



UNIVERSITY OF HAWAII

SENIOR VICE PRESIDENT, UNIVERSITY OF HAWAII  
AND CHANCELLOR FOR COMMUNITY COLLEGES

February 1, 1999

OFFICE OF ENVIRONMENTAL  
QUALITY CONTROL  
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RECEIVED

Mr. Gary Gill  
Interim Director  
State of Hawai'i  
Department of Health  
Office of Environmental Quality Control  
235 S. Beretania Street, Suite 702  
Honolulu, Hawai'i 96813

SUBJECT: Finding of No Significant Impact (FONSI) for the Leeward Community  
College Long Range Development Plan (TMK: 9-6-3: 48)

Dear Mr. Gill:

The Office of the Chancellor for Community Colleges, University of Hawai'i, as accepting authority, has reviewed the comments received during the 30-day public comment period which began on September 8, 1998. The Office of the Chancellor has determined that this project will not have a significant environmental effect and has issued a FONSI. Please publish the notice of availability for this project in the February 8, 1998 OEQC Bulletin.

Enclosed please find:

- Four (4) copies of the Leeward Community College Long Range Development Plan Environmental Assessment.
- A completed OEQC Document Publication form.
- Distribution list for the Final Environmental Assessment

Should you have any questions, please contact Maynard G. P. Young at phone 734-9771.

Sincerely,

Joyce S. Tsunoda  
Senior Vice President, University of Hawai'i  
and Chancellor for Community Colleges

JST:MY:ikt  
Enclosures

cc: Maynard Young  
George Atta, Group 70 International

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**\* LEEWARD COMMUNITY COLLEGE  
LONG RANGE DEVELOPMENT PLAN**

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**Final Environmental Assessment**

**Applicant:**

University of Hawaii - Community Colleges  
Physical Facilities Planning and Construction office

**Accepting Authority:**

University of Hawaii - Community Colleges  
Office of the Chancellor

**March 1999**



Group 70 International • Architecture • Planning • Interior Design • Environmental Services • Building Diagnostics  
925 Bethel Street, Fifth Floor • Honolulu, Hawaii 96813 • Phone (808) 523-5866 FAX (808) 523-5874

**Leeward Community College  
Long Range Development Plan**

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Pearl City, Island of Oahu, Hawaii

**Final  
Environmental Assessment**

This environmental document is prepared pursuant to Chapter 200 of Title 11,  
Administrative Rules, Department of Health, "Environmental Impact Statement Rules."

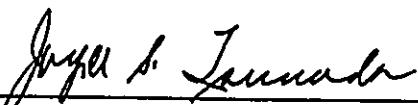
**Applicant:**

University of Hawaii - Community Colleges  
Physical Facilities Planning and Construction Office  
4303 Diamond Head Road  
Honolulu, Hawaii 96816

**Accepting Authority:**

University of Hawaii - Community Colleges  
Office of the Chancellor

Responsible  
Official:

  
\_\_\_\_\_  
Joyce S. Tsunoda, Ph. D., Senior Vice President  
Chancellor of Community Colleges

2/11/99  
Date

**Prepared By:**  
Group 70 International, Inc.  
Architecture • Planning • Interior Design • Environmental Services  
925 Bethel Street, 5<sup>th</sup> Floor  
Honolulu, Hawaii 96813

**January 1999**

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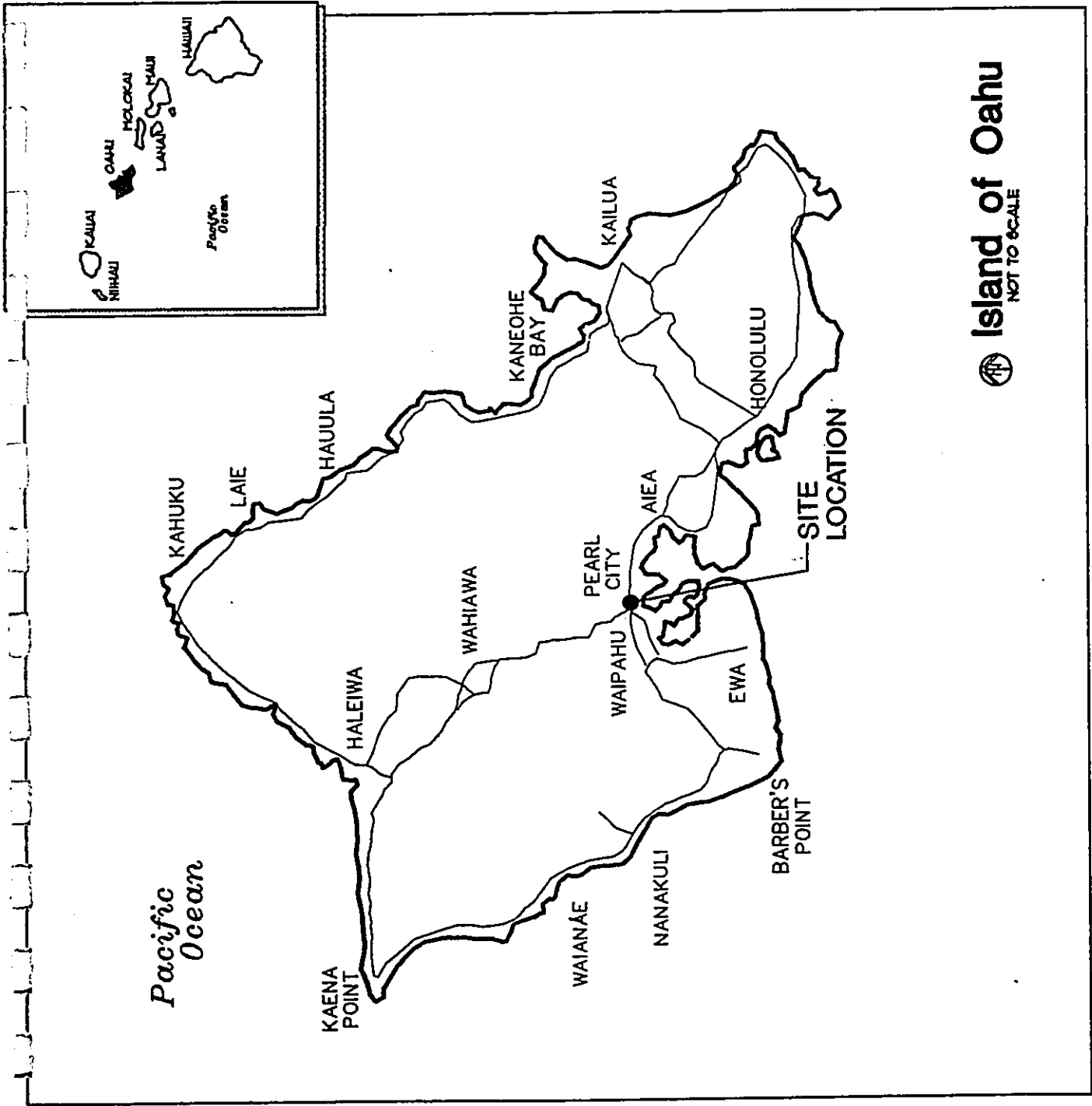
## 1.0 INTRODUCTION

This Environmental Assessment (EA) has been prepared in accordance with the requirements of Chapter 343, HRS and Hawaii Administrative Rules, Title 11, Department of Health, as the proposed action involves the use of State lands and funds.

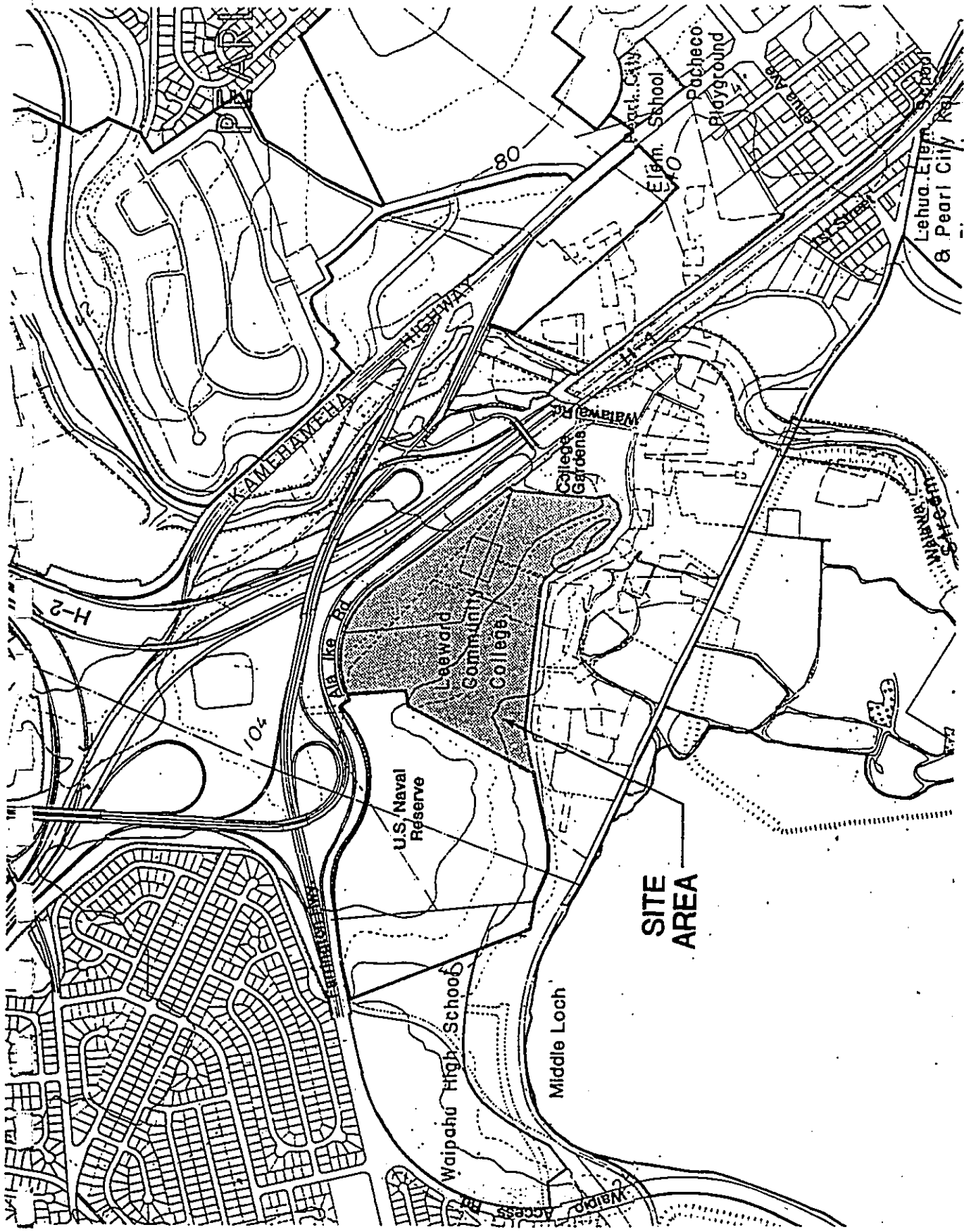
### 1.1 PROJECT INFORMATION SUMMARY

<u>Applicant:</u>	University of Hawaii Facilities Planning Office for Community Colleges Kapiolani Community College - Manele Building 4303 Diamond Head Road Honolulu, Hawaii 96816 Contact: Maynard Young, Director - Facilities Planning Telephone: 808-734-9771 Fax: 808-734-9430
<u>Agent:</u>	Group 70 International, Inc. 925 Bethel Street, Fifth Floor Honolulu, Hawaii 96813 Contact: George Atta, AICP Telephone: 808-523-5866 Fax: 808-523-5874
<u>Accepting Authority:</u>	State of Hawaii, University of Hawaii Community Colleges - Office of the Chancellor
<u>Project Location:</u>	Waiawa, Oahu, Hawaii (Figures 1-1 and 1-2)
<u>Tax Map Key:</u>	9-6-3:48
<u>Landowner:</u>	State of Hawaii
<u>Land Area:</u>	49.551 acres
<u>State Land Use District:</u>	Urban
<u>Development Plan Public Facilities:</u>	Community College
<u>Zoning:</u>	General Agricultural District (AG-2)
<u>Special Management Area:</u>	The Leeward Community College Campus is not within the Special Management Area.





Vicinity Map  
 Leeward Community College Master Plan  
 Figure 1-1



Site Area Location Map

Leeward Community College Master Plan

Figure 1-2

## 1.2 OVERVIEW OF THE PROPOSED ACTION

Leeward Community College has been serving the Leeward community since it first opened in 1968. Construction of facilities at the Pearl City campus continued through the 1970s and ended with the completion of the Automotive Technology facility in 1979. As construction ceased, LCC's program offerings and student enrollment continued to grow, resulting in crowded conditions at the campus. In an effort to meet the future needs of this continually growing and changing region, the Leeward Community College Long Range Development Plan (LRDP) was prepared and approved by the University of Hawaii Board of Regents in 1996. The master planning process is depicted in Figure 1-3.

The Long Range Development Plan for the College, which was adopted by the University of Hawaii Board of Regents in January 1996, is designed to meet the space and functional needs of individual programs and the larger LCC campus as a whole. Based on current and proposed program offerings, and an enrollment of 5,000 full-time equivalent (FTE) students, approximately 375,000 SF of new construction (new and expanded buildings) is recommended. This added space will roughly double the building area at the campus.

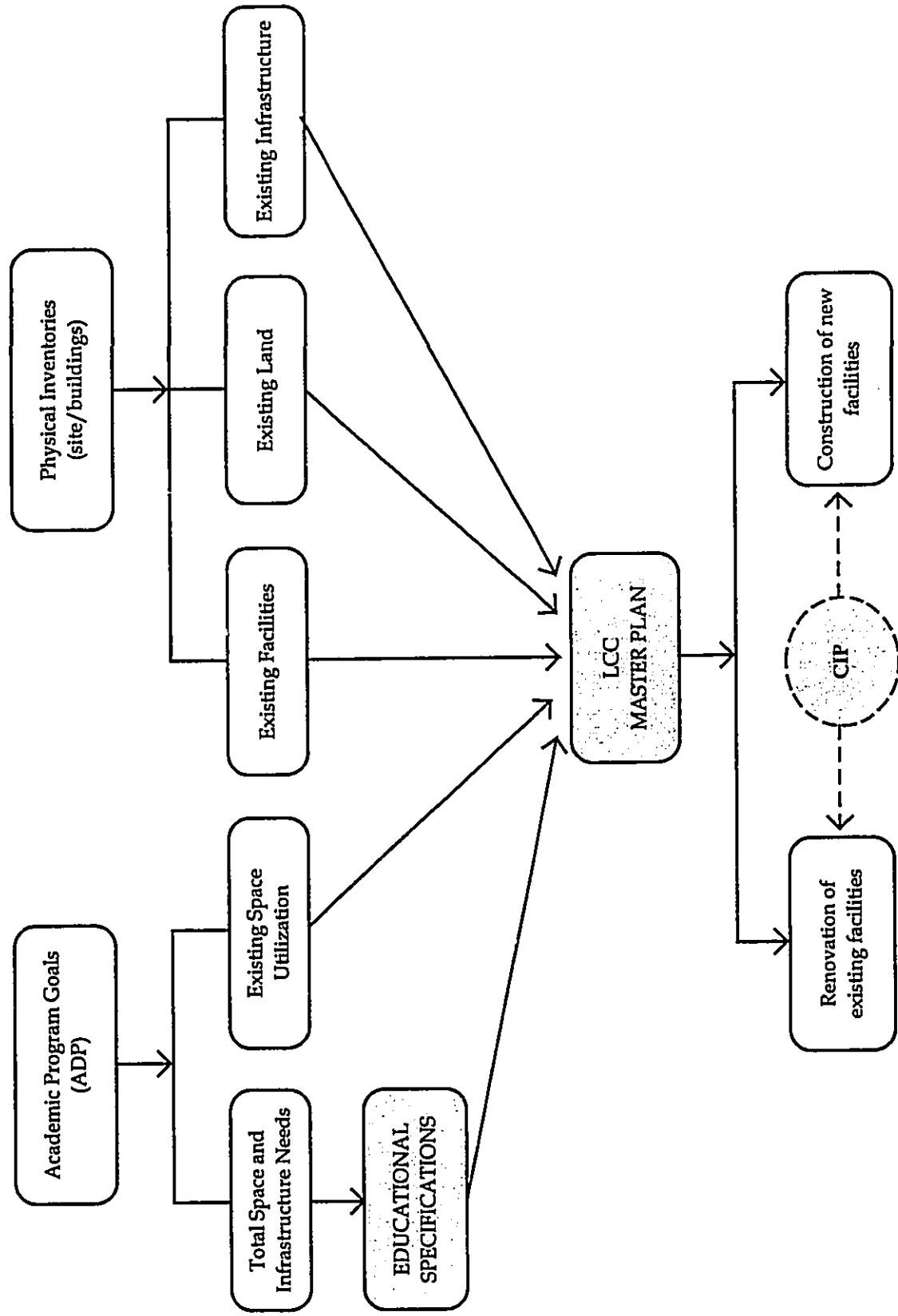
The implementation of the Long Range Development Plan is recommended in six phases. Prior to new building construction, a total of 28 portable classrooms have been relocated from Kapiolani Community College to the Leeward campus. These temporary facilities are utilized by the University of Hawaii - West Oahu (UHWO). Once the permanent UHWO campus is developed near Kapolei, Leeward Community College will inhabit the portable classrooms until funding is available for construction of the first classroom facilities proposed in the LCC Long Range Development Plan.

New facilities are proposed for Art & Humanities, Social Science, Business Education, Language Arts, Health Sciences, and Math & Science programs. A Media & Arts Instructional Center will be designed and the Theater expanded to enhance the fine arts program at the College. In addition to new facilities, significant expansions to the Library, Student Center and Automotive Technology buildings are proposed. Construction of a new parking structure and re-striping of the main parking lot is recommended to provide needed parking for students and staff.

The east side of the campus, because of its proximity to the Theater, is recommended for Arts & Humanities, Social Studies, Language Arts, and Business Education programs. The west side of the campus is recommended for expansion of Math & Science and vocational facilities. The Library, providing services to students and faculty throughout the campus, will be expanded at its current location. Facilities proposed for the lower campus include an astronomy observatory and park-like green space for passive and active recreation.

Several infrastructure issues are also addressed in the Long Range Development Plan. Based on available pressure and existing line sizes, improvements should be made to LCC's water system so that it meets current Board of Water Supply fire protection standards.

Figure 1-3 Leeward Community College Master Planning Process Diagram



## LEEWARD COMMUNITY COLLEGE LONG RANGE DEVELOPMENT PLAN

In addition to fire flow requirements, vehicular access to the College is another important issue. The single road accessing the Leeward Community College campus becomes severely congested at peak periods during the day, often resulting in long delays. This daily inconvenience could become a significant obstacle in the event of an emergency such as a fire, broken water main, or major car accident. While a secondary access route is not essential to the implementation of the Long Range Development Plan, a secondary access road should be developed to improve emergency egress from the campus. In addition to other roadway improvements which are discussed further in Section 3.0, expansion of the existing Waiawa Road H-1 bridge overpass to four lanes is recommended to improve access to and from the campus.

### **1.3 AGENCIES CONTACTED IN PRE-CONSULTATION**

Listed below are the agencies and organizations consulted in the preparation of the Long Range Development Plan and this Draft Environmental Assessment. The Office of the Governor is the accepting authority for this proposed action.

#### FEDERAL AGENCIES

U.S. Army Corps of Engineers  
U.S. Navy

#### STATE AGENCIES

Department of Education  
Department of Health  
Department of Land and Natural Resources  
Department of Transportation  
University of Hawaii, Board of Regents  
University of Hawaii, Leeward Community College  
University of Hawaii, Facilities Planning Office for Community Colleges  
University of Hawaii, Facilities Planning and Management Office  
University of Hawaii, West Oahu

#### COUNTY AGENCIES

Board of Water Supply  
Department of Land Utilization  
Department of Public Works  
Department of Transportation Services  
Department of Wastewater Management  
Fire Department  
Planning Department  
Police Department

#### ORGANIZATIONS

BHP Gas Company  
GTE Hawaiian Tel  
Hawaiian Electric Company  
Oahu Metropolitan Planning Organization  
Oceanic Cable

## LEEWARD COMMUNITY COLLEGE LONG RANGE DEVELOPMENT PLAN

### **1.4 CONTENTS OF THE FINAL ENVIRONMENTAL ASSESSMENT**

The Environmental Assessment (EA) evaluates the potential impacts of the Long Range Development Plan on the natural and human environment. This document is presented in six sections. Section 1.0 contains the introduction and project overview. Section 2.0 describes the proposed project. Section 3.0 addresses the environmental, social and economic setting of the proposed project along with imitative measures. Alternatives to the proposed Long Range Development Plan are presented in Section 4.0. A review of the appropriate existing State and County policies and plans is contained in Section 5.0. Section 6.0 contains a statement of anticipated determination, findings and reasons supporting the anticipated determination.

Section 2.0  

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Project Description

## 2.0 PROJECT AND AREA DESCRIPTION

### 2.1 DESCRIPTION OF THE PROJECT AREA

Leeward Community College (LCC) is located in Waiawa on the island of Oahu. The site is situated between the communities of Pearl City, Waipio Gentry/Waikele and Waipahu and adjacent to the interchange of H-1, H-2, Farrington Highway and Kamehameha Highway. It is just *mauka* of the upper Pearl Harbor Middle Loch shoreline and west of the Waiawa Stream outlet. The site is bounded on the north by the H-1, H-2, Farrington Highway and Kamehameha Highway interchange.

The communities of Waipahu, Waipio and Pearl City are multi-ethnic communities separated by Waiawa Stream and the H-1 and H-2 Freeways. The 1990 populations for these areas were respectively: Waipahu (31,425), Waipio (11,812) and Pearl City (30,993). Average household sizes ranged from 3.28 at Waipio to 3.68 at Waipahu. Waipahu has evolved from a sugar plantation town starting near the turn of the century to a more diversified community with professional service, retail, industrial and commercial establishments as well as residential neighborhoods. Pearl City is a newer community that has evolved through time from a similar agricultural background but one that was not dominated by a single plantation. Today, its residential neighborhoods extend up the ridges of Pacific Palisades, Waimanu and Newtown. The Waipio/Waikele Communities are fairly new communities starting in the post war years with Crestview and Seaview and continuing on to Waipio Gentry and Waikele in the last 20 - 30 years. They are predominantly bedroom communities but have developed industrial and retail centers. The military presence remains strong through the military housing and facilities at Waipio Peninsula, Kipapa Gulch, Manana housing and Pearl City Peninsula.

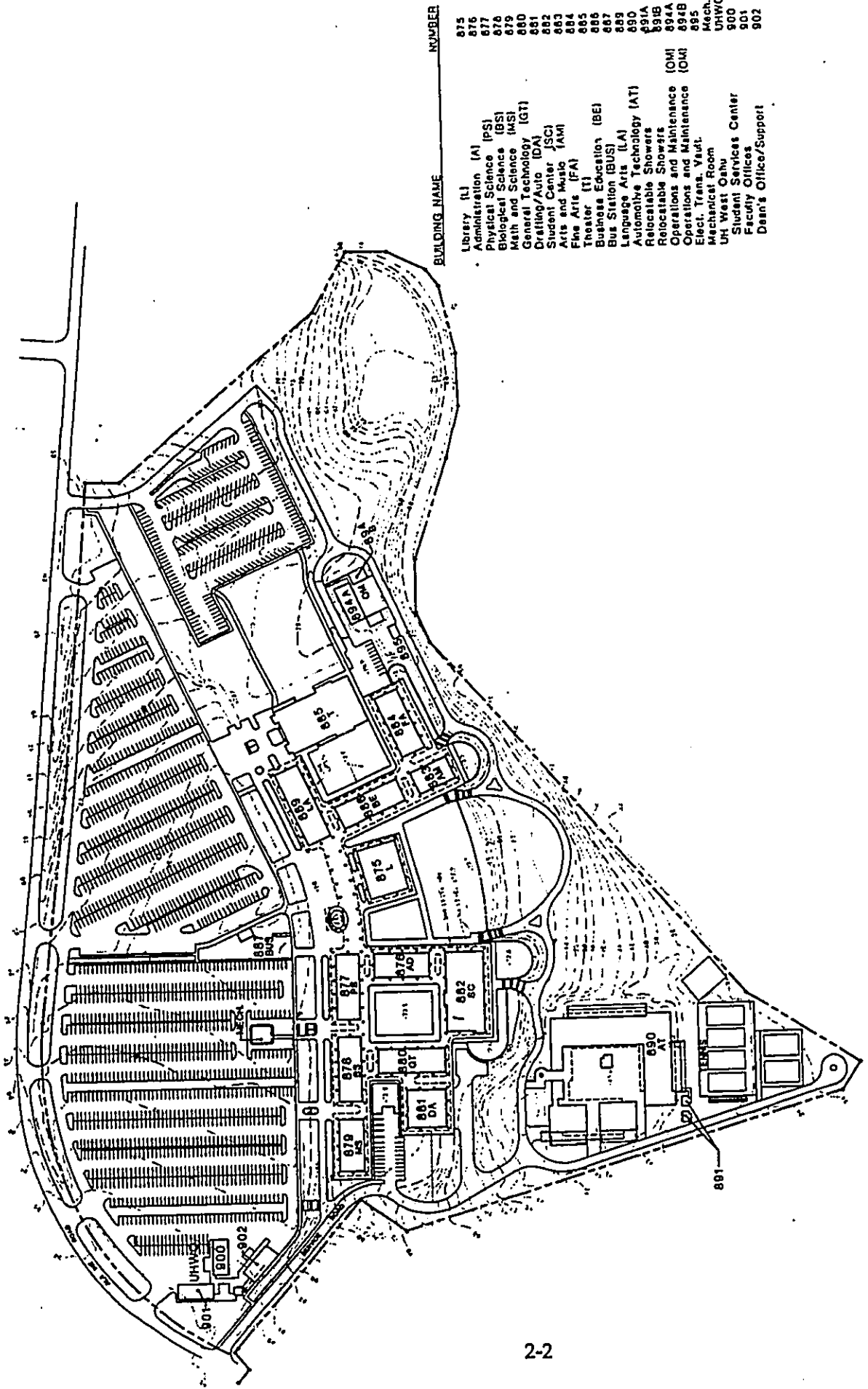
Leeward Community College is a commuter campus and the service extends well beyond the limits of the adjacent, surrounding communities. Students come from as far away as Makaha, the North Shore and East Honolulu. Increasingly there are older, non-traditional students attending classes and participating in various programs at the college.

### 2.2 EXISTING CONDITIONS AT THE PROJECT SITE

The campus building complex is a sheltered, open air, low rise configuration of 1-2 stories along the *mauka* entry approach. The complex then steps down the sloping site into multiple floor levels. The configuration of the buildings moving down the *makai* half of the site become 2-3 stories and encompass wide roof overhangs, a variety of open balconies, courtyard lawns, retaining walls and grassy slope banks. The existing site plan and functional relationship diagram for the College are presented in Figures 2-1 and 2-2.

The *mauka* half of the site is dominated by the required on-site parking. A few landscaped islands are dispersed throughout the parking areas. However, this portion of the site is still visually dominated by pavement. In contrast the *makai* portion of the site below the building complex has scattered landscape coverage with a variety of shade trees, scrub and grassy slope banks which give it a more natural woodland character.



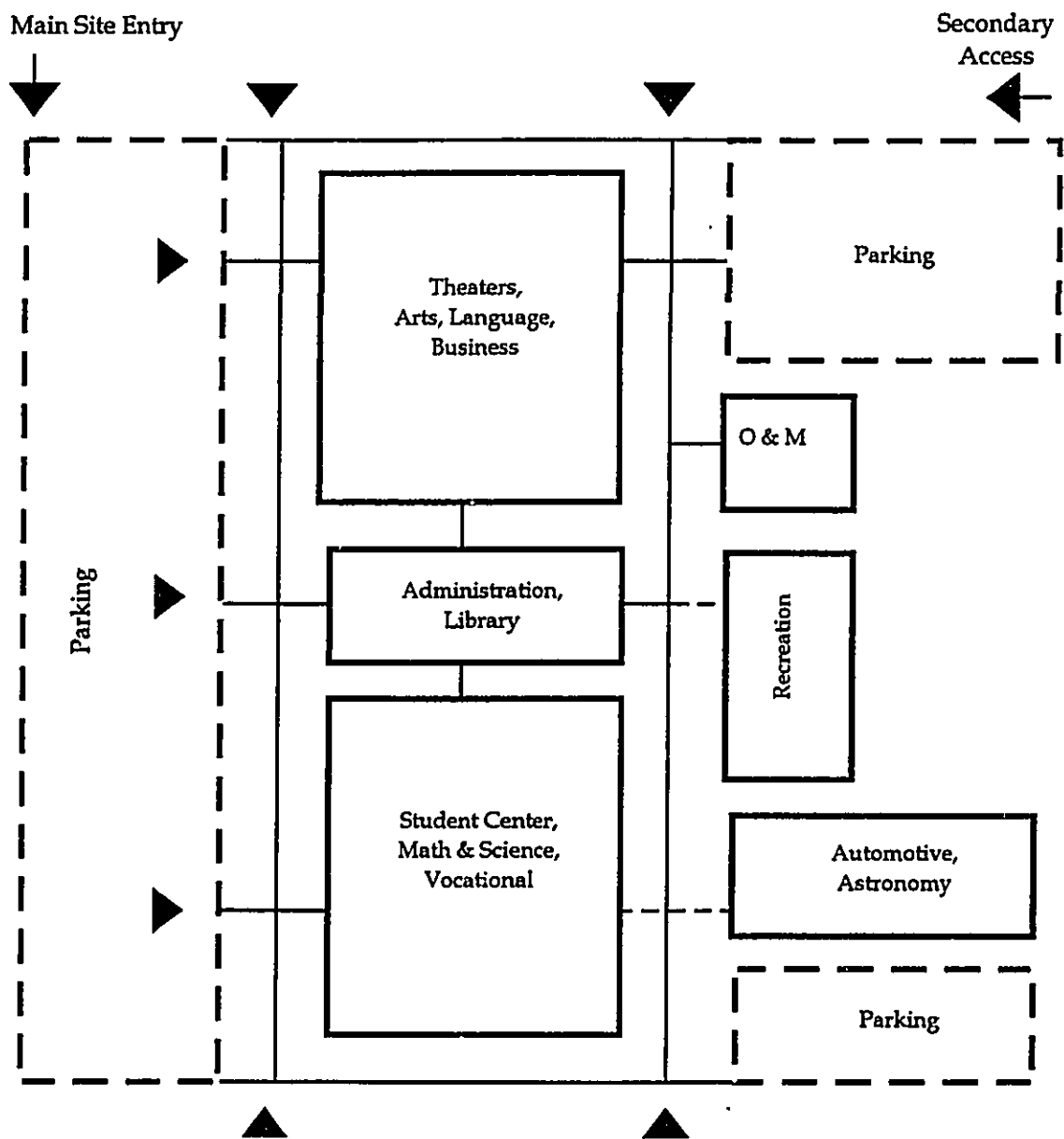


Existing Site Plan  
Leeward Community College Master Plan

Figure 2-1

Figure 2-2

Campus Wide Functional Relationship Diagram



Legend

- ▲ Access Point    — Direct Relationship    - - Indirect Relationship    □ Operational Unit

## LEEWARD COMMUNITY COLLEGE LONG RANGE DEVELOPMENT PLAN

There are currently 13 interconnected buildings associated with the main building complex, all of which were built between 1968 and 1977. A deck system connects the upper level of the entire complex. Concrete retaining walls define the lower level areas to the rear (*makai*). Additional buildings, located below the main complex, include Operations & Maintenance (O&M) buildings (1975) and the Automotive Technology complex (1979). The predominant construction method for all of the buildings is pre-cast/poured concrete in combination with a variety of masonry block and masonry finishes.

None of the structures have conditions that would preclude them from continued use. However, the Long Range Development Plan calls for the following issues to be addressed:

- 1) Pre-cast Guardrail/Parapet: The pre-cast guardrails and parapet walls are constructed of exposed coral and limestone aggregate, making for a very porous finish. Some of the guardrails and panels have already shown damage and deterioration due to rusting of the steel reinforcing bars within them. Repairs for some of the more obvious damages have already commenced. A cleaning and sealant application to protect the pre-cast guardrails and parapet walls from further deterioration should be considered in the maintenance program.
- 2) Roofing (Main Building Complex): While major portions of the roof for the main building complex is in good condition, several areas are in need of re-roofing and repair. The roof areas in front of the Library and the Automotive Building No. 890 already have leaks and are scheduled for repairs. Other portions of the flat roof such as over the Student Center Building No. 882 and the Arts & Music Building No. 883 are showing signs of loose aggregate toppings, exposing the base asphaltic roof membrane. The roofing membranes will rapidly breakdown and deteriorate as they lose the aggregate toppings, and initiate further roof failure.
- 3) Concrete Lanai Decking: Several of the building spaces have had water infiltration due to cracks in the concrete lanai decks and failure of the waterproofing membrane under them. Repair work is already scheduled for this problem.

There are four lighted tennis courts (with a small set of bleachers) and 2 multi-purpose paved courts located *makai* of the Automotive Technologies complex. The court surfaces are in poor condition and use of the facilities is generally restricted by O&M. Continued use of these tennis facilities would require renovation of the playing court surfaces. Two wooden structures containing showers/bathrooms (Men's & Women's) are located between the paved courts and the Automotive buildings.

A concrete foundation, pedestal, and electrical connections for a small telescope have been erected in the area *makai* of the Automotive Technology building. There are LCC staff proposals to locate facilities for a second 18.5 foot dome containing a 24-inch telescope in the same general area. There is an abandoned scuba diving tank located in the *makai* corner of the campus. The area around the tank includes a small shed/storage building and the underground scuba diving tank which was once used for diving instruction. The tank opening

has been capped and the area around the tank and sheds is enclosed with a chain link fence. The shed is currently being used in conjunction with astronomical observatory activities.

### 2.3 DESCRIPTION OF THE PROPOSED ACTION

The Long Range Development Plan for the College calls for 375,000 gross square feet of new building construction, in addition to expansion of existing facilities, in order to meet programmatic needs for 5,000 full-time equivalent (FTE) students. The campus' Ultimate Site Plan is presented in Figure 2-3 and the Conceptual Site Sections are shown in Figure 2-4.

The long-range plan includes new buildings (2-story) for the Media & Arts Instructional Center, Arts/Humanities, Social Science, Language Arts, and Business Education programs located in the area east of the existing Theater. The Media & Arts Instructional Center would be located in a center courtyard nearest the Theater, as part of the eastern academic expansion area. A second courtyard would be formed by the remaining academic buildings. A small surface parking lot and service area would run along the east and *makai* edges of the new complex.

A new Math & Science and Health Sciences complex will be developed as a series of 2-story buildings running along the *mauka* edge of the existing science buildings. Walkways and landscape frontage would run between the parking lot and new buildings, consistent with existing landscape patterns. In addition, an observatory complex including five domes, a workshop building, restroom facilities (replacement of temporary shower buildings) and a small parking lot, is proposed near the tennis courts.

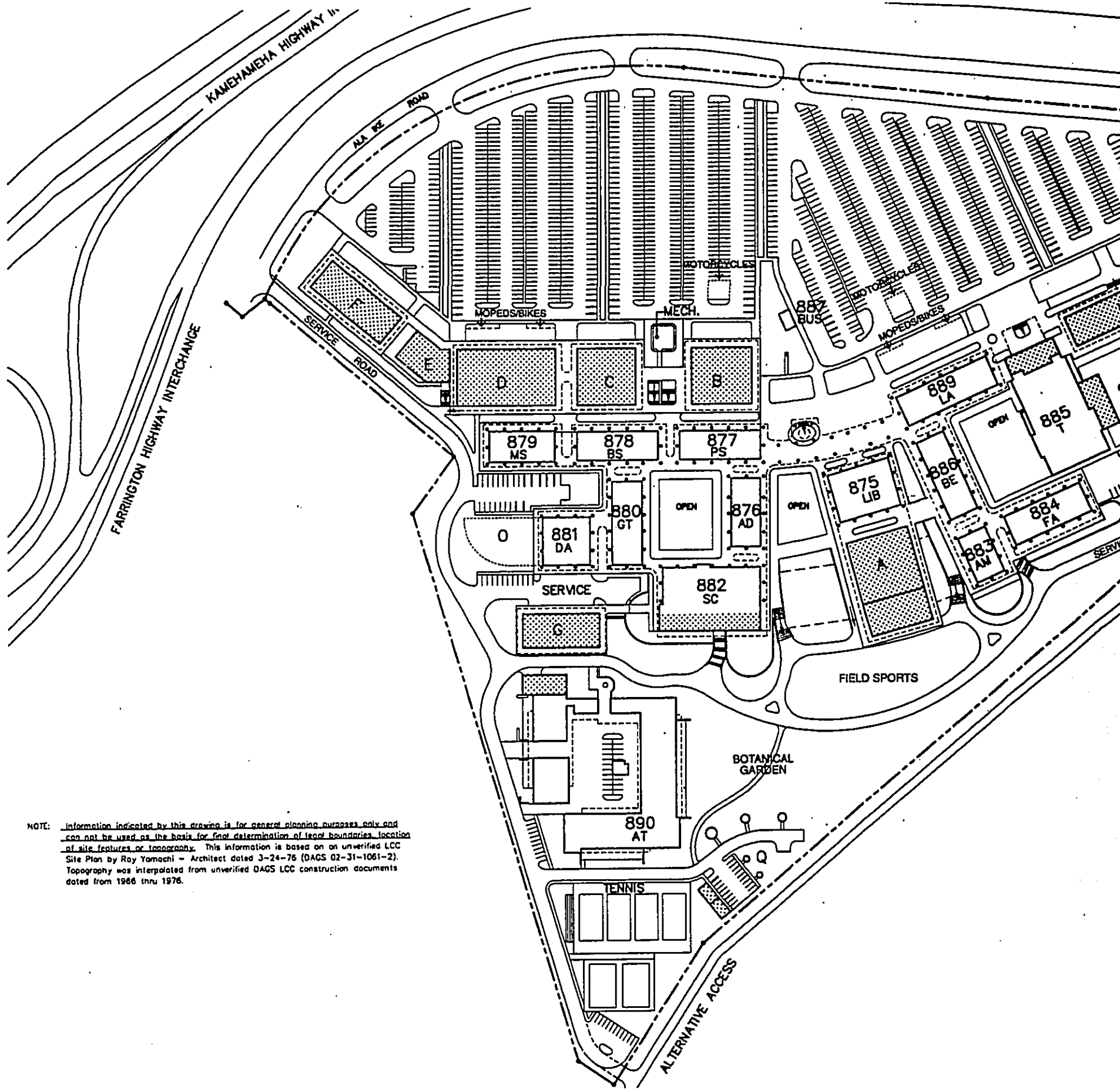
Vocational Food Services will be relocated to a new building (2-story plus basement), adjacent to the existing Student Center. A bridged passage will connect the two buildings. Service areas will be consolidated around the existing vehicular court.

Several existing facilities will be expanded to meet programmatic and support needs. Library and Learning Resource Center expansions will occur in a new 3-story building complex (plus basement), to the rear of the existing Library. The rear retaining wall will be removed and the plaza area re-graded to accommodate a series of terraced lawns, leading down to the lower campus. A bridged passage will connect the library expansion to the east wing of the campus. Theater space shall be expanded into the existing front plaza for lobby, offices, gallery, concession areas, and expanded out to the east side for rehearsal/meeting spaces.

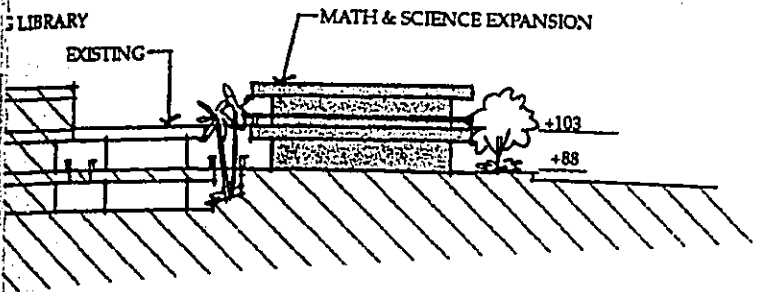
The Student Center building will be expanded on the *makai* side to accommodate additional Cafeteria, Bookstore and Student Life program requirements. A satellite snack bar or cafe could also be located within the new eastern academic building expansions. The Automotive Technology building will include an expansion for service/storage spaces and off-street parking. Operations and Maintenance's (O&M) service yard and mechanical spaces will be expanded to the east into the open area adjacent to existing O&M facilities.

Additional parking will be accommodated in a 4-level parking structure and additional surface parking areas. The existing parking lot will be re-stripped to accommodate more compact parking stalls. Tennis courts and multi-purpose court areas will remain in their existing

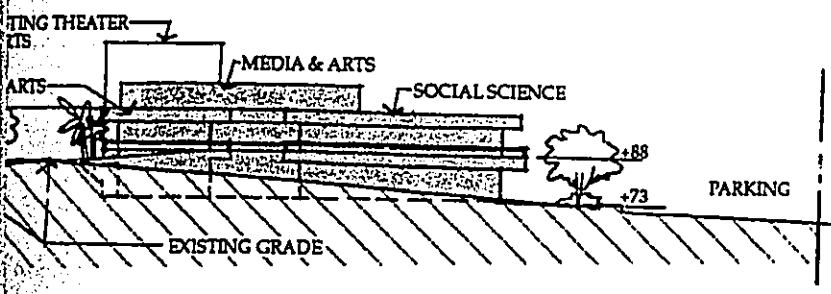




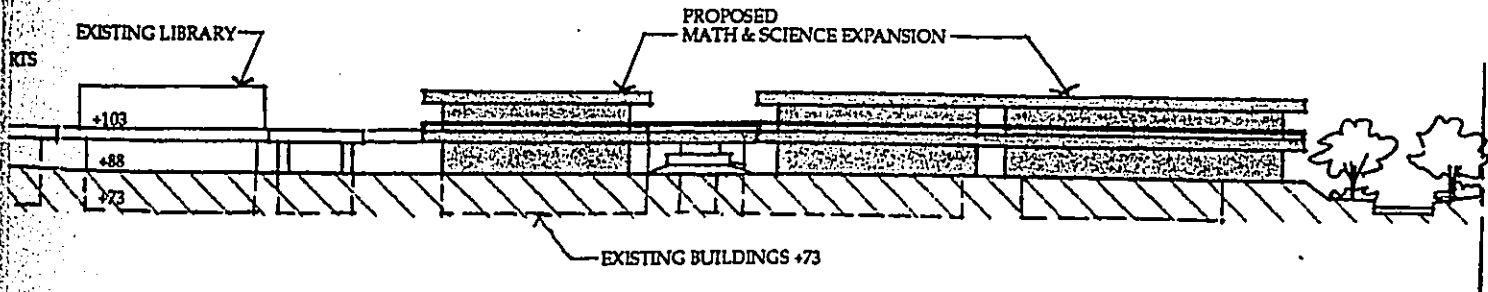
NOTE: Information indicated by this drawing is for general planning purposes only and can not be used as the basis for final determination of legal boundaries, location of site features or topography. This information is based on an unverified LCC Site Plan by Roy Yamachi - Architect dated 3-24-76 (DACS 02-31-1061-2). Topography was interpolated from unverified DACS LCC construction documents dated from 1966 thru 1976.



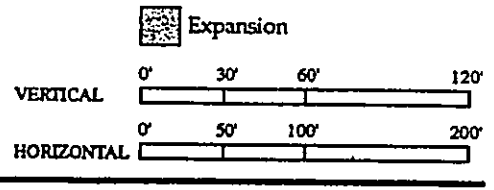
Academic Expansion

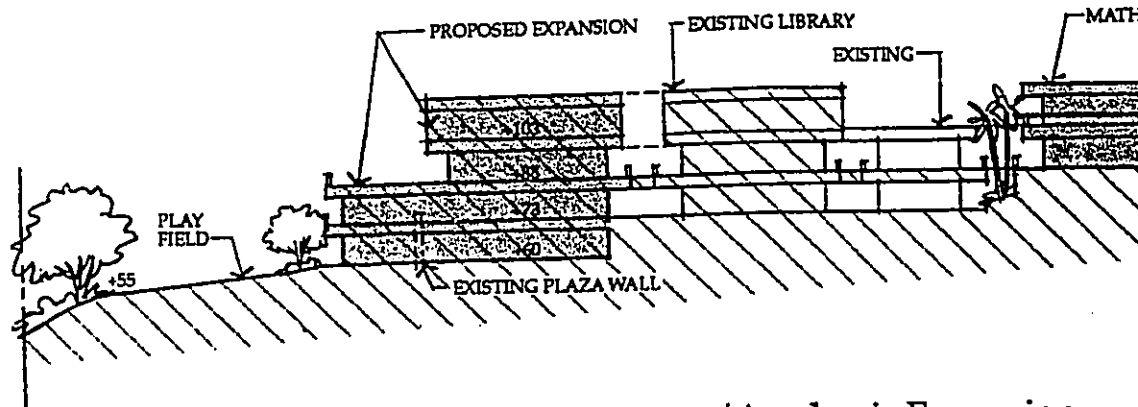


Library/Academic Expansion

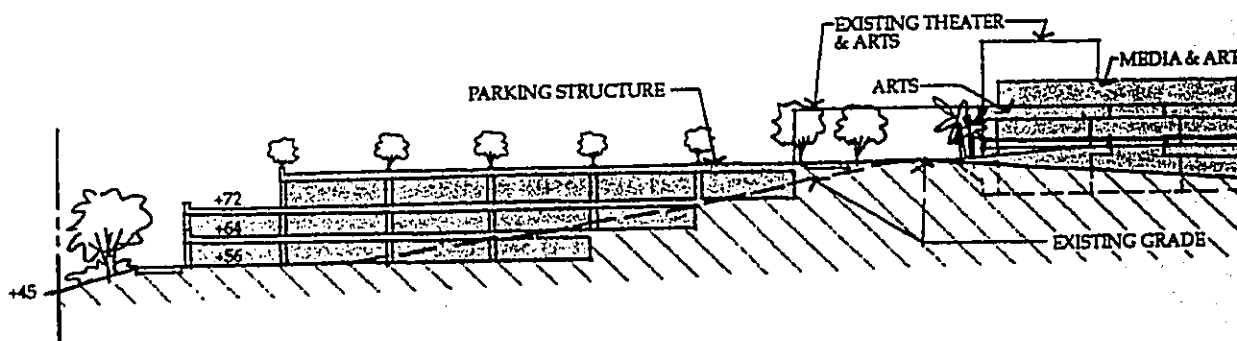


Library/Academic Expansion / West Front

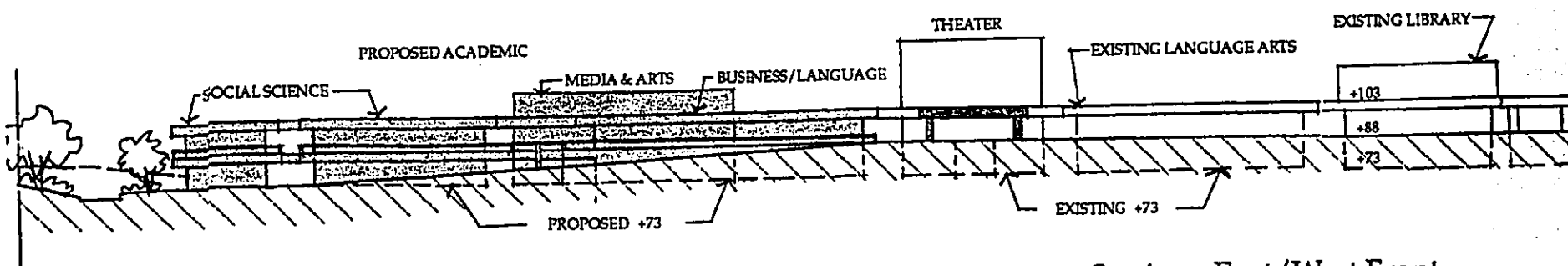




Section - Library/Academic Expansion



Section - Parking Structure/Academic Expansion



Section - East/West Front



location, with renovations of court surfaces. The open space below the existing Library plaza will be reconfigured to accommodate separate areas for informal field sports and botanical gardens.

