bring additional traffic from those entering/leaving the Makakilo residential community. Additional roadway improvements may be required of the applicant at that time; however, since this will be addressed during the review of construction plans, no related condition of approval is required.

b. Fire Protection

The Honolulu Fire Department (HFD) provided the following comments:

- Pursuant to the 1997 Uniform Fire Code, Section 902.2.1., a fire apparatus access road shall be provided for every facility, building, portion of a building hereafter constructed or moved into or within the jurisdiction when any portion of the facility or any portion of an exterior wall of the first story of the building is located more than 150 feet from the fire apparatus access road as measured by an approved route around the exterior of the building or facility.
- Pursuant to the 1997 Uniform Fire Code, Section 903.2, as amended, provide a water supply, approved by the County, capable of supplying the required fire flow for fire protection to all premises upon which facilities or buildings, or portions thereof, are hereafter constructed or moved into.

On-site fire hydrants and mains capable of supplying the required fire flow shall be provided when any portion of the facility or building is in excess of the 150 feet from a water supply or fire apparatus access road, as measured by an approved route around the exterior of the facility or building.

Condition 1b of the LUC Decision and Order requires that a fire protection and control plan be submitted to the Honolulu Fire Department for review approval by May 7, 2009. Pursuant to a letter dated May 5, 2009, to the Honolulu Fire Department and the Director of Planning and Permitting, the applicant indicates that it is proceeding with preparation of the required fire protection and control plan. Compliance with HFD requirements and the fire protection and control plan, as approved by HFD, will be confirmed when building permits are submitted for review and approval. Thus, a condition of approval regarding fire protection is not required.

c. Wastewater

With respect to wastewater disposal, the Project site is not connected to the City wastewater collection system. The applicant plans to install an individual wastewater system in accordance with the requirements of the State Department of Health. Portable toilet facilities are provided on other areas of the project. The applicant

states that there are no changes to the wastewater flows as a result of the proposed expansion.

d. Water

The applicant has a well source on the processing site makai of the H-1 Freeway (Parcel 4) which is limited by the State Water Commission to a maximum draw of 168,000 gallons per day. The applicant uses this private water source mainly for washing, dust control, and landscaping on both the quarry site and the processing site makai of the H-1 Freeway. The applicant also draws potable water from the Board of Water Supply (BWS) which has transmission mains beneath Farrington Highway. The BWS records indicate the applicant uses on average about 27,000 gallons per day.

The applicant plans to relocate the existing water source to the quarry. As no details have been provided other than the establishment of a new source in either Parcel 74 or 82 within three years of CUP approval, the **applicant should be required to submit water development and distribution plans to the BWS for review and approval as a condition of CUP approval.** The applicant should also indicate in the water development plan, the disposition of the existing water source in Parcel 4, the processing site.

e. Drainage

The applicant proposes to retain all stormwater runoff that drains into the quarry pit within the quarry by establishing drainage basins designed for a 100-year storm event. The applicant also proposes the construction of two berms for screening purposes. Runoff from these berms may partially drain away from the quarry pit and into the area's existing drainage system. Ordinarily, berm construction is subject to the Grading Ordinance of the Revised Ordinances of Honolulu. Since quarries and related grading are exempt from the grading ordinance until completion of the resource extraction phase, the applicant **should be required to stabilize the berms during construction and landscape it upon completion to minimize impacts to water quality, as a condition of approval.**

The applicant submitted an engineering report dated April, 2007, which addresses drainage requirements, including revegetation upon completion of resource extraction activities. An update to the drainage report may be required by the Director, pursuant to Condition 8 of the LUC Decision and Order dated November 7, 2008.

f. Solid Waste

Solid waste generated at the Project site will be disposed of by private hauler.

C. **The proposed use will not alter the character of the surrounding area in a manner substantially limiting, impairing, or precluding the use of surrounding properties for the principal uses permitted in the underlying zoning district.**

Expansion of the quarry and buffer area will not adversely impact the surrounding area or the use of surrounding properties permitted within their respective zoning districts. The quarry pit is buffered by 302 acres of open space where uses and structures other than open space and agriculture activities would not be permitted. In addition, the nearest dwelling units would be no closer than 600 feet to the quarry excavation and processing activities.

1. Visual Impacts

Although views of the pit's expansion farther up Puu Makakilo from public vantage points would be affected, slopes of the pit walls have been reduced to no greater than 75 percent. The applicant provided revised visual simulations of the quarry excavation in five-year increments, based on its June 5, 2008 closure grading plan. The simulations show the appearance of the mauka-most slopes of the renaturalized pit up to the 725-foot elevation with shrubs. There are no vertical cuts and benches to leave exposed as bare rock. The revised slopes of the June 5, 2008 grading plan provides a more natural finish grade that would encourage long-term vegetation growth and blend better with the surrounding topography of Puu Makakilo than the applicant's original proposal, which involved near vertical slopes, exposed rocks, and horizontal benches.

2. Dust, Noise, and Fumes

In response to concerns raised by the surrounding community and the DPP, the applicant is required to cease operations at the processing site located makai of the H-1 Freeway, which is a source of dust, noise, and fumes, by December 31, 2012, pursuant to Condition 4 of the LUC Decision and Order. Most industrial uses at the site would relocate to the quarry pit and the balance would relocate to CIP. This addresses concerns over dust, noise, and fumes impacting the surrounding neighbors. Some truck traffic to and from the quarry would temporarily utilize Farrington Highway for H-1 Freeway access until the North-South Road Interchange is completed in the second half of 2009.

Excavation, rock crushing, and stockpiling, and recycling activities will generate noise at the Project site. In addition, during a site visit, DPP staff observed fugitive dust traveling beyond the Project site from blasting. Applicable State laws prohibit fugitive dust from crossing property boundaries. The applicant should comply with the State Department of Health's regulations governing air quality and noise.

As existing regulations of the State Department of Health and relevant conditions of the LUC Decision and Order address air quality and noise, a condition of CUP approval is not required at this time. Should circumstance change, the Director is allowed to revisit the CUP and modify or impose additional conditions to address unanticipated impacts.

3. Vibrations and Rockfall Hazards

The applicant regularly monitors blasting activities with a seismograph and past readings have not exceeded the standards. Blasting is controlled by regulations of the Federal Bureau of Alcohol, Tobacco, Firearms, and Explosives.

The DPP raised concerns relating to hazardous rockfalls as a result of blasting. The applicant explained that in December 2004, a large boulder fell onto the H-1 Freeway from the hillside between the H-1 Freeway and upper quarry during the operation of a bulldozer. Geolabs, Inc. was contracted by the applicant to perform a rockfall hazard assessment for the slopes adjacent to the freeway. Its report was provided to the State Department of Transportation for review. Subsequently, the applicant hired a contractor to remove all boulders along a 2,000-foot stretch of the H-1 Freeway deemed to be a potential hazard.

The proposed expansion and related drilling and blasting will occur further mauka from the H-1 Freeway, and with the removal of potential rockfall boulders, it is unlikely that another rockfall onto the H-1 Freeway could occur.

Other potential areas of rockfall risk around the quarry would be houselots in upper Makakilo closest to the expansion area, including those along the northwestern base of Puu Makakilo, which includes homes on Pueonani Street, Nemo Street, and Palaulau Place (this subdivision is known as Anuheia).

The applicant has monitored seismic activity on Pueonani Street during blasting with no rockfalls being reported. Should vibration and/or rockfalls from blasting become a problem, the applicant proposes a reduction in blast intensity by smaller drill patterns or 'double-decking' the explosives. As blasting is regulated by the U. S. Federal Codes, conditions relating to

vibrations and rockfall hazards as a result of blasting are not recommended.

4. Lighting

The applicant proposes to receive cold-planed asphalt from repaving jobs from the hours of 6:00 p.m. to 10:00 p.m., Sunday through Friday. Lighting will be required to illuminate the affected area for night time unloading operations. The applicant did not provide any information as to the type of lighting fixtures to be used for this operation. Other than security lighting, no other lighting is being proposed for the project site. Any existing or proposed outdoor lighting should be shielded from adjacent properties to minimize light trespass and protect nocturnal avifauna that may frequent the area. **Therefore, as a condition of approval, the applicant shall be required to fully shield light fixtures and direct all exterior lighting away from any adjoining lots.**

D. The use at its proposed location will provide a service or facility which will contribute to the general welfare of the community-at-large or surrounding neighborhood.

The project is necessary for providing A-Grade rock which is required for manufacturing asphaltic concrete and ready-mix concrete which are needed by the construction industry for roadway pavement and building construction. Presently, there is no alternative source of A-Grade rock in sufficient quantities that is immediately available. The location of the quarry expansion adjoins the existing quarry and has sufficient reserves to produce quality rock for the next 24 years. Support infrastructure for the expansion is available or will be made available such that improvements to the existing system will be minimal. Mitigation measures are proposed and have been or should be required to address negative impacts to the surrounding community.

IV. CONCLUSIONS OF LAW

The Director hereby makes the following Conclusions of Law:

1. The proposed use is permitted as a conditional use in the underlying zoning district and conforms to the requirements of the Land Use Ordinance (LUO);
2. The site is suitable for the proposed use considering size, location, topography, infrastructure, and natural features;
3. With appropriate conditions of approval, the proposed use will not alter the character of the surrounding area in a manner substantially limiting, impairing, or

precluding the use of surrounding properties for the principal uses permitted in the underlying zoning district; and

4. The use at its proposed location will provide a service or facility that will contribute to the general welfare of the community-at-large or surrounding neighborhood.

V. DECISION AND ORDER

Pursuant to the Findings of Fact and Conclusions of Law, the Director of the Department of Planning and Permitting (DPP) hereby APPROVES the application for a Conditional Use Permit to allow resource extraction, recycling of concrete and cold-planed asphalt, HMA plant, and other uses and structures as shown on Exhibit 5, subject to the following conditions:

1. Blasting shall be restricted to the hours of 8:00 a.m. to 12 noon, Mondays through Fridays.
2. Within one year of this Decision and Order, the applicant shall submit to the Director of the DPP for review and approval, final grading plans with contour intervals of five feet in areas where the slope is greater than ten percent; two feet in areas where the slope is ten percent or less.
3. On the fifth anniversary date of this Decision and Order, and an update every fifth year thereafter, as may be required by the Director, the applicant shall submit a beneficial reuse plan which shall show how the property is to be left in a form suitable for reuse for purposes permissible in the district, relating such reuses to existing or proposed uses of surrounding properties. Among items to be included in the plan are feasible circulation patterns in and around the site, the treatment of exposed soil or subsoil, including measures to be taken to replace topsoil or establish vegetation in excavated areas in order to make the property suitable for the proposed reuse, treatment of slopes to prevent erosion and delineation of floodways and floodplains (if any) to be maintained in open usage. Submittal of the beneficial reuse plan under Condition 12 of the Land Use Commission Decision and Order, dated November 7, 2008, may satisfy the requirements of this condition (providing the reuse plan complies with Land Use Ordinance Section 5.520, Specific Use Development Standards, for Resource Extraction).
4. Prior to the issuance of a building permit for any structures within and/or the relocation of any structures to the Project Site, the applicant shall submit to the Director for review and approval:
 - a. A site plan showing compliance with all development standards of the Land Use Ordinance, including but not limited to, parking and loading, structure heights and setbacks, and building coverage.

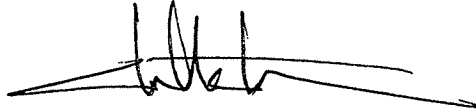
- b. A water source and distribution plan approved by the Board of Water Supply. The plan shall include the disposition of the existing water source in the processing site.
 - c. An outdoor lighting plan showing all existing and proposed outdoor lighting fixtures. All exterior lighting shall be fully shielded to prevent glare and light spillage on surrounding lots and public rights-of-way. Lighting for unloading of cold-planed asphalt shall be directed away from adjoining residential uses and be turned off upon completion of unloading operations.
- 5. The applicant shall stabilize exposed soils during the construction of any berms to minimize runoff impacts to the area's natural drainage features. Landscaping of any berms shall commence within 30 days of completion of berm construction.
 - 6. Operation of the resource extraction facility and accessory uses shall be in general conformance with the approved project, as described herein and shown on plans on file with the DPP. Any modification to the project and/or plans shall be subject to the prior review and approval by the Director. Major modifications shall require a new Conditional Use Permit.
 - 7. This application has only been reviewed and approved pursuant to the provisions of Section 21-5.520 (Resource Extraction), and its approval shall not constitute compliance with the requirements of other governmental agencies. These are subject to separate review and approval. The applicant shall be responsible for insuring that the final plans for the project approved under this permit comply with all applicable government agencies' provisions and requirements, including compliance with all other provisions of the Land Use Ordinance.
 - 8. The applicant and/or landowner shall submit written notification to the Director of DPP of any change in use, including the addition of any accessory uses and/or structure, termination of any use on the property; and/or transfer in ownership of the property or of any use on the property. In the case of any addition and/or change in use, the Director shall determine if the proposed change requires a minor or major modification of the Conditional Use Permit. In the event of a change in ownership, the Director shall notify the new owner (by copy of this report) that the site and/or facility is permitted and/or governed by the Conditional Use Permit, and that compliance with all conditions of approval is required.
 - 9. The Director may modify the conditions of this permit by imposing additional conditions, modifying existing conditions, or deleting conditions deemed satisfied upon a finding that circumstances related to the approved project have significantly changed so as to warrant a modification to the conditions of approval. In the event of the noncompliance with any of the conditions set forth herein, the Director may terminate all uses approved under this permit or halt

their operation until all conditions are met or may declare this Conditional Use Permit null and void or seek civil enforcement.

Dated at Honolulu, Hawaii this 17th day of July 2009.

DEPARTMENT OF PLANNING AND PERMITTING
CITY AND COUNTY OF HONOLULU
STATE OF HAWAII

By

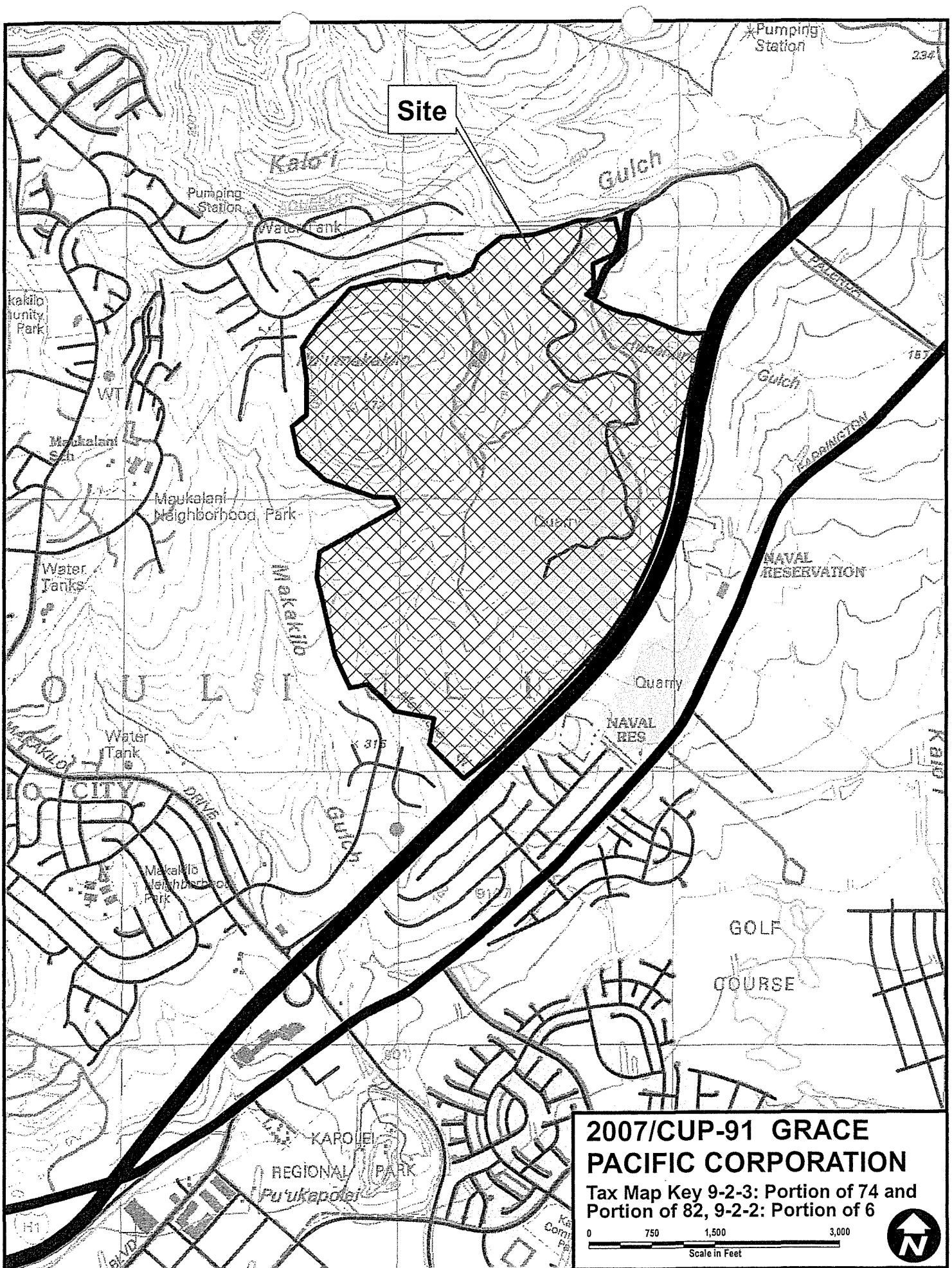
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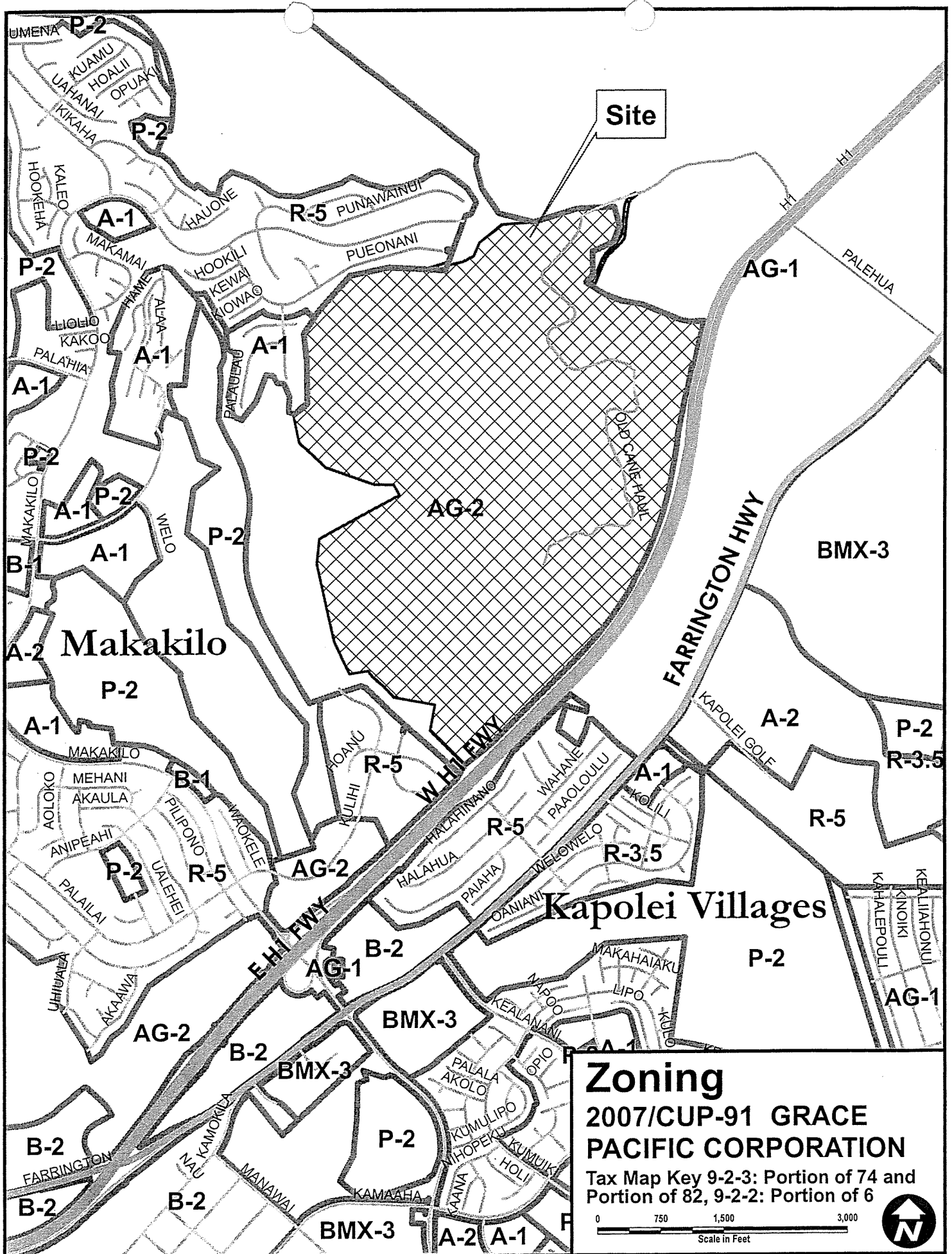
David K. Tanoue, Director

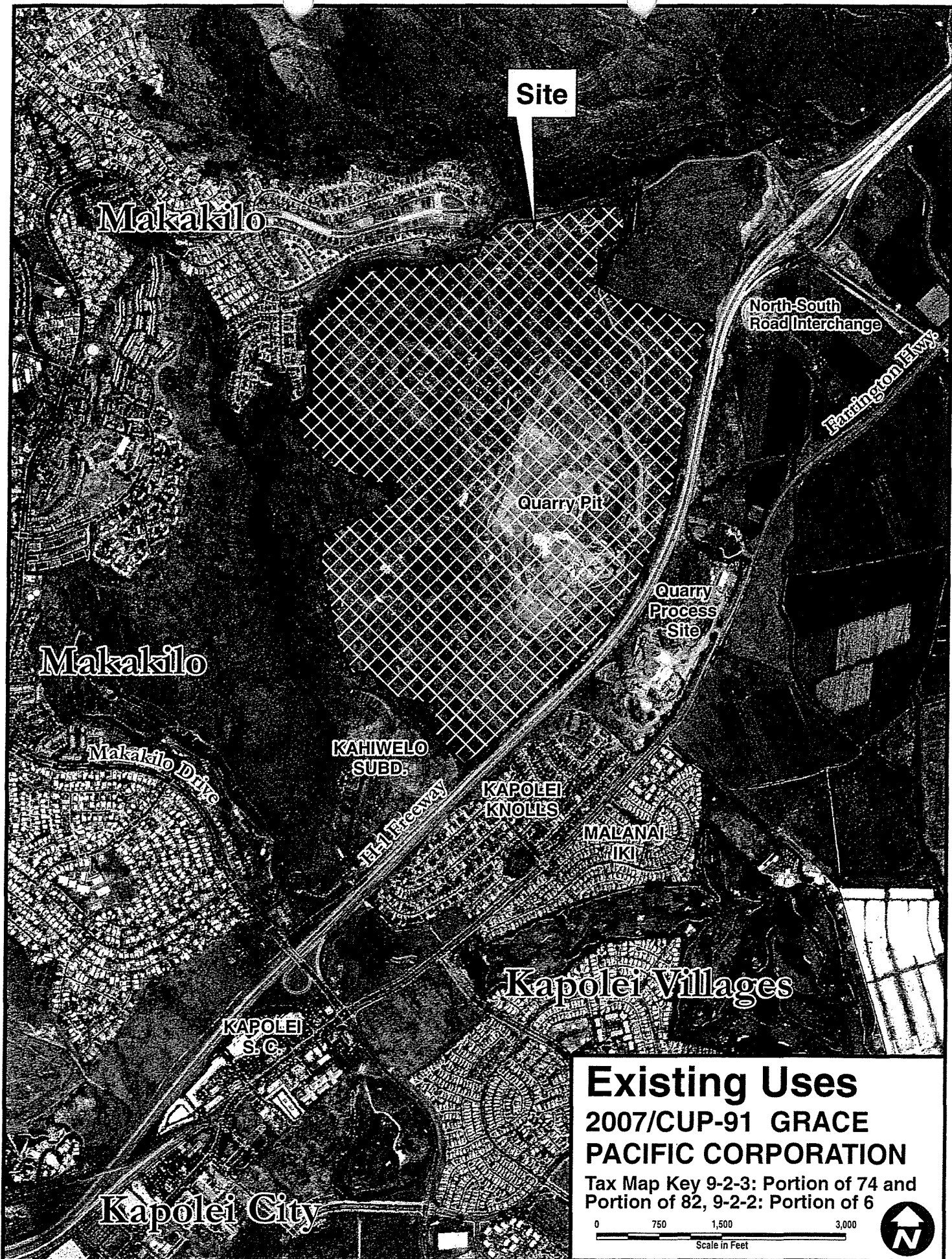
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Attachments

EXHIBITS

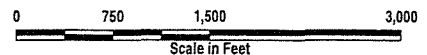


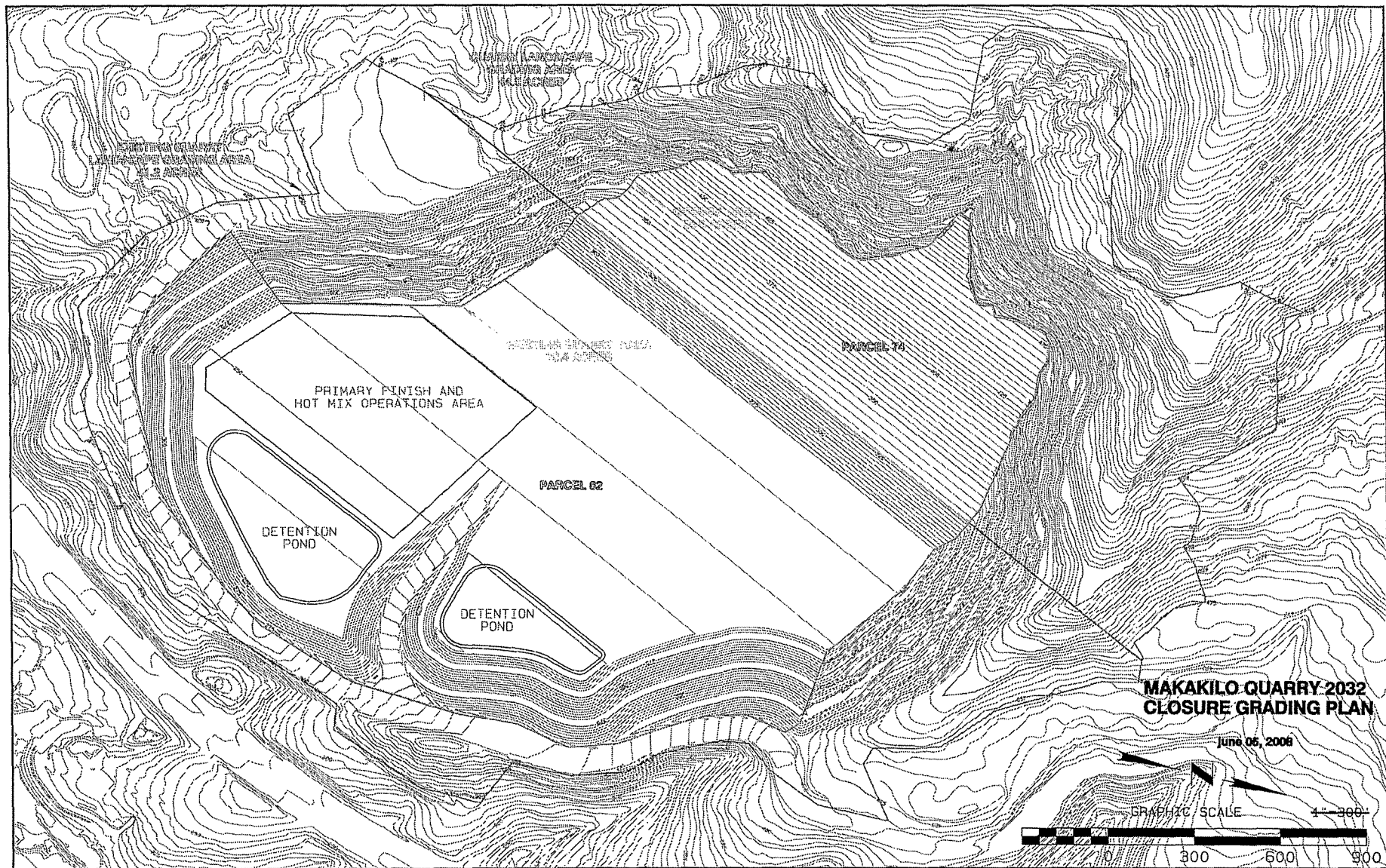




Existing Uses
2007/CUP-91 GRACE
PACIFIC CORPORATION

Tax Map Key 9-2-3: Portion of 74 and
Portion of 82, 9-2-2: Portion of 6





Fofoforma Site Plan Lot for the Makakilo Quarry, November 04, 2008

The site plan list below describes the building and structures that will be contained in the various areas of operation in the Makakilo Quarry. As stated in the permit submittal due to the conditions placed on the use and the extensive planning necessary for final fabrication of the processing equipment, a final mutually agreeable site plan between the City and Grace Pacific will be provided one year from the approval of the C.U.P.. The dimensions, areas, heights and ground elevations below are an approximations to quantify the necessary operational areas for the C.U.P.. See Figure 6 for location of designated areas.

