Office of the Administrative Director – Financial Services Department
THE JUDICIARY • STATE OF HAWAI'I • 1111 ALAKEA STREET, 6TH FLOOR • HONOLULU, HAWAI'I 96813-2807
TELEPHONE (808) 538-5800 • FAX (808) 538-5802

Terri Gearon
FINANCIAL SERVICES DIRECTOR

May 24, 2019

MEMORANDUM

TO WHOM IT MAY CONCERN:

FROM: Terri Gearon, Financial Services Director /s/ Terri Gearon

SUBJECT: ADDENDUM NO. 2
JUDICIARY PROJECT NO. J19313
DESIGN, FURNISH, INSTALL, AND MAINTAIN A PHOTOVOLTAIC SYSTEM WITH BATTERY STORAGE FOR THE RONALD TY MOON JUDICIARY COMPLEX IN KAPOLEI

Transmitted herewith is a copy of Addendum No. 2 providing the following:

- **Amend Notice to Offerors, "All Other Questions" contact information to read as follows:**

All Other Questions:

Contact Person	**Kelly Kimura**
Contract's e-mail address	**Kelly.Y.Kimura@courts.hawaii.gov**

- **Include Foundation Investigation Kapolei Judiciary Complex, Kapolei, Oahu, Hawaii document as part of the RFP J19313.**
- **Include Kapolei Additional Drawings document as part of the RFP J19313.**

Should you have any technical questions regarding this Addendum, please call the Officer-In-Charge for this project Dee Dee Letts via phone at (808) 538-5990 or via email at deedee.d.letts@courts.hawaii.gov. Other questions may be directed to Kelly Kimura of the Judiciary Contracts & Purchasing Office via phone at (808) 538-5805, or via email Kelly.Y.Kimura@courts.hawaii.gov.

Foundation Investigation

Kapolei Judiciary Complex
Kapolei, Oahu, Hawaii

nka Ronald T. Y. Moon Judiciary Complex

FOUNDATION INVESTIGATION
KAPOLEI JUDICIARY COMPLEX
KAPOLEI, OAHU, HAWAII

for

ARCHITECTS HAWAII, LTD.

HIRATA & ASSOCIATES, INC.
W.O. 05-4124
January 23, 2006

Hirata & Associates
Geotechnical Engineering
Hirata & Associates, Inc.
99-1433 Koaha Pl
Aiea, HI 96701
tel 808.486.0787
fax 808.486.0870

January 23, 2006
W.O. 05-4124

Mr. Michael Kim
Architects Hawaii, Ltd.
1001 Bishop Street, Suite 300
Honolulu, Hawaii 96813

Dear Mr. Kim:

Our report, "Foundation Investigation, Kapolei Judiciary Complex, Kapolei, Oahu, Hawaii," dated January 23, 2006, our Work Order 05-4124 is enclosed. This investigation was conducted in general conformance with the scope of work presented in our proposal dated November 4, 2004.

The predominant soil encountered in our borings was tan coral rubblestone. Coral rubblestone consists of a conglomerate of coralline silt, sand, and coral fragments, oftentimes partially cemented by calcium carbonate. The coral rubblestone encountered in our borings was in a medium dense to dense condition, with occasional medium hard sections, and extended to the maximum depths drilled. Borings B4, B7, B8, and B11 through B16, encountered a thin surface layer of brown and grayish brown clayey silt. In addition, borings B3, and B5 through B8, encountered a layer of grayish brown silty clay at depths ranging from about 19 to 28 feet. Groundwater was not encountered in our borings.

We understand that the Family Court Center will have one level of basement parking and that the Juvenile Detention Center will have a below grade service area and sally port. Although finish elevations were not available at the time of this report, we expect that structural excavations will generally expose the medium dense to dense coral rubblestone. Conventional spread footings founded directly on the medium dense to dense coral rubblestone may be used to support the proposed structures.

The following is a summary of our geotechnical recommendations. This summary is not intended to be a substitute for our report which includes more detailed explanations of our recommendations, as well as additional requirements.

- Allowable bearing value = 4,000 psf
- Coefficient of friction = 0.4
- Passive earth pressure = 350 pcf

We appreciate this opportunity to be of service. Should you have any questions concerning this report, please feel free to call on us.

Very truly yours,

HIRATA & ASSOCIATES, INC.

Paul S. Morimoto

Paul S. Morimoto Vice President

PSM:RIKY:ph

TABLE OF CONTENTS

APPENDICES

APPENDIX A

APPENDIX B

FOUNDATION INVESTIGATION
KAPOLEI JUDICIARY COMPLEX
KAPOLEI, OAHU, HAWAII

INTRODUCTION

This report presents the results of our foundation investigation performed for the proposed Kapolei Judiciary Complex in Kapolei, Oahu, Hawaii. Our work scope for this study included the following:

- A visual reconnaissance of the site and its vicinity to observe existing conditions which may affect the project. The general location of the project site is shown on the enclosed Location Map, Plate A2.1.

- A review of available in-house soils information pertinent to the site and the proposed project.

- Drilling and sampling sixteen exploratory borings to depths ranging from about 6 to 40.5 feet. A description of our field investigation is summarized on Plates A1.1 and A1.2. The approximate exploratory boring locations are shown on the enclosed Boring Location Plan, Plate A2.2, and the soils encountered in the borings are described on the Boring Logs, Plates A4.1 through A4.24.

- Laboratory testing of selected soil samples. Testing procedures are presented in the Description of Laboratory Testing, Plates B1.1 through B1.3. Test results are presented in the Description of Laboratory Testing, as well as on the Unified Soil Classification System chart (Plate A3.2), Boring Logs (Plates A4.1 through A4.24), Consolidation Test reports (Plates B2.1 through B2.5), Direct Shear Test reports (Plates B3.1 through B3.7), Modified Proctor Curve reports (Plates B4.1 and B4.2), CBR Stress Penetration Test Curve report (Plates B5.1), and Gradation Curve reports (Plates B6.1 and B6.2).

- Engineering analyses of the field and laboratory data.

- Preparation of this report presenting geotechnical recommendations for the design of foundations, seismic considerations, slabs-on-grade, resistance to lateral pressures, flexible and rigid pavement, and site grading.

PROJECT CONSIDERATIONS

The proposed Kapolei Judiciary Complex will consist of a Family Court Facility and a Juvenile Detention Facility. The Family Court Facility will be located in the northern portion of the site, while the Juvenile Detention Facility will be located in the southeastern section. The Family Court Facility will be a 4-story structure with below grade corridors connecting elevators serving the holding cells. The Juvenile Detention Facility will be two stories in height. The Juvenile Detention Facility and Family Court Facility will be connected at ground level by a sally port. We assume that reinforced concrete and concrete masonry construction will be used, and although not available at the time of this report, relatively heavy structural loads are anticipated.

The project will also include AC paved parking areas in the western portion of the site, and in a smaller area in the northeast, adjacent to the Family Court Facility.

Finish grades were not available at the time of this report. However, the site is relatively level and, except for the basement excavations, only minor site grading is expected in the remaining areas.

SITE CONDITIONS

The subject property is located southeast of the intersection between Kamokila Boulevard and Kapolei Parkway. Vacant land, which may have been previously cleared, borders the site on the west, while undeveloped overgrown land borders the site on the north and east. An abandoned railroad track parallels the south property line, just beyond the parcel.

The site is vacant of structures and, at the time of our exploratory fieldwork, was covered with light vegetation. However, the site appears to have been recently cleared.

Drainage over the site flows in a southerly to southeasterly direction. Total relief over the site is approximately 10 feet, with ground elevations ranging from about +68 in the northeast to about +58 in the southeast.

SOIL CONDITIONS

The predominant soil encountered in our borings consisted of tan coral rubblestone. Coral rubblestone consists of a conglomerate of coralline silt, sand, and coral fragments, oftentimes partially cemented by calcium carbonate. Typical of coral rubblestone deposits, the quantities of silt, sand, and coral fragments vary throughout the stratum. The coral rubblestone was in a medium dense to dense condition with occasional medium hard sections, and extended to the maximum depths drilled.

Borings B4, B7, B8, and B11 through B16, encountered a thin layer of brown to grayish brown clayey silt with coral gravel overlying the coral rubblestone. The surface clayey silt ranged in thickness from only about 1 to 2 feet.

A layer of grayish brown silty clay was encountered in borings B3, and B5 through B8, at depths ranging from approximately 19 to 28 feet. The silty clay layer was in a stiff to medium stiff condition, and ranged in thickness from about 3.5 to 15 feet. Reddish brown clayey silt was encountered in boring B9 between 5.5 and 10 feet. Laboratory testing on the silty clay and clayey silt resulted in relatively low expansion potentials.

Neither groundwater nor seepage water was encountered in the borings.

CONCLUSIONS AND RECOMMENDATIONS

Based on our exploratory fieldwork and laboratory testing, we believe that from a geotechnical viewpoint, the site can generally be developed as planned.

Finish elevations were not available at the time of this report. However, we expect that structural excavations will generally expose the medium dense to dense coral rubblestone. Conventional spread footings founded directly on coral rubblestone may be used to support the proposed structures. Building slabs-on-grade will require only the standard 4-inch gravel cushion and vapor barrier.

If exposed at the bottom of foundation excavations or at slab-on-grade subgrade elevations, the grayish brown silty clay should be overexcavated to a minimum 24 inches below the bottom of footing and slab elevations, and replaced with granular fill. The gravel cushion and base course layers recommended below slabs-on-grade may be considered part of the granular fill. The remainder of the granular fill section should consist of granular structural fill, such as the onsite coral rubblestone.

Foundations

Conventional spread footings founded directly on the medium dense to dense coral rubblestone may be used to support the proposed structures. Foundations may be designed for an allowable bearing value of 4,000 pounds per square foot. The recommended allowable bearing value is for the total of dead and frequently applied live loads, and may be increased by one-third for short duration loading which includes the effect of wind and seismic forces.

Footings should be a minimum 16 inches in width and embedded at least 24 inches below finish adjacent grade. The bottom of all footing excavations should be throughly tamped and cleaned of loose or deleterious material prior to placement of reinforcing steel and concrete.

Seismic Design

Based on the 1997 Uniform Building Code, the site is located within Seismic Zone 2A. Within this zone, a seismic zone factor (Z) equal to 0.15 is recommended (97 UBC Table 16-I) for calculation of shear and lateral load imparted on structures during an earthquake. Based on borings drilled as part of this study and our knowledge of the deep soil conditions in the area, the subsurface soils can be characterized as a dense soil profile. Therefore, soil profile type S_C is recommended for this site.

Lateral Design

Resistance to lateral loading may be provided by friction acting at the base of foundations and by passive earth pressure acting on the buried portions of foundations.

An allowable coefficient of friction of 0.4 may be used with the dead load forces. Passive earth pressure may be computed as an equivalent fluid having a density of 350 pounds per cubic foot with a maximum earth pressure of 3,500 pounds per square foot. Unless covered by pavement or concrete slabs, the upper 12 inches of soil should not be considered in computing lateral resistance.

For active earth pressure considerations, equivalent fluid pressures of 40 and 55 pounds per cubic foot may be used for freestanding and restrained conditions, respectively. To prevent buildup of hydrostatic pressures, weepholes or subdrains should be included in the design of any retaining structures.

Foundation Settlement

Structural loads were not available at the time of this report. However, neither excessive total nor differential settlement is anticipated for foundations bearing on

the medium dense to dense coral rubblestone. The final building loads should be forwarded to our office, when available, for review.

Slabs-on-Grade

To provide uniform support, building slabs-on-grade should be underlain by a 4-inch cushion of clean gravel, such as #3 Fine (ASTM C33 Size No. 67). Where vehicular or forklift loading is anticipated, the concrete slabs-on-grade should be underlain by a minimum 6 inches of aggregate base course. The base course is in lieu of the gravel cushion.

All slabs should also be protected by a vapor barrier placed over the cushion material or aggregate base course.

The subgrade soils should be scarified to a depth of six inches, moistened to slightly above optimum moisture content, and compacted to a minimum 95 percent compaction as determined by ASTM D 1557. The overlying gravel cushion should be compacted to a level surface using vibratory equipment. Aggregate base course should be compacted to a minimum 95 percent compaction as determined by ASTM D 1557.

As previously mentioned, if exposed at slab subgrade elevations, the grayish brown silty clay should be overexcavated to a minimum 24 inches below the bottom of slab elevation, and replaced with granular fill. The gravel cushion and base course layers may be considered part of the granular fill. The remainder of the granular fill section should consist of granular structural fill, such as the onsite coral rubblestone.

Slabs-on-grade which will receive floor covering, especially "hard" floor covering such as slate or marble, should include control joints saw-cut into the concrete slab. The purpose of this is to help reduce the potential for reflective cracking of the floor

covering due to shrinkage cracks in the concrete slab. Proper curing of the concrete slabs will help reduce shrinkage cracking.

Exterior slabs-on-grade and concrete walkways should be underlain by at least 4 inches of aggregate base course.

Pavement Design

Pavement design was based on medium traffic consisting primarily of passenger vehicles and light duty trucks, with occasional heavy trucks. Pavement design for driveways and parking areas may be designed based on the following sections:

Flexible Pavement

2.5"	Asphaltic Concrete
6.0"	Aggregate Base Course (minimum CBR = 85)
8.5"	Total Thickness

Rigid Pavement

6.0"	Portland Cement Concrete
6.0"	Aggregate Base Course (minimum CBR = 85)
12.0"	Total Thickness

The exposed subgrade should be scarified to a minimum depth of 6 inches, moisture conditioned to slightly above the optimum moisture content, and compacted to a minimum 95 percent compaction as determined by ASTM D 1557. The aggregate base course should also be compacted to a minimum 95 percent compaction as determined by ASTM D 1557.

Site Grading

Site Preparation - The project site should be cleared of all vegetation and other deleterious material. Prior to placement of fill, the exposed subgrade should be scarified to a minimum depth of 6 inches, moisture conditioned to slightly above the optimum moisture content, and compacted to a minimum 95 percent compaction as determined by ASTM D 1557.

Onsite Fill Materials - The onsite coral rubblestone may be used in structural fills and backfills, provided all coral fragments larger than 3 inches in maximum dimension are either crushed or removed. The surface clayey silt will be acceptable for reuse in non-building areas, such as parking lots, and in non-structural fills. Rock and coral fragments larger than 3 inches in maximum dimension should be removed from the clayey silt prior to compaction.

Imported Fill Materials - Imported structural fill should be well-graded, non-expansive granular material. Specifications for imported granular structural fill should indicate a maximum particle size of 3 inches, and state that between 8 and 20 percent of soil by weight shall pass the #200 sieve. In addition, the plasticity index (P.I.) of that portion of the soil passing the #40 sieve shall not be greater than 10. Granular structural fill should also have a minimum CBR value of 12 and a CBR expansion value less than 1.0 percent when tested in accordance with ASTM D 1883.

Compaction - Structural fill should be placed in horizontal lifts restricted to eight inches in loose thickness, and compacted to at least 95 percent compaction as determined by ASTM D 1557.

Fill placed in areas which slope steeper than 5H:1V should be continually benched as the fill is brought up in lifts.

Structural Excavations - Based on our exploratory borings, we believe that excavations into the onsite coral rubblestone can be accomplished using conventional excavating equipment. The sidewalls of temporary cuts into the coral rubblestone should be stable at gradients of 1H:1V or flatter. However, the contractor should be responsible for conforming to all OSHA safety standards for excavations.

Slope Gradients - Permanent cut and fill slopes may be designed for gradients of 2H:1V or flatter. Slopes should be planted as soon as practical upon completion of grading to reduce the potential for erosion damage.

ADDITIONAL SERVICES

We recommend that we perform a general review of the final design plans and specifications. This will allow us to verify that the foundation design and earthwork recommendations have been properly interpreted and implemented in the design plans and construction specifications.

For continuity, we recommend that we be retained during construction to (1) check footing excavations prior to placement of reinforcing steel and concrete, (2) review and/or perform laboratory testing on import borrow to determine its acceptability for use in compacted fills, (3) observe structural fill and backfill placement and perform compaction testing, and (4) provide geotechnical consultation as required. Our services during construction will allow us to verify that our recommendations are properly interpreted and included in construction, and if necessary, to make modifications to those recommendations, thereby reducing construction delays in the event subsurface conditions differ from those anticipated.

LIMITATIONS

The boring logs indicate the approximate subsurface soil conditions encountered only at those times and locations where our borings were made, and may not represent conditions at other times and locations.

This report was prepared specifically for Architects Hawaii, Ltd. and their sub-consultants for design of the proposed Kapolei Judiciary Complex in Kapolei, Hawaii. The boring logs, laboratory test results, and recommendations presented in

this report are for design purposes only, and are not intended for use in developing cost estimates by the contractor.

During construction, should subsurface conditions differ from those encountered in our borings, we should be advised immediately in order to re-evaluate our recommendations, and to revise or verify them in writing before proceeding with construction.

Our recommendations and conclusions are based upon the site materials observed, the preliminary design information made available, the data obtained from our site exploration, our engineering analyses, and our experience and engineering judgement. The conclusions and recommendations are professional opinions which we have strived to develop in a manner consistent with that level of care, skill, and competence ordinarily exercised by members of the profession in good standing, currently practicing under similar conditions. We will be responsible for those recommendations and conclusions, but will not be responsible for the interpretation by others of the information developed. No warranty is made regarding the services performed under this agreement, either express or implied.

Respectfully submitted,

HIRATA & ASSOCIATES, INC.

Rick Yoshida, Project Engineer

Paul S. Morimoto, Project Manager

This work was prepared by me or under my supervision
Expiration Date of License:
April 30, 2006

APPENDIX A

FIELD INVESTIGATION

DESCRIPTION OF FIELD INVESTIGATION

GENERAL

The site was explored from July 5 to 11, 2005 by performing a visual site reconnaissance and drilling sixteen exploratory test borings ranging in depth from about 6 to 40.5 feet with a Mobile B40-L22 truck-mounted drill rig.

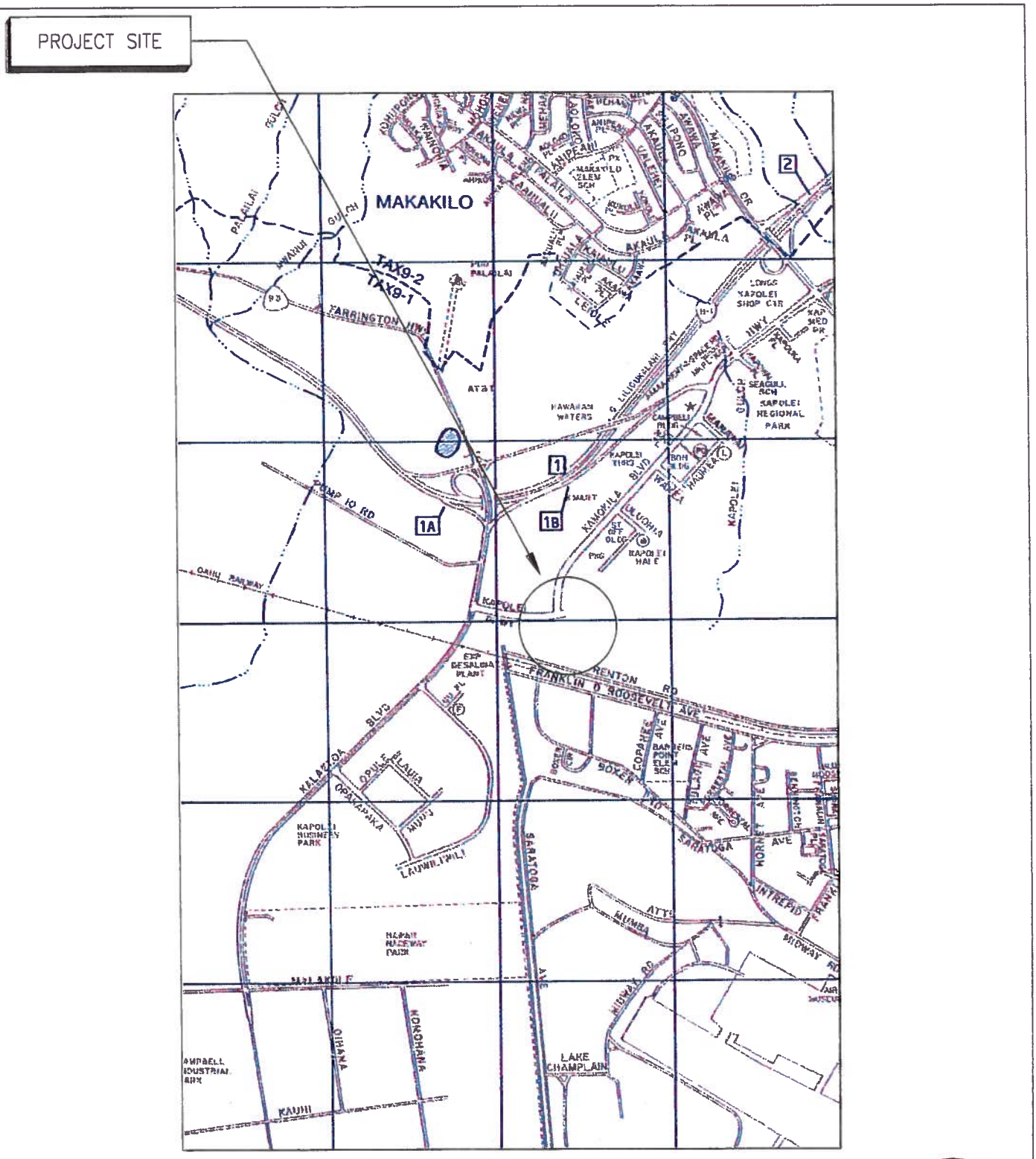
During drilling operations, the soils were continuously logged by our field engineer and classified by visual examination in accordance with the Unified Soil Classification System. The boring logs indicate the depths at which the soils or their characteristics change, although the change could actually be gradual. If the change occurred between sample locations, the depth was interpreted based on field observations. Classifications and sampling intervals are shown on the boring logs. A Boring Log Legend is presented on Plate A3.1. The Unified Soil Classification System is shown on Plate A3.2. The soils encountered are logged on Plates A4.1 through A4.24.

Boring locations were originally located in the field by M&E Pacific, Inc. based on a Site Plan provided by Architects Hawaii, Ltd., dated June 23, 2005. However, a revised Site Plan was received from Architects Hawaii, Ltd. on August 18, 2005, requiring the boring locations to be revised. The revised boring locations were then located by measuring/taping offsets from the original boring locations provided. Ground surface elevations at the boring locations were estimated using the Topographic Map provided by Architects Hawaii, Ltd. The accuracy of the boring locations shown on Plate A2.2 and the surface elevations shown on the boring logs are therefore approximate, in accordance with the field methods used.