#### 2.4 PHASING OF THE PROPOSED ACTION

Budgetary constraints will most likely mandate incremental implementation of the Long Range Development Plan. An Incremental Phasing Plan, presented in Figure 2-5, is described below. The construction phases are designed to meet the College's priority need to provide additional classroom space supported by parking and student services. Because the existing facilities are deficient in many areas, a significant amount of infrastructure work will have to be completed prior to the initiation of any new building construction. In addition, much of the new building space is planned to augment classroom or facility deficiencies not currently met for the existing academic programs at current enrollment levels (estimated at approximately 4,000 FTE - Fall 1994). While the phasing plan is divided into six different increments, it is a long range plan and programmatic priorities and fiscal realities will ultimately determine the scope and timing of each phase of development.

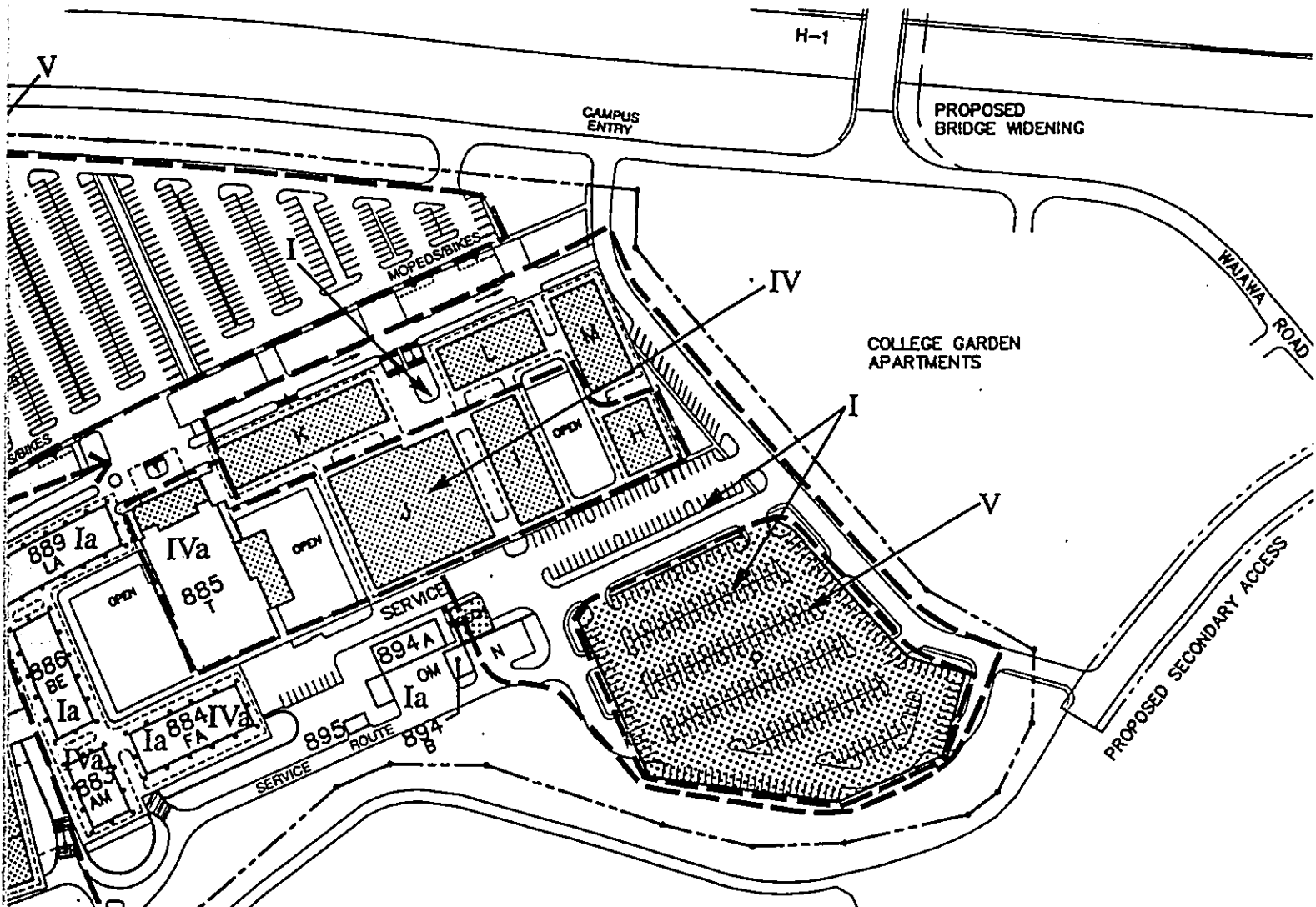
Prior to implementation of new building construction on campus, 28 portable classroom units were relocated from Kapiolani Community College to LCC. Of these 28 units, 19 have been placed near the Theater, another four were placed east of the Operations and Maintenance buildings, and the final four located near existing UH West Oahu facilities (Figure 2-6). The portable units are being utilized by UH West Oahu on an interim basis. Once the permanent UH West Oahu campus is developed, Leeward Community College will use the portable classrooms until funding is available for construction of the classroom facilities proposed in the Long Range Development Plan.

##### Phase I

- I. *Infrastructure/Social Science/Business/Language Arts*
- Ia. *Renovations to vacated or adjacent buildings*

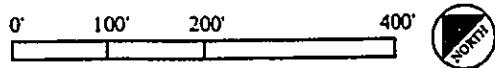
Off-site water line upgrades are essential for Leeward Community College campus to meet current fire protection standards. In the first phase of construction, off-site and on-site infrastructure improvements will be made to support building construction. In addition to necessary infrastructure, the first phase of construction will provide new classroom space to meet existing and anticipated demands. Academically, the Social Science department has the highest need for new facilities as they currently utilize classrooms in a number of different buildings on the campus. Therefore, the first phase of building construction will include new Social Science and Business/Language Arts buildings on the eastern edge of the campus.

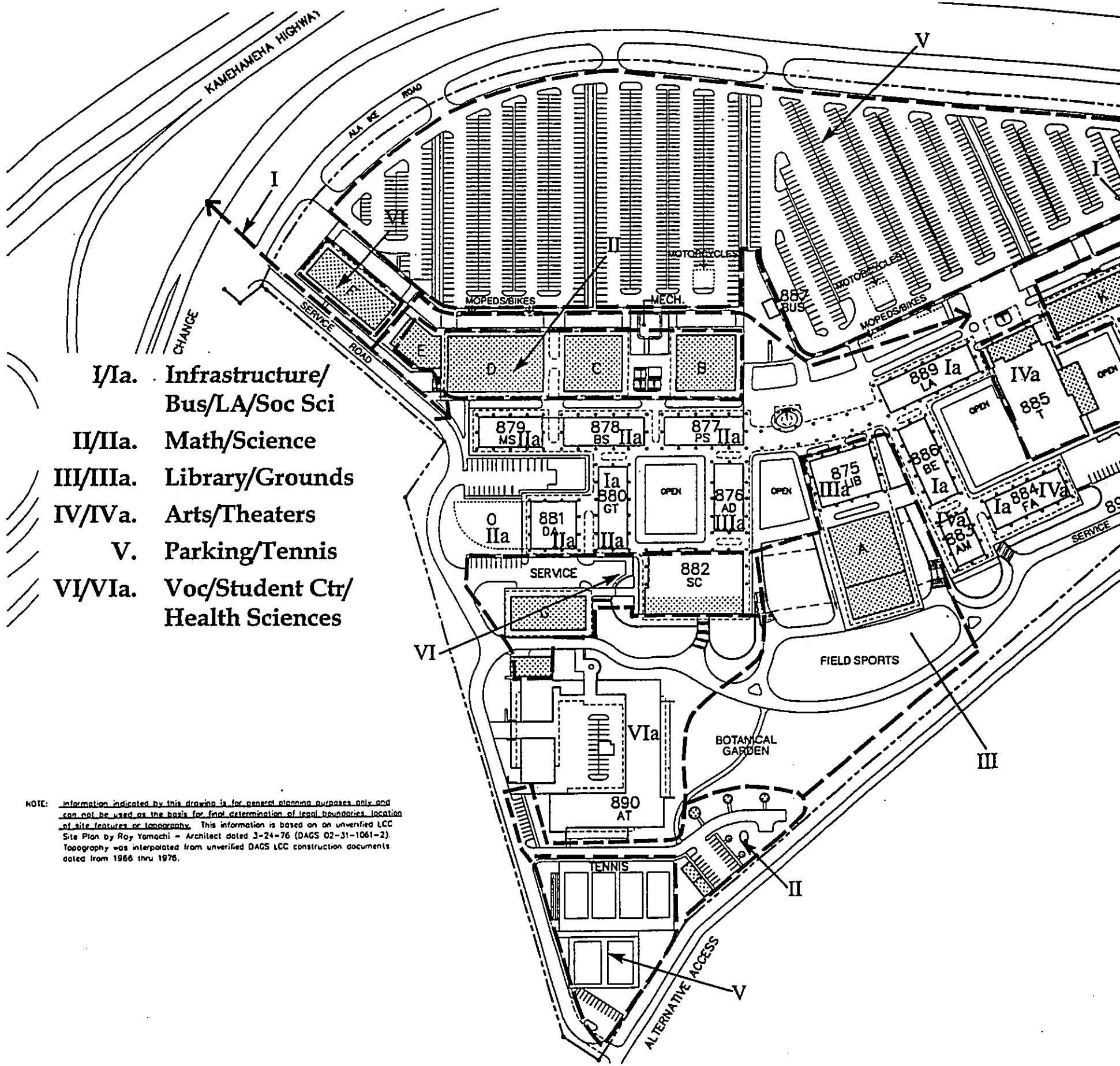
To replace the parking lost to new construction, a paved surface lot will be constructed in the southeast corner of the campus. Once new construction is complete and academic activities are relocated, renovations (partial and complete) will take place in five existing campus buildings. Portions of a new or existing building may need to be converted to a temporary Library annex to support the expected increase in student body.



#	PROPOSED NEW FACILITIES	GROSS SQ. FT.	#	PROPOSED EXPANSION OF EXISTING BUILDINGS	GROSS SQ. FT.
A	Library/LRC	70,000	875 L	Library/Admin.	
B	Math&Science/Admin.	22,000	876 AD	Administration	
C	Math&Science	24,000	877 PS	Physical Science	
D	Math&Science	35,000	878 BS	Biological Science	
E	Math&Science	4,000	879 MS	Math & Science	
F	Health Sciences	20,000	880 GT	General Tech./Admin.	
G	Voc. Food Service	32,500	881 DA	Drafting/Auto/Admin.	
H	Arts/Humanities	10,000	882 SC	Student Center	6,500 *
I	Arts/Humanities	18,500	883 AM	Arts and Music	
J	Media&Ar. Instruction Center	60,500	884 FA	Fine Arts	
K	Business Ed./Language Arts	24,000	885 T	Theater	13,000 *
L	Social Science	15,000	886 BE	Business Education	
M	Social Science	15,000	887 BUS	Bus Station	
N	O&M Service Yard		889 LA	Language Arts	
O	Child Care Play Yard		890 AT	Automotive Technology	2,500 *
P	Parking Structure		894 a	O & M	
Q	Astronomy Observ./Restrooms	2,500	894 b	O & M	
	<b>TOTAL EXPANSION</b>	<b>375,000</b>	895	Elect. Trans. Vault	
	Surface Parking (40% compact)	1532	Mech	Mechanical	
	Parking Structure	1086			
	Handicap parking	45			
	<b>Total Parking Provided</b>	<b>2663 spaces</b>			

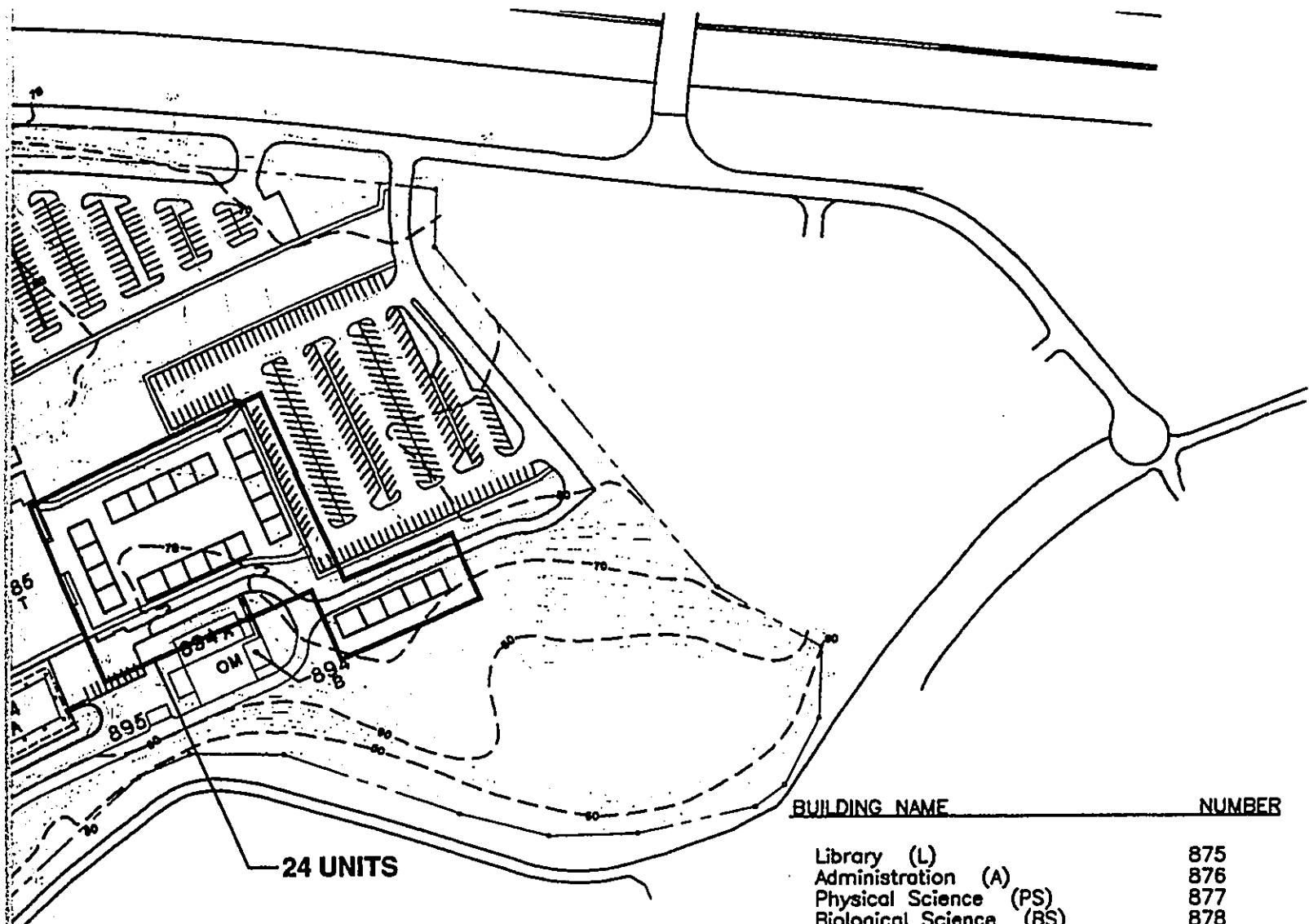
[Existing buildings with additions] \*





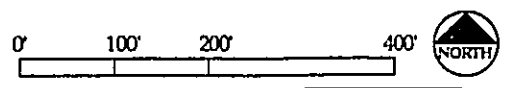
Leeward Community College Master Plan

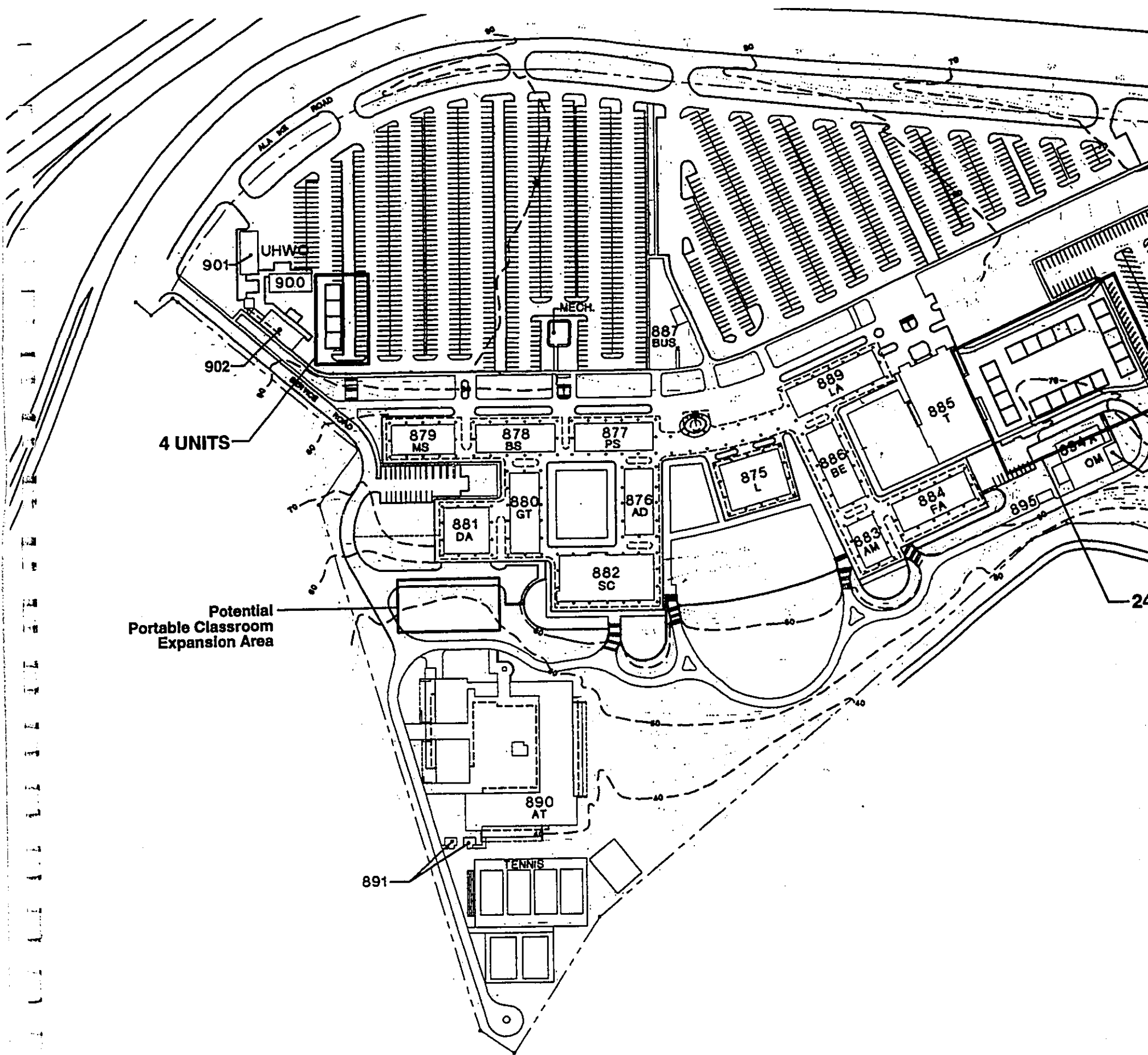
Incremental Phasing Plan



**BUILDING NAME** **NUMBER**

Library (L)	875
Administration (A)	876
Physical Science (PS)	877
Biological Science (BS)	878
Math and Science (MS)	879
General Technology (GT)	880
Drafting/Auto (DA)	881
Student Center (SC)	882
Arts and Music (AM)	883
Fine Arts (FA)	884
Theater (T)	885
Business Education (BE)	886
Bus Station (BUS)	887
Language Arts (LA)	889
Automotive Technology (AT)	890
Relocatable Showers	891A
Relocatable Showers	891B
Operations and Maintenance (OM)	894A
Operations and Maintenance (OM)	894B
Elect. Trans. Vault.	895
Mechanical Room	Mech.
UH West Oahu	UHWO
Student Services Center	900
Faculty Offices	901
Dean's Office/Support	902





Portable Classroom Plan  
 Leeward Community College Master Plan

## LEEWARD COMMUNITY COLLEGE LONG RANGE DEVELOPMENT PLAN

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### Phase II

#### II. *Math/Science*

##### IIa. *Renovations to vacated buildings*

The already strong Math and Science program will be expanded with the construction of four new Math and Science buildings erected between the existing buildings and the main parking lot. In addition, five new observatories will be constructed in the southern corner of the campus.

### Phase III

#### III. *Library/Grounds*

##### IIIa. *Renovation of existing Library*

Once a significant amount of classroom space is added in phases I and II, it will become critical to supplement existing student support activities. A new Library and Learning Resource Center (LRC) is proposed in addition to renovation of the undersized existing facility. An informal sports field will be provided south of the Library for student recreation.

### Phase IV

#### IV. *Arts/Theaters*

##### IVa. *Renovations to existing Theater and classroom buildings*

Two new Arts and Humanities buildings are proposed in addition to a multi-disciplinary Media & Arts Instruction Center. These facilities and related courtyards will be developed in an arts compound east of the Theater. Extensive renovation and expansion will upgrade the existing Theater and make it more accessible to the public entering from the main parking lot. Two classroom buildings will also be renovated as part of this phase of development. Walkway additions and corridor/entry modifications will make the area more physically accessible.

### Phase V

#### V. *Parking/Tennis*

Once the Theater and Humanities construction and renovation is complete, a new parking structure is propose at the southeastern corner of the campus to support these new facilities. The surface parking lot erected in Phase I would be extracted to make way for the new construction. In addition, new tennis courts would replace the existing deteriorated courts in the southwest corner of the campus.

### Phase VI

#### VI. *Vocational/Student Center/Health Sciences*

##### VIa. *Renovation to Auto Technology complex*

Vocational programs will be upgraded with new construction and extensive renovation. A new Health Sciences building will be constructed adjacent to the new Math and Science buildings. The Food Services Program will move out of the Student Center into its own building and the Student Center will be reconfigured and enlarged to meet student needs. Renovation and an addition to the Automotive Technology will complete upgrades to vocational facilities.

## 2.5 PURPOSE AND NEED FOR THE PROPOSED ACTION

The objectives of the Long Range Development Plan are to:

- A. Develop a site and facilities redevelopment master plan which will best accommodate the educational program needs of the College, is economical in cost, and complies with government, utility and historical/aesthetic/environmental requirements.
- B. Develop civil, landscaping, and electrical and information technology master plans to implement the site master plan.
- C. Develop a facilities implementation plan which will satisfy the short and long-range requirements of Leeward Community College (LCC). Provide square foot cost estimates for each phase of the implementation plan.
- D. Re-establish architectural design and landscaping guides to ensure cohesive campus development.

In September of 1965, the Leeward Community College (LCC) Long Range Development Plan was initiated to plan for a new community college with an ultimate enrollment of 5,000 full-time equivalent (FTE) students. Between 1968 and 1979 the campus developed to its present size. Although construction continued for the first 10 years of the school's existence while enrollment boomed, the complete master plan for the College was never implemented, leaving the College without planned classrooms and specialized facilities for fine arts and social sciences.

Today, over 6,600 students attend the College (approximately 4,000 full-time equivalent in the Fall of 1994). Much of the new building space proposed in the Long Range Development Plan is designed to augment classroom or facility deficiencies not accommodated at current enrollment levels. The large number of students, increased space needs for a diverse array of program offerings, expected expansion of academic programs, and existing and proposed infrastructure needs are all factors that prompted the preparation of a Long Range Development Plan for the College.

Section 3.0

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Description of the Environmental Setting,  
Potential Impacts, and Mitigative Measures



### 3.0 DESCRIPTION OF THE ENVIRONMENTAL SETTING, POTENTIAL IMPACTS, AND MITIGATIVE MEASURES

This section addresses the potential environmental impacts of the Leeward Community College Long Range Development Plan and surrounding area.

#### 3.1 CLIMATE

##### *Existing Conditions*

This portion of Oahu is generally dry and hot, with very little seasonal rainfall (25"- 35" annually - mostly November through April). Due to the exposed nature of the site it is also subject to strong trade winds (average velocity of 12 mph) blowing across the Central Oahu plain. The *mauka* portions of the site are generally exposed to these elements and benefit from the cooling effects of these trade winds. The *makai* areas of the site, which are on the down-slope of the bluff, do not receive as much benefit from these breezes. Within the building complex, roof overhangs and site vegetation create significantly cooler and protected micro-climates.

##### *Anticipated Impacts and Mitigative Measures*

The proposed action will have no significant effect on climatic conditions, thus no mitigative measures are required.

#### 3.2 TOPOGRAPHY

##### *Existing Conditions*

The site is located on a bluff that overlooks Pearl Harbor and the surrounding Waipahu and Pearl City communities. Elevations of the site range from 98 feet above sea level at the western corner of the parking lot to 32 feet above sea level at the southern corner of the site with grades ranging from 2% to 50%. The *mauka* portions of the site, parking areas and building entrances, are generally level while the steeper grades transition throughout the building complex. The steepest embankments occur along the *makai* boundaries of the campus.

The parking lot along Ala Ike Road occupies the highest tier, predominantly above 80 feet in elevation. Most of the school buildings were built on a lower second tier at approximately 73 feet in elevation. The Automotive Technology complex is on a third tier at about elevation 42 feet. Tennis and basketball courts were placed at the lowest site below the Automotive Technology complex at elevations 36 feet and 34 feet respectively.

##### *Anticipated Impacts and Mitigative Measures*

Development proposed in the master plan is consistent with existing facility development patterns at the campus. Future development of the site will generally conform to the established grading pattern. New buildings will be placed on existing tiers or "inserted" into the terrain with a minimum of disruption to the existing grades surrounding the new buildings.

## LEEWARD COMMUNITY COLLEGE LONG RANGE DEVELOPMENT PLAN

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Examples of new buildings placed on existing tiers with minimal grading are the Arts, Social Sciences and Humanities buildings proposed east of the existing Theater. The Library/Administration, Math and Science, and Vocational Food Service buildings are examples where buildings are inserted into the embankment with their walls also acting as retaining walls to limit the earthwork and impact on adjacent areas. Construction of the parking structure will involve the greatest amount of earthwork because of its size, but the structure will be adapted to the terrain to minimize earthwork and limit impact to adjacent areas.

### 3.3 SOILS AND GRADING

#### *Existing Conditions*

Soil characteristics of the site are Waipahu silty clays (WzA, WzC). Slopes generally range from 0% to 12%, permeability is moderate to slow (.20 - 2.0), runoff is medium to very slow, erosion hazard is slight to moderate, shrink swell potential is high, pH ranges from 6.1 to 6.5 (Source: Soil Survey of the Island of Oahu, Hawaii - USDA SCS - 1973). No assumptions have been made on fill soils that may have been imported for existing structures or grading.

Leeward Community College occupies a site that is fairly steep for a school campus. Adaptation to the terrain was accomplished by terracing major functional areas. This resulted in the utilization of substantial grade adjustment retaining walls and the corresponding stairways for pedestrian traffic.

#### *Anticipated Impacts and Mitigative Measures*

The improvements of the Long Range Development Plan will involve more grading and the creation of additional landscape. In the process, some of the existing soils will be removed and replaced with fill material and imported top soil for landscaping. Other areas will be covered with new asphalt, concrete surfaces or other paving material. The overall impact will be some loss of open space and an increase in impervious surfaces. This effect will be somewhat minimized by increasing landscaping, but the loss of some of the existing soils will not be mitigated.

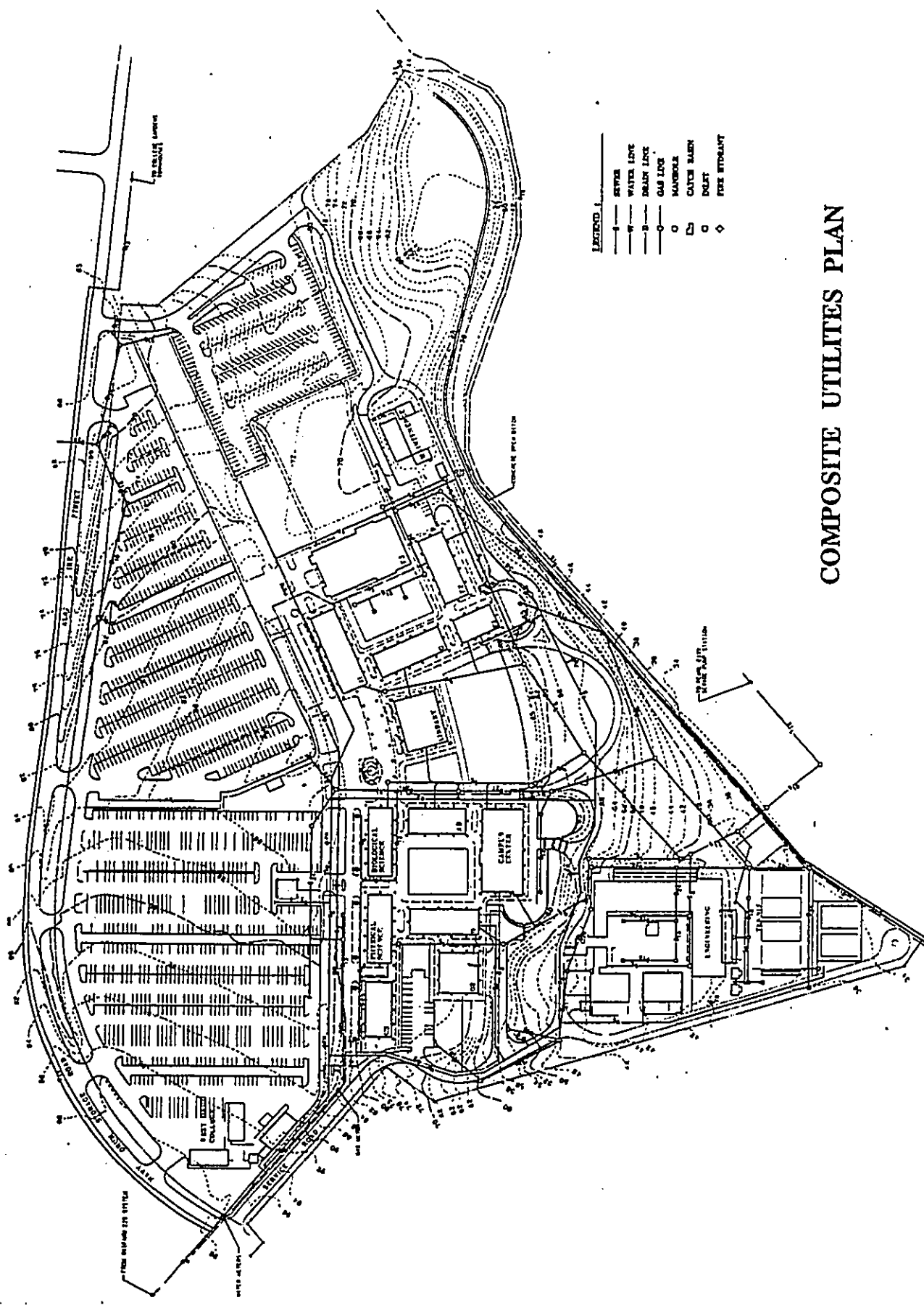
### 3.4 DRAINAGE AND WATER RESOURCES

#### *Existing Conditions*

##### *Drainage:*

A network of drain inlets and pipes collects storm runoff from most of the campus and directs the storm water to the southwest corner near the existing tennis courts. From there it leaves the campus via a 48-inch drain pipe westward in a 15-foot drain easement through the adjacent U.S. Government land. Approximately 500 feet beyond the school boundary this off-site storm drain turns southward through private property (15-foot easement) and ultimately discharges into Pearl Harbor Middle Loch. This off-site storm drain system was built by the State in the late 1960s. Existing utilities are shown in Figure 3-1.

There is an existing concrete-lined trapezoidal ditch running along the entire southern boundary of the campus. For the most part, the ditch slopes downhill from the eastern end to



Existing Utilities Plan  
 Leeward Community College Master Plan  
 Figure 3-1

## LEEWARD COMMUNITY COLLEGE LONG RANGE DEVELOPMENT PLAN

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the westward end with the low point occurring near the tennis courts. The ditch intercepts surface runoff not collected by the on-site network of drain inlets and drains. The lined ditch has inlets that are connected, via a 24-inch drain, to the 48-inch off-site drain described above.

The existing flood zones were reviewed using the National Flood Insurance Program, Flood Insurance Rate Map (FIRM). The FIRM indicates that the LCC site is largely within Zone X, "Areas determined to be outside the 500-year flood plain." The site is depicted on FIRM Panel Number 150001 0110 D and Panel Number 150001 0065 C (Insert N). A small sliver on the northwest corner is designated Zone D which is an area where flood hazards are undetermined.

A small section of the campus at the northeast corner has a separate drainage system. Several inlets collect runoff from a portion of a parking lot and convey the storm water off the campus across Ala Ike Road toward Waiawa Stream via a 24-inch drain. The storm runoff is primarily generated by rain falling within the campus site. Consequently, there are no major external storm runoff flows to contend with. Localized flooding of buildings during severe storms can be corrected.

There is an erosion problem in the open area at the southeast corner of the campus. Parts of the site contain bare patches of earth which may erode and run off during heavy rains. These patches are generally limited to small areas of a few dozen square feet along the steeper topography. This is due to insufficient ground cover and will be corrected with proper landscaping and an irrigation system.

Additionally, there are berms and swales *mauka* of Waiawa Road that captures runoff from the campus before the road. Again, there is no need for additional measures to handle onsite drainage beyond what is proposed in the ultimate utility plans for the campus. Indirect and cumulative impacts relate to the increased hardscape represented by full development of the site. While there may be some increase in runoff it is not expected to be significant.

The only stream within any reasonable proximity to the site is Waiawa Stream which is approximately 900 to 1,000 feet away from the campus in its nearest location. H-1 Freeway and the College Gardens Apartments separate the campus from the stream. There is no need to provide additional drainage mitigation because of the campus' distance from the stream and the intervening uses that exist.

### Water Resources and Features:

Three aquifer systems from the Koolau shield enters into the upper Pearl Harbor basin where the project site is located: Waimalu, Waiawa and Waipahu. These systems drain into Middle and East Lochs. The Koolau aquifer system interfaces with the Waianae aquifer system along a feature called the Waianae Koolau unconformity. The Waianae section contains the Kūnia and Ewa aquifers which drain into West Loch. There are a set of springs associated with each aquifer system. These springs are all located at a low point in the caprock that defines the edges of the system. It has been stated that additional spring sources are located in the lochs themselves; the probable locations being low spots in the lochs. The LCC site is part of the Waiawa system. The Board of Water Supply and the Navy are the main users drawing water

## LEEWARD COMMUNITY COLLEGE LONG RANGE DEVELOPMENT PLAN

from this aquifers. In the past, the sugar industry was also a large user but this use has stopped and there are only a few small diversified agricultural users today.

The total sustainable yield of the Pearl Harbor system is estimated at about 140 to 165 million gallons per day (mgd). (Yuen 1988) The combined capacity of the springs is estimated to be about 75 mgd. The Waiawa spring capacity is estimated at 15 mgd. The BWS and the Navy are the largest users in the Pearl Harbor Basin System with allocations of 92 and 28 mgd respectively.

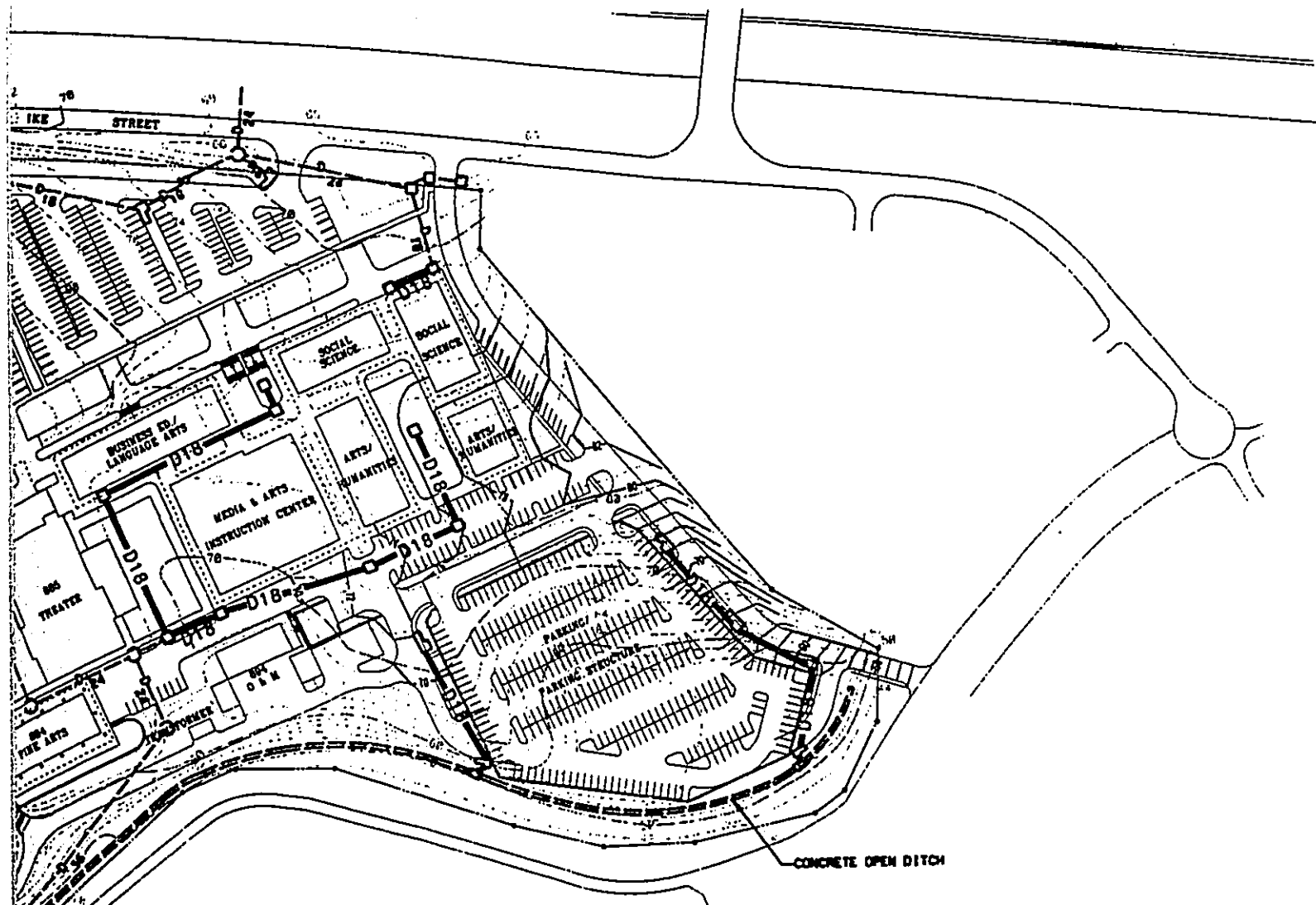
Waiawa Stream is the main drainage path of the Waiawa aquifer. Its lower reaches meanders in horseshoe bends as it empties into pearl Harbor.

Pearl Harbor is a series of drowned dendritic river valleys carved during lower stands of the sea. It is a major harbor and estuary. All surface runoff in this basin drains into the harbor. Urbanization generally adds incrementally to non-point sources of pollution. Increases in impervious surfaces also contribute to increased runoff into the harbor. The implementation of the LRDP may contribute to the incremental increase in runoff and non-point source discharges. *Makai* of the campus a drainage ditch intercepts all runoff from the campus and directs it along Waiawa Street to a discharge point near the head of the loch. Below the road are a zone of farms and vacant lots. Many of these farms are associated with springs, old fishponds and taro *loi*.

### *Proposed Improvements*

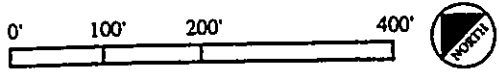
Major additions and/or modifications to the drainage system are shown in Figure 3-2. Improvements include:

- a. Addition of catch-basins and drain pipes to serve the parking lot adjacent to the new Math and Science buildings. This modification will replace the existing parking lot drainage system that has to be demolished for the construction of the new buildings.
- b. Addition of inlets and drain pipes to serve the areas between the Business Education/Language Arts, Social Science, and Media and Arts Instruction Center buildings. Storm runoff in this area currently flows overland to a ditch located along the driveway to the Fine Arts building parking lot. The proposed Media and Arts Instruction Center building will create a barrier and require inlets and drain pipes to reroute storm flows.
- c. Addition of inlets and drain pipes to serve the area between the new Arts/Humanities buildings and the adjacent parking lot. This area is currently a portion of a paved parking lot. The new drainage system will replace the existing system serving the parking lot which will be demolished.

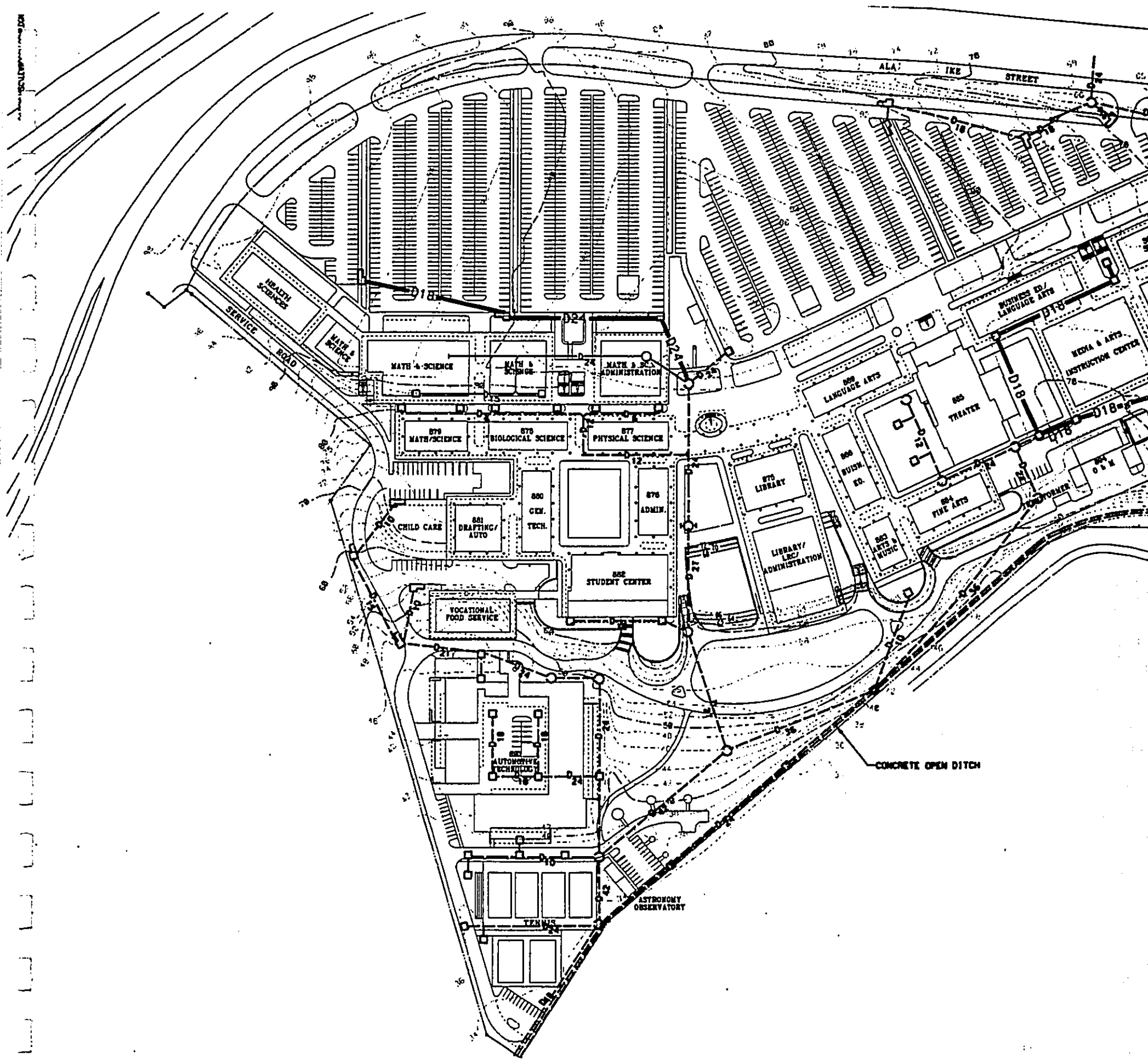


**LEGEND :**

- D18—** PROPOSED DRAIN LINE
- - -D12 - - -** EXISTING DRAIN LINE TO REMAIN
- D12—** EXISTING DRAIN LINE TO BE REPLACED
- CATCH BASIN
- GRATED INLET
- DRAIN MANHOLE
- 70 —** FINISH CONTOUR
- - - 70 - - -** EXIST. CONTOUR



& Drainage Plan



Leeward Community College Master Plan

Ultimate Grading & Drainage Plan

- d. Addition of catch-basins and drain pipes in the driveways to the proposed parking structure. This system will prevent storm runoff from entering the parking structure. Runoff collected from the top deck of the parking structure will also be discharged into this system.