AREA # 1 "Items to be included in the Scale and Access Road area"

Scale House					
Group and Individual Items	Width Ft.	Length Ft.	Square Ft.	Height Ft.	Ground El.
SCALE HOUSE	12	30	360	15	355
TRUCK SCALE	12	60	720	5	355
TRUCK SCALE	12	60	720	5	355
SECURITY OFFICE	8	16	128	15	355
DECKS AND WALKWAYS			1,000		
ROADS			270,000		
TOTAL ACRES AREA # 1			6.3		

AREA # 2 "Items to be included in the Office and Maintenance area"

Office area					
Group and Individual Items	Width Ft.	Length Ft.	Square Ft.	Height Ft.	Ground El.
SALES OFFICE	36	60	2,160	20	275
FIELD OFFICES	36	60	2,160	20	275
TESTING LAB AND OFFICES	24	60	1,440	20	275
DECKS WALKWAYS			15,000		
EMPLOYEE PARKING			25,000		
QUARRY MAINTANCE SHOP	70	200	14,000	35	275
QUARRY MAINTANCE AREA			28,000		
ROADS			48,000		
OPEN SPACE			94,000		
TOTAL ACRES AREA # 2			5.3		

AREA # 3 "Items to be included in the Existing Recycle Plant area and the New Plant(s) area"

Recycle Plant					
Group and Individual Items	Width Ft.	Length Ft.	Square Ft.	Height Ft.	Ground El.
JAW CRUSHER	12	52	624	20	275
SCREEN AND SECONDARY CRUSHER PLANT	12	50	600	18	275
SECONDARY SCREEN	10	25	250	15	275
GENERATOR SET TRAILER	8	40	320	18	275
SWITCH HOUSE	8	30	240	18	275
FUEL TANK WITH ENCLOSURE	10	30	300	9	275

Exhibit C

HYDROLIC HAMMER	8		64	25	275
CONVEYORS					275
CONVEYORS (PORTABLE)					275
Finish Plant					
Group and Individual Items	Width Ft.	Length Ft.	Square Ft.	Height Ft.	Ground El.
SCREEN HOUSE	24	50	1,200	35	275
CRUSHER HOUSE	20	30	600	30	275
GENERATOR SET TRAILER	8	40	320	18	275
CONVEYORS					275
CONVEYORS (PORTABLE)					275
Wash Plant					
Group and Individual Items	Width Ft.	Length Ft.	Square Ft.	Height Ft.	Ground El.
ENCLOSURE	15	50	750	25	275
CONVEYORS					275
CONVEYORS (PORTABLE)					275
Hot Mix Plant					
Group and Individual Items	Width Ft.	Length Ft.	Square Ft.	Height Ft.	Ground El.
STRUCT. BURNER, DRYER, AND BAG HOUSE	20	80	1,600	40	275
SCALE WITH FOUR SILOS IN LINE	20	120	2,400	70	275
FEED BINS	12	50	600	20	275
OPERATORS HOUSE AND SWITCH GEAR	10	50	500	18	275
GENERATOR SET TRAILER	10	50	500	18	275
FUEL STORAGE TANK WITH ENCLOSURE	10	40	400	12	275
HOUSE AND SHOP	10	50	500	12	275
Topsoli Plant (Re-naturalization)					
Group and Individual Items	Width Ft.	Length Ft.	Square Ft.	Height Ft.	Ground El.
SCREEN HOUSE	24	50	1,200	25	275
ENCLOSURE STORAGE FOR PRODUCTION	10	30	300	21	275
CONVEYORS					275
Quarrying Supply Storage Area					
Group and Individual Items	Width Ft.	Length Ft.	Square Ft.	Height Ft.	Ground El.
4 STORAGE CONTAINERS	10	24	960	8	275
SECURE CONTAINMENT AREA			160,000		275
QUARRY EQUIPMENT PARKING			25,000		
TRUCK STAGING AREA			50,000		
ROADS			560,000		
STOCK PILES			386,000		
OPEN SPACE			900,000		
TOTAL ACRES AREA #3			48.1		
AREA # 4 "Items to be included in the New Active Quarry area"					
Primary Plant(s) (Portable)					
Group and Individual Items	Width Ft.	Length Ft.	Square Ft.	Height Ft.	Ground El.
PRIMARY CRUSHER	12	52	624	20	325 - 650
PRIMARY CRUSHER	12	52	624	20	325 - 650
GENERATOR SET TRAILER	10	50	500	18	325 - 650
GENERATOR SET TRAILER	10	50	500	18	325 - 650
FUEL TANK TRAILER	8	30	240	10	325 - 650
FUEL TANK TRAILER	8	30	240	10	325 - 650
CONTAINER FOR PARTS AND TOOLS	10	24	240	8	325 - 650
CONVEYORS (PORTABLE)					325 - 650
OPEN SPACE			1,125,000		
TOTAL ACRES AREA #4			25.9		

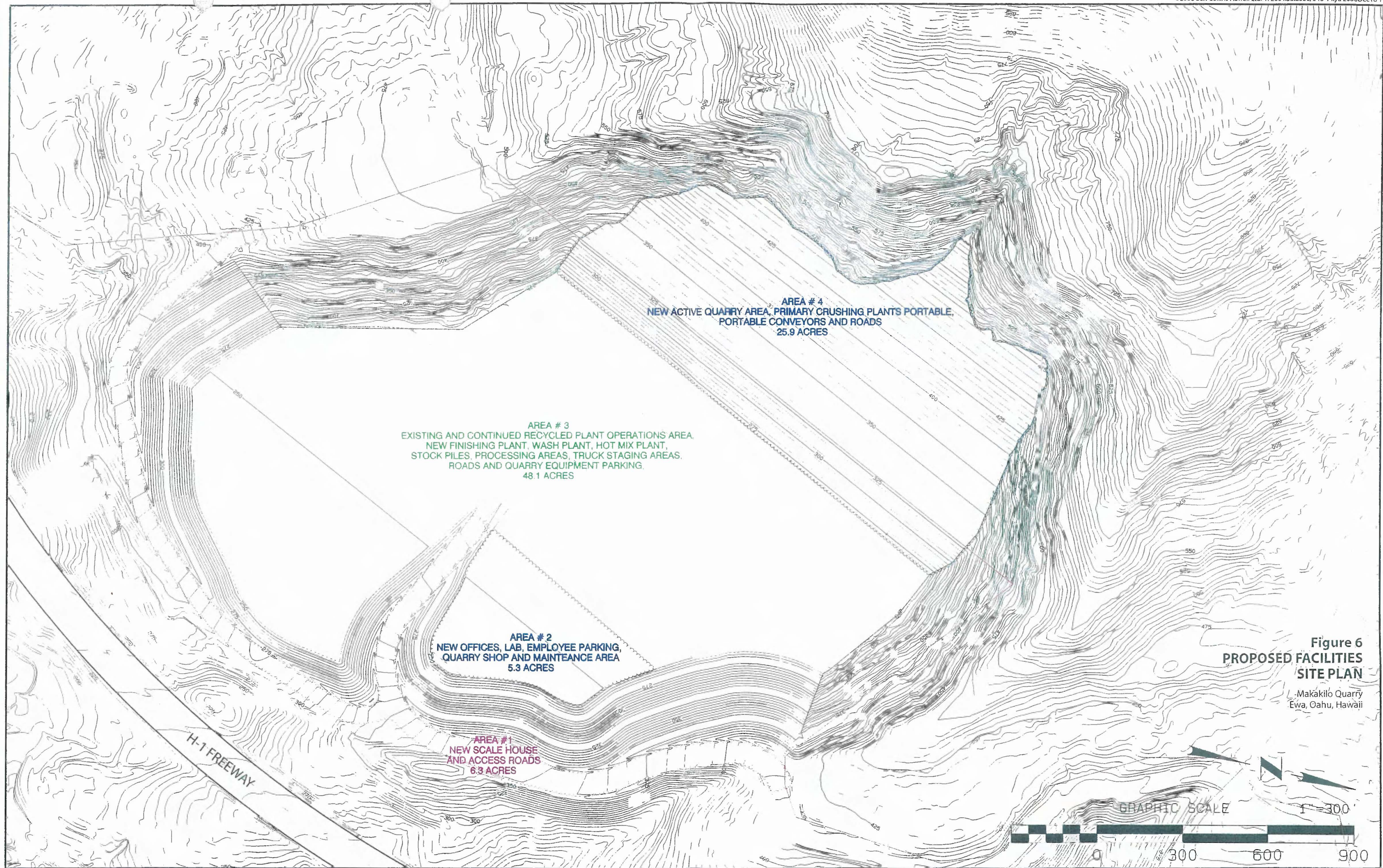
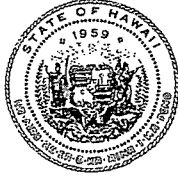


Figure 6
PROPOSED FACILITIES
SITE PLAN

Makakilo Quarry
Ewa, Oahu, Hawaii

ATTACHMENT 1



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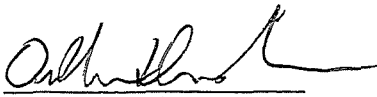
BEFORE THE LAND USE COMMISSION
OF THE STATE OF HAWAII

DEPT. OF LAND AND NATURAL RESOURCES
CITY & COUNTY OF HONOLULU

In The Matter Of The Application Of	) DOCKET NO. SP73-147
)
GRACE PACIFIC CORPORATION	) FINDINGS OF FACT, CONCLUSIONS
(Formerly Pacific Concrete & Rock Co.,	) OF LAW, AND DECISION AND ORDER
Ltd.)	) APPROVING WITH MODIFICATIONS
	) THE RECOMMENDATION OF THE
To Extend The Life Of The Makakilo	) CITY AND COUNTY OF HONOLULU
Quarry Resource Extraction And	) PLANNING COMMISSION TO (1)
Aggregate Processing Operations To	) EXTEND THE LIFE OF THE
2032 And To Expand The Resource	) MAKAKILO QUARRY RESOURCE
Extraction And Buffer Areas Of The	) EXTRACTION AND AGGREGATE
Quarry On Approximately 541.5 Acres	) PROCESSING OPERATIONS TO 2032;
Of Land Within The State Land Use	) AND (2) EXPAND THE RESOURCE
Agricultural District At Pu'u Makakilo,	) EXTRACTION AND BUFFER AREAS OF
'Ewa, O'ahu, Hawai'i, Tax Map Keys:	) THE QUARRY
9-1-16: 4 And 9-2-03: Por. 74 And Por. 82)
)

FINDINGS OF FACT, CONCLUSIONS OF LAW, AND DECISION AND ORDER
APPROVING WITH MODIFICATIONS THE RECOMMENDATION OF THE CITY
AND COUNTY OF HONOLULU PLANNING COMMISSION TO (1) EXTEND THE
LIFE OF THE MAKAKILO QUARRY RESOURCE EXTRACTION AND AGGREGATE
PROCESSING OPERATIONS TO 2032; AND (2) EXPAND THE RESOURCE
EXTRACTION AND BUFFER AREAS OF THE QUARRY

This is to certify that this is a true and correct
copy of the document on file in the office of the
State Land Use Commission, Honolulu, Hawaii.

11/12/08 by 
Executive Officer



BEFORE THE LAND USE COMMISSION
OF THE STATE OF HAWAII

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PROCESSING OPERATIONS TO 2032; AND (2) EXPAND THE RESOURCE
EXTRACTION AND BUFFER AREAS OF THE QUARRY

The Land Use Commission ("LUC"), having examined the complete
record of the City and County of Honolulu Planning Commission's ("Planning
Commission") proceedings on Grace Pacific Corporation's ("Applicant") application to
(1) extend the life of the Makakilo Quarry resource extraction and aggregate processing

operations to 2032; and (2) expand the resource extraction and buffer areas of the quarry ("Application"), and upon consideration of the matters discussed therein, at its meeting on October 2, 2008, in Honolulu, Hawai'i, hereby makes the following findings of fact, conclusions of law, and decision and order:

FINDINGS OF FACT

PROCEDURAL MATTERS

1. On October 5, 2007, the Applicant filed the Application with the City and County of Honolulu Department of Planning and Permitting ("DPP") to amend Special Use Permit No. 72/SUP-1, originally issued to Pacific Concrete & Rock Co., Ltd. ("Pacific Concrete"), pursuant to section 205-6, Hawai'i Revised Statutes ("HRS"), and sections 15-15-95 and 15-15-96, Hawai'i Administrative Rules ("HAR").¹
2. The Applicant sought to (1) extend the life of the Makakilo Quarry resource extraction and aggregate processing operations to 2032; and (2) expand the resource extraction and buffer areas of the quarry.
3. On November 9, 2007, the DPP accepted the Application for processing.
4. On July 31, 2008, Mark M. Schnabel filed a Petition To Intervene on behalf of himself and John Riggins. Mr. Schnabel subsequently withdrew the Petition To Intervene by letter dated August 5, 2008.

¹ The Applicant initially filed the Application with the DPP on April 18, 2007. However, the DPP declined to accept the Application for processing until various issues were addressed and/or clarified and returned the Application to the Applicant. On October 5, 2007, the Applicant also filed an application to amend Conditional Use Permit No. 72/CUP-15 that was granted for the quarrying operations.

5. On July 18, 2008, public notice of the Planning Commission's hearing on the Application was published in the *Honolulu Star-Bulletin*.

6. On August 20, 2008, the Planning Commission conducted the hearing in the City Council Committee Meeting Room, Second Floor, 530 South King Street, Honolulu, Hawai'i. At the hearing, the Planning Commission heard and received public testimony from individuals in support of and in opposition to the Application. After due deliberation, the Planning Commission recommended approval to (1) extend the life of the Makakilo Quarry resource extraction and aggregate processing operations to 2032; and (2) expand the resource extraction and buffer areas of the quarry to the LUC, subject to 13 conditions recommended by the DPP and 1 additional condition.²

7. On September 12, 2008, the LUC received the decision and the complete record of the Planning Commission's proceedings.

8. On October 2, 2008, the LUC met in Conference Room 406, Leiopapa A Kamehameha Building, Honolulu, Hawai'i, to consider the matter.³ Douglas Ing, Esq.; Robert M. Creps; and Lee Sichter appeared on behalf of the Applicant. Ray Young appeared on behalf of the DPP. Bryan C. Yee, Esq., and Abe

² Pursuant to the recommendation of the DPP, the Planning Commission considered the Application as a new special use permit (File No. 2007/SUP-6), effectively superseding Special Use Permit No. 72/SUP-1 and its 12 conditions applicable to the quarry operations. The Planning Commission did not address the sanitary landfill operations that were also approved as part of Special Use Permit No. 72/SUP-1 nor the conditions imposed thereon.

³ Because this matter involves a previously approved LUC special use permit, the LUC is considering it as an amendment to the existing special use permit, and not a new LUC special use permit. The LUC acknowledges that there have been changes to the quarrying operations since its original approval and believes that reviewing the Application in the context in which it was filed provides an opportunity to bring the entire record in this docket current with existing uses and acreages.

Mitsuda were also present at the meeting on behalf of the State Office of Planning ("OP"). Pursuant to section 92-3, HRS, the LUC heard and received public testimony from several individuals.⁴ At the meeting, the Applicant provided a background of its request and clarified various matters relating to the quarry and sanitary landfill operations originally approved in the special use permit.⁵ After discussion, a motion was made and seconded to approve with modifications the recommendation of the Planning Commission to (1) extend the life of the Makakilo Quarry resource extraction and aggregate processing operations to 2032; and (2) expand the resource extraction and buffer areas of the quarry, subject to the Planning Commission's 14 conditions and two additional conditions recommended by the LUC staff.⁶ Upon further discussion, the motion was amended and seconded to also include the amendments to Condition Numbers 1, 4, 9, 11, and 12 recommended by the LUC staff. There being a vote tally of 6 ayes, 0 nays, and 3 excused, the amended motion carried.

⁴ Providing oral and/or written testimony were Sharie Phillips-Swatek, Michael Swatek, Kurt Fevella, Patti Teruya, Warren Wegesend (on behalf of Greg Peterson), William "Buzz" Hong, Dr. Kioni Dudley, John Riggins, Jacqueline Rabang, Allan Los Banos, and Mark and Sara Schnabel. In addition, OP provided oral testimony in support of the Applicant's request.

⁵ The Applicant also proposed an amendment to the Planning Commission's Condition Number 4 to specifically include landscape material production as a permitted use on TMK: 9-1-16: 4 following the closure of the processing site on the parcel and an amendment to the Planning Commission's Condition Number 5 to allow cleaning and washdown of equipment and preventive maintenance on equipment from 6:00 p.m. to 8:00 p.m., Monday to Friday, beginning January 1, 2012. Additionally, the Applicant noted that it would be necessary for the tunnel beneath the H-1 Freeway to be accessible beyond January 1, 2012, in order for the Applicant to service the utility lines that are contained within the tunnel. Upon questioning by the LUC, the DPP noted that these issues were not specifically raised during the Planning Commission's hearing. Neither the Applicant's proposed amendments nor the Applicant's assertion that the use of the tunnel continue beyond January 1, 2012, were included as part of the LUC's approval of the recommendation of the Planning Commission. The LUC determined that they are matters that should go back to the Planning Commission for further consideration.

⁶ Condition Number 15 specifies the uses that shall occur in the quarry excavation area and Condition Number 16 requires the Applicant to establish the quarry expansion in substantial compliance with the representations to the LUC. The Applicant, the DPP, and OP had no objections to these additional conditions.

DESCRIPTION OF THE PROPERTY

9. The Makakilo Quarry is located at Pu`u Makakilo, `Ewa, O`ahu, Hawai`i. The existing quarry, including the berming and buffer areas, and the proposed expansion areas are located on Tax Map Keys ("TMKs"): 9-2-03: por. 74 and por. 82, while the processing site and a portion of the tunnel are located on TMK: 9-1-16: 4 (a portion of the tunnel is also located beneath the H-1 Freeway and is not assigned a TMK parcel) (collectively "Property").⁷ The Property consists of approximately 541.5 acres.

10. The Property is located within the State Land Use Agricultural District.

11. The `Ewa Development Plan designates the Property as Low and Medium Density Residential, Golf Course, Agricultural and Preservation, and Highway. The Property is further designated within the Urban Growth Boundary.

⁷ An existing 1.4-acre offsite stilling basin on TMK: 9-1-16: por. 108 related to the quarrying operations is not included herein as it will be abandoned and was not originally included in the special use permit.

As part of the Planning Commission's recommendation, an approximately 1.5-acre portion of an access road, owned by D.R. Horton-Schuler Homes, LLC ("Horton-Schuler"), and located on TMK: 9-2-02: por. 6, was included in the special use permit area. Since the Applicant had not included this access road in its request, there is no written authorization from Horton-Schuler in the record consenting to its inclusion. At the October 2, 2008, meeting, the Applicant clarified that it did not include that portion of the access road on TMK: 9-2-02: por. 6 in its request because the Applicant only has a non-exclusive easement for the use of that road. Others who utilize the Horton-Schuler lands also have access to the road and the Applicant reserved the right to dedicate further access to others for use of the road. According to the Applicant, farmers and ranchers currently utilize the road. Based on the Applicant's explanation for excluding the road from its request, the DPP stated that it had no objections to the road's exclusion. The Applicant also provided the LUC with Table 1 which clarified the approximate acreages of the existing quarry operations and the proposed expansion area. The DPP had no objections to the acreages as clarified by the Applicant in Table 1. In response to the DPP's concerns about possible encroachment upon State and U. S. Navy lands by uses associated with the processing site, the Applicant stated that it removed the stockpiled material in question from the area along the H-1 Freeway and will survey the area near the U. S. Navy well located to the north and east of the processing site. The Applicant represented that if there is any encroachment in this area by uses associated with the processing site, the Applicant will remove it.

12. The City and County zones TMK: 9-2-03: 74 and 82 as AG-2 General Agricultural District and TMK: 9-1-16: 4 as AG-1 Restricted Agricultural District.

13. Puu Makakilo, Inc. ("PMI"), a wholly-owned subsidiary of the Applicant, owns TMK: 9-2-03: 74, while the James Campbell Company LLC ("JCC") owns TMKs: 9-2-03: 82 and 9-1-16: 4. JCC licenses TMK: 9-2-03: 82 to the Applicant through a license agreement that expires in 2017. The Applicant has negotiated with JCC for an extension of the license to 2032. JCC leases TMK: 9-1-16: 4 to the Applicant through a lease agreement that expires in 2017. The Applicant has similarly negotiated with JCC for an extension of the lease to 2032.

14. The State of Hawai'i owns the tunnel under the H-1 Freeway. The State granted Easement 748 to Pacific Concrete, the predecessor to the Applicant herein, dated October 2, 1973. The term of the easement is for 65 years.

BACKGROUND OF THE MAKAKILO QUARRY

15. On February 28, 1973, the Planning Commission under File No. 72/SUP-1 considered and recommended approval of Pacific Concrete's special use permit application for rock quarrying operations on the southeastern slopes of Pu'u Makakilo to produce basalt aggregate for concrete production and road and fill rock.

16. On March 23, 1973, following receipt of the Planning Commission's record from the then Planning Department, the LUC approved Pacific Concrete's rock

quarrying operations on approximately 295 acres of land in LUC Docket No. SP73-147, subject to 12 conditions as recommended by the Planning Commission. The 295-acre site consisted of a 72-acre quarry and a 188-acre buffer area. The remaining 35 acres were reserved for the shop, office, scale, processing site, and concrete batching plant. In the same docket, the LUC also approved the establishment of sanitary landfill operations on approximately 29 acres of land at Pu'u Palailai, subject to 12 conditions that were applicable to the landfill only. The landfill has since closed.⁸

17. By Certificate of Merger issued on February 4, 1985, Pacific Concrete and Grace Brothers, Limited ("Grace Brothers"), merged and Grace Brothers acquired the quarry operation from Pacific Concrete. Grace Brothers subsequently changed its name to Grace Pacific Corporation, the Applicant herein.

18. The Applicant is the operator of the existing quarry and currently uses the quarry site for rock excavation, primary crushing and stockpiling, recycling of concrete and asphaltic pavement, support services, and open space buffer. The Applicant is also the operator of the processing site and currently uses the site for finish crushing, stockpiling of aggregate, concrete and asphaltic concrete manufacturing, maintenance activities, employee training, laboratory, and other support services.

⁸ At the October 2, 2008, meeting, the Applicant clarified that it acquired the lease for the landfill site by assignment from Pacific Concrete. The Applicant had that lease extended and is currently the lessee of the landfill site. As the lessee, the Applicant was responsible for the closure of the landfill and is responsible for the maintenance and monitoring under the closure plan approved by the State Department of Health ("DOH") and the Environmental Protection Agency ("EPA"). The Applicant continues daily monitoring at the site and prepares and submits annual reports to the DOH for review. In 1990, the EPA released the landfill from further reporting and further action after an inspection.

19. The Applicant typically brings the raw material from the quarry via the tunnel to the processing site for subsequent processing into aggregates for sale or for the production of hot-mix asphalt ("HMA") and ready-mix concrete. The Applicant operates the HMA plant on the site, while Hawaiian Cement operates the ready-mix concrete plant.

20. The quarry and processing site currently operate primarily during the hours of 6:00 a.m. to 6:00 p.m. with recycling ending at 11:00 p.m., Monday through Saturday. Night operations at the recycling facility for receiving and processing cold-planned asphalt from City and County and State road paving jobs and at the existing HMA plant occur about 160 nights of the year and operate as late as 1:00 a.m.

DESCRIPTION OF PROPOSED USE

21. The Applicant proposes to (1) extend the life of the Makakilo Quarry resource extraction and aggregate processing operations to 2032; and (2) expand the resource extraction and buffer areas of the quarry. The expansion of the quarry entails the excavation of rock from the upper slopes of Pu`u Makakilo.

22. The Applicant plans to excavate as deep as 200 to 250 feet below the existing grade to maximize extraction of known basaltic reserves. The Applicant intends to establish berming and landscaping along the perimeter of the lower half of the quarry pit in the first phase (2009 to 2012). It is anticipated that mining activities will continue in the existing pit floor. During the second phase (2013 to 2017), the

Applicant plans to undertake berming and landscaping of the upper half of the quarry, with excavation continuing in the mid-section of the quarry. Excavation of the remaining portions of the quarry are expected in the third to fifth phases, with final grades at the upper most portion of the Pu'u Makakilo completed by 2032. These schedules for excavation are dependent upon actual market demand and the actual phasing may differ.

23. The Applicant also proposes to relocate the industrial processing uses on the processing site located on the makai portion of the Property to either the quarry pit on the mauka portion of the Property or to the Campbell Industrial Park by December 31, 2012. The relocation will involve the re-use of existing and purchase of new equipment. The proposed 24-year time extension will allow the Applicant to amortize the costs associated with the relocation of the uses.

24. The relocation will involve the removal of the HMA plant and the ready-mix concrete plant, both of which are scheduled to be completed by June 2009. By December 2012, the finish crushing and screening plant and the maintenance shop are anticipated to be removed from the site. The HMA plant will be relocated to the Campbell Industrial Park to accommodate night operations and a new HMA plant will be constructed in the quarry pit for day operations only. All other uses except for removal and renaturalization activities are scheduled to cease within three years after receipt of approval of the Applicant's request. The Applicant also intends to landscape

the entire site within six years after receipt of approval of its request and return the land to landowner JCC by 2015.

NEED FOR THE PROPOSED USE

25. The Makakilo Quarry supplies 70 percent of the local rock production. The quarry sites at Kapa`a and Halawa supply the remaining 30 percent. The rock is used for the construction of roadways and buildings. Extracting rock at the Makakilo Quarry is more economically feasible than importing rock from other quarries on the island of O`ahu or from sites that are located off-island. If the Makakilo Quarry is closed, rock from other quarries would need to be dramatically increased, possibly at higher prices because of their greater distances from the job sites that utilize concrete and base course products. The supply of rock from other quarries on the island may also not be sufficient to economically replace the Makakilo Quarry and may not be established in a timely manner to meet the demand from the construction industry.

26. With the expansion of the quarry, the Applicant proposes to supply approximately 500,000 tons of A-Grade rock and 600,000 tons of B-Grade rock annually for the next 24 years to meet the demand.

IMPACTS UPON THE RESOURCES OF THE AREA

Agricultural Resources

27. The Land Study Bureau Detailed Land Classification system classifies the existing pit and proposed expansion area as overall (master) productivity

rating class "E," the lowest agricultural productivity rating. The processing site contains soils with a productivity rating class of "A," "B," "D," and "E," with the majority of the site consisting of "A" and "B" rated soils.

28. The Agricultural Lands of Importance to the State of Hawai'i ("ALISH") classification system classifies a small portion of the pit expansion as "Other Important Agricultural Land." Most of the remaining quarry site comprised by the buffer areas is not rated under the ALISH system. The majority of the processing site is rated "Prime Agricultural Land" and "Other Important Agricultural Land."

29. The U. S. Department of Agriculture, Soil Conservation Service, classifies the soils on the excavation expansion area as a combination of Mahana Silty Clay Loam (McD2), 12 to 20 percent slopes; Helemano Silty Clay (HLMG), 30 to 90 percent slopes; and Mahana Badland Complex (MBL). The majority of the proposed excavation expansion falls within the Mahana Badland Complex soil type. Mahana Silty Clay Loam and Helemano Silty Clay soils are used for pasture, woodland, and wildlife habitat. Mahana Badland Complex consists of Mahana soils and Badland and is used for pasture.

30. The expansion of the quarry will not adversely impact agricultural resources of the area. The suitability of the quarry site for agricultural activities is limited given the poor crop productivity ratings and the lack of readily available irrigation water. The processing site will be returned to open space and landscaping by

2012 at which time it will be available for agricultural uses should the City and County's development plan policies for 'Ewa designate the site for agriculture.

Archaeological and Historical Resources

31. A surface archaeological reconnaissance was conducted in 1988 for Finance Realty, Ltd.'s, 18-hole golf course that was proposed on the mauka portion of the Property where the expansion of the quarry is now proposed. No surface remains were found and it was concluded, with the concurrence of the State Historic Preservation Division, that subsurface testing was not needed. Based on the archaeological reconnaissance and the ongoing use of the Property, there are no known archaeological and historical resources on the Property. Therefore, it is not anticipated that the quarry expansion will adversely impact such resources.

Flora and Faunal Resources

32. A limited variety of floral species have been identified on the Property, including guinea grass (*Panicum maximum*), buffel grass, feather fingergrass (*Chloris radiata*), 'uhaloa (*Waltheria indica*), kiawe (*Prosopis pallida*), and klu (*Acacia farnesiana*). Introduced fauna such as mongoose, rat, zebra dove, common mynah, house sparrow and finch, bulbul, and Java finch are also present on the Property. There are no known endangered or threatened native species of flora and fauna on the site, and therefore the quarry expansion is not anticipated to adversely impact such species.