SOIL SAMPLING

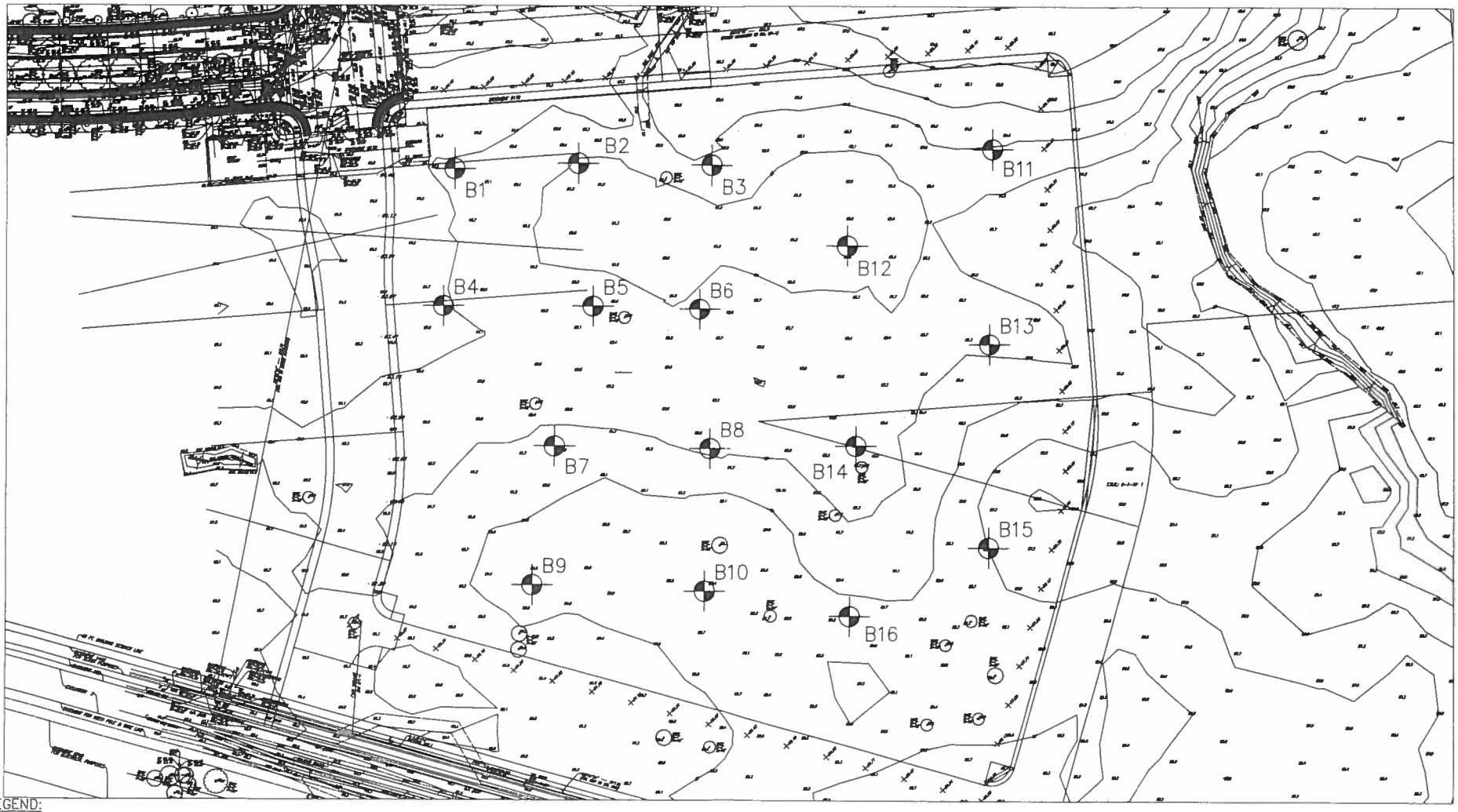
Representative and bulk soil samples were recovered from the borings for selected laboratory testing and analyses. Representative samples were recovered by driving

a 3-inch O.D. split tube sampler a total of 18 inches with a 140-pound hammer dropped from a height of 30 inches. The number of blows required to drive the sampler the final 12 inches are recorded at the appropriate depths on the boring logs, unless noted otherwise. Bulk soil samples were recovered from borings B7 and B12, between depths of about 0 to 2 and 1.5 feet, for selected laboratory testing that would aid in soil classification and pavement design.



Reference: Bryan's Sectional Maps, 2003 Edition
(Copyright J.R. Clere, used with permission)

W.O. 05-4124	Kapolei Judiciary Complex
Hirata & Associates, Inc.	LOCATION MAP Plate A2.1



LEGEND:

Approximate location of borings

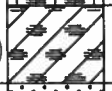
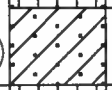
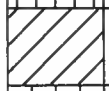
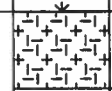
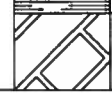
GRAPHIC SCALE:

0 60 120 240 FT.

1" = 120'

Reference: Topographic Plan provided by Architects Hawaii, Ltd.

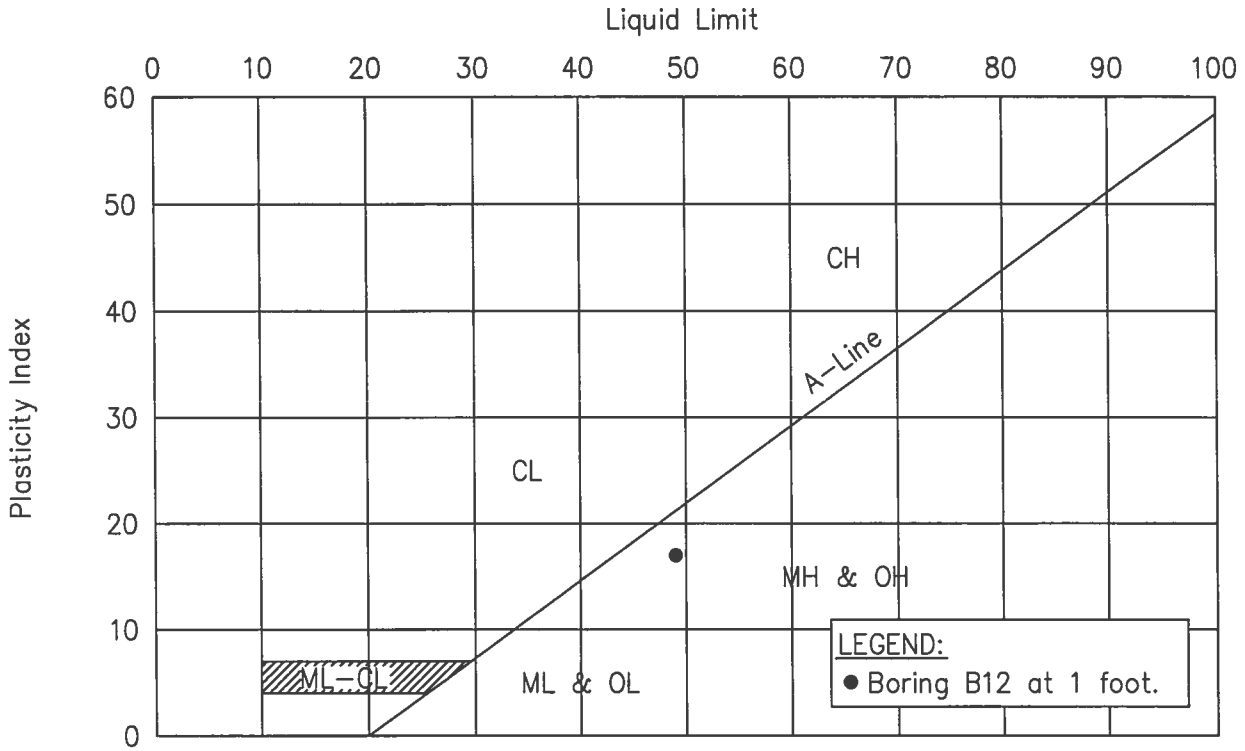
W.O. 05-4124	Kapolei Judiciary Complex
Hirata & Associates, Inc.	BORING LOCATION PLAN
	Plate A2.2

MAJOR DIVISIONS			GROUP SYMBOLS		TYPICAL NAMES
COARSE GRAINED SOILS (More than 50% of the material is LARGER than No. 200 sieve size.)	GRAVELS (More than 50% of coarse fraction is LARGER than the No. 4 sieve size.)	CLEAN GRAVELS (Little or no fines.)		GW	Well graded gravels, gravel–sand mixtures, little or no fines.
				GP	Poorly graded gravels or gravel–sand mixtures, little or no fines.
		GRAVELS WITH FINES (Appreciable amt. of fines.)		GM	Silty gravels, gravel–sand–silt mixtures.
				GC	Clayey gravels, gravel–sand–clay mixtures.
	SANDS (More than 50% of coarse fraction is SMALLER than the No. 4 sieve size.)	CLEAN SANDS (Little or no fines.)		SW	Well graded sands, gravelly sands, little or no fines.
				SP	Poorly graded sands or gravelly sands, little or no fines.
		SANDS WITH FINES (Appreciable amt. of fines.)		SM	Silty sands, sand–silt mixtures.
				SC	Clayey sands, sand–clay mixtures.
FINE GRAINED SOILS (More than 50% of the material is SMALLER than No. 200 sieve size.)	SILTS AND CLAYS (Liquid limit LESS than 50.)			ML	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity.
				CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays.
				OL	Organic silts and organic silty clays of low plasticity.
	SILTS AND CLAYS (Liquid limit GREATER than 50.)			MH	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts.
				CH	Inorganic clays of high plasticity, fat clays.
				OH	Organic clays of medium to high plasticity, organic silts.
HIGHLY ORGANIC SOILS				PT	Peat and other highly organic soils.
					FRESH TO MODERATELY WEATHERED BASALT
					VOLCANIC TUFF / HIGHLY TO COMPLETELY WEATHERED BASALT
					CORAL

SAMPLE DEFINITION		
2" O.D. Standard Split Spoon Sampler	Shelby Tube	RQD Rock Quality Designation
3" O.D. Split Tube Sampler	NX / 4" Coring	Water Level

W.O. 05–4124	Kapolei Judiciary Complex
Hirata & Associates, Inc.	BORING LOG LEGEND Plate A3.1

PLASTICITY CHART



GRADATION CHART

COMPONENT DEFINITIONS BY GRADATION	
COMPONENT	SIZE RANGE
Boulders	Above 12 in.
Cobbles	3 in. to 12 in.
Gravel Coarse gravel Fine gravel	3 in. to No. 4 (4.76 mm) 3 in. to 3/4 in. 3/4 in. to No. 4 (4.76 mm)
Sand Coarse sand Medium sand Fine sand	No. 4 (4.76 mm) to No. 200 (0.074 mm) No. 4 (4.76 mm) to No. 10 (2.0 mm) No. 10 (2.0 mm) to No. 40 (0.42 mm) No. 40 (0.42 mm) to No. 200 (0.074 mm)
Silt and clay	Smaller than No. 200 (0.074 mm)

W.O. 05-4124	Kapolei Judiciary Complex
Hirata & Associates, Inc.	UNIFIED SOIL CLASSIFICATION SYSTEM Plate A3.2

HIRATA & ASSOCIATES, INC.

BORING LOG

W.O. 05-4124

BORING NO. B1 DRIVING WT. 140 lb. START DATE 7/06/05
SURFACE ELEV. 64.2±* DROP 30 in. END DATE 7/07/05

DEPTH	GRAPH	SAMPLE	BLOWS PER FOOT	DRY DENSITY (PCF)	MOIST. CONT. (%)	DESCRIPTION
0						Clayey SILT (MH) – Brown, moist, medium stiff, with coralline sand and gravel.
			10/No Penetration			CORAL RUBBLESTONE – Tan, moist, dense. (Silty sand with coralline gravel)
			40/3"	No Recovery		
			10/No penetration			
5			50/5"	97	8	
10			49	101	18	
15			50/6"	106	12	
20			37	116	11	
25			24	87	9	Medium dense at 24 feet.
30			50	112	12	

* Elevations based on Topographic Survey Map provided by Architects Hawaii, Ltd.

Plate A4.1

HIRATA & ASSOCIATES, INC.

BORING LOG

W.O. 05-4124

BORING NO. B1 (continued) DRIVING WT. 140 lb. START DATE 7/06/05
SURFACE ELEV. 64.2± DROP 30 in. END DATE 7/07/05

DEPTH	GRAPH	SAMPLE	BLOWS PER FOOT	DRY DENSITY (PCF)	MOIST. CONT. (%)	DESCRIPTION
30						
35			50	105	4	
40			20/6" 10/No Penetration	105	9	
						End boring at 40 feet.
45						Neither groundwater nor seepage water encountered.
50						
55						
60						

Plate A4.2

HIRATA & ASSOCIATES, INC.

BORING LOG

W.O. 05-4124

BORING NO. B2 DRIVING WT. 140 lb. START DATE 7/05/05
SURFACE ELEV. 61± DROP 30 in. END DATE 7/05/05

DEPTH	GRAPH	SAMPLE	BLOWS PER FOOT	DRY DENSITY (PCF)	MOIST. CONT. (%)	DESCRIPTION
0						Clayey SILT (ML) – Brown, moist, medium stiff, with coralline sand and gravel.
			10/No penetration			CORAL RUBBLESTONE – Tan, moist, dense. (Silty sand with coralline gravel)
5			10/No penetration			
10			20	88	9	Medium dense at 9 feet.
15			46	94	13	
20			28	90	8	Medium dense at 19 feet.
25			49	110	13	
30			62	96	25	

Plate A4.3

HIRATA & ASSOCIATES, INC.

BORING LOG

W.O. 05-4124

BORING NO. B2 (continued) DRIVING WT. 140 lb. START DATE 7/05/05
SURFACE ELEV. 61± DROP 30 in. END DATE 7/05/05

DEPTH	GRAPH	SAMPLE	BLOWS PER FOOT	DRY DENSITY (PCF)	MOIST. CONT. (%)	DESCRIPTION
30						
		☐	50/5"	110	12	Grayish brown silty clay with coralline gravel at 34 feet.
35						
		☐	57/6"	104	3	
40						End boring at 39.5 feet.
45						Neither groundwater nor seepage water encountered.
50						
55						
60						

Plate A4.4

HIRATA & ASSOCIATES, INC.

BORING LOG

W.O. 05-4124

BORING NO. B3 DRIVING WT. 140 lb. START DATE 7/07/05
SURFACE ELEV. 68.5± DROP 30 in. END DATE 7/07/05

DEPTH	GRAPH	SAMPLE	BLOWS PER FOOT	DRY DENSITY (PCF)	MOIST. CONT. (%)	DESCRIPTION
0						CORAL RUBBLESTONE – Tan, moist, dense. (Silty sand with coralline gravel)
			31	91	15	
5			33	96	14	
			53/9" 10/No Penetration	108	14	
10						
			32	99	9	
15						
			46	102	9	
20						
25			26	93	18	Silty CLAY (CH) – Grayish brown, moist, medium stiff, with coralline gravel.
			72	94	25	Stiff at 28 feet.
30						

Plate A4.5

HIRATA & ASSOCIATES, INC.

BORING LOG

W.O. 05-4124

BORING NO. B3 (continued) DRIVING WT. 140 lb. START DATE 7/07/05
SURFACE ELEV. 68.5± DROP 30 in. END DATE 7/07/05

DEPTH	GRAPH	SAMPLE	BLOWS PER FOOT	DRY DENSITY (PCF)	MOIST. CONT. (%)	DESCRIPTION
30						CORAL RUBBLESTONE – Tan, moist, dense. (Silty sand with coralline gravel)
			60	104	5	
35						
			10/No Penetration			
						End boring at 38 feet.
40						
45						Neither groundwater nor seepage water encountered.
50						
55						
60						

Plate A4.6

HIRATA & ASSOCIATES, INC.

BORING LOG

W.O. 05-4124

BORING NO. B4 DRIVING WT. 140 lb. START DATE 7/06/05
SURFACE ELEV. 65.1± DROP 30 in. END DATE 7/06/05

DEPTH	GRAPH	SAMPLE	BLOWS PER FOOT	DRY DENSITY (PCF)	MOIST. CONT. (%)	DESCRIPTION
0						Clayey SILT (ML) – Grayish brown, moist, medium stiff.
			50/6"	No Recovery		CORAL RUBBLESTONE – Tan, moist, dense. (Silty sand with coralline gravel)
5			87/11"	97	15	
10			38	104	13	
15			32	87	9	
20			27	97	7	Medium dense from 18 to 25 feet.
25			24	100	8	
30			45	83	41	

Plate A4.7

HIRATA & ASSOCIATES, INC.

BORING LOG

W.O. 05-4124

BORING NO. B4 (continued) DRIVING WT. 140 lb. START DATE 7/06/05
SURFACE ELEV. 65.1± DROP 30 in. END DATE 7/06/05

DEPTH	GRAPH	SAMPLE	BLOWS PER FOOT	DRY DENSITY (PCF)	MOIST. CONT. (%)	DESCRIPTION
30						
			12	92	6	Medium dense at 33 feet.
35						
			15/No Penetration			
						End boring at 38 feet.
40						
45						Neither groundwater nor seepage water encountered.
50						
55						
60						

Plate A4.8

HIRATA & ASSOCIATES, INC.

BORING LOG

W.O. 05-4124

BORING NO. B5 DRIVING WT. 140 lb. START DATE 7/07/05
SURFACE ELEV. 62.6± DROP 30 in. END DATE 7/07/05

DEPTH	GRAPH	SAMPLE	BLOWS PER FOOT	DRY DENSITY (PCF)	MOIST. CONT. (%)	DESCRIPTION
0						CORAL RUBBLESTONE – Tan, moist, medium dense. (Silty sand with coralline gravel)
			13	67	16	
			9	81	9	Loose at 3 feet.
5			30	102	2	
10			15	96	4	
15			54	109	8	Dense from 14 feet.
20			33	63	61	Silty CLAY (CH) – Grayish brown, moist, stiff, with coralline gravel.
25			22	70	42	Medium stiff at 24 feet.
						CORAL RUBBLESTONE – Tan, moist, dense. (Silty sand with coralline gravel)
30			50/6"	99	19	

Plate A4.9

HIRATA & ASSOCIATES, INC.

BORING LOG

W.O. 05-4124

BORING NO. B5 (continued) DRIVING WT. 140 lb. START DATE 7/07/05
SURFACE ELEV. 62.6± DROP 30 in. END DATE 7/07/05

DEPTH	GRAPH	SAMPLE	BLOWS PER FOOT	DRY DENSITY (PCF)	MOIST. CONT. (%)	DESCRIPTION
30						
			34/6"	118	4	
35			10/No penetration			
			10/No penetration			
40						End boring at 39 feet.
45						Neither groundwater nor seepage water encountered.
50						
55						
60						

Plate A4.10

HIRATA & ASSOCIATES, INC.

BORING LOG

W.O. 05-4124

BORING NO. B6 DRIVING WT. 140 lb. START DATE 7/06/05

SURFACE ELEV. 61.9± DROP 30 in. END DATE 7/06/05

DEPTH	GRAPH	SAMPLE	BLOWS PER FOOT	DRY DENSITY (PCF)	MOIST. CONT. (%)	DESCRIPTION
0						CORAL RUBBLESTONE – Tan, moist, medium dense. (Silty sand with coralline gravel)
			27	73	15	
			17	74	31	
5			47	96	10	Dense from 5 feet.
			50/7"	99	5	
10			10/No Penetration			
			60	91	13	
15						
			13/6"	90	22	
20			13/6"			Silty CLAY (CH) – Grayish brown, moist, medium stiff, with coralline gravel.
			16	74	38	
25						
			27	63	68	
30						

Plate A4.11

HIRATA & ASSOCIATES, INC.

BORING LOG

W.O. 05-4124

BORING NO. B6 (continued) DRIVING WT. 140 lb. START DATE 7/06/05
SURFACE ELEV. 61.9± DROP 30 in. END DATE 7/06/05

DEPTH	GRAPH	SAMPLE	BLOWS PER FOOT	DRY DENSITY (PCF)	MOIST. CONT. (%)	DESCRIPTION
30			15/6"	70	41	
35			14/6"			CORAL RUBBLESTONE – Tan, moist, medium dense to dense. (Silty sand with coralline gravel)
40			30	86	7	
						End boring at 40.5 feet. Neither groundwater nor seepage water encountered.
45						
50						
55						
60						

Plate A4.12

HIRATA & ASSOCIATES, INC.

BORING LOG

W.O. 05-4124

BORING NO. B7 DRIVING WT. 140 lb. START DATE 7/08/05

SURFACE ELEV. 61.8± DROP 30 in. END DATE 7/08/05

DEPTH	GRAPH	SAMPLE	BLOWS PER FOOT	DRY DENSITY (PCF)	MOIST. CONT. (%)	DESCRIPTION
0						Clayey SILT (ML) – Grayish brown, slightly moist, medium stiff, with sand and coralline gravel.
			61/6"	No Recovery		CORAL RUBBLESTONE– Tan, moist, dense. (Silty sand with coralline gravel)
5			57	98	14	
			56			
10						
			38	94	6	
15						
			31			
20						
			36	98	16	Siltier at 23 feet.
25						
			30			Silty CLAY (CH) – Grayish brown, moist, stiff, with coralline gravel.
30						

Plate A4.13

HIRATA & ASSOCIATES, INC.

BORING LOG

W.O. 05-4124

BORING NO. B7 (continued) DRIVING WT. 140 lb. START DATE 7/08/05
SURFACE ELEV. 61.8± DROP 30 in. END DATE 7/08/05

DEPTH	GRAPH	SAMPLE	BLOWS PER FOOT	DRY DENSITY (PCF)	MOIST. CONT. (%)	DESCRIPTION
30						
						CORAL RUBBLESTONE – Tan, moist, dense. (Silty sand with coralline gravel)
			34/10"	90	7	
35			10/No penetration			
			10/No penetration			
						End boring at 38 feet.
40						
45						Neither groundwater nor seepage water encountered.
50						
55						
60						

Plate A4.14

HIRATA & ASSOCIATES, INC.

BORING LOG

W.O. 05-4124

BORING NO. B8 DRIVING WT. 140 lb. START DATE 7/08/05
SURFACE ELEV. 61.1± DROP 30 in. END DATE 7/08/05

DEPTH	GRAPH	SAMPLE	BLOWS PER FOOT	DRY DENSITY (PCF)	MOIST. CONT. (%)	DESCRIPTION
0						Clayey SILT (ML) – Brown, slightly moist, medium stiff, with coralline gravel.
			43			CORAL RUBBLESTONE – Tan, moist, dense. (Silty sand with coralline gravel)
5			58			
			28	88	7	Medium dense at 8 feet.
10						
			32/3" 10/No Penetration			
15						
			34	99	17	
20						
			34			Silty CLAY (CH) – Grayish brown, moist, stiff, with coralline gravel.
25						
			41	84	28	CORAL RUBBLESTONE – Tan, moist, dense. (Silty sand with coralline gravel)
30						

Plate A4.15

HIRATA & ASSOCIATES, INC.

BORING LOG

W.O. 05-4124

BORING NO. B8 (continued) DRIVING WT. 140 lb. START DATE 7/08/05
SURFACE ELEV. 61.1± DROP 30 in. END DATE 7/08/05

DEPTH	GRAPH	SAMPLE	BLOWS PER FOOT	DRY DENSITY (PCF)	MOIST. CONT. (%)	DESCRIPTION
30						
			24/6" 10/No Penetration			
35						
			25	95	5	
40						End boring at 39.5 feet.
45						Neither groundwater nor seepage water encountered.
50						
55						
60						

Plate A4.16

HIRATA & ASSOCIATES, INC.

BORING LOG

W.O. 05-4124

BORING NO. B9 DRIVING WT. 140 lb. START DATE 7/11/05

SURFACE ELEV. 59.7± DROP 30 in. END DATE 7/11/05

DEPTH	GRAPH	SAMPLE	BLOWS PER FOOT	DRY DENSITY (PCF)	MOIST. CONT. (%)	DESCRIPTION
0						CORAL RUBBLESTONE – Tan, moist, dense. (Silty sand with coralline gravel)
			10/No Penetration			
5			26	83	10	
						Clayey SILT (MH) – Reddish brown, moist, stiff, with coralline gravel.
			29/6"	82	31	
10						CORAL RUBBLESTONE – Tan, moist, dense. (Silty sand with coralline gravel)
			10/No Penetration			
15						
			33	108	6	
20						End boring at 19.5 feet.
						Neither groundwater nor seepage water encountered.
25						
30						

Plate A4.17

HIRATA & ASSOCIATES, INC.

BORING LOG

W.O. 05-4124

BORING NO. B10 DRIVING WT. 140 lb. START DATE 7/11/05
SURFACE ELEV. 58.6± DROP 30 in. END DATE 7/11/05

DEPTH	GRAPH	SAMPLE	BLOWS PER FOOT	DRY DENSITY (PCF)	MOIST. CONT. (%)	DESCRIPTION
0						CORAL RUBBLESTONE – Tan, moist, dense. (Silty sand with coralline gravel)
			67	101	4	
			96/9"	No Recovery		
5			76	98	4	
10			51	109	5	
15			72	87	5	
20			31	100	13	
						End boring at 20.5 feet.
25						Neither groundwater nor seepage water encountered.
30						

Plate A4.18

HIRATA & ASSOCIATES, INC.

BORING LOG

W.O. 05-4124

BORING NO. B11 DRIVING WT. 140 lb. START DATE 7/05/05
SURFACE ELEV. 64.5± DROP 30 in. END DATE 7/05/05

DEPTH	GRAPH	SAMPLE	BLOWS PER FOOT	DRY DENSITY (PCF)	MOIST. CONT. (%)	DESCRIPTION
0						Clayey SILT (ML) – Brown, slightly moist, medium stiff.
			10/No Penetration			CORAL RUBBLESTONE – Tan, moist, dense. (Silty sand with coralline gravel)
			50/6"	92	13	
5			80/3"	91	13	
			10/No Penetration			
10			43	102	18	
						End boring at 10.5 feet.
15						Neither groundwater nor seepage water encountered.
20						
25						
30						

Plate A4.19

HIRATA & ASSOCIATES, INC.