Detailed designs for the drainage system will consider best management practices (BMP). Landscape buffers will be used where practical to filter runoff and reduce velocities. Filter fabrics and timely replanting will be used to minimize erosion. Construction activities will also follow BMP guidelines. No significant impacts to water resources are anticipated from the future development of the college.

### 3.5 FLORA

#### *Existing Conditions*

Much of the existing vegetation on the campus consists of ornamental trees and shrubs that have been planted as the site has developed. Landscaped planters with roof cutouts (for sunlight) occur throughout the building complex and trees planted in curbed landscape islands occur within the parking lots. Lawn areas are predominantly Bermuda grass with a variety of wild grasses and weeds. The *makai* portion of the site is heavily vegetated in some areas with natural stands of Kiawe, scrub and other large trees. Most of the year the site appears quite "brown" since the irrigation system is no longer functional and existing landscaping must survive on minimal natural rainfall and periodic watering by the janitorial staff. An inventory of campus trees is presented in Table 3-1.

#### Landscape Zones

The campus can be divided into 3 distinct landscape zones: the parking zone, classroom zone, and lower campus.

#### *Parking Zone*

Campus entry, parking and building access occurs within this area. This is the area that is seen most by the community-at-large, principally from the highways that border it to the north. The visual impression of the campus from these vantage points is of acres of parking, unscreened by hedges and unshaded by trees. Landscape elements within this zone include Gold and Silver Trumpet, Monkeypod, small Plumeria, true Kamani, Wili-Wili, Royal Poincianas, Kukui Nut, and Rainbow Showers, plus grass.

#### *Classroom Zone*

This area is approximately 16 ft. lower than the main parking area. Landscaping for most of the classroom buildings and the principal student activity area occurs at this level. Landscape elements within this zone include the following:

1. Narrow landscaped planters with roof cutouts are used to provide light and air to the *mauka* side of the ground floor classrooms. These planters are characterized by high lava rock walls and mature *Brassaia* trees. Little or no ground cover exists in these areas, where both wind and water erosion are a problem. There are some seating/planting areas in the hallways between the buildings. However, plants have been removed and replaced with cinder mulch.



LEEWARD COMMUNITY COLLEGE LONG RANGE DEVELOPMENT PLAN

Table 3-1  
Inventory of Campus Trees

<u>Scientific Name</u>	<u>Common Name</u>
Acacia confusa	Formosa Koa
*Aleurites moluccana	Kukui Nut Tree
*Artocarpus communis	Breadfruit Tree
Bambusa spp.	Bamboo
Bauhinia blakeana	Hong Kong Orchid Tree
Brassaia actinophylla	Brassaia
*Calophyllum inophyllum	True Kamani
Cassia javanica x c. fistula	Rainbow Shower Tree
Casuarina equisetifolia	Ironwood
Chrysalidocarpus lutescens	Areca Palm
Citharexylum spinosum	Fiddlewood
Citrus spp.	Citrus
Clusia rosea	Autograph Tree
*Cocos nucifera	Coconut Palm
*Cordia subcordata	True Kou
Cycas circinalis	Giant Cycad
Cycas revoluta	Sago Palm
Delonix regia	Royal Poinciana
Eucalyptus spp.	Eucalyptus
Erythrina variegata var. orientalis	Wili-Wili
Eugenia cuminii	Java Plum
Ficus retusa	Chinese Banyan
Ficus spp.	Fig
Filicium decipiens	Fern Tree
Jatropha hastata	Jatropha
Leucaena glauca	Haole Koa
Melaleuca leucadendra	Paper Bark
Pimenta dioica	Allspice
Plumeria spp.	Plumeria Varieties
Podocarpus gracilior	Podocarpus
*Pritchardia pacifica	Loulu Palm
Prosopis pallida	Kiawe
Ptychosperma macarthurii	Macarthur Palm
Samanea saman	Monkeypod
Spathodea campanulata	African Tulip
Tabebuia argentea	Silver Trumpet
Tabebuia donnell-smithii	Gold Tree
Tamarindus indica	Tamarind
*Thespesia populnea	Milo
Veitchia merrillii	Manila Palm

\*Denotes native Hawaiian and Polynesian-introduced species.

2. There are three large landscaped courtyards located next to the Campus Center, Library and Theater. Each courtyard is characterized by grass and a few mature trees.

#### *Lower Campus*

This area is characterized by relatively undeveloped land sloping from elevation +70 to +42 at the southeast corner to elevation +34 at the southernmost tip. Because this area is outside the primary use area of the Classroom Level, maintenance and irrigation have been kept to a minimum. Slopes have been maintained in grass and many of the more precipitous areas are severely eroded. Landscape elements within this area include: a small area with experimental planting of drought tolerant trees and shrubs; a stand of Silver Trumpet, Kukui, Wili-Wili and Formosan Koa; and a gently sloping grassed area.

#### Irrigation/Maintenance

The existing irrigation system is 20 years old and 80 percent dysfunctional. In most cases the automatic controllers do not operate because wires are cut, solenoids are dead, and valve diaphragms are dried out. Watering, when it occurs, is by manual control valves or by hand.

The College voluntarily limits its landscape irrigation during water conservation periods announced by the Board of Water Supply. During these periods only trees and planters are watered. An effort has been made by maintenance staff and faculty to plant native, drought-tolerant trees, as well as to remove plant material requiring heavy watering. For a campus of this size, maintenance requirements have been kept to a minimum. Four groundskeepers are responsible for maintaining approximately 25 acres of landscaped space. Considering this man to area ratio, the present staff is doing a remarkable job of maintaining the campus. (Note: The City and County Parks Department assigns one man per three acres to achieve minimal maintenance levels).

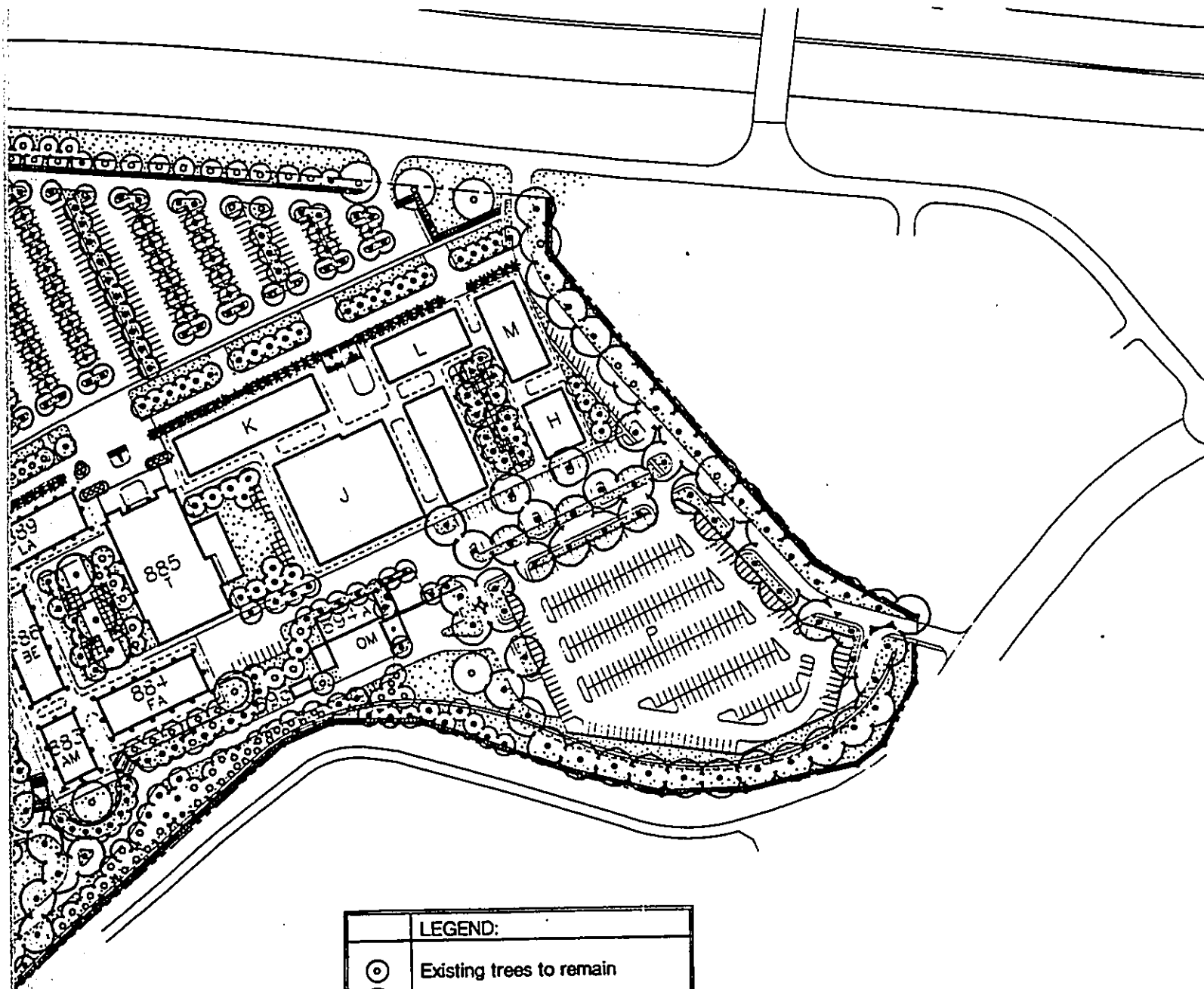
#### *Anticipated Impacts and Mitigative Measures*

Landscape improvements called for in the Long Range Development Plan will enhance the appearance of the Leeward campus (Figure 3-3). Introduction of lower maintenance vegetation, to accent, shelter, or screen key features of the site shall be included in all new campus development.

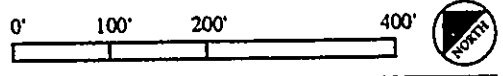
Campus landscaping will emphasize native Hawaiian and Polynesian-introduced plant species. Exotic plant material, which have become synonymous with the local environment, may also be included.

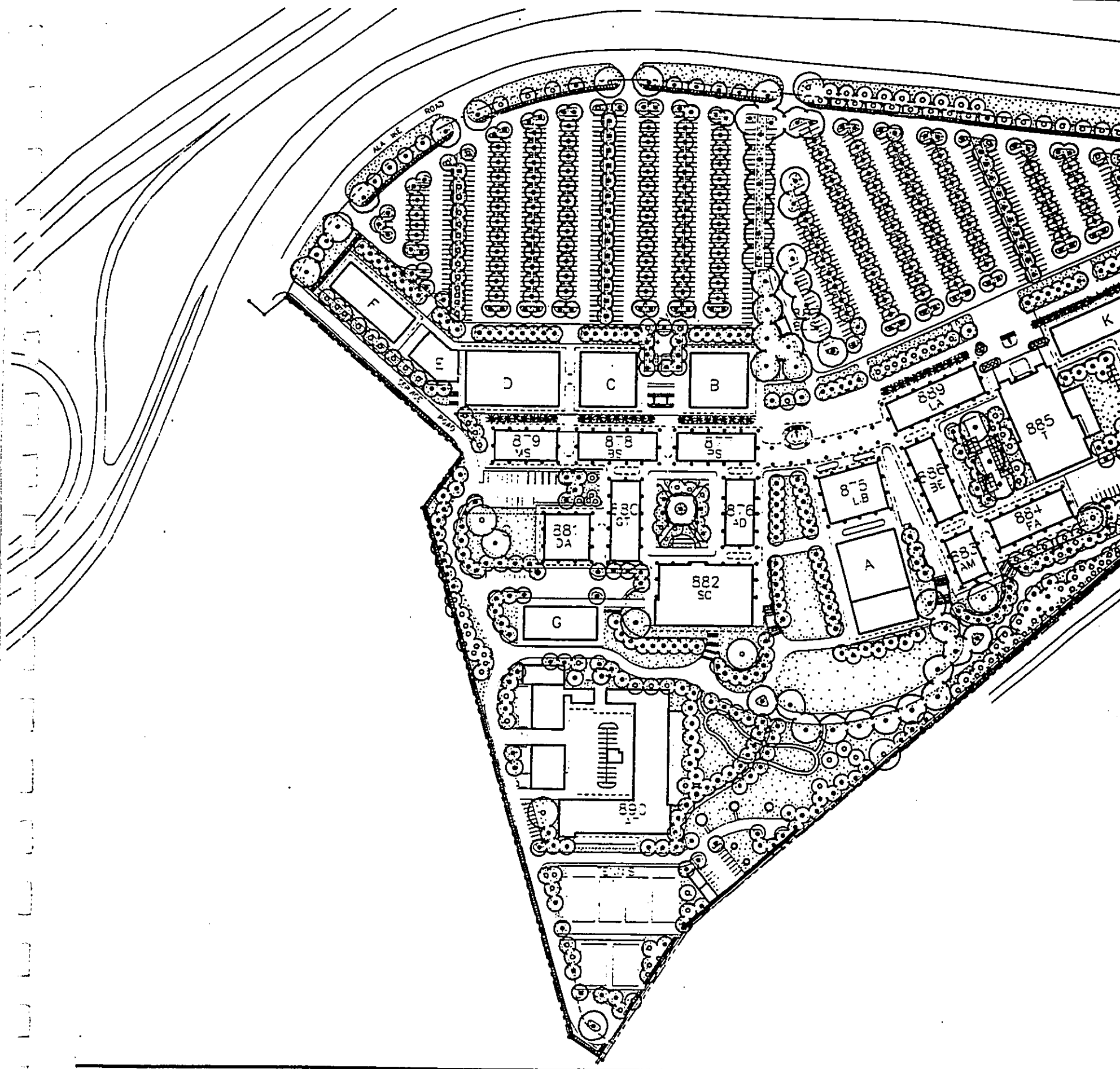
Monkey pod trees will be planted along both sides of parking lot entrances to highlight campus circulation patterns. Perimeter street trees along Ala Ike Road will be Gold Trees and Silver Trumpet Trees. Existing trees of this type are to remain. All other tree types will be relocated.

Medium canopy trees will be planted within the parking lot rows in 3' square tree wells; one tree should be planted for every 6 parking stalls. Existing small accent trees will be removed and replaced by canopy trees.



LEGEND:	
⊙	Existing trees to remain
○	Large canopy trees
⊙	Flowering trees
*	Palms
▬	Flowering hedge
⋯	Shrubs, groundcover and grass





Leeward Community College Master Plan

Ultimate Landscape Plan

## LEEWARD COMMUNITY COLLEGE LONG RANGE DEVELOPMENT PLAN

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A large flowering hedge will be planted along the perimeter of the campus to screen off-site views from the neighboring highways to the north, apartments to the east, and to define the limits of the campus to the south and west. Additional landscape screening/fencing will be provided as needed around on-site service areas or mechanical equipment.

Walkways will intersect the courtyards, directing the students through the spaces instead of around the perimeter. Each courtyard will have its own functional identity which will be achieved through the use of plant materials, paving and site furnishings.

A new automatic irrigation system will be installed. The existing system will be abandoned; sprinkler heads should be removed and parts will be salvaged if practical. A low-volume or drip irrigation system will be considered for trees and ground cover areas only.

The principles of xeriscape, water conservation through proper landscape planning and design, will be implemented. Native and drought tolerant plants will be planted wherever possible and existing shrubs and ground covers requiring excessive watering will be removed.

### 3.6 ARCHAEOLOGICAL/HISTORICAL RESOURCES

#### *Existing Conditions*

The site is located in the *ahupua'a* of Waiawa in the district of 'Ewa. Although general overviews have been compiled relatively little is recorded of the archaeology of 'Ewa. Historic development around Pearl Harbor has resulted in the destruction of most sites in the area.

Studies by Kirch (1985) have concluded that archaeological evidence shows an explosive population growth between A.D. 1100 and 1300. During this time population pressure seems to have forced the dispersal of native Hawaiians from the fertile windward valleys into the drier Leeward regions. Most of the dispersal seems to have occurred between A.D. 1100 and 1650. The speculation is that most of the fishponds for which the region is famous were constructed in the later part of this expansion.

Following initial settlement, irrigated agriculture was developed and taro pond-field complexes were established. By the 1800s, a vast complex of fishponds existed, and the lands of Waikele and Kipapa had been developed into extensive pond-field complexes. The regions around Pearl Harbor likely supported a substantial population during this period. Accounts from Vancouver's 1798 visit give the impression that this region was densely settled.

The 19<sup>th</sup> century saw the arrival of Protestant missionaries in the 1820s and the Catholic church in the 1840s. Much of the information about the region survive in the recollections of John Papa Ii which contain information about the region. Numerous oral traditions also exist. Sterling and Summer's map of the region indicates that the Old 'Ewa Church mission was located in the vicinity of the current campus. Records from the mahele land reforms of 1848 - 1852 indicate numerous taro pondfield complexes in the region. Many of the ponds and *loi* shown on these maps have been graded over or filled in the century since the mahele. These reforms also changed the nature of land tenure and economy in Hawaii and opened the door to a new kind of society for Hawaii. Towards the close of the century the development of the sugar industry

## LEEWARD COMMUNITY COLLEGE LONG RANGE DEVELOPMENT PLAN

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and commercial agriculture dominated the life of the region. In 1897 O'ahu Sugar company began developing plantations in the area. The railway right of way *makai* of the campus is a remnant of this period.

Military development at Pearl Harbor began in the 1930s and remains a strong presence in the area today. The years before and after World War II saw great expansion of the military in the region. Besides the development of facilities around Pearl Harbor, the Navy also acquired portions of Kipapa Gulch and other adjacent lands including parcels in the *ahupua'a* of Waiawa. The Navy drum storage site next to the campus is a reminder of the extent of this previous presence.

After the war years suburban expansion modified the landscape even further. Today there are no known historical or archaeological sites on the campus.

### *Anticipated Impacts and Mitigative Measures*

The LCC Campus has been extensively graded during previous uses as sugar plantation and military land. It was most recently impacted during construction of the existing facilities and it is unlikely that subsurface remains will be uncovered during construction of new facilities. Should remains or artifacts be found during construction, work in the area would be suspended immediately and the Historic Preservation Division of the State Department of Land and Natural Resources would be immediately notified to determine the appropriate course of action.

### 3.7 LAND USE AND DEVELOPMENT PATTERNS

#### *Existing Conditions*

The campus is located in the City and County of Honolulu and has an underlying zoning of Agricultural-General (AG-2). It is within the Central Oahu Development Plan (DP) area and is indicated on the Development Plan's Public Facilities Map as a Community College. The State Land Use District (SLUD) designation is Urban. The campus is just *mauka* and outside of the Special Management Area (SMA) boundary.

The site is bounded on the north by the H-1, H-2, Farrington Highway and Kamehameha Highway interchange. To the west is a vacant U.S. Naval Reservation parcel which was originally used as an oil drum/fuel storage area (Zoning - AG-2, DP - Industrial, SLUD - Urban). This parcel was recently included in a land exchange with the Department of Hawaiian Home Lands (DHHL) and will be transferred to that agency in the future. Waipahu High School is located just west of the Naval Reservation along with an intermediate water front parcel that is zoned A-2. To the south are numerous small agricultural parcels, ponds and wetlands (Zoning - AG-2, DP - Agriculture, SLUD - Agricultural). To the east is the existing College Gardens Apartments (Zoning - A-2, DP - MDA, SLUD - Urban). Additional parcels southeast of the site are currently in a variety of residential and agricultural uses and are zoned R-5. The land for the college was acquired from the federal government after statehood and is not ceded lands.

*Anticipated Impacts and Mitigative Measures*

The existing use is not consistent with the underlying zoning. Large institutional uses such as college campuses require a plan review use approval to conform to the zoning. Expansion of College facilities within the existing campus will be consistent with the present use of the site when a plan review use for the campus is approved by the City and County of Honolulu. The University of Hawaii will be applying for a plan review use application after going through the environmental review process.

The agricultural uses *makai* of the campus are mostly small truck farms growing fresh vegetables and poultry. Several farms use the springs and wetland hydrology to grow wetland crops like watercress. While the campus does not have a direct impact on the farms there may be some indirect impact through the pressures associated with growing urbanization; e.g. increasing traffic, use conflicts and rising property values.

**3.8 ROADWAYS, ACCESS, TRAFFIC AND PARKING CONDITIONS**

Existing traffic conditions and anticipated future conditions with and without the project are detailed in the Traffic Impact Analysis Report for the Proposed Leeward Community College Expansion (hereafter referred to as the TIAR) (Austin Tsutsumi & Associates, Inc., June 1998) which is included in Appendix C. The findings are summarized below. Additional discussion includes pedestrian, bicycle and mass transit options.

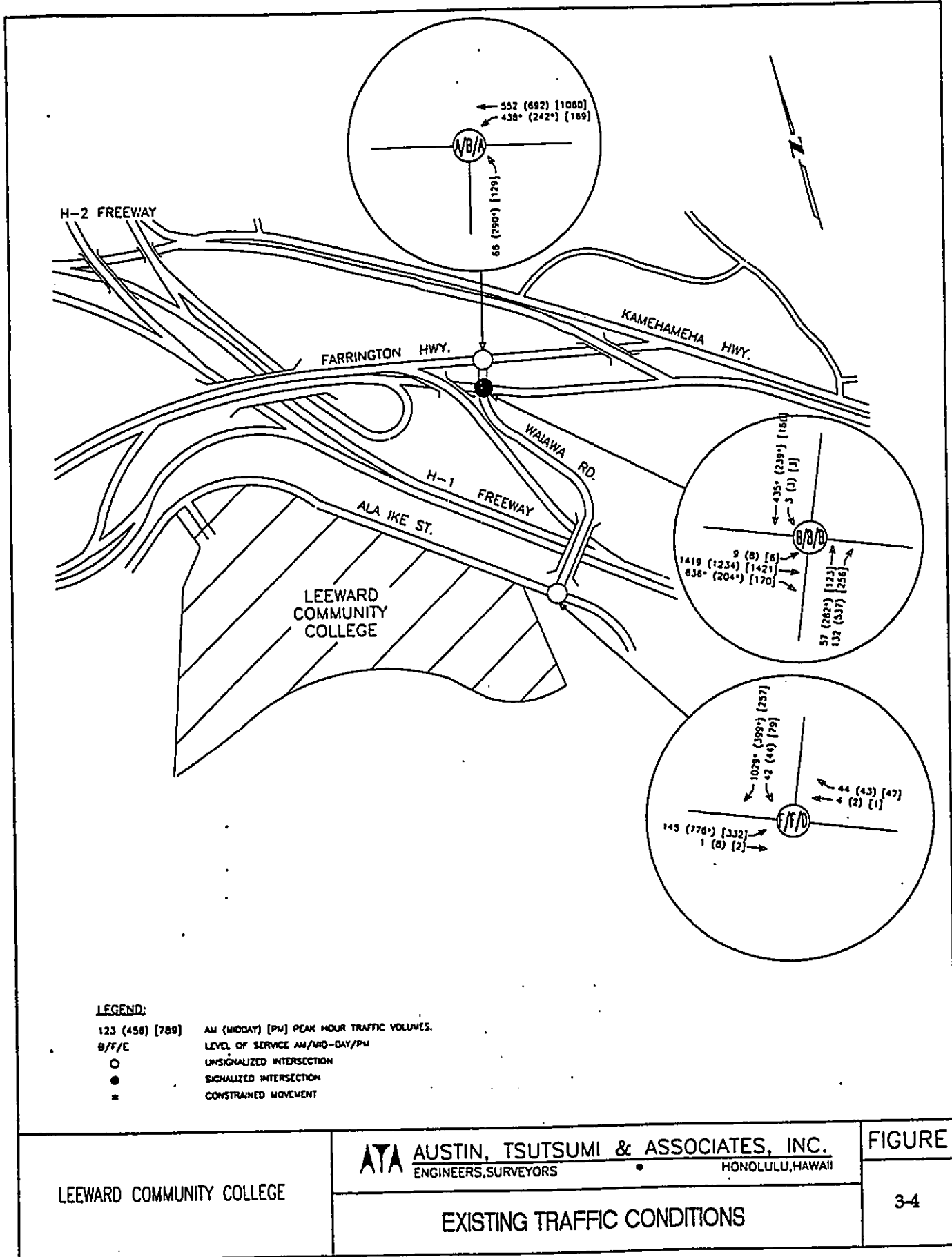
*Existing Conditions*

The only access to the Leeward Community College site is by way of Waiawa Road, a two-lane, two-way, north/south State collector road which crosses the H-1 Freeway. At a T-intersection with Waiawa Road is Ala Ike Road which turns at a right angle in the west (Ewa) direction to the LCC campus and on toward the U.S. Navy Drum Storage facility adjacent to the Ewa-side of the LCC campus. Ala Ike Road is a two-lane, two-way east/west State collector road that runs parallel to H-1 Freeway along the northern boundary of the campus.

Access to the campus from Pearl City and areas east of the College is by way of the H-1 Freeway or Kamehameha Highway, both of which connect to Farrington Highway and then on to Waiawa Road and Ala Ike Road. Motorists using the west-bound freeway must exit at the Pearl City off-ramp of the Waiawa Interchange, approximately 1.5 miles east of Waiawa Road. Students and faculty commuting from areas to the west would use the H-1 Freeway or Farrington Highway to access Waiawa Road and on to Ala Ike Road. From the north, motorists would use Kamehameha Highway or the H-2 Freeway to get to Waiawa Road.

The single access route to and from campus, via Waiawa Road and Ala Ike Road, is very congested at end-of-class periods when many students exit the campus. The traffic queue at these times is frequently more than one-half mile long extending along the entire campus frontage on Ala Ike Road. This recurrent congestion, on occasion, makes it difficult to get through the Waiawa Road intersection for adjacent residents of the "College Gardens" apartment complex (not associated with LCC), single-family homes and several farm lots, all which border the east and south side of campus.

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There is an unpaved dirt road outside of the property that parallels the south border of the campus which provides access to farms in the area. The road is blocked by a gate approximately 1/4 mile west of the LCC campus. There is no other public roadway or continuous paved road out of the area. The campus would be landlocked if the Waiawa Road bridge or roadway were blocked. Having only one access route to the campus would be a problem if there were an emergency in the area, such as a fire, broken water main, or major car accident. A second access road to and from the campus would provide an alternate means to enter and exit the area. This is especially important for an institutional facility such as LCC, where there is a continuous flow of users.

*Existing Level Of Service Analysis*

Level of Service (LOS) analysis is a qualitative measure used to describe the conditions of traffic flow ranging from free-flow conditions at LOS A to congested traffic conditions at LOS F. Weekday AM, mid-day and PM peak traffic turning movement counts were obtained on Wednesday, September 24, 1997. From the count data, the AM peak hour of traffic was determined to be from 7:30 - 8:30 AM; mid-day from 12:15 - 1:15 PM; PM peak hour from 4:00 - 5:00 PM. Turning movement count data, which were also supplemented with 24-hour machine counts in February 1998, are all provided in the TIAR in Appendix A.

Three intersections were analyzed: Waiawa Road and Ala Ike Road (Unsignalized); Farrington Highway eastbound and Waiawa Road (Signalized); and Farrington Highway westbound and Waiawa Road (Unsignalized). Figure 3-4 and Table 3-2 summarizes the Level of service results for the intersections under existing conditions.

The analysis indicates that the unsignalized Ala Ike Road/Waiawa Road intersection is operating at LOS F during the AM peak hour of traffic. Long traffic queues back up from the intersection causing the eastbound and westbound Farrington Highway/Waiawa Road intersections to back up and be constrained.

During the mid-day peak hour of traffic, analysis indicates that the unsignalized Ala Ike Road/Waiawa Road intersection is operating at LOS F. This is due to a high eastbound Ala Ike Road left turn onto north bound Waiawa Road, which has to yield the right-of-way to motorists southbound on Waiawa Road. Therefore, vehicles exiting LCC queued back from this intersection and took approximately 10 minutes to reach the intersection.

During the PM peak hour of traffic, the unsignalized Ala Ike Road/Waiawa Road and the signalized Farrington Highway/Waiawa Road intersections are operating at LOS B. The westbound Farrington Highway/Waiawa Road intersection is operating overall at LOS E with the left turns out of Waiawa Road to westbound Farrington Highway operating at LOS F.

*Anticipated Impacts and Mitigative Measures for Existing Conditions*

While not essential to the implementation of the Long Range Development Plan, either a secondary access to Leeward Community College or widening of Ala Ike Road and Waiawa Road (both to 4 lanes) should be constructed in order to mitigate the delays and queuing problems.

Figure 3-5 illustrates the following recommended improvements to the existing roadway system which would result in the intersections of Ala Ike Road/Waiawa Road, eastbound Farrington Highway/Waiawa Road, and westbound Farrington Highway/Waiawa would operate at LOS B or better during the AM, mid-day and PM peak hours of traffic. The analyses also indicates that the queuing problems would be reduced.

- Widen Ala Ike Road to 4 lanes between the second LCC driveway to its intersection with Waiawa Road.
- Widen Waiawa Road to 4 lanes from Ala Ike Road to its intersection with westbound Farrington Highway.
- Reconfigure Ala Ike Road/Waiawa Road intersection so that the major flow of traffic is to/from LCC and Farrington Highway and no long a T-intersection.
- Provide two through-lanes and a right-turn lane for southbound Waiawa Road at its intersection with eastbound Farrington Highway.
- Signalize the westbound Farrington Highway/Waiawa Road intersection.
- Provide two left-turn lanes from northbound Waiawa Road to westbound Farrington Highway.
- Coordinate the two traffic signals on Waiawa Road with eastbound and westbound Farrington Highway.

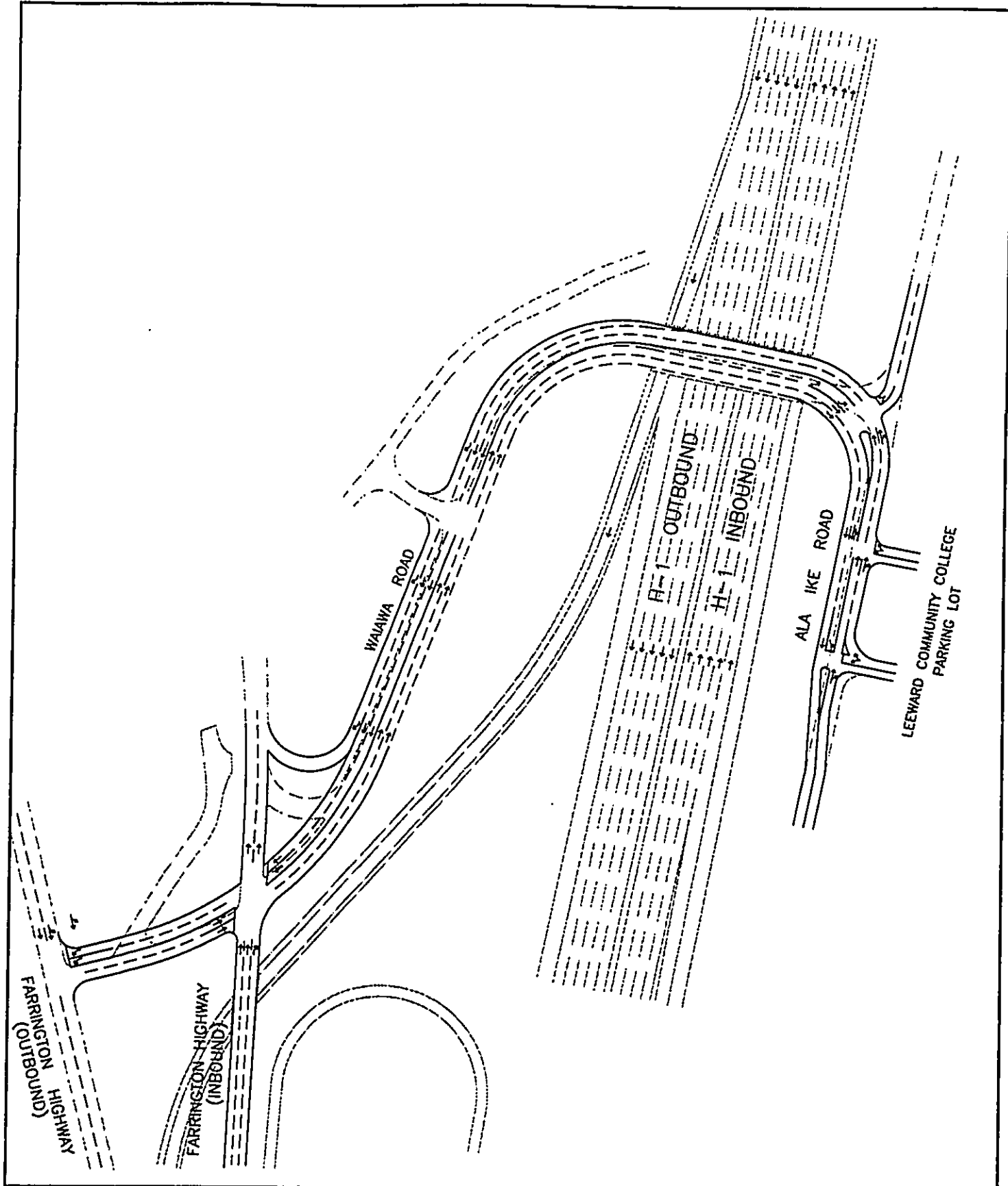
#### *Future Conditions With and Without The Project*


A defacto growth factor of 1.8% was calculated from information contained in the Oahu Metropolitan Planning Organization's Oahu Regional Transportation Plan (November 1995). The growth factor was applied to the through-traffic volumes on Farrington Highway approaching Waiawa Road to estimate the Base Years 2002, 2007, 2017, and 2027 traffic volume projections. For the first three Base Years without the proposed LCC expansion, but with the recommended improvements the three intersections are anticipated to operate at LOC C or better during the AM, mid-day and PM peak hours of traffic. For Base Year 2027 without the proposed LCC expansion (Figure 3-6), several of the movements are anticipated to operate at unacceptable LOS levels at the eastbound Farrington Highway/Waiawa Road intersection even with the improvements.

For the Base Years of 2002, 2007 and 2017 with the proposed LCC expansion and with the recommended improvements to existing conditions, the three intersections are anticipated to operate at LOS C or better (the same LOS as without the expansion) during the AM, mid-day and PM peak hours of traffic. For the Year 2027 with the proposed LCC expansion and the recommended improvements (Figure 3-7), some turning movements at the Farrington Highway/Waiawa Road intersection will operate at LOS D and F during the AM, mid-day and PM peak hours of traffic. Other turning movements at this intersection will operate at LOS A, B and C. The Ala Ike Road/Waiawa Road intersection is anticipated to operate between LOS A and C during the AM, mid-day and PM peak hours of traffic.

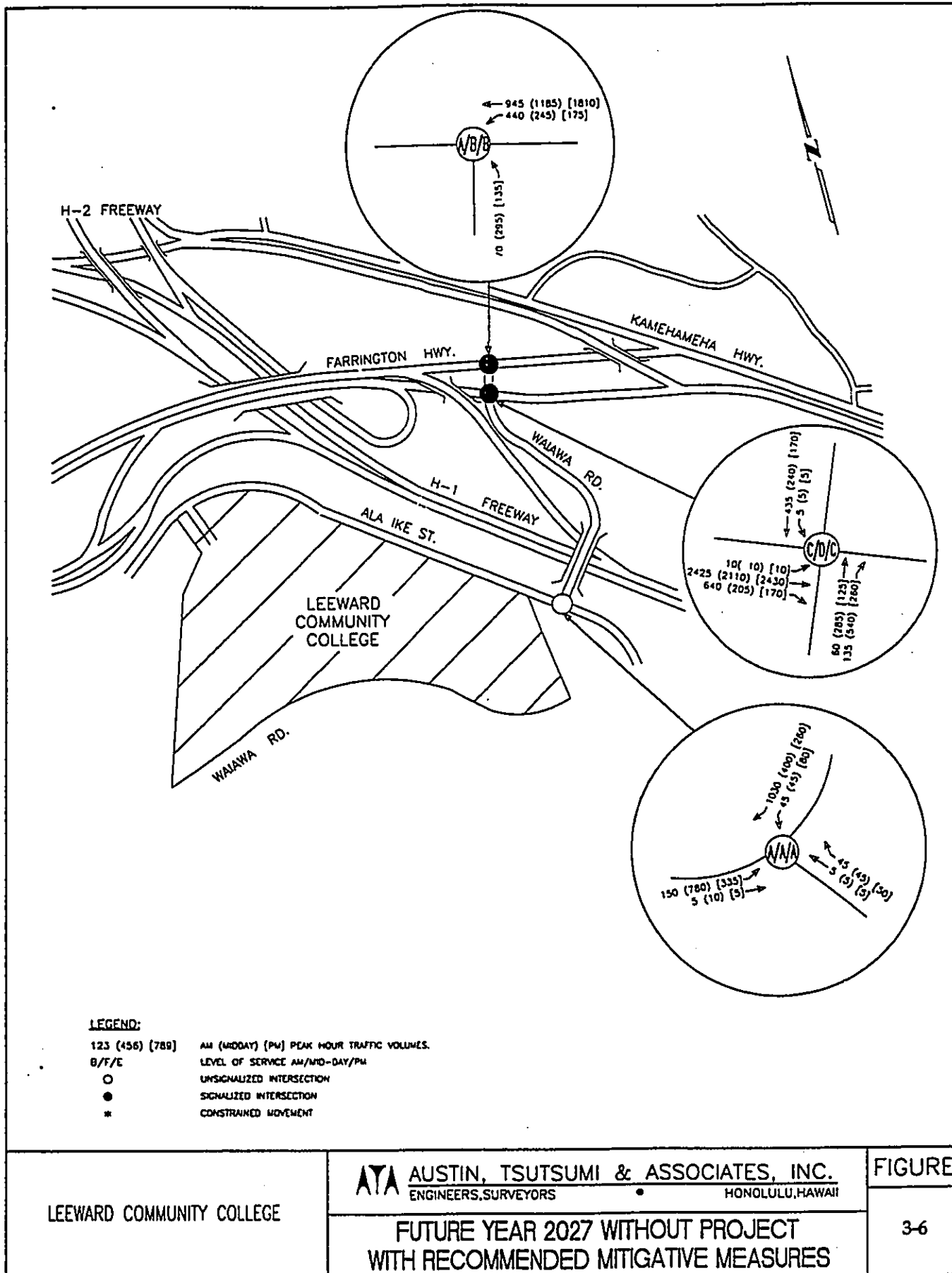
#### *Anticipated Impacts and Mitigative Measures for the Proposed Project*

One alternative to reduce the long northbound Waiawa Road right-turn queue length may be to extend Waiawa Road beyond its current terminus with westbound Farrington Highway to



LEEWARD COMMUNITY COLLEGE	 <b>AUSTIN, TSUTSUMI &amp; ASSOCIATES, INC.</b> ENGINEERS, SURVEYORS • HONOLULU, HAWAII	FIGURE
	<b>RECOMMENDED MITIGATIVE MEASURES</b>	3-5

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LEEWARD COMMUNITY COLLEGE

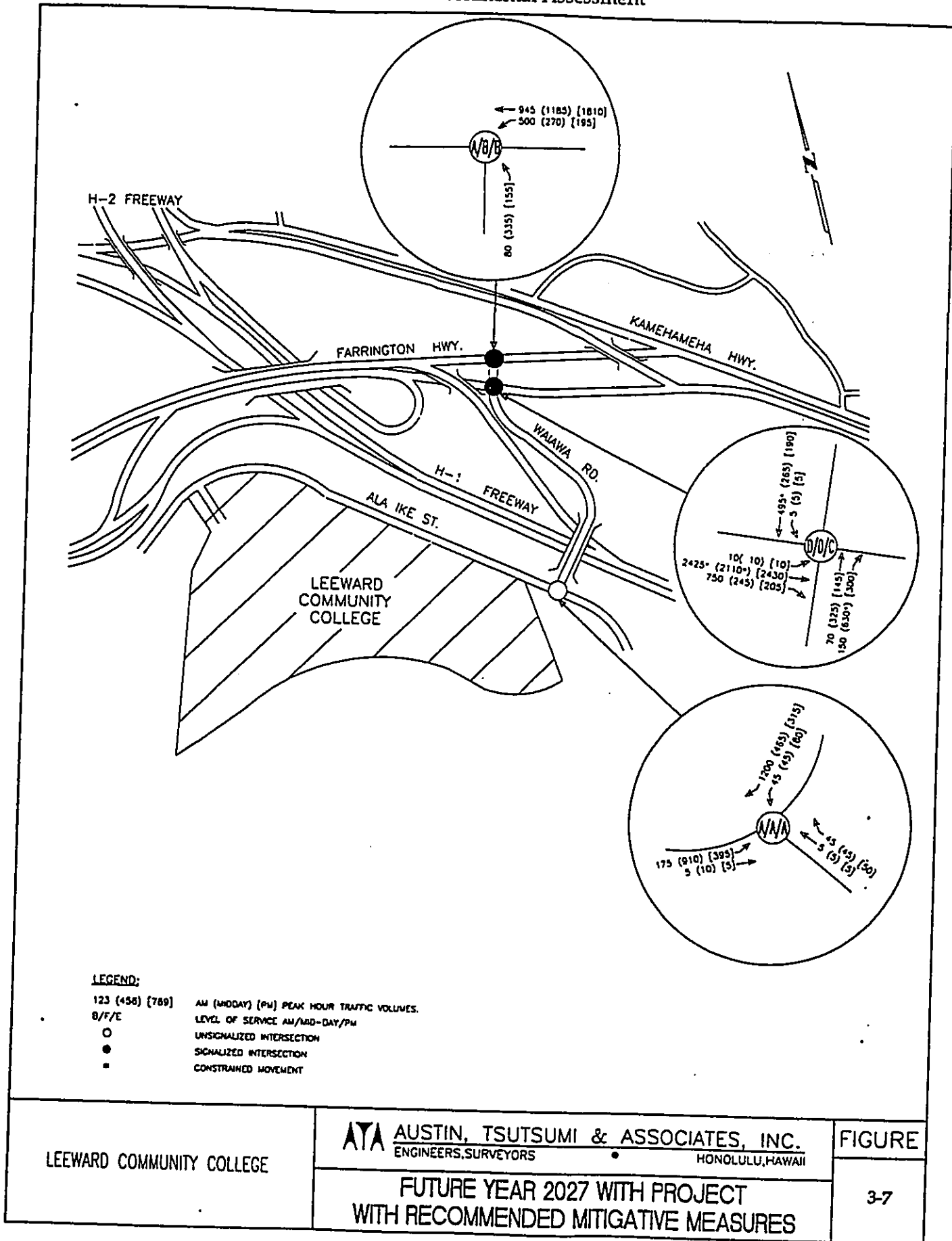
ATA AUSTIN, TSUTSUMI & ASSOCIATES, INC.  
ENGINEERS, SURVEYORS HONOLULU, HAWAII

FIGURE

FUTURE YEAR 2027 WITHOUT PROJECT  
WITH RECOMMENDED MITIGATIVE MEASURES

3-6

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FIGURE

FUTURE YEAR 2027 WITH PROJECT  
WITH RECOMMENDED MITIGATIVE MEASURES

3-7

## LEEWARD COMMUNITY COLLEGE LONG RANGE DEVELOPMENT PLAN

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intersect Kamehameha Highway. Commuters proceeding to westbound H-1 Freeway and northbound H-2 Freeway would go straight through to a new Kamehameha Highway intersection and make a left turn to access the freeway on-ramps. At the same time, westbound Farrington Highway left turn onto southbound Waiawa Road toward LCC could be restricted and replaced by forcing them to the new Waiawa Road extension/Kamehameha Highway intersection. This would provide a longer storage length for westbound traffic entering LCC.

### *Traffic Impact Analysis Report Conclusions*

The current long delays and queuing lengths for traffic entering and exiting the LCC campus are affecting operations on Farrington Highway during the AM and mid-day peak hours of traffic. The delays and queuing are associated with the poor operations at the Ala Ike Road/Waiawa Road intersection. It is estimated that the proposed expansion of LCC can be accommodated through the Year 2017 with improvements and widening to Ala Ike Road and Waiawa Road. However, beyond the Year 2017, a secondary access road to the LCC campus will be needed.