It is also not anticipated that the quarry expansion will adversely impact any natural habitats at Pu`u Makakilo.

Vibration and Rockfall Hazards

33. There is the potential for vibration and rockfalls as a result of blasting activities associated with quarrying operations. The Applicant regularly monitors blasting activities with a seismograph and past readings have not exceeded standards. Blasting is controlled by regulations of the Federal Bureau of Alcohol, Tobacco, Firearms, and Explosives. With the proposed expansion, drilling and blasting activities will occur further mauka from their present location. Should vibration and/or rockfalls from blasting adversely impact the surrounding property, the Applicant proposes to reduce the blast intensity by utilizing smaller drill patterns or by "double-decking" the explosives.

Air Quality and Noise

34. Area residents have expressed concerns about the noise and dust generated by the existing quarrying and related manufacturing operations. Fugitive dust emitted by the processing site equipment has been observed crossing the H-1 Freeway on several occasions. A dust plume arising out of blasting at the quarry has also been seen traveling downwind beyond the boundaries of the Property.

35. As part of the request to expand the quarry, the Applicant will cease operations at the processing site by December 31, 2012, and relocate the industrial

processing uses to either the quarry pit on the mauka portion of the Property or to the Campbell Industrial Park. This relocation is intended to mitigate the noxious impacts of the processing upon surrounding neighbors. As may be required by the DOH, the Applicant will be required to place in service additional dust control measures to control dust generation, so that no visible fugitive dust shall cross the combined boundaries of TMK: 9-2-03: 74 and 82.

36. To address noise and dust impacts on nearby residences from night operations, beginning January 1, 2012, receipt of cold-planed asphalt at the quarry site will be allowed up to 10:00 p.m., Sunday to Friday. No other night operations will be permitted.

37. The Applicant is also required to submit annual reports to the DPP and the LUC which, among other things, must include observations of fugitive dust and a report of any citizen's complaints relating to the operation along with the actions taken to ameliorate those complaints. The Applicant is further required, for the life of the extension, to establish and disclose to the community a telephone number dedicated to receiving and recording complaints relating to quarry and recycling operations.

Visual Resources

38. Pu'u Makakilo is part of the proposed Open Space and Greenways Network and is intended for preservation and enhancement as a visual landmark and as part of a significant vista from Kapolei.

39. The Applicant has excavated up to the 560-foot elevation of Pu`u Makakilo and the pit's near vertical cuts and exposed rock are visible to much of the `Ewa Plain.

40. The Applicant's Closure Grading Plan dated June 5, 2008, calls for (1) a screening berm of up to 40 feet above finish grade and extending from the quarry pit access road to an elevation of 725 feet along the northern ridgeline; (2) a smaller berm between the quarry pit and the H-1 Freeway; and (3) renaturalization of grades of the former golf course driving range located in the upper valley of Pu`u Makakilo to replicate conditions that existed prior to the mass grading for the golf course. Post-quarry operations also include the incorporation of final landforms that will have slopes no greater than 75 percent to promote long-term soil retention and landscaping. Under the plan, there are no vertical cuts, horizontal benches, or exposed rocks. The Applicant intends to implement the final closure grades as represented in its Closure Grading Plan dated June 5, 2008.

41. The Applicant is also required to provide a beneficial re-use plan for lands disturbed by its quarry operations. The plan must include planning and preparation of design and implementation scenarios for the beneficial re-use of the pit area consistent with established land use policies for the site and surrounding area.

ADEQUACY OF PUBLIC FACILITIES AND UTILITIES

Roadways

42. Farrington Highway provides access to the processing facility on the makai portion of the Property, while Palehua Road, a private paved roadway, provides access to the quarry pit. Trucks entering and exiting the quarry pit use westbound on and off-ramps at the H-1 Freeway at Palehua Road as the underpass is closed as a result of the ongoing construction of the North-South Road Interchange. Eastbound trucks exiting the quarry enter the H-1 Freeway via the westbound on-ramp and change direction at the Palailai Interchange. Upon completion of the North-South Interchange, traffic into and out of the quarry would utilize the new interchange. There are no changes anticipated to the traffic volumes generated by the quarry expansion.

Water

43. The Applicant has a well source on the processing site that is limited by the State Commission on Water Resource Management ("CWRM") to a maximum draw of 168,000 gallons per day ("gpd"). This is a private water source and is used for washing, dust control, and landscaping. The Applicant also obtains drinking water from the Board of Water Supply which has transmission mains beneath Farrington Highway. The Applicant uses an average of 27,000 gpd. Under the proposal to expand the quarry, the source and uses of water will not change.

44. The Applicant's Revegetation Matrix and Revegetation Phasing Plan assumes the availability of approximately 200,000 gpd of water for quarry and revegetation purposes. Of this amount, the Revegetation Plan targets 100,000 gpd or less for revegetation purposes. This limitation on supply serves as a constraint on the speed by which land graded for visual mitigation purposes may be revegetated. As a result, the Applicant is in the process of requesting that its current allocation of Waiahole Ditch water of 750,000 gpd be reduced and allowed to be used for existing and future revegetation and landscaping purposes on TMK: 9-2-03: 74.⁹

Drainage

45. The Applicant prepared an Engineering Report dated April 2007 that addresses drainage requirements, regrading, and revegetation upon completion of resource extraction activities. The Applicant proposes to retain all storm water runoff that drains into the quarry pit with three existing drainage basins that have been designed for a 100-year storm event. The quarry expansion is not anticipated to have adverse impacts on adjacent properties and existing drainage systems downstream of the Property. If required by the DPP, the Applicant must submit an update of the drainage plan for the DPP's review and approval as a result of modifications to the final grading and beneficial re-use plans.

⁹ Pursuant to the CWRM's Decision and Order dated July 13, 2006, PMI was assigned Water Use Permit No. 775 for 750,000 gpd of non-drinking water for the irrigation of the golf course that was proposed by Finance Realty, Ltd., and partially developed by the parcel's previous owner before being abandoned. The issuance of the permit is currently on appeal.

Wastewater

46. The quarry is not connected to the City and County wastewater collection system. The Applicant installed an Individual Wastewater System on TMK: 9-1-16: 4 in 2006 consisting of three septic tanks and a converted seepage pit which serves the restrooms at the administration building, truck scale house, and batch plants. Portable toilet facilities are provided on other areas of the site. No changes to the wastewater flows are anticipated with the expansion of the quarry.

Solid Waste

47. Solid waste generated by the quarry operations is removed by a private hauler, which will continue under the expansion of the quarry.

Police and Fire Protection

48. The Property is located within the existing service area of the Honolulu Police Department. There are no adverse impacts anticipated on police services from the proposed quarry expansion.

49. The Property is located within the existing service area of the Honolulu Fire Department. The processing facility site has four water tanks with a total capacity of 10,000 gallons. There is also a water truck available onsite with pressurized water capability and a water cannon. In addition, there are fire extinguishers located throughout the site. There are no adverse impacts anticipated on fire protection services from the proposed quarry expansion.

Electrical Service

50. Hawaiian Electric Company has a substation on the processing site and provides electrical service to the quarry.

CONCLUSIONS OF LAW

1. The LUC has jurisdiction over this matter pursuant to section 205-6, HRS, and sections 15-15-95 and 15-15-96, HAR.

2. Based upon the record of the proceedings before the Planning Commission, and pursuant to section 205-6, HRS, and sections 15-15-95 and 15-15-96, HAR, the LUC finds that the recommendation of the Planning Commission to (1) extend the life of the Makakilo Quarry resource extraction and aggregate processing operations to 2032; and (2) expand the resource extraction and buffer areas of the quarry generally meets the guidelines for determining an “unusual and reasonable” use within the State Land Use Agricultural District.

3. The use shall not be contrary to the objectives sought to be accomplished by chapters 205 and 205A, HRS, and the rules of the LUC. The expansion of the quarry on the mauka portion of the Property is not contrary to the objective of protecting land with a high capacity for intensive cultivation since the site consists of marginal agricultural land that is and will increasingly be surrounded by urban uses. Under the expansion plans, the known basaltic reserves in the expansion area will be used to supply the construction industry with A-Grade and B-Grade rock. There are no

known archaeological and historical resources on the Property. There are also no known endangered or threatened species of flora and fauna on the Property.

4. Based upon the record of the proceedings before the Planning Commission, the desired use would not adversely affect surrounding property. At the time of the establishment of the quarry, the surrounding lands consisted of sugarcane fields, open space, and pasture. However, much of these lands have since been either developed or are planned for urban development. Residents of Kapolei Villages and Kapolei Knolls, located approximately 2,000 and 1,500 feet from the quarry pit, respectively, have complained about noise, dust, and odors as a result of the existing quarrying and related manufacturing operations. The Applicant has agreed to close the processing site and to relocate all uses into the quarry pit or to the Campbell Industrial Park by December 31, 2012. To mitigate adverse visual impacts of the quarrying activities, the Applicant intends to implement its final closure grades, as identified in the June 5, 2008, grading plan. These slopes provide a more natural finish grade that will encourage long-term vegetation growth and blend with the surrounding topography of Pu'u Makakilo. The Applicant is also required to file annual reports to include, among other things, a report of any citizen's complaints relating to the operation along with the actions taken to ameliorate those complaints. The Applicant will further be required, for the life of the special use permit, to establish and disclose to the community a telephone number dedicated to receiving and recording complaints

relating to the quarrying and recycling operations. The Applicant regularly monitors blasting activities with a seismograph and past readings have not exceeded standards. With the proposed expansion, drilling and blasting will occur further mauka from the H-1 Freeway. Should vibration and/or rockfalls from blasting adversely impact the surrounding property, the Applicant proposes a reduction in blast intensity by utilizing smaller drill patterns or "double-decking" the explosives.

5. Based upon the record of the proceedings before the Planning Commission, the use would not unreasonably burden public agencies to provide facilities and services. There are no changes to the traffic volumes and the wastewater flows generated by the expansion to the quarry operations. The Applicant will be required to submit a fire protection and control plan to the Honolulu Fire Department for review.

6. Based upon the record of the proceedings before the Planning Commission, the preponderance of the evidence established that unusual conditions, trends, and needs had arisen since the district boundaries and rules were established. Approval to establish the quarry was granted in 1973 to produce basalt aggregate for concrete production and road and fill rock. At the time of the establishment of the quarry, the surrounding areas were largely undeveloped. Despite the increasing urban development in the area, there continues to be demand for the rock in the construction of roadways and buildings. However, good quality rock in the existing approved area

of the quarry has been depleted, and at this time, there are no reasonable alternatives on the island that can be timely established to provide quality rock that is economical, reliable, and meets construction standards. With the expansion of the quarry, the Applicant proposes to supply approximately 500,000 tons of A-Grade rock and 600,000 tons of B-Grade rock annually for the next 24 years to meet the demand.

7. Based upon the record of the proceedings before the Planning Commission, the land upon which the proposed use is sought is unsuited for the uses permitted within the district. The expansion and extension of the quarry will not have an adverse impact on agricultural resources. The quarry expansion involves marginal agricultural land and irrigation water is not readily available. There are no current plans to use the site for any agricultural activity. The uses on the processing site, the majority of which consists of "Prime Agricultural Land" and "Other Important Agricultural Land," will be relocated and the site will be returned to landscaped open space uses. At that time, the site will be available for agricultural uses should the City and County's development plan policies for 'Ewa designate the site for agriculture.

8. Any of the proposed findings of fact or conclusions of law submitted by any of the parties not already ruled on by the LUC by adoption or rejected by clearly contrary findings of fact or conclusions of law are hereby denied and rejected. Any conclusion of law that is or should be a finding of fact is to be taken as such notwithstanding its denomination as a conclusion of law; any finding of fact that is or

should be a conclusion of law is to be taken as such notwithstanding its denomination as a finding of fact.

DECISION AND ORDER

Having duly considered the complete record in this matter, the oral arguments presented by the parties in this proceeding, the LUC, through an amended motion having been duly made at a meeting conducted on October 2, 2008, in Honolulu, Hawai'i, and the amended motion having received the affirmative votes required by section 15-15-13, HAR, and there being good cause for the amended motion, hereby APPROVES with modifications the recommendation of the Planning Commission to (1) extend the life of the Makakilo Quarry resource extraction and aggregate processing operations to 2032; and (2) expand the resource extraction and buffer areas of the quarry on the Property for a total special use permit area in this docket of approximately 541.5 acres of land within the State Land Use Agricultural District at Pu'u Makakilo, 'Ewa, O'ahu, Hawai'i, identified as TMKs: 9-1-16: 4 and 9-2-03: por. 74 and por. 82,¹⁰ and approximately shown on Exhibit B and described in Table 1, attached hereto and incorporated by reference herein, subject to the following conditions to replace all other conditions imposed by the LUC on March 23, 1973, in this docket that are applicable to the rock quarrying operations:

1. Within six (6) months of the Land Use Commission's Decision and

¹⁰ The approximately 541.5 acres of land also includes that portion of the tunnel located beneath the H-1 Freeway, which is not assigned a TMK parcel.

Order approving the Special Use Permit, the Applicant shall submit:

- a. A new site plan with metes and bounds map and description delineating the approximately 541-acre Property, including the boundaries of the quarry excavation and berming areas, the processing site and conveyor tunnel, and the buffer area to the Director of Planning and Permitting for review and approval. The site plan shall also be submitted to the Land Use Commission.
- b. A fire protection and control plan to Honolulu Fire Department for review and approval. A copy of the approved plan shall be submitted to the Director of Planning and Permitting within 30 days of approval.

2. Within one (1) year of the Land Use Commission's Decision and Order approving the Special Use Permit, the Applicant shall submit to the Director of Planning and Permitting for review and approval a renaturalization plan in coordination with the proposed Closure Grading Plan for the quarry site and buffer area mauka of the H-1 Freeway showing landscaping details including plant types, sizing and spacing, irrigation facilities and distribution systems.

3. All resource extraction, related aggregate processing and concrete and asphalt production activities, including recycling activities shall cease by December 31, 2032. Final beneficial re-use plans as approved by the Department of Planning and Permitting shall be implemented immediately upon the cessation of said resource extraction and related quarrying activities.

4. The Applicant shall close the processing site on Parcel 4 by relocating all uses on the site into the quarry pit or Campbell Industrial Park by

December 31, 2012, and Parcel 4 shall be returned to landscaped open space use within six (6) years of the date of the Land Use Commission's Decision and Order. A landscape plan shall be submitted to the Director of Planning and Permitting for review and approval on the second anniversary date of the Land Use Commission's Decision and Order and the approved landscape plan shall be implemented within one (1) year of its approval. Landscaping shall be maintained in a natural state for the life of the Special Use Permit.

5. Beginning January 1, 2012, quarry operations shall be limited to the following days/hours:

- a. Quarry excavation, crushing, stockpiling, equipment maintenance, and recycling facility – 6:00 a.m. to 6:00 p.m., Monday to Saturday.
- b. Hot-mix asphalt plant – 6:00 a.m. to 6:00 p.m., Monday to Friday.
- c. Unloading of cold-planed asphaltic concrete during re-paving jobs – 6:00 p.m. to 10:00 p.m., Sunday to Friday.

6. Except for quarry, recycling activities in the quarry, and renaturalization activities, the remainder of Tax Map Key: 9-2-03: 74 shall remain in open space buffer for the life of the quarry and related activities. Minor accessory uses or structures may be permitted on Parcel 74 with the express written consent of the Director of Planning and Permitting. Any other uses shall be processed pursuant to Section 205-6, Hawai'i Revised Statutes.

7. As may be required by the State Department of Health, the Applicant shall place in service additional dust control measures to control dust generation at the project such that no visible fugitive dust shall cross the combined property boundaries of Tax Map Key: 9-2-03: 74 and 82.

8. The Applicant shall, as a result of modifications to the final grading and beneficial re-use plans, submit an update of the drainage plan, prepared by a qualified civil engineer, as may be required by the Director of Planning and Permitting for review and approval.

9. On each anniversary date of the Land Use Commission's Decision and Order, the Applicant or its successor shall file with the Department of Planning and Permitting and the Land Use Commission a report and supporting documentation demonstrating the status of compliance with each of the conditions of the Special Use Permit approval. Included in the supporting documentation shall be an updated rectified aerial imagery of the quarry, buffer area and processing site and dust control management plan. The following items shall also be a part of the supporting documentation:

- a. Observations of fugitive dust.
- b. A report on replanting activities, including the areas replanted, and the type of vegetation planted.
- c. A report of any citizen's complaints relating to the operation along with the actions taken to ameliorate those complaints.

The Director may present its analysis and recommendations on the annual report to the Planning Commission and the State Department of Health for further action pursuant to the Rules of the Planning Commission.

10. The Applicant shall provide a beneficial re-use plan for lands disturbed by its quarry operations. The plan shall include planning and preparation of design and implementation scenarios for the beneficial re-use of the pit area consistent with established land use policies for the site and surrounding area. The re-use planning document and accompanying scenarios and drawings shall be submitted to the Department of Planning and Permitting, for review and approval within the fifth (5th) year after the date of the Land Use Commission's Decision and Order approving this expansion. An updated re-use plan shall be submitted to the DPP for review and approval every five (5) years thereafter. The beneficial re-use planning and design document shall be an ongoing document prepared by a professional qualified in re-use planning and contain objectives, implementation and funding strategies for reclamation of the pit area for the purpose of achieving the area's long term land use policies. The Applicant will update the plan, as may be required by the Director of Planning and Permitting, to respond appropriately to any changes in the surrounding area's land use policies.

The beneficial re-use plan shall include at least one public access across

Tax Map Key: 9-2-03: 74, connecting Tax Map Key: 9-2-03: 81 and the extension of

Makakilo Drive, across the project in which safe pedestrian/bicycling passage can be established. Access requirements, such as but not limited to, subdivision, nature of improvements, routing, hours accessible, shall be established as part of the final beneficial re-use plan. Suggested routing of the public access is shown on Exhibit A.

11. Approval of this Special Use Permit does not constitute compliance with other land use ordinances or governmental agencies' requirements. They are subject to separate review and approval. The Applicant shall be responsible for insuring that the final plans for the project approved under this permit comply with all applicable provisions of the Land Use Ordinance and other governmental agencies' provisions and requirements.

12. The Applicant and/or landowner shall notify the Director of Planning and Permitting and the Land Use Commission of any changes in uses on the Property; termination of any uses on the Property; and/or transfer in ownership of the Property or any uses on the Property. The Planning Commission shall then, in consultation with the Director of Planning and Permitting, determine the appropriate disposition of this Special Use Permit and facilities.

13. In the event of noncompliance with any of the conditions set forth herein, the Director of Planning and Permitting may terminate all uses approved under this Special Use Permit or the Director may declare this Special Use Permit null and void or seek available civil procedures to enforce compliance.

14. The Applicant shall, for the life of the Special Use Permit, establish and disclose to the community, a telephone number dedicated to receiving and recording complaints relating to quarry and recycling operations. A continuous volume of complaints shall warrant reconsideration of the Special Use Permit by the Planning Commission.

15. The uses in the quarry excavation area shall be limited to rock excavation, crushing, stockpiling, a new hot-mix asphalt plant, recycling of concrete rubble, glass, and asphaltic concrete pavement, equipment maintenance, employee support, parking, administration, and a water well and pump. No other uses shall be permitted without the approval of the Land Use Commission.

16. The Applicant shall establish the quarry expansion in substantial compliance with the representations made to the Land Use Commission in obtaining the Land Use Commission Special Use Permit. Failure to do so may result in the revocation of the permit.


IT IS FURTHER ORDERED that the conditions imposed by the LUC on March 23, 1973, in this docket that are applicable to the sanitary landfill operations shall remain in full force and effect.

ADOPTION OF ORDER


The undersigned Commissioners, being familiar with the record and proceedings, hereby adopt and approve the foregoing ORDER this 6th day of November, 2008. This ORDER and its ADOPTION shall take effect upon the date this ORDER is certified and filed by this Commission.

Done at Honolulu, Hawai'i, this 6th day of November, 2008, per motion on Nov. 6, 2008.

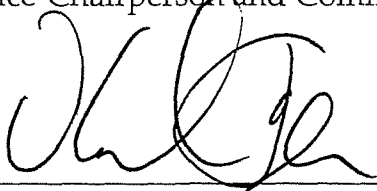
APPROVED AS TO FORM


Deputy Attorney General

LAND USE COMMISSION
STATE OF HAWAII


DUANE KANUHIA
Chairperson and Commissioner

ABSENT
RANSOM PILTZ
Vice-Chairperson and Commissioner


VLADIMIR PAUL DEVENS
Vice-Chairperson and Commissioner

ABSENT
KYLE CHOCK
Commissioner

ABSENT
THOMAS CONTRADES
Commissioner

Lisa M. Judge
LISA M. JUDGE
Commissioner

NORMAND LEZY
Commissioner

NICHOLAS W. TEVES, JR.
Commissioner

REUBEN S.F. WONG
Commissioner

Filed and effective on: November 7, 2008

Certified by:

Orlando Davidson
ORLANDO DAVIDSON
Executive Officer

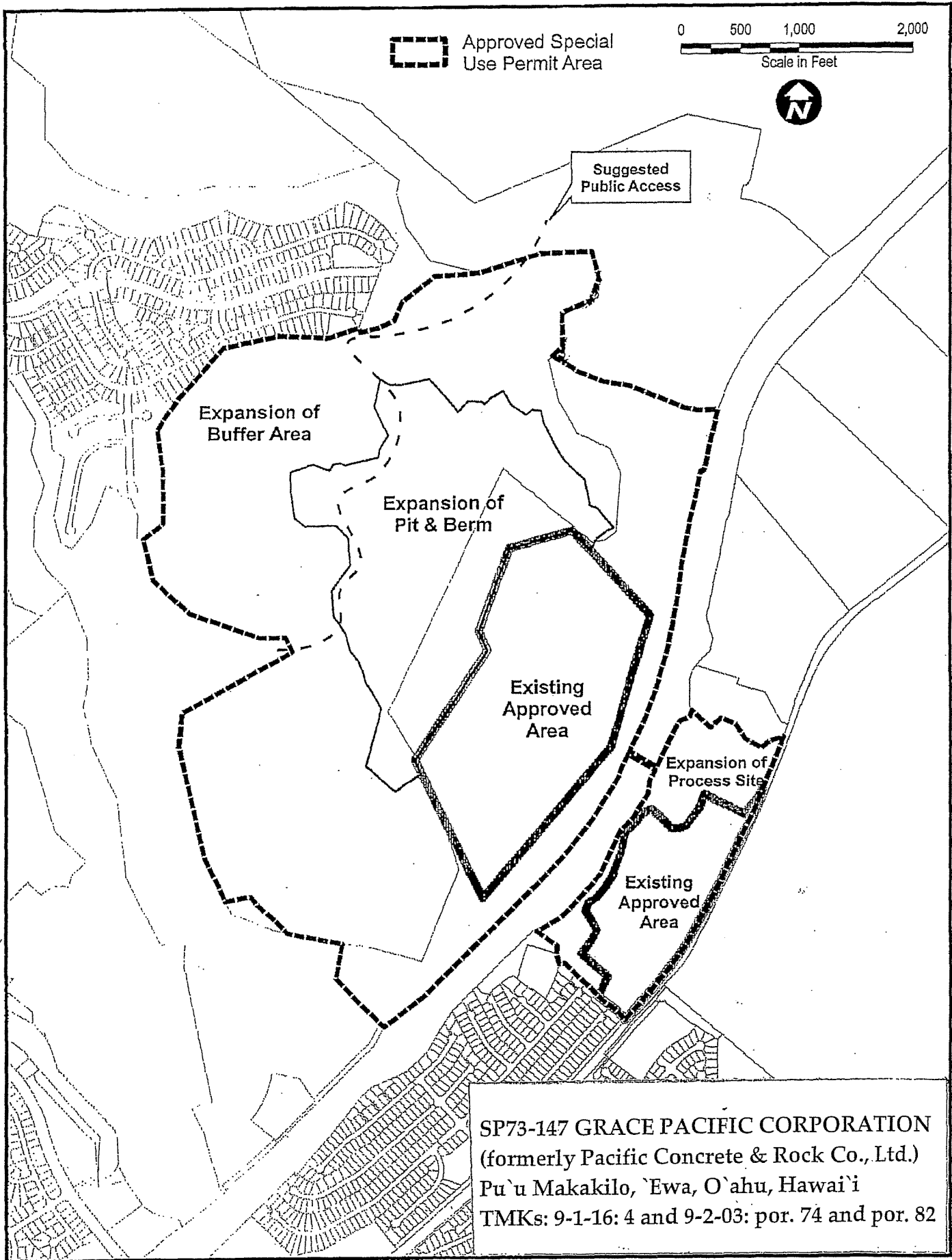




Table 1

Acreage of Existing Quarry and Proposed Expansion Areas

Description of Area	Existing Acreage	Proposed Additional Acreage	Total	TMKs Affected
Quarry Excavation & Berming (including landscaping and grading)	78.4	105.8 (including 20.6 acres of quarry expansion & 44 acres of landscaping and grading in Parcel 74 and 41.2 acres in Parcel 82)	184.2	9-2-03: por. 74 & por. 82
Processing Site & Conveyor Tunnel	54.6 (comprising 53.6 Parcel 4, 0.6 flag-strip connecting to Parcel 10, 0.3 road remnant, and 0.1 tunnel)	0.00	54.6	9-1-16: 4
Buffer Area Surrounding Quarry (Passive Open Space)	188.0	114.7	302.7	9-2-03: por. 74 & por. 82
Offsite Stilling Basin (to be abandoned)	1.4	(1.4)	0.00	9-1-16: por. 108
Access Road	0.00	0.00	0.00	9-2-02: por. 6
Total	322.4	219.1	541.5	

BEFORE THE LAND USE COMMISSION

OF THE STATE OF HAWAII

In The Matter Of The Application Of	)	DOCKET NO. SP73-147
)	
GRACE PACIFIC CORPORATION	)	CERTIFICATE OF SERVICE
(Formerly Pacific Concrete & Rock Co.,)	
Ltd.))	
)	
To Extend The Life Of The Makakilo)	
Quarry Resource Extraction And)	
Aggregate Processing Operations To)	
2032 And To Expand The Resource)	
Extraction And Buffer Areas Of The)	
Quarry On Approximately 541.5 Acres)	
Of Land Within The State Land Use)	
Agricultural District At Pu'u Makakilo,)	
'Ewa, O'ahu, Hawai'i, Tax Map Keys:)	
9-1-16: 4 And 9-2-03: Por. 74 And Por. 82)	
_____)	

CERTIFICATE OF SERVICE

I hereby certify that a certified copy of the FINDINGS OF FACT, CONCLUSIONS OF LAW, AND DECISION AND ORDER APPROVING WITH MODIFICATIONS THE RECOMMENDATION OF THE CITY AND COUNTY OF HONOLULU PLANNING COMMISSION TO (1) EXTEND THE LIFE OF THE MAKAKILO QUARRY RESOURCE EXTRACTION AND AGGREGATE PROCESSING OPERATIONS TO 2032; AND (2) EXPAND THE RESOURCE EXTRACTION AND BUFFER AREAS OF THE QUARRY was served upon the following by either hand delivery or depositing the same in the U. S. Postal Service by regular or certified mail as noted:

DEL. ABBEY MAYER, Director
 Office of Planning
 P. O. Box 2359
 Honolulu, Hawai'i 96804-2359

BRYAN C. YEE, Esq.
Deputy Attorney General
425 Queen Street
Honolulu, Hawai'i 96813
Attorney for State Office of Planning

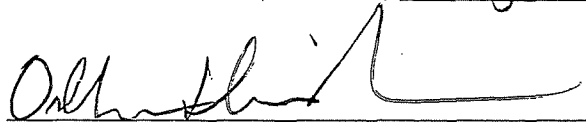
ROBERT M. CREPS
Senior Vice President Administration
Grace Pacific Corporation
P. O. Box 78
Honolulu, Hawaii 96810

DOUGLAS ING, Esq.
Watanabe Ing Kawashima & Komeiji LLP
999 Bishop Street, 23rd Floor
Honolulu, Hawaii 96813
Attorney for Petitioner

HENRY ENG, Director
Department of Planning and Permitting
City and County of Honolulu
650 South King Street
Honolulu, Hawaii 96813

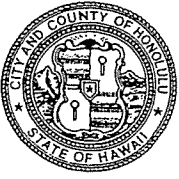
CARRIE OKINAGA, ESQ.
Corporation Counsel
City & County of Honolulu
530 South King Street
Honolulu, Hawaii 96813
Attorney for City and County of Honolulu

DATED: Honolulu, Hawai'i, Nov. 7, 2008



ORLANDO DAVIDSON
Executive Officer

ATTACHMENT 2



MAKAKILO/KAPOLEI/HONOKAI HALE NEIGHBORHOOD BOARD NO. 34

c/o NEIGHBORHOOD COMMISSION • CITY HALL, ROOM 400 • HONOLULU, HAWAII 96813

'09 APR -8 P3:55

April 6, 2009

CITY OF HONOLULU
CITY SECRETARY

Mr. David Tanoue, Director
Department of Planning and Permitting
City and County of Honolulu
650 South King Street
Honolulu, HI 96813

**RE: February 20, 2009 Memorandum re: Conditional Use Permit
No. 2007/CUP-91 for Expansion of Makakilo Quarry**

Dear Mr. Tanoue,

Thank you for the opportunity to comment on the Conditional Use Permit (CUP) application for the expansion of Makakilo Quarry. At this time, the Makakilo/Kapolei/Honokai Hale Neighborhood Board #34 has no specific comments on the application.