BORING LOG

W.O. 05-4124

BORING NO. B12 DRIVING WT. 140 lb. START DATE 7/05/05
SURFACE ELEV. 59.8± DROP 30 in. END DATE 7/05/05

DEPTH	GRAPH	SAMPLE	BLOWS PER FOOT	DRY DENSITY (PCF)	MOIST. CONT. (%)	DESCRIPTION
0			25/2"	72	32	Clayey SILT (ML) – Brown, moist, medium stiff, with coralline gravel.
			10/No Penetration			CORAL RUBBLESTONE – Tan, moist, dense. (Silty sand with coralline gravel)
			57	102	12	
5			55/6"	96	12	Grayish brown silty clay at 5 feet.
						End boring at 6 feet.
10						Neither groundwater nor seepage water encountered.
15						
20						
25						
30						

Plate A4.20

HIRATA & ASSOCIATES, INC.

BORING LOG

W.O. 05-4124

BORING NO. B13 DRIVING WT. 140 lb. START DATE 7/05/05

SURFACE ELEV. 62.4± DROP 30 in. END DATE 7/05/05

DEPTH	GRAPH	SAMPLE	BLOWS PER FOOT	DRY DENSITY (PCF)	MOIST. CONT. (%)	DESCRIPTION
0			10/6"	94	7	Silty SAND (SM) – Tan, slightly moist, dense, with coralline gravel.
			75/5"			Silty CLAY (CH) – Grayish brown, moist, stiff, with coralline gravel.
			81/9"	72	23	
			10/No Penetration			
5			80/8"	83	21	
			10/No Penetration			End boring at 6 feet.
10						Neither groundwater nor seepage water encountered.
15						
20						
25						
30						

Plate A4.21

HIRATA & ASSOCIATES, INC.

BORING LOG

W.O. 05-4124

BORING NO. B14 DRIVING WT. 140 lb. START DATE 7/11/05
SURFACE ELEV. 63.5± DROP 30 in. END DATE 7/11/05

DEPTH	GRAPH	SAMPLE	BLOWS PER FOOT	DRY DENSITY (PCF)	MOIST. CONT. (%)	DESCRIPTION
0						Clayey SILT (ML) – Brown, moist, medium stiff, with coralline gravel.
			76	73	16	CORAL RUBBLESTONE – Tan, moist, dense. (Silty sand with coralline gravel)
			16	89	16	Medium dense at 3 feet.
5			32	93	6	
10			59/11" 10/No Penetration	100	5	
15			30	104	8	
20			37	107	16	
						End boring at 20.5 feet.
25						Neither groundwater nor seepage water encountered.
30						

Plate A4.22

HIRATA & ASSOCIATES, INC.

BORING LOG

W.O. 05-4124

BORING NO. B15 DRIVING WT. 140 lb. START DATE 7/05/05
SURFACE ELEV. 57.9± DROP 30 in. END DATE 7/05/05

DEPTH	GRAPH	SAMPLE	BLOWS PER FOOT	DRY DENSITY (PCF)	MOIST. CONT. (%)	DESCRIPTION
0			50/6" 10/No Penetration	80	20	Clayey SILT (ML) – Reddish brown, moist, medium stiff, with coralline gravel.
			95	109	7	CORAL RUBBLESTONE – Tan, moist, dense. (Silty sand with coralline gravel)
5			60/6" 10/No Penetration	95	8	
10			79	108	15	
						End boring at 10.5 feet.
15						Neither groundwater nor seepage water encountered.
20						
25						
30						

Plate A4.23

HIRATA & ASSOCIATES, INC.

BORING LOG

W.O. 05-4124

BORING NO. B16 DRIVING WT. 140 lb. START DATE 7/11/05
SURFACE ELEV. 58.8± DROP 30 in. END DATE 7/11/05

DEPTH	GRAPH	SAMPLE	BLOWS PER FOOT	DRY DENSITY (PCF)	MOIST. CONT. (%)	DESCRIPTION
0						Clayey SILT (ML) – Brown, slighlty moist, medium stiff.
			21	87	12	CORAL RUBBLESTONE– Tan, moist, medium dense. (Silty sand with coralline gravel)
5			49	98	18	Dense from 4 feet.
			50/3"	No Recovery		
10			10/No Penetration			
			58	103	3	
15						
			10/No Penetration			
						End boring at 18 feet.
20						
25						Neither groundwater nor seepage water encountered.
30						

Plate A4.24

APPENDIX B

LABORATORY TESTING

DESCRIPTION OF LABORATORY TESTING

CLASSIFICATION

Field classification was verified in the laboratory in accordance with the Unified Soil Classification System. Laboratory classification was determined by visual examination, Atterberg Limit tests performed in general accordance with ASTM D 4318, and sieve analysis testing performed in general accordance with ASTM D 422. Results of Atterberg Limit tests are plotted on Plate A3.2, while gradation test results are presented on Plates B6.1 and B6.2 The final classifications are shown at the appropriate locations on the Boring Logs, Plates A4.1 through A4.24.

MOISTURE-DENSITY

Representative samples were tested for field moisture content and dry unit weight. The dry unit weight was determined in pounds per cubic foot while the moisture content was determined as a percentage of dry weight. Samples were obtained using a 3-inch O.D. split tube sampler. Test results are shown at the appropriate depths on the Boring Logs, Plates A4.1 through A4.24.

CONSOLIDATION

Representative samples were tested for their consolidation characteristics. Test samples were 2.42 inches in diameter and 1 inch high. Porous stones were placed in contact with the top and bottom of test samples to permit addition and release of pore fluid. Loads were then applied in several increments in a geometric progression, and the resulting deformations recorded at selected time intervals. Test results are plotted on the Consolidation Test Reports, Plates B2.1 through B2.5.

SHEAR TESTS

Shear tests were performed in the Direct Shear Machine which is of the strain control type. The rate of deformation was approximately 0.02 inches per minute. Each sample was sheared under varying confining loads in order to determine the

Coulomb shear strength parameters, cohesion and angle of internal friction. Eighty percent of the maximum value was taken to determine the shear strength parameters. Test results are presented on Plates B3.1 through B3.7.

SWELL TESTS

Swell tests were performed on representative soil samples by first placing a 90 psf surcharge load on one inch high specimens. The samples were inundated with water, and total expansion was recorded after a period of at least 24 hours. Test results were recorded as a percentage of original height. Test results are summarized in the following table:

Sample	Sample Type	Recorded Expansion	Moisture Content Prior to Test
B3@28'	Representative	2.5%	25%
B5@19'	Representative	0.1%	61%

PROCTOR TEST

Modified Proctor tests were performed on bulk samples, obtained from borings B7 and B12 between depths of about 0 to 2 and 1.5 feet, in general accordance with ASTM D 1557. The test is used to determine the optimum moisture content at which the soil compacts to 100 percent density. Results are shown on Plates B4.1 and B4.2.

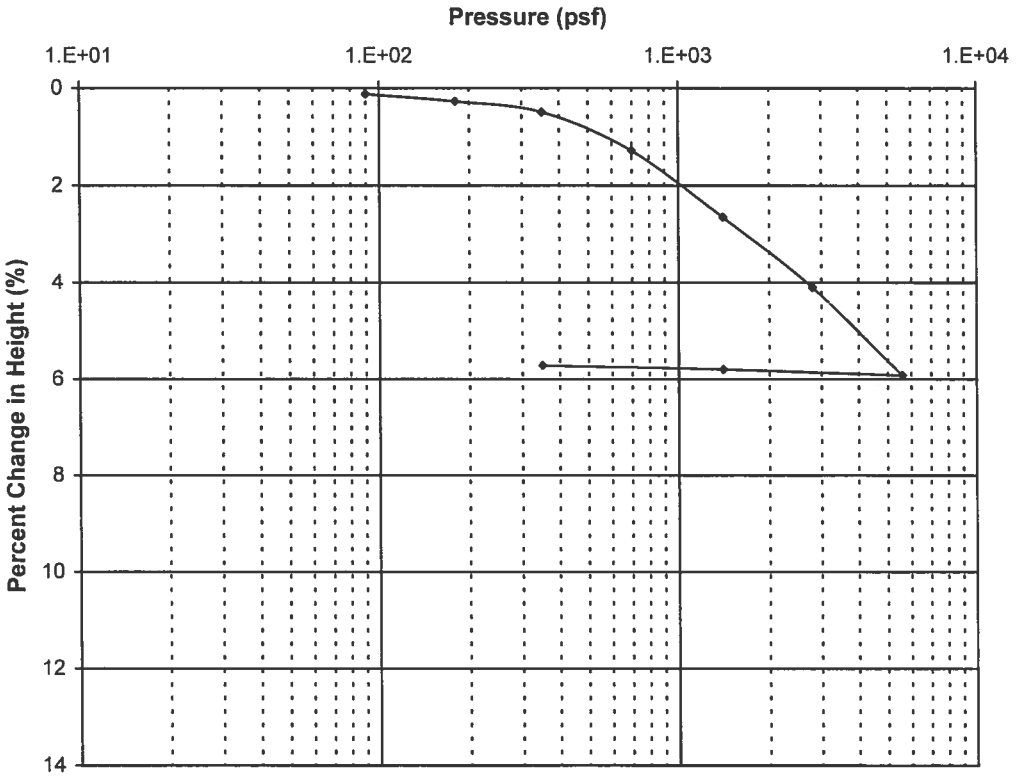
CALIFORNIA BEARING RATIO TEST

A CBR test was performed on a bulk sample, obtained from boring B7 between depths of about 0 to 2 feet, in general accordance with ASTM D 1883. The test is used to evaluate the relative quality of subgrade soils to be used in the design of flexible pavements. Results are shown on Plate B5.1.

SIEVE ANALYSIS

Sieve analysis tests were conducted on representative samples in general accordance with ASTM D 422. The test is used to classify granular soils. Test results are presented on Plates B6.1 and B6.2.

Consolidation Test Results



Sample Description

Boring No.: B2 **Depth (ft):** 19
Soil Description: Tan coral rubblestone

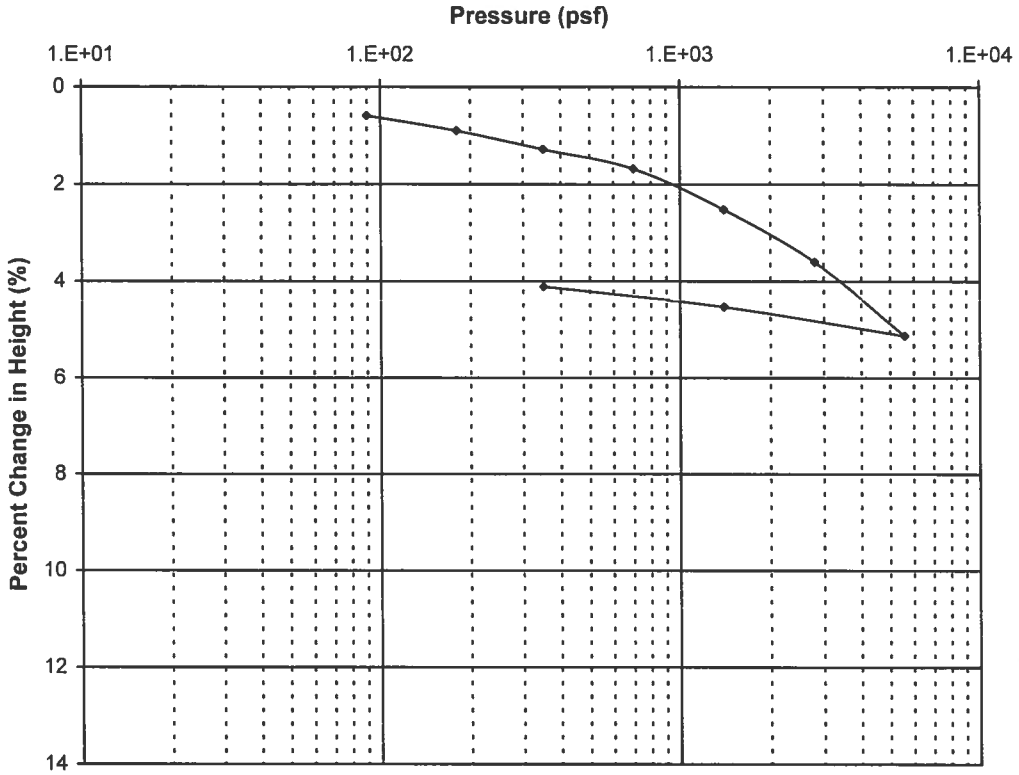
	Moisture Content (%)	Dry Density (pcf)
Initial	8.0	90.1
Final	1.4	95.6

Remark: 8/27/05

W.O. 05-4124	Kapolei Judiciary Complex
Hirata & Associates, Inc.	**CONSOLIDATION TEST**

Plate B2.1

Consolidation Test Results



Sample Description

Boring No.: B3 **Depth (ft):** 23

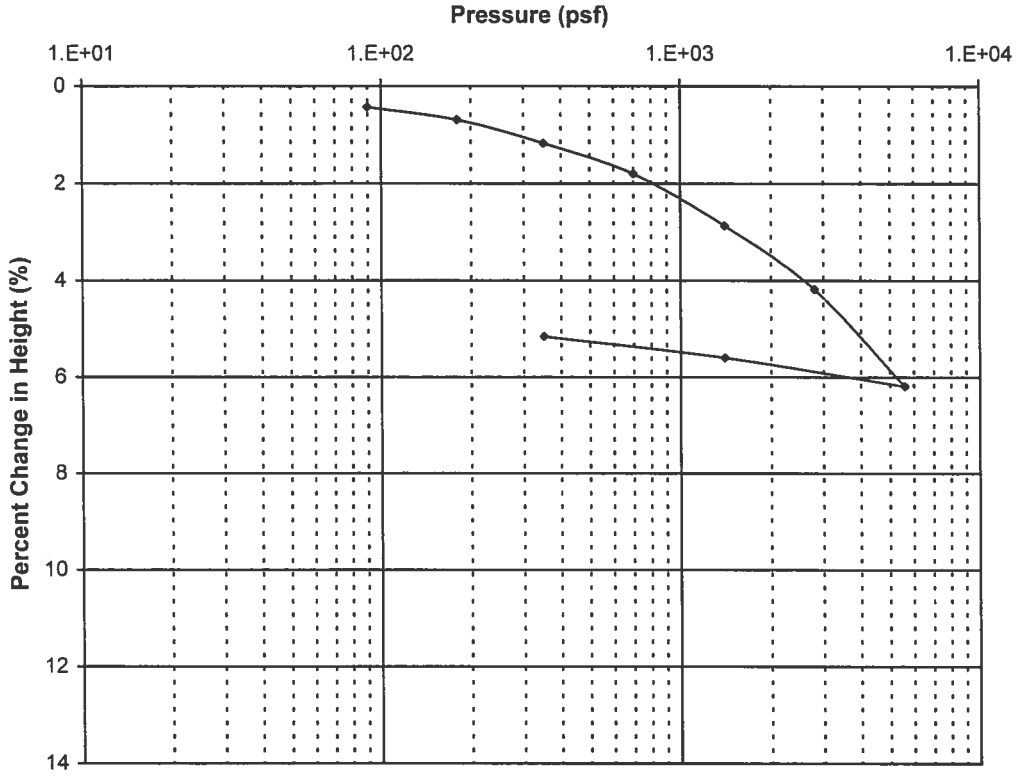
Soil Description: Grayish brown silty clay

	Moisture Content (%)	Dry Density (pcf)
Initial	17.9	93.3
Final	12.4	97.3

Remark: 12/16/05

W.O. 05-4124	Kapolei Judiciary Complex
Hirata & Associates, Inc.	**CONSOLIDATION TEST** Plate B2.2

Consolidation Test Results



Sample Description

Boring No.: B6 **Depth (ft):** 24

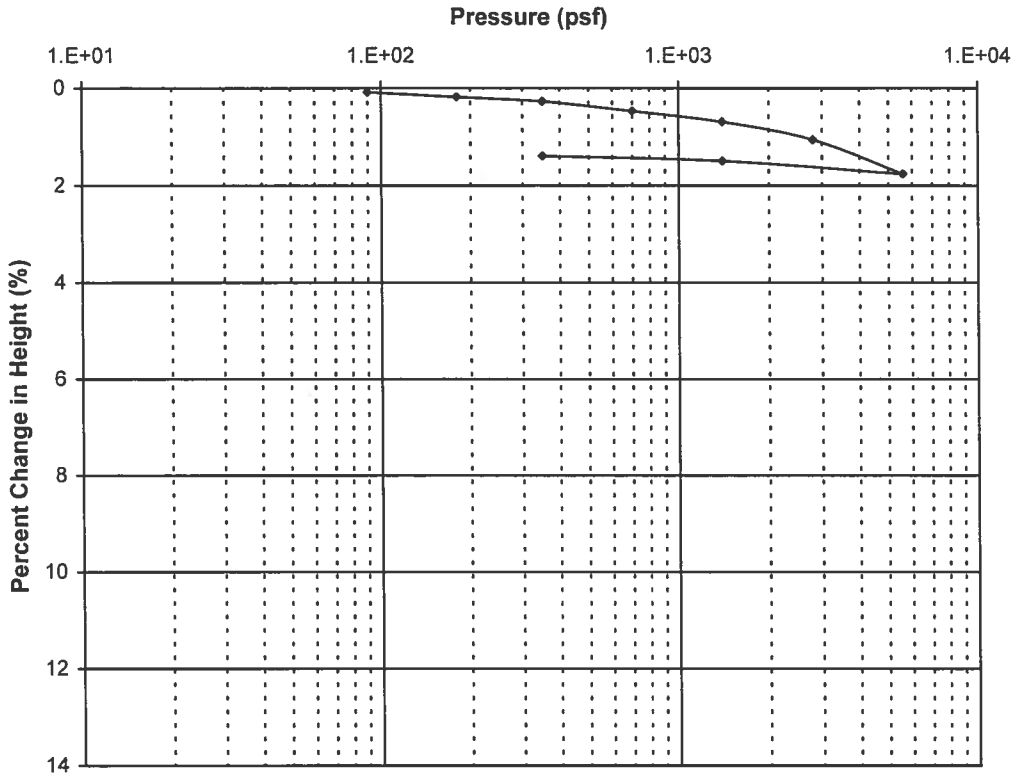
Soil Description: Grayish brown silty clay

	Moisture Content (%)	Dry Density (pcf)
Initial	38.4	74.0
Final	30.6	78.1

Remark: 12/16/05

W.O. 05-4124	Kapolei Judiciary Complex
Hirata & Associates, Inc.	**CONSOLIDATION TEST** Plate B2.3

Consolidation Test Results



Sample Description

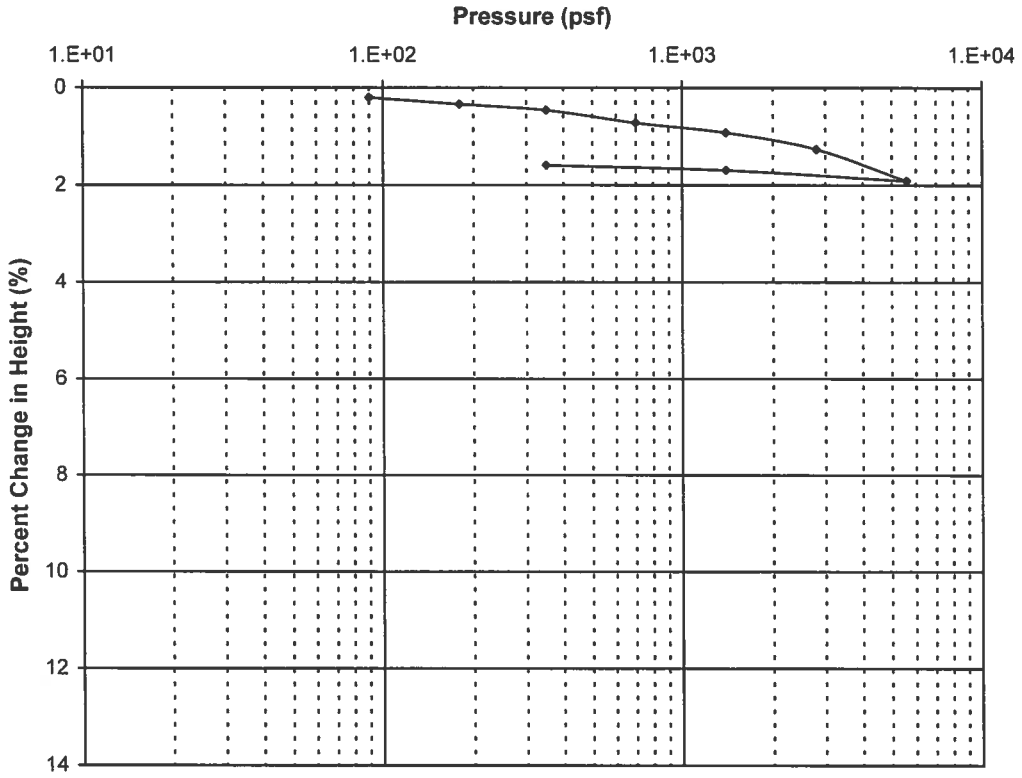
Boring No.: B8 **Depth (ft):** 18
Soil Description: Tan coral rubblestone

	Moisture Content (%)	Dry Density (pcf)
Initial	17.1	99.0
Final	5.0	100.4

Remark: 12/16/05

W.O. 05-4124	Kapolei Judiciary Complex
Hirata & Associates, Inc.	**CONSOLIDATION TEST** Plate B2.4

Consolidation Test Results



Sample Description

Boring No.: B14 **Depth (ft):** 14
Soil Description: Tan coral rubblestone

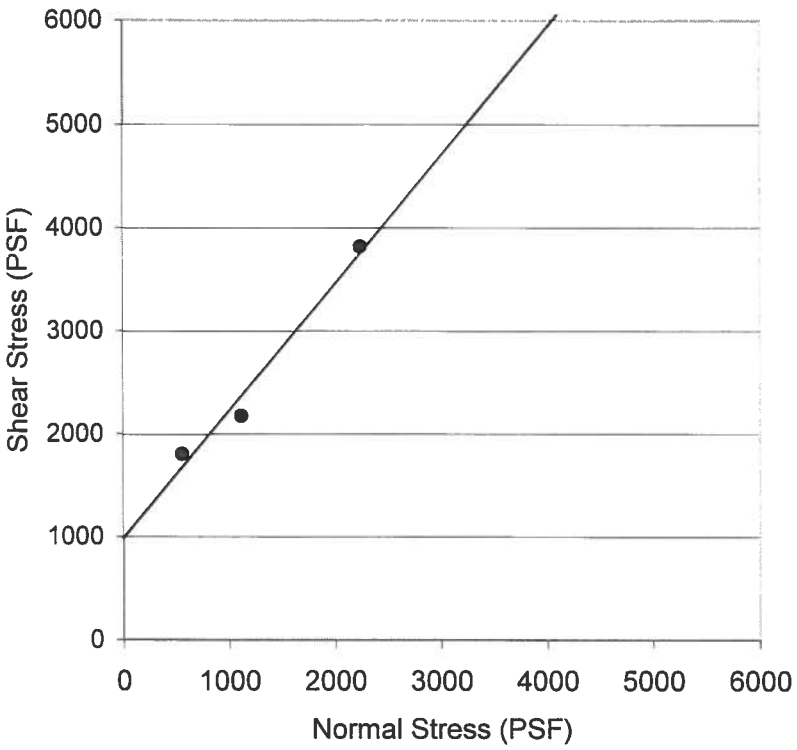
	Moisture Content (%)	Dry Density (pcf)
Initial	8.3	103.9
Final	7.2	105.6

Remark: 12/16/05

W.O. 05-4124	Kapolei Judiciary Complex
Hirata & Associates, Inc.	**CONSOLIDATION TEST**