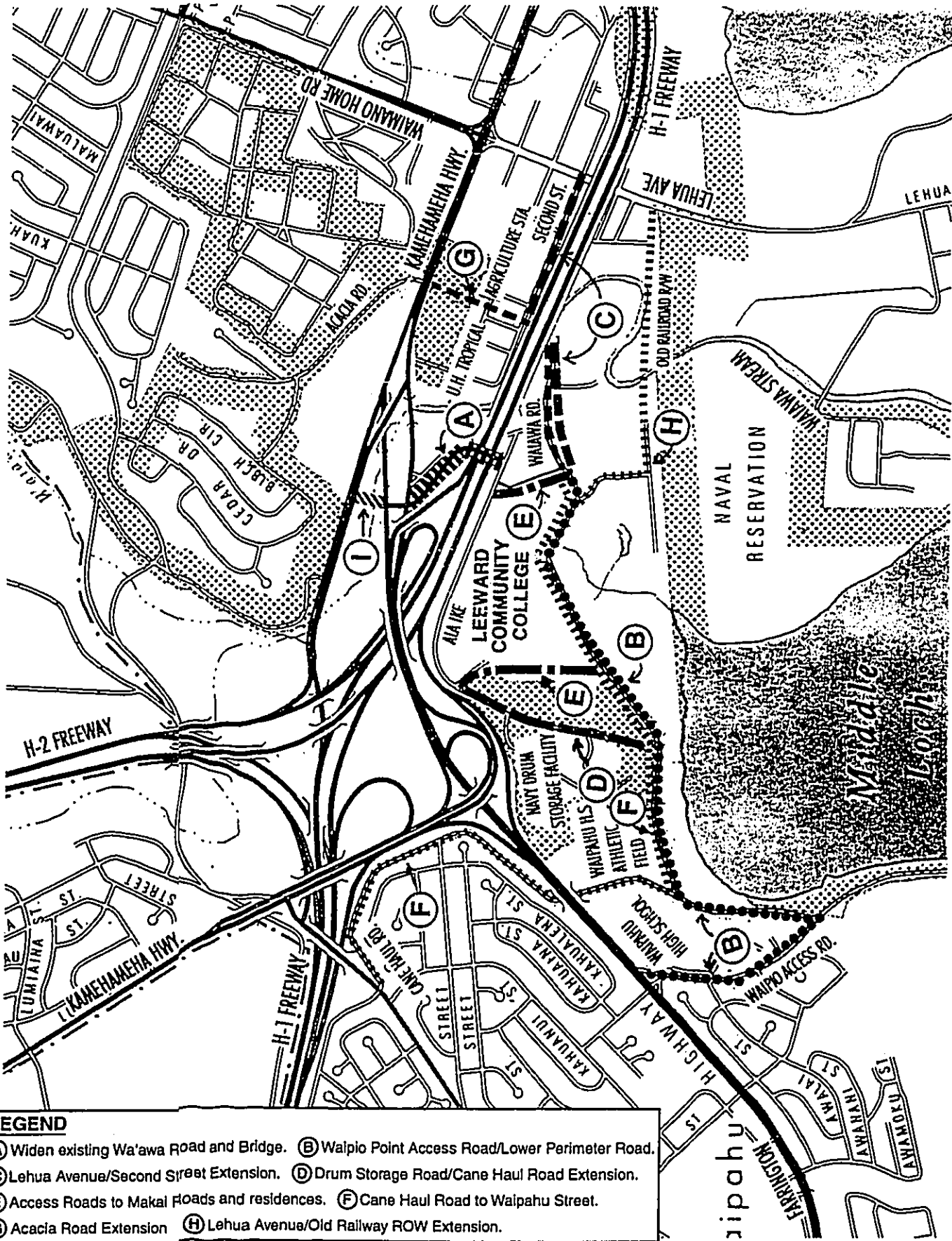
### *Secondary Access Road to Leeward Community College*


Current Status: Plans for a second access road into Leeward Community College have been discussed for over a decade. A study was prepared in 1974 by the State Department of Accounting and General Services for an access road from Waipio Point Access Road (near Waipahu High School) to the southern campus boundary, but the project was never implemented.

Several alternative alignments have been reviewed for the secondary access road. Options have included widening the existing Waiawa Road overpass, extensions from Lehua Avenue and Acacia Road from the Pearl City direction and alignments from the Waipahu town direction. The Pearl City options require bridges over Waiawa Stream. The Waipahu Town options include a *makai* alignment that may impact coastal wetlands along the Pearl harbor shoreline, an intermediate alignment passing through the Navy site and a *mauka* alignment which uses the Cane Haul Road that goes under the highway and has a right of way set aside in the unilateral agreement for the Alii Cove project adjacent to Waipahu High School. (Figure 3-8) Some alignments use Waiawa Road and others follow the old railway right of way and energy corridor alignment that is part of the bikeway system plan. While some initial assessment was done and some preliminary preferences indicated in the planning no alignment has been recommended by the University or the State Department of Transportation (SDOT).

Recently, the State Legislature in May of 1998 approved \$1 million to plan and design a second access road to the LCC campus from Waipio Point Access Road. The new access road could connect up with Ala Ike Road providing commuters with an alternate route towards Honolulu. However, the construction funds have not yet been approved by the Legislature.

Anticipated Impacts and Mitigation: The secondary access road will be studied in conjunction with the study that is underway for the Waiawa Interchange/H-1 widening study. An alignment will be selected after that study is complete. The lead agency for these studies is the State Department of Transportation. The University of Hawaii will work with SDOT assessing desirable alternatives and supporting development of the project.



 <b>AUSTIN, TSUTSUMI &amp; ASSOC., INC.</b> ENGINEERS • SURVEYORS	<b>TRAFFIC ASSESSMENT</b> LEEWARD COMMUNITY COLLEGE	<b>FIGURE</b>
	<b>SITE ACCESS ALTERNATIVES</b>	3-8



**Parking**

**Existing Conditions:** There are approximately 1,600 parking stalls on campus. At the highest demand for parking (late morning) field observations indicate that an additional 200 to 250 vehicles are parking on the grass shoulders on both sides of Ala Ike Road and on a temporary gravel lot located on the west end of the campus. The calculated existing parking ratio is 0.30 stall per student.

**Anticipated Impact and Mitigation:** It is anticipated that because of the single access and distance from transit stops there will be a continued need for vehicular parking. Using the anticipated overall student count of 8,200 (this number includes part time and non-traditional students) and extending the existing parking ratio of 0.30 stall per student there will be a need for 2,500 stalls. The LRDP projects 2,700 stalls at final completion. This should accommodate the anticipated future demand for parking on the campus.

### 3.9 OTHER ACCESS OPTIONS

**Existing Conditions**

While vehicular traffic is the main means of transport to the campus there are other alternatives. Except for express buses, almost all of the main Leeward Oahu and Central Oahu bus routes pass along Farrington and Kamehameha Highways paralleling the H-1 Freeway. There are bus stops located in both directions where students and others can depart and walk to the campus. The distance is about a half mile to the main campus buildings. There is also a shuttle bus route (#73) with a stop at the front of the LCC library that is in service during the semester when school is in session.

The Draft Honolulu Bicycle Master Plan shows an existing bikeway along Waiawa Street that extends to Waipahu high School. Additionally, there is a priority one project for a spur to connect the campus with bikeway. While not designated, bicycles can access the campus via Kamehameha and Farrington highways. There has been some thought to using the Cane Haul Road from the Waipahu side as a bike path.

Other than students coming from College Gardens and the other adjacent residences, pedestrian access to and from the campus is limited primarily to students traveling to and from the bus stops on Farrington Highway, approximately one-half mile from the campus. Pedestrians must walk on a paved shoulder from Farrington Highway to the Waiawa Road intersection and then on a grass shoulder to get to the campus. The walkway on the east side of the Waiawa Road bridge is approximately six feet wide and is demarcated by an asphalt roll curb.

Pedestrian access from the main parking lot is accommodated along two central walkways extending from the parking lots and connecting directly to *mauka* promenades which run along the entire length of the building complex. Within the main campus, covered pedestrian circulation to all the buildings is accommodated along the wide structured decks and walkways. The walkways and buildings define the perimeters of three courtyards, each includes a large open lawn area which can be used for lounging between classes or other

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campus activities. Access to the *makai* portion of the site is possible from several wide stairways connecting to the rear service road.

### *Anticipated Impacts and Mitigative Measures*

Implementation of the LRDP will increase the number of people coming to the campus. The increase represents a roughly 20% increase in the full time equivalent student population from the current 4,000 to projected 5,000 enrollment. This will be projected over a 30 year time frame.

It has been suggested that a bus route be added to the secondary access road when the alignment is selected and the roadway built. Conversations with the City's transit division indicate that the assignment of routes is based on an *assessment of need and demand*. If demand exists bus routes along the secondary road will be considered.

The projected bikeway extension to the campus will increase the ease with which bicycles can access the campus. Further designation along Kamehameha and Farrington highways may be needed to accommodate paths related to the communities from which future students are projected.

It is not anticipated that walking will be a major option for people coming to the campus. Pedestrian circulation improvements will focus on onsite improvements.

Handicapped accessible routes will be provided from designated parking areas to all campus facilities. The existing pedestrian circulation patterns will continue into the new expansion areas through the extension of the existing mezzanine terraces which interconnect the entire complex at each floor level. Additional pathways will be created to allow direct pedestrian access from the upper complex to the new parking structure as well as the lower recreation and observatory areas (Figure 3-9).

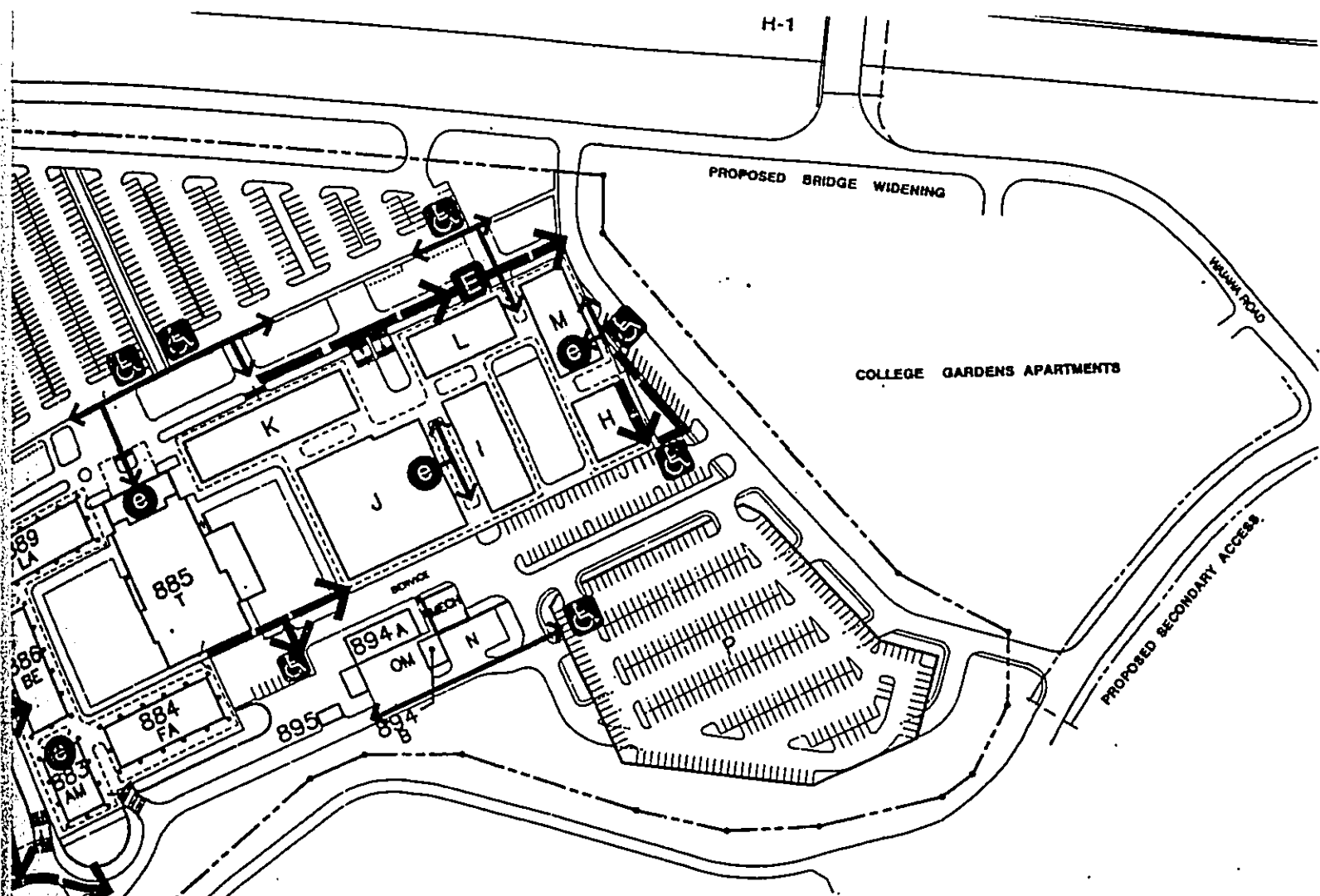
### 3.10 NOISE

#### *Existing Conditions*

The noise environment at Leeward Community College is dominated by nearby roadways, most notably the H-1 Freeway. Other noise sources include activities and events at Waipahu High School and Leeward Community College. Agricultural noise can be heard from the farms to the south.

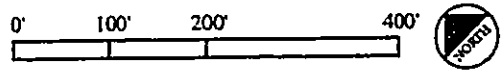
#### *Anticipated Impacts and Mitigative Measures*

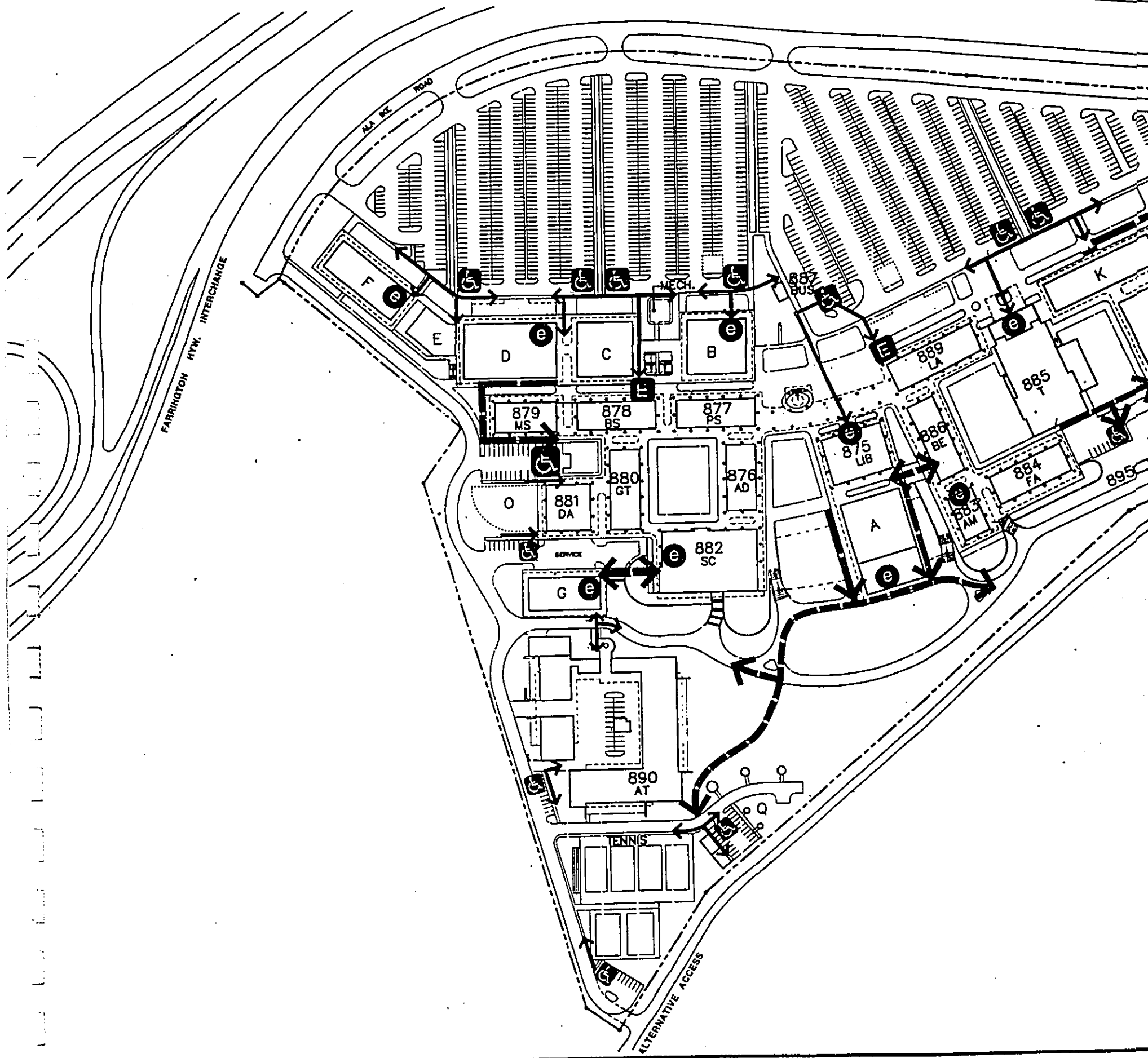
Short-term noise impacts during the construction phase will be mitigated with the proper use and maintenance of mufflers on construction equipment. Noise from ongoing operation of vehicles accessing the site and periodic use of grounds maintenance equipment may be noticeable at the site boundary. The noise associated with the college is not expected to be significant, particularly in comparison to the H-1 freeway and other roadways nearby. Noise during construction and normal hours of operation will follow the guidelines established in Chapter 46 Community Noise Control of Title 11 Administrative Rules of the State Department of Health.



**LEGEND**

- E** Common Area Elevators
- e** Building Elevators
- ↔** Ramps/Bridges
- ↓** General Access Route





### 3.11 AIR QUALITY

#### *Existing Conditions*

The State Department of Health, Clean Air Branch regularly samples ambient air quality at monitoring stations throughout the State and publishes the information in *Hawaii Air Quality Data*. The most recent publication includes air quality data for the period from 1991 to 1993.

The Pearl City Station, located at the Leeward Medical Center, is the closest air quality monitoring station to Leeward Community College. This station monitors PM<sub>10</sub>, particulate matter that is 10 microns or less in diameter. Levels of PM<sub>10</sub> at this station are consistently below State air quality standards for particulate matter. In 1993, average PM<sub>10</sub> levels were 15 ug/m<sup>3</sup>, substantially less than the State standard of 150 ug/m<sup>3</sup>.

Air quality in the Leeward Community College area is considered to be very good as nearby monitoring stations have consistently recorded airborne particulate and sulfur dioxide levels that are well within allowable State of Hawaii air quality standards.

#### *Anticipated Impacts and Mitigative Measures*

During construction periods, fugitive dust and vehicle emissions may impact air quality. These impacts will be short-term and mitigated through construction site control measures. Operation of the College in improved and expanded facilities will not significantly affect ambient air quality levels.

### 3.12 SOCIO-ECONOMIC CHARACTERISTICS

#### *Existing Conditions*

The population of Waipahu and Pearl City has grown steadily during this century. Today, the area stands at the center of urban growth on O'ahu, lying at the intersection of the island's major highways and between O'ahu's urban core and the areas designated for future urban expansion. It is a growing, low-density, suburban community with some medium-density apartments. From the 1950's, new residential suburbs and towns such as Waipio's Gentry and Waikele have developed as well. In 1990, over 98,000 people lived in the Waipahu - Pearl City region.

Waipahu originated as a sugar town, centered around the operations of the O'ahu Sugar Mill. O'ahu Sugar workers lived in camps throughout the surrounding region, and Waipahu grew up below the mill site. By 1940, Waipahu had a high school for students from the Waianae, Ewa, and Waipahu areas. Residential, commercial and light industrial areas have developed and grown since this time.

Unlike Waipahu, Pearl City did not develop around a sugar plantation. The area was settled by independent farmers who grew watercress, taro, rice, lotus, pineapple and sugar. Many small businesses also emerged. After WWII, the military developed much of the land around Pearl Harbor. The 1950's brought the development of the first of many subdivisions in Pearl City. Today, Pearl City is home to a rapidly growing population and hosts a full range of business and light industrial employers and numerous community facilities.

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In addition to serving Waipahu, Waipo/Waikele and Pearl City, Leeward Community College provides educational opportunities to the residents of the communities from Waianae on the Leeward coast to Haleiwa on the north shore to suburban Aiea. Between 5,500 and 6,000 students are typically enrolled each semester in liberal arts and vocational education programs offered by the College. Enrollment is expected to continue to increase as the population increases and as adults continue to return to school to gain skills for job development. LCC will continue to attract a substantial portion of students who are first generation college students, including many who are non-native speakers of English.

### *Anticipated Impacts and Mitigative Measures*

The principal socio-economic impact of the proposed action will be increased educational and cultural opportunities. Advanced facilities such as the proposed Media and Arts Instruction Center and new Health Sciences facilities will provide new educational avenues for Leeward students. Theater and library expansions will positively enhance the community by increasing the quality and amount of services provided at the College. Expansion of College facilities is not expected to increase population or housing demand in the Leeward area.

Construction activities will provide economic benefits through the purchase of goods and services and through construction period employment. The development of new facilities and expansion of existing facilities is also expected to increase permanent employment at the College.

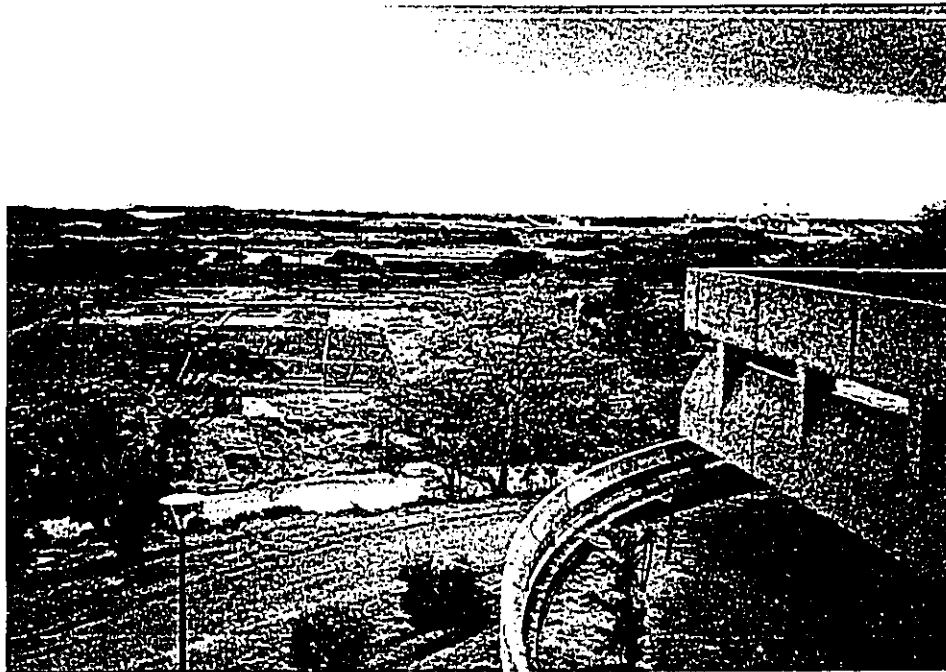
### 3.13 VISUAL RESOURCES

#### *Existing Conditions*

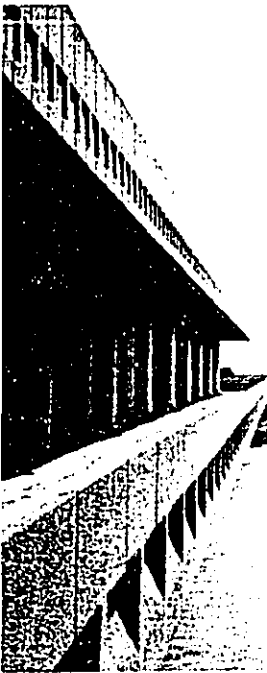
The existing campus incorporates a number of positive design characteristics, such as courtyards and the preservation of views toward off-site areas (Figure 3-10). One of the predominant visual features of LCC is the panoramic view of Pearl Harbor and the surrounding country side. The Coastal View Study (City and County of Honolulu Department of Land Utilization 1987) identifies Leeward Community College as a site of significant stationary views with important views into Pearl Harbor.

Off site developments in the immediate vicinity are generally residential in character; low-scale (1 to 2-stories), and located below LCC site elevations. This allows for long, unobstructed off-site views from many locations within the campus. Views looking *mauka* from the campus are also generally unobstructed.

The *mauka*-half of the site is covered by the vast expanse of pavement required for on-site parking. A few landscaped islands are dispersed throughout the parking areas, however this portion of the site is still visually dominated by pavement. The *makai* portion of the campus has scattered landscape coverage. Because of limited irrigation, the predominant visual impression of much of the campus is a dry landscape.



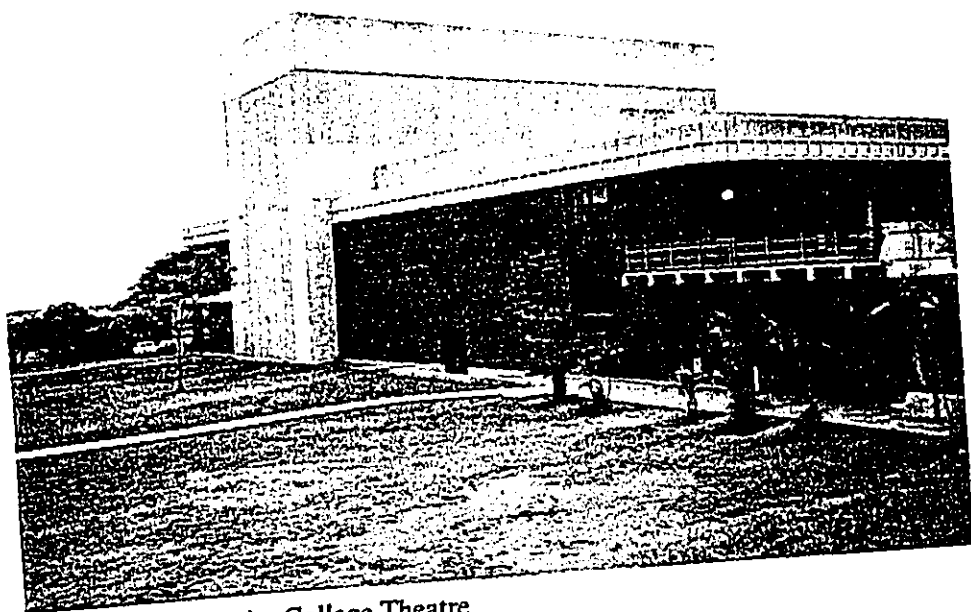
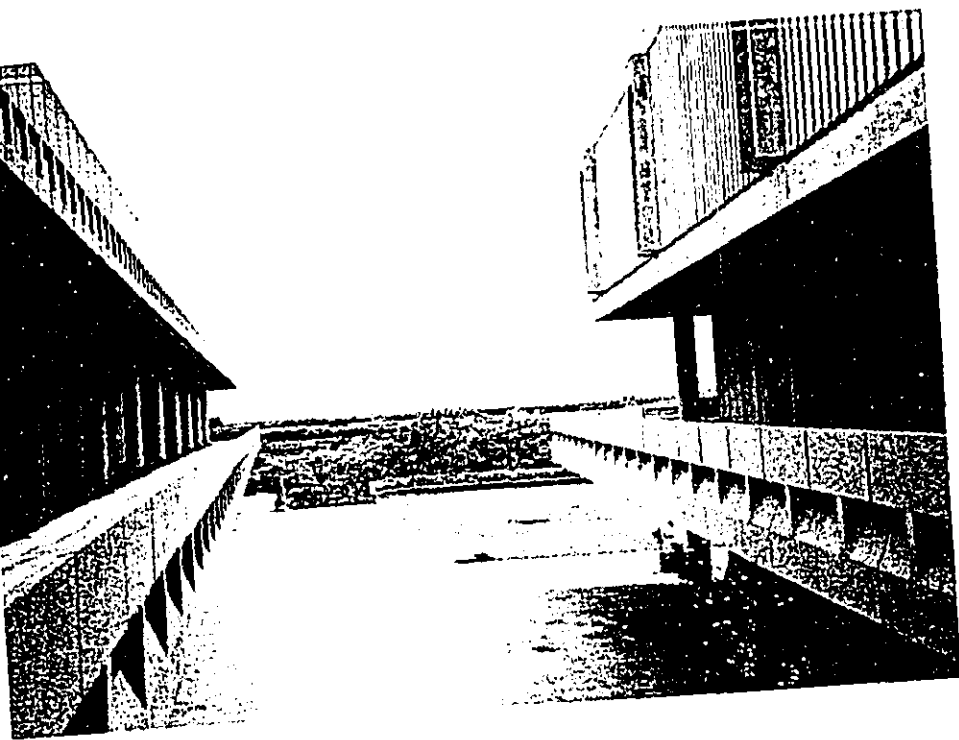
Views Makai to Agricultural Fields and Pearl Harbor



Main Parking Lot/Campus Entry



Classroom Courtyard



Leeward Community College Theatre



*Anticipated Impacts and Mitigative Measures*

Views to Off Site Areas

Existing open space and view corridors will be preserved and enhanced to the greatest extent possible.

Building designs will continue to follow the topography of the site through a system of terraces. Offsite views will be enhanced from these new structures. The impact to neighbors should be minor because of setback distances and the terraced development.

The Long Range Development Plan calls for a large flowering hedge to be planted along the perimeter of the campus to screen off-site views from the neighboring highways to the north, apartments to the east, and to define the limits of the campus to the south and west. Additional landscape screening/fencing shall be provided as needed around on-site service areas or mechanical equipment.

Views On-Site

Existing on-site open space and view corridors will be preserved and enhanced to the greatest extent possible. On-site service areas and mechanical equipment shall be visually screened by landscaping or other architectural treatments.

Landscaped courtyards will be incorporated into the construction of new buildings on the east side of the campus to continue the band of open space through the campus' central portion. Landscaping which requires minimal maintenance is recommended to visually enhance the campus.

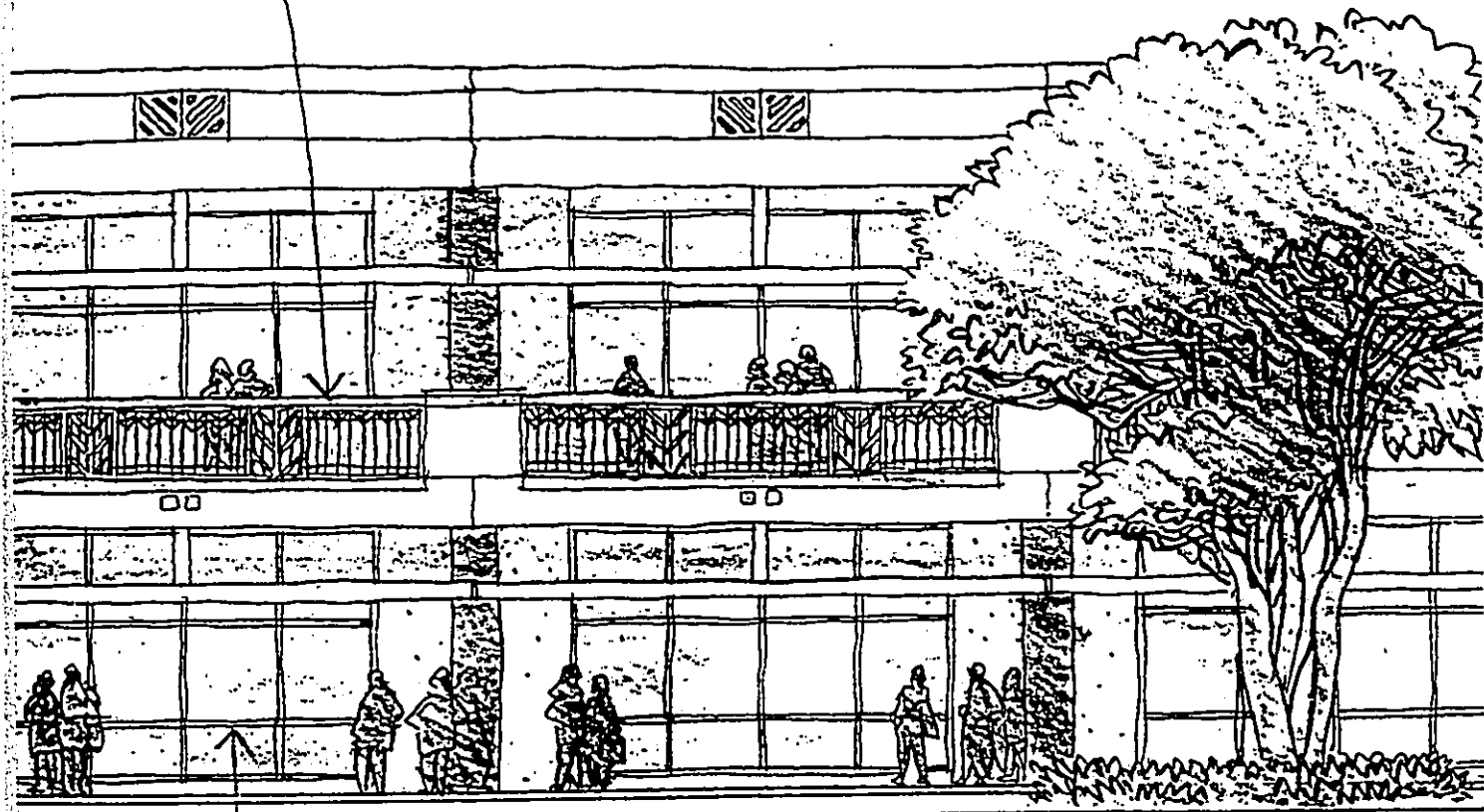
Building profiles will maintain consistency through retention of existing building heights, flat roof lines, horizontal forms and masonry construction. Lowered roof overhangs which are closer to human scale and provide protection from the elements shall be incorporated in new structures or renovations. Detailing of building exteriors (glass, finishes, and color) will decrease the monolithic qualities of the complex (Figure 3-11).

ANELS

ANELS OR SYNTHETIC PLASTER

AIL OR

L GUARDRAIL



FRITTED/ETCHED GLASS. ALUMINUM STOREFRONT  
WINDOW SYSTEM (typical)

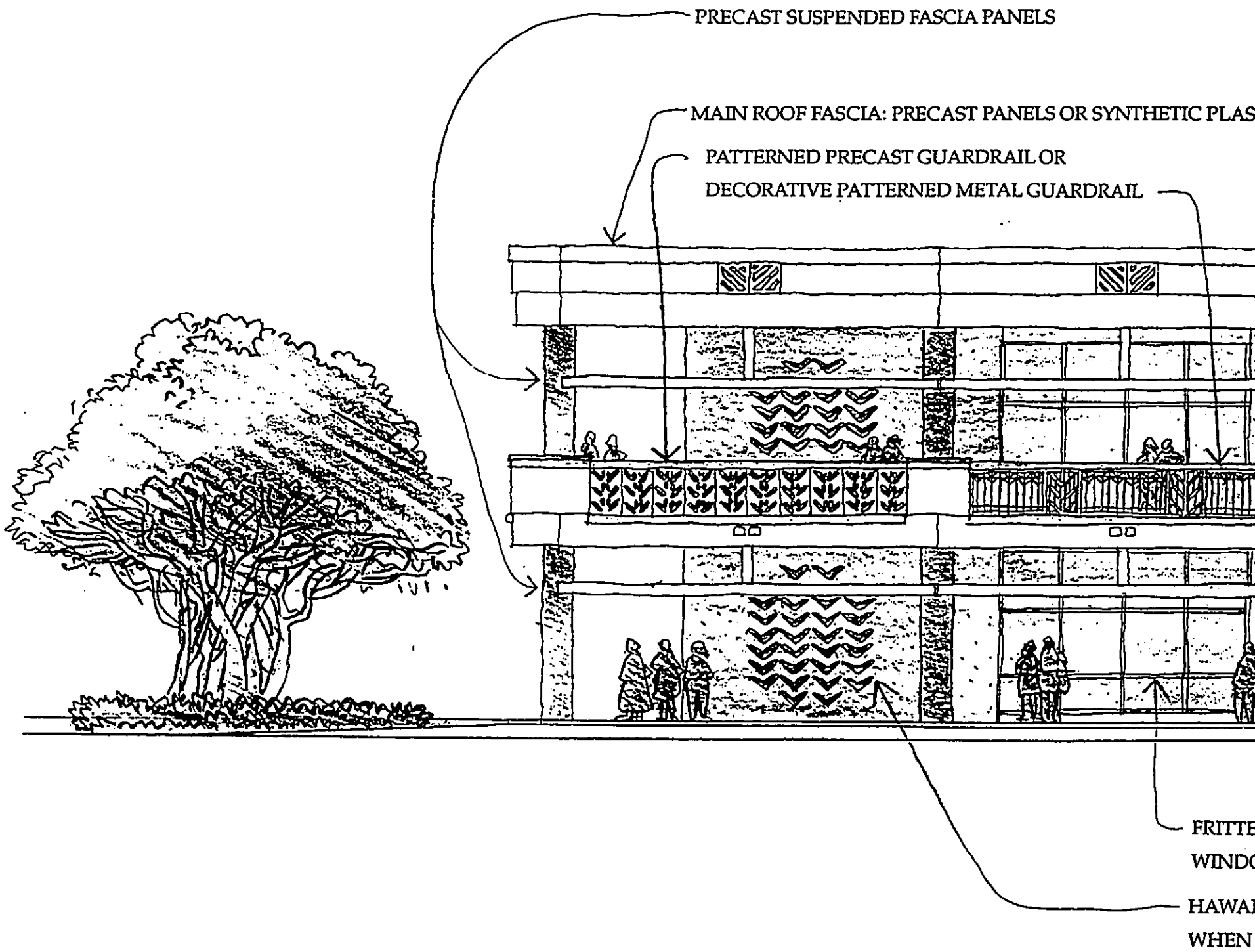
HAWAIIAN MOTIF PATTERN BLOCK WALLS  
WHEN SOLID WALL IS REQUIRED

0' 4' 8' 16'

ding Elevation

3-30

**GROUP 70**  
INTERNATIONAL  
Figure 3-11



### 3.14 WATER

#### *Existing Conditions*

Water service to the Leeward Community College (LCC) is provided by an 8-inch main that was extended from the Board of Water Supply (BWS) Waipahu "228" System at the intersection of Waipahu Street and Kahualena Street in Waipahu. Although this main was installed primarily for LCC, other service connections to the main have since been permitted by BWS. The largest is a 12-inch extension along Ala Ike Road for residential developments along Waiawa Road.

LCC water consumption is monitored by two water meters at the northwest corner of the campus adjacent to Ala Ike Road. From this point the water piping network extends to the area where the campus buildings are located, forming a loop system around the buildings, with dead-end extensions to facilities outside the loop. The UH West Oahu complex, located in the northwest corner of the campus, is also served by the LCC water system.

The main lines are 8-inch transmission mains with fire hydrant connections at various locations around the buildings. Water pressures are governed by the BWS Waipahu Reservoir which has a spillway elevation of 228 feet mean sea level. With ground elevations between 34 feet and 100 feet, the water system pressure for domestic water uses should be adequate.

Based on the available pressure and the existing water system line sizes, the current BWS fire flow requirements of 2,000 gallons per minute (gpm) at 20 pounds per square inch (psi) cannot be met. The maintenance staff reported that this deficiency has been noted by the Fire Department after conducting fire hydrant tests at the LCC campus. According to the Board of Water Supply (BWS), the existing facilities cannot provide adequate fire protection. Improvements should be made to bring the existing water system up to current BWS fire protection standards.

#### *Requirements*

Design guidelines contained in the Water System Standards, Volume I, of the Board of Water Supply (BWS), were used to evaluate the existing system and to determine the water system requirements for the proposed expansion of the Leeward Community College facilities.

#### a. Water Consumption

There are two criteria for estimating average daily water demand for a school: 60 gallons (gal) per person (student & staff) and 4,000 gal/acre of campus area.

$$\begin{aligned} 60 \times (5,000 \text{ FTE} + 500 \text{ staff}) &= 330,000 \text{ gal/day} \\ 4,000 \times 50 \text{ acres} &= 200,000 \text{ gal/day} \end{aligned}$$

The larger value of 330,000 gal/day based on 5,000 FTE students and 500 employees was used. Water demands are as follows:

$$\begin{aligned} \text{Average Daily Demand} &= 330,000 \text{ gal/day} \\ \text{Maximum Daily Demand} &= 1.5 \times \text{Average} = 495,000 \text{ gal/day} \\ \text{Peak Hour Flow} &= 3.0 \times \text{Average} = 990,000 \text{ gal/day} \end{aligned}$$

## LEEWARD COMMUNITY COLLEGE LONG RANGE DEVELOPMENT PLAN

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### b. Fire Protection

Fire flow requirement for schools is 2,000 gpm for a duration of 2 hours. Fire hydrant spacing is 250 feet maximum.

In order to satisfy current fire flow standards a second transmission main needs to be constructed, possibly parallel to the existing 8-inch main from the Waipahu Street/Kahualena Street intersection. The piping network within the campus would also have to be upgraded.

### c. System Sizing

Criteria for sizing the water mains is based on satisfying the following:

- (1) Peak hour flow with a minimum residual pressure of 40 psi at the critical location and maximum flow velocity of 6 feet per second.
- (2) Maximum daily demand plus fire flow with a residual pressure of 20 psi at the critical fire hydrant.

### *Proposed Improvements*

#### Off-Site Water

A new 16-inch main will be installed from the BWS Waipahu "228" System at the intersection of Waipahu Street and Kahualena Street to the north edge of the LCC campus parallel to the existing 8-inch transmission main (Figure 3-12). Additionally, the BWS will install a 12-inch main along Waipahu Street for approximately 1,000 feet to connect to a point in the system with sufficient pressure and flow to meet standards.

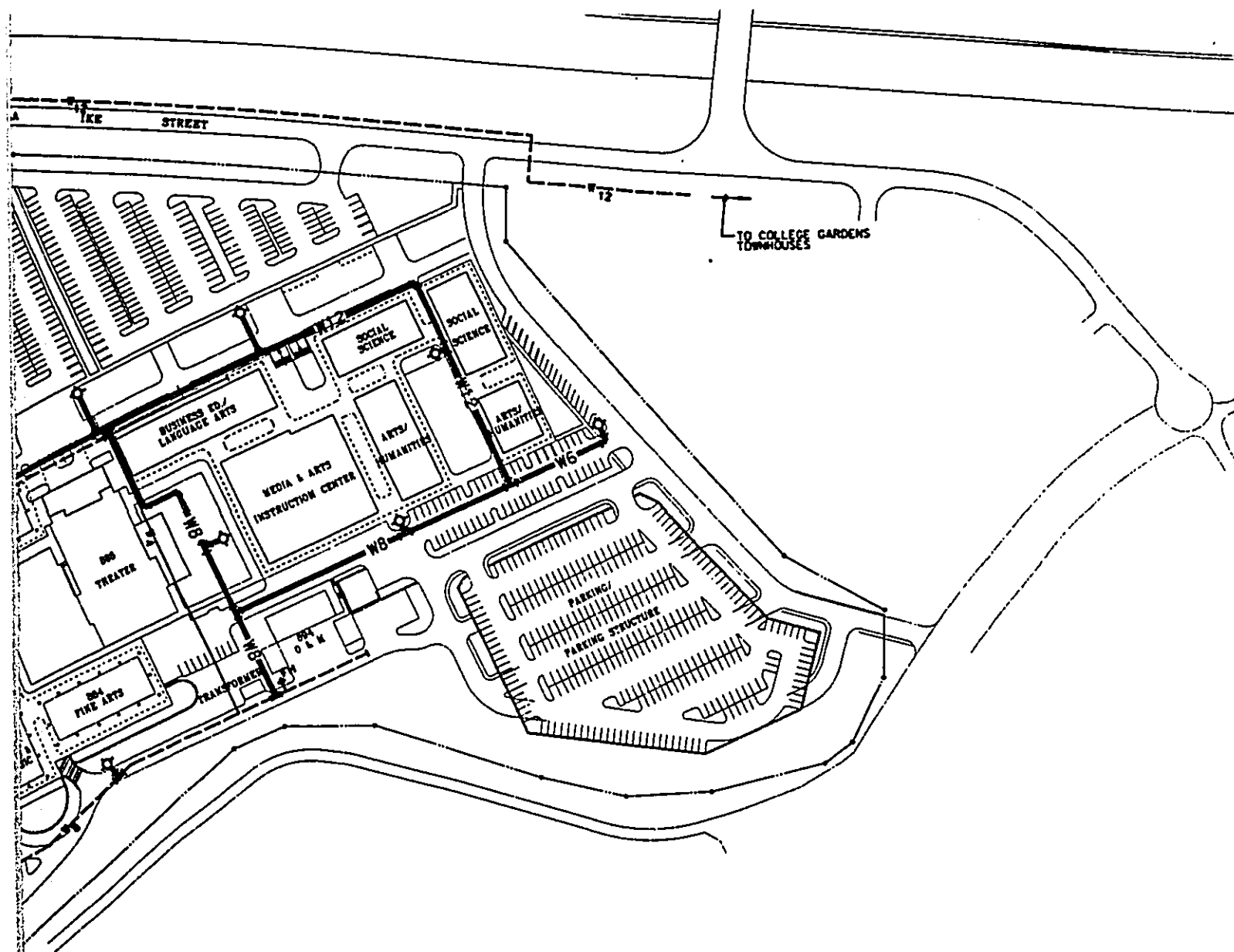
#### On-Site Water

Pipe sizes in the distribution network were evaluated for both campus domestic consumption and fire flow demands based on BWS design standards. In this case, the fire flow demand governed and determined the necessary water system improvements. Fire hydrants were also added at selected locations to provide the required coverage.



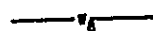

The following improvements to the on-site distribution system are indicated in Figure 3-13:

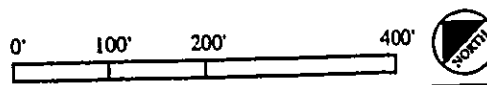
- a. Addition of an 8x2 FM meter assembly to replace the existing 6-inch meters. A more thorough review of the metering requirements will be performed during design.
- b. Addition of new lines to increase system capacity for fire protection, to extend the system to new facilities and to replace lines that are situated in future building sites.
  - (1) Addition of a 12-inch main along the existing service road from the new FM meter.
  - (2) Addition of a 12-inch main along parking lot to replace the existing main that is in the way of the new Math and Science buildings.