However, we affirm our official position of support for the project taken in September 2006. We affirm our support based on the understanding that this project has taken significant steps to mitigate impacts and that it serves a vital role in supplying aggregate for the area's transportation infrastructure improvement projects.

Again, thank you for allowing me to provide these comments. If you have any questions, please don't hesitate to contact me 349-5992.

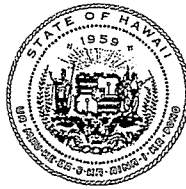
Sincerely,

Maeda Timson

Chair, Makakilo/Kapolei/Honokai Hale Neighborhood Board #34



LINDA LINGLE
GOVERNOR



BRENNON T. MORIOKA
DIRECTOR

Deputy Directors
MICHAEL D. FORMBY
FRANCIS PAUL KEENO
BRIAN H. SEKIGUCHI
JIRO A. SUMADA

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

IN REPLY REFER TO:

HWY-PS
2.1341

March 20, 2009

Mr. David K. Tanoue, Director
Department of Planning and Permitting
City and County of Honolulu
650 South King Street, 7th Floor
Honolulu, Hawaii 96813

Dear Mr. Tanoue:

Subject: Conditional Use Permit Application No. 2007/CUP-91 to
Allow Expansion of Makakilo Quarry
Oahu, Ewa District, Makakilo, TMK: (1) 9-2-2: 6, 9-2-3: 74 & 82

We are in receipt of your February 20, 2009, letter requesting our review and comment on the subject application. Our previous comments, HWY-PS 2.7126 dated February 25, 2008, are still applicable. We have no additional comments.

If you have any questions, please contact Robert Miyasaki, Systems Planning Engineer, Highways Division, at 587-6336.

Very truly yours,

A handwritten signature in black ink, appearing to be "B. Morioka", is written over a horizontal line.

BRENNON T. MORIOKA, Ph.D., P.E.
Director of Transportation

Enclosure

680378

LINDA LINGLE
GOVERNOR



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

FEB 25 2008

2/25/08 *file*
BRENNON T. MORIOKA
INTERIM DIRECTOR

Deputy Directors
MICHAEL D. FORMBY
FRANCIS PAUL KEENO
BRIAN H. SEKIGUCHI

IN REPLY REFER TO:

HWY-PS
2.7126

Mr. Henry Eng, FAICP
Director
Department of Planning and Permitting
City and County of Honolulu
650 South King Street, 7th Floor
Honolulu, Hawaii 96813

Dear Mr. Eng:

Subject: Application to Amend Special Use Permit (72/SUP-1, 2007/SUP-6) and
Conditional Use Permit (72/CUP-15, 2007/CUP-91) to Allow Modification of the
Excavation and Buffer Zone Areas at the Makakilo Quarry
Oahu, Ewa District, Makakilo, TMK: (1) 9-11-16: 4: 9-2-2:6, 9-2-3:74 & 82

Thank you for consulting us. It is important for the State to have reliable local sources of aggregate, particularly aggregate for asphalt paving, for the maintenance, improvement, and expansion of Hawaii's highways, airport and harbors. Without Makakilo Quarry, aggregate would need to be imported at higher cost. The Department of Transportation has no objection to the application to extend the life of Makakilo Quarry.

It is our understanding that the ingress and egress of the Makakilo Quarry will be provided by the City's Makakilo Extension project. To accommodate the City's proposed project the Department of Transportation has accommodated its connection to the Department of Transportation's North-South Road project.

The Department of Transportation understands that the applicant may relocate its quarry processing facilities to the Makakilo Quarry site. If the relocation is approved, Grace Pacific and the appropriate City agencies will work with the Department of Transportation to resolve proper ingress and egress during the construction of North-South Road.

If you have any questions, please contact Ken Tatsuguchi, Engineering Program Manager, Planning Branch, at 587-1830.

Very truly yours,

A handwritten signature in black ink, appearing to read "BT", followed by a horizontal line.

BRENNON T. MORIOKA, Ph.D., P.E.
Interim Director of Transportation

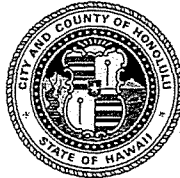
bc: STP (DIR 1437), HWY-O, -R, -T, -D, -PS (07-364)
DM/KT:th

0 7-364
DM

HONOLULU FIRE DEPARTMENT
CITY AND COUNTY OF HONOLULU

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

MUFI HANNEMANN
MAYOR



'09 MAR 18 P2:42

KENNETH G. SILVA
FIRE CHIEF

ALVIN K. TOMITA
DEPUTY FIRE CHIEF

DEPARTMENT OF PLANNING AND PERMITTING
CITY AND COUNTY OF HONOLULU

March 16, 2009

TO: DAVID TANOUE, DIRECTOR
DEPARTMENT OF PLANNING AND PERMITTING

FROM: KENNETH G. SILVA, FIRE CHIEF

SUBJECT: CONDITIONAL USE PERMIT APPLICATION NO. 2007/CUP-91
TO ALLOW EXPANSION OF MAKAKILO QUARRY
92-1130 PUEONANI STREET AND TWO LOTS SITUATED
BETWEEN PARCEL 74 AND THE H-1 FREEWAY, KAPOLEI
TAX MAP KEYS: 9-2-002: 006 AND 9-2-003: 074 AND 082

In response to your memorandum dated February 20, 2009, regarding the above-mentioned subject, the Honolulu Fire Department (HFD) reviewed the materials provided and requires that the following be complied with:

1. Provide a fire apparatus access road for every facility, building, or portion of a building hereafter constructed or moved into or within the jurisdiction when any portion of the facility or any portion of an exterior wall of the first story of the building is located more than 150 feet (45 720 mm) from the fire apparatus access as measured by an approved route around the exterior of the building or facility.
(1997 Uniform Fire Code, Section 902.2.1)
2. Provide a water supply, approved by the county, capable of supplying the required fire flow for fire protection to all premises upon which facilities or buildings, or portions thereof, are hereafter constructed or moved into or within the county.

On-site fire hydrants and mains capable of supplying the required fire flow shall be provided when any portion of the facility or building is in excess of 150 feet (45 720 mm) from a water supply on a fire apparatus access road, as measured by an approved route around the

684756

David Tanoue, Director

Page 2

March 16, 2009

exterior of the facility or building. (1997 Uniform Fire Code, Section 903.2, as amended)

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

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

A handwritten signature in black ink, appearing to read "Kenneth G. Silva".

KENNETH G. SILVA
Fire Chief

KGS/SY:bh

BOARD OF WATER SUPPLY

CITY AND COUNTY OF HONOLULU
630 SOUTH BERETANIA STREET
HONOLULU, HI 96843



March 16, 2009

MUFI HANNEMANN, Mayor

RANDALL Y. S. CHUNG, Chairman
SAMUEL T. HATA
ALLY J. PARK
ROBERT K. CUNDIFF

JEFFREY S. CUDIAMAT, Ex-Officio
BRENNON T. MORIOKA, Ex-Officio

WAYNE M. HASHIRO, P.E.
Manager and Chief Engineer

DEAN A. NAKANO
Deputy Manager and Chief Engineer

09 MAR 17 P2 35
CITY AND COUNTY OF HONOLULU

TO: DAVID K. TANOUE, DIRECTOR
DEPARTMENT OF PLANNING AND PERMITTING

FROM: KEITH S. SHIDA, PROGRAM ADMINISTRATOR
BOARD OF WATER SUPPLY *K. Shida*

SUBJECT: YOUR LETTER DATED FEBRUARY 20, 2009 ON THE CONDITIONAL
USE PERMIT APPLICATION NO. 2007/CUP-91 TO ALLOW EXPANSION
OF MAKAKILO QUARRY, TMK: 9-2-2:6; 9-2-3:74 AND 82, FILE NO.
2007/CUP-91(ry)

Thank you for the opportunity to comment on the expansion of Makakilo Quarry.

We do not have a water system in this area.

The fire protection requirements should be coordinated with the Fire Prevention Bureau of the Honolulu Fire Department.

If you have any questions, please contact Robert Chun at 748-5443.



09 MAY -6 P2:56

May 6, 2009
2004.33.8000 / 09P-104

CLERK OF PLANNING
AND PERMITTING
CITY & COUNTY OF HONOLULU

Mr. David Tanoue, Director
Department of Planning and Permitting
City and County of Honolulu
650 South King Street, 7th Floor
Honolulu, HI 96813

Dear Mr. Tanoue:

**Special Use Permit (SUP)
Land Use Commission (LUC) Docket No. SP73-147
Makakilo Quarry Expansion; Ewa, Oahu, Hawaii
Tax Map Key (1) 9-1-16: 4 and (1) 9-2-03: 74 and 82**

On behalf of Grace Pacific Corporation, we respectfully submit the attached refined site plan and accompanying metes and bounds description of the Makakilo Quarry expansion project in compliance with Condition 1(a) of the Land Use Commission's (LUC) Decision and Order (D&O), Docket No. SP73-147. The condition calls for Grace Pacific to submit within six months of the LUC's D&O issuance a "new site plan with metes and bounds map and description delineating the approximately 541-acre Property, including the boundaries of the quarry excavation and berming areas, the processing site and conveyor tunnel, and the buffer area to the Director of Planning and Permitting for review and approval."

Should you have any questions regarding this submittal, please do not hesitate to call me at 521-5361.

Sincerely yours,

BELT COLLINS HAWAII LTD.

Lee W. Sichter
Principal Planner

LWS:lf

cc: Orlando Davidson, State Land Use Commission
Robert Creps, Grace Pacific Corporation

Attachment

DELINATION OF OUTER BOUNDARIES "MAUKA" OF H-1 IS 486.9 ACRES,
"MAKAI" OF H-1 IS 54.5 ACRES AND CONVEYOR TUNNEL EASEMENT IS
0.1 ACRE THE OVERALL AREA TOTAL IS 541.5 ACRES

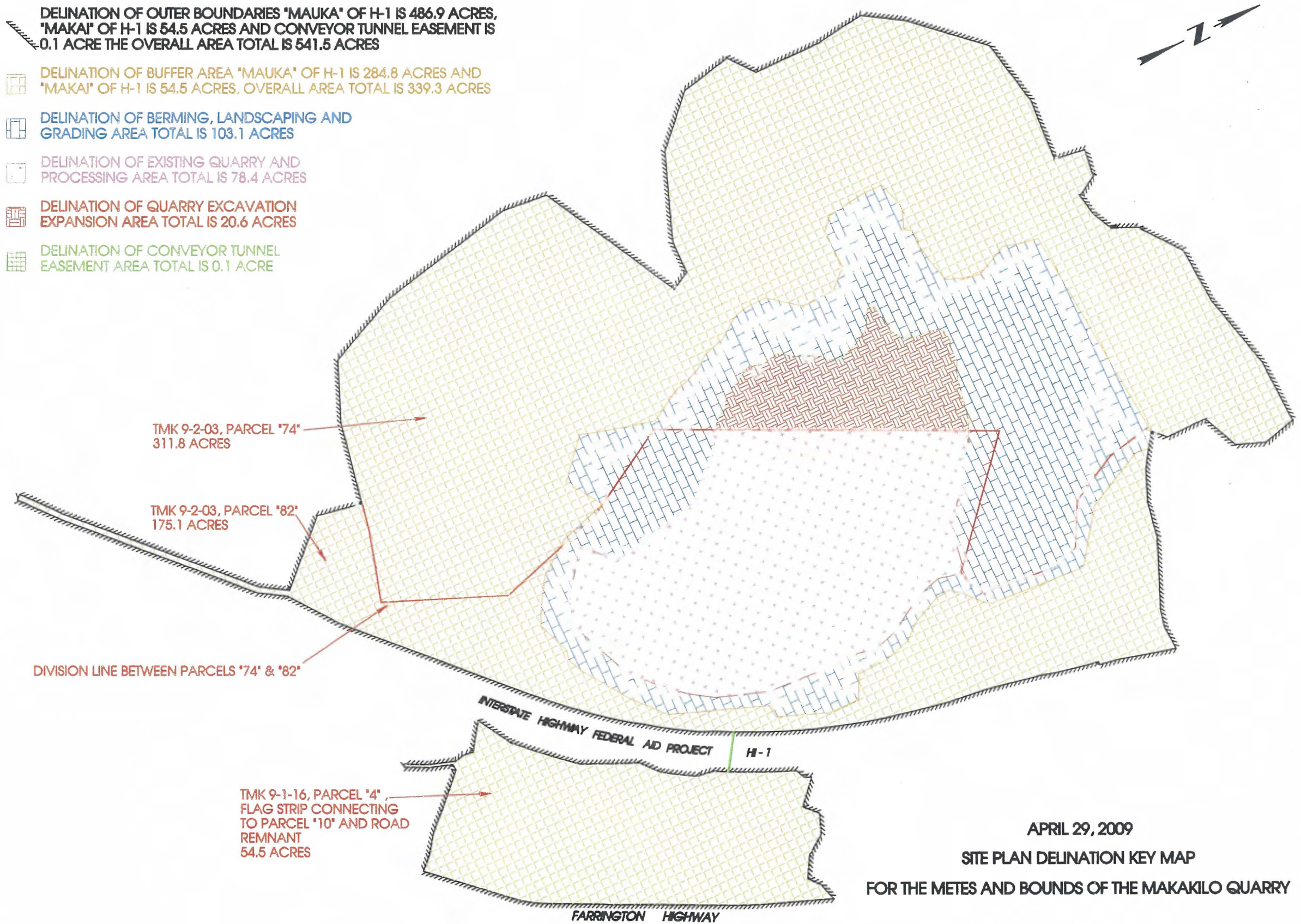
DELINATION OF BUFFER AREA "MAUKA" OF H-1 IS 284.8 ACRES AND
"MAKAI" OF H-1 IS 54.5 ACRES, OVERALL AREA TOTAL IS 339.3 ACRES

DELINATION OF BERMING, LANDSCAPING AND
GRADING AREA TOTAL IS 103.1 ACRES

DELINATION OF EXISTING QUARRY AND
PROCESSING AREA TOTAL IS 78.4 ACRES

DELINATION OF QUARRY EXCAVATION
EXPANSION AREA TOTAL IS 20.6 ACRES

DELINATION OF CONVEYOR TUNNEL
EASEMENT AREA TOTAL IS 0.1 ACRE



APRIL 29, 2009

SITE PLAN DELINATION KEY MAP
FOR THE METES AND BOUNDS OF THE MAKAKILO QUARRY

OUTER BOUNDARY AREA MAUKA H - 1.txt

METES AND BOUNDS REPORT

Boundary Name: OUTER BOUNDARY AREA MAUKA H - 1

Coordinate values shown are computed based on the rounded bearing and distance, or chord bearing and chord lengths as indicated herein.

Point Number	Bearing	Description Distance	Sta	Northing	Easting	Elevation
0			0+00.00	-9505.45	-162.64	0.00
0	10030'00"	313.39 ft				
0	315021'00"	541.77 ft	3+13.39	-9813.60	-219.75	0.00
0	31019'10"	211.23 ft	8+55.16	-10199.02	161.00	0.00
0	45021'20"	1393.75 ft	10+66.39	-10379.47	51.20	0.00
0	49010'10"	340.25 ft	24+60.14	-11358.86	-940.43	0.00
0	319008'36"	42.98 ft	28+00.39	-11581.33	-1197.88	0.00
0	224041'49"	40.72 ft	28+43.37	-11613.84	-1169.76	0.00
0	229010'10"	300.67 ft	28+84.09	-11584.89	-1141.12	0.00
0	225021'20"	1400.04 ft	31+84.76	-11388.30	-913.62	0.00
0	211019'10"	206.13 ft	45+84.80	-10404.49	82.48	0.00
0	232028'50"	403.08 ft	47+90.94	-10228.40	189.63	0.00
0	225021'20"	1319.71 ft	51+94.01	-9982.91	509.33	0.00
0			65+13.72	-9055.54	1448.28	0.00
	Center Point:		0	-5893.78	-1674.48	
	Radius:	4443.91 ft				
	Delta:	16000'14" Left				
	Arc Length:	1241.27 ft				
	Chord Bearing:	217021'13"				
	Chord Length:	1237.24 ft				
	Middle Ordinate:	43.27 ft				
	External:	43.69 ft				
	Deg of Curvature:	1017'22" Arc Definition				
	Tangent:	624.70 ft				
	Curve PI:			-8616.56	1892.74	
0			77+55.00	-8072.05	2198.95	0.00
0	209021'06"	0.25 ft				
0	119021'06"	0.03 ft	77+55.25	-8071.83	2199.08	0.00
0	202049'53"	97.12 ft	77+55.27	-8071.82	2199.05	0.00
0	90000'00"	0.00 ft	78+52.39	-7982.31	2236.73	0.00
0			78+52.39	-7982.31	2236.73	0.00
	Center Point:		0	-5893.79	-1674.49	
	Radius:	4433.91 ft				
	Delta:	17029'15" Left				
	Arc Length:	1353.30 ft				
	Chord Bearing:	199021'28"				
	Chord Length:	1348.06 ft				

OUTER BOUNDARY AREA MAUKA H - 1.txt

Middle Ordinate:	51.53 ft				
External:	52.14 ft				
Deg of Curvature:	1017'32" Arc	Definition			
Tangent:	681.95 ft				
Curve PI:					
0		92+05.69	-7380.75	2557.96	
190036'50"	250.99 ft		-6710.46	2683.57	0.00
0		94+56.68	-6463.76	2729.80	0.00
186002'23"	250.80 ft				
0		97+07.48	-6214.35	2756.19	0.00
190036'50"	399.98 ft				
0		101+07.46	-5821.22	2829.86	0.00
196019'30"	100.50 ft				
0		102+07.96	-5724.77	2858.11	0.00
190036'50"	299.76 ft				
0		105+07.72	-5430.14	2913.32	0.00
280036'50"	20.00 ft				
0		105+27.72	-5433.82	2932.98	0.00
190036'50"	140.32 ft				
0		106+68.04	-5295.90	2958.83	0.00
194020'48"	389.76 ft				
0		110+57.81	-4918.30	3055.40	0.00
86051'32"	168.98 ft				
0		112+26.78	-4927.56	2886.68	0.00
103000'00"	119.30 ft				
0		113+46.08	-4900.72	2770.43	0.00
112022'00"	495.00 ft				
0		118+41.08	-4712.36	2312.68	0.00
99028'00"	235.90 ft				
0		120+76.98	-4673.56	2079.99	0.00
112009'00"	226.20 ft				
0		123+03.18	-4588.27	1870.48	0.00
122040'00"	261.10 ft				
0		125+64.28	-4447.34	1650.68	0.00
224027'00"	119.00 ft				
0		126+83.28	-4362.39	1734.01	0.00
179020'00"	282.20 ft				
0		129+65.48	-4080.21	1730.73	0.00
245024'00"	270.90 ft				
0		132+36.38	-3967.44	1977.04	0.00
200009'00"	208.60 ft				
0		134+44.98	-3771.61	2048.90	0.00
165002'00"	234.80 ft				
0		136+79.78	-3544.78	1988.26	0.00
87038'00"	439.20 ft				
0		141+18.98	-3562.91	1549.44	0.00
75047'00"	548.80 ft				
0		146+67.78	-3697.69	1017.45	0.00
85051'00"	386.45 ft				
0		150+54.23	-3725.66	632.01	0.00
51039'00"	351.91 ft				
0		154+06.14	-3944.01	356.03	0.00
23045'00"	175.00 ft				
0		155+81.14	-4104.19	285.55	0.00
63030'00"	150.00 ft				
0		157+31.14	-4171.11	151.31	0.00
77045'00"	156.00 ft				
0		158+87.14	-4204.21	-1.14	0.00
149054'00"	158.53 ft				
0		160+45.67	-4067.06	-80.65	0.00
97047'00"	190.64 ft				
0		162+36.31	-4041.24	-269.53	0.00
7047'00"	215.35 ft				

OUTER BOUNDARY AREA MAUKA H - 1.txt					
0		164+51.66	-4254.61	-298.69	0.00
0	92°45'00"	434.93 ft			
0	77°50'00"	460.00 ft	168+86.59	-4233.74	-733.12
0	41°30'00"	598.00 ft	173+46.59	-4330.69	-1182.79
0	31°30'00"	300.00 ft	179+44.59	-4778.57	-1579.04
0	351°55'00"	350.00 ft	182+44.59	-5034.36	-1735.79
0	359°45'00"	465.00 ft	185+94.59	-5380.88	-1686.57
0	50°45'00"	219.99 ft	190+59.59	-5845.88	-1684.54
0	92°29'41"	0.01 ft	192+79.58	-5985.07	-1854.90
0	347°09'10"	362.83 ft	192+79.59	-5985.07	-1854.91
0	313°00'00"	430.00 ft	196+42.42	-6338.81	-1774.24
0	290°00'00"	620.00 ft	200+72.42	-6632.07	-1459.75
0	270°04'00"	222.00 ft	206+92.42	-6844.12	-877.14
0	330°56'00"	140.00 ft	209+14.42	-6844.38	-655.14
0	60°56'00"	1080.00 ft	210+54.42	-6966.75	-587.13
0	5°35'00"	311.00 ft	221+34.42	-7491.44	-1531.11
0	347°12'00"	966.00 ft	224+45.42	-7800.97	-1561.37
0	335°07'00"	550.00 ft	234+11.42	-8742.96	-1347.35
0	292°04'00"	426.00 ft	239+61.42	-9241.90	-1115.93
0	280°30'00"	568.00 ft	243+87.42	-9401.95	-721.13
0			249+55.42	-9505.46	-162.64

Closing latitude	= -0.00098
Closing departure	= -0.00708
Closing bearing	= 262°04'59"
Closing distance	= 0.00715
Total traverse length	= 24946.15 (24955.42)
Total error of closure	= 1/3488664
Error of closure in latitude	= 1/25328348
Error of closure in departure	= 1/3522235

Area	= 21213012 Sq. Ft.
Area	= 486.984 Acres

OUTER BOUNDARY AREA MAKAI H - 1.txt

METES AND BOUNDS REPORT

Boundary Name: OUTER BOUNDARY AREA MAKAI H - 1

Coordinate values shown are computed based on the rounded bearing and distance, or chord bearing and chord lengths as indicated herein.

Point Number	Description	Sta	Northing	Easting	Elevation
Bearing	Distance				
0	221ø50'00"	8+26.86	-10163.36	2273.31	0.00
0	212.45 ft	10+39.31	-10005.07	2415.01	0.00
0	266ø50'00"	10+39.34	-10005.07	2415.04	0.00
0	0.03 ft	14+08.27	-9730.18	2661.10	0.00
0	221ø50'00"	14+08.28	-9730.18	2661.11	0.00
0	368.93 ft	14+08.28	-9730.18	2661.11	0.00
0	225ø16'07"	0	-9073.22	1927.19	
0	0.01 ft	985.00 ft			
0	90ø00'00"	16ø29'58" Left			
	Center Point:	283.65 ft			
	Radius:	213ø34'59"			
	Delta:	282.67 ft			
	Arc Length:	10.19 ft			
	Chord Bearing:	10.30 ft			
	Chord Length:	5ø49'01" Arc Definition			
	Middle Ordinate:	142.81 ft			
	External:				
	Deg of Curvature:				
	Tangent:				
	Curve PI:				
0	270ø00'00"	16+91.93	-9623.77	2756.36	0.00
0	0.00 ft	16+91.93	-9494.69	2817.47	0.00
0	214ø08'02"	16+91.93	-9494.69	2817.47	0.00
0	0.01 ft	16+91.93	-9494.68	2817.47	0.00
0	205ø20'00"	20+60.86	-9161.23	2975.33	0.00
0	368.93 ft	20+60.89	-9161.20	2975.32	0.00
0	160ø20'00"	29+44.74	-8362.35	3353.51	0.00
0	0.03 ft	0	-7311.90	1134.61	
0	205ø20'00"	2454.98 ft			
	Center Point:	4ø45'00" Left			
	Radius:	203.53 ft			
	Delta:	202ø57'30"			
	Arc Length:	203.47 ft			
	Chord Bearing:	2.11 ft			
	Chord Length:	2.11 ft			
	Middle Ordinate:	2ø20'02" Arc Definition			
	External:	101.82 ft			
	Deg of Curvature:				
	Tangent:				
	Curve PI:				
0	200ø35'00"	31+48.27	-8270.32	3397.07	0.00
0	468.05 ft	36+16.32	-8174.99	3432.87	0.00
0	73ø15'00"	37+41.27	-7736.82	3597.42	0.00
0	124.96 ft	38+41.28	-7772.84	3477.77	0.00
0	49ø30'00"		-7837.79	3401.72	0.00
0	100.01 ft				

OUTER BOUNDARY AREA MAKAI H - 1.txt

119°45'00"	160.02 ft	40+01.30	-7758.38	3262.79	0.00
0 143°45'00"	160.00 ft	41+61.30	-7629.35	3168.18	0.00
0 111°00'00"	139.98 ft	43+01.28	-7579.19	3037.50	0.00
0 46°46'30"	123.34 ft	44+24.62	-7663.66	2947.62	0.00
0 132°15'00"	210.70 ft	46+35.32	-7521.99	2791.66	0.00
0 20°19'09"	47.39 ft	46+82.71	-7566.43	2775.20	0.00
0 65°00'24"	71.85 ft	47+54.56	-7596.79	2710.08	0.00
0 90°00'00"	0.00 ft	47+54.56	-7596.79	2710.08	0.00
Center Point:		0	-5893.78	-1674.48	
Radius:		4703.68 ft			
Delta:		6°52'29" Right			
Arc Length:		564.39 ft			
Chord Bearing:		24°39'51"			
Chord Length:		564.05 ft			
Middle Ordinate:		8.46 ft			
External:		8.48 ft			
Deg of Curvature:		1°13'05" Arc Definition			
Tangent:		282.53 ft			
Curve PI:			-7860.16	2607.78	
0 90°00'00"	0.00 ft	53+18.95	-8109.38	2474.70	0.00
0 7°30'52"	110.54 ft	53+18.95	-8109.38	2474.70	0.00
0 90°00'00"	0.00 ft	54+29.50	-8218.97	2460.25	0.00
0 90°00'00"	0.00 ft	54+29.50	-8218.97	2460.25	0.00
Center Point:		0	-5893.77	-1674.47	
Radius:		4743.68 ft			
Delta:		3°07'30" Right			
Arc Length:		258.73 ft			
Chord Bearing:		30°54'51"			
Chord Length:		258.70 ft			
Middle Ordinate:		1.76 ft			
External:		1.76 ft			
Deg of Curvature:		1°12'28" Arc Definition			
Tangent:		129.40 ft			
Curve PI:			-8331.77	2396.82	
0 90°00'00"	0.00 ft	56+88.23	-8440.92	2327.34	0.00
0 47°22'20"	159.15 ft	56+88.23	-8440.92	2327.34	0.00
0 23°57'00"	400.06 ft	58+47.37	-8548.70	2210.24	0.00
0 90°00'00"	0.00 ft	62+47.44	-8914.32	2047.84	0.00
0 90°00'00"	0.00 ft	62+47.44	-8914.32	2047.84	0.00
Center Point:		0	-5893.76	-1674.47	
Radius:		4793.68 ft			
Delta:		5°55'04" Right			
Arc Length:		495.11 ft			
Chord Bearing:		42°01'02"			
Chord Length:		494.89 ft			
Middle Ordinate:		6.39 ft			
External:		6.40 ft			
Deg of Curvature:		1°11'43" Arc Definition			

OUTER BOUNDARY AREA MAKAI H - 1.txt

Tangent:		247.78 ft			
Curve PI:					
0			67+42.55	-9106.73	1891.71
	90°00'00"	0.00 ft		-9281.99	1716.59
0			67+42.55	-9281.99	1716.59
	58°45'20"	258.49 ft			0.00
0			70+01.04	-9416.07	1495.59
	304°27'50"	214.74 ft			0.00
0			72+15.78	-9537.59	1672.64
	7°14'00"	69.55 ft			0.00
0			72+85.33	-9606.58	1663.88
	94°11'53"	0.03 ft			0.00
0			72+85.36	-9606.58	1663.85
	346°18'00"	61.63 ft			0.00
0			73+46.99	-9666.46	1678.45
	17°00'00"	185.00 ft			0.00
0			75+31.99	-9843.37	1624.36
	26°00'00"	165.00 ft			0.00
0			76+96.99	-9991.67	1552.03
	296°00'00"	20.00 ft			0.00
0			77+16.99	-10000.44	1570.00
	206°00'00"	166.57 ft			0.00
0			78+83.56	-9850.73	1643.02
	197°00'00"	162.34 ft			0.00
0			80+45.90	-9695.48	1690.48
	268°57'00"	44.21 ft			0.00
0			80+90.11	-9694.67	1734.69
	313°56'00"	270.70 ft			0.00
0			83+60.81	-9882.49	1929.63
	316°19'00"	113.62 ft			0.00
0			84+74.43	-9964.66	2008.10
	313°11'00"	63.16 ft			0.00
0			85+37.59	-10007.88	2054.16
	306°10'00"	152.78 ft			0.00
0			86+90.37	-10098.04	2177.50
	313°53'00"	76.65 ft			0.00
0			87+67.02	-10151.17	2232.74
	43°53'00"	3.50 ft			0.00
0			87+70.52	-10153.70	2230.32
	313°53'00"	25.12 ft			0.00
0			87+95.64	-10171.11	2248.42
	317°01'00"	13.45 ft			0.00
0			88+09.09	-10180.95	2257.59
	221°47'44"	23.60 ft			0.00
0			88+32.69	-10163.35	2273.32

Closing latitude = 0.00943
 Closing departure = 0.01077
 Closing bearing = 48°47'22"
 Closing distance = 0.01432
 Total traverse length = 8004.21 (8005.82)
 Total error of closure = 1/559016
 Error of closure in latitude = 1/848501
 Error of closure in departure = 1/743083

Area = 2373528 Sq. Ft.
 Area = 54.489 Acres

BUFFER AREA MAUKA H - 1.txt

METES AND BOUNDS REPORT

Boundary Name: BUFFER AREA MAUKA OF H - 1

Coordinate values shown are computed based on the rounded bearing and distance, or chord bearing and chord lengths as indicated herein.