Plate B2.5

Direct Shear Test Results



Sample Description

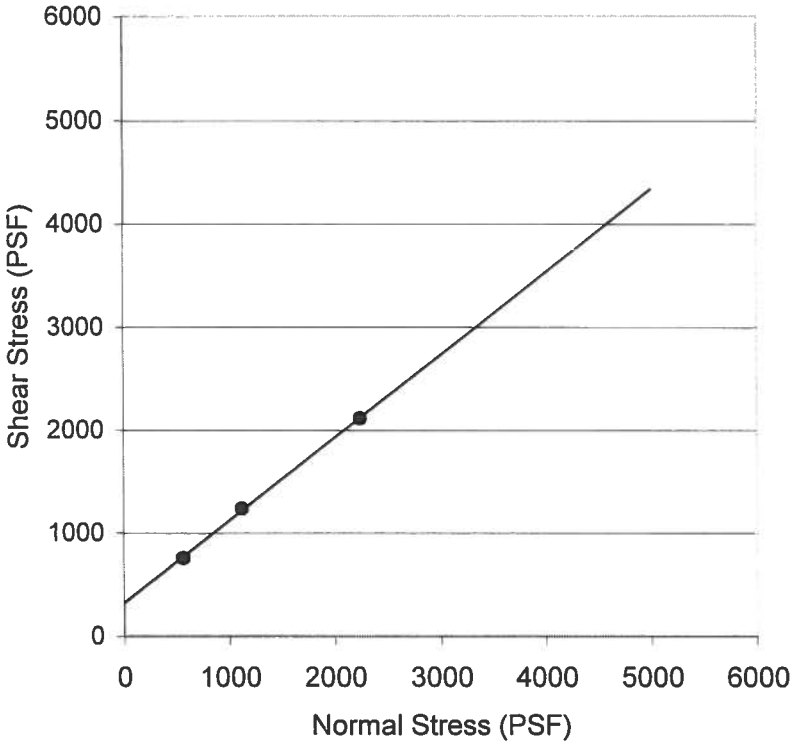
Boring No.:	B3	**Depth (ft):**	8	
Soil Description:		Tan coral rubblestone		
Strength Intercept (C):		986.6	PSF	(Peak Strength)
Friction Angle (ϕ):		51.0	DEG	(Peak Strength)

Remark: 12/6/05

W.O. 05-4124	**Kapolei Judiciary Complex**
Hirata & Associates, Inc.	**DIRECT SHEAR TEST**

Plate B3.1

Direct Shear Test Results



Sample Description

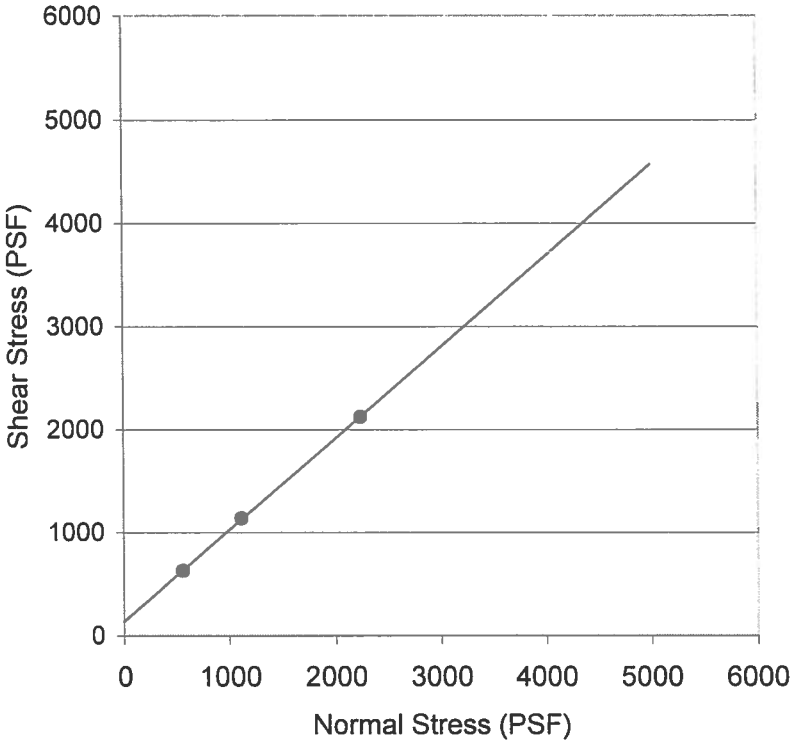
Boring No.:	B5	**Depth (ft):**	5	
Soil Description:		Tan coral rubblestone		
Strength Intercept (C):		320.3	PSF	(Peak Strength)
Friction Angle (ϕ):		38.8	DEG	(Peak Strength)

Remark: 12/12/05

W.O. 05-4124	**Kapolei Judiciary Complex**
Hirata & Associates, Inc.	**DIRECT SHEAR TEST**

Plate B3.2

Direct Shear Test Results



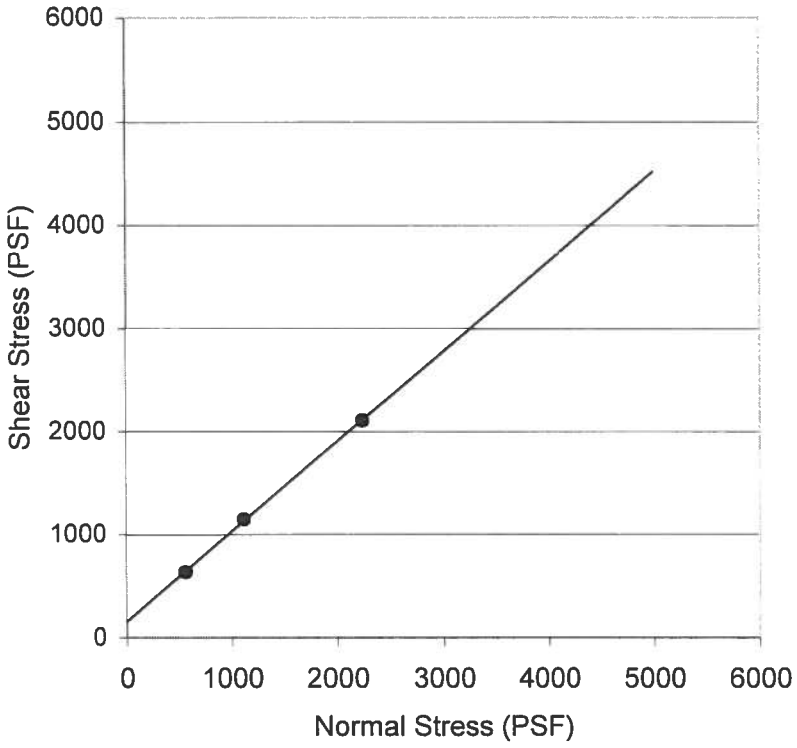
Sample Description

Boring No.:	B8	**Depth (ft):** 8	
Soil Description:	Tan coral rubblestone		
Strength Intercept (C):	137.6 PSF		(Peak Strength)
Friction Angle (ϕ):	41.6 DEG		(Peak Strength)

Remark: 12/14/05

W.O. 05-4124	**Kapolei Judiciary Complex**
Hirata & Associates, Inc.	**DIRECT SHEAR TEST** Plate B3.3

Direct Shear Test Results



Sample Description

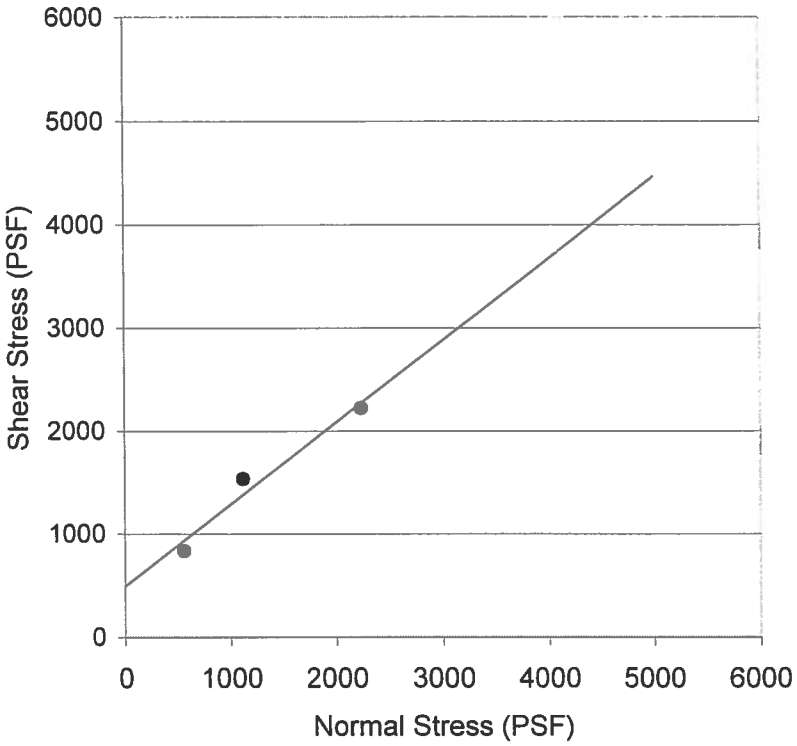
Boring No.:	B9	**Depth (ft):** 4	
Soil Description:	Tan coral rubblestone		
Strength Intercept (C):	156.6 PSF		(Peak Strength)
Friction Angle (ϕ):	41.1 DEG		(Peak Strength)

Remark: 12/13/05

W.O. 05-4124	**Kapolei Judiciary Complex**
Hirata & Associates, Inc.	**DIRECT SHEAR TEST**

Plate B3.4

Direct Shear Test Results



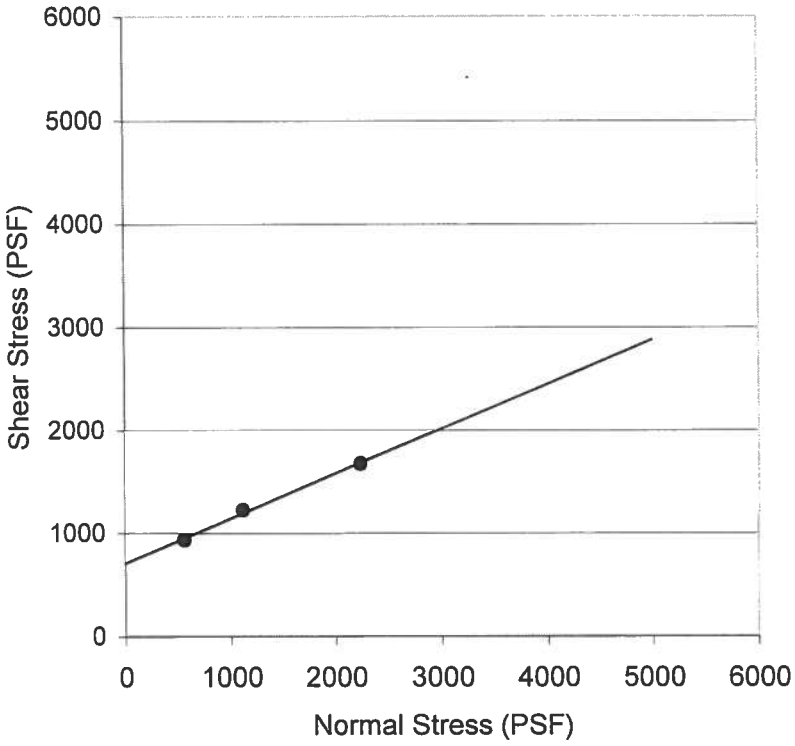
Sample Description

Boring No.: B12 **Depth (ft):** 5
Soil Description: Tan coral rubblestone
Strength Intercept (C): 491.7 PSF (Peak Strength)
Friction Angle (ϕ): 38.5 DEG (Peak Strength)

Remark: 12/9/05

W.O. 05-4124	Kapolei Judiciary Complex
Hirata & Associates, Inc.	**DIRECT SHEAR TEST** Plate B3.5

Direct Shear Test Results



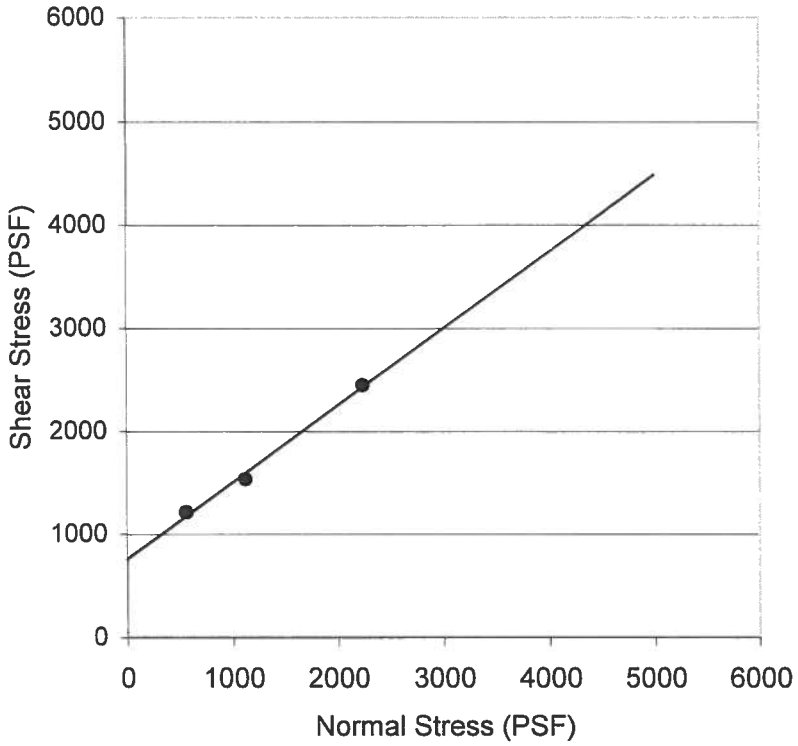
Sample Description

Boring No.:	B14	**Depth (ft):**	3	
Soil Description:		Tan coral rubblestone		
Strength Intercept (C):		708.7	PSF	(Peak Strength)
Friction Angle (ϕ):		23.5	DEG	(Peak Strength)

Remark: 5/19/03

W.O. 05-4124	**Kapolei Judiciary Complex**
Hirata & Associates, Inc.	**DIRECT SHEAR TEST** Plate B3.6

Direct Shear Test Results



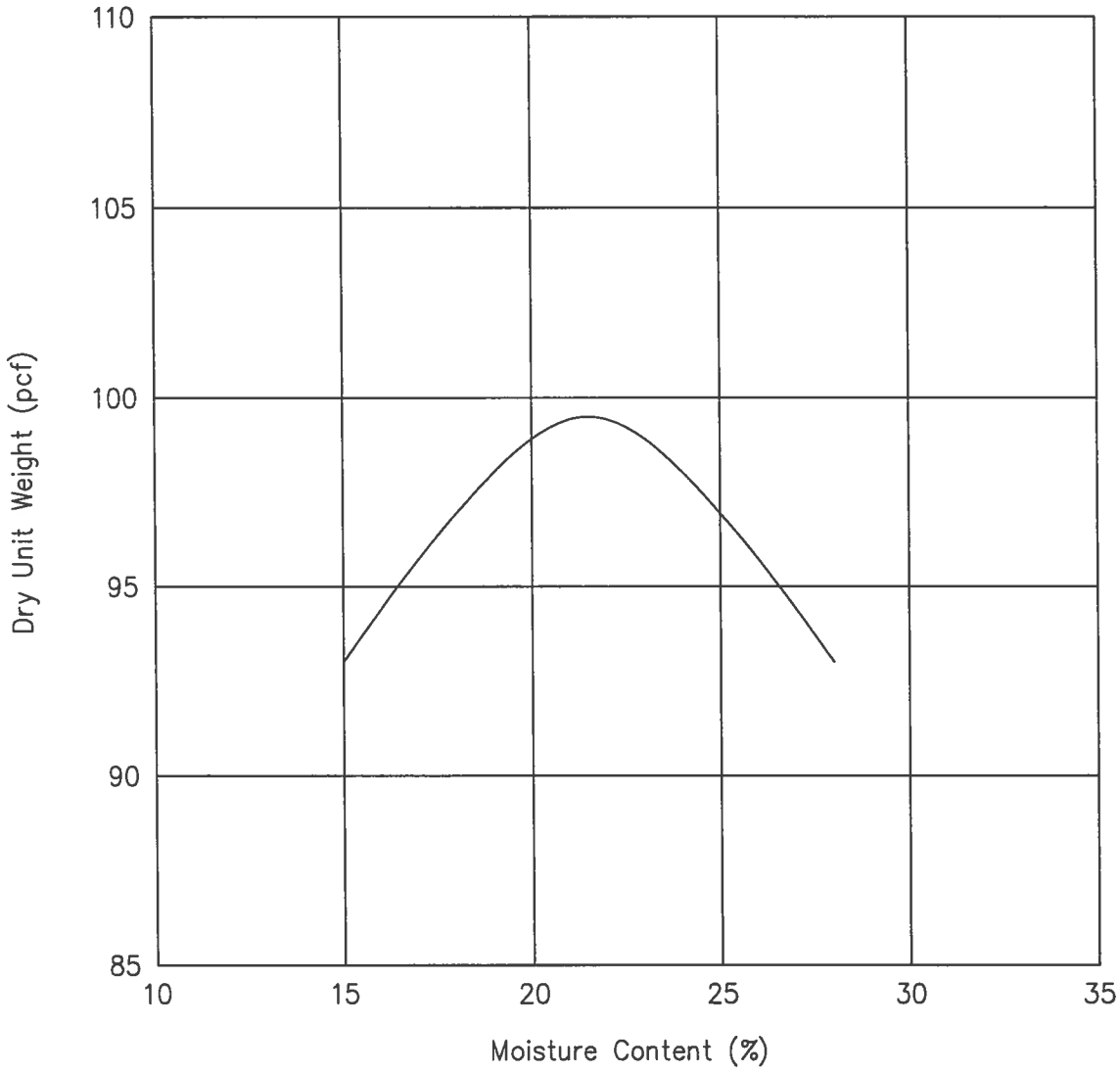
Sample Description

Boring No.:	B16	**Depth (ft):**	4	
Soil Description:		Tan coral rubblestone		
Strength Intercept (C):		758.2	PSF	(Peak Strength)
Friction Angle (ϕ):		36.7	DEG	(Peak Strength)

Remark: 12/8/05

W.O. 05-4124	**Kapolei Judiciary Complex**
Hirata & Associates, Inc.	**DIRECT SHEAR TEST**

Plate B3.7



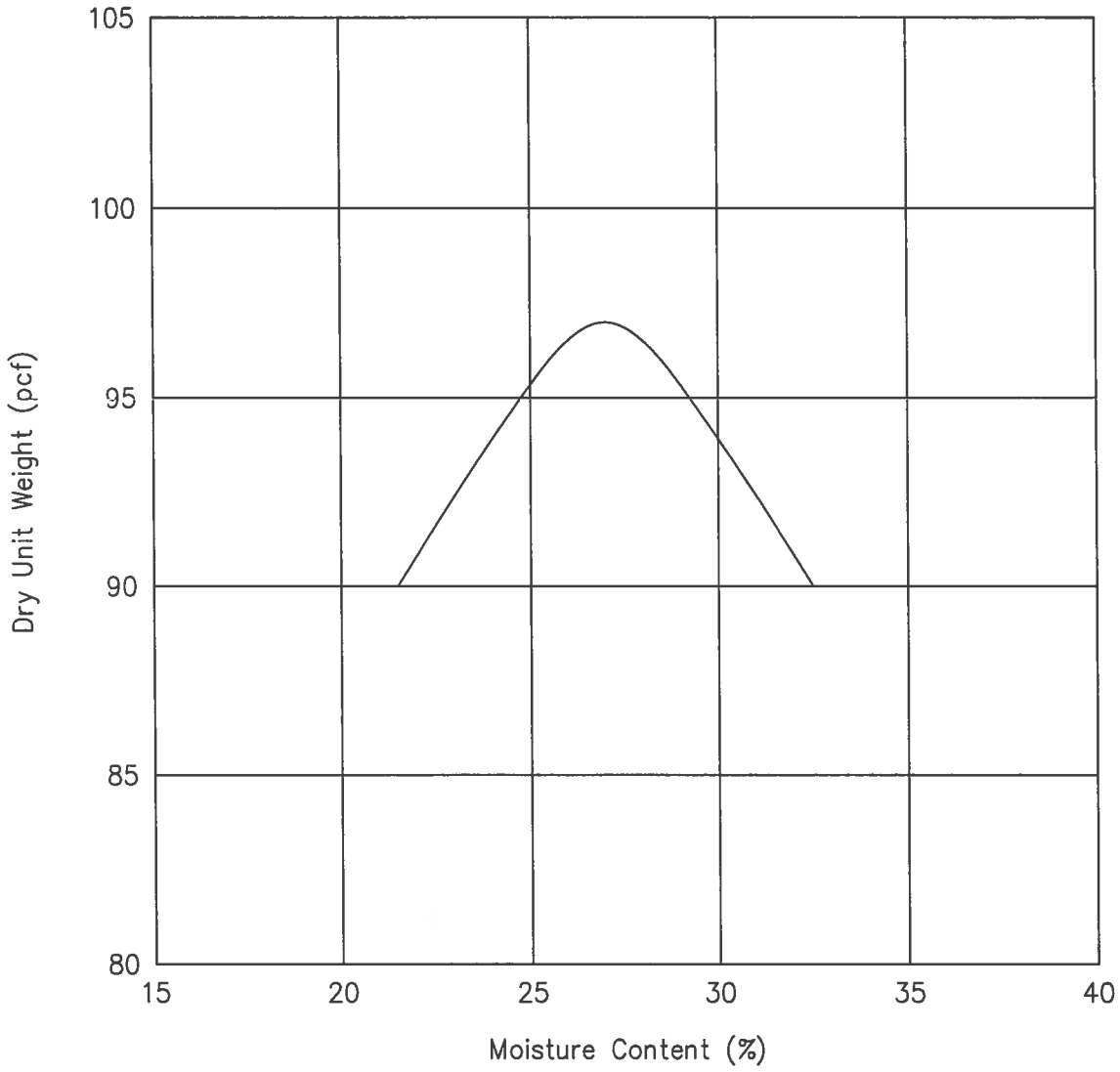
Soil Data

Location: Boring B7 from 0 to 2 feet.
Description: Grayish brown clayey silt

Test Results

Maximum Dry Density: 99.5 pcf
Optimum Moisture Content: 21.5%

W.O. 05-4124	Kapolei Judiciary Complex
Hirata & Associates, Inc.	MODIFIED PROCTOR CURVE Plate B4.1



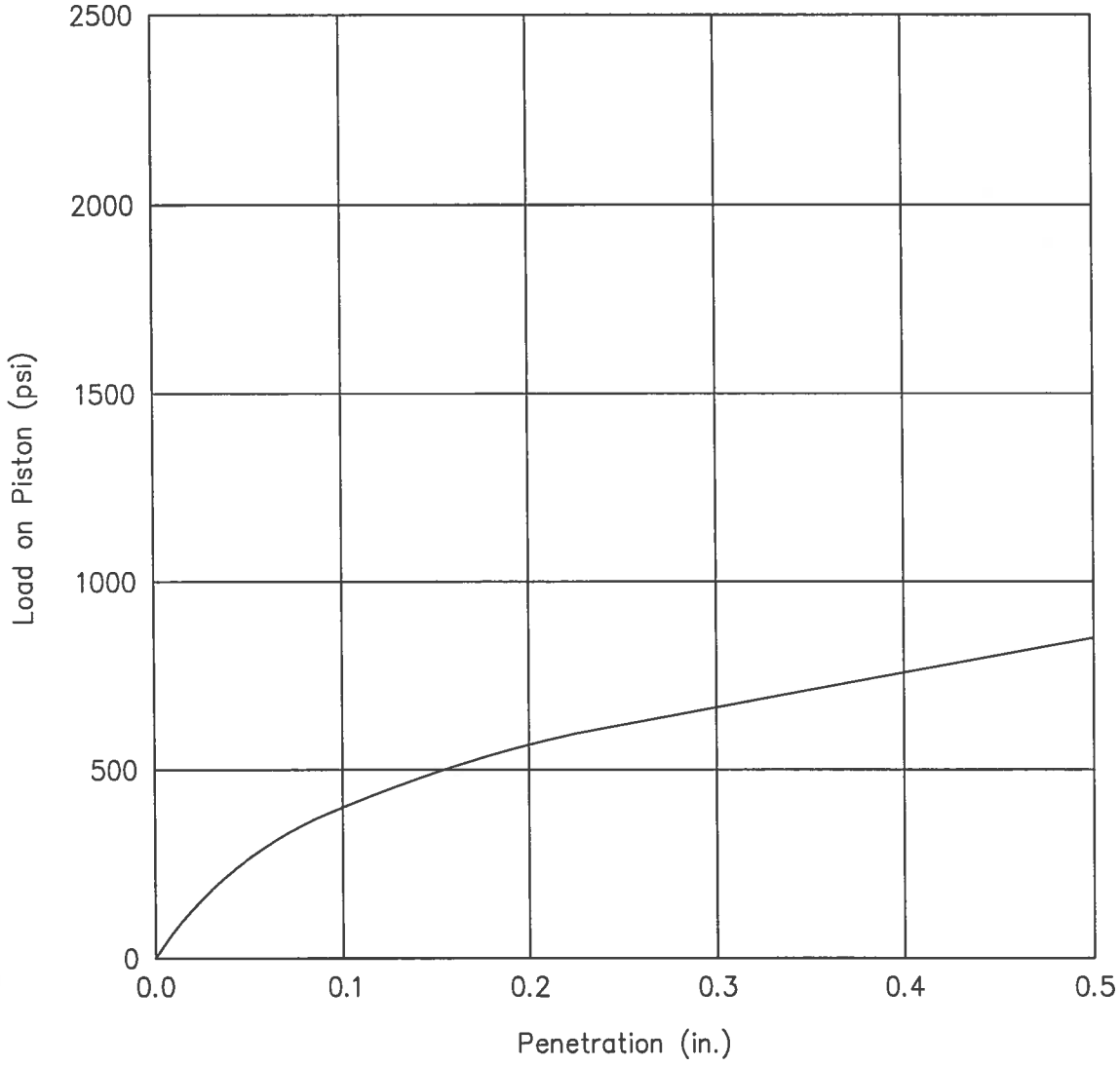
Soil Data

Location: Boring B12 from 0 to 1.5 feet.
Description: Brown clayey silt

Test Results

Maximum Dry Density: 97 pcf
Optimum Moisture Content: 27%

W.O. 05-4124	Kapolei Judiciary Complex
Hirata & Associates, Inc.	MODIFIED PROCTOR CURVE Plate B4.2