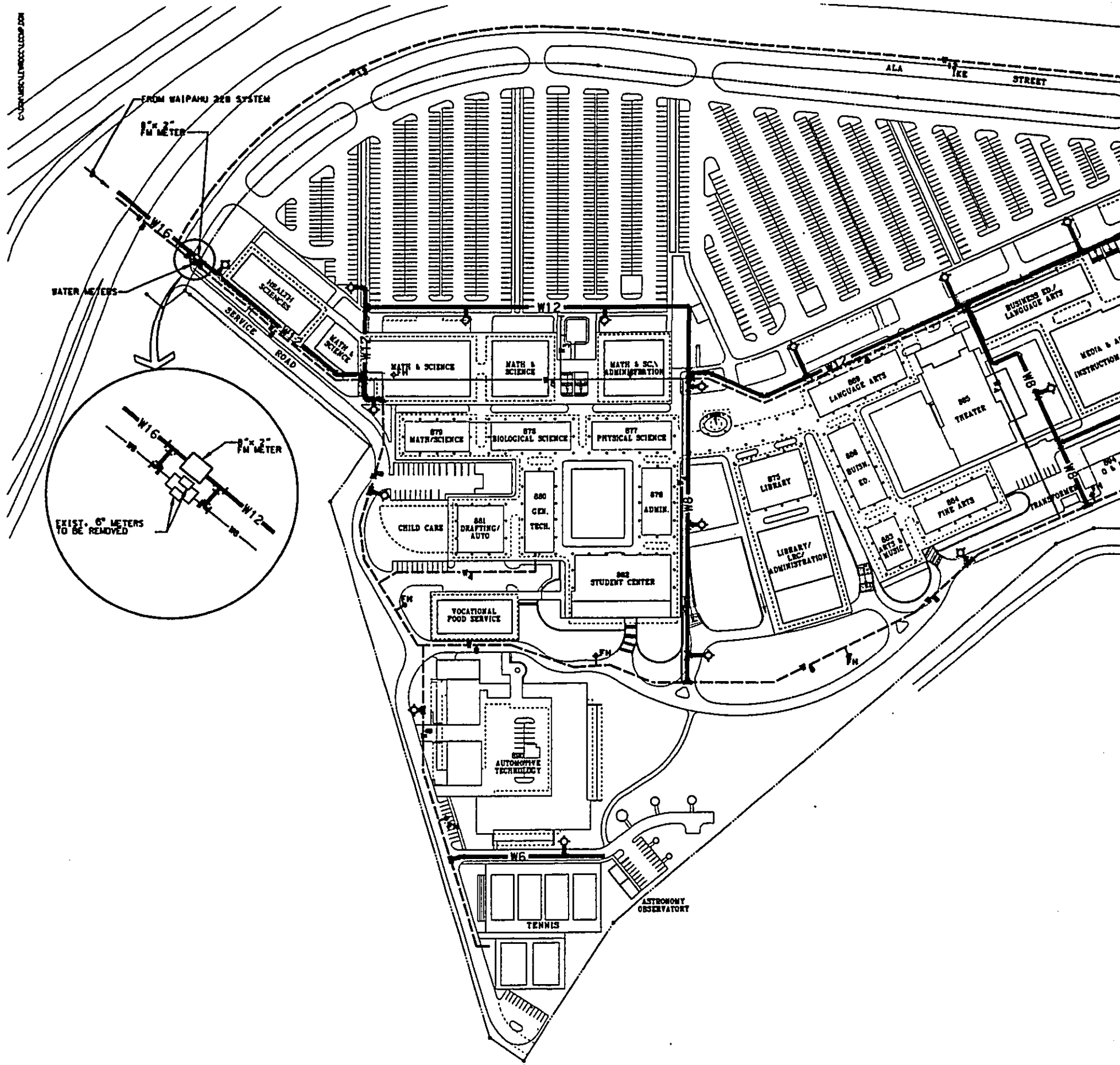


**LEGEND :**

-  PROPOSED WATER LINE
-  EXISTING WATER LINE TO REMAIN
-  EXISTING WATER LINE TO BE REPLACED
-  PROPOSED FIRE HYDRANT



C:\DWG\LEU\WATER\WATER.DWG



Leeward Community College Master Plan

Ultimate Water System Plan



- (3) Continuation of the 12-inch main to service the new buildings east of the existing Theater and addition of an 8-inch main to form a loop system.
- (4) Replacement of the two existing 4-inch lines adjacent to the Administration building and Theater with 8-inch mains to improve system hydraulics.
- (5) Extension of a 6-inch main to the new Astronomy Observatory facilities.

The university has awarded a contract to design the onsite water system improvements to address the fireflow requirements. A loop system is being evaluated. The impact of pressure loss due to backflow prevention devices will be addressed in the design. The requirements for 2,000 gpm capacity and 20 psi pressure will be met when the system is complete. Hydrant spacing every 250 feet will be designed into the system. The system will address all capacity and fire protection needs.

### 3.15 WASTEWATER

#### *Existing Conditions*

Initially, the on-site sewer system collected and directed the wastewater to a temporary treatment plant located on-site next to the existing tennis courts. The treatment plant has been abandoned and a 10-inch sewer has been extended off-site to connect to the City and County of Honolulu sewer which terminates at the Pearl City Sewage Pump Station. Wastewater generated at LCC is ultimately conveyed by a series of pump stations, force mains, and gravity sewers to the Honouliuli Treatment Plant. The wastewater is treated and then discharged off the Ewa coast via an ocean sewer outfall.

The campus' on-site sewer system is comprised of line sizes between 4 to 10 inches and extends to every building requiring service, including UH West Oahu. Based on discussions with the LCC maintenance staff, there are no apparent deficiencies with the existing on-site sewer system.

#### *System Requirements*

##### 1) Basis of Design

Design guidelines contained in the Design Standards, Volume I, of the Department of Wastewater Management, City and County of Honolulu and the Uniform Plumbing Code were used to evaluate the existing system and to determine the sewer system requirements for the proposed expansion of the Leeward Community College facilities.

Sizing of the sewer system is based on the following design flows:

- a. Average daily flow for schools is based on 25 gallons per day per student and staff.
- b. Design average flow is the sum of average flow plus dry weather infiltration/inflow based on 5 gallons per capita.

## LEEWARD COMMUNITY COLLEGE LONG RANGE DEVELOPMENT PLAN

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- c. Design maximum flow is derived by multiplying the average flow by a maximum flow factor and then adding the dry weather infiltration/inflow. The maximum flow factor is a probability factor related to the population served.
- d. Design peak flow is the sum of the design maximum flow plus wet weather infiltration/inflow which is based on 1250 gallons per acre of the tributary area.

Based on the above, the overall design flows for the total future population of 5,000 FTE and 500 staff persons are as follows:

Average Flow = 165,000 gpd  
Maximum Flow = 517,000 gpd  
Peak Flow = 579,000 gpd

### *Proposed Improvements*

The City and County of Honolulu wastewater system serving LCC is currently capable of accommodating the proposed growth of the campus. At the time of actual development a sewer connection permit application identifying the increased flow will have to be submitted to the Department of Wastewater Management.

Additions and modifications to the sewer system reflected on the Ultimate Sewer Plan (Figure 3-14) include:

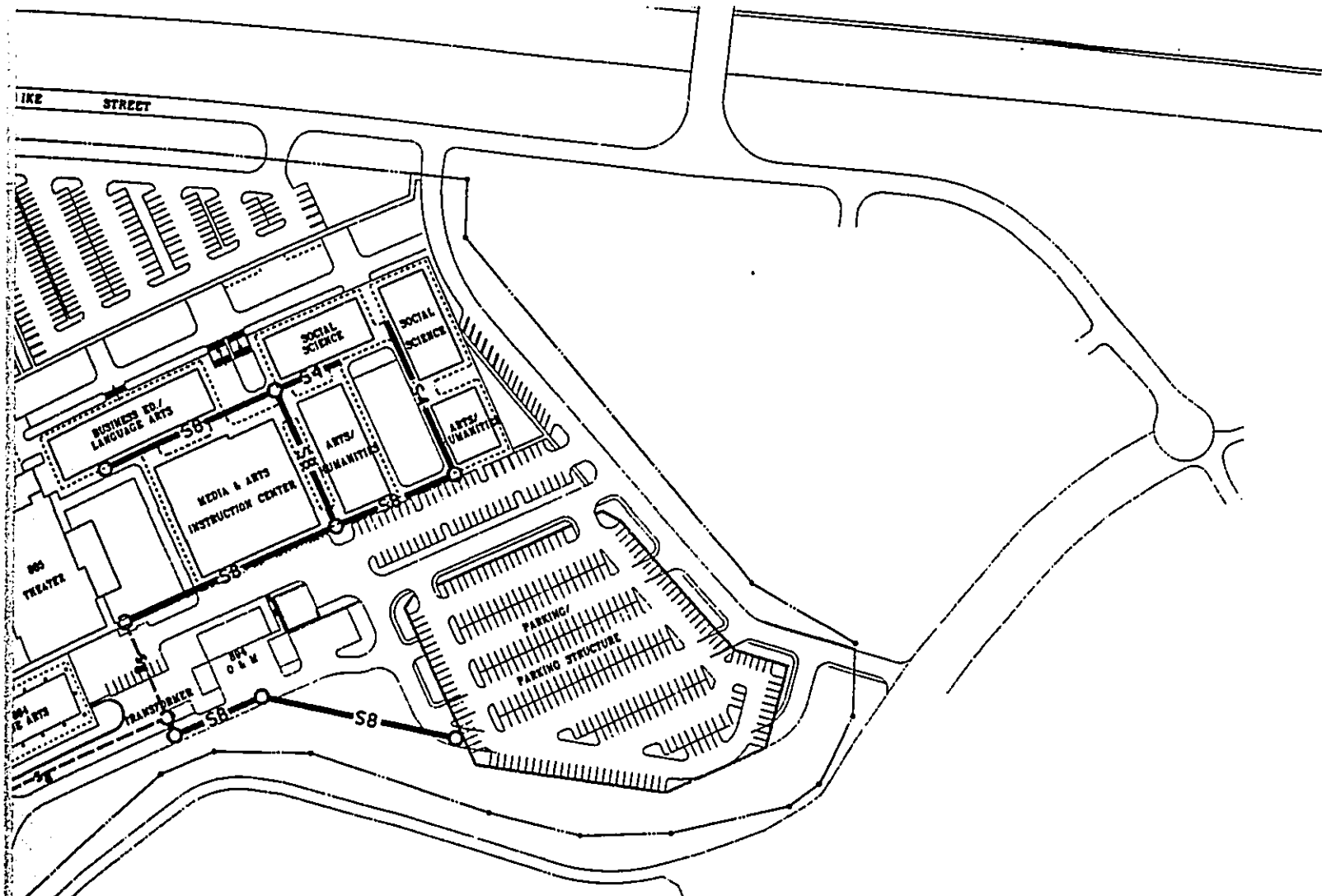
- a. Addition of an 8-inch sewer to serve the new Math and Science buildings.
- b. Relocation of an existing 8-inch sewer to clear the area for the new Library/Administration building.
- c. Extension of 8-inch and 4-inch sewers to serve the new building complex located east of the existing Theater.
- d. Extension of an 8-inch sewer to the parking structure. Floor drains in the covered parking decks must connect to the sewer system. Only storm runoff from the top deck can be discharged into the drainage system.

### **3.16 ELECTRICAL POWER**

#### *Existing Conditions*

Leeward Community College is serviced with dual 12,470 volt (12.47 kV) feeders by the Hawaiian Electric Company. HECO feeders terminate at LCC's primary service equipment located in the Air Conditioning Cooling Tower Plant where they are primary metered.

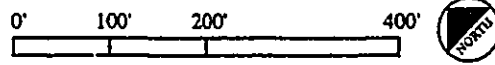
The 12.47 kV power is distributed to transformer stations on the LCC campus through the underground power raceway system. That system and cables within are owned and maintained by the State.



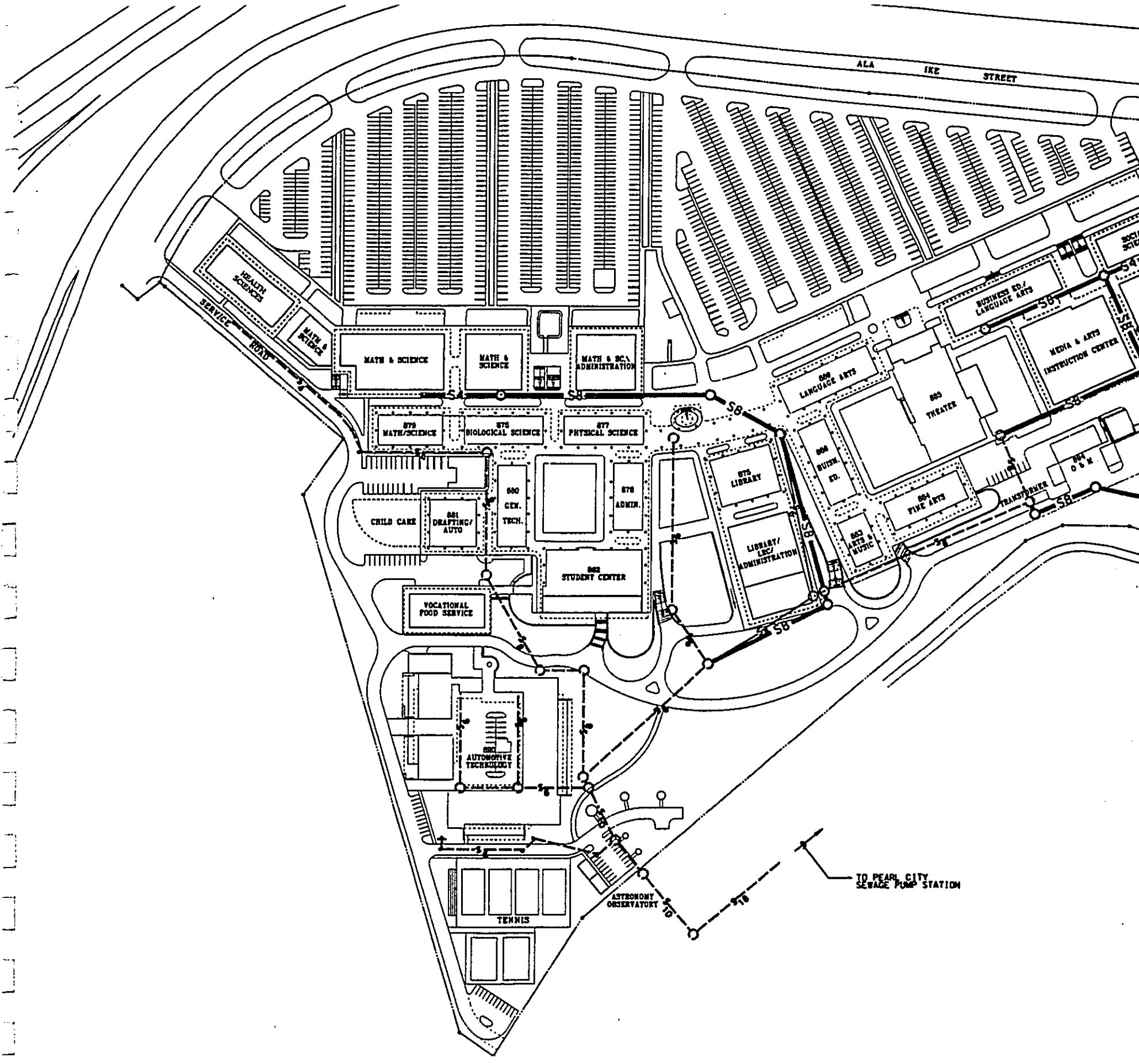
**LEGEND :**

- SB— PROPOSED SEWER
- s<sub>g</sub>- EXISTING SEWER TO REMAIN
- s<sub>B</sub>- EXISTING SEWER TO BE REPLACED
- SEWER MANHOLE

STATION



ewer Plan



Leeward Community College Master Plan

Ultimate Sewer Plan

## LEEWARD COMMUNITY COLLEGE LONG RANGE DEVELOPMENT PLAN

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Transformer stations located in Biological Science (871), General Technology (880), Language Arts (889), Automotive Technology (890), and the Fine Arts/Theater Transformer Vault transform primary power down to utilization voltage for distribution to and use in the various buildings.

Transformers in Biological Science (871), General Technology (880), Language Arts (889), and the Fine Arts/Theater Transformer Vault were originally PCB filled. They have since been retrofilled with silicon and reclassified as non-PCB. The Automotive Technology transformer is dry type.

The primary service equipment is suffering from corrosion. The door to one of the HECO metering sections has rusted off its hinges and was found leaning against the equipment. The base of that equipment was corroded through in several places. Stainless steel filters on the undersides of the enclosure roof overhang were corroded through in several places. That corrosion suggests that damage extends into the gear itself. Several years ago, General Electric (GE) did maintenance on the gear. LCC staff recalled that GE's report on that work indicated corrosion within the gear.

The switchgear is free-standing, outdoors, and adjacent to the air conditioning system cooling towers. It has been suggested that chemicals in the cooling tower water contribute to the switchgears corrosion problem.

Corrosion was also noted on equipment inside the control building next to the cooling tower. The ventilation intake for the building is on the cooling tower side of the building. Corrosion on equipment protected from the elements, may substantiate the belief that cooling tower water is a contributing factor to the problem.

Silicon is considered a "Less-Flammable Liquid". The National Electrical Code (NEC) requires spill containment for such transformers installed indoors. Berms at Biological Science (871), General Technology (880), and Language Arts (889) buildings were removed when those transformers were converted to Non-PCB transformers. Those berms will be replaced.

Transformer rooms in Biological Science (871), General Technology (880), and Language Arts (889) buildings do not comply with NEC requirements for access and working space. Biological Science (871) and General Technology (880) transformer rooms are of considerable concern because they lack sufficient clearances for egress in an emergency. Doors will be added to those rooms.

Also, Biological Science (871) and General Technology (880) transformer rooms are insufficiently ventilated. Those rooms will be modified to allow proper ventilation of the electrical equipment within.

LCC staff noted that they have suffered from intermittent, localized power outages on Biological Science (871) transformer circuits. Those outages have been traced to tripped circuit

## LEEWARD COMMUNITY COLLEGE LONG RANGE DEVELOPMENT PLAN

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breakers. Circuit breakers include a thermal overload trip. It is possible that insufficient ventilation in that room is causing the breaker to heat up and trip.

The Biological Science (871) transformer serves the school's central chiller plant. That plant includes chillers with variable speed drives. The transformer also serves a large aggregate computer load. Both variable speed drives and computers introduce harmonics onto powerlines. Those harmonics may contribute to the circuit breaker tripping problem.

Both HECO and LCC staff have commented on the school's problem with power factor correction capacitor failures. Capacitor failure has occurred in Biological Science (871), General Technology (880), Automotive Technology (890), and the Fine Arts/Theater Transformer Vaults. Such failures are symptomatic of a harmonic problem.

### *Proposed Improvements*

The Long Range Development Plan proposes that the existing dual radial distribution system be split into two circuit pairs.

The existing primary electrical equipment is badly corroded and will be replaced. That work will be engineered to facilitate future implementation of the ultimate power scheme.

Transformer room code and ventilation deficiencies will be corrected and a harmonic study implemented. An immediate benefit from this effort may be an apparent increase in capacity at the stations impacted.

The 12.47 kV, three-phase power will be extended in underground ducts to the proposed new facilities. Transformers will be provided at the new facilities to reduce voltage down to 480Y/277 volts for distribution and use.

Most of the existing LCC transformer stations are sized at 1,000 kVA or larger. It is recommended that new transformers be 750 kVA or smaller to avoid problems in coordinating protective devices. Consequently, it appears that transformer density is increased at the new facilities.

It is recommended that the proposed mechanical plant and the proposed Media Center (Building J) be provided with their own transformer stations to minimize the impacts of noise and harmonic related problems.

A new transformer station will be provided in the proposed Library Expansion. The existing Library Building (875) should be disconnected from the Physical Science Building transformer station and reconnected to the new transformer station. Thus, consolidating the electrical system in the existing building and the proposed extension, and freeing electrical capacity at the Physical Science Building (877).

### 3.17 GAS AND FUEL

#### *Existing Conditions*

There are two gas systems at Leeward Community College. One is a 500 psi high pressure gas line that runs along the southern boundary of the campus within the 30-foot State energy corridor. A segment of this 16-inch gas line is located within the school property, under the southeast corners of the existing tennis and basketball/volleyball courts. A 10-inch fuel line is also located in the energy corridor.

The second gas system consists of a 4-inch line extended from the 8-inch gas main located along Farrington Highway. This service line enters the campus at the northwest corner and reduces to a 2-inch line installed along the service road. At the Math & Science Building (879) the system branches out with a 1 1/4-inch line to the Campus Center and a 1 1/4-inch line continuing to the Fine Arts Building (884). Originally gas use was monitored by a single master meter. This was converted recently to individual meters at each building using gas.

The State Energy Corridor runs along an easement *makai* of the campus.

#### *Proposed Improvements*

Existing gas lines will be relocated as needed by the Gas Company if the lines are in conflict with the construction of new facilities. These include the lines along the Math and Science buildings and near the northeast corner of the Theater.

### 3.18 ENERGY AND RESOURCE EFFICIENCY

#### *Existing Conditions*

Much of the campus was built before the days of energy awareness. Buildings were generally enclosed and air conditioned without consideration for operable windows. Buildings do not deliberately take advantage of natural ventilation or other energy conservation strategies. The courtyard design and deep overhangs on the buildings at the ground levels are good concepts that were included in the architecture. Landscaping did not incorporate xeriscape concepts.

Subsequently, the College adopted a light fixture and equipment replacement program that considers the energy efficiency of the replacement bulbs and equipment.

#### *Proposed Improvements*

New buildings will extend the deep overhang and courtyard concepts. Operable windows will be considered in new building designs. Increased landscaping is planned to provide more shade and reduce ambient heating. This improvement should be especially noticeable in the *mauka* parking area where the shade will reduce the heat from the asphalt pavement. Alternative energy sources will be considered in new buildings construction and renovation of existing facilities.

Section 4.0

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Alternatives to the Proposed Action



## 4.0 ALTERNATIVES TO THE PROPOSED ACTION

This Environmental Assessment evaluates three alternatives to the project proposed in Section 2.0. The alternatives include:

- No Action Alternative
- Alternative 1 - Long Range Development Plan
- Alternative 2 - Long Range Development Plan

During the Long Range Development Plan planning process, three alternatives and the No Action alternative were analyzed. A preferred plan was selected from the three and designated the Ultimate Site Plan. The other two plans are discussed in this Section as Alternative 1 and Alternative 2.

Since the Leeward Community College (LCC) campus is a mature campus, the development options are limited. Alternatives focus on differing densities and differing locations for projected programs. Alternatives look at possible in-fill location and/or redevelopment of existing facilities. Benefits and negative impacts relate to program efficiencies, height of structures and loss of open space. Issues of impacts external to the site remain generally the same for all alternatives, with minor differences to visual cross sections of the campus from adjacent properties.

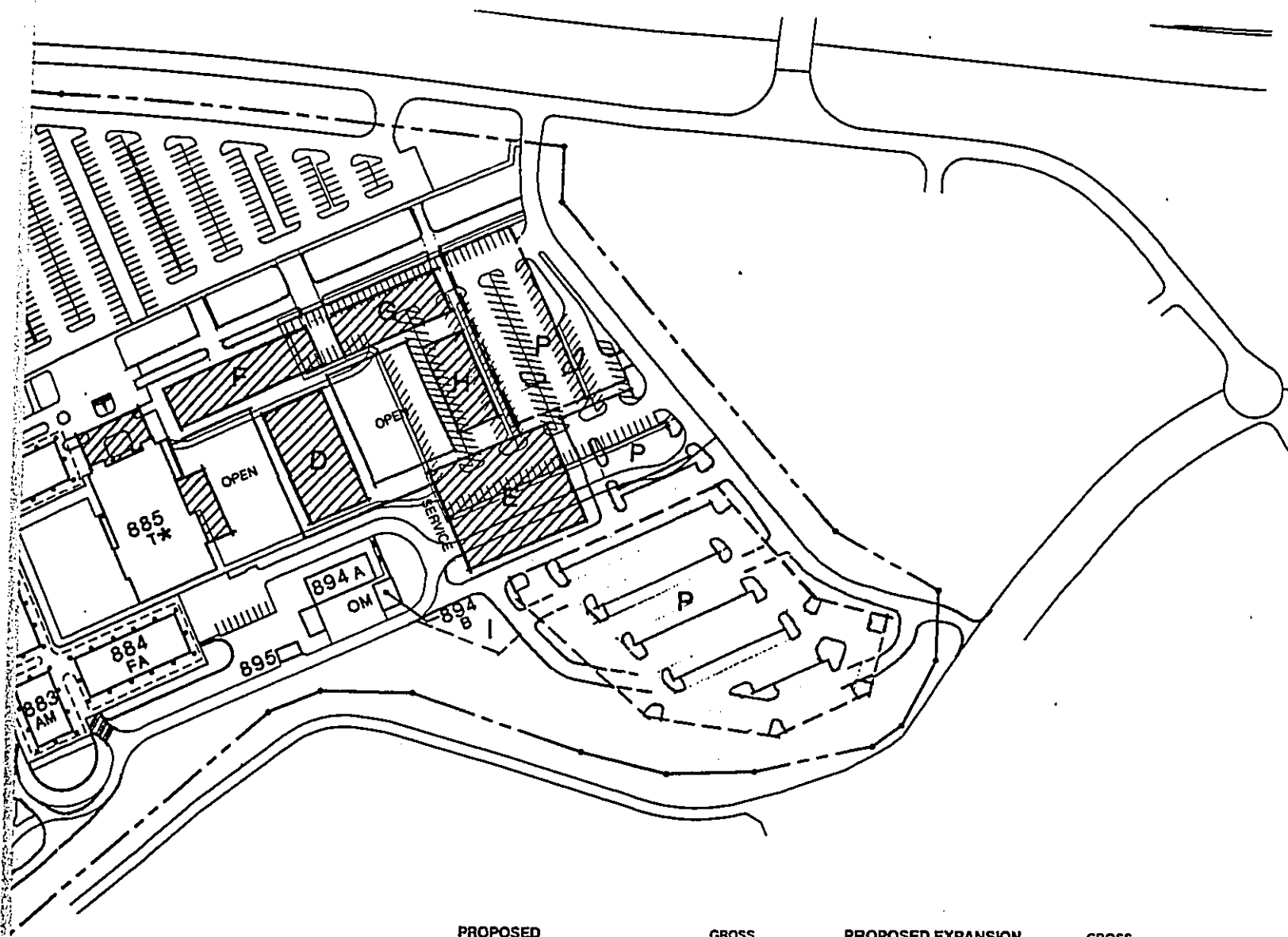
### 4.1 NO ACTION ALTERNATIVE

The No Action alternative would maintain the existing campus facilities through normal repairs as needed with no new construction of any buildings. The already crowded campus would continue to serve the existing student population and anticipated enrollment increases. Enrollment will rise as residential development continues to grow in West Oahu. With an ever changing economy, the demand for a variety of job skill training programs will increase, further taxing the College's existing facilities. No action will not accommodate the College's academic mission and goals.

### 4.2 ALTERNATIVE 1 - LONG RANGE DEVELOPMENT PLAN

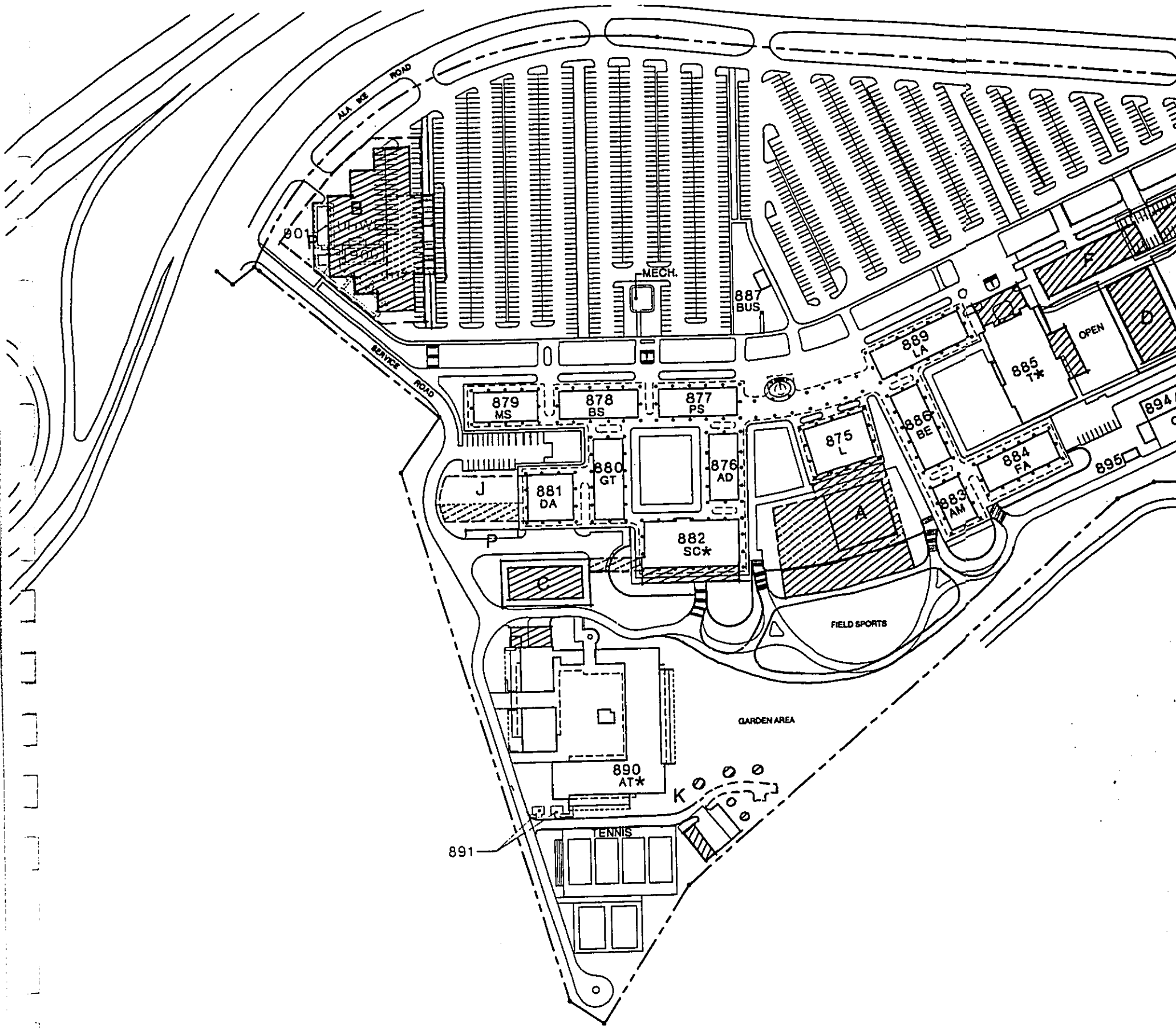
The first alternative Long Range Development Plan scheme is presented in Figure 4-1. A new Math & Science and Health Sciences complex would occur in a series of 2-story buildings running along the mauka edge of the existing Math & Science buildings and would also extend into the west end of the main parking lot. Portions of the existing parking lot would be removed to accommodate the new buildings.

Enrollment Services would be located in the ground level of one of these new buildings. The Computer Center and Counseling expansion would occur in a new building on the opposite side of the campus entry area, mauka of the existing language arts building.



PROPOSED NEW BUILDINGS		GROSS SQ. FT.	PROPOSED EXPANSION OF EXISTING BUILDINGS		GROSS SQ. FT.
#			#		
A	Library/LRC/Admin. Expansion	85,000	875 L	Library	
B	Math&Science Exp./Health Sciences	86,500	876 AD	Administration	
C	Voc. Food Service	30,000	877 PS	Physical Science	
D	Arts/Humanities Expansion	27,000	878 BS	Biological Science	
E	Media&Arts Instruction Center	58,500	879 MS	Math & Science	
F	Business Ed./Language Arts Exp.	25,000	880 GT	General Technology	
G	Social Science	15,000	881 DA	Drafting/Auto	
H	Social Science	15,000	882 SC	Student Center	7,500 *
I	O&M Service Yard		883 AM	Arts and Music	
J	Child Care		884 FA	Fine Arts	
K	Astronomy Observatory	2,500	885 T	Theater	12,500 *
P	Parking/Parking Structure		886 BE	Business Education	
			887 BUS	Bus Station	
			889 LA	Language Arts	
			890 AT	Automotive Technology	2,500 *
			891a	Temp. Showers	out
			891b	Temp. Showers	out
			894a OM	O & M	
			894b OM	O & M	
			895	Elect. Trans. Vault	
			900	UH-WO Student Serv.	out
			901	UH-WO Faculty Off.	out
			902	UH-WO Dean/Class Rm.	out
<b>TOTAL EXPANSION</b>		<b>367,000</b>	* Indicates existing buildings with additions		





## LEEWARD COMMUNITY COLLEGE LONG RANGE DEVELOPMENT PLAN

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Library and Learning Resource Center expansions would occur in a new 3-story building to the rear of the existing Library, with a basement level extending through the rear retaining wall.

The Media & Arts Instructional Center would front on open space at the eastern most edge of the academic expansion area. A second inner courtyard would be formed by the remaining academic buildings. Surface parking lots and service areas would run along the east and makai edges of the complex.

The new parking structure would need to be four levels (approximately 900 spaces) to reach a minimum total of 2,000 parking spaces on campus.

### 4.3 ALTERNATIVE 2 - LONG RANGE DEVELOPMENT PLAN

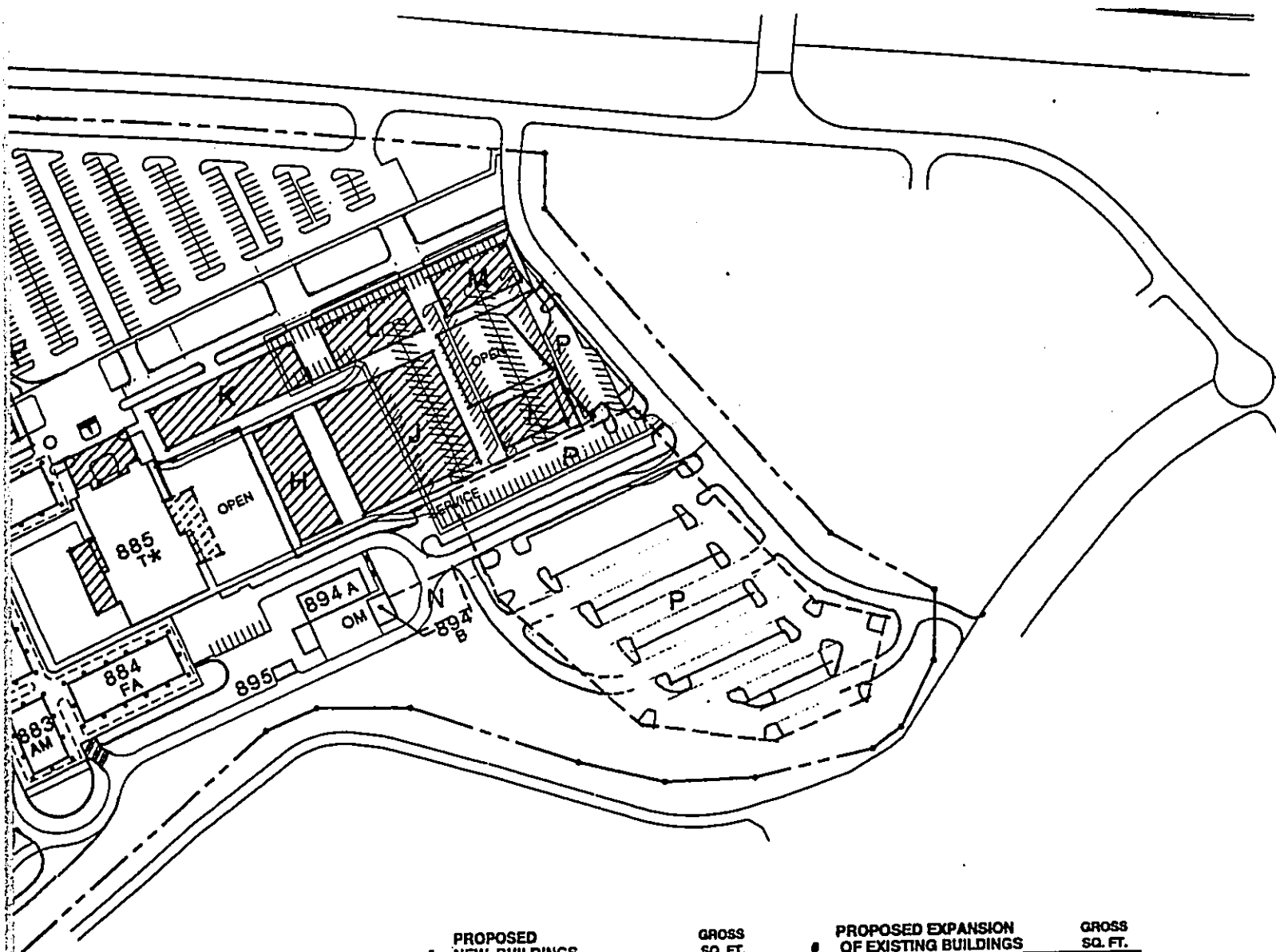
The second alternative to the proposed project is presented in Figure 4-2. In this alternative, a new Math & Science and Health Sciences complex would be located in the eastern corner of the site. Health Sciences would be located in a new building within the western academic expansion area.

Administrative expansions for the Computer Center, Enrollment Services, Counseling, Library and Learning Resource Center would be located in a 3-story building expansion to the rear of the existing Library. This would include basement level developments in the plaza area, extending through the rear retaining wall.

The Media & Arts Instructional Center would be located makai of the eastern academic expansion area. A second inner courtyard would be formed by the remaining academic buildings. A parking lot would run along the eastern edge of the complex, with service areas to the rear of the Instructional Center. The new parking structure located in the west corner of the main parking lot, would need to be three levels (approximately 800 spaces) to reach a minimum total of 2,000 parking spaces on campus.

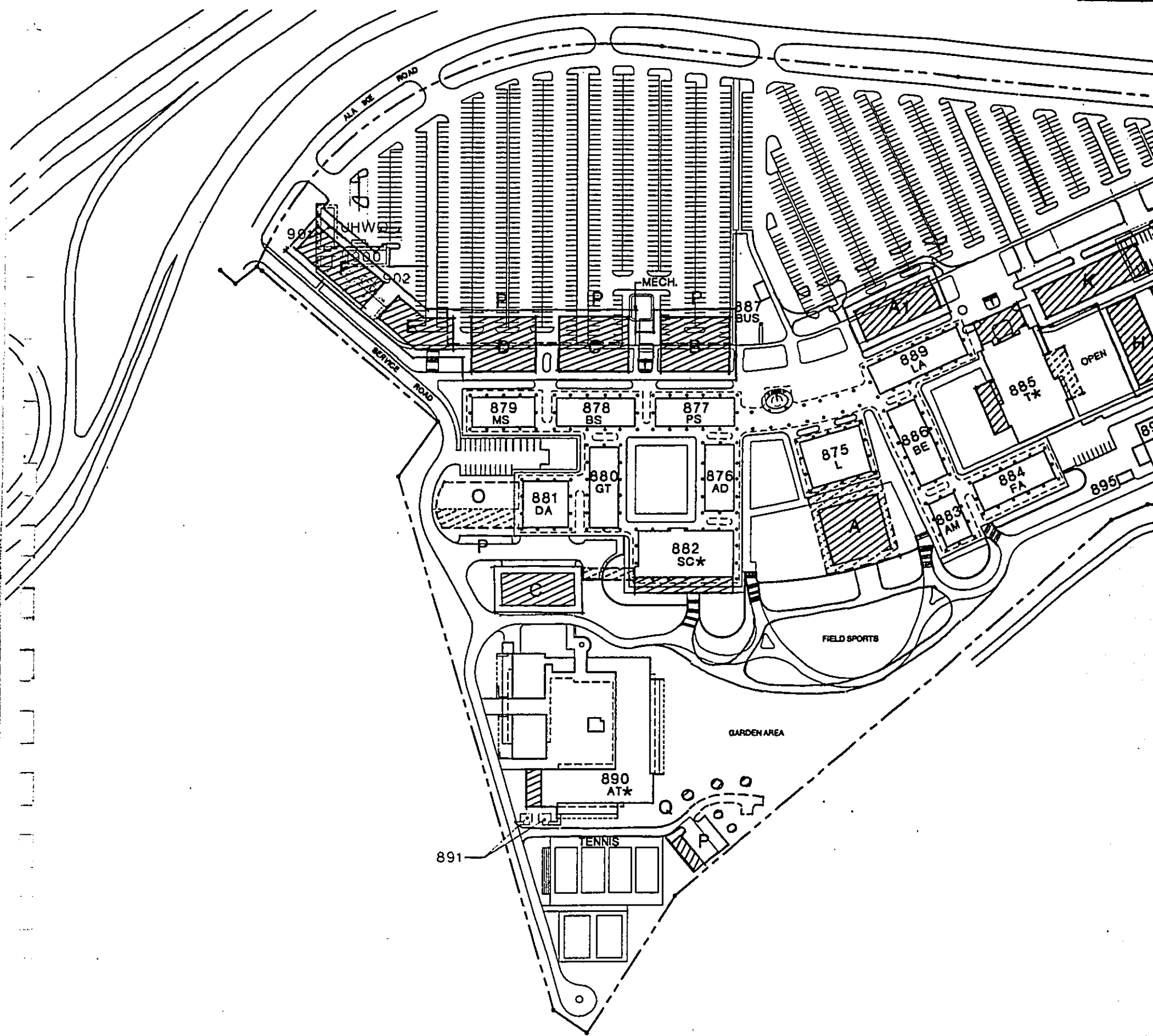
### 4.4 ELEMENTS COMMON TO ALTERNATIVES 1 AND 2 AND TO THE PREFERRED LONG RANGE DEVELOPMENT PLAN

- 1) Approximately 375,000 gross sq. ft. of building area to be constructed in addition to existing uses.
- 2) New buildings (2-story) developed for the Media & Arts Instructional Center, Arts/Humanities, Social Science, Language Arts, and Business Education programs located in the area east of the existing Theater.
- 3) Theater expansions into the existing front plaza for lobby, offices, gallery, and concession areas, and/or expansions to the east or west side walls for rehearsal/meeting spaces.



PROPOSED NEW BUILDINGS		GROSS SQ. FT.	PROPOSED EXPANSION OF EXISTING BUILDINGS		GROSS SQ. FT.
A	Library/LRC/Admin. Expansion	57,000	875 L	Library	
A1	Administration Expansion	18,000	876 AD	Administration	
B	Math&Science Expansion/Admin.	20,500	877 PS	Physical Science	
C	Math&Science	22,000	878 BS	Biological Science	
D	Math&Science	20,500	879 MS	Math & Science	
E	Math&Science	15,500	880 GT	General Technology	
F	Health Sciences	20,000	881 DA	Drafting/Auto	
G	Voc. Food Service	30,000	882 SC	Student Center	7,500 *
H	Arts/Humanities Expansion	17,000	883 AM	Arts and Music	
I	Arts/Humanities	10,000	884 FA	Fine Arts	
J	Media&Arts Instruction Center	58,500	885 T	Theater	12,500 *
K	Business Ed./Language Arts Exp.	25,000	886 BE	Business Education	
L	Social Science	15,000	887 BUS	Bus Station	
M	Social Science	15,000	889 LA	Language Arts	
N	O&M Service Yard		890 AT	Automotive Technology	2,500 *
O	Child Care		891A	Temp. Showers	out
P	Parking/Parking Structure		891B	Temp. Showers	out
Q	Astronomy Observatory/Restrooms	2,500	894A OM	O & M	
			894B OM	O & M	
			895	Elect. Trans. Vault	
			900	UH-WO Student Serv.	out
			901	UH-WO Faculty Off.	out
			902	UH-WO Dean/Class Rm.	out
<b>TOTAL EXPANSION</b>		<b>367,000</b>	* Indicates existing buildings with additions		





## LEEWARD COMMUNITY COLLEGE LONG RANGE DEVELOPMENT PLAN

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- 4) A new complex for Math & Science and Health Sciences programs. Five observatory domes located near the tennis courts including a workshop building, restroom facilities (replacement of temporary shower buildings), and a small parking lot.
- 5) The Automotive Technology building would be expanded for service/storage spaces.
- 6) Tennis courts and multi-purpose court areas would be renovated but remain in their existing location. The open space below the existing plaza will be reconfigured to accommodate an area for field sports.
- 7) Library, Learning Resource Center, and Counseling expansions shall be developed in a new 3-story building to the rear of the existing Library, with a basement level extending through the rear retaining wall. An alternative to a third story would include below grade expansion into the plaza area.
- 8) Enrollment Services and the Computer Center are located in new buildings at the front of the campus.
- 9) The Child Care Facility remains in its existing location with expansions of the exterior play yard.
- 10) Vocational Technical/Food Services relocates to a new building (2-story plus basement), adjacent to the existing Student Center. A bridged passage connects the two buildings at the top level. Service areas are consolidated around the existing vehicular court.
- 11) The Student Center building expands on the makai side to accommodate additional Cafeteria, Bookstore and Student Life program needs.
- 12) Additional parking is accommodated in a 3- or 4-level parking structure. The new parking structure in each scheme would provide additional parking spaces so that the total campus on-site parking count is approximately 2,000 spaces. A gain of at least 500 spaces over existing parking counts.
- 13) Operations and Maintenance's (O&M) service yard and mechanical spaces expands into the open area adjacent to O&M existing facilities.