Point Number	Bearing	Description Distance	Sta	Northing	Easting	Elevation
0			0+00.00	-6060.70	2115.10	
0	40°43'16"	108.99 ft				
0	352°08'41"	103.17 ft	1+08.99	-6143.30	2044.00	
0	334°57'45"	219.75 ft	2+12.15	-6245.50	2058.10	
0	317°47'53"	128.92 ft	4+31.90	-6444.61	2151.10	
0	343°29'41"	198.17 ft	5+60.82	-6540.11	2237.70	
0	359°01'44"	206.53 ft	7+58.99	-6730.11	2294.00	
0	295°35'31"	176.41 ft	9+65.52	-6936.61	2297.50	
0	1°21'03"	220.56 ft	11+41.92	-7012.81	2456.60	
0	21°00'35"	359.62 ft	13+62.48	-7233.31	2451.40	
0	83°07'11"	89.73 ft	17+22.11	-7569.02	2322.47	
0	19°53'54"	688.65 ft	18+11.84	-7579.77	2233.39	
0	47°06'15"	259.25 ft	25+00.49	-8227.31	1999.00	
0	54°34'08"	396.94 ft	27+59.74	-8403.77	1809.08	
0	62°24'40"	112.00 ft	31+56.68	-8633.89	1485.65	
0	104°37'16"	71.90 ft	32+68.68	-8685.76	1386.38	
0	67°12'51"	242.90 ft	33+40.58	-8667.61	1316.81	
0	116°49'06"	120.52 ft	35+83.49	-8761.68	1092.87	
0	122°09'30"	226.51 ft	37+04.00	-8707.31	985.31	
0	143°38'40"	275.20 ft	39+30.52	-8586.74	793.55	
0	162°08'30"	351.85 ft	42+05.72	-8365.11	630.41	
0	55°56'09"	288.87 ft	45+57.57	-8030.21	522.51	
0	131°17'38"	334.74 ft	48+46.44	-8192.02	283.21	
0	199°16'53"	58.95 ft	51+81.18	-7971.11	31.71	
0	194°50'28"	170.28 ft	52+40.12	-7915.47	51.18	
0	193°58'58"	294.54 ft	54+10.41	-7750.87	94.79	
0			57+04.95	-7465.06	165.96	

BUFFER AREA MAUKA H - 1.txt

0 149036'12"	260.52 ft	59+65.47	-7240.35	34.14
0 166053'01"	78.74 ft	60+44.21	-7163.66	16.27
0 157039'31"	70.91 ft	61+15.11	-7098.08	-10.68
0 155011'14"	55.68 ft	61+70.80	-7047.54	-34.05
0 140022'45"	98.71 ft	62+69.50	-6971.50	-97.00
0 163012'44"	164.52 ft	64+34.02	-6813.99	-144.51
0 144027'30"	172.08 ft	66+06.10	-6673.97	-244.54
0 162031'23"	76.19 ft	66+82.28	-6601.30	-267.42
0 178031'10"	167.48 ft	68+49.77	-6433.88	-271.75
0 217011'45"	268.72 ft	71+18.49	-6219.82	-109.30
0 176018'55"	228.26 ft	73+46.75	-5992.03	-123.97
0 136020'45"	168.28 ft	75+15.03	-5870.28	-240.13
0 88013'54"	265.60 ft	77+80.63	-5878.47	-505.61
0 129055'40"	114.57 ft	78+95.20	-5804.94	-593.47
0 171029'56"	257.61 ft	81+52.81	-5550.16	-631.55
0 179055'35"	156.37 ft	83+09.18	-5393.79	-631.75
0 251039'39"	176.99 ft	84+86.16	-5338.10	-463.75
0 270000'00"	34.05 ft	85+20.21	-5338.10	-429.70
0 290008'02"	140.92 ft	86+61.13	-5386.61	-297.39
0 214015'35"	66.60 ft	87+27.73	-5331.57	-259.90
0 265020'00"	52.06 ft	87+79.79	-5327.33	-208.01
0 284051'48"	55.34 ft	88+35.13	-5341.53	-154.52
0 258041'49"	150.25 ft	89+85.38	-5312.08	-7.19
0 253047'33"	143.91 ft	91+29.29	-5271.91	131.01
0 200039'16"	151.11 ft	92+80.40	-5130.51	184.31
0 188047'46"	86.32 ft	93+66.72	-5045.21	197.51
0 154014'09"	197.46 ft	95+64.18	-4867.38	111.68
0 148010'35"	42.80 ft	96+06.98	-4831.01	89.11
0 195035'28"	103.63 ft	97+10.62	-4731.19	116.96
0 190025'38"	144.47 ft	98+55.08	-4589.11	143.11
0 264037'42"	1514.23 ft	113+69.32	-4447.35	1650.69
0 224027'00"	119.00 ft			

BUFFER AREA MAUKA H - 1.txt				
0		114+88.32	-4362.40	1734.02
0	179°20'00"	282.20 ft		
0		117+70.52	-4080.22	1730.74
0	245°24'00"	270.90 ft		
0		120+41.42	-3967.45	1977.05
0	200°09'00"	208.60 ft		
0		122+50.02	-3771.62	2048.91
0	165°02'00"	234.80 ft		
0		124+84.82	-3544.78	1988.27
0	87°38'00"	439.20 ft		
0		129+24.02	-3562.92	1549.45
0	75°47'00"	548.80 ft		
0		134+72.82	-3697.70	1017.45
0	85°51'00"	386.45 ft		
0		138+59.27	-3725.67	632.02
0	51°39'00"	351.91 ft		
0		142+11.18	-3944.01	356.04
0	23°45'00"	175.00 ft		
0		143+86.18	-4104.19	285.56
0	63°30'00"	150.00 ft		
0		145+36.18	-4171.12	151.31
0	77°45'00"	156.00 ft		
0		146+92.18	-4204.22	-1.13
0	149°54'00"	158.53 ft		
0		148+50.71	-4067.07	-80.64
0	97°47'00"	190.64 ft		
0		150+41.35	-4041.25	-269.52
0	7°47'00"	215.35 ft		
0		152+56.70	-4254.62	-298.69
0	92°45'00"	434.93 ft		
0		156+91.63	-4233.75	-733.11
0	77°50'00"	460.00 ft		
0		161+51.63	-4330.70	-1182.78
0	41°30'00"	598.00 ft		
0		167+49.63	-4778.58	-1579.03
0	31°30'00"	300.00 ft		
0		170+49.63	-5034.37	-1735.78
0	351°55'00"	350.00 ft		
0		173+99.63	-5380.89	-1686.56
0	359°45'00"	465.00 ft		
0		178+64.63	-5845.89	-1684.54
0	50°45'00"	219.99 ft		
0		180+84.62	-5985.07	-1854.89
0	92°29'41"	0.01 ft		
0		180+84.62	-5985.07	-1854.90
0	347°09'10"	362.83 ft		
0		184+47.45	-6338.82	-1774.23
0	313°00'00"	430.00 ft		
0		188+77.45	-6632.08	-1459.75
0	290°00'00"	620.00 ft		
0		194+97.45	-6844.13	-877.14
0	270°04'00"	222.00 ft		
0		197+19.45	-6844.39	-655.14
0	330°56'00"	140.00 ft		
0		198+59.45	-6966.76	-587.12
0	60°56'00"	1080.00 ft		
0		209+39.45	-7491.45	-1531.10
0	5°35'00"	311.00 ft		
0		212+50.45	-7800.98	-1561.36
0	347°12'00"	966.00 ft		
0		222+16.45	-8742.97	-1347.34
0	335°07'00"	550.00 ft		
0		227+66.45	-9241.91	-1115.92

BUFFER AREA MAUKA H - 1.txt

0	292°04'00"	426.00 ft	231+92.45	-9401.95	-721.12
0	280°30'00"	568.00 ft	237+60.45	-9505.46	-162.63
0	10°30'00"	313.39 ft	240+73.84	-9813.61	-219.75
0	315°21'00"	541.77 ft	246+15.61	-10199.03	161.00
0	31°19'10"	211.23 ft	248+26.84	-10379.48	51.20
0	45°21'20"	1393.75 ft	262+20.59	-11358.87	-940.43
0	49°10'10"	340.25 ft	265+60.84	-11581.34	-1197.88
0	319°08'36"	42.98 ft	266+03.82	-11613.85	-1169.76
0	224°41'49"	40.72 ft	266+44.55	-11584.90	-1141.12
0	229°10'10"	300.67 ft	269+45.22	-11388.32	-913.62
0	225°21'20"	1400.04 ft	283+45.26	-10404.50	82.48
0	211°19'10"	206.13 ft	285+51.39	-10228.41	189.63
0	232°28'50"	403.08 ft	289+54.47	-9982.92	509.33
0	225°21'20"	1319.71 ft	302+74.17	-9055.55	1448.28
	Center Point:		0	-5893.79	-1674.48
	Radius:	4443.91 ft			
	Delta:	16°00'14" Left			
	Arc Length:	1241.27 ft			
	Chord Bearing:	217°21'13"			
	Chord Length:	1237.24 ft			
	Middle Ordinate:	43.27 ft			
	External:	43.69 ft			
	Deg of Curvature:	1°17'22" Arc Definition			
	Tangent:	624.70 ft			
	Curve PI:			-8616.56	1892.74
0			315+15.45	-8072.06	2198.95
0	209°21'06"	0.25 ft	315+15.70	-8071.84	2199.08
0	119°21'06"	0.03 ft	315+15.73	-8071.83	2199.05
0	202°49'53"	97.12 ft	316+12.84	-7982.32	2236.73
0	90°00'00"	0.00 ft	316+12.84	-7982.32	2236.73
	Center Point:		0	-5893.80	-1674.49
	Radius:	4433.91 ft			
	Delta:	17°29'15" Left			
	Arc Length:	1353.30 ft			
	Chord Bearing:	199°21'28"			
	Chord Length:	1348.06 ft			
	Middle Ordinate:	51.53 ft			
	External:	52.14 ft			
	Deg of Curvature:	1°17'32" Arc Definition			
	Tangent:	681.95 ft			
	Curve PI:			-7380.75	2557.96
0			329+66.15	-6710.47	2683.57
0	190°36'50"	250.99 ft	332+17.14	-6463.77	2729.80
0	186°02'23"	250.80 ft			

BUFFER AREA MAUKA H - 1.txt					
0			334+67.94	-6214.36	2756.19
0	190°36'50"	399.98 ft			
0			338+67.91	-5821.23	2829.86
0	196°19'30"	100.50 ft			
0			339+68.41	-5724.78	2858.11
0	190°36'50"	299.76 ft			
0			342+68.18	-5430.15	2913.32
0	280°36'50"	20.00 ft			
0			342+88.18	-5433.83	2932.98
0	190°36'50"	140.32 ft			
0			344+28.50	-5295.91	2958.83
0	194°20'48"	389.76 ft			
0			348+18.26	-4918.31	3055.40
0	86°51'32"	168.98 ft			
0			349+87.24	-4927.57	2886.68
0	103°00'00"	119.30 ft			
0			351+06.54	-4900.73	2770.44
0	112°22'00"	495.00 ft			
0			356+01.54	-4712.37	2312.68
0	99°28'00"	235.90 ft			
0			358+37.44	-4673.57	2079.99
0	112°09'00"	226.20 ft			
0			360+63.64	-4588.28	1870.48
0	122°40'00"	261.10 ft			
0			363+24.74	-4447.35	1650.68
0	302°40'00"	113.98 ft			
0			364+38.72	-4508.87	1746.63
0	3°20'10"	98.42 ft			
0			365+37.14	-4607.13	1740.90
0	332°56'15"	451.12 ft			
0			369+88.26	-5008.86	1946.15
0	305°23'53"	422.97 ft			
0			374+11.24	-5253.86	2290.93
0	3°35'29"	683.08 ft			
0			380+94.31	-5935.60	2248.14
0	46°45'45"	182.63 ft			
0			382+76.95	-6060.71	2115.09

Closing latitude	= -0.00650
Closing departure	= -0.00774
Closing bearing	= 229°57'42"
Closing distance	= 0.01010
Total traverse length	= 38267.68 (38276.95)
Total error of closure	= 1/3787416
Error of closure in latitude	= 1/5887475
Error of closure in departure	= 1/4946902

Area	= 12407677 Sq. Ft.
Area	= 284.841 Acres

BUFFER AREA MAKAI H - 1.txt

METES AND BOUNDS REPORT

Boundary Name: BUFFER AREA MAKAI H - 1

Coordinate values shown are computed based on the rounded bearing and distance, or chord bearing and chord lengths as indicated herein.

Point	Number	Description	Sta	Northing	Easting	Elevation
	Bearing	Distance				
	0		8+26.86	-10163.36	2273.31	0.00
	221ø50'00"	212.45 ft				
	0		10+39.31	-10005.07	2415.01	0.00
	266ø50'00"	0.03 ft				
	0		10+39.34	-10005.07	2415.04	0.00
	221ø50'00"	368.93 ft				
	0		14+08.27	-9730.18	2661.10	0.00
	225ø16'07"	0.01 ft				
	0		14+08.28	-9730.18	2661.11	0.00
	90ø00'00"	0.00 ft				
	0		14+08.28	-9730.18	2661.11	0.00
	Center Point:		0	-9073.22	1927.19	
	Radius:		985.00 ft			
	Delta:		16ø29'58"	Left		
	Arc Length:		283.65 ft			
	Chord Bearing:		213ø34'59"			
	Chord Length:		282.67 ft			
	Middle Ordinate:		10.19 ft			
	External:		10.30 ft			
	Deg of Curvature:		5ø49'01"	Arc Definition		
	Tangent:		142.81 ft			
	Curve PI:					
	0		16+91.93	-9623.77	2756.36	
	270ø00'00"	0.00 ft		-9494.69	2817.47	0.00
	0		16+91.93	-9494.69	2817.47	0.00
	214ø08'02"	0.01 ft				
	0		16+91.93	-9494.68	2817.47	0.00
	205ø20'00"	368.93 ft				
	0		20+60.86	-9161.23	2975.33	0.00
	160ø20'00"	0.03 ft				
	0		20+60.89	-9161.20	2975.32	0.00
	205ø20'00"	883.85 ft				
	0		29+44.74	-8362.35	3353.51	0.00
	Center Point:		0	-7311.90	1134.61	
	Radius:		2454.98 ft			
	Delta:		4ø45'00"	Left		
	Arc Length:		203.53 ft			
	Chord Bearing:		202ø57'30"			
	Chord Length:		203.47 ft			
	Middle Ordinate:		2.11 ft			
	External:		2.11 ft			
	Deg of Curvature:		2ø20'02"	Arc Definition		
	Tangent:		101.82 ft			
	Curve PI:					
	0		31+48.27	-8270.32	3397.07	
	200ø35'00"	468.05 ft		-8174.99	3432.87	0.00
	0		36+16.32	-7736.82	3597.42	0.00
	73ø15'00"	124.96 ft				
	0		37+41.27	-7772.84	3477.77	0.00
	49ø30'00"	100.01 ft				
	0		38+41.28	-7837.79	3401.72	0.00

BUFFER AREA MAKAI H - 1.txt

119°45'00"	160.02 ft				
0		40+01.30	-7758.38	3262.79	0.00
143°45'00"	160.00 ft				
0		41+61.30	-7629.35	3168.18	0.00
111°00'00"	139.98 ft				
0		43+01.28	-7579.19	3037.50	0.00
46°46'30"	123.34 ft				
0		44+24.62	-7663.66	2947.62	0.00
132°15'00"	210.70 ft				
0		46+35.32	-7521.99	2791.66	0.00
20°19'09"	47.39 ft				
0		46+82.71	-7566.43	2775.20	0.00
65°00'24"	71.85 ft				
0		47+54.56	-7596.79	2710.08	0.00
90°00'00"	0.00 ft				
0		47+54.56	-7596.79	2710.08	0.00
Center Point:		0	-5893.78	-1674.48	
Radius:		4703.68 ft			
Delta:		6°52'29" Right			
Arc Length:		564.39 ft			
Chord Bearing:		24°39'51"			
Chord Length:		564.05 ft			
Middle Ordinate:		8.46 ft			
External:		8.48 ft			
Deg of Curvature:		1°13'05" Arc Definition			
Tangent:		282.53 ft			
Curve PI:			-7860.16	2607.78	
0		53+18.95	-8109.38	2474.70	0.00
90°00'00"	0.00 ft				
0		53+18.95	-8109.38	2474.70	0.00
7°30'52"	110.54 ft				
0		54+29.50	-8218.97	2460.25	0.00
90°00'00"	0.00 ft				
0		54+29.50	-8218.97	2460.25	0.00
Center Point:		0	-5893.77	-1674.47	
Radius:		4743.68 ft			
Delta:		3°07'30" Right			
Arc Length:		258.73 ft			
Chord Bearing:		30°54'51"			
Chord Length:		258.70 ft			
Middle Ordinate:		1.76 ft			
External:		1.76 ft			
Deg of Curvature:		1°12'28" Arc Definition			
Tangent:		129.40 ft			
Curve PI:			-8331.77	2396.82	
0		56+88.23	-8440.92	2327.34	0.00
90°00'00"	0.00 ft				
0		56+88.23	-8440.92	2327.34	0.00
47°22'20"	159.15 ft				
0		58+47.37	-8548.70	2210.24	0.00
23°57'00"	400.06 ft				
0		62+47.44	-8914.32	2047.84	0.00
90°00'00"	0.00 ft				
0		62+47.44	-8914.32	2047.84	0.00
Center Point:		0	-5893.76	-1674.47	
Radius:		4793.68 ft			
Delta:		5°55'04" Right			
Arc Length:		495.11 ft			
Chord Bearing:		42°01'02"			
Chord Length:		494.89 ft			
Middle Ordinate:		6.39 ft			
External:		6.40 ft			
Deg of Curvature:		1°11'43" Arc Definition			

BUFFER AREA MAKAI H - 1.txt

Tangent:		247.78 ft			
Curve PI:			-9106.73	1891.71	
0		67+42.55	-9281.99	1716.59	0.00
0	90°00'00"	0.00 ft			
0	58°45'20"	258.49 ft	67+42.55	-9281.99	1716.59
0					0.00
0	304°27'50"	214.74 ft	70+01.04	-9416.07	1495.59
0					0.00
0	7°14'00"	69.55 ft	72+15.78	-9537.59	1672.64
0					0.00
0	94°11'53"	0.03 ft	72+85.33	-9606.58	1663.88
0					0.00
0	346°18'00"	61.63 ft	72+85.36	-9606.58	1663.85
0					0.00
0	17°00'00"	185.00 ft	73+46.99	-9666.46	1678.45
0					0.00
0	26°00'00"	165.00 ft	75+31.99	-9843.37	1624.36
0					0.00
0	296°00'00"	20.00 ft	76+96.99	-9991.67	1552.03
0					0.00
0	206°00'00"	166.57 ft	77+16.99	-10000.44	1570.00
0					0.00
0	197°00'00"	162.34 ft	78+83.56	-9850.73	1643.02
0					0.00
0	268°57'00"	44.21 ft	80+45.90	-9695.48	1690.48
0					0.00
0	313°56'00"	270.70 ft	80+90.11	-9694.67	1734.69
0					0.00
0	316°19'00"	113.62 ft	83+60.81	-9882.49	1929.63
0					0.00
0	313°11'00"	63.16 ft	84+74.43	-9964.66	2008.10
0					0.00
0	306°10'00"	152.78 ft	85+37.59	-10007.88	2054.16
0					0.00
0	313°53'00"	76.65 ft	86+90.37	-10098.04	2177.50
0					0.00
0	43°53'00"	3.50 ft	87+67.02	-10151.17	2232.74
0					0.00
0	313°53'00"	25.12 ft	87+70.52	-10153.70	2230.32
0					0.00
0	317°01'00"	13.45 ft	87+95.64	-10171.11	2248.42
0					0.00
0	221°47'44"	23.60 ft	88+09.09	-10180.95	2257.59
0					0.00
0			88+32.69	-10163.35	2273.32
					0.00

Closing latitude = 0.00943
 Closing departure = 0.01077
 Closing bearing = 48°47'22"
 Closing distance = 0.01432
 Total traverse length = 8004.21 (8005.82)
 Total error of closure = 1/559016
 Error of closure in latitude = 1/848501
 Error of closure in departure = 1/743083

Area = 2373528 Sq. Ft.
 Area = 54.489 Acres

BERMING LANDSCAPING AND GRADING AREA.TXT

METES AND BOUNDS REPORT

Boundary Name: BERMING, LANDSCAPING AND GRADING AREA

Coordinate values shown are computed based on the rounded bearing and distance, or chord bearing and chord lengths as indicated herein.

Point Number	Bearing	Description Distance	Sta	Northing	Easting	Elevation
0			0+00.00	-6060.70	2115.10	
0	226°45'45"	182.63 ft				
0	183°35'29"	683.08 ft	1+82.63	-5935.59	2248.15	
0	125°23'53"	422.97 ft	8+65.71	-5253.86	2290.94	
0	152°56'15"	451.12 ft	12+88.68	-5008.85	1946.16	
0	183°20'10"	98.42 ft	17+39.81	-4607.12	1740.91	
0	122°40'00"	113.98 ft	18+38.22	-4508.87	1746.64	
0	84°37'42"	1514.23 ft	19+52.21	-4447.35	1650.69	
0	10°25'38"	144.47 ft	34+66.44	-4589.10	143.11	
0	15°35'28"	103.63 ft	36+10.91	-4731.19	116.96	
0	328°10'35"	42.80 ft	37+14.54	-4831.00	89.11	
0	334°14'09"	197.46 ft	37+57.35	-4867.37	111.68	
0	8°47'46"	86.32 ft	39+54.81	-5045.20	197.51	
0	20°39'16"	151.11 ft	40+41.13	-5130.51	184.31	
0	73°47'33"	143.91 ft	41+92.23	-5271.90	131.01	
0	78°41'49"	150.25 ft	43+36.15	-5312.07	-7.18	
0	104°51'48"	55.34 ft	44+86.40	-5341.52	-154.52	
0	85°20'00"	52.06 ft	45+41.74	-5327.32	-208.01	
0	34°15'35"	66.60 ft	45+93.80	-5331.56	-259.90	
0	110°08'02"	140.92 ft	46+60.40	-5386.60	-297.39	
0	90°00'00"	34.05 ft	48+01.32	-5338.10	-429.70	
0	71°39'39"	176.99 ft	48+35.36	-5338.10	-463.75	
0	359°55'35"	156.37 ft	50+12.35	-5393.79	-631.75	
0	351°29'56"	257.61 ft	51+68.72	-5550.16	-631.55	
0	309°55'40"	114.57 ft	54+26.33	-5804.94	-593.46	
0	268°13'54"	265.60 ft	55+40.90	-5878.47	-505.61	
0			58+06.50	-5870.27	-240.13	

BERMING LANDSCAPING AND GRADING AREA.TXT

0 316020'45"	168.28 ft	59+74.78	-5992.03	-123.97
0 356018'55"	228.26 ft	62+03.04	-6219.82	-109.30
0 37011'45"	268.72 ft	64+71.76	-6433.87	-271.75
0 358031'10"	167.48 ft	66+39.24	-6601.29	-267.42
0 342031'23"	76.19 ft	67+15.43	-6673.97	-244.54
0 324027'30"	172.08 ft	68+87.51	-6813.99	-144.51
0 343012'44"	164.52 ft	70+52.02	-6971.50	-97.00
0 320022'45"	98.71 ft	71+50.73	-7047.53	-34.05
0 335011'14"	55.68 ft	72+06.41	-7098.07	-10.68
0 337039'31"	70.91 ft	72+77.32	-7163.66	16.27
0 346053'01"	78.74 ft	73+56.06	-7240.34	34.14
0 329036'12"	260.52 ft	76+16.58	-7465.05	165.96
0 213025'47"	404.48 ft	80+21.06	-7127.49	388.79
0 135029'16"	103.65 ft	81+24.71	-7053.58	316.13
0 174054'36"	8.68 ft	81+33.38	-7044.93	315.36
0 162021'20"	11.97 ft	81+45.35	-7033.52	311.73
0 162019'30"	16.49 ft	81+61.85	-7017.81	306.72
0 149028'05"	9.87 ft	81+71.72	-7009.31	301.71
0 133029'27"	11.05 ft	81+82.76	-7001.71	293.69
0 126037'04"	33.55 ft	82+16.32	-6981.69	266.77
0 115050'03"	60.13 ft	82+76.45	-6955.49	212.65
0 142057'08"	5.48 ft	82+81.93	-6951.12	209.34
0 157024'41"	129.42 ft	84+11.34	-6831.63	159.63
0 142030'06"	75.06 ft	84+86.40	-6772.08	113.94
0 163033'13"	43.02 ft	85+29.42	-6730.82	101.76
0 195018'03"	103.15 ft	86+32.58	-6631.32	128.98
0 164024'33"	110.54 ft	87+43.12	-6524.85	99.27
0 214037'26"	140.21 ft	88+83.33	-6409.47	178.94
0 195002'03"	52.17 ft	89+35.50	-6359.09	192.47
0 207030'16"	115.51 ft	90+51.01	-6256.63	245.81
0 234031'56"	51.21 ft	91+02.22	-6226.92	287.52
0 203001'06"	76.27 ft			

BERMING LANDSCAPING AND GRADING AREA.TXT					
0			91+78.49	-6156.72	317.34
0	175ø28'44"	25.53 ft			
0			92+04.02	-6131.27	315.33
0	158ø32'39"	124.93 ft			
0			93+28.94	-6015.00	269.63
0	152ø22'57"	120.46 ft			
0			94+49.41	-5908.26	213.79
0	119ø29'16"	153.17 ft			
0			96+02.57	-5832.87	80.46
0	198ø12'51"	51.27 ft			
0			96+53.84	-5784.16	96.49
0	271ø30'09"	46.97 ft			
0			97+00.81	-5785.40	143.44
0	251ø26'11"	60.82 ft			
0			97+61.63	-5766.03	201.10
0	259ø37'57"	98.95 ft			
0			98+60.58	-5748.23	298.43
0	239ø07'30"	83.92 ft			
0			99+44.50	-5705.16	370.46
0	175ø24'16"	53.65 ft			
0			99+98.15	-5651.68	366.16
0	241ø34'26"	34.87 ft			
0			100+33.02	-5635.09	396.83
0	181ø15'54"	89.21 ft			
0			101+22.24	-5545.90	398.80
0	190ø08'16"	94.97 ft			
0			102+17.21	-5452.41	415.51
0	237ø03'49"	42.63 ft			
0			102+59.83	-5429.23	451.29
0	261ø06'24"	64.99 ft			
0			103+24.82	-5419.18	515.50
0	289ø42'21"	49.09 ft			
0			103+73.91	-5435.74	561.72
0	269ø50'53"	100.20 ft			
0			104+74.11	-5435.47	661.92
0	296ø31'11"	69.75 ft			
0			105+43.86	-5466.62	724.33
0	287ø44'19"	58.40 ft			
0			106+02.26	-5484.41	779.95
0	277ø27'11"	37.72 ft			
0			106+39.97	-5489.30	817.35
0	280ø31'50"	255.27 ft			
0			108+95.25	-5535.95	1068.32
0	297ø17'09"	64.34 ft			
0			109+59.59	-5565.45	1125.50
0	297ø17'09"	72.77 ft			
0			110+32.36	-5598.81	1190.18
0	320ø05'23"	85.94 ft			
0			111+18.30	-5664.73	1245.31
0	295ø20'57"	176.75 ft			
0			112+95.05	-5740.40	1405.05
0	308ø23'57"	341.59 ft			
0			116+36.64	-5952.58	1672.75
0	277ø53'50"	262.33 ft			
0			118+98.97	-5988.62	1932.59
0	316ø04'27"	61.60 ft			
0			119+60.57	-6032.99	1975.33
0	12ø06'16"	144.36 ft			
0			121+04.93	-6174.14	1945.06
0	344ø58'21"	143.57 ft			
0			122+48.50	-6312.80	1982.28
0	332ø34'54"	115.89 ft			
0			123+64.39	-6415.67	2035.65