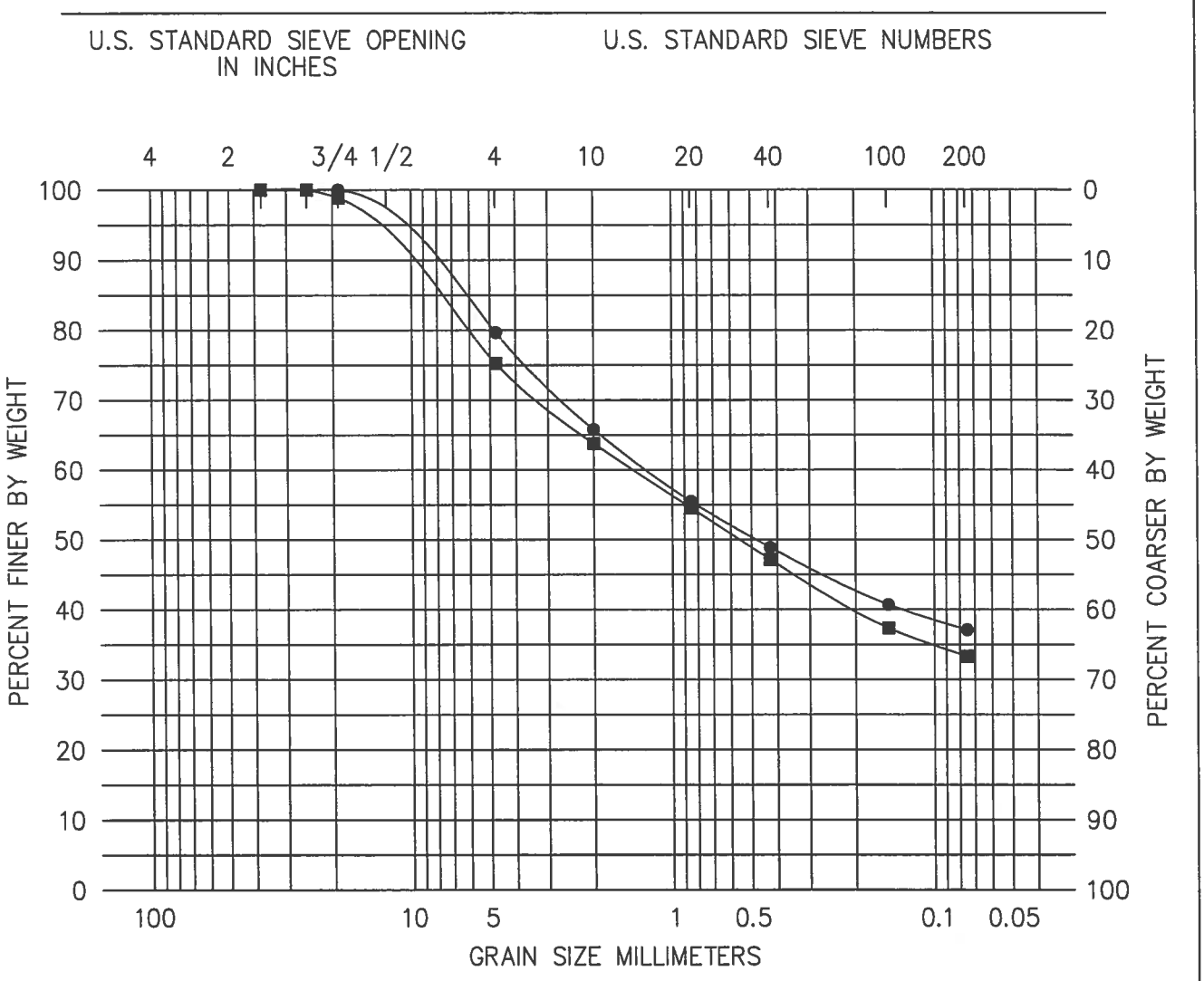
Soil Data

Location:	Boring B7 from 0 to 2 feet
Description:	Grayish brown clayey silt
Sample Dry Density:	99 pcf
Sample Moisture Content:	21%

Test Results

CBR Value:	38%
Expansion:	0.7%

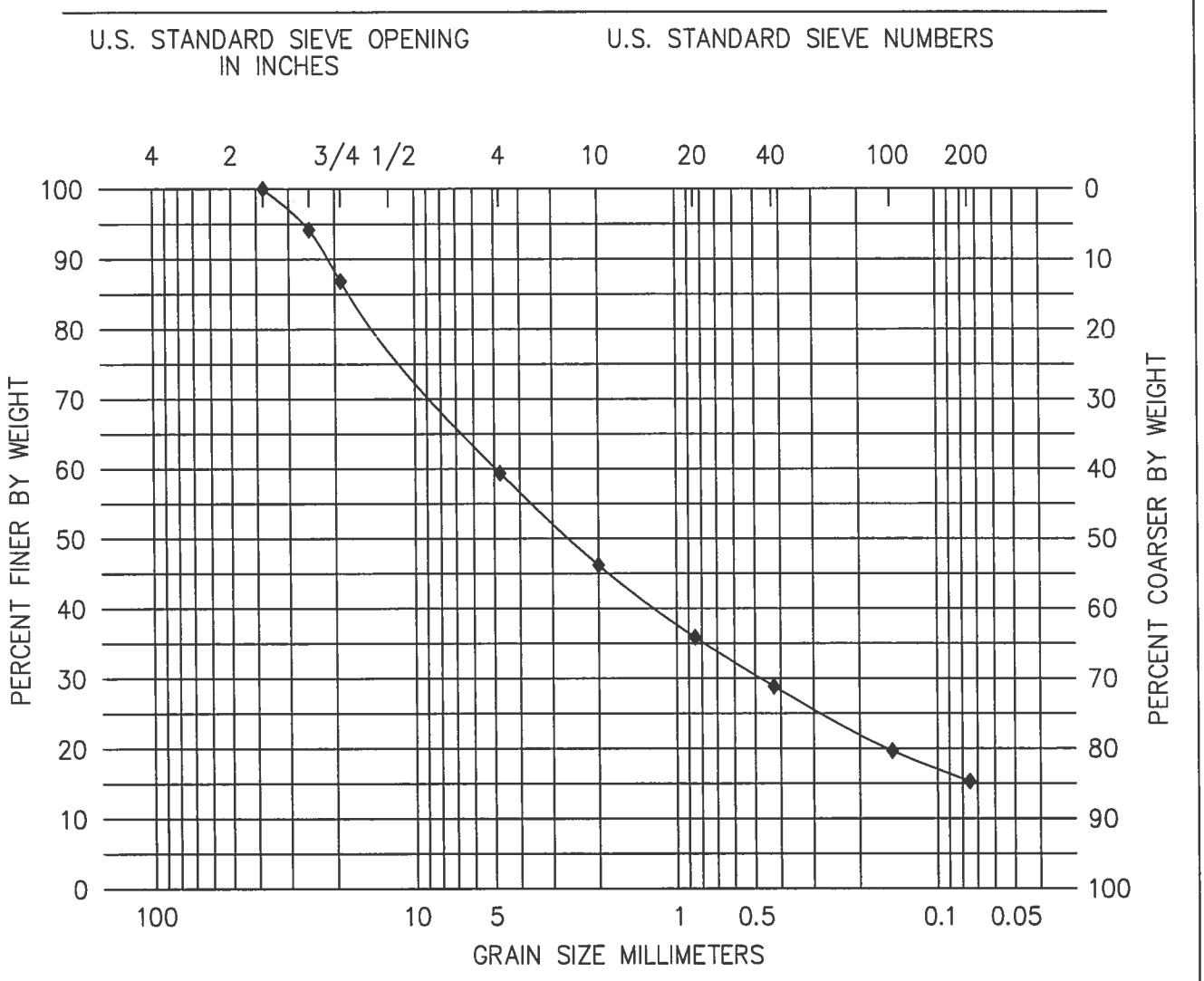
W.O. 05-4124	Kapolei Judiciary Complex
Hirata & Associates, Inc.	CBR STRESS PENETRATION CURVE Plate B5.1



COBBLES	GRAVEL		SAND			SILT or CLAY
	Coarse	Fine	Coarse	Medium	Fine	

● Sample #1	Location:	Boring B2 at 9 feet
	Description:	Tan silty sand with coralline gravel (Coral Rubblestone)
■ Sample #2	Location:	Boring B10 at 1 foot
	Description:	Tan silty sand with coralline gravel (Coral Rubblestone)

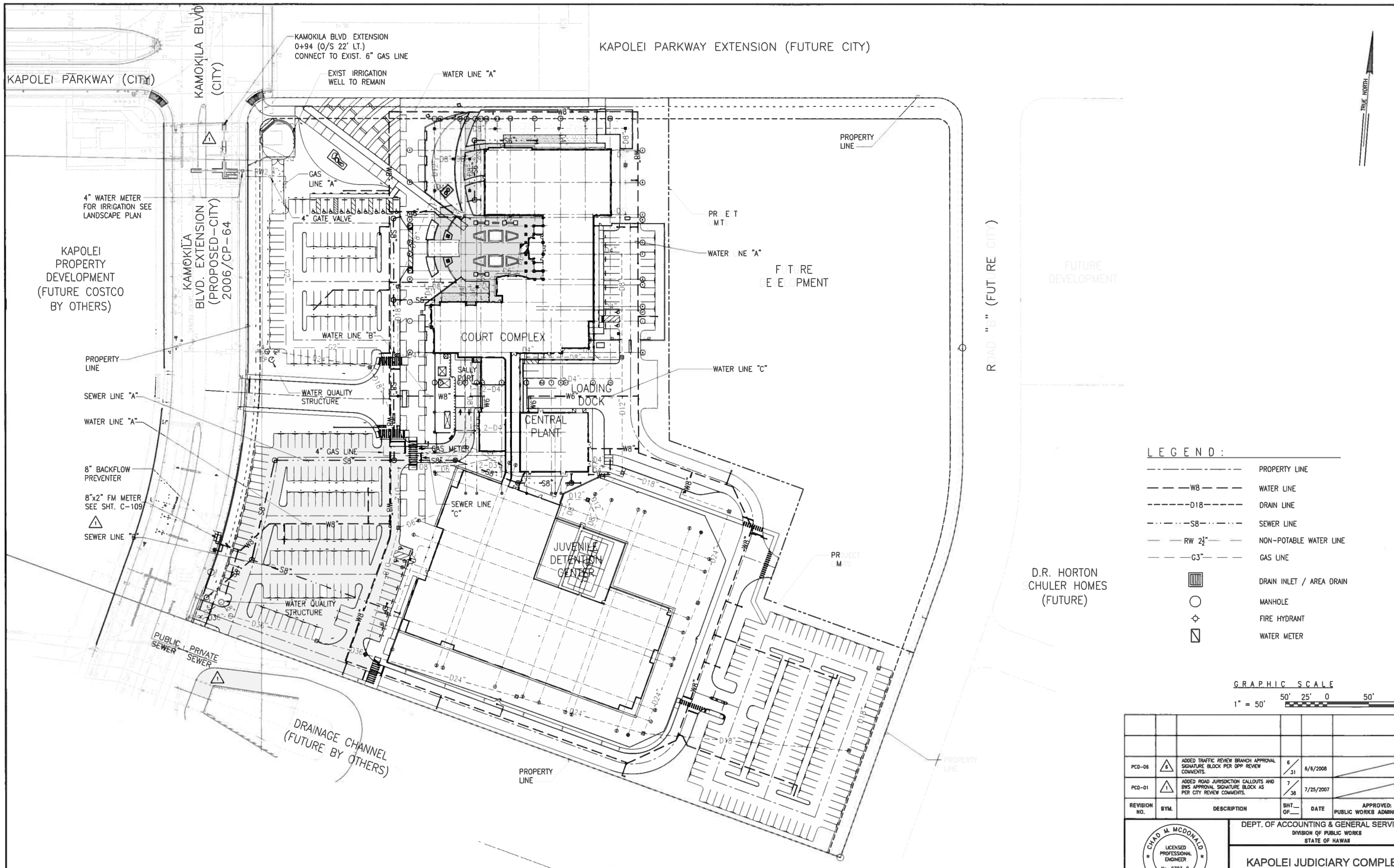
W.O. 05-4124	**Kapolei Judiciary Complex**
Hirata & Associates, Inc.	**GRADATION CURVES** Plate B6.1



♦ Sample #3	Location: Boring B11 at 3 feet.
	Description: Tan silty sand with coralline gravel (Coral Rubblestone)

W.O. 05-4124	**Kapolei Judiciary Complex**
Hirata & Associates, Inc.	**GRADATION CURVES** Plate B6.2

Kapolei Additional Drawings



GENERAL UTILITY PLAN

SCALE: 1"=50'
TMK:9-1-016:001

APPROVED:

1 _____ CHIEF, CAPITAL PROJECT DIVISION, BWS DATE

8 _____ CHIEF, TRAFFIC REVIEW BRANCH, DPP DATE

LEGEND:

- PROPERTY LINE
- W8 WATER LINE
- D18 DRAIN LINE
- S8 SEWER LINE
- RW 2½" NON-POTABLE WATER LINE
- G3" GAS LINE
- DRAIN INLET / AREA DRAIN
- MANHOLE
- FIRE HYDRANT
- WATER METER

GRAPHIC SCALE
1" = 50' 50' 25' 0 50' 100'

REVISION NO.	SYM.	DESCRIPTION	SHT. OF	DATE	APPROVED: PUBLIC WORKS ADMINISTRATOR
PCD-06	8	ADDED TRAFFIC REVIEW BRANCH APPROVAL SIGNATURE BLOCK PER DPP REVIEW COMMENTS.	6/31	6/6/2006	
PCD-01	1	ADDED ROAD JURISDICTION CALLOUTS AND BWS APPROVAL SIGNATURE BLOCK AS PER CITY REVIEW COMMENTS.	7/38	7/25/2007	

CHAD M. MCDONALD LICENSED PROFESSIONAL ENGINEER No. 9793-C HAWAII, U.S.A.

This work was prepared by me or under my supervision and construction of this project will be under my observation. (Observation of construction as defined in Chapter 16-115, Subchapter 1, Definitions of the Hawaii Administrative Rules, Professional Engineers, Architects, Surveyors, and Landscape Architects.)

signature 04/30/10 expiration date of the license

NOTE: Contractor to check and verify dimensions at job before proceeding with work.

DEPT. OF ACCOUNTING & GENERAL SERVICES
DIVISION OF PUBLIC WORKS
STATE OF HAWAII

KAPOLEI JUDICIARY COMPLEX
KAPOLEI, OAHU, HAWAII

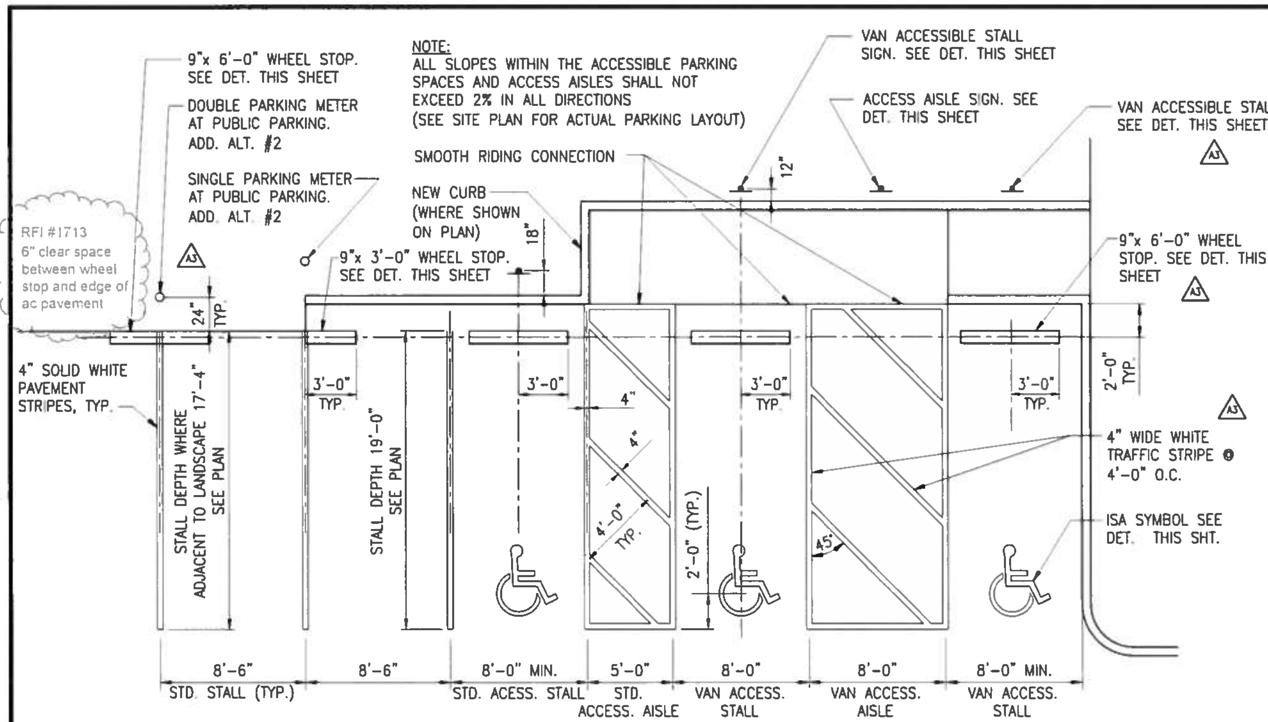
GENERAL UTILITY PLAN

MITSUNAGA & ASSOCIATES, INC.

DESIGNED BY:	CHECKED BY:	BASIS JOB NO.	DRAWING NO.
KS	CM	12-21-7043	C-106
DRAWN BY:	APPROVED BY:	DATE	SHEET
CADD	CM	NOV 2006	27 OF 1032 SHTS.
SCALE: 1" = 50'-0"			

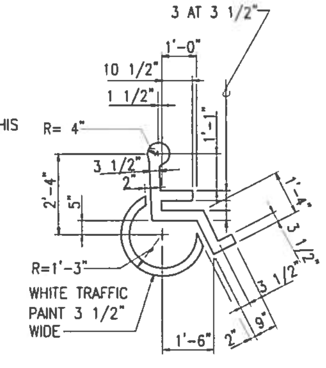
FIELD POSTED RECORD DRAWINGS Certified by Date November 26 2012 Unlimited Construction Services Inc

FILE _____ DRAW _____ FOLDER _____



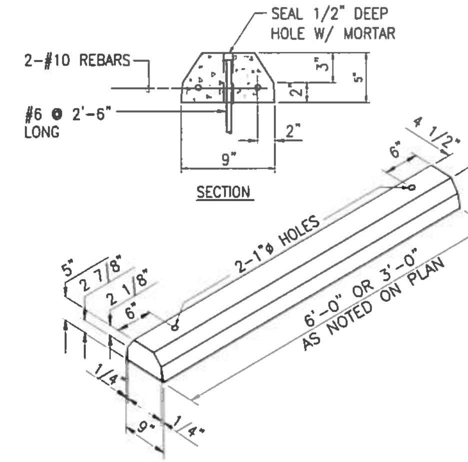
ACCESSIBLE PARKING STALL DETAIL

NOT TO SCALE



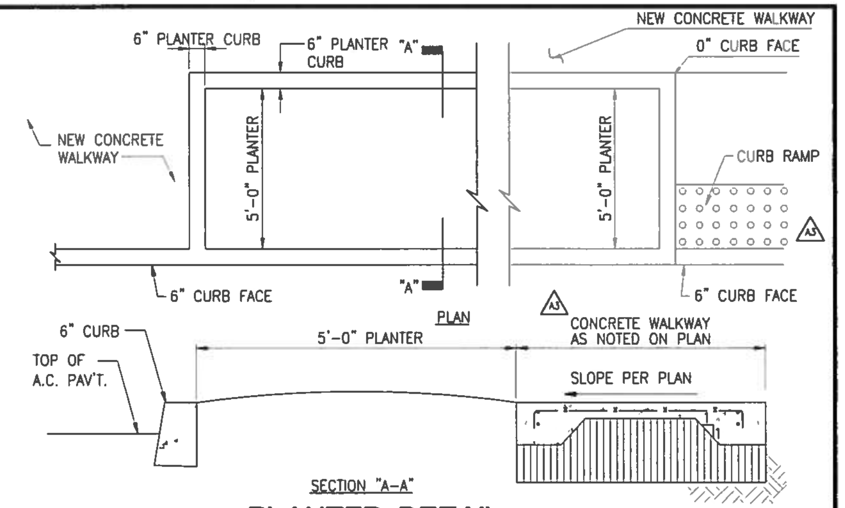
ISA SYMBOL DETAIL

NOT TO SCALE



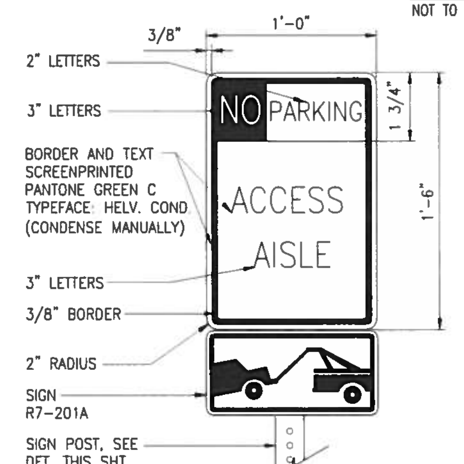
PRECAST CONCRETE WHEEL STOP

NOT TO SCALE



PLANTER DETAIL

SCALE: 3/4" = 1'-0"



NOTES:
1. SIGNS SHALL BE ALUM T6061 SHEET COVERED WITH ENGINEERING GRADE REFLECTIVE SHEETING.
2. SIGN LETTERING SHALL BE UPPERCASE LETTERS OF THE TYPE APPROVED BY FEDERAL HIGHWAY ADMINISTRATION.