### 4.5 COMPARISON OF ALTERNATIVES WITH THE PREFERRED PLAN

The alternative plans are evaluated and presented in a matrix below. Rankings categories include Functional Relationships, Circulation/Parking, Aesthetics and Environmental Considerations, and Cost and Phasing Considerations. Each criteria and their scored ratings are shown in Table 4-1.

LEEWARD COMMUNITY COLLEGE LONG RANGE DEVELOPMENT PLAN

Table 4 - 1  
Comparison of Alternative Plans

Ratings: (+) Good, (=) Fair, (-) Poor

Criteria	Preferred Plan	Alt. 1	Alt. 2
<u>Functional Relationships</u>			
• Consolidates Math & Science locations	+	+	-
• Health Sciences program adjacent to Math & Science	+	+	-
• Computer Center in new facility near Math & Science	+	=	-
• Provides area for field sports & gardens	+	+	+
• Direct relationship between Theater & Media & Arts Instruction Center.	+	=	-
• Direct relationship between open space & Media & Arts Instruction Center.	+	=	-
• Provides parking expansion closest to academic areas	+	+	-
• Enrollment and Counseling near front of campus	+	+	-
• Voc. Food Services adjacent to Cafeteria/Student Ctr.	+	+	+
• Consolidates other required programs	=	+	=
<u>Circulation/Parking</u>			
• Provides safe pedestrian access from parking to academic areas	+	+	=
• Minimizes structures in front parking lot	+	=	-
• Improves pedestrian access to lower campus	+	+	+
• Distributes site parking/vehicular circulation	+	+	-
• Provides adequate service drives/loading areas	+	+	+
• Improves handicap access to Theater & other areas	+	+	+
<u>Aesthetics and Environmental Considerations</u>			
• Preserves/enhances open space patterns/courtyards	=	+	=
• Preserves/enhances existing trees/landscape	=	=	=
• Preserves clear views of campus entry from Ala Ike Rd.	+	-	=
• Preserves landscape edge along front parking area	+	=	-
• Minimizes impacts on open space in Library courtyard	-	-	-
• Minimizes visual impacts from parking structure	+	+	-
• Provides clear visual entry to Media & Arts Instructional Center	+	=	=
<u>Cost /Phasing Considerations</u>			
• Minimizes removal of existing parking	=	-	+
• Minimizes disruption of existing activities	=	=	+
• Minimizes below grade development of plaza areas	=	+	-
• Minimizes utility impacts	=	=	-
• Allows for phased on grade parking	+	+	-
TOTALS	+	20	17
	=	8	9
	-	0	2
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Section 5.0  
Relationship of the Proposed Action to  
Existing Policies and Plans

## 5.0 RELATIONSHIP OF THE PROPOSED ACTION TO EXISTING POLICIES AND PLANS

This section includes a discussion of how the proposed action relates to the plans and policies of the State of Hawaii, Leeward Community College, and the City and County of Honolulu.

### 5.1 HAWAII STATE PLAN

This section includes an assessment of the conformity of the proposed action to the applicable goals, objectives and policies of the Hawaii State Plan, Chapter 226 HRS (1991 with 1993 amendments), and applicable priority guidelines and functional plan policies.

*Sec. 226-23 Objective and policies for socio-cultural advancement - education.*

(a) *Planning for the State's socio-cultural advancement with regard to education shall be directed towards achievement of the objective of the provision of a variety of educational opportunities to enable individuals to fulfill their needs, responsibilities, and aspirations.*

(b) *To achieve the education objective, it shall be the policy of this State to:*

- (1) *Support educational programs and activities that enhance personal development, physical fitness, recreation, and cultural pursuits of all groups.*
- (2) *Ensure the provision of adequate and accessible educational services and facilities that are designed to meet individual and community needs.*
- (3) *Provide appropriate educational opportunities for groups with special needs.*
- (4) *Promote educational programs which enhance understanding of Hawaii's cultural heritage.*
- (5) *Provide higher educational opportunities that enable Hawaii's people to adapt to changing employment demands.*
- (6) *Assist individuals, especially those experiencing critical employment problems or barriers, or undergoing employment transitions, by providing appropriate employment training programs and other related educational opportunities.*
- (7) *Promote programs and activities that facilitate the acquisition of basic skills, such as reading, writing, computing, listening, speaking and reasoning.*
- (8) *Emphasize quality educational programs in Hawaii's institutions to promote academic excellence.*
- (9) *Support research programs and activities that enhance the education programs of the State.*

Discussion: It is the mission of Leeward Community College (LCC) to provide open-door opportunities for students to enter high quality educational programs. The College provides high quality vocational and technical programs which prepare students for immediate employment and provide the paraprofessional and trained work force required in the State. The Long Range Development Plan (LRDP) for the College enhances the facilities in which the College's diverse array of programs is offered. Additional classrooms, laboratories, computer facilities, and vocational spaces will further the College's mission of providing high quality training for students going on to further education and into the workforce. The LRDP's accessibility plan provides an integrated system of access for all students and visitors.

## 5.2 STATE HIGHER EDUCATION FUNCTIONAL PLAN

The State Functional Plans translate the broad goals and objectives of the Hawaii State Plan into detailed courses of action. The relationship of the proposed action to the relevant State Functional Plan objectives is described below.

State Higher Education Functional Plan. The goals and objectives of the State in providing post-secondary educational services are outlined in this functional plan (University of Hawaii, 1984). Those objectives and policies related to community colleges are discussed below.

- A. Objective: *A number and variety of post-secondary education institutions sufficient to provide the diverse range of programs required to satisfy individual and societal needs and interests.*
- A(1). Policy. *Maintain and strengthen institutional distinctiveness and develop programs in ways that enrich diversity of educational opportunity without unnecessary duplication.*
- A(2). Policy. *Provide professional and job-related training which responds to the needs of, and opportunities within, the State of Hawaii.*
- A(4). Policy. *Encourage and recognize independent educational and training systems and programs of study at the post-secondary level.*

Discussion: Leeward Community College recognizes its position within a rapidly growing area of Oahu. The College boasts numerous distinct programs such as its performing arts and vocational programs. The College responds to the changing economic and work force conditions by varying its academic and vocational program offerings. The Office of Special Programs and Community Services offers non-credit courses to meet the training needs of business and industry through short-term customized training programs, linked to identified needs of employers. On-campus and distance learning forums provide flexibility in program offerings to the largest possible population of students. The Long Range Development Plan provides new and enhanced facilities for the College's distinctive programs and promotes the flexibility required by today's students.

- B. Objective: *The highest level of quality, commensurate with its mission and objectives, of each educational, research, and public service program offered in Hawaii by an institution of higher education.*
- B(1). Policy. *Sustain the commitment to quality instruction and scholarship in the basic arts, letters, humanities, and social and natural sciences as a necessary prerequisite to overall institutional quality.*
- B(2). Policy. *Identify for program enrichment and emphasis those programs considered important in terms of State needs and emphases, those programs for which special advantages in Hawaii provide an opportunity for national or international prominence, and those programs which have already achieved such prominence.*
- B(4) Policy. *Improve and maintain support programs at a level of quality commensurate with the programs they support.*

## LEEWARD COMMUNITY COLLEGE LONG RANGE DEVELOPMENT PLAN

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Discussion: LCC is one of seven community colleges in Hawaii which reports through the Executive Vice President and Chancellor for Community Colleges to the President and Board of Regents of the University of Hawaii. Its Liberal Arts program and Associate in Arts degree are strongly influenced by the general education requirements of the University of Hawaii baccalaureate program. In addition, Leeward Community College has developed vocational programs in Business (Office Administration and Technology, Management, and Accounting), Vocational/Technical areas (Automotive Mechanics, Drafting, Food Service, and Television Production) and in Computer Science.

The non-credit program at LCC has grown rapidly as well, offering programs in literacy, office skills, small business development, golf course maintenance, conversational Japanese, job search and interview skills, computer software, and many other areas of interest to the community. LCC also maintains an active non-credit program for Senior Citizens. The Long Range Development Plan calls for new and/or expanded facilities in each of the College's programmatic and service areas.

C. Objective: *Provide appropriate educational opportunities for all who are willing and able to benefit from post secondary education.*

- C(1). Policy. *Provide appropriate options within the state's post secondary education community for all qualified people of Hawaii, in which each participant has a reasonable chance for success.*
- C(2). Policy. *Extend educational opportunities to persons who are unable to attend classes on a campus through off-campus outreach programs.*
- C(3). Policy. *Remove artificial barriers to educational opportunity and career choice related to ethnic origin, sex, or handicap.*

Discussion: Part of LCC's stated mission is "to broaden access to post-secondary colleges in the State of Hawaii by providing open-door opportunities for students to enter quality educational programs within their community." Specialized instructional programs for students at all levels of ability, support services for students with physical or health challenges, and the provision of off-campus and distance education credit courses are provided to support a diverse student body.

The Long Range Development Plan calls for appropriately equipped spaces for Leeward's instructional and support programs for on- and off-campus students. The accessibility plan presents an integrated system for accessing campus facilities.

### 5.3 LEEWARD COMMUNITY COLLEGE ACADEMIC DEVELOPMENT PLAN

The most recent Academic Development Plan (ADP) for Leeward Community College addressed the period from 1991 to 1996. This document is an extension and update of the Educational Development Plan for 1987-93. The ADP was never formally approved by the University of Hawaii Board of Regents.

## LEEWARD COMMUNITY COLLEGE LONG RANGE DEVELOPMENT PLAN

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While not formally adopted, the ADP was used in planning for the College because it re-states the four long-range goals established by the College in 1987:

1. The Vigorous Pursuit of Educational Quality
2. Selective Comprehensiveness and Expanded Access
3. Expanded Relationships with the Community
4. Integration of Campus Functions

The Long Range Development Plan for Leeward Community College, which incorporated these long-range goals, was approved by the Board of Regents in January 1996. The specific goals and priorities of the College are to:

### Build Linkages with the Community

1. *Develop training partnerships with business, community and governmental agencies as well as design flexible ways of meeting their training needs.*
2. *Expand educational opportunities by strengthening and establishing outreach centers in the Leeward and Central Areas.*
3. *Develop continuing processes for private sector fund raising and for marketing LCC programs.*

### Focus on Students

4. *Implement a campus-wide student success effort through partnership of instruction, student services, and academic support.*
5. *Remove barriers to the success of special student groups.*

### Enhance Instructional Programs

6. *Emphasize critical thinking through development of integrated learning experiences across-the-curriculum in the basic skills and problem solving.*
7. *Improve articulation with higher education institutions and the Department of Education.*
8. *Create approaches fostering the development of each student as a whole person.*

### Build Institutional Effectiveness

9. *Expand opportunities for faculty/staff/organizational development.*
10. *Update technology and alternative delivery systems for more effective instruction and administration.*

Discussion: Specialized instructional programs for students at all levels of ability, support services for students with health challenges, and the provision of off-campus and distance education credit courses, are provided to support a diverse student body.

The College's Office of Special Programs and Community Services coordinates continuing education programs, public service programs, and the use of campus facilities by community groups. The Office serves as the liaison with community organizations and works with local professional and special interest groups to offer workshops and conferences on a wide variety of topics. The LRDP provides additional space for the programs of this office.

The Long Range Development Plan calls for appropriately equipped spaces for Leeward's support programs for on- and off-campus students. The accessibility plan presents an

## LEEWARD COMMUNITY COLLEGE LONG RANGE DEVELOPMENT PLAN

integrated system for accessing all of the campus' facilities. Computer laboratories, upgraded communication systems, and televised learning facilities are proposed in the LRDP.

### 5.4 CITY AND COUNTY OF HONOLULU - GENERAL PLAN

The following discussion provides an assessment of how the proposed Long Range Development Plan for LCC conforms to and implements the objectives and policies of the General Plan (City and County of Honolulu, 1992). Relevant objectives and policies of the General Plan are outlined below.

#### Health and Education

*Objective B. To provide a wide range of educational opportunities for the people of Oahu.*

*Policy 1. Support education programs that encourage the development of employable skills.*

*Policy 2. Encourage the provision of informal educational programs for people of all age groups.*

*Policy 3. Encourage the after-hours use of school buildings, grounds and facilities.*

*Policy 4. Encourage the construction of school facilities that are designed for flexibility and high levels of use.*

*Policy 5. Facilitate the appropriate location of learning institutions from the preschool through the university levels.*

Discussion: Leeward Community College is centrally located to serve the people of Ewa and Central Oahu. In addition to general education programs, the College provides vocational training, non-credit job training and classes, student support services and community service programs. Outside of scheduled classes and events, campus facilities are available for use by community groups.

The Long Range Development Plan calls for an expansion of College facilities within the pattern of use already established at the campus. The majority of spaces called for in the master plan are flexible classroom spaces. Specialized spaces are also proposed for performing arts, vocational, and technical programs.

#### Culture and Recreation

*Objective C. To foster the visual and performing arts.*

*Policy 1. Encourage and support programs and activities for the visual and performing arts.*

*Policy 2. Encourage creative expression and access to the arts by all segments of the population.*

Discussion: The Leeward Community College Theater is one of Hawaii's finest theaters for the performing arts. The Theater is known for its excellent acoustics and creative programming. During last year's season, more than 200 presentations were performed at the 600-seat theater. In addition to providing the performance space for College and community productions, the Theater also houses classes for acting, dance, and stage craft.

The Long Range Development Plan for the College provides for the expansion of the existing theater for lobby, offices, gallery, concession areas, and rehearsal/meeting spaces. Additionally, the development of the Media and Arts Instruction Center, a smaller rehearsal and performance space, will enhance the fine arts program at the College.

5.5 CITY AND COUNTY OF HONOLULU -  
CENTRAL OAHU DEVELOPMENT PLAN

Development Plan Common Provisions

*Section 4, General Urban Design Principles and Controls*

- (a) *Public Views. The design and siting of all structures shall reflect the need to maintain and enhance available views of significant landmarks.*
- (c) *Vehicular and Pedestrian Routes. Landscaping shall be provided along major vehicular arterials and collector streets as a means to increase the general attractiveness of the community and the enjoyment of vehicular travel for visitors and residents.*

Discussion: The LRDP calls for the expansion of campus facilities in a pattern consistent with the existing development of buildings around courtyards. Views makai to Pearl Harbor will be maintained. Landscaping is proposed along Ala Ike Road to improve the appearance of the campus from off-site areas.

Central Oahu Development Plan Special Provisions

*Section 2, Urban Design Principles and Controls for Central Oahu*

- (2) *Public Views. In order to promote pleasing and attractive living environments and panoramic mauka and makai views from public places, views of major landmarks from public places shall be protected whenever possible.*

Discussion: The LRDP calls for the expansion of campus facilities in a pattern consistent with the existing development of buildings around courtyards. Views makai to Pearl Harbor will be maintained.

5.6 APPROVALS AND PERMITS REQUIRED

College development on the site is consistent with the existing State Land Use District Urban designation (SLUD-Urban), as well as the City and County of Honolulu Development Plan designation (DP - Public Facility) and zoning (zoning - AG-2). Because most of the campus was planned and developed prior to initiation of the Planned Review Use (PRU) process in 1984, the existing facility has been "grandfathered" and has been maintained in its present condition. The campus property is outside of the SMA boundary.

A Plan Review Use (PRU) application will be submitted for the Long Range Development Plan for Leeward Community College. Construction projects implementing the plan will be subject to state and county regulations.

Section 6.0

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Findings and Reasons Supporting  
Anticipated Determination



## 6.0 FINDINGS AND REASONS SUPPORTING ANTICIPATED DETERMINATION

### 6.1 ANTICIPATED DETERMINATION

Based upon the findings presented in this Environmental Assessment, the potential impacts of the implementation of the Leeward Community College Long Range Development Plan, have been examined and discussed. After reviewing the significance criteria outlined in Section 11-200-12, EIS Rules, Contents of Environmental Assessment, it is anticipated that the adoption of the LRDP for the LCC campus will not result in significant adverse effects on the natural or human environment. The following conclusions were reached regarding the impact of the proposed action:

1. Involve an irrevocable loss or destruction of any natural or cultural resource.

Response: The project site is a highly developed site. There are no known natural or cultural resources on the site. While nearby low lying areas along Waiawa Stream and Pearl Harbor (Middle Loch) contain valuable springs and wetlands, including a wildlife sanctuary, our project is not expected to have a significant impact on these resources.

2. Significantly curtail the range of beneficial uses of the environment.

Response: Any intensification of development on the site will curtail the range of beneficial uses of the environment. Further development of the LRDP will strengthen the commitment to continue the use of the site for higher education. While it curtails the range of beneficial uses, the use of the site for Leeward Community College is considered a beneficial use. The proposed action will intensify this beneficial use.

3. Conflict with the State's long-term environmental policies or goals and guidelines as expressed in Chapter 344, HRS.

Response: The proposed project is consistent with the State's environmental policies. Development on an existing site conserves environmental resources. Increased landscaping improves interaction with the natural environment. Educational activities diversify economic activity in a balanced way; it is a relatively clean activity. The xeriscape gardening and increased plantings of native and indigenous species enhances the interaction with nature and the Hawaiian sense of place.

4. Substantially or adversely affect the economic or social welfare of the community or State.

Response: The further development of Leeward Community College improves the educational infrastructure of the State and has a positive impact on the social welfare of our residents. An educated work force creates a better business climate and provides people with greater economic opportunities. Educational and cultural programs at LCC enrich

LEEWARD COMMUNITY COLLEGE LONG RANGE DEVELOPMENT PLAN

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audiences who attend such events and activities. Implementation of the LRDP will increase the level and diversity of programs offered by the college.

5. Substantially affects public health

Response: Implementation of the LRDP does not have a negative impact on public health. While there may be some deterioration of air quality due to increased traffic, the amount is considered minimal. The expansion of educational, cultural and recreational opportunities provided by the development of the campus will have a positive impact on public health.

6. Involve substantial or adverse secondary impacts, such as population changes or effects on public facilities.

Response: There is some increased impact on infrastructure needs represented by the development of the LRDP. However, improvements identified in the utility master plans will accommodate these anticipated impacts. No impacts on population are expected.

7. Involve a substantial degradation of environmental quality.

Response: No substantial degradation of environmental quality is expected. Since the site is already developed there should be no significant impact. Developments proposed in the LRDP will continue the basic pattern and style of development that already exists on campus.

8. Cumulatively have a considerable effect upon the environment or involve a commitment for larger actions.

Response: The adoption of the LRDP does indicate a commitment for further actions as projects are developed to implement the plan. Future buildings will be evaluated for potential impact. If needed, more detailed studies will be conducted.

9. Affect a rare, threatened or endangered species, or its habitat.

Response: There are no rare, threatened or endangered species on the site. Endangered water birds are found at the nature preserve in Middle Loch managed by the Navy. Due to its distance from the campus, implementation of the LRDP is not expected to have any impact on the nature preserve or species that utilize the Pearl Harbor coastline for foraging and resting.

10. Detrimentially affect air or water quality or ambient noise levels;

Response: Air quality is not expected to be affected. There may be a slight increase in runoff due to increases in impervious surfaces but the amount is not expected to be significant. Improved landscaping should mitigate some of this potential impact. Ambient noise levels should remain essentially the same except during construction of new facilities.

## LEEWARD COMMUNITY COLLEGE LONG RANGE DEVELOPMENT PLAN

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11. The project is not located in an environmentally sensitive area (e.g. flood plain, tsunami zone, coastal areas)

Response: While the site is in a coastal area, except for a small area in zone D at the corner of the site that is in an undetermined zone, most of the land is outside of designated flood hazard areas. Most of the campus is on a bluff above the coastal plain and is not impacted by tsunami's or floods.

12. Affects scenic vistas and viewplanes identified in County or State plans or studies.

Response: It is noted in the City and County of Honolulu's Coastal View Study that the Pearl City area has little view opportunities except for the upper residential subdivision areas. The LCC campus is identified as a significant stationary site. The coastal highways approaching the campus have been identified as having intermittent views. The quality of the LCC campus as a stationary site will not be affected. New development will be terraced and significant views toward Pearl Harbor will be preserved. Viewing opportunities will consider options for interpretive instruction.

13. Require substantial energy consumption.

New developments on the campus will require additional energy consumption. Building designs will consider energy conservation measures where possible when funding is available. At that time more detailed options for energy conservation will be evaluated. LCC is also engaging in an energy reduction program in the replacement of existing fixtures and equipment.

Based on the above findings, further consideration of the project's impacts through the preparation of an Environmental Impact Statement is not warranted. An environmental assessment will be prepared for each major project proposed in the Long Range Development Plan as that project is implemented.

### 6.2 REASONS SUPPORTING THE ANTICIPATED DETERMINATION

As stated above, there are no significant environmental impacts expected to result from the proposed action. Improvements proposed in the Long Range Development Plan for Leeward Community College will:

- Provide adequate space to accommodate 5,000 full time equivalent (FTE) students.
- Enhance the College's program offerings by increasing the amount of both flexible and specialized space at the Leeward campus.

## LEEWARD COMMUNITY COLLEGE LONG RANGE DEVELOPMENT PLAN

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- Expand and enhance facilities used to benefit the community at large through cultural activities and non-credit offerings.
- Accommodate expansion requirements in a way that continues existing development patterns and maintains scenic view corridors.
- Provide physical improvements to allow full access to campus facilities.
- Improve facilities for distance learning to increase access to educational offerings.
- Humanize and improve the visual appearance of the school by lowering roof lines, detailing exterior skin and integration of Hawaiian motifs and providing landscaping with minimal maintenance requirements.

Appendix A  

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References

LEEWARD COMMUNITY COLLEGE LONG RANGE DEVELOPMENT PLAN  
Draft Environmental Assessment

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APPENDIX A - REFERENCES

- Austin, Tsutsumi & Associates, Inc. June 1998. Traffic Impact Analysis Report for the Proposed Leeward Community College Expansion.
- City and County of Honolulu, Planning Department. Zoning Map.
- County of Honolulu, Planning Department. The General Plan - Objectives and Policies. General Plan Map, City and County of Honolulu.
- Federal Emergency Management Agency. September 30, 1995. Flood Insurance Rate Maps: Island of Oahu.
- Hawaii State Department of Business, Economic Development and Tourism. June 1994. The State of Hawaii Data Book 1993-94.
- University of Hawaii, Department of Geography. 1983. Atlas of Hawaii, Second Edition.

Appendix B

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Letters: Comments and Responses

FIRE DEPARTMENT  
CITY AND COUNTY OF HONOLULU  
3375 KOAHPAKA STREET, SUITE H425  
HONOLULU, HAWAII 96819-1889



RECEIVED  
FEB 23 1998

ANTHONY J. LOPEZ, JR.  
FIRE CHIEF  
ATTORNEYS LEONARDI  
FIRE DEPARTMENT

January 29, 1998

Mr. George I. Atta, AICP, CEI  
Chief Planner  
Group 70 International  
925 Bethel Street, Fifth Floor  
Honolulu, Hawaii 96813-4307

Dear Mr. Atta:

Subject: Environmental Assessment for Leeward Community College  
Long Range Development Plan  
Pre-consultation Review  
HFD Internal No. 98-028

This letter is in response to your correspondence of January 26, 1998, requesting a review of the Draft Environmental Assessment (DEA). It appears that your future plans have adequately addressed the necessary fire flow and protection needs for the campus expansion, but the interim plan of relocating 28 portable classrooms from Kapiolani Community College to the Leeward campus should be reassessed.

As described in the DEA, the existing facility's fire protection is "deficient" due to the inadequate fire flow. Increasing the fire load with these 28 additional classrooms will reduce your fire protection to an unacceptable level. The current water system cannot support any additional fire load.

We recommend the construction phasing be altered by moving the infrastructure work on the water mains to the forefront of the project. This would ensure adequate fire flow prior to the relocation of these portable classrooms.

Should you have any questions, please call Battalion Chief Charles Wassman of our Fire Prevention Bureau at 831-7778.

Sincerely,

ANTHONY J. LOPEZ, JR.  
Fire Chief



GROUP 70  
INTERNATIONAL

FRANKS, GIL, AIA, ACP  
Norman G. Y. Hoang, AIA  
Sheryl B. Seaman, AIA, ASID  
Hiroko Hada, AIA  
Roy H. Nishi, AIA, CSI  
James F. Robinson, AIA  
Rajpal E. Parmar, AICP  
Stephen H. Yuen, AIA  
Iveta L. Chung, AIA  
  
Paul P. Chorney, AIA  
Dean H. Kauruba, AIA  
Kathryn A. Nam  
Roy A. Dwyer  
Mary J. O'Leary

23 February 1998

Anthony J. Lopez, Jr.  
Fire Chief  
3375 Koaapaka Street, Suite H425  
Honolulu, Hawaii 96819

Subject: Draft Environmental Assessment (DEA) for the Leeward Community College  
Long Range Development Plan

Dear Chief Lopez:

Thank you for your response to our DEA dated January 29, 1998. We understand and appreciate your concerns about the timing of water system improvements in relation to the development of the campus. We note, with pleasure, your comment that future plans address the fire flow issues adequately.

With regard to the issue of the portable classrooms we regret to inform you that we were not able to sequence the relocation in the order that you suggested. Nineteen (19) of the portables have already been moved to Leeward Community College onto the site designated in the LRDP. The nine remaining portables are scheduled for relocation at the end of this summer. The timing of these relocations is related to accreditation pressures for West Oahu College. Certain deadlines were set which needed to be met to show progress in compliance with accreditation recommendations. The accreditation committee will be returning in April 1998 to check on the progress of the improvements.

On a parallel track the State Department of Accounting and General Services has been working with the Honolulu Board of Water Supply to design the necessary off site improvements. Once the improvements have been completed the system will meet all code requirements. The current schedule calls for the water system improvements to be completed by the end of the year. The money for the project has been appropriated. We anticipate that all regulatory requirements will be met by the end of the year.

If you have any other questions regarding the project please feel free to contact me at 523-5866.

Sincerely,

GROUP 70 INTERNATIONAL, INC.

George I. Atta, AICP, CEI  
Project Planner

ALL:mpm

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letter.doc

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POLICE DEPARTMENT  
**CITY AND COUNTY OF HONOLULU**  
801 SOUTH BERETANIA STREET  
HONOLULU, HAWAII 96813 • AREA CODE (808) 538-3111



JEREMY HARRIS  
MAYOR

RECEIVED  
FEB 1 1998  
LEE D. DONOHUE  
ACTING CHIEF  
WILLIAM B. CLARK  
DEPUTY CHIEF

OUR REFERENCE: BS-DL

January 30, 1998

Mr. George I. Atta, AICP, CEI  
Chief Planner  
Group 70 International, Inc.  
925 Bethel Street, Fifth Floor  
Honolulu, Hawaii 96813-4307

Dear Mr. Atta:

This is in response to the Draft Environmental Assessment for the Leeward Community College Long-Range Development Plan.

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

Thank you for the opportunity to review this document.

Sincerely,

LEE D. DONOHUE  
Acting Chief of Police

By *[Signature]*  
JAMES FEMIA, Assistant Chief  
Administrative Bureau



**GROUP 70**  
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FRANK S. GRIFFIN, AIA, AICP  
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ROY A. BROWN  
MARY J. O'LEARY

6 March 1998

Mr. Lee D. Donohue  
Acting Chief of Police  
801 South Beretania Street  
Honolulu, Hawaii 96813

Subject: Draft Environmental Assessment for the Leeward Community College Long Range Development Plan

Dear Chief Donohue:

Thank you for your letter responding to our draft environmental assessment (EA). We are pleased to hear that you do not see any significant impact on police services from our proposed project.

We will continue to keep your department informed of the progress of the project.

Sincerely,

Group 70 International, Inc.

*[Signature]*  
George I. Atta, AIA, CEI  
Chief Planner

VPOLLANT\Project\Planning\94005\_LEEWARDEFA\_PRU Communications\94002g\_1\_21118\_ca response.doc

Group 70 International, Inc. • Architecture • Planning • Interior Design • Environmental Services • Building Design • Asset Management  
925 Bethel Street, Fifth Floor • Honolulu, Hawaii 96813-4307 • Phone: (808) 538-3860 • FAX: (808) 538-3871 • http://www.group70.com



HERMAN M. AIZAWA, Ph.D.  
SUPERINTENDENT

STATE OF HAWAII  
DEPARTMENT OF EDUCATION  
P O BOX 2280  
HONOLULU, HAWAII 96804

OFFICE OF THE SUPERINTENDENT

February 9, 1998

Mr. George I. Atta, AICP, CEI  
Chief Planner  
Group 70 International, Inc.  
925 Bethel Street, Fifth Floor  
Honolulu, Hawaii 96813-4307

Dear Mr. Atta:

Subject: Draft EA for Leeward Community College  
Long Range Development Plan

The Department of Education has no comment on the draft environmental assessment.

Thank you for the opportunity to respond.

Sincerely,

Herman M. Aizawa, Ph.D.  
Superintendent

HIMA:hy

cc: A. Suga, OBS  
W. Staszko, LDO

AN AFFIRMATIVE ACTION AND EQUAL OPPORTUNITY EMPLOYER



GROUP 70  
INTERNATIONAL

LIZARD S. ODA, AIA, AEP  
NORMAN G.Y. HONG, AIA  
SHERYL B. SCAMM, AIA, AEP  
HAROLD HALL, AIA  
BOB H. NICHOL, AIA, CN  
JAMES L. NICHOLSON, AIA  
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STEPHEN H. YAM, AIA  
LINDA L. CHENG, AIA

PAUL P. CHERRY, AIA  
DANIEL H. KAMATA, AIA  
NORMA J. SMITH, AIA  
STEPHEN E. CALH, CPA  
GEORGE J. ATTA, AICP  
KILBY H. OVERMAN, AICP  
KATHRYN A. NAM  
ROY A. INAYAR  
MARY J. O'LEARY

March 9, 1998

Mr. Herman M. Aizawa, Ph. D.  
Superintendent  
State of Hawaii  
Department of Education  
P.O. Box 2360  
Honolulu, HI 96804

Dear Mr. Aizawa:

Subject: Leeward Community College Long Range Development Plan  
Pre-Consultation Review of Draft Environmental Assessment

Thank you for your February 9, 1998 letter regarding the Draft Environmental Assessment (EA) for the Leeward Community College Long Range Development Plan. We acknowledge that you do not have any comments at this time.

We will forward a copy of the Draft EA for your review and comment upon its completion. Your letter and this response letter will be included in the Draft Environmental Assessment. We appreciate your input for this project.

GROUP 70 INTERNATIONAL, INC.

Sincerely,

Mary J. O'Leary, AICP  
Senior Planner

cc: Mr. Maynard Young  
Director, Facilities Planning - University of Hawaii Community Colleges

Group 70 International, Inc. - Architecture - Planning - Interior Design - Environmental Services - Building Inspection - Asset Management  
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DEPARTMENT OF PUBLIC WORKS  
**CITY AND COUNTY OF HONOLULU**  
450 SOUTH KING STREET, 11TH FLOOR • HONOLULU, HAWAII 96813  
PHONE: (808) 525-4341 • FAX: (808) 527-8857

JEREMY HARRIS  
MAYOR



JONATHAN K. SHIMADA, PH.D.  
DIRECTOR AND CHIEF ENGINEER  
ROLAND D. LIBBY, JR.  
DEPUTY DIRECTOR  
ENV 98-040

February 12, 1998

Mr. George I. Atta, AICP, CEI  
Chief Planner  
Group 70 International  
925 Bethel Street, 5/F  
Honolulu, Hawaii 96813-4307

Dear Mr. Atta:

Subject: Draft Environmental Assessment (DEA)  
Leeward Community College Long Range Development Plan  
THK: 9-6-03: 48

We have reviewed the subject DEA and have the following comment:

Section 3.4: The DEA should address the extent of "erosion problem in open area at the southeast corner of the campus" along with mitigative measures.

Should you have any questions, please contact Alex Ho, Environmental Engineer, at 523-4150.

Very truly yours,

JONATHAN K. SHIMADA, PhD  
Director and Chief Engineer



**GROUP 70**  
INTERNATIONAL

FRANK S. TALL, AIA, AICP  
NORMAN G. Y. HONG, AIA  
MERYL B. NEUMAN, AIA, AIAI  
HAROLD HUBB, AIA  
ROY H. WILBY, AIA, CSI  
JAMES I. NOLAN, AIA  
RALPH E. NEWMAN, AICP  
STEPHAN H. YUEN, AIA  
LINDA L. CHONG, AIA

PAUL H. CHENEY, AIA  
DONALD H. KAMAZA, AIA  
SUSAN J. SWEET, AIA  
STEPHEN E. COLBY, CPA  
GEORGE I. ATTA, AICP  
JEFFREY H. O'NEILL, AICP  
KATHY A. NAMI  
ROY A. HANAY  
MARY J. O'LEARY

GROUP 70 INTERNATIONAL, INC.

George I. Atta, AICP, CEI  
Project Planner

cc: Maynard Young, Francis Oda

23 February 1998

Jonathan K. Shimada, Ph.D.  
Director and Chief Engineer  
Department of Public Works  
650 South King Street, 11th Floor  
Honolulu, Hawaii 96813

Subject: Draft Environmental Assessment (DEA) for Leeward Community College  
Long Range Development Plan: THK 9-6-03:48

Dear Director Shimada:

Thank you for your comments to our draft report. With reference to your response letter dated February 12, 1998 we note your comments about the need for greater elaboration on the erosion problem on the southeast corner of the campus. We will expand the problem description and include more information about mitigation measures. These changes will be included in the revised DEA.

If you have a further questions please feel free to call me at 523-5866.

Sincerely,

\\P\OL\AVT\Project\Planning\9-6-03\LEEWARDEA\_PRU\_Communications\jho\pa\_kcz2318\_public works 1.doc

Group 70 International, Inc. • Architecture • Planning • Interior Design • Environmental Services • Building Design • Access Management  
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DEPARTMENT OF TRANSPORTATION SERVICES  
CITY AND COUNTY OF HONOLULU

PACIFIC PARK PLAZA • 711 KAPOLANI BOULEVARD, SUITE 1200 • HONOLULU, HAWAII 96813  
PHONE: (808) 923-4228 • FAX: (808) 923-4770



CHERYL D. SOON  
DIRECTOR  
JOSEPH M. MAGALOU, JR.  
DEPUTY DIRECTOR

February 25, 1998

TSP1/98-00451R  
TSP98-00078

Mr. George I. Atta, AICP, CEI  
Chief Planner  
Group 70 International, Inc.  
925 Bethel Street, Fifth Floor  
Honolulu, Hawaii 96813-4307

Dear Mr. Atta:

Subject: Leeward Community College Long Range  
Development Plan

In response to your January 26, 1998 letter, the draft environmental assessment for the subject plan was reviewed. The vehicular access for the project will be from State facilities. We, therefore, have no comments regarding the transportation or traffic impacts of this project.

Should you have any questions regarding this matter, please contact Faith Miyamoto of the Transportation System Planning Division at 527-6976.

Sincerely,

CHERYL D. SOON  
Director



GROUP 70  
INTERNATIONAL

IRVING S. GILL, AIA, ACP  
MERRILL G.Y. HUNG, AIA  
SHERYL B. SCAMAN, AIA, ASID  
HAROLD HILL, AIA  
ROY H. NILES, AIA, CSI  
JAMES J. NEWMAN, AIA  
KARLE F. NICHOLS, AICP  
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IRVING H. KAMATA, AIA  
NORMAN J. SMITH, AIA  
STEPHEN F. CALLO, CPA  
GEORGE J. ALTA, AICP  
KATHY H. OVERTON, AICP  
KATHY A. NAM  
BOB A. HARVEY  
MURRY J. OLLIVY

March 9, 1998

Ms. Cheryl D. Soon, Director  
City & County of Honolulu  
Department of Transportation Services  
Pacific Park Plaza  
711 Kapiolani Boulevard, Suite 1200  
Honolulu, HI 96813

Dear Ms. Soon:

Subject: Leeward Community College Long Range Development Plan  
Pre-Consultation Review of Draft Environmental Assessment

Thank you for your February 25, 1998 letter regarding the Draft Environmental Assessment (EA) for the Leeward Community College Long Range Development Plan. We acknowledge your comment that vehicular access for the project will be from State facilities and that your office, therefore, does not have any comments at this time.

We will forward a copy of the Draft EA for your review upon its completion. Your letter and this response letter will be included in the Draft Environmental Assessment. We appreciate your input for this project.

GROUP 70 INTERNATIONAL, INC.

Sincerely,

CHERYL D. SOON  
Senior Planner

cc: Mr. Maynard Young  
Director, Facilities Planning - University of Hawaii Community Colleges

Group 70 International, Inc. • An Interstate Planning • Incentive Program • Environmental Services • Planning Design • Assets Management  
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DEPARTMENT OF LAND UTILIZATION  
**CITY AND COUNTY OF HONOLULU**

830 SOUTH KING STREET, 27th FLOOR • HONOLULU, HAWAII 96813  
PHONE: (808) 523-4414 • FAX: (808) 527-8743



JAN NAOE SULLIVAN  
DIRECTOR  
LORETTA R. CHIEZ  
SENIOR DIRECTOR  
98-00669 (DT)

February 26, 1998

Mr. George I. Atta, AICP, CEI  
Chief Planner  
Group 70 International, Inc.  
925 Bethel Street, Fifth Floor  
Honolulu, Hawaii 96813-4307

Dear Mr. Atta:

Draft Environmental Assessment (EA)  
Leeward Community College (LCC)  
Long Range Development Plan  
Tax\_Map\_Key: 9-6-03: 48

We have reviewed the above EA and have the following comments:

1. Incorrect information is given for the Plan Review Use (PRU) application on page 5-6, "Permits and Approvals Required". A height variance application is not required as it can be addressed by the PRU.
2. Any streams within the vicinity of ICC should be mentioned in the EA. If there are any nearby streams, Best Management Practices (BMPs) should be implemented to prevent construction runoff from entering the stream. The type(s) of BMPs to be implemented should be discussed in the EA.
3. The EA should contain a traffic study describing the associated traffic impacts to the surrounding area.

Thank you for the opportunity to comment. Please call Ms. Eileen Mark of our staff at 527-5374, if you have any questions regarding the PRU. Any other questions may be answered by Ms. Dana Teramoto of our staff at 523-4648.

Very truly yours,

JAN NAOE SULLIVAN  
Director of Land Utilization

JNS:am  
9801lcc-d11



**GROUP 70**  
INTERNATIONAL

FRANK S. OMA, AIA, AICP  
SHEMAM G.Y. HONG, AIA  
SHERY H. SCAMAR, AIA, AICP  
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LEWIS F. ADA, AICP  
KATHY H. DAVENPORT, AICP  
KATHLEEN A. RUM  
BOB A. HANNEY  
MAY I. OLEARY

March 9, 1998

Ms. Jan Naoe Sullivan, Director  
City and County of Honolulu  
Department of Land Utilization  
650 South King Street, 7th Floor  
Honolulu, HI 96813

Dear Ms. Sullivan:

Subject: Leeward Community College Long Range Development Plan  
Pre-Consultation Review of Draft Environmental Assessment

Thank you for your February 26, 1998 letter regarding the Draft Environmental Assessment (EA) for the Leeward Community College Long Range Development Plan. We acknowledge your comments and correction to page 5-6. The Draft EA will address your comments regarding the issue of nearby streams and will contain a traffic study describing the project's associated traffic impacts.

We will forward a copy of the Draft EA for your review and comment upon its completion. Your letter and this response letter will be included in the Draft Environmental Assessment. We appreciate your input for this project.

GROUP 70 INTERNATIONAL, INC.

Sincerely,  
  
Mary J. O'Leary, AICP  
Senior Planner

cc: Mr. Maynard Young  
Director, Facilities Planning - University of Hawaii Community Colleges

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DEPARTMENT OF WASTEWATER MANAGEMENT  
CITY AND COUNTY OF HONOLULU  
430 SOUTH KING STREET, 3RD FLOOR • HONOLULU, HAWAII 96813  
PHONE: (808) 537-4663 • FAX: (808) 537-4673



JEREMY HARRIS  
MAYOR

EDMUND E. SPRAGUE, P.E., P.D.  
DIRECTOR  
CHERYL E. OGUMA, RFP, ESO  
DEPUTY DIRECTOR

In reply refer to:  
WCC 98-45

March 2, 1998

Mr. George I. Altia, AICP, CEI  
Group 70 International, Inc.  
925 Bethel Street, Fifth Floor  
Honolulu, Hawaii 96813

Dear Mr. Altia:

Subject: ENVIRONMENTAL ASSESSMENT FOR LEEWARD COMMUNITY  
COLLEGE LONG RANGE DEVELOPMENT PLAN  
PRECONSULTATION REVIEW  
TMK: 2-6-03-48

The municipal wastewater system is available and adequate to accommodate the proposed project. The project will provide 375,000 gross square feet of additional classrooms to help support a total future population of five-thousand students and five-hundred staff.

This statement shall not be construed as confirmation of sewage capacity reservation. Sewage capacity reservation is contingent on submittal and approval of a "Sewer Connection Application" form. This project may be liable for payment of a Wastewater System Facility Charge.

If you have any questions, please contact Mr. Scott Gushi of the Service Control Branch at 523-4886.

Sincerely,

*Cheryl E. Sprague*  
for KENNETH E. SPRAGUE  
Director



GROUP 70  
INTERNATIONAL

FRANK S. DALY, AIA, AICP  
RICHARD G. Y. HONG, AIA  
SHERYL B. NEUMAN, AIA, AIAI  
HAROLD HALL, AIA  
ROY H. NISSE, AIA, CSI  
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ROBERT J. NAYLOR, AIA  
STEPHEN F. CALKINS, CPA  
GEORGE J. ALTO, AICP  
JILLIAN H. OVERTON, AICP  
KATHLEEN A. NEM  
ROY A. HENRY  
MARY J. O'LEARY

March 9, 1998

Mr. Kenneth E. Sprague, Director  
City & County of Honolulu  
Department of Wastewater Management  
650 South King Street, 3rd Floor  
Honolulu, HI 96813

Dear Mr. Sprague:

Subject: Leeward Community College Long Range Development Plan  
Pre-Consultation Review of Draft Environmental Assessment

Thank you for your March 2, 1998 letter regarding the Draft Environmental Assessment (EA) for the Leeward Community College Long Range Development Plan. We acknowledge your comment that the municipal wastewater system is available and adequate to accommodate the proposed project.

We will forward a copy of the Draft EA for your review upon its completion. Your letter and this response letter will be included in the Draft Environmental Assessment. We appreciate your input for this project.

GROUP 70 INTERNATIONAL, INC

Sincerely,

*Mary J. O'Leary*  
Mary J. O'Leary, AICP  
Senior Planner

cc: Mr. Maynard Young  
Director, Facilities Planning - University of Hawaii Community Colleges

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BEAUMAIS J. CAYEHO  
GOVERNOR



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

MAR 18 1998

KAZU HAYASHIDA  
DIRECTOR

DEPUTY DIRECTORS  
SPENCER L. LUKALO  
CLEVELLE COLEMAN

WHILEY REFER TO:  
STP 8.8453

March 2, 1998

Mr. George I. Atta, AICP, CEI  
Group 70 International, Inc.  
925 Bethel Street, 5th Floor  
Honolulu, Hawaii 96813-4307

Dear Mr. Atta:

Subject: Environmental Assessment for Leeward Community College  
Long Range Development Plan  
Pre-consultation Review

Thank you for your transmittal requesting our review of the subject document.

A Traffic Impact Analysis Report (TIAR) should be submitted for our review and approval. The TIAR should address impacts on the H-1 Freeway, Farrington Highway, and Kamehameha Highway. The TIAR should also reflect the phasing and time frame for the projected increase in use, enrollment, and traffic.

Thank you for the opportunity to comment.

Very truly yours,

*Kazu Hayashida*

KAZU HAYASHIDA  
Director of Transportation



GROUP 70  
INTERNATIONAL

FRANK S. OLL, AIA, AICP  
Norman G.Y. Hoeg, AIA  
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Hilanda Hill, AIA  
Roy H. Nelson, AIA, CSI  
James I. Nohamato, AIA  
Kijichi F. Pothinac, AICP  
Stephen H. Yuen, AIA  
Linda L. Chang, AIA

Paul F. Chaney, AIA  
Dean H. Kamaea, AIA  
Nancy J. Scott, AIA  
Stephen F. Cook, CPA  
George F. Arr, AICP  
Jeffrey H. Overton, AICP  
Kathryn A. Nait  
Ray A. Inouye  
Mary J. O'Leary

July 16, 1998

Mr. Kazu Hayashida  
Director of Transportation  
State of Hawaii  
Department of Transportation  
869 Punchbowl Street  
Honolulu, HI 96813

Dear Mr. Hayashida:

Subject: Leeward Community College Long Range Development Plan  
Pre-Consultation Review of Draft Environmental Assessment

Thank you for your March 2, 1998 letter regarding your pre-consultation review of the Draft Environmental Assessment (EA) for the Leeward Community College Long Range Development Plan. The Draft EA will contain a traffic impact analysis report which addresses potential traffic impacts related to the proposed long-term expansion of Leeward Community College.

We will forward a copy of the Draft EA for your review upon its completion. Your letter and this response letter will be included in the Draft Environmental Assessment. We appreciate your input for this project.

GROUP 70 INTERNATIONAL, INC.

Sincerely,

*Mary J. O'Leary*  
Mary J. O'Leary, AICP  
Senior Planner

cc: Mr. Maynard Young  
Director, Facilities Planning - University of Hawaii Community Colleges

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**CITY AND COUNTY OF HONOLULU**  
 PLANNING DEPARTMENT  
 650 SOUTH KING STREET, 5TH FLOOR • HONOLULU, HAWAII 96813-2017  
 PHONE: (808) 523-4523 • FAX: (808) 523-4520



PATRICK T. ONISHI  
 CHIEF PLANNING OFFICER  
 DONALD MARAHE  
 DEPUTY CHIEF PLANNING OFFICER

RR 1/98-0134

March 4, 1998

Group 70 International, Inc.  
 925 Belhel Street, 5th Floor  
 Honolulu, Hawaii 96813-4307

Attention: Mr. George I. Ata, AICP, CEI  
 Chief Planner

Gentlemen:

Environmental Assessment (EA) for Leeward Community College  
Long Range Development Plan - Pre-consultation Review

In response to your company's request of January 26, 1998, we have reviewed the draft EA with regard to the proposed long range development plan's impact on the City and County of Honolulu's General Plan and the Central Oahu Development Plan and find the proposed plan consistent with these Plans' objectives and provisions.