BERMING LANDSCAPING AND GRADING AREA.TXT

0 328019'38"	211.87 ft	125+76.26	-6595.98	2146.89
0 342047'16"	168.70 ft	127+44.96	-6757.13	2196.81
0 11021'34"	203.16 ft	129+48.12	-6956.31	2156.80
0 356002'01"	203.39 ft	131+51.51	-7159.21	2170.87
0 3029'29"	381.89 ft	135+33.39	-7540.39	2147.61
0 18041'14"	368.27 ft	139+01.66	-7889.25	2029.62
0 32046'44"	184.77 ft	140+86.44	-8044.60	1929.58
0 41014'46"	247.44 ft	143+33.87	-8230.64	1766.45
0 46048'20"	187.45 ft	145+21.32	-8358.95	1629.79
0 65028'52"	384.89 ft	149+06.20	-8518.67	1279.61
0 73007'13"	118.56 ft	150+24.77	-8553.10	1166.15
0 108001'23"	169.64 ft	151+94.41	-8500.61	1004.84
0 125049'17"	347.46 ft	155+41.87	-8297.26	723.10
0 221028'26"	299.26 ft	158+41.13	-8073.04	921.29
0 167050'47"	630.47 ft	164+71.60	-7456.70	788.56
0 135032'43"	381.15 ft	168+52.75	-7184.63	521.62
0 112037'10"	140.66 ft	169+93.41	-7130.53	391.78
0 135029'16"	4.25 ft	169+97.66	-7127.50	388.80
0 33025'47"	404.48 ft	174+02.14	-7465.06	165.97
0 13058'58"	294.54 ft	176+96.68	-7750.88	94.80
0 14050'28"	170.28 ft	178+66.96	-7915.48	51.18
0 19016'53"	58.95 ft	179+25.91	-7971.12	31.72
0 311017'38"	334.74 ft	182+60.65	-8192.02	283.22
0 235056'09"	288.87 ft	185+49.52	-8030.22	522.52
0 342008'30"	351.85 ft	189+01.37	-8365.12	630.42
0 323038'40"	275.20 ft	191+76.57	-8586.75	793.56
0 302009'30"	226.51 ft	194+03.08	-8707.31	985.32
0 296049'06"	120.52 ft	195+23.60	-8761.69	1092.88
0 247012'51"	242.90 ft	197+66.50	-8667.61	1316.82
0 284037'16"	71.90 ft	198+38.41	-8685.76	1386.39
0 242024'40"	112.00 ft	199+50.41	-8633.89	1485.66
0 234034'08"	396.94 ft			

BERMING LANDSCAPING AND GRADING AREA.TXT					
0			203+47.35	-8403.78	1809.09
0	227°06'15"	259.25 ft			
0			206+06.60	-8227.31	1999.01
0	199°53'54"	688.65 ft			
0			212+95.25	-7579.78	2233.40
0	263°07'11"	89.73 ft			
0			213+84.98	-7569.03	2322.48
0	201°00'35"	359.62 ft			
0			217+44.60	-7233.32	2451.41
0	181°21'03"	220.56 ft			
0			219+65.16	-7012.82	2456.61
0	115°35'31"	176.41 ft			
0			221+41.57	-6936.62	2297.51
0	179°01'44"	206.53 ft			
0			223+48.10	-6730.12	2294.01
0	163°29'41"	198.17 ft			
0			225+46.27	-6540.11	2237.71
0	137°47'53"	128.92 ft			
0			226+75.18	-6444.61	2151.11
0	154°57'45"	219.75 ft			
0			228+94.93	-6245.51	2058.11
0	172°08'41"	103.17 ft			
0			229+98.10	-6143.31	2044.01
0	220°43'16"	108.99 ft			
0			231+07.09	-6060.71	2115.11

Closing latitude	= -0.00517
Closing departure	= 0.00882
Closing bearing	= 120°20'34"
Closing distance	= 0.01023
Total traverse length	= 23107.11 (23107.09)
Total error of closure	= 1/2259841
Error of closure in latitude	= 1/4473401
Error of closure in departure	= 1/2618532

Area	= 4491354 Sq. Ft.
Area	= 103.107 Acres

EXISTING QUARRY AND PROCESSING AREA.txt

METES AND BOUNDS REPORT

Boundary Name: EXISTING QUARRY AND PROCESSING AREA

Coordinate values shown are computed based on the rounded bearing and distance, or chord bearing and chord lengths as indicated herein.

Point Number	Bearing	Description Distance	Sta	Northing	Easting	Elevation
0			0+00.00	-5565.44	1125.49	
0	297°17'09"	72.77 ft	0+72.77	-5598.80	1190.16	
0	320°05'23"	85.94 ft	1+58.71	-5664.72	1245.30	
0	295°20'57"	176.75 ft	3+35.46	-5740.39	1405.03	
0	308°23'57"	341.59 ft	6+77.06	-5952.57	1672.74	
0	277°53'50"	262.33 ft	9+39.39	-5988.61	1932.58	
0	316°04'27"	61.60 ft	10+00.98	-6032.98	1975.31	
0	12°06'16"	144.36 ft	11+45.35	-6174.13	1945.04	
0	344°58'21"	143.57 ft	12+88.92	-6312.79	1982.27	
0	332°34'54"	115.89 ft	14+04.80	-6415.66	2035.63	
0	328°19'38"	211.87 ft	16+16.67	-6595.97	2146.88	
0	342°47'16"	168.70 ft	17+85.37	-6757.12	2196.80	
0	11°21'34"	203.16 ft	19+88.53	-6956.30	2156.78	
0	356°02'01"	203.39 ft	21+91.92	-7159.20	2170.85	
0	3°29'29"	381.89 ft	25+73.81	-7540.38	2147.60	
0	18°41'14"	368.27 ft	29+42.08	-7889.24	2029.60	
0	32°46'44"	184.77 ft	31+26.85	-8044.59	1929.57	
0	41°14'46"	247.44 ft	33+74.29	-8230.63	1766.43	
0	46°48'20"	187.45 ft	35+61.73	-8358.94	1629.77	
0	65°28'52"	384.89 ft	39+46.62	-8518.67	1279.59	
0	73°07'13"	118.56 ft	40+65.18	-8553.09	1166.14	
0	108°01'23"	169.64 ft	42+34.82	-8500.60	1004.82	
0	125°49'17"	347.46 ft	45+82.29	-8297.25	723.09	
0	221°28'26"	299.26 ft	48+81.54	-8073.03	921.28	
0	167°50'47"	630.47 ft	55+12.01	-7456.69	788.55	
0	135°32'43"	381.15 ft	58+93.17	-7184.62	521.61	
0	112°37'10"	140.66 ft				

EXISTING QUARRY AND PROCESSING AREA.txt					
0			60+33.83	-7130.52	391.77
135°29'16"	4.25 ft				
0			60+38.07	-7127.49	388.79
205°15'00"	1727.05 ft				
0			77+65.12	-5565.45	1125.49

Closing latitude	= -0.01147
Closing departure	= 0.00453
Closing bearing	= 158°26'34"
Closing distance	= 0.01234
Total traverse length	= 7765.13 (7765.12)
Total error of closure	= 1/629430
Error of closure in latitude	= 1/676770
Error of closure in departure	= 1/1713053

Area	= 3417258 Sq. Ft.
Area	= 78.449 Acres

QUARRY EXCAVATION EXPANSION AREA.txt

METES AND BOUNDS REPORT

Boundary Name: QUARRY EXCAVATION EXPANSION AREA

Coordinate values shown are computed based on the rounded bearing and distance, or chord bearing and chord lengths as indicated herein.

Point Number	Bearing	Description Distance	Sta	Northing	Easting	Elevation
0	135°29'16"	103.65 ft	0+00.00	-7127.48	388.78	
0	174°54'36"	8.68 ft	1+03.65	-7053.57	316.12	
0	162°21'20"	11.97 ft	1+12.32	-7044.92	315.35	
0	162°19'30"	16.49 ft	1+24.29	-7033.51	311.72	
0	149°28'05"	9.87 ft	1+40.79	-7017.80	306.71	
0	133°29'27"	11.05 ft	1+50.66	-7009.30	301.70	
0	126°37'04"	33.55 ft	1+61.70	-7001.70	293.68	
0	115°50'03"	60.13 ft	1+95.26	-6981.69	266.76	
0	142°57'08"	5.48 ft	2+55.39	-6955.48	212.64	
0	157°24'41"	129.42 ft	2+60.87	-6951.11	209.33	
0	142°30'06"	75.06 ft	3+90.28	-6831.62	159.62	
0	163°33'13"	43.02 ft	4+65.34	-6772.07	113.93	
0	195°18'03"	103.15 ft	5+08.36	-6730.81	101.75	
0	164°24'33"	110.54 ft	6+11.52	-6631.31	128.97	
0	214°37'26"	140.21 ft	7+22.06	-6524.84	99.26	
0	195°02'03"	52.17 ft	8+62.27	-6409.46	178.93	
0	207°30'16"	115.51 ft	9+14.44	-6359.08	192.46	
0	234°31'56"	51.21 ft	10+29.95	-6256.62	245.80	
0	203°01'06"	76.27 ft	10+81.16	-6226.91	287.51	
0	175°28'44"	25.53 ft	11+57.43	-6156.71	317.33	
0	158°32'39"	124.93 ft	11+82.96	-6131.26	315.32	
0	152°22'57"	120.46 ft	13+07.88	-6014.99	269.62	
0	119°29'16"	153.17 ft	14+28.35	-5908.25	213.78	
0	198°12'51"	51.27 ft	15+81.51	-5832.86	80.46	
0	271°30'09"	46.97 ft	16+32.79	-5784.16	96.48	
0	251°26'11"	60.82 ft	16+79.75	-5785.39	143.43	

QUARRY EXCAVATION EXPANSION AREA.txt				
0		17+40.57	-5766.02	201.09
259°37'57"	98.95 ft			
0		18+39.52	-5748.22	298.42
239°07'30"	83.92 ft			
0		19+23.44	-5705.15	370.45
175°24'16"	53.65 ft			
0		19+77.09	-5651.68	366.15
241°34'26"	34.87 ft			
0		20+11.96	-5635.08	396.82
181°15'54"	89.21 ft			
0		21+01.18	-5545.89	398.79
190°08'16"	94.97 ft			
0		21+96.15	-5452.40	415.51
237°03'49"	42.63 ft			
0		22+38.77	-5429.22	451.28
261°06'24"	64.99 ft			
0		23+03.76	-5419.18	515.49
289°42'21"	49.09 ft			
0		23+52.85	-5435.73	561.71
269°50'53"	100.20 ft			
0		24+53.05	-5435.46	661.91
296°31'11"	69.75 ft			
0		25+22.80	-5466.61	724.32
287°44'19"	58.40 ft			
0		25+81.20	-5484.40	779.94
277°27'11"	37.72 ft			
0		26+18.91	-5489.29	817.34
280°31'50"	255.27 ft			
0		28+74.19	-5535.94	1068.31
297°17'09"	64.34 ft			
0		29+38.53	-5565.44	1125.49
25°15'00"	1727.05 ft			
0		46+65.58	-7127.48	388.79

Closing latitude	= 0.00079
Closing departure	= 0.00364
Closing bearing	= 77°41'53"
Closing distance	= 0.00372
Total traverse length	= 4665.59 (4665.58)
Total error of closure	= 1/1252900
Error of closure in latitude	= 1/5880376
Error of closure in departure	= 1/1282345
Area	= 896723 Sq. Ft.
Area	= 20.586 Acres

CONVEYOR TUNNEL EASEMENT AREA.txt

METES AND BOUNDS REPORT

Boundary Name: CONVEYOR TUNNEL EASEMENT AREA

Coordinate values shown are computed based on the rounded bearing and distance, or chord bearing and chord lengths as indicated herein.

Point Number	Description	Sta	Northing	Easting	Elevation
Bearing	Distance				
0		0+00.00	-8013.49	2524.50	0.00
90ø00'00"	0.00 ft				
0		0+00.00	-8013.49	2524.50	0.00
Center Point:		0	-5893.78	-1674.48	
Radius:		4703.68 ft			
Delta:		0ø08'49" Right			
Arc Length:		12.06 ft			
Chord Bearing:		26ø51'32"			
Chord Length:		12.06 ft			
Middle Ordinate:		0.00 ft			
External:		0.00 ft			
Deg of Curvature:		1ø13'05" Arc Definition			
Tangent:		6.03 ft			
Curve PI:			-8018.87	2521.79	
0		0+12.06	-8024.24	2519.05	0.00
90ø00'00"	0.00 ft				
0		0+12.06	-8024.24	2519.05	0.00
122ø44'23"	271.50 ft				
0		2+83.56	-7877.41	2290.69	0.00
90ø00'00"	0.00 ft				
0		2+83.56	-7877.41	2290.69	0.00
Center Point:		0	-5893.78	-1674.48	
Radius:		4433.66 ft			
Delta:		0ø09'22" Left			
Arc Length:		12.07 ft			
Chord Bearing:		206ø29'57"			
Chord Length:		12.07 ft			
Middle Ordinate:		0.00 ft			
External:		0.00 ft			
Deg of Curvature:		1ø17'32" Arc Definition			
Tangent:		6.04 ft			
Curve PI:			-7872.02	2293.39	
0		2+95.63	-7866.61	2296.07	0.00
270ø00'00"	0.00 ft				
0		2+95.63	-7866.61	2296.07	0.00
302ø44'23"	271.57 ft				
0		5+67.21	-8013.48	2524.50	0.00

Closing latitude = 0.00509
 Closing departure = -0.00431
 Closing bearing = 319ø42'17"
 Closing distance = 0.00667
 Total traverse length = 567.20 (567.21)
 Total error of closure = 1/85028
 Error of closure in latitude = 1/111479
 Error of closure in departure = 1/131474

Area = 3258 Sq. Ft.
 Area = 0.075 Acres



May 5, 2009

Mr. Kenneth G. Silva, Fire Chief
Honolulu Fire Department
City and County of Honolulu
636 South Street
Honolulu, HI 96813-5007

Mr. David Tanoue, Director
Department of Planning and Permitting
650 South King Street, 7th Floor
Honolulu, HI 96813

RECEIVED
MAY 11 2009
CITY OF HONOLULU

09 MAY -7 03:47

Dear Mr. Silva,

This letter is to inform you and your department of Grace Pacific Corporation's intent to develop a "Fire Protection and Control Plan" for the Makakilo Quarry and its Buffering Area for your review and approval. This action is in response to a requirement set out in the "Decision and Order" from the Land Use Commission (Docket No. SP73-147, pages 23-24) copied below.

1. *Within six (6) months of the Land Use Commission's Decision and Order approving the Special Use Permit, the Applicant shall submit:*
 - b. *A fire protection and control plan to Honolulu Fire Department for review and approval. A copy of the approved plan shall be submitted to the Director of Planning and Permitting within 30 days of approval.*

Through my staff and consultants working with members of your department it is our understanding that there is no set format for the "Fire Protection and Control Plan" mentioned in the "Decision and Order" With this encountered we are going to proceed forward in developing a first draft with private consultants. When this is complete we would like your staff to assist us in tailoring and finalizing the plan, which you and your department would approve.

If you agree that the approach above is the appropriate process, could you please advise us on who in your department would be our point of contact to start this process with? I want to thank you and your department for all the assistance we have received



so far. We look forward to having an approved Plan that will guide our operation safely and effectively.

Sincerely,

A handwritten signature in cursive script, appearing to read "Robert M. Creps".

Robert M. Creps
Senior Vice President Administration
Grace Pacific Corporation

cc:
Mr. Socrates Bratakos, Battalion Chief



DEPARTMENT OF PLANNING
AND ECONOMIC DEVELOPMENT



RECEIVED
MAR 29 1973

JOHN A. BURNS
Governor

GORO INABA
Chairman

EDDIE TANGEN
Vice Chairman

LAND USE COMMISSION

250 South King St. / Honolulu, Hawaii 96813 / P. O. Box 2359 / Honolulu, Hawaii 96804

COMMISSION MEMBERS

Alexander J. Napier

Shelley M. Mark

Sunao Kido

Leslie E. L. Wung

Tanji Yamamura

Stanley S. Sakahashi

TATSUO FUJIMOTO
Executive Officer

March 27, 1973

Handwritten signature/initials over stamp

Mr. Robert B. Robinson
President and General Manager
Pacific Concrete & Rock Co., Ltd.
2344 Pahounui Drive
Honolulu, Hawaii 96819

Dear Mr. Robinson:

The original of the attached letter approving the special permit request by Pacific Concrete & Rock Co., Ltd. (SP73-147) to allow sanitary landfill operation at Puu Palailai on approximately 29 acres of land described as Tax Map Key 9-1-16: portions of 6 and 20, Ewa, Oahu; and rock quarrying operations on the southeastern slopes of Puu Makakilo on approximately 295 acres of land described as Tax Map Key 9-2-03: portion of 2, and 9-1-16: portion of 4, Ewa, Oahu; both operations subject to the conditions stipulated by the City Planning Commission of the City and County of Honolulu; is on file in the office of the Planning Commission, Honolulu, Hawaii.

Very truly yours,

Handwritten signature of Tatsuo Fujimoto
TATSUO FUJIMOTO
Executive Officer

Encls. .
cc: Ben Kaito

Handwritten signature/initials

Exhibit "C"

STATE OF HAWAII
LAND USE COMMISSION

MEMORANDUM

March 23, 1973
2:30 p.m.

TO: Land Use Commission

FROM: Staff

SUBJECT: SP73-147 - PACIFIC CONCRETE & ROCK CO., LTD.

Pacific Concrete & Rock Co., Ltd. has submitted special permit requests involving the following:

Area 1 - Sanitary landfill operation within the existing quarry at Puu Palailai, situated in the Agricultural District, Ewa, Oahu, and described as Tax Map Key 9-1-16: portions of 6 and 20, comprising approximately 29 acres.

Area 2 - Rock quarrying operations makai of Puu Makakilo, situated in the Agricultural District, Ewa, Oahu, and described as Tax Map Key 9-2-03: portion of 2, and 9-1-16: portion of 4, on approximately 295 acres.

In order that the proceedings on the above requests may be simplified and facilitated, the staff will discuss each area separately.

AREA 1 - SANITARY LANDFILL OPERATION

The 29-acre site consists of an exhausted quarry pit which is situated south of the Makakilo Urban District in the vicinity of the Palailai Interchange of H-1 Highway. The pit averages 90 feet in depth, but contains walls at the mauka end which are 150 feet in height. Land uses in the area are residential developments and vacant lands in the Makakilo Urban District and cane cultivation in the surrounding Agricultural District. The site itself contains only 1-1/2 year's deposit of material to be quarried. Other than for landfill purposes, the pit has no economical or practical value if not restored.

Petitioner states that the consulting firm of Metcalf & Eddy has recommended to the City that a major sanitary landfill be established to replace the obsolete and ecologically unsatisfactory Waipahu dump which was closed on December 31, 1972. Until a replacement area is found, all refuse will be taken to the Windward Oahu Kapaa dump site. The proposed 29-acre site, which is under a 10 year lease by Campbell Estate authorizing the petitioner to operate a sanitary landfill, can be profitably operated at a charge per ton to the City of no more than it would cost the City to operate.

The petitioner estimates that the proposed landfill operation will result in a 17% increase in traffic over that presently generated by the quarry operation. This is based on an estimated 135 trips by refuse trucks and 10 additional trips which are required to haul cover material for the landfill. Approximately 84% of the refuse traffic will come from the Honolulu direction, and the remaining 16% will come from Waianae, Campbell Industrial Park and Makakilo. Access will be from Farrington Highway. Residential areas will not be directly affected.

Hours of operation will be from 6:00 a.m. to 5:00 p.m. Monday through Friday and 7:00 a.m. to 3:00 p.m. on Saturdays. Initially, the floor of the pit will be sealed with a 12-inch layer of impermeable engineered soil stratum approved by the Board of Water Supply and overlain by a 12 inch pervious drainage stratum of crushed rock which will lead to a sump-well. The sump-well will allow for inspection or removal of leachate, if necessary.

A D-8 tractor will spread and compact refuse in 2 foot thick layers. It is estimated that 500 to 600 tons will be compacted daily. At the close of day, the working face will be covered by a 6 inch layer of soil, cinder, and small rocks, thus creating a dense "cell" which would exclude rodents and insects as well as eliminate odors and unsightliness. An estimated 3.3 million cubic yards of refuse can be accommodated by this modern cell method. All refuse will be accepted except chemicals, radioactive wastes, and whole animal carcasses. Neither the entrance nor the fill itself will be visible from Makakilo city. The landfill operation will convert a difficult to utilize and dangerous pit into a well graded area suitable for recreational or agricultural use.

COUNTY RECOMMENDATION

At its meeting of February 28, 1973, the City Planning Commission voted to recommend approval of this special permit subject to the final approval of the State Land Use Commission and further to obtain a Conditional Use Permit from the City. The recommendation for approval was further conditioned by the following:

- "1. The provisions set forth in the submitted application marked Exhibit A shall be complied with except as may be altered by any of the conditions stated hereunder;
- "2. The applicant shall comply with all requirements which may be imposed by the State Department of Health, Board of Water Supply, State Fire Marshall, and the Department of Public Works;

- "3. The permits hereby granted shall expire at the end of 5 years from the date of issuance. The subject permits may upon their expiration be renewed for another 5-year period by the City Council provided the applicant applies for renewal of the Conditional Use and Special Use Permits and provided further that the conditions of the permits have not been violated during the initial 5-year term or if the conditions in the area have not changed in such a manner as to justify refusal of the renewal;
- "4. The source for the landfill cover material shall be subject to the approval of the Planning Director and other appropriate governmental agencies.
- "5. If for any reason, either the Conditional Use Permit or the Special Use Permit is denied, the other shall automatically be declared null and void;
- "6. Signs shall be provided in accordance with the regulations set forth under Section 21-404 of the Comprehensive Zoning Code;
- "7. The proposed use shall comply with the noise regulations of the Comprehensive Zoning Code and with any other more restrictive noise regulations as may be promulgated by the Department of Health. To determine whether or not noise regulations are being complied with, the applicant shall retain a qualified noise consultant to conduct a noise study within 6 months from the date the use commences. Said study shall be conducted at a time and under conditions acceptable to the Planning Director. The results of the study shall be submitted to the Planning Director for his review and approval. If the study indicates that the use is not operating in compliance with the noise regulation, the applicant shall be required to take corrective actions in a manner acceptable to the Planning Director. Additional noise studies shall be conducted as may be determined necessary and appropriate by the Planning Director.
- "8. After the issuance of the subject permit, the City Council may at any time, upon finding that any one of the conditions imposed herein is not being complied with by the applicant, authorize the Planning Director to suspend such operation until compliance with said conditions is obtained or to revoke the permit;
- "9. Any modification to the conditions stated herein shall be subject to the approval of the City Council;

- "10. The City Council may impose additional conditions after the approval of the subject permits when it becomes apparent that a modification is necessary and appropriate;
- "11. The applicant shall file with the Bureau of Conveyances or the Assistant Registrar of the Land Court, a declaration of the restrictive conditions stated herein;
- "12. The applicant shall present to the Planning Department certified copies of the document issued by the Bureau of Conveyances or the Assistant Registrar as evidence of recordation."

The City's General Plan designates the property for Agriculture and the zoning is AG-1 Restricted Agricultural District. No Detailed Land Use Map or Development Plan has been adopted for this area.

A review of the proposed sanitary landfill operation finds that adequate safeguards have been incorporated in the conditions imposed by the City agency to protect the health, safety and welfare of the public and to minimize or eliminate any adverse effects on surrounding property. Based on information presented in the Final Environmental Impact Statement for the proposed landfill operation and upon the recommendations of the Office of Environmental Quality Control, the Environmental Impact Statement was approved by Governor Burns on January 13, 1973. Further, the petitioner's technical and professional consultants have addressed the project in sufficient detail to allow the establishment of preventive and corrective measures before actual initiation of the project.

Based on the above, the staff finds that the landfill operation substantially meets the guidelines for determining an "unusual and reasonable use" and therefore recommends approval of the sanitary landfill operation as conditioned by the City Planning Commission.

AREA 2 - ROCK QUARRYING AND ALLIED OPERATIONS

The petitioner proposes to establish a rock quarrying operation and allied uses on a total of 295 acres of land situated on the southeastern slopes of Puu Makakilo and located about 1.5 miles east of Area 1. The proposed quarry site of 72 acres and a buffer area comprising 188 acres abut the mauka side of the H-1 Highway.

Immediately makai of the highway and quarry site is another 35 acres proposed for accessory uses such as a shop, office, scale, processing area and a concrete batching plant.

Presently, the mauka area of 260 acres containing the proposed quarry and buffer area is used for cattle grazing. The quarry site is bounded on 2 sides by gulches and divided in the center by another gulch. The makai area of 35 acres containing the processing and office facilities is presently in cane cultivation. The developed portion of the Makakilo Urban District lies approximately one mile west of the proposed quarry site, and the Waipahu Urban District lies 3 miles to the east.

The petitioner states that Pacific Concrete and Rock Co., Ltd. has been in business on Oahu for 22 years; that it is one of 2 major suppliers of concrete on Oahu and supplies 40% of the island's needs; that it employs 300 people and contributes approximately \$207,000 in state taxes annually.

Pacific Concrete's existing quarry will be exhausted in 1-1/2 years and has been proposed for a sanitary landfill site (Area 1). Approximately 8 years ago, after extensive test drillings and studies, a new source of rock was located at the site now under consideration. It is the only known source within economical distance of Honolulu. Because of the topography, the site is well hidden except from distant scrutiny. A new quarry site is essential to the continued existence of the company.

Approximately 500,000 tons of basalt aggregate for concrete production and approximately 250,000 tons of road and fill rock will be produced at the new site on an annual basis.

Quarrying operations mauka of the H-1 will involve clearing the overburden; drilling of the basaltic, or blue rock; placement and detonation of explosives (which is controlled by the State Division of Industrial Safety), in order to reduce all rock to no larger than 4 foot pieces; loading and hauling to primary crusher for crushing rocks to 10 inch size, conveyance to the secondary crusher for reduction to 3 inch size; conveyance to surge piles, and finally conveyance by a 42 inch belt to the makai processing area through a 10 foot square tunnel under H-1. At no time will more than 15 acres be stripped for quarrying.

On the makai processing site, the 3 inch rock will be stacked into grades "A" and "B" surge piles; sized by a series of screens; conveyed into finished stockpiles or into reduction crushers for sand production.

At all critical points, water with a wetting agent will be sprayed on the rocks; the primary crusher, batching plant, and screens will be totally housed to eliminate noise and stray dust; noise and dust levels will be below all government standards at the buffer zone boundaries; and berms will be constructed and plantings provided to

shield the operation visually. Over 500 trees and 1,000 shrubs will be planted. In total, \$565,000 will be spent on pollution control measures, excluding maintenance costs.

Only 1 access will be provided off Farrington Highway. The total daily traffic is 36 mixer truck round trips from 6:00 a.m. to 4:00 p.m. and 91 dump truck round trips from 7:00 a.m. to 12:00 p.m.

The petitioner states that the area "will have been leveled to a predetermined plan for residential construction in concert with the City's detailed land use map" and that site preparation costs will be nil since all final quarry grades are designed for home and school buildings.

Maps submitted by the petitioner show that the completion of the quarrying operation will result in a series of 4 benches which are proposed for single family residential use. The lowest bench abutting the H-1 is proposed for a school and park site. The elevation ranges from about 250 feet at the lowest level to 365 feet at the uppermost level, with 30 to 45 feet differences between levels. A 56 foot access road is shown leading to Makakilo City and in the direction of Palehua Road.