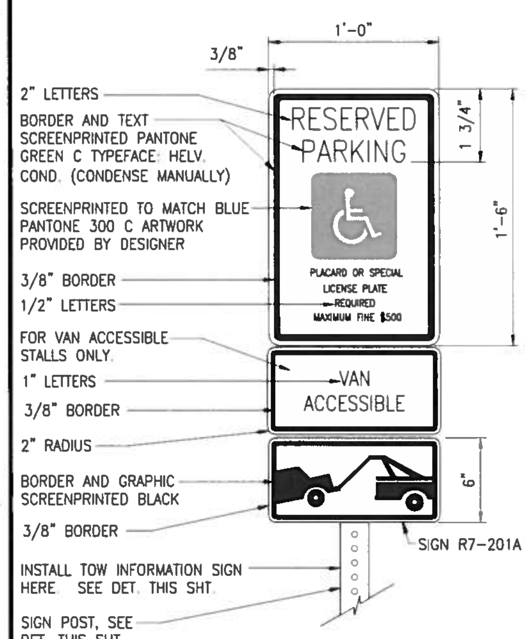
ACCESS AISLE SIGN DETAIL

SCALE: 1 1/2"=1'-0"

NOTES:
1. MOUNT PER SIGN POST DETAIL ON SHT. C-506 EXCEPT AT 36" FROM FINISH GRADE TO THE BOTTOM OF THE SIGN.
2. TEXT SHALL BE 3/4" HIGH HELVETICA FONT
3. SIGN SIZE: 12" X 18"

DO NOT DRINK SIGN

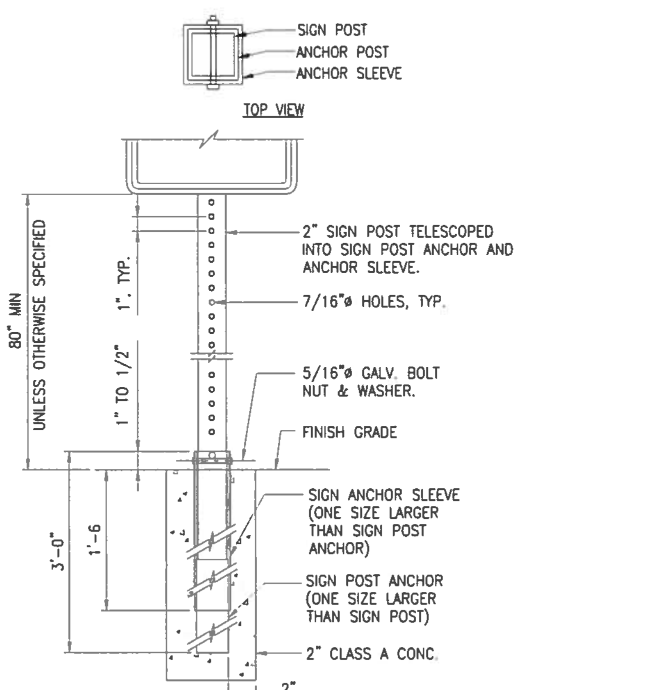
NOT TO SCALE



NOTES:
1. SIGNS SHALL BE ALUM T6061 SHEET COVERED WITH ENGINEERING GRADE REFLECTIVE SHEETING.
2. SIGN LETTERING SHALL BE UPPERCASE LETTERS OF THE TYPE APPROVED BY FEDERAL HIGHWAY ADMINISTRATION.

VAN ACCESSIBLE & ACCESSIBLE STALL SIGNS DETAIL

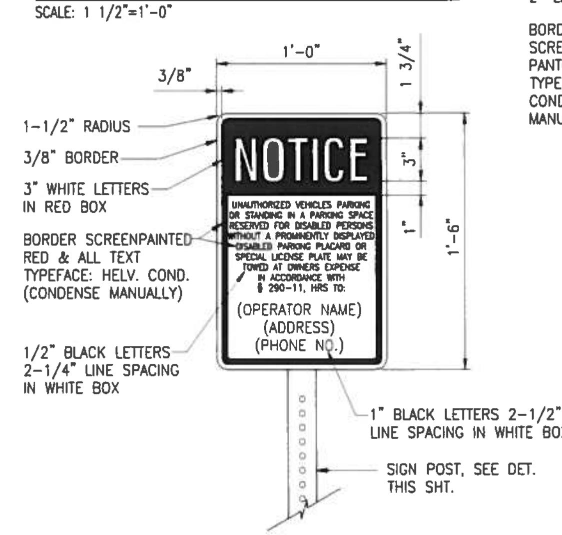
SCALE: 1 1/2"=1'-0"



NOTES:
1. THE INSIDE OF THE ANCHOR POST MUST BE KEPT FREE OF IMPEDIMENTS TO ASSURE EASY INSERTION OF THE 2" SIGN POST.
2. SQUARE TUBE POSTS SHALL BE TELESCOPING PERFORATED.
3. THE 2 1/4" ANCHOR POST SHALL BE 3'-0" LONG FOR NORMAL OR POOR CONDITIONS AND 2'-6" FOR ROCKY CONDITIONS.
4. SIGN POST MUST BE FIRM AND NOT SHAKY, OTHERWISE CONCRETE MUST BE USED TO STABILIZE THE ANCHOR POST.
4. FOR ADDITIONAL DETAILS SEE STATE STDS TE-03 & TE-01.
5. SIGN TO BE INSTALLED WITH 80" CLEAR BETWEEN THE BOTTOM OF THE SIGN AND FINISHED GRADE. IF IT IS NOT POSSIBLE TO PROVIDE THE 80" CLEAR THE CONTRACTOR SHALL NOTIFY THE ENGINEER.

SIGN POST DETAIL

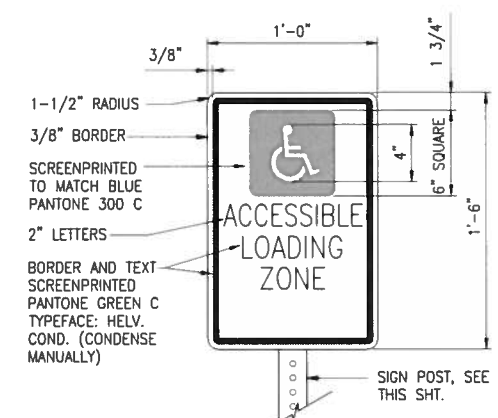
SCALE: 3"=1'-0"



NOTES:
1. SIGNS SHALL BE ALUM T6061 SHEET COVERED WITH ENGINEERING GRADE REFLECTIVE SHEETING.
2. SIGN LETTERING SHALL BE UPPERCASE LETTERS OF THE TYPE APPROVED BY FEDERAL HIGHWAY ADMINISTRATION.

TOW INFORMATION SIGN DETAIL

SCALE: 1 1/2" = 1'-0"



NOTES:
1. SIGNS SHALL BE ALUM T6061 SHEET COVERED WITH ENGINEERING GRADE REFLECTIVE SHEETING.
2. SIGN LETTERING SHALL BE UPPERCASE LETTERS OF THE TYPE APPROVED BY FEDERAL HIGHWAY ADMINISTRATION.
3. WALL MOUNTED SIGNS ON CONCRETE COLUMNS OR WALLS SHALL BE MOUNTED WITH 5/16-18 UNC x 1" EXPANSION BOLTS FOR MASONRY AT THE TOP AND BOTTOM OF THE SIGN.

ACCESSIBLE LOADING ZONE SIGN DETAIL

SCALE: 1 1/2"=1'-0"

GRAPHIC SCALES:

3" = 1'-0" — 0, 3", 6", 9", 1'

1-1/2" = 1'-0" — 1', 9", 6", 3", 0, 1'

3/4" = 1'-0" — 1', 6", 0, 1', 2', 3'

REVISION NO.	SYM.	DESCRIPTION	SHT. OF	DATE	APPROVED: PUBLIC WORKS ADMINISTRATOR
PCD-01	1	ADDED DO NOT DRINK SIGN & AND BWS APPROVAL SIGNATURE BLOCK TO ADDRESS CITY REVIEW COMMENTS	22/38	7/25/2007	
ADD-03	A3	ADDED OR EDITED TEXT. EDITED DETAIL	2/227	1/19/2007	

DEPT. OF ACCOUNTING & GENERAL SERVICES
DIVISION OF PUBLIC WORKS
STATE OF HAWAII

KAPOLEI JUDICIARY COMPLEX
KAPOLEI, OAHU, HAWAII

PARKING DETAILS

CHAD M. MCDONALD — LICENSED PROFESSIONAL ENGINEER — No. 9793-C — HAWAII, U.S.A.

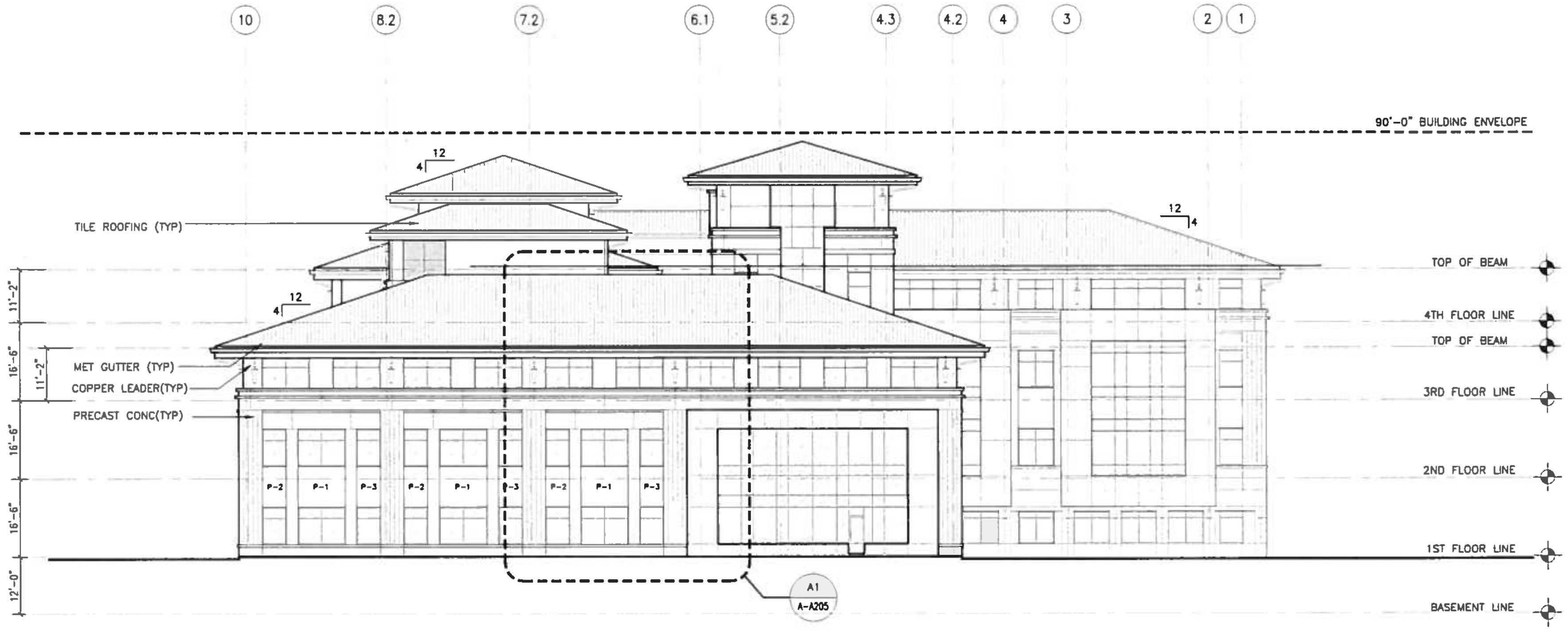
This work was prepared by me or under my supervision and construction of this project will be under my observation. (Observation of construction as defined in Chapter 16-115, Subchapter Definitions of the Hawaii Administrative Rules, Professional Engineers, Architects, Surveyors, and Landscape Architects.)

signature — 04/30/08 — expiration date of the license

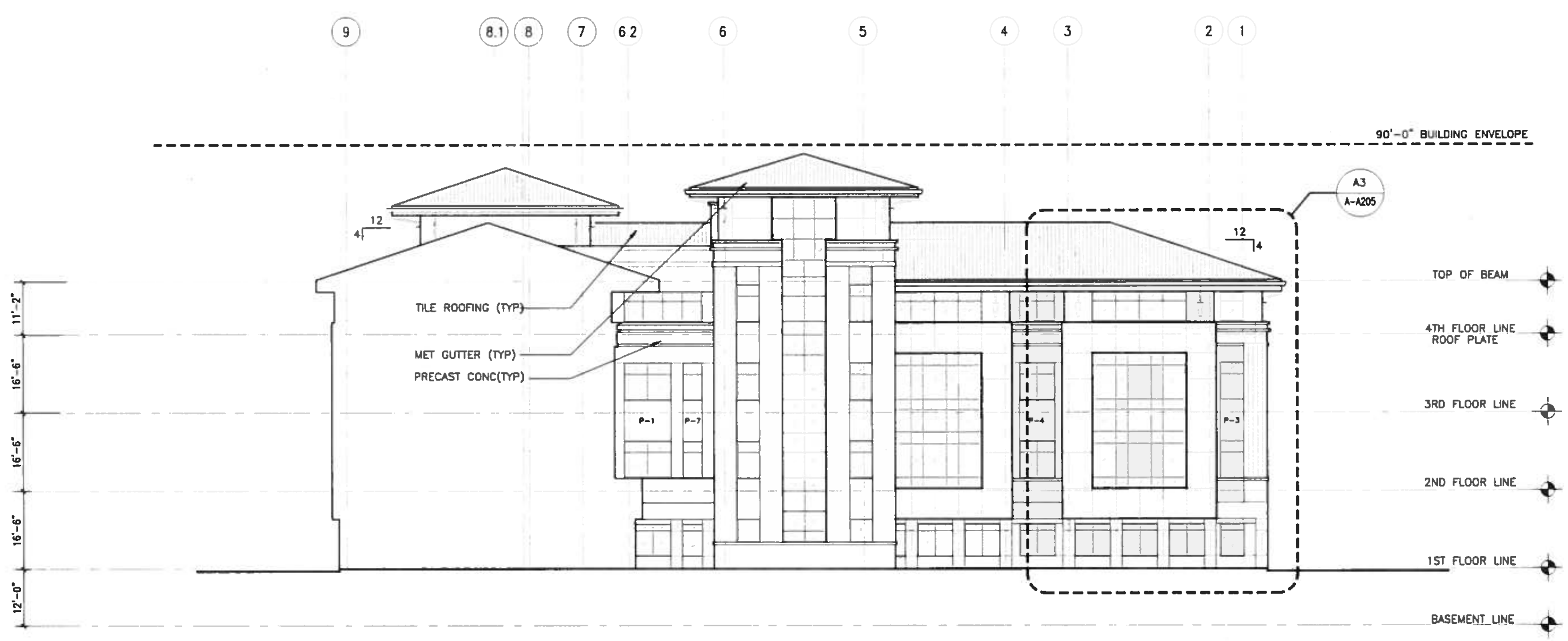
NOTE: Contractor to check and verify dimensions at job before proceeding with work.

MITSUNAGA & ASSOCIATES, INC.		DAGS JOB NO.	DRAWING NO.
DESIGNED BY: KS	CHECKED BY: CM	12-21-7043	C-506
DRAWN BY: KS	APPROVED BY: CM	DATE: NOV 2006	SHEET 53 OF 1032 SHTS.
SCALE: AS SHOWN			

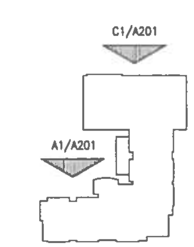
FILE ______ WALW ______ FOLDER ______



C1 NORTH ELEVATION-1
SCALE: 1/16" = 1'0"



A1 NORTH ELEVATION-2
SCALE: 1/16" = 1'0"



KEYPLAN
NO SCALE

0 4 8 16 24 32 40 48FT
SCALE 1/16"=1'-0"

REVISION NO.	SYM.	DESCRIPTION	SHT.__ OF__	DATE	APPROVED: PUBLIC WORKS ADMINISTRATOR

LLOYD T. ARAKAKI
LICENSED PROFESSIONAL ARCHITECT
No. 5336
HAWAII, U.S.A.

This work was prepared by me or under my supervision and construction of this project will be under my observation (Observation of construction as defined in Chapter 16-115, Subchapter 1 Definitions of the Hawaii Administrative Rules: "Professional Engineers, Architects, Surveyors, and Landscape Architects")

signature — 04/30/08 expiration date of the license

NOTE: Contractor to check and verify dimensions at job before proceeding with work

DEPT. OF ACCOUNTING & GENERAL SERVICES
DIVISION OF PUBLIC WORKS
STATE OF HAWAII

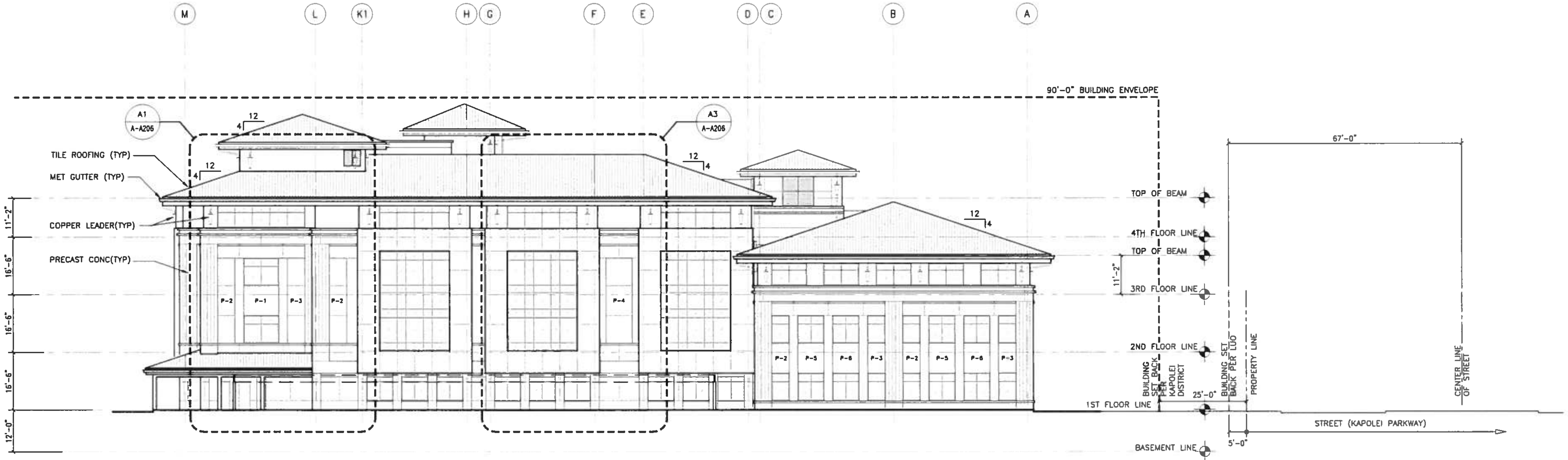
KAPOLEI JUDICIARY COMPLEX
KAPOLEI, OAHU, HAWAII

COURT COMPLEX
NORTH ELEVATION

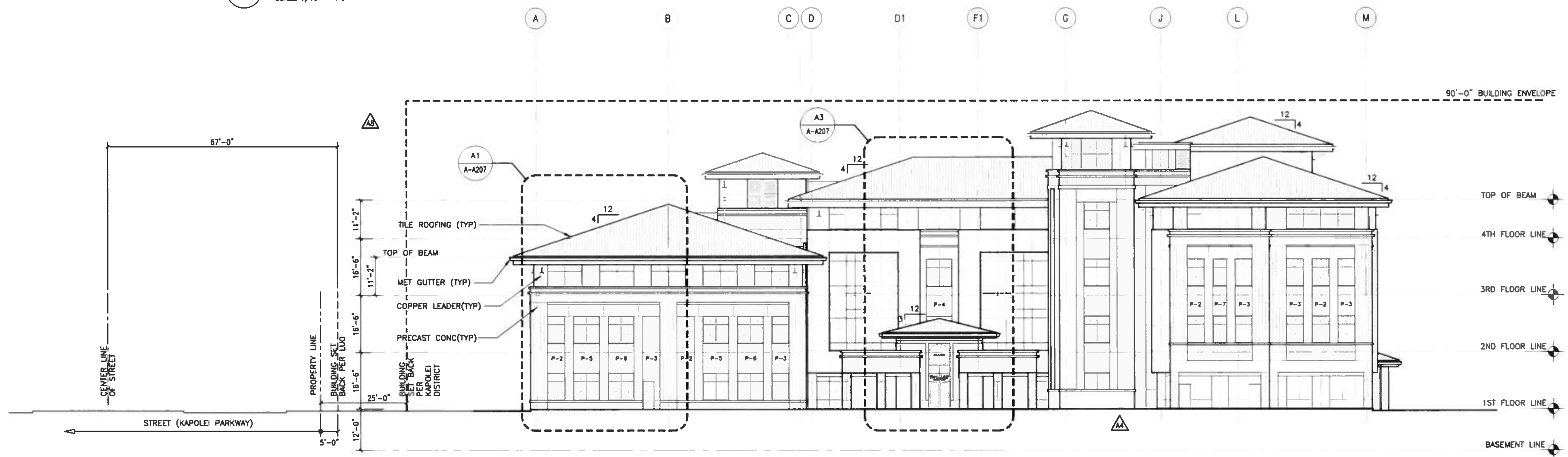
ARCHITECTS HAWAII, LTD.		DAGS JOB NO.	DRAWING NO.
DESIGNED BY: DB	CHECKED BY: MK	12-21-7043	A-A201
DRAWN BY: MA	APPROVED BY: –	DATE	SHEET 158
SCALE: AS SHOWN		NOV 2006	OF 1021 SHTS.

FILE ______ DRAW ______ FOLDER ______

FIELD POSTED RECORD DRAWINGS Certified by: [signature] Unlimited Construction Services, Inc. Date 8/03/10



C1 EAST ELEVATION
SCALE: 1/16" = 1'0"



A1 WEST ELEVATION
SCALE: 1/16" = 1'0"

KEYPLAN
NO SCALE

SCALE 1/16"=1'-0"

REVISION NO.	SYM.	DESCRIPTION	SHT.__ OF__	DATE	APPROVED: PUBLIC WORKS ADMINISTRATOR
ADD-08	A8	SHOW BUILDING ENVELOPE	10/59	02/16/07	
ADD-04	A4	ADD LOUVERS	51/195	01/26/07	

LLOYD T. ARAKAKI LICENSED PROFESSIONAL ARCHITECT No. 5336 HAWAII, U.S.A.

This work was prepared by me or under my supervision and construction of this project will be under my observation. (Observation of construction as defined in Chapter 16-115, Subchapter 1 Definitions of the Hawaii Administrative Rules, Professional Engineers, Architects, Surveyors, and Landscape Architects.)

Signature 04/30/08 expiration date of the license

NOTE: Contractor to check and verify dimensions of job before proceeding with work

DEPT. OF ACCOUNTING & GENERAL SERVICES
DIVISION OF PUBLIC WORKS
STATE OF HAWAII

KAPOLEI JUDICIARY COMPLEX
KAPOLEI, OAHU, HAWAII

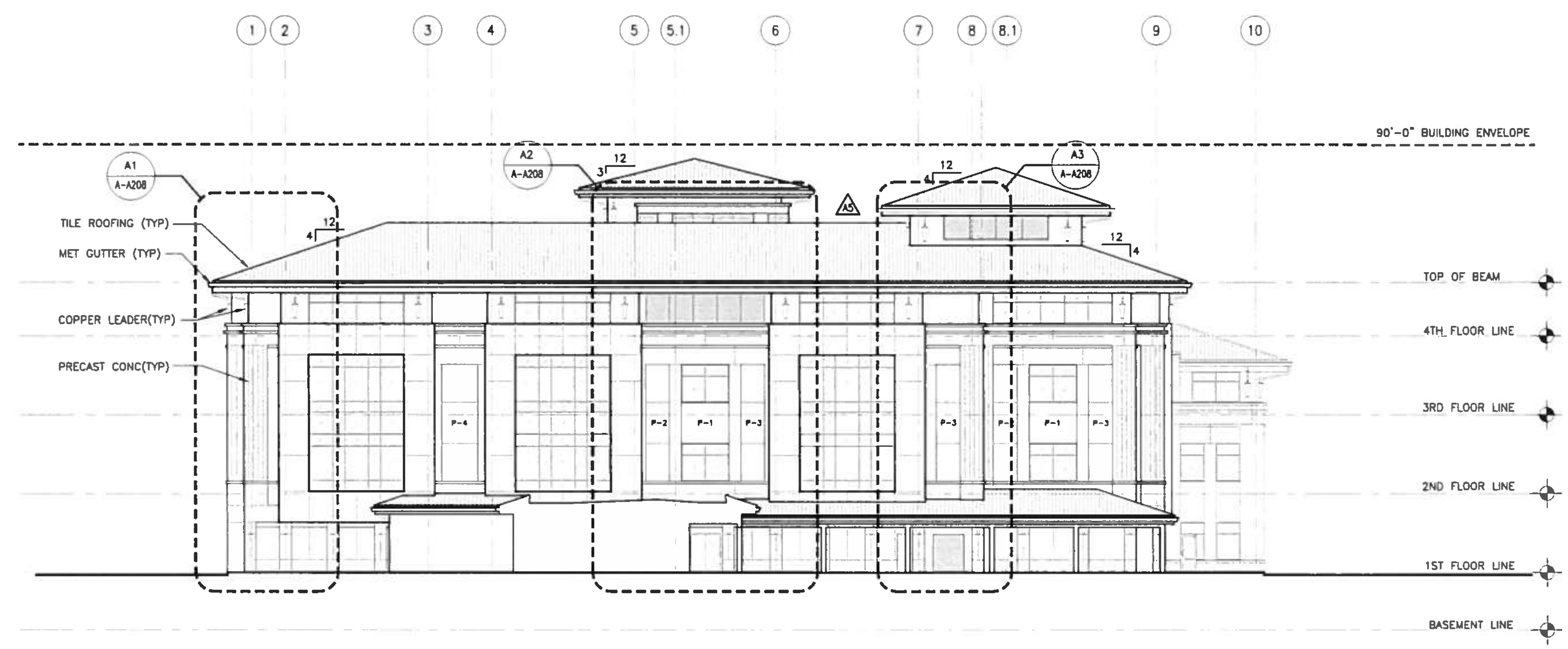
COURT COMPLEX
WEST & EAST ELEVATION

ARCHITECTS HAWAII, LTD.