Should you have any questions, please contact Robert Reed of my staff at 523-4402.

Yours very truly,

*Patrick T. Onishi*  
 PATRICK T. ONISHI  
 Chief Planning Officer

PTO:ft



**GROUP 70**  
 INTERNATIONAL

FRANK S. OHL, AIA, AICP  
 NORMAN G. Y. HONG, AIA  
 MARY H. SCAMM, AIA, ASID  
 HARSHI JHAJA, AIA  
 ROY H. MAHE, AIA, CN  
 JAMES I. SCHNEIDER, AIA  
 ROJAH E. PARMORE, AICP  
 SUDHAKAR H. VISHN, AIA  
 LINDA L. CHANG, AIA

PAUL F. CHERRY, AIA  
 DEAN H. MANNING, AIA  
 MERRILL J. NICHOLS, AIA  
 NICHOLE L. GILES, CPA  
 GEORGE J. ABLE, AICP  
 KELLEY H. CHAYTON, AICP  
 KATHRYN A. NAM  
 ROY A. O'LEARY  
 MARY J. O'LEARY

March 9, 1998

Mr. Patrick Onishi, Chief Planning Officer  
 City and County of Honolulu  
 Planning Department  
 650 South King Street, 8th Floor  
 Honolulu, HI 96813

Dear Mr. Onishi:

Subject: Leeward Community College Long Range Development Plan  
 Pre-Consultation Review of Draft Environmental Assessment

Thank you for your March 4, 1998 letter regarding the Draft Environmental Assessment (EA) for the Leeward Community College Long Range Development Plan. We acknowledge your comment that the proposed plan is consistent with the City and County of Honolulu's General Plan and the Central Oahu Development Plan.

We will forward a copy of the Draft EA for your review and comment upon its completion. Your letter and this response letter will be included in the Draft Environmental Assessment. We appreciate your input for this project.

GROUP 70 INTERNATIONAL, INC.

Sincerely,  
  
 Mary J. O'Leary, AICP  
 Senior Planner

cc: Mr. Maynard Young  
 Director, Facilities Planning - University of Hawaii Community Colleges

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 925 Belhel Street, Fifth Floor • Honolulu, Hawaii 96813-4307 • Phone: (808) 523-5866 • FAX: (808) 523-5871 • E-mail: g70@group70.com



**BOARD OF WATER SUPPLY**

CITY AND COUNTY OF HONOLULU  
630 SOUTH BETARUA STREET  
HONOLULU, HAWAII 96813  
PHONE: (808) 527-6180  
FAX: (808) 533-2714



March 13, 1998

FRANK HARPER, Mayor  
WALTERO WATSON, Jr., Chairman  
EDDIE FLORES, Jr.  
KAZUHAYASHIDA  
JAWHILY AM  
FORESTIC MURPHY  
JOHANNIKI SIKIADA, PRO  
BARBARA KIM STANTON  
RAYMOND H. SATO  
Manager and Chief Engineer

Mr. George I. Atta, AICP, CEI  
Group 70 International  
925 Bethel Street, Fifth Floor  
Honolulu, Hawaii 96813-4307

Dear Mr. Atta:

Subject: Your letter of January 26, 1998 regarding a Pre-consultation Review of the Draft Environmental Assessment (DEA) for the Leeward Community College, Long Range Development Plan. We offer the following comments:

Thank you for the opportunity to review the pre-consultation Draft Environmental Assessment (DEA) for the Leeward Community College, Long Range Development Plan. We offer the following comments:

1. The existing water system can not provide adequate fire protection. Please revise page 3-20, paragraph 1, as follows: According to Board of Water Supply (BWS), the existing facilities cannot provide adequate fire protection. Improvements should be made to bring the water system up to current BWS fire protection standards.
2. The developer is required to install the necessary water system improvements to serve the project. The proposed off-site 16-inch main will provide adequate fire protection only up to the proposed 8x2 FM meter. Existing water service is provided by a stamess connection of two 6-inch meters and not by two 4-inch meters as indicated in the DEA.
3. A Reduced Pressure Principle Backflow Prevention (RPP) Device will cause an approximate 10-15 pound per square inch (psi) pressure drop. Therefore, the pressure after the meter will be less than 20 psi. The proposed project is subject to our cross connection control requirements prior to the issuance of the building permit.
4. The developer is required to obtain a water allocation.
4. The availability of water will be confirmed when the building permits are submitted for our review and approval. When water is made available, the applicant will be required to pay the applicable Water System Facilities Charges.
5. Water efficient landscaping should be utilized to reduce the irrigation demand.
6. We reserve further comments on the proposed development until development plans are formalized.

If you have any questions, please contact Barry Usagawa at 527-5235.

Very truly yours,

FOR  
RAYMOND H. SATO  
Manager and Chief Engineer



**GROUP 70**  
INTERNATIONAL

LEONARD OHL, AIA, AICP  
Nathan G.Y. Hing, AIA  
Sheryl H. Norman, AIA, AIA  
Hiroshi Ito, AIA  
Roy H. Niki, AIA, CN  
James I. Nishimura, AIA  
Rajiv E. Patel, AICP  
Stephen H. Yuen, AIA  
Frank L. Chang, AIA

Paul P. Charney, AIA  
Ikumichi Kozuma, AIA  
Nancy J. Saito, AIA  
Stephen E. Cahn, CIA  
Gregory J. Allen, AICP  
Julius H. Davison, AICP  
Kathryn A. Nam  
Roy A. Bessy  
May J. O'Brien

March 20, 1998

Mr. Raymond H. Sato, Manager and Chief Engineer  
City & County of Honolulu  
Board of Water Supply  
630 South Beretania Street  
Honolulu, HI 96813

Dear Mr. Sato:

Subject: Leeward Community College Long Range Development Plan  
Pre-Consultation Review of Draft Environmental Assessment

Thank you for your March 13, 1998 letter regarding your pre-consultation review of the Draft Environmental Assessment (EA) for the Leeward Community College Long Range Development Plan. We have prepared the following responses to your comments.

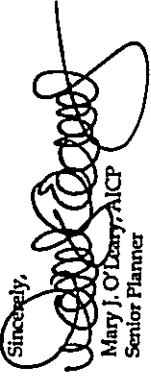
1. The Draft EA page 3-20, paragraph 1, will be revised as suggested.
2. We acknowledge that the proposed off-site 16-inch main will extend adequate fire protection to the proposed 8x2 FM meter only. Additional on-site water system improvements are necessary to extend adequate fire protection to existing and future buildings. A more thorough review of the metering requirements would be performed during design of the on-site water system improvements. A parallel 8x2 FM meter could be proposed at the 16-inch main connection, or at the northeast corner of the campus from the 12-inch main along Ala Ike Road, as required. We also acknowledge that the project is subject to your cross connection control requirements.
3. The Draft EA will be revised to state that existing water service is provided by a stamess connection of two 6-inch meters, not 4-inch meters.
3. The University of Hawaii (project developer) will obtain a water allocation at the appropriate time in the development process.
4. We acknowledge your comment that confirmation of the availability of water for the project will take place when building permits are submitted to your office, and that there will be water system facilities charges.

5. Water efficient landscaping will be used where practical to reduce irrigation demand. The landscape palette will select plants with lower water requirements and the drip irrigation method will minimize irrigation usage.

We will forward a copy of the Draft EA for your review upon its completion. Your letter and this response letter will be included in the Draft Environmental Assessment. We appreciate your input for this project.

GROUP 70 INTERNATIONAL, INC.

Sincerely,



Mary J. O'Leary, AICP  
Senior Planner

cc: Mr. Maynard Young  
Director, Facilities Planning - University of Hawaii Community Colleges



DEPARTMENT OF THE NAVY  
COMMANDER  
NAVAL BASE PEARL HARBOR  
BOX 110  
PEARL HARBOR, HAWAII 96860-5020

5090, PIPER REFER TO  
Ser N40(23) 4503  
March 16, 1998

Mr. George Atta, AICP, CEI  
Chief Planner  
Group 70 International, Inc.  
925 Belhel Street, Fifth Floor  
Honolulu, Hawaii 96813

Dear Mr. Atta:

Subj: DRAFT ENVIRONMENTAL ASSESSMENT (DEA) FOR LEEWARD  
COMMUNITY COLLEGE LONG RANGE DEVELOPMENT PLAN OF  
JANUARY 1998

Thank you for providing the Draft Environmental Assessment for us to review and comment upon. The Navy has no comment to offer at this time and appreciates the opportunity to participate in your review process.

The Navy's point of contact is Mr. Clyde Yokota. He may be contacted at 474-0292, by facsimile transmission at 474-2328, or by e-mail at [N4.2@cnbgw.cnbbp.navy.mil](mailto:N4.2@cnbgw.cnbbp.navy.mil).

Sincerely,



J. M. SHREWSBURY  
Captain, CEC, U.S. Navy  
Assistant Chief of Staff for  
Facilities and Environment  
By direction of  
Commander, Naval Base, Pearl Harbor

DEPARTMENT OF TRANSPORTATION SERVICES  
**CITY AND COUNTY OF HONOLULU**  
PACIFIC PARK PLAZA • 711 KAPIOLANI BOULEVARD, SUITE 1200 • HONOLULU, HAWAII 96813  
PHONE: (808) 523-4338 • FAX: (808) 523-4730



JEREMY HARRIS  
Mayor

March 18, 1998



**GROUP 70**  
INTERNATIONAL

FERRIS S. OMA, AIA, AICP  
Norman G. Y. Hoang, AIA  
Stacy H. Scaman, AIA, AUP  
Hiroshi Hida, AIA  
Roy H. Nishi, AIA, CN  
James J. Nishimura, AIA  
Ralph E. Pomeroy, AICP  
Stephen H. Yuen, AIA  
Linda L. Chung, AIA

Paul P. Chenevix, AIA  
Dean H. Kikunaga, AIA  
Norma J. Scott, AIA  
Stephen F. Calko, CPA  
George T. Aho, AICP  
Jeffrey H. Overton, AICP  
Kathryn A. Nam  
Roy A. Inouye  
Mary J. O'Leary

Mr. J.M. Shrewsbury  
Captain, CEC, U.S. Navy  
Department of the Navy  
Naval Base Pearl Harbor  
Box 110  
Pearl Harbor, Hawaii 96860-5020

Dear Captain Shrewsbury:

Subject: Leeward Community College Long Range Development Plan  
Pre-Consultation Review of Draft Environmental Assessment

Thank you for your March 18, 1998 letter regarding your pre-consultation review of the Draft Environmental Assessment (EA) for the Leeward Community College Long Range Development Plan. We acknowledge that you do not have any comments at this time.

We will forward a copy of the Draft EA for your review upon its completion. Your letter and this response letter will be included in the Draft Environmental Assessment. We appreciate your input for this project.

GROUP 70 INTERNATIONAL, INC.

Sincerely,

Mary J. O'Leary, AICP  
Senior Planner

cc: Mr. Maynard Young  
Director, Facilities Planning - University of Hawaii Community Colleges

Group 70 International, Inc. • Architecture • Planning • Interior Design • Environmental Services • Building Diagnostics • Assets Management  
925 Bethel Street, Fifth Floor • Honolulu, Hawaii 96813-4977 • Phone: (808) 523-5966 • FAX: (808) 523-5874 • <http://www.group70.com>

Mr. George I. Atta, AICP, CEI  
Chief Planner  
Group 70 International, Inc.  
925 Bethel Street, Fifth Floor  
Honolulu, Hawaii 96813-4307

Dear Mr. Atta:

Subject: Leeward Community College Long Range Development Plan

This is a supplemental response to your January 26, 1998, letter and my letter to you dated February 25, 1998.

Positive provisions should be made in your plans to facilitate bus transit access and provide convenient and safe services to the facilities to include bus shelters and amenities.

If you have any questions in this area, please call Paul Steffens at 527-6891.

Sincerely,

CHERYL D. SOON  
Director

CHERYL D. SOON  
DIRECTOR  
JOSEPHINE MAGALDI, JR.  
DEPUTY DIRECTOR

March 18, 1998



July 16, 1998

Ms. Cheryl D. Soont, Director  
City & County of Honolulu  
Department of Transportation Services  
Pacific Park Plaza  
711 Kapiolani Boulevard, Suite 1200  
Honolulu, HI 96813

- FURNESS OL, AIA, AICP
- SCHEMUNGGY Hwang, AIA
- MARY J. O'LEARY, AIA, ASID
- HAROLD HARRIS, AIA
- ROY H. RIBBEY, AIA, CSI
- JAMES I. NISHIMOTO, AIA
- RAJESH K. PATEL, AICP
- STEPHEN H. YOUNG, AIA
- LINDA L. CHANG, AIA
- PAUL P. CLARNEY, AIA
- DEAN H. KAZAMIAZ, AIA
- SCOTT J. SCOTT, AIA
- STEPHEN E. CALLO, CFA
- GEORGE C. ADA, AICP
- JEFFREY H. OVERTON, AICP
- KATHYAN A. NAM
- BOB A. BRADY
- MARY J. O'LEARY

Dear Ms. Soont:  
Subject: Leeward Community College Long Range Development Plan  
Pre-Consultation Review of Draft Environmental Assessment

Thank you for your supplemental response letter dated March 18, 1998 regarding pre-consultation review of the Draft Environmental Assessment (EA) for the Leeward Community College Long Range Development Plan.  
Regarding facilitation of bus transit access and facilities at the Leeward Community College campus, currently LCC is served by the City's Pearl City shuttle bus route #73 which is in service only during the spring and fall LCC semesters. The shuttle bus operates from approximately 8:00 AM to 2:30 PM on a 30-minute interval and goes between the campus and the bus stops on Farrington Highway and beyond into Pearl City.

There is an existing centrally located bus shelter on the LCC campus (structure #887 on Figure 2-3 Ultimate Site Plan in the Draft EA) in the vicinity of the main campus entry between the Physical Science (#877) and Language Arts (#889) buildings.

We will forward a copy of the Draft EA for your review upon its completion. Your letter and this response letter will be included in the Draft Environmental Assessment. We appreciate your input for this project.

GROUP 70 INTERNATIONAL, INC.

Sincerely,  
  
Mary J. O'Leary, AICP  
Senior Planner

cc: Mr. Maynard Young  
Director, Facilities Planning - University of Hawaii Community Colleges

Group 70 International, Inc. • Architecture • Planning • Interior Design • Environmental Services • Building Design • Assets Management  
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KEOLANNE J. CAVITTANO  
GOVERNOR OF HAWAII

STATE OF HAWAII  
DEPARTMENT OF HEALTH  
P.O. BOX 3378  
HONOLULU, HAWAII 96801

RECEIVED  
APR - 6 1998

March 27, 1998

98-016/epo

GROUP 70

Mr. George I. Atta, AICP, CEI  
Chief Planner  
Group 70 International, Inc.  
925 Bethel Street, Fifth Floor  
Honolulu, Hawaii 96813-4307

Dear Mr. Atta:

Subject: Draft Environmental Assessment (DEA)  
Long Range Development Plan  
Leeward Community College  
Pearl City, Hawaii  
THK: 9-6-5: 48

Thank you for allowing us to review and comment on the subject plan. We have the following comments to offer:

**Wastewater**

The proposed project includes six (6) phases: 1) construction of 28 portable classrooms; 2) new facilities for Art and Humanities, Social Science, Business Education, Language Arts, Health Sciences, and Math & Science programs; 3) Media and Arts Instructional Center; 4) expansion of the Library, Student Center and Automotive Technology building, and parking structure; 5) astronomical observatories; and 6) park-like green space and improvements to roadways.

As the area is served by the City's sewer system, all wastewater generated by the project must be connected to the sewer system.

All wastewater plans must conform to applicable provisions of the Department of Health's Administrative Rules, Chapter 11-62, "Wastewater Systems."

Should you have any questions on this matter, please contact the Planning/Design Section of the Wastewater Branch at 586-4294.

LAWRENCE M. WEE  
DIRECTOR OF HEALTH

In Reply, Please Refer to

#### Solid Waste

We request that the community college address all opportunities to incorporate recycling efforts in its master planning process. State recycling mandates that pertain to this particular project include the use of glassphalt in all state and county paving projects (Act 201, HSL 1994). Also, it should be noted that the Integrated Solid Waste Management Act of 1991 mandates that all state and county agencies establish a recycling program in all new projects.

Additionally, the Office of Solid Waste Management would like to encourage the use of recycled content building products in constructing the project. This would also support State and County efforts to promote local reuse of recyclable materials. Lumber made of recycled plastic is produced in-state and is a weather resistant alternative to traditional lumber. Locally produced compost is also available for use in landscape work.

We are enclosing for your information waste minimization measures for implementation in the design and construction of new developments.

Questions regarding these comments should be directed to Mr. Lane Otsu of the Office of Solid Waste Management at 586-4240.

#### Hazardous Waste

1. On page 2-4, last paragraph, mention is made of an underground tank in the makai corner of the site. Is this tank an underground storage tank which contains, or has contained, petroleum or a hazardous substance? If so, please see comment #2 below.
2. Although it was not specifically mentioned in the DEA, it is possible that underground storage tanks (USTs) may be installed at the facility for storage of motor fuel, used motor oil, emergency generator fuel, etc. The applicant should note that USTs are subject to federal and state requirements. Owners of newly installed USTs must notify our Underground Storage Tank Section of the existence of such USTs within 30 days of installation. In addition, our Underground Storage Tank Section is developing new State administrative rules on USTs which, when finalized, will require permits for all new USTs. Finally, permits must be obtained from the applicable building and fire safety authorities before installation of any USTs.

Should you have any questions regarding these comments, please contact Mr. Eric Sadoyama of our Underground Storage Tank Section at 586-4226.

#### Noise Concerns

Construction activities must comply with the provisions of Chapter 11-46, Hawaii Administrative Rules, "Community Noise Control."

Should there be any questions on this matter, please contact Mr. Jerry Haruno, Environmental Health Program Manager, Noise, Radiation and Indoor Air Quality Branch at 586-4701.

#### Polluted Runoff Control

Proper planning, design and use of erosion control measures and management practices will substantially reduce the total volume of runoff and limit the potential impact to the coastal waters from polluted runoff. Please refer to the Hawaii's Coastal Nonpoint Source Control Plan, pages III-117 to III-119 for guidance on these management measures and practices for specific project activities. To inquire about receiving a copy of this plan, please call the State Coastal Zone Management Program in the State Planning Office at 587-2880.

The following practices are suggested to minimize erosion during construction activities:

1. Conduct grubbing and grading activities during the low rainfall months (minimum erosion potential).
2. Clear only areas essential for construction.
3. Locate potential nonpoint pollutant sources away from steep slopes, water bodies, and critical areas.
4. Protect natural vegetation with fencing, tree armoring, and retaining walls or tree wells.
5. Cover or stabilize topsoil stockpiles.
6. Intercept runoff above disturbed slopes and convey it to a permanent channel or storm drain.
7. On long or steep slopes, construct benches, terraces, or ditches at regular intervals to intercept runoff.

ENCLOSURE

Mr. George I. Atta  
March 27, 1998  
Page 4  
98-016

THE FOLLOWING ARE A FEW WASTE MINIMIZATION MEASURES FOR IMPLEMENTATION IN DESIGN AND CONSTRUCTION OF NEW DEVELOPMENTS:

- 8. Protect areas that provide important water quality benefits and/or are environmentally sensitive ecosystems.
  - 9. Protect water bodies and natural drainage systems by establishing streamside buffers.
  - 10. Minimize the amount of construction time spent in any stream bed.
  - 11. Properly dispose of sediment and debris from construction activities.
  - 12. Replant or cover bare areas as soon as grading or construction is completed. New plantings will require soil amendments, fertilizers and temporary irrigation to become established. Use high planting and/or seeding rates to ensure rapid stand establishment. Use seeding and mulch/mats. Sodding is an alternative.
- The following practices are suggested to remove solids and associated pollutants in runoff during and after heavy rains and/or wind:
- 1. Sediment basins.
  - 2. Sediment traps.
  - 3. Fabric filter fences.
  - 4. Straw bale barriers.
  - 5. Vegetative filter strips.

Any questions regarding these matters should be directed to the Polluted Runoff Control Program in the Clean Water Branch at 586-4309.

Sincerely,



BRUCE S. ANDERSON, Ph.D.  
Deputy Director for  
Environmental Health

Enclosure

c: WRB  
OSWH  
SHWB  
NR&IAOB  
CWB (PRC)

I. WASTE REDUCTION DURING CONSTRUCTION/DEMOLITION

GREENWASTE - SOD AND TOP SOIL COMPOSTING  
CONCRETE OR ASPHALT RECYCLING - ROCK & BOULDER SEPARATION  
SALVAGE OF DIMENSIONAL LUMBER  
METALS RECOVERY

WASTE MINIMIZATION PLAN - USUAL PRACTICE BUT EMPHASIZE

SALVAGE BY LOCAL NON-PROFIT  
HAZWASTE MINIMIZATION - ESPECIALLY SUB-CONTRACTORS

II. USE OF RECYCLED MATERIALS

LOCAL COMPOST - SOIL AMENDMENTS  
CRUSHED GLASS IN PAVING - BASE - BACKFILL  
CONSTRUCTION BOARD WITH RECYCLED CONTENT  
RECYCLED CONCRETE OR ASPHALT IN BASE  
RECYCLED PLASTIC "LUMBER" IN OUTDOOR FURNITURE, FENCING, ETC.

III. DESIGN AND OPERATIONAL REQUIREMENTS

CONSIDER SPACIAL REQUIREMENTS AT INTERNAL COLLECTION AND EXTERNAL STORAGE AREAS  
REVIEW OPERATIONAL REQUIREMENTS WITH MAINTENANCE AND CUSTODIAL STAFF  
PROVIDE COLLECTION CAPABILITIES FOR SEPARATED GREENWASTE  
DISCUSS EQUIPMENT AND CONTAINER REQUIREMENTS WITH HAULERS AND VENDORS  
MULTI-MATERIAL CHUTES IN HIGH RISES  
CONVENIENT DROP-OFF SITES IN TOWN HOUSES  
INTERNAL TENANT RECYCLING IN SHOPPING CENTERS



**GROUP 70**  
INTERNATIONAL

FRANK S. OMI, AIA, AICP  
 SHAWN G. Y. HONG, AIA  
 NICHOLAS SCARF, AIA, AIA  
 HIRSHI HALL, AIA  
 ROY H. NIKET, AIA, CSA  
 JAMES J. SCHNEIDER, AIA  
 RAJESH I. PAVANKE, AICP  
 NICHOLAS H. YUEN, AIA  
 LINDA L. CHUNG, AIA  
 PAUL P. O'BRIEN, AIA  
 DEAN H. KAMURA, AIA  
 NICHOLAS J. SUZ, AIA  
 NICHOLAS L. GIBB, CIA  
 GEORGE I. AHA, AICP  
 KENNETH H. O'NEILL, AICP  
 KATHRYN A. NEM  
 ROY A. HENRY  
 MARY J. O'LEARY

July 16, 1998

Mr. Bruce S. Anderson, Ph. D.  
 Deputy Director for Environmental Health  
 State of Hawaii  
 Department of Health  
 P.O. Box 3378  
 Honolulu, HI 96801

Dear Mr. Anderson:

Subject: Leeward Community College Long Range Development Plan  
 Pre-Consultation Review of Draft Environmental Assessment

Thank you for your March 27, 1998 letter regarding your pre-consultation review of the Draft Environmental Assessment (EA) for the Leeward Community College Long Range Development Plan. We have the following responses to your comments:

Wastewater

1. All of the proposed additions to the campus will be served by an expansion of the on-site sewer system which connects to the City's Pearl City Sewer System. The municipal system is currently capable of accommodating the proposed facilities.
2. When implemented, wastewater improvements would conform to applicable provisions of the Department of Health's Administrative Rules, Chapter 11-62, "Wastewater System".

Solid Waste

1. Leeward Community College will address opportunities to incorporate recycling in its master planning projects. We appreciate your office's information regarding the use of recycled content building products and the availability of locally produced compost for use in landscape work. We also appreciate the information you had enclosed regarding waste minimization measures for implementation in the design and construction of new developments.

Hazardous Waste

1. The last paragraph on page 2-4 of the pre-consultation Draft Environmental Assessment describes an abandoned scuba diving decompression-chamber type tank which is located underground in the makai corner of the campus. The scuba diving tank has never contained petroleum or hazardous substances or used in any form as an underground storage tank. The scuba diving tank is no longer used and, as stated in the Draft EA, the tank opening has been sealed and the area around the tank is enclosed with a chain link fence. There are no current plans for use of this tank, but it will definitely not be used for storage of hazardous materials.

State Department of Health  
 Mr. Bruce Anderson, Ph. D.  
 July 16, 1998  
 page 2

Noise Concerns

1. All construction activities will comply with the provisions of Chapter 11-46, Hawaii Administrative Rules, "Community Noise Control".

Polluted Runoff Control

1. Construction projects at Leeward Community College will follow best management practices and employ appropriate erosion control measures in order to reduce the total volume of runoff and limit potential impact to coastal waters from polluted runoff.

We will forward a copy of the Draft Environmental Assessment for your review upon its completion. Your letter and this response letter will be included in the Draft Environmental Assessment. We appreciate your input for this project.

GROUP 70 INTERNATIONAL, INC.

Sincerely,

Mary J. O'Leary, AICP  
 Senior Planner

cc: Mr. Maynard Young  
 Director, Facilities Planning - University of Hawaii Community Colleges

RECEIVED  
APR 14 1998



STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
LAND DIVISION  
PO BOX 621  
HONOLULU, HAWAII 96809

APR 13, 1998

LD-NAV

Mr. George I. Atta, CEI  
Chief Planner  
Group 70 International, Inc.  
925 Bethel Street, 5th Floor  
Honolulu, Hawaii 96813-4307

Dear Mr. Atta:

SUBJECT: Review : Draft Environmental Assessment  
Applicant: University of Hawaii, Facilities Planning  
Office for Community College  
Department of Parks and Recreation  
Project : Leeward Community College  
Location : Pearl City, Island of Oahu, Hawaii  
TMK : 1st/ 96031 parcel 48

Thank you for the opportunity to review and comment on the subject Draft Environmental Assessment.

Our Engineering Branch has commented that the proposed project site, according to FEMA Community Panel Map No. 150001 0065 C, is located in Zone D. This is an area in which flood hazards are determined. Furthermore, please inform the applicant to coordinate any potable or irrigation water requirements with the Land Division Engineering Branch.

The Department of Land and Natural Resources has no other comments to offer on the subject matter at this time. Should you have any questions, please contact Nicholas Vaccaro of our Land Division's Support Services Branch at 587-0438.

Very truly yours,

*Nicholas Vaccaro*  
NICHOLAS Y. UCHIDA  
Administrator

c: Land Boards Members  
Oahu District Land Office

AGRICULTURE DEVELOPMENT  
PROGRAMS  
PLANNING  
SOIL AND WATER CONSERVATION  
CONSERVATION AND  
RESOURCES ENFORCEMENT  
CONSERVATION  
HISTORIC PRESERVATION  
LAND DIVISION  
STATE PARKS  
WATER RESOURCE MANAGEMENT



STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
LAND DIVISION  
PO BOX 621  
HONOLULU, HAWAII 96809

APRIL 27, 1998

LD-NAV  
REF.: 2DEALCC.RCM

Mr. George I. Atta, CEI  
Chief Planner  
Group 70 International, Inc.  
925 Bethel Street, 5th Floor  
Honolulu, Hawaii 96813-4307

Dear Mr. Atta:

SUBJECT: Review : Draft Environmental Assessment  
Applicant: University of Hawaii, Facilities Planning  
Office for Community College  
Department of Parks and Recreation  
Project : Leeward Community College  
Location : Pearl City, Island of Oahu, Hawaii  
TMK : 1st/ 96031 parcel 48

This is a follow-up to our letter dated April 13, 1998 (Ref.: DEALCC.RCM), regarding the subject matter.

Attached herewith is a copy of the Commission on Water Resource Management's comments related to water resources for the proposed project.

The Department of Land and Natural Resources has no other comments to offer on the subject matter at this time. Should you have any questions, please contact Nicholas Vaccaro of our Land Division's Support Services Branch at 587-0438.

Very truly yours,

*Nicholas Vaccaro*  
NICHOLAS Y. UCHIDA  
Administrator

c: Land Boards Members  
Oahu District Land Office



EDUARDO CASTILLO  
GOVERNOR OF HAWAII



STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
COMMISSION ON WATER RESOURCE MANAGEMENT  
P. O. BOX 521  
HONOLULU, HAWAII 96809

MICHAEL D. WALTON  
Chairman  
ROBERT G. CRAIG  
DAVID A. MORIYA  
LAWRENCE H. LARKE  
RICHARD H. COLE  
HERBERT M. ROYAL  
Acting Deputy Director

April 17, 1998

TO: Mr. Dean Uchida, Administrator  
Land Division

FROM: Edwin T. Sakoda, Acting Deputy Director  
Commission on Water Resource Management (CWRM)

SUBJECT: Draft Environmental Assessment for Leeward Community College, TMK 9-6-03-48

FILE NO.: DEALCC.COM

Thank you for the opportunity to review the subject document. Our comments related to water resources are marked below.

In general, the CWRM strongly promotes the efficient use of our water resources through conservation measures and use of alternative non-potable water resources whenever available, feasible, and there are no harmful effects to the ecosystem. Also, the CWRM encourages the protection of water recharge areas which are important for the maintenance of streams and the replenishment of aquifers.

- We recommend coordination with the county government to incorporate this project into the county's Water Use and Development Plan.
- We recommend coordination with the Land Division of the State Department of Land and Natural Resources to incorporate this project into the State Water Project Plan.
- We are concerned about the potential for ground or surface water degradation/contamination and recommend that approvals for this project be conditioned upon a review by the State Department of Health and the developer's acceptance of any resulting requirements related to water quality.
- A Well Construction Permit and/or a Pump Installation Permit from the Commission would be required before ground water is developed as a source of supply for the project.
- The proposed water supply source for the project is located in a designated water management area, and a Water Use Permit from the Commission would be required prior to use of this source.
- Groundwater withdrawals from this project may affect streamflows which may require an instream flow standard amendment.
- We recommend that no development take place affecting highly erodible slopes which drain into streams within or adjacent to the project.
- If the proposed project includes construction of a stream diversion, the project may require a stream diversion works permit and amend the instream flow standard for the affected stream(s).
- If the proposed project alters the bed and banks of a stream channel, the project may require a stream channel alteration permit.
- OTHER:

The report indicates that potable and nonpotable water for the project will be supplied through the municipal water system. As noted above, we recommend coordination with the Land Division of the Department of Land and Natural Resources to account for this proposed state water need in the State Water Project Plan so that it may be incorporated into the County's Water Use and Development Plan.

If there are any questions, please contact Lenore Nakama at 587-0218.



July 17, 1998

Mr. Dean Y. Uchida, Administrator  
State of Hawaii  
Department of Land & Natural Resources  
P.O. Box 621  
Honolulu, HI 96809

Francis S. Oda, AIA, AICP  
Norman G.Y. Hong, AIA  
Sheryl B. Scaman, AIA, ACP  
Hiroshi Hida, AIA  
Roy H. Niles, AIA, CSI  
James J. Nishimoto, AIA  
Ralph E. Parnock, ACP  
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Linda L. Chung, AIA  
Paul P. Clonney, AIA  
Dean H. Kamaura, AIA  
Norma J. Smit, AIA  
Stephen E. Cain, CPA  
George L. Au, AICP  
Jeffrey H. Overton, AICP  
Kulayn A. Nam  
Ray A. Hoag  
Mary J. O'Leary

Dear Mr. Uchida:

Subject: Leeward Community College Long Range Development Plan  
Pre-Consultation Review of Draft Environmental Assessment

Thank you for your April 13, 1998 and April 27, 1998 letters regarding your pre-consultation review of the Draft Environmental Assessment (EA) for the Leeward Community College Long Range Development Plan. We have prepared the following responses.

1. The Draft EA will provide more information regarding the project site's flood zone designation.
2. Regarding the State Commission on Water Resource Management and their long-range State Water Projects Plan, the applicant will communicate long-range water requirements related to the proposed expansion of the Leeward Community College to the Commission at the appropriate juncture.

We will forward a copy of the Draft EA for your review and comment upon its completion. Your letter and this response letter will be included in the Draft Environmental Assessment. We appreciate your input for this project.

GROUP 70 INTERNATIONAL, INC.

Sincerely,

Mary J. O'Leary, AICP  
Senior Planner

cc: Mr. Maynard Young  
Director, Facilities Planning - University of Hawaii Community Colleges

Group 70 International, Inc. • Architecture • Planning • Interior Design • Environmental Services • Building Diagnostics • Asset Management  
925 Kiehl Street, Fifth Floor • Honolulu, Hawaii 96813-1397 • Phone (808) 523-5866 • FAX (808) 523-5874 • http://www.group70inc.com



DEPARTMENT OF THE ARMY  
U.S. ARMY ENGINEER DISTRICT, HONOLULU  
FORT SHAFTER, HAWAII 96858-5440

REPLY TO  
ATTENTION

August 14, 1998

Civil Works Branch

Ms. Mary O'Leary  
Group 70 International  
925 Bethel Street, 5th Floor  
Honolulu, Hawaii 96813-4307

Dear Ms. O'Leary:

Thank you for the opportunity to review and comment on the Draft Environmental Assessment (DEA) for the Leeward Community College Long Range Development Plan, Oahu (TMK 9-6-3: 48). The following comments are provided in accordance with Corps of Engineers authorities to provide flood hazard information and to issue Department of the Army (DA) permits.

- a. Based on the information provided, a DA permit will not be required for the project.
- b. The flood hazard information provided on page 3-4 of the DEA is correct.

Sincerely,

Paul Mizue, P.E.  
Chief, Civil Works Branch

Copy Furnished:

Mr. Maynard G. P. Young, Director  
Facilities Planning  
4303 Diamond Head Road  
Honolulu, Hawaii 96816



GROUP 70  
INTERNATIONAL

August 25, 1998

Mr. Paul Mizue, P.E.  
Chief, Civil Works Branch  
Department of the Army  
U.S. Army Engineer District, Honolulu  
Fort Shafter, Hawaii 96858-5440

Dear Mr. Mizue:

Subject: Leeward Community College Long Range Development Plan  
Draft Environmental Assessment

Thank you for your August 14, 1998 letter regarding your review of the Draft Environmental Assessment (EA) for the Leeward Community College Long Range Development Plan. We acknowledge your comments that the flood hazard information provided on page 3-4 of the Draft EA is correct and that a Department of the Army permit will not be required for the project.

Your letter and this response letter will be included in the final Environmental Assessment. We will forward a copy of the final EA for your review upon its completion. We appreciate your input for this project.

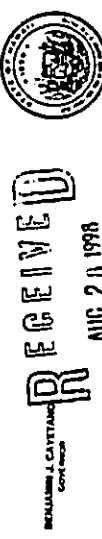
GROUP 70 INTERNATIONAL, INC.

Sincerely,

Mary J. O'Leary, AICP  
Senior Planner

cc: Mr. Maynard Young  
Director, Facilities Planning - University of Hawaii Community Colleges

Group 70 International, Inc. - Architecture - Planning - Interior Design - Environmental Services - Building Design - Building Operations - Asset Management  
925 Bethel Street, Fifth Floor - Honolulu, Hawaii 96813-4307 - Phone (808) 523-5666 - FAX (808) 523-5671 - http://www.group70.com



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AUG 20 1998

STATE OF HAWAII  
DEPARTMENT OF EDUCATION  
P.O. BOX 2360  
HONOLULU, HAWAII 96804



GROUP 70  
INTERNATIONAL

August 31, 1998

XXXXXXXXXXXXXXXXXXXX  
Alfred K. Suga  
Interim Superintendent

August 20, 1998

OFFICE OF THE SUPERINTENDENT

Ms. Mary O'Leary  
Group 70 International, Inc.  
925 Bethel Street, 5<sup>th</sup> Floor  
Honolulu, Hawaii 96813-4307

Dear Ms. O'Leary:

Subject: Leeward Community College - Long-Range  
Development Plan Draft EA

The Department of Education has no comment on the Leeward Community  
College Long-Range Development Plan Draft Environmental Assessment.

Thank you for the opportunity to respond.

Sincerely,

*Alfred K. Suga*  
Alfred K. Suga  
Interim Superintendent

AKS:hy

cc: OBS  
W. Staszko, LDO  
M. Young, UH

Mr. Alfred K. Suga  
Interim Superintendent  
Department of Education  
State of Hawaii  
P.O. Box 2360  
Honolulu, HI 96804

Dear Mr. Suga:

Subject: Leeward Community College Long Range Development Plan  
Draft Environmental Assessment

Thank you for your August 20, 1998 letter regarding your review of the Draft  
Environmental Assessment (EA) for the Leeward Community College Long Range  
Development Plan. We acknowledge that the Department of Education does not have  
any comments at this time.

Your letter and this response letter will be included in the final Environmental  
Assessment. We will forward a copy of the final EA for your review upon its completion.  
We appreciate your input for this project.

GROUP 70 INTERNATIONAL, INC.

Sincerely,

*Mary J. O'Leary*  
Mary J. O'Leary, AICP  
Senior Planner

cc: Mr. Maynard Young  
Director, Facilities Planning - University of Hawaii Community Colleges

AN AFFIRMATIVE ACTION AND EQUAL OPPORTUNITY EMPLOYER

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HAWAIIAN TELEPHONE SYSTEMS

DEPARTMENT OF DESIGN AND CONSTRUCTION  
CITY AND COUNTY OF HONOLULU

850 SOUTH KING STREET, 2ND FLOOR  
HONOLULU, HAWAII 96813  
PHONE: (808) 523-4564 • FAX: (808) 523-4567



JEREMY HARRIS  
MAYOR

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AUG 31 1998

GROUP 70

August 24, 1998

RANDALL K. FUJIKI, AIA  
DIRECTOR  
ROLAND D. LIBBY, JR., AIA  
DEPUTY DIRECTOR  
DC-110



GROUP 70  
INTERNATIONAL

August 31, 1998

Mr. Randall K. Fujiki  
Director  
City and County of Honolulu  
Department of Design & Construction  
650 S. King Street, 2nd Floor  
Honolulu, HI 96813

Ms. Mary J. O'Leary, AICP, Senior Planner  
Group 70 International, Inc.  
925 Bethel Street, Fifth Floor  
Honolulu, Hawaii 96813-4307

Dear Ms. O'Leary:

Subject: Leeward Community College  
Long Range Development Plan  
Draft Environmental Assessment (DEA)

This is in response to your request of July 29, 1998 to review and comment on the subject matter.

We have no comments to offer but appreciate the opportunity to review the document.

Should there be any questions, please contact Douglas Collinson at tel. 527-6375.

Very truly yours,

RANDALL K. FUJIKI  
Director

RKF:jo  
cc: UH Community Colleges - Physical Fac. Planning  
and Constr. Office (Maynard Young)

- Frank S. Omi, AIA, ACP
- Norman G.Y. Hoag, AIA
- Sheryl B. Scaman, AIA, ANID
- Hiroshi Iishi, AIA
- Ray H. Nicks, AIA, CN
- James J. Buchanan, AIA
- Ralph F. Brennan, ACP
- Stephen H. Yuen, AIA
- Isaku J. Chung, AIA
- Paul P. Chaves, AIA
- Dean B. Ramirez, AIA
- Norman J. Suen, AIA
- Stephen E. Gibb, CPA
- George I. Aza, ACP
- Kelley H. Oveson, ACP
- Kathryn A. Nam
- Roy A. Inouye
- Mary J. O'Leary

Dear Mr. Fujiki:

Subject: Leeward Community College Long Range Development Plan  
Draft Environmental Assessment

Thank you for your August 24, 1998 letter regarding your review of the Draft Environmental Assessment (DEA) for the Leeward Community College Long Range Development Plan. We acknowledge that the Department of Design & Construction does not have any comments at this time.

Your letter and this response letter will be included in the final Environmental Assessment. We will forward a copy of the final EA for your review upon its completion. We appreciate your input for this project.

GROUP 70 INTERNATIONAL, INC.

Sincerely,

Mary J. O'Leary, AICP  
Senior Planner

cc: Mr. Maynard Young  
Director, Facilities Planning - University of Hawaii Community Colleges

POLICE DEPARTMENT  
**CITY AND COUNTY OF HONOLULU**  
801 SOUTH BERTANIA STREET  
HONOLULU, HAWAII 96813 - AREA CODE (808) 525-3111

JEREMY HARRIS  
MAYOR



LEE D. DONOHUE  
CHIEF  
WILLIAM B. CLARE  
MICHAEL CANTALING  
DEPUTY CHIEFS

OUR REFERENCE CS-DL

August 31, 1998

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GROUP 70

Ms. Mary J. O'Leary, AICP  
Senior Planner  
Group 70 International, Inc.  
925 Bethel Street, 5th Floor  
Honolulu, Hawaii 96813-4307

Dear Ms. O'Leary:

Thank you for the opportunity to review the Draft Environmental Assessment for the Leeward Community College Long-Range Development Plan.

At this time, the proposed plan should have no significant impact on the operations of the Honolulu Police Department. However, we may have comments as the project develops.

Sincerely,

LEE D. DONOHUE  
Chief of Police

By *James Femia*  
JAMES FEMIA  
Assistant Chief  
Administrative Bureau

cc: Major Michael Brede  
District 3



**GROUP 70**  
INTERNATIONAL

FRANK S. ODU, AIA, AICP  
NORMAN C. Y. HONG, AIA  
SHRYL B. SCAMAN, AIA, ASD  
HAROLD HIDA, AIA  
ROY H. NICKI, AIA, CN  
JAMES I. NICHOLSON, AIA  
RUPH E. BURNHAM, AICP  
STEPHEN H. YUEN, AIA  
TUDU L. CHUNG, AIA  
PAUL P. CHERRY, AIA  
DAVID H. KAMURA, AIA  
VANNI J. NALL, AIA  
STEPHEN E. CALO, CPA  
GAYLE L. ARA, AICP  
KELLY H. OVERTON, AICP  
KATHLEEN A. NUN  
ROY A. IRAGOYE  
MARY J. O'LEARY

September 3, 1998

Mr. Lee D. Donohue  
Chief of Police  
Police Department  
City & County of Honolulu  
801 S. Beretania Street  
Honolulu, HI 96813

Dear Mr. Donohue

Subject: Leeward Community College Long Range Development Plan  
Draft Environmental Assessment

Thank you for your August 31, 1998 letter regarding your review of the Draft Environmental Assessment (EA) for the Leeward Community College Long Range Development Plan. We acknowledge your comment that the proposed plan should have no significant impact on the operations of the Honolulu Police Department and that you may have future comments as the project develops.

Your letter and this response letter will be included in the final Environmental Assessment. We will forward a copy of the final EA for your review upon its completion. We appreciate your input for this project.

GROUP 70 INTERNATIONAL, INC.

Sincerely,

*Mary J. O'Leary*  
Mary J. O'Leary, AICP  
Senior Planner

cc: Mr. Maynard Young  
Director, Facilities Planning - University of Hawaii Community Colleges

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ATTACHE LEONARDI  
FIRE CHIEF  
JOHN CLARK  
DEPUTY FIRE CHIEF

GROUP 70

September 1, 1998

Ms. Mary J. O'Leary, AICP  
Senior Planner  
Group 70 International, Inc.  
925 Bethel Street, Fifth Floor  
Honolulu, Hawaii 96813-4307

Dear Ms. O'Leary:

Subject: Leeward Community College - Long Range Development Plan  
Draft Environmental Assessment

In response to your memorandum of July 29, 1998, we have reviewed the Draft Environmental Assessment for the subject property and offer the following comments:

The State of Hawaii will need to address the installation of an on-site water supply system for fire protection. Our January 29, 1998, letter identified the need to address the on-site water supply deficiencies.

Further, the new on-site water supply system for fire protection should be designed to:

1. Provide 2,000 gpm at a residual pressure of 20 psi.
2. Include installation of fire hydrants to protect structures being constructed on the property. Hydrants should be spaced 250 feet apart.

Prior to the start of construction, plans shall be submitted to our staff for review and approval.

Should you have any questions, please call Battalion Chief Charles Wassman of our Fire Prevention Bureau at 831-7778.

Sincerely,  
*Attilio K. Leonard*  
ATTILIO K. LEONARDI  
Fire Chief

AKJ/CW:bb



GROUP 70  
INTERNATIONAL

Francis S. Oda, AIA, AICP  
Sheran G.Y. Hong, AIA  
Helen B. Scammell, AIA, ASID  
Heonhi Huh, AIA  
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James I. Nishimura, AIA  
Ralph E. Penmore, AICP  
Stephen H. Yuen, AIA  
Linda L. Chung, AIA

Paul P. Conway, AIA  
Dean H. Kiamura, AIA  
Nirima J. Scott, AIA  
Stephen E. Caho, CPA  
George I. Aho, AICP  
Jeffrey H. Overton, AICP  
Kathryn A. Nam  
Roy A. Inouy  
Amy J. O'Leary

20 November 1998

Mr. Attilio K. Leonard  
Fire Chief  
3375 Koa Paka Street, Suite H425  
Honolulu, Hawaii 96819-1869

Subject: Leeward Community College Long Range Development Plan  
Draft Environmental Assessment

Dear Chief Leonard:

With reference to your letter dated September 1, 1998 we wish to thank you for your comments. We acknowledge your statement about the need to develop an on-site water system to provide adequate fire protection. The following responses provide the status of various items needed to meet the concerns raised in your letter:

1. The off-site 16" water main has been designed and the bid for its construction has been awarded. Work is expected to start shortly.
2. It is our understanding that the Board of Water Supply will be improving their Waipahu Street mains to provide the necessary volume and pressure to the planned 16" main.
3. The on-site system is currently being planned. This system will be designed to ultimately provide the standard 2,000 gpm and 20 psi needed for fire protection. The design will include fire hydrants at 250 foot intervals. We wish to note that while the system will be upgraded in phases, ultimately it will be a loop system that meets all the standards.
4. Finally, we will submit our on-site improvement plans to your department for review prior to the start of construction.