COUNTY RECOMMENDATION

At its meeting of February 28, 1973, the City Planning Commission voted to recommend approval of this special permit subject to the final approval of the Land Use Commission and further to obtain a Conditional Use Permit from the City. The recommendation was further conditioned by the following:

- "1. The provisions set forth in the submitted application marked Exhibit "B" and on file with the Planning Department shall be complied with except as may be altered by any of the conditions stated hereunder;
- "2. The applicant shall prepare and submit to the Planning Director for his review and approval a revised grading plan for the quarry area;
- "3. The proposed use shall adhere to the noise regulations of the Comprehensive Zoning Code and to any further regulations as may be promulgated by the Department of Health. If necessary, the Planning Director may require the applicant to conduct a noise study. Said study, if required, shall be conducted in a manner acceptable to the Planning Director and its results shall be submitted to the Planning Director for his review and approval. If the results of said study

indicate noise levels to be in excess of applicable standards, the applicant shall be required to take corrective actions in a manner acceptable to the Planning Director;

- "4. Prior to commencing the quarry operation, the applicant in cooperation with the United States Department of the Navy shall conduct studies necessary to determine the probable effect of the proposed quarry operation on the Navy's water distribution system at Barber's Point. If such studies indicate that said water distribution system may be adversely affected, the applicant shall revise the proposed operation in a manner acceptable to the Planning Director and the United States Department of the Navy.
- "5. The applicant shall submit regularly on a six month basis a report indicating the status of the operation noting his affirmative actions taken to comply with the conditions herein contained. This report shall also contain:
 - a. Observations of fugitive dust.
 - b. A report on replanting activities, including the areas replanted, and the type of vegetation planted.
 - c. A report of any citizen's complaints relating to the operation along with the actions taken to ameliorate those complaints.
- "6. Signs shall be provided in accordance with the regulations set forth under Section 21-404 of the Comprehensive Zoning Code;
- "7. If for any reason either the Conditional Use Permit or the Special Use Permit is denied, the other shall automatically be declared null and void;
- "8. After the issuance of the subject permits, the City Council may at any time upon finding that any one of the conditions imposed herein is not being complied with by the applicant, authorize the Planning Director to suspend such operation until compliance of said conditions is obtained or to revoke the permit.
- "9. Any modification to the conditions stated herein shall be subject to the approval of the City Council.
- "10. The City Council may impose additional conditions after the approval of subject permits when it becomes apparent that a modification is necessary and appropriate.

- "11. The applicant shall file with the Bureau of Conveyances or the Assistant Registrar of the Land Court a declaration of the restrictive conditions stated herein;
- "12. The applicant shall present to the Planning Department certified copies of the documents issued by the Bureau of Conveyances or the Assistant Registrar as evidence of recordation."

Condition #4 was established as a result of a letter from the Navy expressing concern over possible damage to its water supply and distribution system which is located 1/4 mile away from the quarry site. It was noted that the inclusion of condition #4 was acceptable to the Navy.

Condition #2 was included as a result of the City Planning Director's concern over the final configuration of the site after quarrying operations have been completed. He felt that other alternatives should be considered which would "maximize the potential for residential development that would be consistent with the surrounding natural areas." In short, it was felt that the concept of a large flat area near the freeway with narrow, upper terraces does not allow for flexibility in residential design.

Review of the other conditions imposed by the City Planning Commission finds that the public's welfare is adequately protected and the surrounding properties will not be adversely affected. It is further noted that the proposed use will help to alleviate the high demand for rock and concrete products by the construction industry; that public agencies would not be unduly burdened to provide services; that the quarry site is not highly suited for agricultural purposes; and that the quarrying operation would ultimately result in a more productive land use for the site in question.

On the basis of information presented in the Final Environmental Impact Statement for the proposed quarry and upon the recommendation of the Office of Environmental Quality Control, the Environmental Impact Statement was approved by Governor Burns on January 13, 1973.

Based on the above, the staff concludes that the proposed use is an "unusual and reasonable" use within the Agricultural District and concurs with the City Planning Commission in recommending approval of this special permit, subject to the conditions imposed. It should be noted that the recommendation for approval will in no way constitute a commitment for subsequent approval of a residential use after the termination of the quarrying operation.



Aerial Imagery Source: Google Earth, Airbus, Date: 6/10/2019



NORTH

0 600 1200
SCALE IN FEET

Makakilo Quarry Parcel Map

Exhibit "D-1"



Aerial Imagery Source: Google Earth, Maxar Technologies, Date: 6/29/2022



NORTH

0 600 1200
SCALE IN FEET

Palailai Landfill Parcel Map

Exhibit "D-2"



Exhibit "D-3"



NORTH



SCALE IN FEET

Makakilo Quarry Existing Conditions

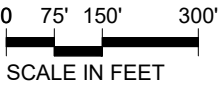
Exhibit "E"



Grace Pacific, LLC
949 Kamokila Blvd.
Suite 200
Honolulu, HI 96810



MAKAKILO QUARRY UPPER
SCALE: 1"=300'
DATE OF PHOTOGRAPHY: 12-2-21
SUPPLEMENTAL MISSION FOR NORTH AREA: 2-12-22



BASIS FOR HORIZONTAL CONTROL:
COORDINATES ARE IN STATE PLANE NAD83.
UNIT OF MEASURE: US SURVEY FOOT
VERTICAL DATUM: MEAN SEA LEVEL
GROUND CONTROL POINTS SET BY GRACE
PACIFIC LLC AND SHOT BY TOWILL, SHIGEOKA &
ASSOCIATES, INC. ON 1/31/2022.






BEFORE THE LAND USE COMMISSION
OF THE STATE OF HAWAII

In The Matter Of The Application Of	)	DOCKET NO. SP73-147
)	
GRACE PACIFIC CORPORATION	)	FINDINGS OF FACT, CONCLUSIONS
(Formerly Pacific Concrete & Rock Co.,	)	OF LAW, AND DECISION AND ORDER
Ltd.)	)	APPROVING WITH MODIFICATIONS
	)	THE RECOMMENDATION OF THE
To Extend The Life Of The Makakilo	)	CITY AND COUNTY OF HONOLULU
Quarry Resource Extraction And	)	PLANNING COMMISSION TO (1)
Aggregate Processing Operations To	)	EXTEND THE LIFE OF THE
2032 And To Expand The Resource	)	MAKAKILO QUARRY RESOURCE
Extraction And Buffer Areas Of The	)	EXTRACTION AND AGGREGATE
Quarry On Approximately 541.5 Acres	)	PROCESSING OPERATIONS TO 2032;
Of Land Within The State Land Use	)	AND (2) EXPAND THE RESOURCE
Agricultural District At Pu'u Makakilo,	)	EXTRACTION AND BUFFER AREAS OF
'Ewa, O'ahu, Hawai'i, Tax Map Keys:	)	THE QUARRY
9-1-16: 4 And 9-2-03: Por. 74 And Por. 82)	
)	

FINDINGS OF FACT, CONCLUSIONS OF LAW, AND DECISION AND ORDER
APPROVING WITH MODIFICATIONS THE RECOMMENDATION OF THE CITY
AND COUNTY OF HONOLULU PLANNING COMMISSION TO (1) EXTEND THE
LIFE OF THE MAKAKILO QUARRY RESOURCE EXTRACTION AND AGGREGATE
PROCESSING OPERATIONS TO 2032; AND (2) EXPAND THE RESOURCE
EXTRACTION AND BUFFER AREAS OF THE QUARRY

This is to certify that this is a true and correct
copy of the document on file in the office of the
State Land Use Commission, Honolulu, Hawaii.

11/7/08 by 
Executive Officer

NOV 19 2008

Exhibit "F"



BEFORE THE LAND USE COMMISSION
OF THE STATE OF HAWAII

In The Matter Of The Application Of	) DOCKET NO. SP73-147
)
GRACE PACIFIC CORPORATION	) FINDINGS OF FACT, CONCLUSIONS
(Formerly Pacific Concrete & Rock Co.,	) OF LAW, AND DECISION AND ORDER
Ltd.)	) APPROVING WITH MODIFICATIONS
	) THE RECOMMENDATION OF THE
To Extend The Life Of The Makakilo	) CITY AND COUNTY OF HONOLULU
Quarry Resource Extraction And	) PLANNING COMMISSION TO (1)
Aggregate Processing Operations To	) EXTEND THE LIFE OF THE
2032 And To Expand The Resource	) MAKAKILO QUARRY RESOURCE
Extraction And Buffer Areas Of The	) EXTRACTION AND AGGREGATE
Quarry On Approximately 541.5 Acres	) PROCESSING OPERATIONS TO 2032;
Of Land Within The State Land Use	) AND (2) EXPAND THE RESOURCE
Agricultural District At Pu`u Makakilo,	) EXTRACTION AND BUFFER AREAS OF
`Ewa, O`ahu, Hawai`i, Tax Map Keys:	) THE QUARRY
9-1-16: 4 And 9-2-03: Por. 74 And Por. 82)
_____)

FINDINGS OF FACT, CONCLUSIONS OF LAW, AND DECISION AND ORDER
APPROVING WITH MODIFICATIONS THE RECOMMENDATION OF THE CITY
AND COUNTY OF HONOLULU PLANNING COMMISSION TO (1) EXTEND THE
LIFE OF THE MAKAKILO QUARRY RESOURCE EXTRACTION AND AGGREGATE
PROCESSING OPERATIONS TO 2032; AND (2) EXPAND THE RESOURCE
EXTRACTION AND BUFFER AREAS OF THE QUARRY

The Land Use Commission ("LUC"), having examined the complete
record of the City and County of Honolulu Planning Commission's ("Planning
Commission") proceedings on Grace Pacific Corporation's ("Applicant") application to
(1) extend the life of the Makakilo Quarry resource extraction and aggregate processing

operations to 2032; and (2) expand the resource extraction and buffer areas of the quarry ("Application"), and upon consideration of the matters discussed therein, at its meeting on October 2, 2008, in Honolulu, Hawai'i, hereby makes the following findings of fact, conclusions of law, and decision and order:

FINDINGS OF FACT

PROCEDURAL MATTERS

1. On October 5, 2007, the Applicant filed the Application with the City and County of Honolulu Department of Planning and Permitting ("DPP") to amend Special Use Permit No. 72/SUP-1, originally issued to Pacific Concrete & Rock Co., Ltd. ("Pacific Concrete"), pursuant to section 205-6, Hawai'i Revised Statutes ("HRS"), and sections 15-15-95 and 15-15-96, Hawai'i Administrative Rules ("HAR").¹

2. The Applicant sought to (1) extend the life of the Makakilo Quarry resource extraction and aggregate processing operations to 2032; and (2) expand the resource extraction and buffer areas of the quarry.

3. On November 9, 2007, the DPP accepted the Application for processing.

4. On July 31, 2008, Mark M. Schnabel filed a Petition To Intervene on behalf of himself and John Riggins. Mr. Schnabel subsequently withdrew the Petition To Intervene by letter dated August 5, 2008.

¹ The Applicant initially filed the Application with the DPP on April 18, 2007. However, the DPP declined to accept the Application for processing until various issues were addressed and/or clarified and returned the Application to the Applicant. On October 5, 2007, the Applicant also filed an application to amend Conditional Use Permit No. 72/CUP-15 that was granted for the quarrying operations. Docket No. SP73-147/Grace Pacific Corporation (Formerly Pacific Concrete & Rock Co., Ltd.)

Page 2

Findings Of Fact, Conclusions Of Law, And Decision And Order Approving With Modifications The Recommendation Of The City And County Of Honolulu Planning Commission To (1) Extend The Life Of The Makakilo Quarry Resource Extraction And Aggregate Processing Operations To 2032; And (2) Expand The Resource Extraction And Buffer Areas Of The Quarry

5. On July 18, 2008, public notice of the Planning Commission's hearing on the Application was published in the *Honolulu Star-Bulletin*.

6. On August 20, 2008, the Planning Commission conducted the hearing in the City Council Committee Meeting Room, Second Floor, 530 South King Street, Honolulu, Hawai'i. At the hearing, the Planning Commission heard and received public testimony from individuals in support of and in opposition to the Application. After due deliberation, the Planning Commission recommended approval to (1) extend the life of the Makakilo Quarry resource extraction and aggregate processing operations to 2032; and (2) expand the resource extraction and buffer areas of the quarry to the LUC, subject to 13 conditions recommended by the DPP and 1 additional condition.²

7. On September 12, 2008, the LUC received the decision and the complete record of the Planning Commission's proceedings.

8. On October 2, 2008, the LUC met in Conference Room 406, Leiopapa A Kamehameha Building, Honolulu, Hawai'i, to consider the matter.³

Douglas Ing, Esq.; Robert M. Creps; and Lee Sichter appeared on behalf of the Applicant. Ray Young appeared on behalf of the DPP. Bryan C. Yee, Esq., and Abe

² Pursuant to the recommendation of the DPP, the Planning Commission considered the Application as a new special use permit (File No. 2007/SUP-6), effectively superseding Special Use Permit No. 72/SUP-1 and its 12 conditions applicable to the quarry operations. The Planning Commission did not address the sanitary landfill operations that were also approved as part of Special Use Permit No. 72/SUP-1 nor the conditions imposed thereon.

³ Because this matter involves a previously approved LUC special use permit, the LUC is considering it as an amendment to the existing special use permit, and not a new LUC special use permit. The LUC acknowledges that there have been changes to the quarrying operations since its original approval and believes that reviewing the Application in the context in which it was filed provides an opportunity to bring the entire record in this docket current with existing uses and acreages.

Mitsuda were also present at the meeting on behalf of the State Office of Planning (“OP”). Pursuant to section 92-3, HRS, the LUC heard and received public testimony from several individuals.⁴ At the meeting, the Applicant provided a background of its request and clarified various matters relating to the quarry and sanitary landfill operations originally approved in the special use permit.⁵ After discussion, a motion was made and seconded to approve with modifications the recommendation of the Planning Commission to (1) extend the life of the Makakilo Quarry resource extraction and aggregate processing operations to 2032; and (2) expand the resource extraction and buffer areas of the quarry, subject to the Planning Commission’s 14 conditions and two additional conditions recommended by the LUC staff.⁶ Upon further discussion, the motion was amended and seconded to also include the amendments to Condition Numbers 1, 4, 9, 11, and 12 recommended by the LUC staff. There being a vote tally of 6 ayes, 0 nays, and 3 excused, the amended motion carried.

⁴ Providing oral and/or written testimony were Sharie Phillips-Swatek, Michael Swatek, Kurt Fevella, Patti Teruya, Warren Wegesend (on behalf of Greg Peterson), William “Buzz” Hong, Dr. Kioni Dudley, John Riggins, Jacqueline Rabang, Allan Los Banos, and Mark and Sara Schnabel. In addition, OP provided oral testimony in support of the Applicant’s request.

⁵ The Applicant also proposed an amendment to the Planning Commission’s Condition Number 4 to specifically include landscape material production as a permitted use on TMK: 9-1-16: 4 following the closure of the processing site on the parcel and an amendment to the Planning Commission’s Condition Number 5 to allow cleaning and washdown of equipment and preventive maintenance on equipment from 6:00 p.m. to 8:00 p.m., Monday to Friday, beginning January 1, 2012. Additionally, the Applicant noted that it would be necessary for the tunnel beneath the H-1 Freeway to be accessible beyond January 1, 2012, in order for the Applicant to service the utility lines that are contained within the tunnel. Upon questioning by the LUC, the DPP noted that these issues were not specifically raised during the Planning Commission’s hearing. Neither the Applicant’s proposed amendments nor the Applicant’s assertion that the use of the tunnel continue beyond January 1, 2012, were included as part of the LUC’s approval of the recommendation of the Planning Commission. The LUC determined that they are matters that should go back to the Planning Commission for further consideration.

⁶ Condition Number 15 specifies the uses that shall occur in the quarry excavation area and Condition Number 16 requires the Applicant to establish the quarry expansion in substantial compliance with the representations to the LUC. The Applicant, the DPP, and OP had no objections to these additional conditions.

DESCRIPTION OF THE PROPERTY

9. The Makakilo Quarry is located at Pu`u Makakilo, `Ewa, O`ahu, Hawai`i. The existing quarry, including the berming and buffer areas, and the proposed expansion areas are located on Tax Map Keys ("TMKs"): 9-2-03: por. 74 and por. 82, while the processing site and a portion of the tunnel are located on TMK: 9-1-16: 4 (a portion of the tunnel is also located beneath the H-1 Freeway and is not assigned a TMK parcel) (collectively "Property").⁷ The Property consists of approximately 541.5 acres.

10. The Property is located within the State Land Use Agricultural District.

11. The `Ewa Development Plan designates the Property as Low and Medium Density Residential, Golf Course, Agricultural and Preservation, and Highway. The Property is further designated within the Urban Growth Boundary.

⁷ An existing 1.4-acre offsite stilling basin on TMK: 9-1-16: por. 108 related to the quarrying operations is not included herein as it will be abandoned and was not originally included in the special use permit.

As part of the Planning Commission's recommendation, an approximately 1.5-acre portion of an access road, owned by D.R. Horton-Schuler Homes, LLC ("Horton-Schuler"), and located on TMK: 9-2-02: por. 6, was included in the special use permit area. Since the Applicant had not included this access road in its request, there is no written authorization from Horton-Schuler in the record consenting to its inclusion. At the October 2, 2008, meeting, the Applicant clarified that it did not include that portion of the access road on TMK: 9-2-02: por. 6 in its request because the Applicant only has a non-exclusive easement for the use of that road. Others who utilize the Horton-Schuler lands also have access to the road and the Applicant reserved the right to dedicate further access to others for use of the road. According to the Applicant, farmers and ranchers currently utilize the road. Based on the Applicant's explanation for excluding the road from its request, the DPP stated that it had no objections to the road's exclusion. The Applicant also provided the LUC with Table 1 which clarified the approximate acreages of the existing quarry operations and the proposed expansion area. The DPP had no objections to the acreages as clarified by the Applicant in Table 1. In response to the DPP's concerns about possible encroachment upon State and U. S. Navy lands by uses associated with the processing site, the Applicant stated that it removed the stockpiled material in question from the area along the H-1 Freeway and will survey the area near the U. S. Navy well located to the north and east of the processing site. The Applicant represented that if there is any encroachment in this area by uses associated with the processing site, the Applicant will remove it.

12. The City and County zones TMK: 9-2-03: 74 and 82 as AG-2 General Agricultural District and TMK: 9-1-16: 4 as AG-1 Restricted Agricultural District.

13. Puu Makakilo, Inc. ("PMI"), a wholly-owned subsidiary of the Applicant, owns TMK: 9-2-03: 74, while the James Campbell Company LLC ("JCC") owns TMKs: 9-2-03: 82 and 9-1-16: 4. JCC licenses TMK: 9-2-03: 82 to the Applicant through a license agreement that expires in 2017. The Applicant has negotiated with JCC for an extension of the license to 2032. JCC leases TMK: 9-1-16: 4 to the Applicant through a lease agreement that expires in 2017. The Applicant has similarly negotiated with JCC for an extension of the lease to 2032.

14. The State of Hawai'i owns the tunnel under the H-1 Freeway. The State granted Easement 748 to Pacific Concrete, the predecessor to the Applicant herein, dated October 2, 1973. The term of the easement is for 65 years.

BACKGROUND OF THE MAKAKILO QUARRY

15. On February 28, 1973, the Planning Commission under File No. 72/SUP-1 considered and recommended approval of Pacific Concrete's special use permit application for rock quarrying operations on the southeastern slopes of Pu'u Makakilo to produce basalt aggregate for concrete production and road and fill rock.

16. On March 23, 1973, following receipt of the Planning Commission's record from the then Planning Department, the LUC approved Pacific Concrete's rock

quarrying operations on approximately 295 acres of land in LUC Docket No. SP73-147, subject to 12 conditions as recommended by the Planning Commission. The 295-acre site consisted of a 72-acre quarry and a 188-acre buffer area. The remaining 35 acres were reserved for the shop, office, scale, processing site, and concrete batching plant. In the same docket, the LUC also approved the establishment of sanitary landfill operations on approximately 29 acres of land at Pu`u Palailai, subject to 12 conditions that were applicable to the landfill only. The landfill has since closed.⁸

17. By Certificate of Merger issued on February 4, 1985, Pacific Concrete and Grace Brothers, Limited (“Grace Brothers”), merged and Grace Brothers acquired the quarry operation from Pacific Concrete. Grace Brothers subsequently changed its name to Grace Pacific Corporation, the Applicant herein.

18. The Applicant is the operator of the existing quarry and currently uses the quarry site for rock excavation, primary crushing and stockpiling, recycling of concrete and asphaltic pavement, support services, and open space buffer. The Applicant is also the operator of the processing site and currently uses the site for finish crushing, stockpiling of aggregate, concrete and asphaltic concrete manufacturing, maintenance activities, employee training, laboratory, and other support services.

⁸ At the October 2, 2008, meeting, the Applicant clarified that it acquired the lease for the landfill site by assignment from Pacific Concrete. The Applicant had that lease extended and is currently the lessee of the landfill site. As the lessee, the Applicant was responsible for the closure of the landfill and is responsible for the maintenance and monitoring under the closure plan approved by the State Department of Health (“DOH”) and the Environmental Protection Agency (“EPA”). The Applicant continues daily monitoring at the site and prepares and submits annual reports to the DOH for review. In 1990, the EPA released the landfill from further reporting and further action after an inspection.

19. The Applicant typically brings the raw material from the quarry via the tunnel to the processing site for subsequent processing into aggregates for sale or for the production of hot-mix asphalt ("HMA") and ready-mix concrete. The Applicant operates the HMA plant on the site, while Hawaiian Cement operates the ready-mix concrete plant.

20. The quarry and processing site currently operate primarily during the hours of 6:00 a.m. to 6:00 p.m. with recycling ending at 11:00 p.m., Monday through Saturday. Night operations at the recycling facility for receiving and processing cold-planned asphalt from City and County and State road paving jobs and at the existing HMA plant occur about 160 nights of the year and operate as late as 1:00 a.m.

DESCRIPTION OF PROPOSED USE

21. The Applicant proposes to (1) extend the life of the Makakilo Quarry resource extraction and aggregate processing operations to 2032; and (2) expand the resource extraction and buffer areas of the quarry. The expansion of the quarry entails the excavation of rock from the upper slopes of Pu`u Makakilo.

22. The Applicant plans to excavate as deep as 200 to 250 feet below the existing grade to maximize extraction of known basaltic reserves. The Applicant intends to establish berming and landscaping along the perimeter of the lower half of the quarry pit in the first phase (2009 to 2012). It is anticipated that mining activities will continue in the existing pit floor. During the second phase (2013 to 2017), the

Applicant plans to undertake berming and landscaping of the upper half of the quarry, with excavation continuing in the mid-section of the quarry. Excavation of the remaining portions of the quarry are expected in the third to fifth phases, with final grades at the upper most portion of the Pu`u Makakilo completed by 2032. These schedules for excavation are dependent upon actual market demand and the actual phasing may differ.

23. The Applicant also proposes to relocate the industrial processing uses on the processing site located on the makai portion of the Property to either the quarry pit on the mauka portion of the Property or to the Campbell Industrial Park by December 31, 2012. The relocation will involve the re-use of existing and purchase of new equipment. The proposed 24-year time extension will allow the Applicant to amortize the costs associated with the relocation of the uses.

24. The relocation will involve the removal of the HMA plant and the ready-mix concrete plant, both of which are scheduled to be completed by June 2009. By December 2012, the finish crushing and screening plant and the maintenance shop are anticipated to be removed from the site. The HMA plant will be relocated to the Campbell Industrial Park to accommodate night operations and a new HMA plant will be constructed in the quarry pit for day operations only. All other uses except for removal and renaturalization activities are scheduled to cease within three years after receipt of approval of the Applicant's request. The Applicant also intends to landscape

the entire site within six years after receipt of approval of its request and return the land to landowner JCC by 2015.

NEED FOR THE PROPOSED USE

25. The Makakilo Quarry supplies 70 percent of the local rock production. The quarry sites at Kapa`a and Halawa supply the remaining 30 percent. The rock is used for the construction of roadways and buildings. Extracting rock at the Makakilo Quarry is more economically feasible than importing rock from other quarries on the island of O`ahu or from sites that are located off-island. If the Makakilo Quarry is closed, rock from other quarries would need to be dramatically increased, possibly at higher prices because of their greater distances from the job sites that utilize concrete and base course products. The supply of rock from other quarries on the island may also not be sufficient to economically replace the Makakilo Quarry and may not be established in a timely manner to meet the demand from the construction industry.

26. With the expansion of the quarry, the Applicant proposes to supply approximately 500,000 tons of A-Grade rock and 600,000 tons of B-Grade rock annually for the next 24 years to meet the demand.

IMPACTS UPON THE RESOURCES OF THE AREA

Agricultural Resources

27. The Land Study Bureau Detailed Land Classification system classifies the existing pit and proposed expansion area as overall (master) productivity

rating class "E," the lowest agricultural productivity rating. The processing site contains soils with a productivity rating class of "A," "B," "D," and "E," with the majority of the site consisting of "A" and "B" rated soils.

28. The Agricultural Lands of Importance to the State of Hawai'i ("ALISH") classification system classifies a small portion of the pit expansion as "Other Important Agricultural Land." Most of the remaining quarry site comprised by the buffer areas is not rated under the ALISH system. The majority of the processing site is rated "Prime Agricultural Land" and "Other Important Agricultural Land."

29. The U. S. Department of Agriculture, Soil Conservation Service, classifies the soils on the excavation expansion area as a combination of Mahana Silty Clay Loam (McD2), 12 to 20 percent slopes; Helemano Silty Clay (HLMG), 30 to 90 percent slopes; and Mahana Badland Complex (MBL). The majority of the proposed excavation expansion falls within the Mahana Badland Complex soil type. Mahana Silty Clay Loam and Helemano Silty Clay soils are used for pasture, woodland, and wildlife habitat. Mahana Badland Complex consists of Mahana soils and Badland and is used for pasture.

30. The expansion of the quarry will not adversely impact agricultural resources of the area. The suitability of the quarry site for agricultural activities is limited given the poor crop productivity ratings and the lack of readily available irrigation water. The processing site will be returned to open space and landscaping by

2012 at which time it will be available for agricultural uses should the City and County's development plan policies for 'Ewa designate the site for agriculture.

Archaeological and Historical Resources

31. A surface archaeological reconnaissance was conducted in 1988 for Finance Realty, Ltd.'s, 18-hole golf course that was proposed on the mauka portion of the Property where the expansion of the quarry is now proposed. No surface remains were found and it was concluded, with the concurrence of the State Historic Preservation Division, that subsurface testing was not needed. Based on the archaeological reconnaissance and the ongoing use of the Property, there are no known archaeological and historical resources on the Property. Therefore, it is not anticipated that the quarry expansion will adversely impact such resources.

Flora and Faunal Resources

32. A limited variety of floral species have been identified on the Property, including guinea grass (*Panicum maximum*), buffel grass, feather fingergrass (*Chloris radiata*), 'uhaloa (*Waltheria indica*), kiawe (*Prosopis pallida*), and klu (*Acacia farnesiana*). Introduced fauna such as mongoose, rat, zebra dove, common mynah, house sparrow and finch, bulbul, and Java finch are also present on the Property. There are no known endangered or threatened native species of flora and fauna on the site, and therefore the quarry expansion is not anticipated to adversely impact such species.

It is also not anticipated that the quarry expansion will adversely impact any natural habitats at Pu`u Makakilo.

Vibration and Rockfall Hazards

33. There is the potential for vibration and rockfalls as a result of blasting activities associated with quarrying operations. The Applicant regularly monitors blasting activities with a seismograph and past readings have not exceeded standards. Blasting is controlled by regulations of the Federal Bureau of Alcohol, Tobacco, Firearms, and Explosives. With the proposed expansion, drilling and blasting activities will occur further mauka from their present location. Should vibration and/or rockfalls from blasting adversely impact the surrounding property, the Applicant proposes to reduce the blast intensity by utilizing smaller drill patterns or by “double-decking” the explosives.

Air Quality and Noise

34. Area residents have expressed concerns about the noise and dust generated by the existing quarrying and related manufacturing operations. Fugitive dust emitted by the processing site equipment has been observed crossing the H-1 Freeway on several occasions. A dust plume arising out of blasting at the quarry has also been seen traveling downwind beyond the boundaries of the Property.

35. As part of the request to expand the quarry, the Applicant will cease operations at the processing site by December 31, 2012, and relocate the industrial

processing uses to either the quarry pit on the mauka portion of the Property or to the Campbell Industrial Park. This relocation is intended to mitigate the noxious impacts of the processing upon surrounding neighbors. As may be required by the DOH, the Applicant will be required to place in service additional dust control measures to control dust generation, so that no visible fugitive dust shall cross the combined boundaries of TMK: 9-2-03: 74 and 82.

36. To address noise and dust impacts on nearby residences from night operations, beginning January 1, 2012, receipt of cold-planed asphalt at the quarry site will be allowed up to 10:00 p.m., Sunday to Friday. No other night operations will be permitted.

37. The Applicant is also required to submit annual reports to the DPP and the LUC which, among other things, must include observations of fugitive dust and a report of any citizen's complaints relating to the operation along with the actions taken to ameliorate those complaints. The Applicant is further required, for the life of the extension, to establish and disclose to the community a telephone number dedicated to receiving and recording complaints relating to quarry and recycling operations.

Visual Resources

38. Pu'u Makakilo is part of the proposed Open Space and Greenways Network and is intended for preservation and enhancement as a visual landmark and as part of a significant vista from Kapolei.

39. The Applicant has excavated up to the 560-foot elevation of Pu`u Makakilo and the pit's near vertical cuts and exposed rock are visible to much of the `Ewa Plain.