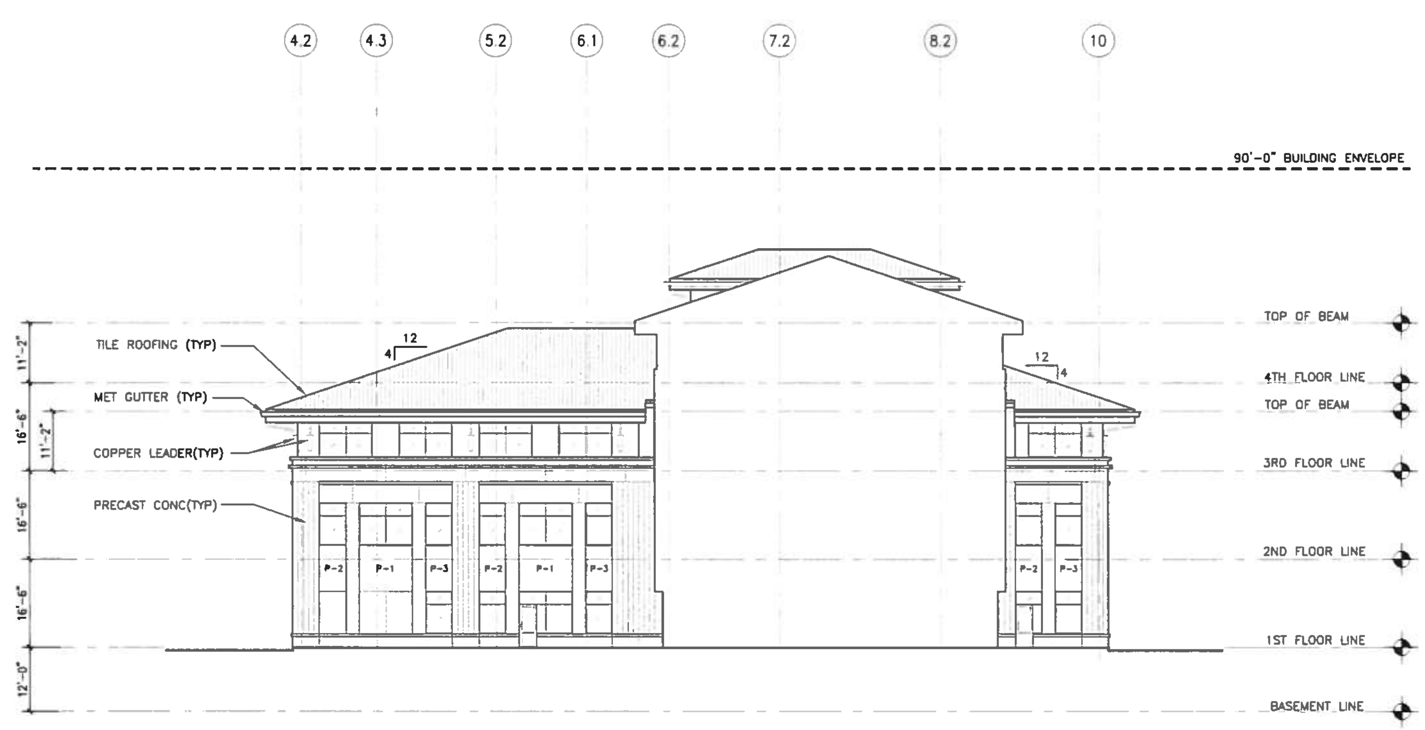
DESIGNED BY: DB	CHECKED BY: MK	DAGS JOB NO. 12-21-7043	DRAWING NO. A-A202
DRAWN BY: MA	APPROVED BY: -	DATE NOV 2006	SHEET 189 OF 1021 SHTS.
SCALE: AS SHOWN			

FIELD POSTED RECORD DRAWINGS Certified by: Unwired Construction Services Inc. Date: 8/03/10

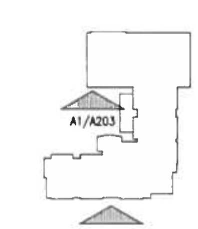
FILE ____ DRAW ____ FOLDER ____



C1 SOUTH ELEVATION-1
SCALE: 1/8" = 1'0"



A1 SOUTH ELEVATION-2
SCALE: 1/8" = 1'0"



KEYPLAN
NO SCALE

SCALE 0 4 8 16 24 32 40 48FT 1/16"=1'-0"

REVISION NO.	SYM.	DESCRIPTION	SHT. OF	DATE	APPROVED: PUBLIC WORKS ADMINISTRATOR
ADD-05	5	REVISE WINDOW TO LOUVER	30/197	02/02/07	

LLOYD T. ARAKAKI LICENSED PROFESSIONAL ARCHITECT No. 5336 HAWAII, U.S.A.

This work was prepared by me or under my supervision and construction of this project will be under my observation. (Observation of construction as defined in Chapter 16-115, Subchapter 1 Definitions of the Hawaii Administrative Rules, "Professional Engineers, Architects, Surveyors, and Landscape Architects.")

signature 04/30/08 expiration date of the license

NOTE: Contractor to check and verify dimensions at job before proceeding with work.

DEPT. OF ACCOUNTING & GENERAL SERVICES
DIVISION OF PUBLIC WORKS
STATE OF HAWAII

KAPOLEI JUDICIARY COMPLEX
KAPOLEI, OAHU, HAWAII

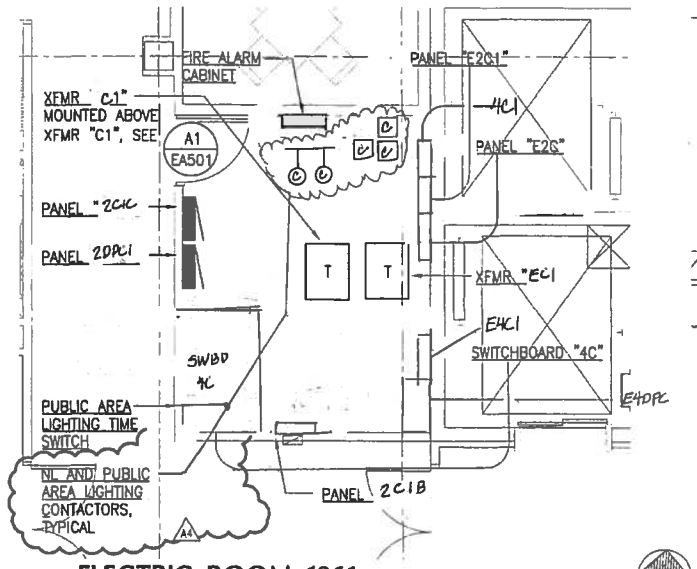
COURT COMPLEX
SOUTH ELEVATION

ARCHITECTS HAWAII, LTD.

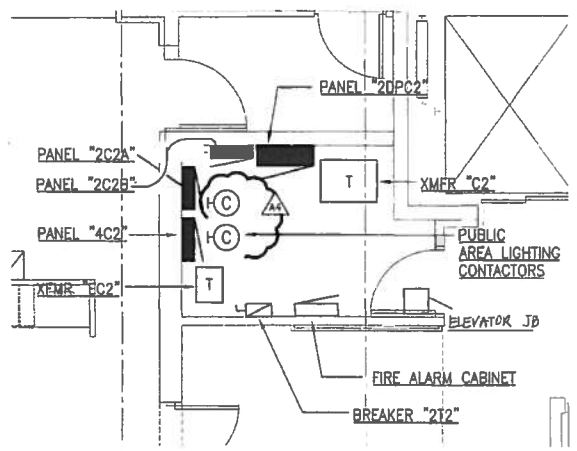
DESIGNED BY: DB	CHECKED BY: MK	DAGS JOB NO. 12-21-7043	DRAWING NO. A-A203
DRAWN BY: AHL	APPROVED BY: -	DATE NOV 2006	SHEET 190 OF 1021 SHTS.
SCALE: AS SHOWN			

FILE ______ DRAW ______ FOLDER ______

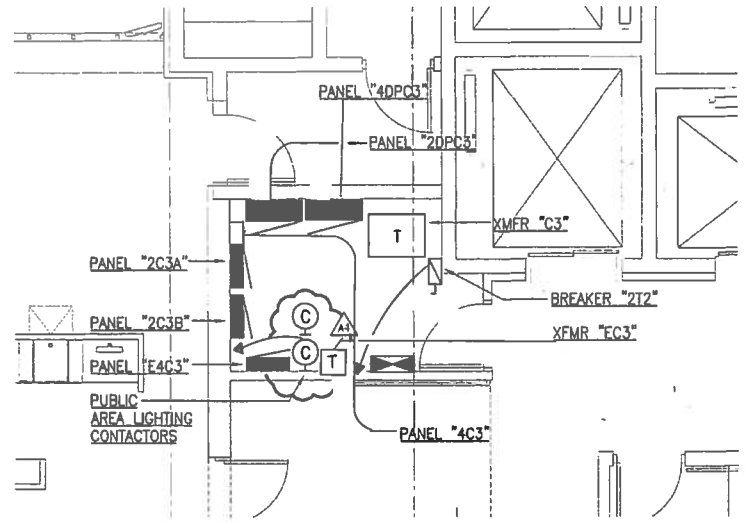
FIELD POSTED RECORD DRAWINGS Certified by: [signature] Unlimited Construction Services, Inc. Date: 8/03/10



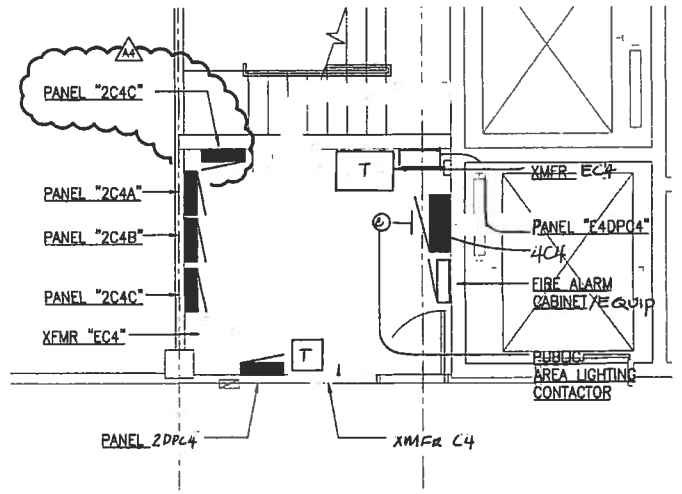
ELECTRIC ROOM 1061
DETAILED ELECTRICAL PLAN
C1 — SCALE: 1/4" = 1'-0"



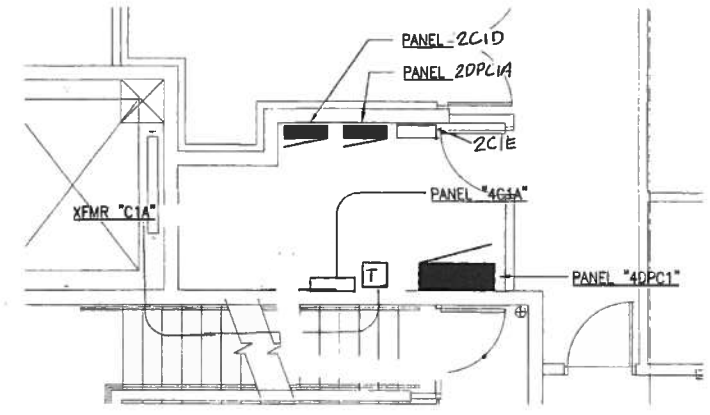
ELECTRIC ROOM 2065
DETAILED ELECTRICAL PLAN
C2 — SCALE: 1/4" = 1'-0"



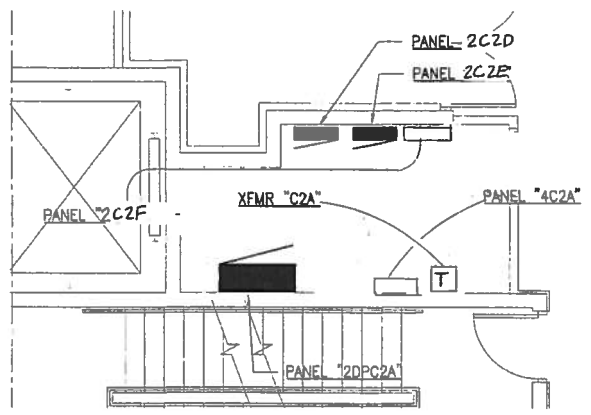
ELECTRIC ROOM 3058
DETAILED ELECTRICAL PLAN
C3 — SCALE: 1/4" = 1'-0"



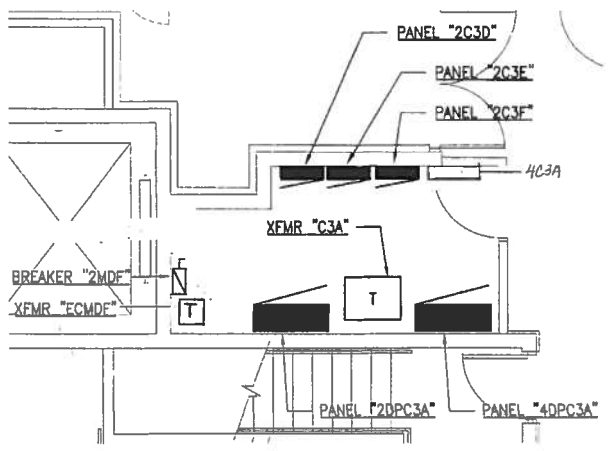
ELECTRIC ROOM 4037
DETAILED ELECTRICAL PLAN
C5 — SCALE: 1/4" = 1'-0"



ELECTRIC ROOM 1039
DETAILED ELECTRICAL PLAN
B1 — SCALE: 1/4" = 1'-0"



ELECTRIC ROOM 2035
DETAILED ELECTRICAL PLAN
B2 — SCALE: 1/4" = 1'-0"



ELECTRIC ROOM 3028
DETAILED ELECTRICAL PLAN
B3 — SCALE: 1/4" = 1'-0"

AS-BUILT DRAWINGS/SPECIFICATIONS

THIS CERTIFIES THAT THE DIMENSIONS AND DETAILS SHOWN ON THIS SHEET REFLECT THE DIMENSIONS AND DETAILS AND SPECIFICATIONS AS CONSTRUCTED IN THE FIELD.

WASA ELECTRICAL SERVICES, INC.
Harold Cabigon 14Apr10
Signature Date

FIELD POSTED RECORD DRAWINGS

FIELD POSTED RECORD DRAWINGS Certified by Keith Hanashiro Date December 10, 2012 Unlimited Construction Services Inc

REVISION NO.	SYM.	DESCRIPTION	SHT. OF	DATE	APPROVED: PUBLIC WORKS ADMINISTRATOR
ADD-04	AA	ADD LIGHTING CONTACTORS, ADD PANEL "2C4C"	156/195	01/26/07	

GLENN T. KARAMATSU LICENSED PROFESSIONAL ENGINEER No. 4368-E HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.

PROJECT ENGINEER for ECS, Inc.
APRIL 30, 2008
EXPIRATION DATE OF THE LICENSE

DEPT. OF ACCOUNTING & GENERAL SERVICES
DIVISION OF PUBLIC WORKS
STATE OF HAWAII

KAPOLEI JUDICIARY COMPLEX
KAPOLEI, OAHU, HAWAII

ELECTRIC ROOM DETAIL PLANS

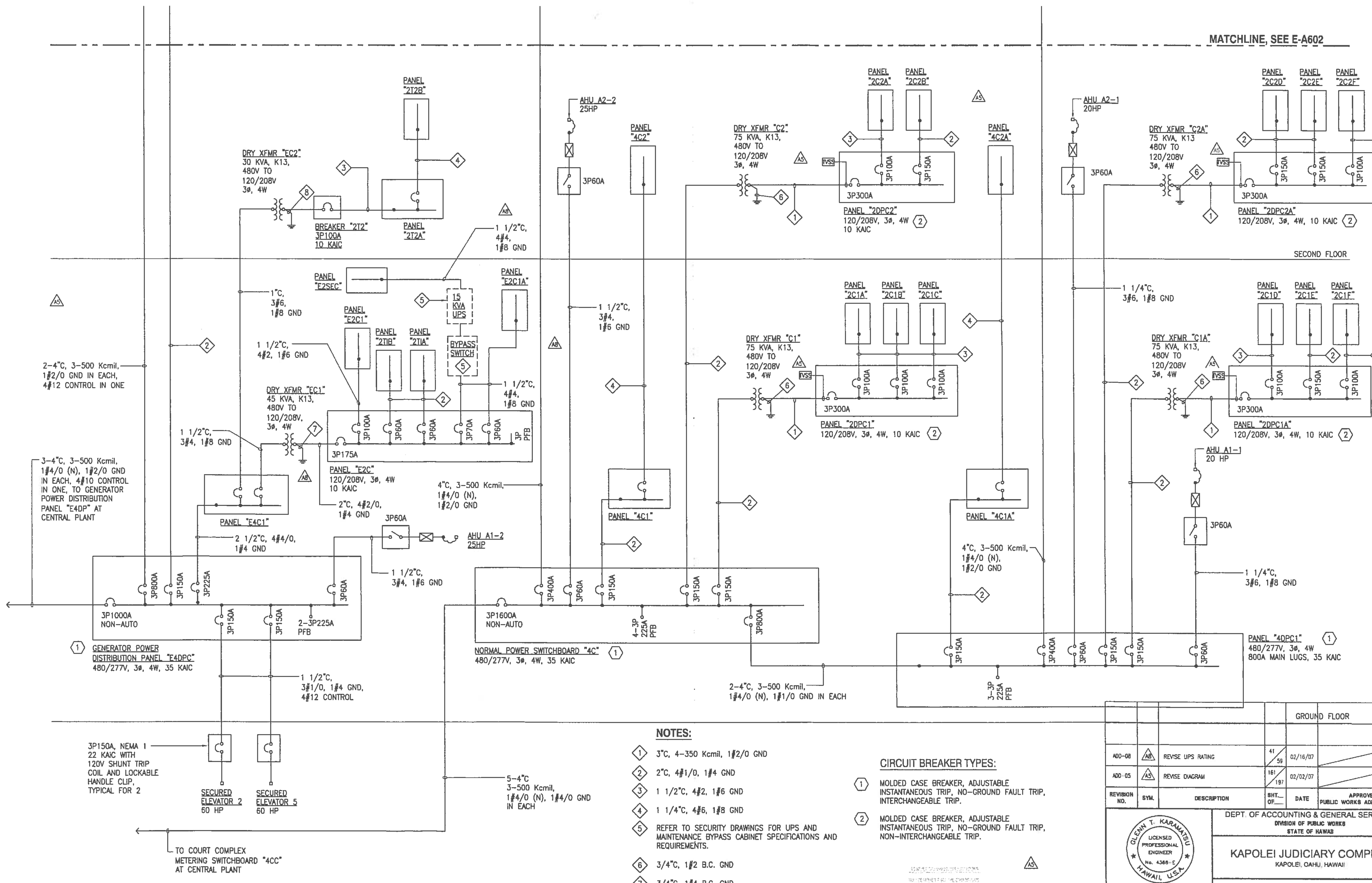
ECS, INC.

DESIGNED BY:	CHECKED BY:	BASIS JOB NO.	DRAWING NO.
MA	VM	12-21-7043	E-A401
DRAWN BY: CS	APPROVED BY: GK	DATE NOV 2008	SHEET OF SHTS.
SCALE: AS SHOWN			

SCALE: 0 2 4 6 8 10 12FT — 1/4"=1'-0"

1/25/07-18:01 Y:\DATA\2014.051\14-51 EA401 PDS.dwg

FILE ——— DRAW ——— FOLDER ———



NOTES:

1. 3"C, 4-350 Kcmil, 1#2/0 GND
2. 2"C, 4#1/0, 1#4 GND
3. 1 1/2"C, 4#2, 1#6 GND
4. 1 1/4"C, 4#6, 1#8 GND
5. REFER TO SECURITY DRAWINGS FOR UPS AND MAINTENANCE BYPASS CABINET SPECIFICATIONS AND REQUIREMENTS.
6. 3/4"C, 1#2 B.C. GND
7. 3/4"C, 1#4 B.C. GND
8. 3/4"C, 1#6 B.C. GND

CIRCUIT BREAKER TYPES:

1. MOLDED CASE BREAKER, ADJUSTABLE INSTANTANEOUS TRIP, NO-GROUND FAULT TRIP, INTERCHANGEABLE TRIP.
2. MOLDED CASE BREAKER, ADJUSTABLE INSTANTANEOUS TRIP, NO-GROUND FAULT TRIP, NON-INTERCHANGEABLE TRIP.

A2 PARTIAL ONE LINE DIAGRAM - 1
NO SCALE

FIELD POSTED RECORD DRAWINGS

FIELD POSTED RECORD DRAWINGS Certified by: Seth Murashige Date December 10, 2012 Unlimited Construction Services, Inc.

REVISION NO.	SYM.	DESCRIPTION	SHT. OF	DATE	APPROVED: PUBLIC WORKS ADMINISTRATOR
ADD-08	A8	REVISE UPS RATING	41/59	02/16/07	
ADD-05	A5	REVISE DIAGRAM	161/197	02/02/07	

DEPT. OF ACCOUNTING & GENERAL SERVICES
DIVISION OF PUBLIC WORKS
STATE OF HAWAII

KAPOLEI JUDICIARY COMPLEX
KAPOLEI, OAHU, HAWAII

PARTIAL ONE LINE DIAGRAM - 1

GLENN T. KARAMATSU LICENSED PROFESSIONAL ENGINEER No. 4388-E HAWAII, U.S.A.

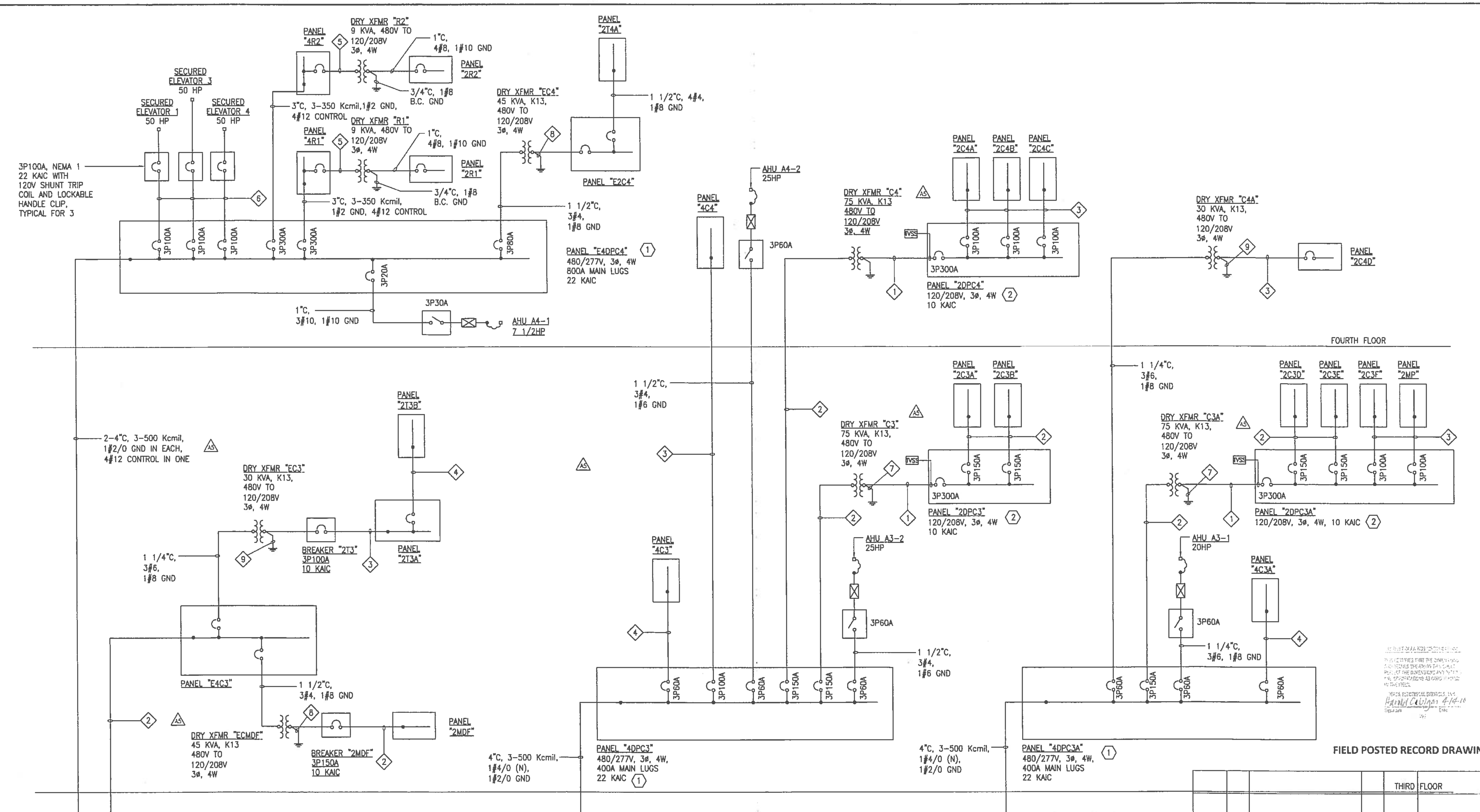
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.