If you have any other questions please call me at 523-5866

Sincerely,

GROUP 70 INTERNATIONAL, INC

*George Alta*  
George Alta, AICP  
Project Planner

Cc: Maynard Young, Sharon Nakamura, Francis Oda

DEPARTMENT OF ENVIRONMENTAL SERVICES  
CITY AND COUNTY OF HONOLULU  
650 SOUTH KING STREET  
HONOLULU HI 96813



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SEP - 3 1998

KENNETH E. SPRAGUE  
Director  
CHERYL K. OKUMA-SOPE, DDO,  
Deputy Director

ENV 98-165



GROUP 70  
INTERNATIONAL

Ms. Mary O'Leary, AICP  
Senior Planner  
Group 70 International, Inc.  
925 Bethel Street, 5th Floor  
Honolulu, Hawaii 96813-4307

September 1, 1998

GROUP 70

Dear Ms. O'Leary:

Subject: Draft Environmental Assessment (DEA)  
Leeward Community College - Long Range Development Plan  
TMK: 9-8-3-48

We have reviewed the subject DEA and have the following comments:

1. The consultant should consult with the City regarding the existing capacity at the Pearl City Wastewater Pump Station and the sewer system prior to "actual development".
2. During construction, Best Management Practices (BMPs) should be employed to reduce and control discharge of pollutants.
3. As part of permanent BMPs, direct surface runoff from paved areas to planted areas. Should you have any questions, please contact Alex Ho, Environmental Engineer, at 523-4150.

Sincerely,

*Cheryl K. Okuma-Sope*  
CHERYL K. OKUMA-SOPE  
Director

September 3, 1998

Mr. Kenneth E. Sprague, Director  
Department of Environmental Services  
City & County of Honolulu  
650 S. King Street  
Honolulu, HI 96813

Dear Mr. Sprague:

Subject: Leeward Community College Long Range Development Plan  
Draft Environmental Assessment

Thank you for your September 1, 1998 letter regarding your review of the Draft Environmental Assessment (EA) for the Leeward Community College Long Range Development Plan. We acknowledge your comments and have the following responses.

- a. At the appropriate time prior to actual development, the City will be contacted regarding the existing capacity at the Pearl City Wastewater Pump Station and the sewer system.
- b. Best Management Practices (BMPs) will be employed during and after construction to reduce and control discharge of pollutants and direct surface runoff from paved areas to planted areas.

Your letter and this response letter will be included in the final Environmental Assessment. We will forward a copy of the final EA for your review upon its completion. We appreciate your input for this project.

GROUP 70 INTERNATIONAL, INC

Sincerely,

*Mary J. O'Leary, AICP*  
Mary J. O'Leary, AICP  
Senior Planner

cc: Mr. Maynard Young  
Director, Facilities Planning - University of Hawaii Community Colleges

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DEPARTMENT OF THE NAVY  
 COMMANDER  
 NAVAL BASE PEARL HARBOR  
 517 RUSSELL AVENUE  
 PEARL HARBOR, HAWAII 96860-6020

IN REPLY REFER TO:  
 S090P.1FOB  
 Ser N40(23) 4670  
 September 1, 1998

**RECEIVED**  
 SEP - 3 1998  
 CIVILIAN

Ms. Mary O'Leary  
 Group 70 International, Inc.  
 925 Bethel Street, 5<sup>th</sup> Floor  
 Honolulu, HI 96813-4307

Dear Ms. O'Leary:

**SUBJECT: LEEWARD COMMUNITY COLLEGE (LCC) - LONGE RANGE  
 DEVELOPMENT PLAN DRAFT ENVIRONMENTAL ASSESSMENT (EA) OF  
 AUGUST 1998**

Thank you for providing the Draft EA for us to review and comment upon. The Navy has the following comment to offer:

a. The Navy, as an adjoining landowner of the Ewa Drum parcel on the west side of the campus, has concerns on the secondary access road referred to in the EA which we assume is the same as the "alternate access" shown in Figure 2-3. This proposed secondary or alternate access is very proximate to our landholdings. The EA states on page 1-6, first paragraph that "While a secondary access route is not essential to the implementation of the Long Range Development Plan, a secondary access road should be developed to improve emergency egress from the campus." Also, on page 3-19, second paragraph, under Traffic Impact Analysis Report Conclusions, the last sentence states that "beyond the Year 2017, a secondary access road to the LCC campus will be needed." It was pointed out on the same page that in May 1998, the State Legislature approved \$1 million to plan and design a second access road to LCC. However, there was no further discussion on what action would be taken by the University of Hawaii to secure a secondary access road as part of the long range development plan for LCC. It should be noted that Navy approval and easement are required for any proposed access road through Navy property.

The Navy's point of contact is Mr. Clyde Yokota at 474-0292.

Sincerely,

*C. K. Yokota*  
 C. K. YOKOTA  
 Environmental Program Manager  
 By direction of  
 Commander, Naval Base, Pearl Harbor

S090P.1FOB  
 Ser N40(23) / 4670  
 September 1, 1998

Copy to:  
 Mr. Maynard G.P. Young  
 Director Facilities Planning  
 University of Hawaii - Community Colleges  
 Physical Facilities Planning and Construction Office  
 4303 Diamond Head Road  
 Honolulu, HI 96816





**GROUP 70**  
INTERNATIONAL

19 November 1998

Mr. Clyde K. Yokota  
Environmental Program Manager  
Naval Base Pearl Harbor  
517 Russell Avenue  
Pearl Harbor, Hawaii 96860-5020

Subject: Leeward Community College Long Range Development Plan (LRDP)  
Environmental Assessment (EA)

Dear Mr. Yokota:

Thank you for your letter dated September 1, 1998 commenting on our draft environmental assessment. Regarding the concerns raised in your letter we wish to provide the following responses:

1. Regarding the secondary access road referred to in our EA in figure 2-3, I wish to provide some clarification on the issue. We studied several alternative alignments during our development of the LRDP. The university decided that while the project would benefit the LCC campus no specific alignment was preferred and that a determination of preference should await more detailed studies of cost and impact. Therefore, the secondary road issue was to be treated as a separate project in itself. It is not a part of the LRDP. As such, figure 2-3 shows potential points of access. They do not represent any specific alignment. The figure is not meant to imply that the University preferred these specific alignments or that we were planning for them.

2. We acknowledge that the Navy is the owner of the Drum Storage site to the west of the campus and that any proposals for secondary access from that direction would require coordination and approval by the Navy. We are also aware that the drum storage site was one of the parcels involved in the recent return of Federal lands to the State of Hawaii. It is our understanding that the Department of Hawaiian Home Lands is slated to be the recipient of the land sometime in the future. Consequently we have provided a copy of the EA for their review as well.

Francis S. Oda, AIA, AICP  
Norman G. Y. Hoang, AIA  
Steven B. Seaman, AIA, ASD  
Harold H. Hsu, AIA  
Roy H. Hsieh, AIA, CSI  
James I. Nishimura, AIA  
Ralph E. Pevzner, AICP  
Stephen H. Yuen, AIA  
Linda L. Chang, AIA

Paul P. Chorney, AIA  
Dean H. Karamira, AIA  
Norma J. Scott, AIA  
Stephen E. Cullis, CPA  
George I. Aua, AICP  
Jeffrey H. Overton, AICP  
Kallryn A. Nim  
Roy A. Inouye  
Mary J. O'Leary

3. Regarding the University's position on the issue and any future action about the Road, we would like to point out that the University is not the lead agency for this project. The funding that was appropriated directs the State Department of Transportation to study the issue. The University remains an interested party and is inclined to support whatever alignment is ultimately chosen by SDOT.

If there are any further questions please feel free to call me.

Sincerely,

GROUP 70 INTERNATIONAL, INC.

*Mary Oate*

George Oate, AICP  
Project Planner

cc. Maynard Young, Sharon Narimatsu, Francis Oda

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

**BOARD OF WATER SUPPLY**

CITY AND COUNTY OF HONOLULU  
800 SOUTH BERTANHA STREET  
HONOLULU, HAWAII 96813  
PHONE (808) 527-6180  
FAX (808) 533-2714



September 4, 1998

JERRY HARRIS, Mayor  
EDDIE FLORES, JR., Chairman  
FOREST C. MURPHY, Vice Chairman  
PAUL HANSEN  
JAY LILLY, AICP  
DAVID K. SHIMADA, PhD  
BARBARA ANN SINTOFF  
CHARLES A. SITO

CLIFFORD S. JAMILE  
Manager and Chief Engineer

**RECEIVED**

SEP 11 1998

Group 70 International, Inc.  
925 Bethel Street, 5th Floor  
Honolulu, Hawaii 96813-4307

Attention: Mary O'Leary

Gentlemen:

Subject: Your Transmittal of July 29, 1998 of the Draft Environmental Assessment for the Leeward Community College-Long Range Development Plan, Pearl City, Oahu, T.M.K.: 9-6-03: 43

Thank you for the opportunity to review the environmental document for the long range plan for the Leeward Community College (LCC) campus.

Our previous comments of March 13, 1998 are still applicable and included in Section 7.0 of the document. In addition, we have the following comments to offer:

1. The existing water system cannot provide adequate fire protection to accommodate the proposed development plan. The developer will be required to install the 16-inch main to provide adequate off-site fire protection. The construction plans for the 16-inch main and FM meter have been submitted and are currently under review.
2. The on-site fire protection requirements should be coordinated with the Fire Prevention Bureau of the Honolulu Fire Department.
3. Board of Water Supply approved reduced pressure principle backflow prevention assemblies are required to be installed immediately after all domestic water meters serving the LCC campus. The head losses associated with these installations should be accounted for in the LCC water system sizing.

If you have any questions, please contact Barry Usagawa at 527-5235.

Very truly yours,

*Clifford S. Jamile*  
CLIFFORD S. JAMILE  
Manager and Chief Engineer

cc: University of Hawaii - Community College  
Office of Environmental Quality Control



**GROUP 70**  
INTERNATIONAL

Francis S. Oda, AIA, AICP  
Norman G. Y. Hoang, AIA  
Sheryl B. Seaman, AIA, ASD  
Hiroshi Hida, AIA  
Roy H. Nabel, AIA, CSI  
James I. Nishimoto, AIA  
Ralph E. Postmore, AICP  
Stephen H. Yuen, AIA  
Linda L. Chang, AIA  
  
Paul P. Chomsky, AIA  
Dean H. Kameura, AIA  
Norma J. Scott, AIA  
Stephen E. Calko, CFA  
George L. Atza, AICP  
Jeffrey H. Overton, AICP  
Kathryn A. Nam  
Roy A. Inouye  
Mary J. O'Leary

November 24, 1998

Clifford S. Jamile  
Manager and Chief Engineer  
Board of Water Supply  
City and County of Honolulu  
630 South Beretania Street  
Honolulu, Hawaii 96813

Subject: Leeward Community College Draft Environmental Assessment

Dear Mr. Jamile:

Thank you for your letter to Ms. Mary O'Leary dated September 4, 1998. We wish to provide the following responses to your comments:

1. We acknowledge your comments about fire protection and the need for the proposed improvements. As your comments note, the University and its engineering consultant are already addressing this issue and has been working with your staff on this measure.
2. The on-site fire protection requirements are being designed with input and review by the Fire Prevention Bureau of the Honolulu Fire Department.
3. The backflow prevention assemblies are being designed into the on-site system. The pressure losses from these additions are being calculated in the development of this system.

We will continue to work with the Board of Water Supply as we upgrade the entire system. If there are any questions please call me.

Sincerely,

GROUP 70 INTERNATIONAL, INC.

*George I. Atza*  
George I. Atza, AICP  
Project Planner

cc: Maynard Young, Sharon Narimatsu, Francis Oda

PLANNING DEPARTMENT  
**CITY AND COUNTY OF HONOLULU**

930 SOUTH KING STREET, 5TH FLOOR • HONOLULU, HAWAII 96813-2017  
PHONE: (808) 923-2533 • FAX: (808) 923-4930

JEREMY HARRIS  
SENIOR



**RECEIVED**

SEP 11 1998

PATRICK T. ONISHI  
CHIEF PLANNING OFFICER  
DONALD HARRIS  
DEPUTY CHIEF PLANNING OFFICER

RR 8/98-1563

GROUP 70

September 8, 1998

Group 70 International, Inc.  
925 Bethel Street, 5th Floor  
Honolulu, Hawaii 96813-4307

Attention: Mary O'Leary

Gentlemen:

Draft Environmental Assessment (DEA) for  
Leeward Community College - Long Range Development Plan

In response to your company's request of July 29, 1998, we have reviewed the draft EA with regard to the proposed long range development plan's impact on the City and County of Honolulu's General Plan and the Central Oahu Development Plan and find the proposed plan consistent with these Plans' objectives and provisions.

Should you have any questions, please contact Robert Reed of my staff at 523-4402.

Yours very truly,

PATRICK T. ONISHI  
Chief Planning Officer

PTO:js

c: University of Hawaii - Community Colleges  
Physical Facilities Planning and Construction Office



**GROUP 70**  
INTERNATIONAL

Francis S. Ohi, AIA, AICP  
Norman G.Y. Hong, AIA  
Sheyif B. Seaman, AIA, ASID  
Hiroshi Iida, AIA  
Roy H. Nibel, AIA, CSI  
James I. Nohimato, AIA  
Ralph E. Pimentone, AICP  
Stephen H. Vuori, AIA  
Linda L. Chung, AIA

Paul F. Cheney, AIA  
Dean H. Kikamura, AIA  
Norma J. Scott, AIA  
Stephen E. Callo, CPA  
George T. Atz, AICP  
Jeffrey H. Overton, AICP  
Kathryn A. Nam  
Bry A. Inouye  
Mary J. O'Leary

GROUP 70 INTERNATIONAL, INC.

George Atz, AICP  
Project Planner

cc: Maynard Young, Sharon Nardis, Francis Ohi

19 November 1998

Mr. Patrick T. Onishi  
Chief Planning Officer  
Planning Department  
659 South King Street, 8th Floor  
Honolulu, Hawaii 96813

Subject: Leeward Community College Long Range Development Plan

Dear Mr. Onishi:

Thank you for your letter acknowledging the consistency of our plans with the General Plan of the City and County of Honolulu and the Central Oahu Development Plan.

Sincerely,

BENJAMIN J. CAJETANO  
GOVERNOR



STATE OF HAWAII  
OFFICE OF ENVIRONMENTAL QUALITY CONTROL

238 SOUTH KURETANIA STREET  
SUITE 702  
HONOLULU, HAWAII 96813  
TELEPHONE: (808) 546-4116  
FACSIMILE: (808) 546-4116

September 8, 1998

Mr. Maynard G. P. Young, Director  
Physical Facilities Planning and Construction Office  
University of Hawai'i Community Colleges  
4303 Diamond Head Road  
Honolulu, Hawai'i 96816

Dear Mr. Young:

Having reviewed the draft environmental assessment (DEA) entitled *Leeward Community College Long Range Development Plan*, Pearl City, O'ahu, TMK 9-6-3-48, we submit the following comments for your response.

- TRANSPORTATION:** In light of the proposed expansion on campus, and to prevent congestion, all possible transportation alternatives should be discussed (i.e. alternative access, secondary access, new access to existing roads, etc). Please consult with City and State transportation agencies and:
  - Provide maps/diagrams and discussion of the conceptual secondary access route from Waipio Point Access Road.
  - Discuss bicycle access to the Leeward Community College from the Pearl Harbor bikepath, the secondary access via Waipio Point Access Road, and Kamehameha Highway-Waiawa Road Intersection. Please discuss how plans will conform to the City-State Bicycle Master Plan.
  - Consider and discuss the alternatives to provide more options for campus ingress/egress such as constructing on and off ramps to connect Ala Ika Road/Waiawa Road with the Interstate H-1 both eastbound and westbound (e.g. direct connections to: H-1 east along the slope fronting the Farrington Highway on-ramp; direct ramp to Waiawa Road from H-1 westbound Waipahu exit).
  - Discuss the possibility of rerouting existing buses and transit lines along secondary access routes from Waipahu and Pearl City onto the campus.
- CUMULATIVE AND INDIRECT IMPACTS:** Please discuss indirect and cumulative impacts of the proposed plan to:
  - The wetland area and Waiawa Stream downslope of the project site;
  - Agricultural lands in the area;
  - General population of the Waiawa region; and,
  - Surface-ground water quality of Pearl Harbor and nearby springs.
- ENERGY EFFICIENT BUILDING TECHNIQUES:** Please discuss what measures will be taken to ensure that the buildings will be energy efficient, taking advantage of trade-winds and sunlight.

Mr. Maynard G. P. Young, Director  
Physical Facilities Planning and Construction Office  
University of Hawai'i Community Colleges  
September 8, 1998  
Page 2 of 2

GARY GILL  
DIRECTOR

- NATIVE HAWAIIAN AND INDIGENOUS PLANTS:** Please discuss the use of native Hawaiian and indigenous xerophagic plants for landscaping.
- HISTORIC AND CULTURAL CONSIDERATIONS:** As noted on page 3-10 of the DEA, the Waipio area near Pearl Harbor was replete with fishponds, taro pond-field complexes (lo'i) and springs. If there are any notable remnants of these resources appropriate for interpretation on the campus or within the viewplanes from the campus, please consider the inclusion of signage to enhance this historic/cultural feature and preserve this legacy for future generations to come.
- CEDED LANDS:** If Leeward is on ceded lands (see Section 5, Admission Act of 1959), please consult with the Office of Hawaiian Affairs.
- DISCUSSION OF EACH OF THE THIRTEEN SIGNIFICANCE CRITERIA:** Please discuss, and not simply negate, each of the thirteen significance criteria. A sample discussion from another EA is included for your information.

**INCLUSION OF LETTER:** In the consultation comment section, we did not find included in the document a copy of CWRM comments which were to be attached to the April 27, 1998, letter of Dean Uchida, DLNR Land Division, to George Ata.

Please include a copy of this letter and your response to it and all other timely-received comment letters in the final environmental assessment and notice of determination for this project.

If there are any questions, please call Leslie Segundo, Environmental Health Specialist, at 586-4185.

Sincerely,

GARY GILL  
Director

Enclosure

c: Mr. George Ata, AICP, Group 70 International, Inc.

## SECTION 7: DETERMINATION

To assist in this determination, the "significance criteria", Section 12 of the Hawaii Administrative Rules, Title 11, Chapter 200, were reviewed within the context of the project. After careful analysis, the following was concluded:

1. *The proposed project will not involve an irrevocable commitment to loss or destruction to any natural or cultural resources.*

## Response

The entire project site was historically cultivated with sugarcane. As a result, the soil received rigorous grubbing, grading and deep tilling earthwork every 1-2 years. Any natural or cultural resources which may have existed on the property is believed to have been lost. All construction for the proposed aquaculture activity will occur in areas previously disturbed, utilizing existing drainage ditches as appropriate. A Comprehensive Archaeological Survey conducted on the site did not reveal any cultural material or sites.

2. *The proposed project will not curtail the range of beneficial uses of the environment.*

## Response

The proposed action represents the highest and best use for the property. Upon implementation, the farming operation is expected to enhance the presently unproductive lands by diversifying the agri-business economy of westside Kauai through higher employment, higher tax revenues, and improved environmental conditions.

3. *The proposed project will not conflict with the State's long-term environmental policies.*

## Response

The proposed action is consistent with the State of Hawaii's environmental policies, in that water quality of the near-shore marine

environment is not expected to be lowered because the aquaculture effluent has lower amounts of terrestrial sediments, better water clarity, and higher salinity than the current discharges. The project is completing a comprehensive Antidegradation and Zone of Mixing Analysis in preparation of pursuing an NPDES permit, and fully expects to be in complete compliance with all regulatory requirements.

4. *The proposed project will not substantially adversely affect the economic welfare, social welfare, or public health of the community.*

## Response

To the contrary. The proposed project is expected to improve the economic status of the community by providing employment and improved tax revenues. Social welfare often reflects the community's economic condition - when money is available, social problems tend to disappear. Public health is served when improved tax revenues are invested into public facilities and services.

5. *The proposed project will not involve substantial secondary impacts, such as population changes or effects on public facilities.*

## Response

The proposed project will stimulate new employment opportunities for local island residents. CEATECH USA, Inc. does not intend to import off-island labor, but rather to take up the slack caused by the closure of several sugarcane plantations.

6. *The proposed project will not involve a substantial degradation of environmental quality.*

## Response

The proposed drainage system is expected to control the discharge of wastewater and floodwaters from mauka lands from emptying directly into the ocean a series of retention ponds will allow the retained water to evaporate, oxidate wastes, and settle out particulates prior to reaching the ocean.

7. *The proposed project will not have cumulative impacts or involve a commitment for larger actions.*

**Response**

The proposal is a self-contained stand-alone facility. All impacts associated with the operation are either temporary or can be properly mitigated on-site.

8. *The proposed project will not substantially affect any rare, threatened or endangered species of flora or fauna or habitat.*

**Response**

The project site is not designated as a protected area for endangered terrestrial species. It is very likely that with the abandonment of traditional cane harvesting methods (grub and burn), indigenous birds and mammals could return to the area. In addition, native plants previously found in the area could be reintroduced into the landscape.

9. *The proposed project will not detrimentally affect air or water quality or ambient noise levels.*

**Response**

The air quality in the area will be temporarily affected due to construction activities. Fugitive dust, hydrocarbons, and particulates will be dispersed into the atmosphere. It is expected to return back to pre-construction levels once the improvements are complete. These are minor perturbations compared with the historic cane cultivation and harvesting activities. These minor impacts can be controlled by watering the site with sprinklers and water wagons and hoses. It is also expected that hydrocarbon emissions would be quickly dispersed by the tradewinds. There are no residential settlements in the area.

10. *The proposed project is not located in an environmentally sensitive area (e.g., flood plain, tsunami zone, coastal area).*

**Response**

Relative to the Federal Flood Insurance Rate Map (FIRM) Panel 100 of 225 for Kauai County, the subject property lies within Zone A, which is identified as a special flood hazard area inundated by the 100-year flood. Zone A does not have base flood elevations determined and flooding is more riverine in nature, versus coastal flooding forces which exhibit a velocity hazard. A review of the FIRM map indicates that land formations both landward (highway) and seaward (PMRF) are higher in elevation, having been designated Zone X-unshaded which are those areas to be outside the 500-year flood plain.

11. *The proposed project will not substantially affect scenic vistas and viewpoints identified in county or state plans or studies.*

**Response**

The project site is not within an area designed as having special view corridors. The views towards the ocean are not particularly great, bearing in mind that the PMRF facility sits between the affected site and the ocean. Once completed, however, the project will provide an interesting sight for locals and visitors passing by. The primary views, when viewed from the highway, is to the foothills and mountains.

12. *The proposed project will not require substantial energy consumption.*

**Response**

The proposed project does not create a burden on the utility company to upgrade its existing infrastructure to provide electrical service. Power is required to run circulation pumps, aeration equipment, lights and usual maintenance equipment. Where possible, energy saving features shall be incorporated into the system.



**GROUP 70**  
INTERNATIONAL

Franz S. Oki, AIA, ACP  
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George I. Aza, ACP  
Jeffrey H. Overton, ACP  
Kathryn A. Nirm  
Roy A. Inouye  
Mury J. O'Leary

24 November 1998

Mr. Gary Gill, Director  
Office of Environmental Quality Control  
235 South Beretania Street, Suite 702  
Honolulu, Hawaii 96813

Subject: Leeward Community College Long Range Development Plan  
Environmental Assessment

Dear Mr. Gill:

Thank you for your letter of September 8, 1998 to Mr. Maynard Young about our proposed project. With reference to your comments we provide the following responses:

1. Transportation:
  - A. Regarding the conceptual secondary access road from Waipi'o Point Access Road there have been several alternative alignments considered. There is no recommended alternative at this time. Funds have been allocated for planning and design and the State Department of Transportation has been designated to conduct the study. We will provide a more complete discussion of the secondary road situation in the final EA but I wish to point out that the secondary access is a project in itself and not directly connected to the Leeward Community College Long Range Development Plan.
  - B. Bicycle access to Leeward Community College will be discussed in the final EA. The relationship of bicycle access to the campus and its relationship to City and State bike plans will be included in the discussion.
  - C. The issue of other secondary access alternatives was reviewed during the master plan studies. However, a more detailed and rigorous review is scheduled to be a part of the H-1/Waiawa Interchange EIS that is currently underway. We will forward your ideas to the State Department of Transportation for inclusion in their analysis.
  - D. The idea of rerouting existing buses and transit lines along the secondary access roads seems premature at this time since a specific route has not been selected. We will discuss the idea with the City's Public Transit Division.
2. Cumulative and Indirect Impacts
  - A. A discussion of impacts to Waiawa Stream and downslope wetlands will be included in the final EA.
  - B. Agricultural lands will be addressed in more detail.

Group 70 International, Inc. • Architecture • Planning • Interior Design • Environmental Services • Building Design • Assets Management  
925 Bethel Street, Fifth Floor • Honolulu, Hawaii 96813-4307 • Phone (808) 523-5866 • FAX (808) 523-5874 • <http://www.group70int.com>

C. The general population and demographic features of the Waiawa region will be described. However, the communities surrounding the campus belong to several distinct communities and do not necessarily belong to a "Waiawa Community". We will describe the population by the census districts and the distinct communities in nearby areas.

D. Surface and groundwater quality of Pearl Harbor and the nearby springs will be discussed.

3. Energy Efficient Building Techniques: With renovations existing buildings and new buildings that are compatible with the character of the existing buildings there are some limitations in the degree of energy efficiency designs. However, the pattern includes courtyard spaces and breezeways through the pattern which aid natural ventilation and cooling. These will reduce some of the cooling requirements of the buildings. Courtyards and light wells maximizes the use of natural light and reduce the need for artificial lighting. Additionally, with appropriate thermal massing and insulation, new buildings that require air conditioning will go through less heat fluctuation and require less energy to operate. Newer buildings and retrofits will bring about a gradual creation of a campus with "smart" buildings that will be more energy efficient. It is also general University policy in retrofitting buildings to replace lamps and equipment with more energy efficient devices to reduce energy costs.

4. Xeriphytic Landscape: At the time the master plan was developed, there was no specific intent to highlight native and indigenous plants in the landscape palette. However, the selection of landscape material was developed with a focus on xeriphytic plants. In the ongoing evolution in policy the LCC campus plan will begin to increase the use of Polynesian introductions as well as indigenous and endemic species. Xeriphytic species will be encouraged to reduce the need for irrigation and maintenance.

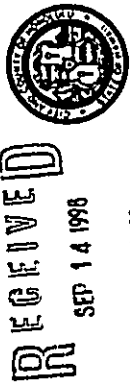
5. Historic and Cultural Sites: The campus site is devoid of historic sites or features due to years of use in agriculture and the development of the campus. However, there are opportunities for historic landscape interpretation from some parts of the campus. The best areas are at the second floor lanais of campus buildings. Interpretive signage pointing out the features of the Pearl Harbor region and its vast resources will be considered; especially with new building development

6. Ceded Lands: Our information shows that the Leeward Community College site is not on ceded lands. Therefore, development on site should have no relationship to the OHA and ceded lands issue.

7. 13 Significance Criteria for Environmental Impact: Discussion of the 13 significance criteria will be included in the final EA. The sample provided by OEQC will be used as a model for this section. Each criterion will be addressed separately and in as much detail as is available.

Group 70 International, Inc. • Architecture • Planning • Interior Design • Environmental Services • Building Design • Assets Management  
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DEPARTMENT OF PLANNING AND PERMITTING  
CITY AND COUNTY OF HONOLULU  
450 SOUTH KING STREET, 7TH FLOOR • HONOLULU, HAWAII 96813  
Phone: (808) 523-4411 • Fax: (808) 527-4743



JEREMY HARRIS  
MANAGER

8. DLNR Letter: The letter from Mr. Dean Uchida and our response will be included in the final EA.

If there are any questions, please call me at 523-5866.

Sincerely,

GROUP 70 INTERNATIONAL, INC.

*George Atia*  
George Atia, AICP  
Project Planner

cc: Maynard Young, Sharon Naimaiwa, Francis Oda

JAN MAOE SULLIVAN  
DIRECTOR  
LORETTA K.C. OKE  
98-05928 (DT)

September 11, 1998

Ms. Mary J. O'Leary  
Senior Planner  
Group 70 International, Inc.  
925 Bethel Street, Fifth Floor  
Honolulu, Hawaii 96813-4307

Dear Ms. O'Leary:

Draft Environmental Assessment  
Leeward Community College (LCC)  
Long Range Development Plan

We have reviewed the proposal to construct new facilities and improvements at LCC in six phases. We have the following comments:

1. All access points to the college are from roadways that are under the jurisdiction of the State Department of Transportation. The Traffic Review Branch of our department has no objections or comments to offer at this time.
2. There are some incorrect statements in Section 5.6. The college is not consistent with zoning until the Plan Review Use (PRU) is approved. Also, the college is nonconforming until the PRU is approved.
3. Our Wastewater and Civil Engineering (Drainage) Branches have no comment on the project.

If you have any questions regarding this letter, please call Ms. Dana Teramoto of our staff at 523-4648.

Very truly yours,

*Kathy Schuyler*  
for JAN MAOE SULLIVAN  
Director of Planning  
and Permitting

JNS:dt  
980521L-01c



DEPARTMENT OF TRANSPORTATION SERVICES  
CITY AND COUNTY OF HONOLULU  
PACIFIC PARK PLAZA • 711 KAPOLANI BOULEVARD, SUITE 1200 • HONOLULU, HAWAII 96813  
PHONE (808) 523-4329 • FAX (808) 523-4730

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SEP 16 1998



JEREMY HARRIS  
MAYOR

19 November 1998



GROUP 70  
INTERNATIONAL

Jan Naoo Sullivan  
Department of Planning and permitting  
650 South King Street, 7th Floor  
Honolulu, Hawaii 96813

Subject: Leeward Community College Long Range Development Plan

Dear Ms. Sullivan:

Thank you for your letter of September 11, 1998 commenting on our draft environmental assessment. With reference to your letter we wish to provide the following comments:

1. We acknowledge your observation that all access points come from State roadways and that the traffic review branch has no comments to offer at this time.
2. Regarding the statements about consistency with zoning we will revise the text to clarify that after a Plan Review Use is approved the facility will conform to zoning.
3. We acknowledge that the Wastewater and Civil Engineering Branches have no comments at this time.

Thank you again for your comments. Please call me if there are any further questions.

Sincerely,

GROUP 70 INTERNATIONAL, INC.

*Darryl*  
George Atch, ACP  
Project Planner

cc: Maynard Young, Sharon Nacimatu, Francis Oda

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CHERYL D. SOON  
DIRECTOR  
JOSEPH M. MAGALDI, JR.  
DEPUTY DIRECTOR

September 15, 1998

TPD8/98-04636R

CHICU 70

Ms. Mary J. O'Leary, Senior Planner  
Group 70 International, Inc.  
925 Bethel Street, 5th Floor  
Honolulu, Hawaii 96813-4307

Dear Ms. O'Leary:

Subject: Leeward Community College - Long Range Development Plan

In response to your July 29, 1998 letter, the draft environmental assessment (EA) and traffic impact analysis report (TIAR) for the subject project were reviewed. The following comments are the result of this review:

1. On Page 3-15 of the draft EA, one of the recommended improvements to the existing roadway system is to "widen Ala Ike Road to four lanes between the second LCC driveway to its intersection with Waiava Road." Figure 3-5 in the draft EA and Figure 5 in the TIAR should show the location of this second LCC driveway.
2. The TIAR addresses public transit service to Leeward Community College (LCC) and recommends improved transit opportunities to the LCC campus. This discussion should be summarized and included in the draft EA.
3. The draft EA should discuss the parking situation at LCC and the method used to determine the number of parking stalls to be provided. The TIAR indicates that there is currently a shortage of legal off-street parking at LCC. Taking this into consideration, the calculated parking ratio used to determine the number of parking stalls to be provided should be greater than the calculated existing parking ratio.

Ms. Mary J. O'Leary  
September 15, 1998  
Page 2

Should you have any questions regarding these comments, please  
contact Faith Miyamoto of the Transportation Planning Division at  
527-6976.

Sincerely,

  
CHERYL D. SOON  
Director

cc: Mr. Maynard G.P. Young, Director  
University of Hawaii - Community Colleges  
Physical Facilities Planning



**GROUP 70**  
INTERNATIONAL

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Hanki Hill, AIA  
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Paul P. Chorney, AIA  
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Stephen E. Cullis, CPA  
George I. Alfa, AICP  
Jeffrey H. Overman, AICP  
Kathryn A. Nam  
Roy A. Ina'ye  
Mary J. O'Leary

19 November 1998

Ms Cheryl D. Soon, Director  
Department of Transportation Services  
Pacific Park Plaza  
711 Kapiolani Boulevard, Suite 1200  
Honolulu, Hawaii 96813

Subject: Leeward Community College - Long Range Development Plan

Dear Ms. Soon:


Thank you for your letter of September 15, 1998 regarding our project. With reference to the comments in your letter we respectfully provide the following responses:

1. Figure 5 of the TIAR will be modified in the final TIAR to include the location of the first and second driveways to LCC.
2. The EA will be revised to include a summary of the discussion of public transit opportunities for LCC contained in the TIAR.
3. The calculated existing parking ratio for LCC as stated in the TIAR is approximately 0.30. This ratio includes vehicles parking in the existing 1,600 marked stalls, on Ala Ika Road and in the temporary gravel lots. At the completion of LCC, there will be a total of 2,700 parking stalls for the anticipated total enrollment of 8,200 students giving a calculated parking ratio of 0.33. Please note that the previous parking ratio analyses were developed using FTE rates instead of total enrollment.

If you have any further comments please feel free to call us.

Sincerely,

GROUP 70 INTERNATIONAL, INC.

  
George I. Alfa, AICP  
Project Planner

Cc: Maynard Young, Sharon Nazimova, Francis Oda



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STATE OF HAWAII  
DEPARTMENT OF HEALTH  
P.O. BOX 3378  
HONOLULU, HAWAII 96801

OCT - 9 1998

In reply, please refer to

October 5, 1998

98-016A/epo

GROUP 70

Ms. Mary J. O'Leary, AICP  
Senior Planner  
Group 70 International, Inc.  
925 Bethel Street, Fifth Floor  
Honolulu, Hawaii 96813-4307

Dear Ms. O'Leary:

Subject: Draft Environmental Assessment (DEA)  
Long Range Development Plan  
Leeward Community College  
Pearl City, Hawaii  
TMK: 9-6-5: 48

Thank you for allowing us to review and comment on the subject document. We do not have any comments to offer at this time.

Sincerely,

*Bruce S. Anderson*

BRUCE S. ANDERSON, Ph.D.  
Deputy Director for  
Environmental Health

c: UH - Community Colleges



**GROUP 70**  
INTERNATIONAL

Francis S. Ohi, AIA, AICP  
Norman G.Y. Hong, AIA  
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Ralph E. Postmore, AICP  
Stephen H. Yuen, AIA  
Linda L. Chung, AIA

Paul P. Charney, AIA  
Dean H. Kazmura, AIA  
Norma J. Scott, AIA  
Stephen E. Carlo, CPA  
George J. Aza, AICP  
Jeffrey H. Overton, AICP  
Kathryn A. Nam  
Roy A. Hoogy  
Mary J. O'Leary

GROUP 70 INTERNATIONAL, INC.

*Mary J. O'Leary*

George L. Aha, AICP  
Project Planner

C: Maynard Young

24 November 1998

Bruce S. Anderson, Ph.D.  
Deputy Director for Environmental Health  
State Department of Health  
P.O. Box 3378  
Honolulu, Hawaii 96801

Subject: Leeward Community College Long Range Development Plan  
Environmental Assessment

Dear Dr. Anderson:

Thank you for your letter dated October 5, 1998. We acknowledge that you have no comments at this time. If you have any questions in the future, please feel free to call me.

Sincerely,

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OCT 23 1998

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
869 PUNCHBOWL STREET  
HONOLULU, HAWAII 96813-5007

OCT 22 1998

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HWY-75  
2-1474

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OCT 23 1998

Mr. Keith K. Niya  
Senior Transportation Engineer  
Austin, Trusumi & Associates, Inc.  
501 Summer Street, Suite 521  
Honolulu, Hawaii 96817

AUSTIN, TRUSUMI & ASSOCIATES, INC.  
Honolulu, Hawaii 96817-3371

Dear Mr. Niya:

Subject: Leeward Community College Expansion Traffic Impact Analysis Report (TIAR)

Thank you for transmitting the above documents for our review. We have the following comments:

1. The University of Hawaii should implement the roadway mitigation measures stated in the TIAR at its own expense.
2. We strongly endorse the TIAR recommendations to improve the existing access, including the extension of Waialua Road, beyond its present terminus at westbound Farrington Highway, to intersect Kamehameha Highway. These improvements, if implemented, will serve the needs for the Leeward Community College for many years.
3. A secondary access to the college, if feasible, will also help to relieve traffic congestion. However, the feasibility of a secondary access has not yet been determined. Our contract with R. M. Towill Corporation for our H-1 Widening project includes studying the feasibility of a secondary access road for Leeward Community College. If this study determines that a feasible secondary access exists, we recommend that it be pursued as a long-range solution to the traffic congestion problem and that the improvements to the existing access be pursued as soon as possible as the short-range solution.

Very truly yours,

*Kazu Hayashida*

KAZU HAYASHIDA  
Director of Transportation

DOT requested copy of July 1998 report.

Post-it brand fax transmittal memo 7871	Page 1 of 1 page(s)
To: Mary O'Leary	From: Howard Mau
On: 6/10/98	Re: TIAR
Page 533-2646	



GROUP 70  
INTERNATIONAL

- Francis S. Oda, AIA, AICP
- Norman G.Y. Hoag, AIA
- Sheryl B. Scammell, AIA, ASID
- Hiroshi Iikuni, AIA
- Roy H. Nohel, AIA, CSI
- James I. Richardson, AIA
- Ralph E. Poore, AICP
- Stephen H. Vuori, AIA
- Linda L. Chung, AIA
- Paul P. Chaney, AIA
- Dean H. Keenan, AIA
- Norma J. Scott, AIA
- Stephen E. Cilio, CPA
- George L. Alta, AICP
- Jeffrey H. Overton, AICP
- Kathryn A. Nam
- Roy A. Inouye
- Mary J. O'Leary

24 November 1998

Kazu Hayashida  
Director of Transportation  
State of Hawaii  
Department of Transportation  
869 Punchbowl Street  
Honolulu, Hawaii 96813

Subject: Leeward Community College Traffic Impact Analysis Report (TIAR)

Dear Mr. Hayashida:

With reference to your letter of October 22, 1998 to Mr. Keith Niya we wish to thank you for your comments. We wish to provide the following responses to your comments.

Comments 1 and 2: The University of Hawaii will look at funding sources for the mitigation measures suggested by the TIAR. However, we request the technical and financial support of the State Department of Transportation (SDOT) in designing and seeking funding for the recommended measures. While Leeward Community College will be a beneficiary of the suggested measures, we would not be the only. Additionally, as a sister State agency, ultimately it will all come out of the same public pot and we feel a partnership is in the best interest of the general public. SDOT has the necessary expertise in this area and your support will clearly provide a more efficient way to design and fund the improvements.

Comment 3: With reference to the secondary access road we understand that funds for feasibility studies and planning have been appropriated. We welcome the study of the secondary access question and acknowledge your evaluation that it will help relieve congestion around the campus. Regarding the timing of the projects we note your statement about distinguishing between short range and long range goals for the various projects. We wish to respond that our entire plan is driven by available funding. We will pursue projects based on which one is funded. If we have the discretion to apply a priority designation we will follow the order suggested by SDOT.

If you have any further questions please call me.

Sincerely,

GROUP 70 INTERNATIONAL, INC.

*George L. Alta*  
George L. Alta, Project Planner

CC: Mr. Maynard Young, Sharon Narimatsu, Keith Niya, Francis Oda



PEARL CITY NEIGHBORHOOD BOARD NO. 21

P.O. BOX 1025 • PEARL CITY, HAWAII 96782

September 16, 1998

RECEIVED  
SEP 17 1998

GROUP 70

Dr. Joyce Tsunoda, Senior Vice President  
and Chancellor of Community Colleges  
University of Hawaii  
2444 Dole Street, Bachman Hall 204  
Honolulu, Hawaii 96822

Re: Leeward Community College Long Range Development Plan

Dear Dr. Tsunoda,

The Pearl City Neighborhood Board No. 21 has received the Draft Environmental Assessment (EA) for the Leeward Community College (LCC) Long Range Development Plan. However, the document was received just prior to the Board's August meeting; thus, the Board did not feel adequately prepared to comment on the Plan.

At the August 27, 1998 meeting of the Pearl City Neighborhood Board No. 21, by a vote of 9-0-0, "Requests an extension of the review period until an educated assessment and review can be carried out."

While I understand the period for comments is set by legislation and has already passed, we still wish to review the project and hope that comments made by the Pearl City Neighborhood Board No. 21 may be incorporated into the EA and taken into account in the Development Plan. We will be discussing the LCC Development Plan at the Board's October committee meeting per discussions with Mr. Atta of Group 70.

Respectfully,

Joshua Kaye

cc: Council Chair Muifi Hannemann  
Pearl City Neighborhood Board members  
George Atta, Group 70  
Gary Gill, Office of Environmental Quality Control



Oahu's Neighborhood Board System - Established 1973

11/23/98 WED 16:03 FAX 808 734 9430 CCFPO \*\*\* GROUP SEVENTY 002

UNIVERSITY OF HAWAII

Office of the Senior Vice President, University of Hawaii's and Chancellor for Community College  
Physical Facilities, Planning and Construction

November 25, 1998

peh11

Mr. Joshua Kaye  
Pearl City Neighborhood Board No. 21  
P.O. Box 1025  
Pearl City, Hawaii 96782

Dear Mr. Kaye:

SUBJECT: Leeward Community College  
Long Range Development Plan  
Review of Draft Environmental Assessment

In response to your September 16, 1998 letter to Dr. Joyce Tsunoda, we concur with your understanding that we cannot extend the review period for the Draft Environmental Assessment (EA) as legislation has set it. However, we have delayed the final submittal of the EA to address comments from the presentation to your Board made by our consultant on November 22, 1998 and November 29, 1998. There will be future opportunities for your Board's comments, as the EA is the first step in the Community Colleges application for the City and County of Honolulu's Plan Review Use.

Thank you and should you have further questions please call me at 734-9771.

Sincerely,

Maynard Young  
Director

MY:lk

cc: Mr. George Atta, Group 70

4101 Diamond Head Road • Māhele Building • Honolulu, Hawaii 96816  
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PEARL CITY NEIGHBORHOOD BOARD NO. 21

45 NEIGHBORHOOD COMMISSION • CITY HALL, ROOM 404 • HONOLULU, HAWAII 96813

November 25, 1998

Mr. George I. Atta, AICP  
Group 70 International, Inc.  
925 Bethel Street, 5th Floor  
Honolulu, Hawaii 96813-4307

Dear Mr. Atta,

Subject: Draft Environmental Assessment (EA)  
Long Range Development Plan  
Leeward Community College  
Waiawa, Ewa, Oahu, Hawaii  
Tax Map Key: 9-6-03-48

RECEIVED  
Nov 2, 1998

This is to inform you that the Pearl City Neighborhood Board No. 21, at its November 19, 1998 regular meeting, voted 12-0-0, to support the conceptual plans for the Long Range Development of Leeward Community College presented at our October 22 and 29, 1998 meetings. We have no significant objections to the proposal, so long as access roadways and added parking stall improvements are implemented concurrently with major facility or enrollment expansion.

We apologize for the submittal of these comments at this late date, as we did not have a quorum at our October 29, 1998 regular meeting to take appropriate action.

Please keep us informed on any further facility changes which will be significant to report to our community.

Very truly yours,

*J. Joseph Kaye*  
24 Joseph Kaye  
Chair

cc: Maynard Young, UH FPOCC  
Sharon Narimatsu, LCC  
Office of Environmental Quality Control  
Pearl City Neighborhood Board members  
Neighborhood Commission Office



Oahu's Neighborhood Board System - Established 1973

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Appendix C  
Traffic Impact Analysis Report

APPENDIX C  
TRAFFIC IMPACT ANALYSIS REPORT

Due to the size of the Austin, Tsutsumi & Associates, Inc Traffic Impact Analysis Report for the Proposed Leeward Community College Expansion (June 1998) distribution has been limited to the following:

- Office of Environmental Quality Control
- State Department of Transportation Services
- City & County of Honolulu Department of Transportation Services
- Leeward Community College
- University of Hawaii - Community Colleges





PEARL CITY NEIGHBORHOOD BOARD NO. 21

P.O. BOX 1025 • PEARL CITY, HAWAII 96782

January 14, 1999

Joyce Tsunoda, Senior Vice President and  
Chancellor of Community Colleges  
Office of the Chancellor for Community Colleges  
4303 Diamond Head Road, Manele Building  
Honolulu, Hawaii 96816

Subject: Leeward Community College Long Range Development Plan

Dear Mrs. Tsunoda:

We wish to thank you and your staff and Mr. Atta for giving presentations to the Pearl City Neighborhood Board.

Whereas the Pearl City Neighborhood Board has reviewed and discussed the Draft Environmental Assessment for the LCC Long Range Development Plan, at the November 19, 1998 meeting, the Pearl City Neighborhood Board No. 21, by a vote of 12-0, "Has no significant objections to the Leeward Community College Long Range Development Plan, so long as access roadways and parking stall improvements are implemented concurrently with major facility or enrollment expansions." Accordingly we would encourage acceptance of the EA and the development plan.

We understand the period for comments is set by legislation and had passed prior to the Board's motion. While the motion from the Board is not part of the EA comments, we encourage you to consider it in your future developments.

Respectfully,

  
J. Joshua Kaye

cc: Councilmember Mufi Hannemann  
George Atta (Group 70)



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