40. The Applicant's Closure Grading Plan dated June 5, 2008, calls for (1) a screening berm of up to 40 feet above finish grade and extending from the quarry pit access road to an elevation of 725 feet along the northern ridgeline; (2) a smaller berm between the quarry pit and the H-1 Freeway; and (3) renaturalization of grades of the former golf course driving range located in the upper valley of Pu`u Makakilo to replicate conditions that existed prior to the mass grading for the golf course. Post-quarry operations also include the incorporation of final landforms that will have slopes no greater than 75 percent to promote long-term soil retention and landscaping. Under the plan, there are no vertical cuts, horizontal benches, or exposed rocks. The Applicant intends to implement the final closure grades as represented in its Closure Grading Plan dated June 5, 2008.

41. The Applicant is also required to provide a beneficial re-use plan for lands disturbed by its quarry operations. The plan must include planning and preparation of design and implementation scenarios for the beneficial re-use of the pit area consistent with established land use policies for the site and surrounding area.

ADEQUACY OF PUBLIC FACILITIES AND UTILITIES

Roadways

42. Farrington Highway provides access to the processing facility on the makai portion of the Property, while Palehua Road, a private paved roadway, provides access to the quarry pit. Trucks entering and exiting the quarry pit use westbound on and off-ramps at the H-1 Freeway at Palehua Road as the underpass is closed as a result of the ongoing construction of the North-South Road Interchange. Eastbound trucks exiting the quarry enter the H-1 Freeway via the westbound on-ramp and change direction at the Palailai Interchange. Upon completion of the North-South Interchange, traffic into and out of the quarry would utilize the new interchange. There are no changes anticipated to the traffic volumes generated by the quarry expansion.

Water

43. The Applicant has a well source on the processing site that is limited by the State Commission on Water Resource Management ("CWRM") to a maximum draw of 168,000 gallons per day ("gpd"). This is a private water source and is used for washing, dust control, and landscaping. The Applicant also obtains drinking water from the Board of Water Supply which has transmission mains beneath Farrington Highway. The Applicant uses an average of 27,000 gpd. Under the proposal to expand the quarry, the source and uses of water will not change.

44. The Applicant's Revegetation Matrix and Revegetation Phasing Plan assumes the availability of approximately 200,000 gpd of water for quarry and revegetation purposes. Of this amount, the Revegetation Plan targets 100,000 gpd or less for revegetation purposes. This limitation on supply serves as a constraint on the speed by which land graded for visual mitigation purposes may be revegetated. As a result, the Applicant is in the process of requesting that its current allocation of Waiahole Ditch water of 750,000 gpd be reduced and allowed to be used for existing and future revegetation and landscaping purposes on TMK: 9-2-03: 74.⁹

Drainage

45. The Applicant prepared an Engineering Report dated April 2007 that addresses drainage requirements, regrading, and revegetation upon completion of resource extraction activities. The Applicant proposes to retain all storm water runoff that drains into the quarry pit with three existing drainage basins that have been designed for a 100-year storm event. The quarry expansion is not anticipated to have adverse impacts on adjacent properties and existing drainage systems downstream of the Property. If required by the DPP, the Applicant must submit an update of the drainage plan for the DPP's review and approval as a result of modifications to the final grading and beneficial re-use plans.

⁹ Pursuant to the CWRM's Decision and Order dated July 13, 2006, PMI was assigned Water Use Permit No. 775 for 750,000 gpd of non-drinking water for the irrigation of the golf course that was proposed by Finance Realty, Ltd., and partially developed by the parcel's previous owner before being abandoned. The issuance of the permit is currently on appeal.

Wastewater

46. The quarry is not connected to the City and County wastewater collection system. The Applicant installed an Individual Wastewater System on TMK: 9-1-16: 4 in 2006 consisting of three septic tanks and a converted seepage pit which serves the restrooms at the administration building, truck scale house, and batch plants. Portable toilet facilities are provided on other areas of the site. No changes to the wastewater flows are anticipated with the expansion of the quarry.

Solid Waste

47. Solid waste generated by the quarry operations is removed by a private hauler, which will continue under the expansion of the quarry.

Police and Fire Protection

48. The Property is located within the existing service area of the Honolulu Police Department. There are no adverse impacts anticipated on police services from the proposed quarry expansion.

49. The Property is located within the existing service area of the Honolulu Fire Department. The processing facility site has four water tanks with a total capacity of 10,000 gallons. There is also a water truck available onsite with pressurized water capability and a water cannon. In addition, there are fire extinguishers located throughout the site. There are no adverse impacts anticipated on fire protection services from the proposed quarry expansion.

Electrical Service

50. Hawaiian Electric Company has a substation on the processing site and provides electrical service to the quarry.

CONCLUSIONS OF LAW

1. The LUC has jurisdiction over this matter pursuant to section 205-6, HRS, and sections 15-15-95 and 15-15-96, HAR.

2. Based upon the record of the proceedings before the Planning Commission, and pursuant to section 205-6, HRS, and sections 15-15-95 and 15-15-96, HAR, the LUC finds that the recommendation of the Planning Commission to (1) extend the life of the Makakilo Quarry resource extraction and aggregate processing operations to 2032; and (2) expand the resource extraction and buffer areas of the quarry generally meets the guidelines for determining an “unusual and reasonable” use within the State Land Use Agricultural District.

3. The use shall not be contrary to the objectives sought to be accomplished by chapters 205 and 205A, HRS, and the rules of the LUC. The expansion of the quarry on the mauka portion of the Property is not contrary to the objective of protecting land with a high capacity for intensive cultivation since the site consists of marginal agricultural land that is and will increasingly be surrounded by urban uses. Under the expansion plans, the known basaltic reserves in the expansion area will be used to supply the construction industry with A-Grade and B-Grade rock. There are no

known archaeological and historical resources on the Property. There are also no known endangered or threatened species of flora and fauna on the Property.

4. Based upon the record of the proceedings before the Planning Commission, the desired use would not adversely affect surrounding property. At the time of the establishment of the quarry, the surrounding lands consisted of sugarcane fields, open space, and pasture. However, much of these lands have since been either developed or are planned for urban development. Residents of Kapolei Villages and Kapolei Knolls, located approximately 2,000 and 1,500 feet from the quarry pit, respectively, have complained about noise, dust, and odors as a result of the existing quarrying and related manufacturing operations. The Applicant has agreed to close the processing site and to relocate all uses into the quarry pit or to the Campbell Industrial Park by December 31, 2012. To mitigate adverse visual impacts of the quarrying activities, the Applicant intends to implement its final closure grades, as identified in the June 5, 2008, grading plan. These slopes provide a more natural finish grade that will encourage long-term vegetation growth and blend with the surrounding topography of Pu`u Makakilo. The Applicant is also required to file annual reports to include, among other things, a report of any citizen's complaints relating to the operation along with the actions taken to ameliorate those complaints. The Applicant will further be required, for the life of the special use permit, to establish and disclose to the community a telephone number dedicated to receiving and recording complaints

relating to the quarrying and recycling operations. The Applicant regularly monitors blasting activities with a seismograph and past readings have not exceeded standards. With the proposed expansion, drilling and blasting will occur further mauka from the H-1 Freeway. Should vibration and/or rockfalls from blasting adversely impact the surrounding property, the Applicant proposes a reduction in blast intensity by utilizing smaller drill patterns or “double-decking” the explosives.

5. Based upon the record of the proceedings before the Planning Commission, the use would not unreasonably burden public agencies to provide facilities and services. There are no changes to the traffic volumes and the wastewater flows generated by the expansion to the quarry operations. The Applicant will be required to submit a fire protection and control plan to the Honolulu Fire Department for review.

6. Based upon the record of the proceedings before the Planning Commission, the preponderance of the evidence established that unusual conditions, trends, and needs had arisen since the district boundaries and rules were established. Approval to establish the quarry was granted in 1973 to produce basalt aggregate for concrete production and road and fill rock. At the time of the establishment of the quarry, the surrounding areas were largely undeveloped. Despite the increasing urban development in the area, there continues to be demand for the rock in the construction of roadways and buildings. However, good quality rock in the existing approved area

of the quarry has been depleted, and at this time, there are no reasonable alternatives on the island that can be timely established to provide quality rock that is economical, reliable, and meets construction standards. With the expansion of the quarry, the Applicant proposes to supply approximately 500,000 tons of A-Grade rock and 600,000 tons of B-Grade rock annually for the next 24 years to meet the demand.

7. Based upon the record of the proceedings before the Planning Commission, the land upon which the proposed use is sought is unsuited for the uses permitted within the district. The expansion and extension of the quarry will not have an adverse impact on agricultural resources. The quarry expansion involves marginal agricultural land and irrigation water is not readily available. There are no current plans to use the site for any agricultural activity. The uses on the processing site, the majority of which consists of "Prime Agricultural Land" and "Other Important Agricultural Land," will be relocated and the site will be returned to landscaped open space uses. At that time, the site will be available for agricultural uses should the City and County's development plan policies for `Ewa designate the site for agriculture.

8. Any of the proposed findings of fact or conclusions of law submitted by any of the parties not already ruled on by the LUC by adoption or rejected by clearly contrary findings of fact or conclusions of law are hereby denied and rejected. Any conclusion of law that is or should be a finding of fact is to be taken as such notwithstanding its denomination as a conclusion of law; any finding of fact that is or

should be a conclusion of law is to be taken as such notwithstanding its denomination as a finding of fact.

DECISION AND ORDER

Having duly considered the complete record in this matter, the oral arguments presented by the parties in this proceeding, the LUC, through an amended motion having been duly made at a meeting conducted on October 2, 2008, in Honolulu, Hawai`i, and the amended motion having received the affirmative votes required by section 15-15-13, HAR, and there being good cause for the amended motion, hereby APPROVES with modifications the recommendation of the Planning Commission to (1) extend the life of the Makakilo Quarry resource extraction and aggregate processing operations to 2032; and (2) expand the resource extraction and buffer areas of the quarry on the Property for a total special use permit area in this docket of approximately 541.5 acres of land within the State Land Use Agricultural District at Pu`u Makakilo, `Ewa, O`ahu, Hawai`i, identified as TMKs: 9-1-16: 4 and 9-2-03: por. 74 and por. 82,¹⁰ and approximately shown on Exhibit B and described in Table 1, attached hereto and incorporated by reference herein, subject to the following conditions to replace all other conditions imposed by the LUC on March 23, 1973, in this docket that are applicable to the rock quarrying operations:

1. Within six (6) months of the Land Use Commission's Decision and

¹⁰ The approximately 541.5 acres of land also includes that portion of the tunnel located beneath the H-1 Freeway, which is not assigned a TMK parcel.

Order approving the Special Use Permit, the Applicant shall submit:

- a. A new site plan with metes and bounds map and description delineating the approximately 541-acre Property, including the boundaries of the quarry excavation and berming areas, the processing site and conveyor tunnel, and the buffer area to the Director of Planning and Permitting for review and approval. The site plan shall also be submitted to the Land Use Commission.
- b. A fire protection and control plan to Honolulu Fire Department for review and approval. A copy of the approved plan shall be submitted to the Director of Planning and Permitting within 30 days of approval.

2. Within one (1) year of the Land Use Commission's Decision and

Order approving the Special Use Permit, the Applicant shall submit to the Director of Planning and Permitting for review and approval a renaturalization plan in coordination with the proposed Closure Grading Plan for the quarry site and buffer area mauka of the H-1 Freeway showing landscaping details including plant types, sizing and spacing, irrigation facilities and distribution systems.

3. All resource extraction, related aggregate processing and concrete and asphalt production activities, including recycling activities shall cease by December 31, 2032. Final beneficial re-use plans as approved by the Department of Planning and Permitting shall be implemented immediately upon the cessation of said resource extraction and related quarrying activities.

4. The Applicant shall close the processing site on Parcel 4 by relocating all uses on the site into the quarry pit or Campbell Industrial Park by

December 31, 2012, and Parcel 4 shall be returned to landscaped open space use within six (6) years of the date of the Land Use Commission's Decision and Order. A

landscape plan shall be submitted to the Director of Planning and Permitting for review and approval on the second anniversary date of the Land Use Commission's Decision and Order and the approved landscape plan shall be implemented within one (1) year of its approval. Landscaping shall be maintained in a natural state for the life of the Special Use Permit.

5. Beginning January 1, 2012, quarry operations shall be limited to the following days/hours:

- a. Quarry excavation, crushing, stockpiling, equipment maintenance, and recycling facility – 6:00 a.m. to 6:00 p.m., Monday to Saturday.
- b. Hot-mix asphalt plant – 6:00 a.m. to 6:00 p.m., Monday to Friday.
- c. Unloading of cold-planed asphaltic concrete during re-paving jobs – 6:00 p.m. to 10:00 p.m., Sunday to Friday.

6. Except for quarry, recycling activities in the quarry, and renaturalization activities, the remainder of Tax Map Key: 9-2-03: 74 shall remain in open space buffer for the life of the quarry and related activities. Minor accessory uses or structures may be permitted on Parcel 74 with the express written consent of the Director of Planning and Permitting. Any other uses shall be processed pursuant to Section 205-6, Hawai'i Revised Statutes.

7. As may be required by the State Department of Health, the Applicant shall place in service additional dust control measures to control dust generation at the project such that no visible fugitive dust shall cross the combined property boundaries of Tax Map Key: 9-2-03: 74 and 82.

8. The Applicant shall, as a result of modifications to the final grading and beneficial re-use plans, submit an update of the drainage plan, prepared by a qualified civil engineer, as may be required by the Director of Planning and Permitting for review and approval.

9. On each anniversary date of the Land Use Commission's Decision and Order, the Applicant or its successor shall file with the Department of Planning and Permitting and the Land Use Commission a report and supporting documentation demonstrating the status of compliance with each of the conditions of the Special Use Permit approval. Included in the supporting documentation shall be an updated rectified aerial imagery of the quarry, buffer area and processing site and dust control management plan. The following items shall also be a part of the supporting documentation:

- a. Observations of fugitive dust.
- b. A report on replanting activities, including the areas replanted, and the type of vegetation planted.
- c. A report of any citizen's complaints relating to the operation along with the actions taken to ameliorate those complaints.

The Director may present its analysis and recommendations on the annual report to the Planning Commission and the State Department of Health for further action pursuant to the Rules of the Planning Commission.

10. The Applicant shall provide a beneficial re-use plan for lands disturbed by its quarry operations. The plan shall include planning and preparation of design and implementation scenarios for the beneficial re-use of the pit area consistent with established land use policies for the site and surrounding area. The re-use planning document and accompanying scenarios and drawings shall be submitted to the Department of Planning and Permitting, for review and approval within the fifth (5th) year after the date of the Land Use Commission's Decision and Order approving this expansion. An updated re-use plan shall be submitted to the DPP for review and approval every five (5) years thereafter. The beneficial re-use planning and design document shall be an ongoing document prepared by a professional qualified in re-use planning and contain objectives, implementation and funding strategies for reclamation of the pit area for the purpose of achieving the area's long term land use policies. The Applicant will update the plan, as may be required by the Director of Planning and Permitting, to respond appropriately to any changes in the surrounding area's land use policies.

The beneficial re-use plan shall include at least one public access across

Tax Map Key: 9-2-03: 74, connecting Tax Map Key: 9-2-03: 81 and the extension of

Makakilo Drive, across the project in which safe pedestrian/bicycling passage can be established. Access requirements, such as but not limited to, subdivision, nature of improvements, routing, hours accessible, shall be established as part of the final beneficial re-use plan. Suggested routing of the public access is shown on Exhibit A.

11. Approval of this Special Use Permit does not constitute compliance with other land use ordinances or governmental agencies' requirements. They are subject to separate review and approval. The Applicant shall be responsible for insuring that the final plans for the project approved under this permit comply with all applicable provisions of the Land Use Ordinance and other governmental agencies' provisions and requirements.

12. The Applicant and/or landowner shall notify the Director of Planning and Permitting and the Land Use Commission of any changes in uses on the Property; termination of any uses on the Property; and/or transfer in ownership of the Property or any uses on the Property. The Planning Commission shall then, in consultation with the Director of Planning and Permitting, determine the appropriate disposition of this Special Use Permit and facilities.

13. In the event of noncompliance with any of the conditions set forth herein, the Director of Planning and Permitting may terminate all uses approved under this Special Use Permit or the Director may declare this Special Use Permit null and void or seek available civil procedures to enforce compliance.

14. The Applicant shall, for the life of the Special Use Permit, establish and disclose to the community, a telephone number dedicated to receiving and recording complaints relating to quarry and recycling operations. A continuous volume of complaints shall warrant reconsideration of the Special Use Permit by the Planning Commission.

15. The uses in the quarry excavation area shall be limited to rock excavation, crushing, stockpiling, a new hot-mix asphalt plant, recycling of concrete rubble, glass, and asphaltic concrete pavement, equipment maintenance, employee support, parking, administration, and a water well and pump. No other uses shall be permitted without the approval of the Land Use Commission.

16. The Applicant shall establish the quarry expansion in substantial compliance with the representations made to the Land Use Commission in obtaining the Land Use Commission Special Use Permit. Failure to do so may result in the revocation of the permit.

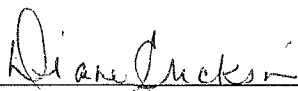
IT IS FURTHER ORDERED that the conditions imposed by the LUC on March 23, 1973, in this docket that are applicable to the sanitary landfill operations shall remain in full force and effect.

ADOPTION OF ORDER

The undersigned Commissioners, being familiar with the record and proceedings, hereby adopt and approve the foregoing ORDER this 6th day of November, 2008. This ORDER and its ADOPTION shall take effect upon the date this ORDER is certified and filed by this Commission.

Done at Honolulu, Hawai'i, this 6th day of November, 2008, per motion on Nov. 6, 2008.

APPROVED AS TO FORM


Deputy Attorney General

LAND USE COMMISSION
STATE OF HAWAII


DUANE KANUHA
Chairperson and Commissioner

ABSENT
RANSOM PILTZ
Vice-Chairperson and Commissioner


VLADIMIR PAUL DEVENS
Vice-Chairperson and Commissioner

ABSENT
KYLE CHOCK
Commissioner

ABSENT
THOMAS CONTRADES
Commissioner

Lisa M. Judge
LISA M. JUDGE
Commissioner

[Signature]
NORMAND LEZY
Commissioner

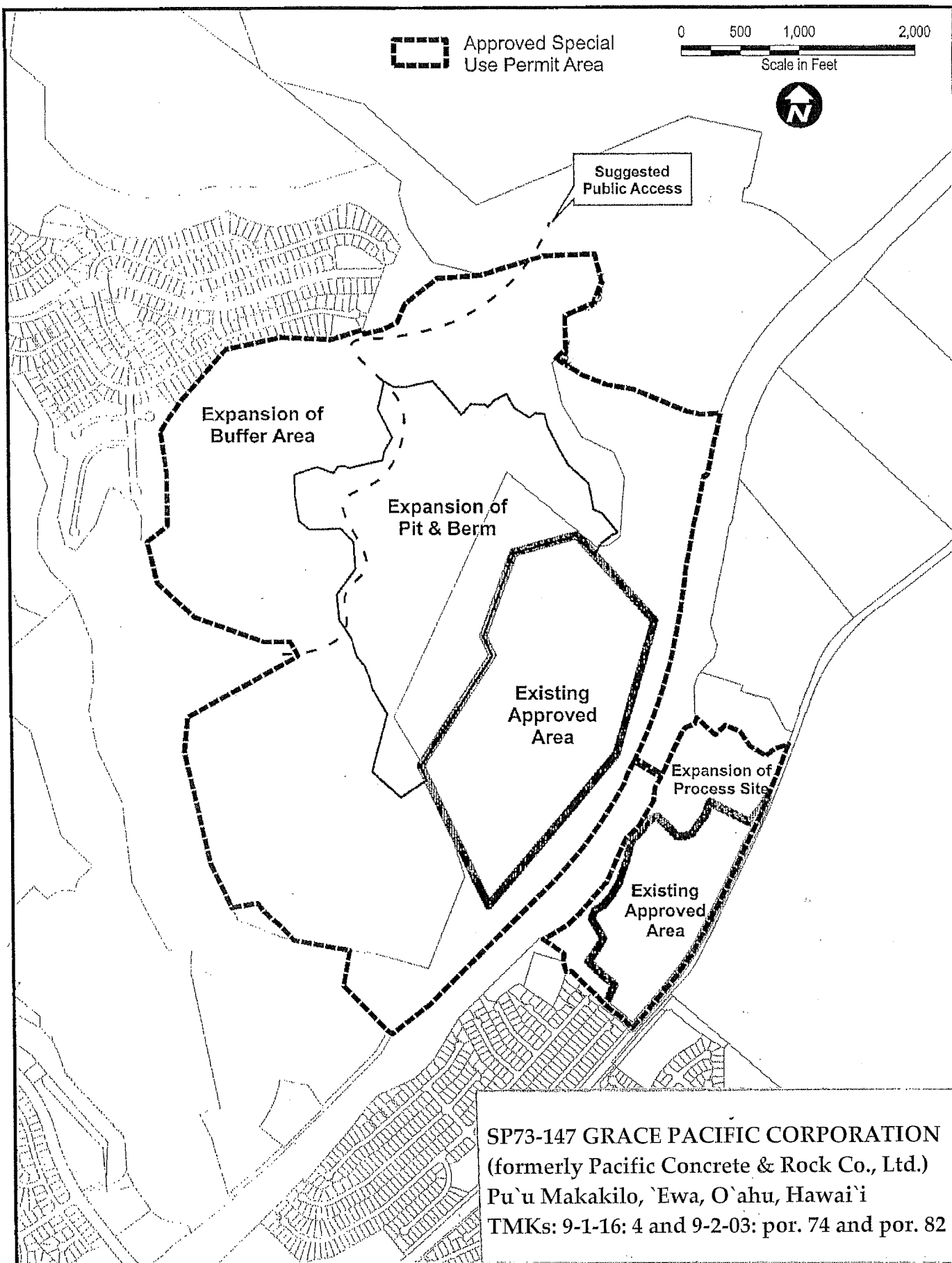
[Signature]
NICHOLAS W. TEVES, JR.
Commissioner

[Signature]
REUBEN S.F. WONG
Commissioner

Filed and effective on: November 7, 2008

Certified by:

[Signature]
ORLANDO DAVIDSON
Executive Officer



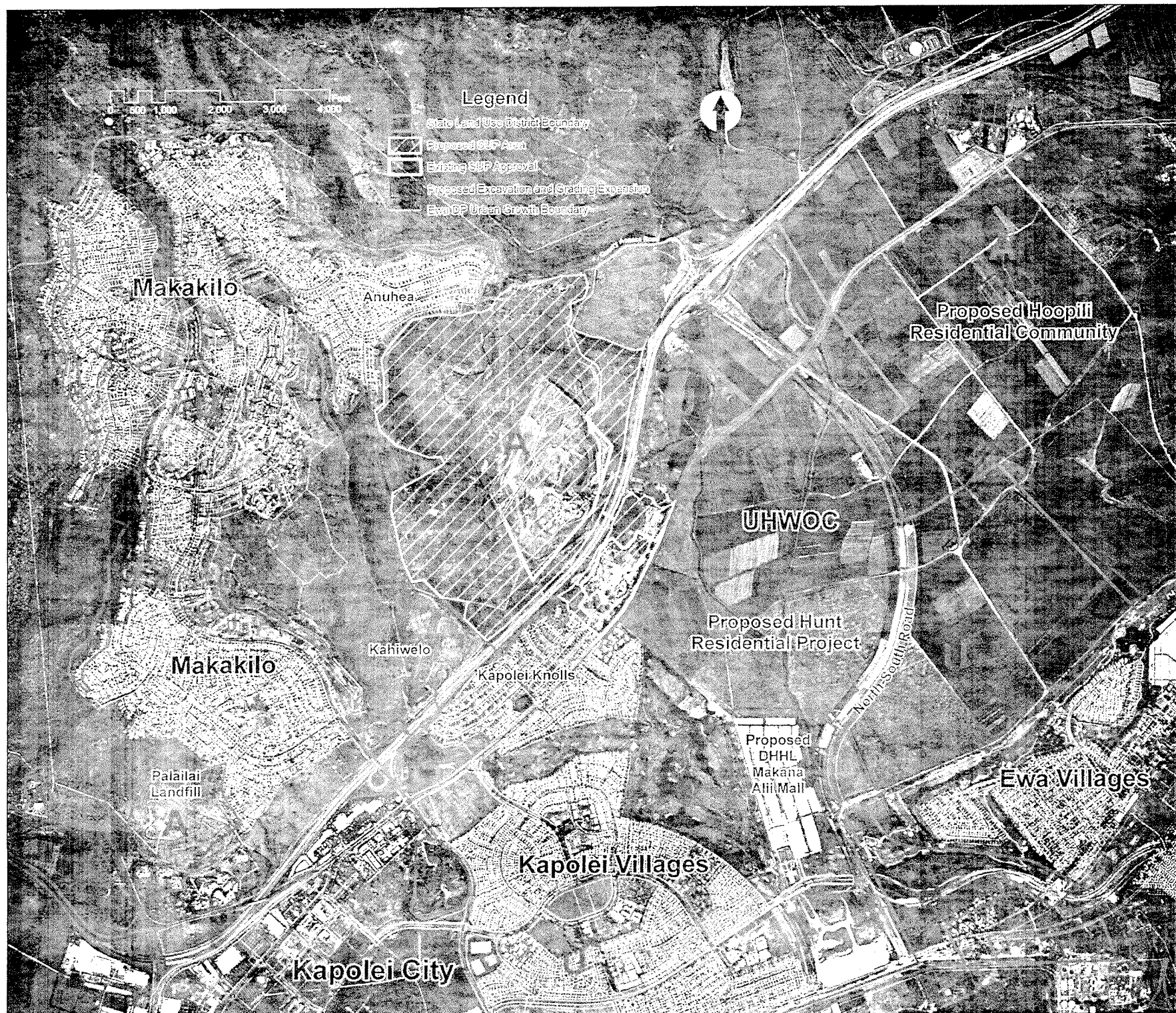


Table 1

Acreage of Existing Quarry and Proposed Expansion Areas

Description of Area	Existing Acreage	Proposed Additional Acreage	Total	TMKs Affected
Quarry Excavation & Berming (including landscaping and grading)	78.4	105.8 (including 20.6 acres of quarry expansion & 44 acres of landscaping and grading in Parcel 74 and 41.2 acres in Parcel 82)	184.2	9-2-03: por. 74 & por. 82
Processing Site & Conveyor Tunnel	54.6 (comprising 53.6 Parcel 4, 0.6 flag-strip connecting to Parcel 10, 0.3 road remnant, and 0.1 tunnel)	0.00	54.6	9-1-16: 4
Buffer Area Surrounding Quarry (Passive Open Space)	188.0	114.7	302.7	9-2-03: por. 74 & por. 82
Offsite Stilling Basin (to be abandoned)	1.4	(1.4)	0.00	9-1-16: por. 108
Access Road	0.00	0.00	0.00	9-2-02: por. 6
Total	322.4	219.1	541.5	

BEFORE THE LAND USE COMMISSION

OF THE STATE OF HAWAII

In The Matter Of The Application Of	)	DOCKET NO. SP73-147
)	
GRACE PACIFIC CORPORATION	)	CERTIFICATE OF SERVICE
(Formerly Pacific Concrete & Rock Co.,)	
Ltd.))	
)	
To Extend The Life Of The Makakilo)	
Quarry Resource Extraction And)	
Aggregate Processing Operations To)	
2032 And To Expand The Resource)	
Extraction And Buffer Areas Of The)	
Quarry On Approximately 541.5 Acres)	
Of Land Within The State Land Use)	
Agricultural District At Pu`u Makakilo,)	
`Ewa, O`ahu, Hawai`i, Tax Map Keys:)	
9-1-16: 4 And 9-2-03: Por. 74 And Por. 82)	
_____)	

CERTIFICATE OF SERVICE

I hereby certify that a certified copy of the FINDINGS OF FACT, CONCLUSIONS OF LAW, AND DECISION AND ORDER APPROVING WITH MODIFICATIONS THE RECOMMENDATION OF THE CITY AND COUNTY OF HONOLULU PLANNING COMMISSION TO (1) EXTEND THE LIFE OF THE MAKAKILO QUARRY RESOURCE EXTRACTION AND AGGREGATE PROCESSING OPERATIONS TO 2032; AND (2) EXPAND THE RESOURCE EXTRACTION AND BUFFER AREAS OF THE QUARRY was served upon the following by either hand delivery or depositing the same in the U. S. Postal Service by regular or certified mail as noted:

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	Honolulu, Hawai'i 96804-2359

BRYAN C. YEE, Esq.
Deputy Attorney General
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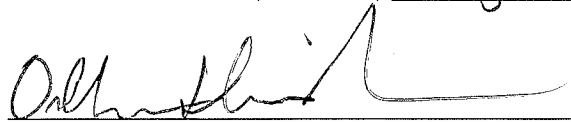
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Attorney for City and County of Honolulu

DATED: Honolulu, Hawai'i, Nov. 7 2008

A handwritten signature in dark ink, appearing to read "Orlando Davidson", is written over a horizontal line.

ORLANDO DAVIDSON
Executive Officer