PROJECT ENGINEER for ECS, Inc.
APRIL 30, 2008
EXPIRATION DATE OF THE LICENSE

ECS, INC

DESIGNED BY: MA	CHECKED BY: VM	DAGS JOB NO. 12-21-7043	DRAWING NO. E-A601
DRAWN BY: CS	APPROVED BY: DK	DATE NOV 2006	SHEET 848 OF 1021 SHTS.
SCALE: AS SHOWN			

5/14/10-9:25 Y:\014\014.051\14-51 EA601-FA602.R02.dwg



NOTES:

1. 3"C, 4-350 Kcmil, 1#2/0 GND
2. 2"C, 4#1/0, 1#4 GND
3. 1 1/2"C, 4#2, 1#6 GND
4. 1 1/4"C, 4#6, 1#8 GND
5. 1"C, 3#10, 1#10 GND
6. 1 1/2"C, 4#2, 1#6 GND, 4#12 CONTROL
7. 3/4"C, 1#2 B.C. GND
8. 3/4"C, 1#4 B.C. GND
9. 3/4"C, 1#6 B.C. GND

CIRCUIT BREAKER TYPES:

1. MOLDED CASE BREAKER, ADJUSTABLE INSTANTANEOUS TRIP, NO-GROUND FAULT TRIP, INTERCHANGEABLE TRIP.
2. MOLDED CASE BREAKER, ADJUSTABLE INSTANTANEOUS TRIP, NO-GROUND FAULT TRIP, NON-INTERCHANGEABLE TRIP.

A2 PARTIAL ONE LINE DIAGRAM - 2

NO SCALE

FIELD POSTED RECORD DRAWINGS

REVISION NO.	SYM.	DESCRIPTION	SHT. OF	DATE	APPROVED: PUBLIC WORKS ADMINISTRATOR
ADD-05	A5	REVISE DIAGRAM	162/197	02/02/07	

DEPT. OF ACCOUNTING & GENERAL SERVICES
DIVISION OF PUBLIC WORKS
STATE OF HAWAII

KAPOLEI JUDICIARY COMPLEX
KAPOLEI, OAHU, HAWAII

PARTIAL ONE LINE DIAGRAM - 2

ECS, INC.

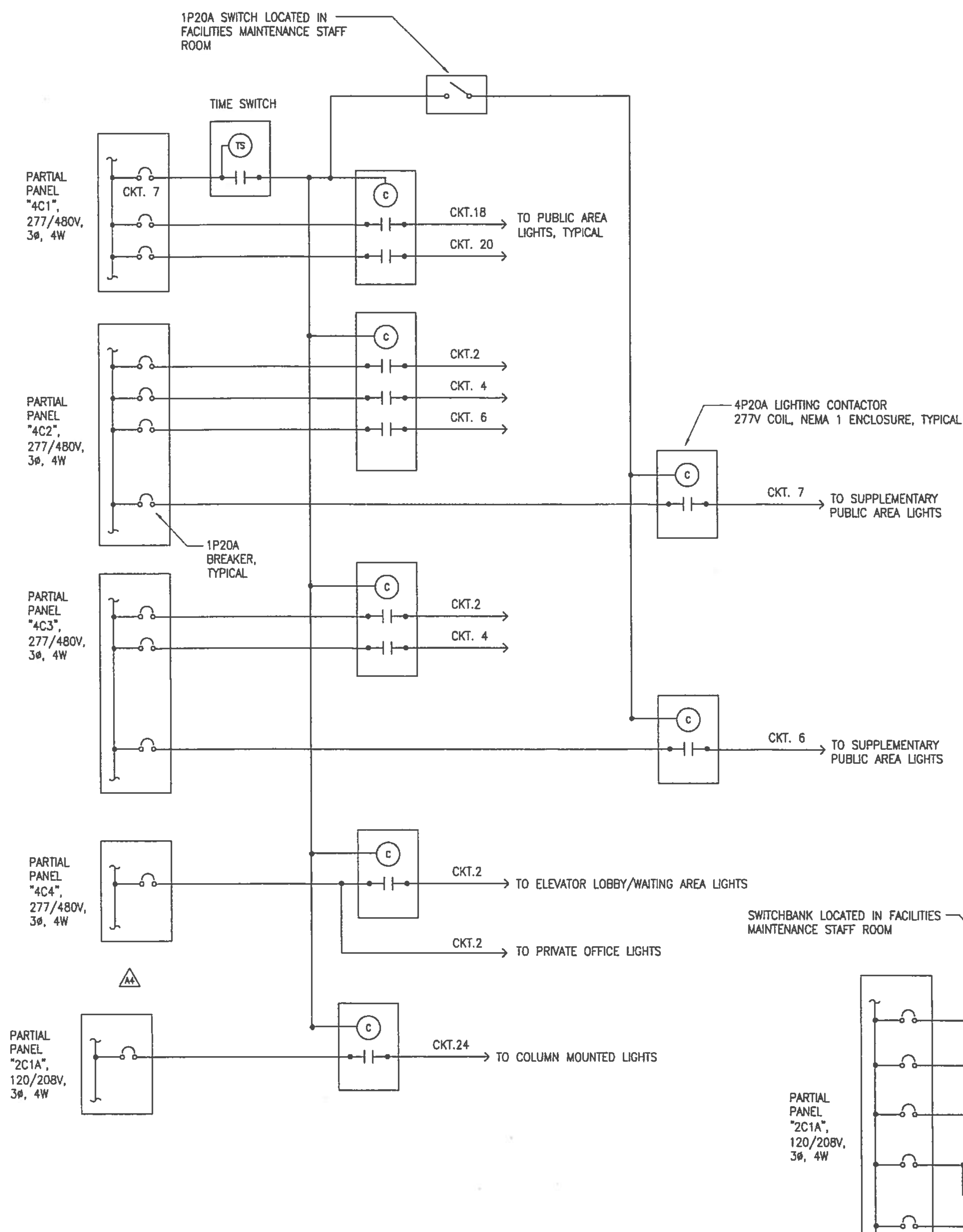
GLENN T. KARAMATSU LICENSED PROFESSIONAL ENGINEER No. 4368-E HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.

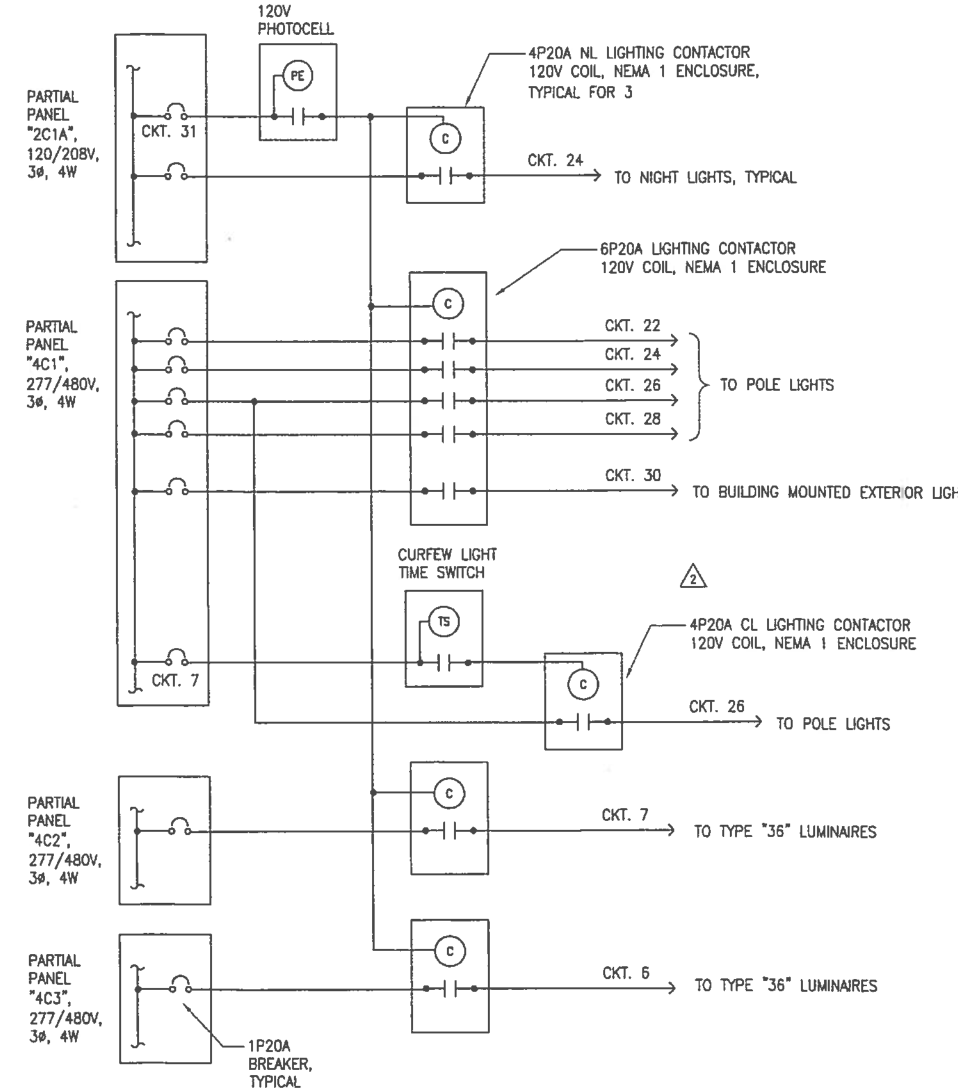
PROJECT ENGINEER for ECS, Inc.
APRIL 30, 2008
EXPIRATION DATE OF THE LICENSE

DESIGNED BY: MA	CHECKED BY: VK	DAGS JOB NO. 12-21-7043	DRAWING NO. E-A602
DRAWN BY: CS	APPROVED BY: GK	DATE NOV 2006	SHEET 549 OF 1021 SHTS.
SCALE: AS SHOWN			

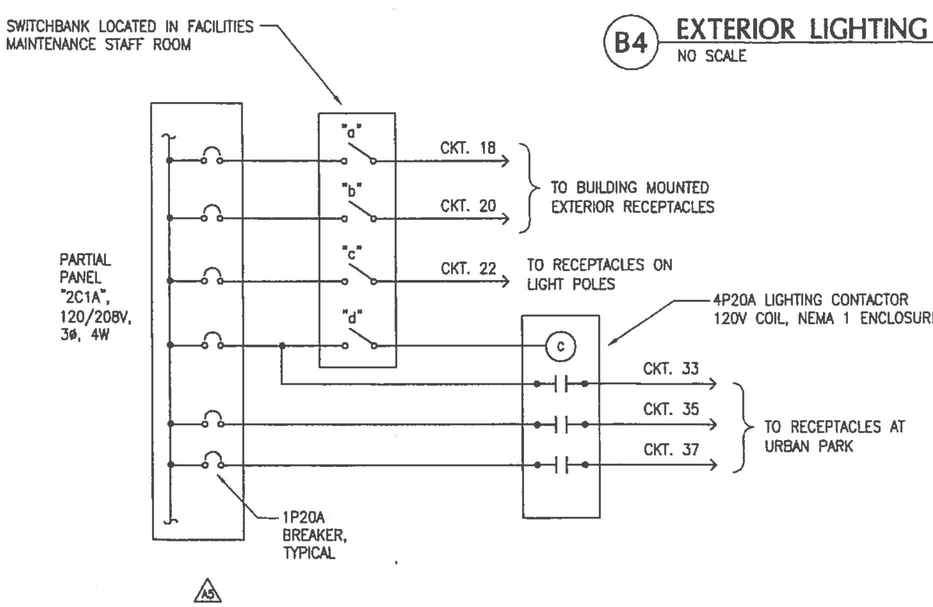
FIELD POSTED RECORD DRAWINGS Certified by Seth Manuzhyu Date December 10, 2012 Unlimited Construction Services, Inc.



B1 PUBLIC AREA LIGHTING CONTROL DIAGRAM
NO SCALE



B4 EXTERIOR LIGHTING CONTROL DIAGRAM
NO SCALE



A3 EXTERIOR RECEPTACLE CONTROL DIAGRAM
NO SCALE

FIELD POSTED RECORD DRAWINGS

FIELD POSTED RECORD DRAWINGS Certified by Seth Murashige Date December 10, 2012
Unlimited Construction Services Inc

REVISION NO.	SYM.	DESCRIPTION	SHT. OF	DATE	APPROVED: PUBLIC WORKS ADMINISTRATOR
PCO-2	2	REVISE EXTERIOR LIGHTING CONTROL DIAGRAM	163/244	10/26/07	
ADD-05	A5	ADD DETAIL A3	167/197	02/02/07	
ADD-04	A4	REVISE DIAGRAMS	160/195	01/26/07	

GLENN T. KARAMATSU LICENSED PROFESSIONAL ENGINEER No. 4368-E HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.

PROJECT ENGINEER for ECS, Inc.
APRIL 30, 2008
EXPIRATION DATE OF THE LICENSE

DEPT. OF ACCOUNTING & GENERAL SERVICES
DIVISION OF PUBLIC WORKS
STATE OF HAWAII

KAPOLEI JUDICIARY COMPLEX
KAPOLEI, OAHU, HAWAII

LIGHTING CONTROL DIAGRAMS

ECS, INC.

DESIGNED BY: MA	CHECKED BY: VM	DAGS JOB NO. 12-21-7043	DRAWING NO. E-A608
DRAWN BY: CS	APPROVED BY: CK	DATE NOV 2006	SHEET 655 OF 1021 SHTS.
SCALE: AS SHOWN			

PANEL "E4C1"

277/480 VOLTS, 3 PHASE, 4 WIRE
225 AMP MAIN LUGS
MIN AIC: 14,000
MOUNTING: SURFACE

WIRE SIZE (AWG)	CKT NO	USE	CKT BKR POLE	CKT BKR AMP	PHASE A	PHASE B	PHASE C	CKT BKR AMP	CKT BKR POLE	USE	CKT NO	WIRE SIZE (AWG)
–	1	PFB	1	–	– 1.8			20	1	LIGHTS–COMM/ELEC	2	12
–	3	PFB	1	–		– 1.8		20	1	LIGHTS–STAIR 3,4	4	12
–	5	PFB	1	–			– 1.8	20	1	LIGHTS–STAIR 2	6	12
–	7	PFB	1	–	– 1.5			20	1	LIGHTS–HOLDING	8	12
–	9	PFB	1	–		– 1.5		20	1	LIGHTS–1ST FLOOR	10	10
–	11	PFB	1	–			– 1.5	20	1	LIGHTS–2ND FLOOR	12	10
6	13		3		8.0 –			–	1	PFB	14	–
6	15	PANEL "2T2A"				8.0 –		–	1	PFB	16	–
6	17			60			8.0 –	–	1	PFB	18	–
4	19		3		12.0 –			–	1	PFB	20	–
4	21	PANEL "E2C"				12.0 –		–	1	PFB	22	–
4	23			80			12.0 –	–	1	PFB	24	–
		CONNECTED LOAD/PHASE			23.3	23.3	23.3					
		TOTAL CONNECTED LOAD			70 KVA							
		DEMAND FACTOR			0.8							
		TOTAL DEMAND LOAD			56 KVA=	67 AMPS						

PANEL "E4C3"

277/480 VOLTS, 3 PHASE, 4 WIRE
225 AMP MAIN LUGS
MIN AIC: 14,000
MOUNTING: SURFACE

WIRE SIZE (AWG)	CKT NO	USE	CKT BKR POLE	CKT BKR AMP	PHASE A	PHASE B	PHASE C	CKT BKR AMP	CKT BKR POLE	USE	CKT NO	WIRE SIZE (AWG)
–	1	PFB	1	–	– 1.5			20	1	LIGHTS–3RD FLOOR	2	10
–	3	PFB	1	–		– 1.5		20	1	LIGHTS–4TH FLOOR	4	10
–	5	PFB	1	–			– 1.5	20	1	SPARE	6	–
–	7	PFB	1	–	– –			–	1	PFB	8	–
–	9	PFB	1	–		– –		–	1	PFB	10	–
–	11	PFB	1	–			– –	–	1	PFB	12	–
6	13		3		8.0 –			–	1	PFB	14	–
6	15	PANEL "2T3A"				8.0 –		–	1	PFB	16	–
6	17			60			8.0 –	–	1	PFB	18	–
4	19		3		11.7 –			–	1	PFB	20	–
4	21	PANEL "2MDF"				11.7 –		–	1	PFB	22	–
4	23			80			11.7 –	–	1	PFB	24	–
		CONNECTED LOAD/PHASE			21.1	21.1	21.2					
		TOTAL CONNECTED LOAD			63.6 KVA							
		DEMAND FACTOR			0.8							
		TOTAL DEMAND LOAD			50.9 KVA=	61 AMPS						

PANEL "4C1"

277/480 VOLTS, 3 PHASE, 4 WIRE
225 AMP MAIN LUGS
MIN AIC: 14,000
MOUNTING: SURFACE

WIRE SIZE (AWG)	CKT NO	USE	CKT BKR POLE	CKT BKR AMP	PHASE A	PHASE B	PHASE C	CKT BKR AMP	CKT BKR POLE	USE	CKT NO	WIRE SIZE (AWG)	
12	1		3		0.8 2.1			20	1	LTS–BASEMENT	2	12	
12	3	EF A1–2				0.8 2.0		20	1	LTS–RCVG/HOOPONO	4	12	
12	5			15			0.8 1.9	20	1	LTS–FAC MAINT	6	12	
12	7	TIME SWITCH	1	20	0.5 2.0			20	1	LTS–SHERIFF	8	12	
12	9	SPARE	1	20		1.5 2.0		20	1	LTS–PRIV LOBBY	10	12	
12	11	SPARE	1	20			1.5 1.8	20	1	LTS–DOCS CLERKS	12	12	
10	13	VENDOR–WATER HTR	1	30	6.6 1.8			20	1	LTS–ACCTS CLERKS	14	12	
10	15	VENDOR–WATER HTR	1	30		6.6 2.0		20	1	LTS–CLERK COUNTER	16	12	
–	17	PFB	1	–			– 2.1	20	1	LTS–LOBBY/STAIR	18	12	TC
–	19	PFB	1	–	– 2.1			20	1	LTS–LOBBY/STAIR	20	12	TC
–	21	PFB	1	–		– 2.0		20	1	LTS–JUDGES PKG	22	10	
–	23	PFB	1	–			– 2.0	20	1	LTS–STAFF PKG	24	10	
4	25		3		11.0 2.1			20	1	LTS–PUBLIC PKG	26	10	
4	27	PANEL "4C2"				11.0 2.0		20	1	LTS–PUBLIC PKG	28	10	
4	29			60			11.0 2.0	20	1	LTS–BLDG EXT	30	10	
		CONNECTED LOAD/PHASE			29.0	29.9	23.1						
		TOTAL CONNECTED LOAD			82.0 KVA								
		DEMAND FACTOR			1.0								
		TOTAL DEMAND LOAD			82.0 KVA=	98 AMPS							

"TC"– DENOTES TIME CLOCK CONTROLLED LIGHTING CIRCUIT

PANEL "4C1A"

277/480 VOLTS, 3 PHASE, 4 WIRE
100 AMP MAIN LUGS
MIN AIC: 14,000
MOUNTING: SURFACE

WIRE SIZE (AWG)	CKT NO	USE	CKT BKR POLE	CKT BKR AMP	PHASE A	PHASE B	PHASE C	CKT BKR AMP	CKT BKR POLE	USE	CKT NO	WIRE SIZE (AWG)
12	1		3		2.1 2.1			20	1	LTS–JUDGE/CELRKS	2	12
12	3	EF A1–1				2.1 2.2		20	1	LTS–CLERKS	4	12
12	5			15			2.1 2.2	20	1	LTS–CLERKS	6	12
–	7	PFB	1	–	– 2.0			20	1	LTS–COURTROOM	8	12
–	9	PFB	1	–		– 1.9		20	1	LTS–HOLDING CELLS	10	12
–	11	PFB	1	–			– 1.6	20	1	LTS–COURTROOM	12	12
6	13		3		8.0 2.0			20	1	SPARE	14	–
6	15	PANEL "4C2A"				8.0 2.0		20	1	SPARE	16	–
6	17			60			8.0 2.0	20	1	SPARE	18	–
		CONNECTED LOAD/PHASE			16.2	16.2	15.9					
		TOTAL CONNECTED LOAD			48.3 KVA							
		DEMAND FACTOR			1.0							
		TOTAL DEMAND LOAD			48.3 KVA=	58 AMPS						

PANEL "4C2"

277/480 VOLTS, 3 PHASE, 4 WIRE
100 AMP MAIN LUGS
MIN AIC: 14,000
MOUNTING: SURFACE

WIRE SIZE (AWG)	CKT NO	USE	CKT BKR POLE	CKT BKR AMP	PHASE A	PHASE B	PHASE C	CKT BKR AMP	CKT BKR POLE	USE	CKT NO	WIRE SIZE (AWG)	
12	1		3		3.0 1.7			20	1	LTS–LOBBY	2	12	TC
12	3	FCU A2–2				3.0 1.7		20	1	LTS–LOBBY	4	12	TC
12	5			20			3.0 1.7	20	1	LTS–WAITING/HALL	6	12	TC
12	7	LTS–WINDOWS	1	20	2.0 2.2			20	1	LTS–PRIV CORRIDOR	8	12	
–	9	SPARE	1	20		2.0 2.2		20	1	LTS–COURT 2071	10	12	
–	11	SPARE	1	20			2.0 2.2	20	1	LTS–COURT 2080	12	12	
–	13	PFB	–	–	– 2.3			20	1	LTS–COURT 2087	14	12	
–	15	PFB	–	–		– 2.2		20	1	LTS–COURT 2058	16	12	
–	17	PFB	–	–			– 2.0	20	1	SPARE	18	–	
		CONNECTED LOAD/PHASE			11.0	10.8	10.8						
		TOTAL CONNECTED LOAD			32.6 KVA								
		DEMAND FACTOR			1.0								
		TOTAL DEMAND LOAD			32.6 KVA=	39 AMPS							

"TC"– DENOTES TIME CLOCK CONTROLLED LIGHTING CIRCUIT

PANEL "4C2A"

277/480 VOLTS, 3 PHASE, 4 WIRE
100 AMP MAIN LUGS
MIN AIC: 14,000
MOUNTING: SURFACE

WIRE SIZE (AWG)	CKT NO	USE	CKT BKR POLE	CKT BKR AMP	PHASE A	PHASE B	PHASE C	CKT BKR AMP	CKT BKR POLE	USE	CKT NO	WIRE SIZE (AWG)
12	1		3		1.0 2.2			20	1	LTS–COURT 2043	2	12
12	3	EF A2–1				1.0 2.2		20	1	LTS–COURT 2052	4	12
12	5			15			1.0 2.0	20	1	LTS–ADMIN STAFF	6	12
–	7	SPARE	1	20	2.0 2.2			20	1	LTS–ADMIN STAFF	8	12
–	9	SPARE	1	20		2.0 2.0		20	1	LTS–BRACHES/PROG	10	12
–	11	SPARE	1	20			2.0 2.1	20	1	LTS–BRACHES/PROG	12	12
–	13	PFB	1	–	– 2.0			20	1	LTS–JCS	14	12
–	15	PFB	1	–		– 1.9		20	1	LTS–JCS	16	12
–	17	PFB	1	–			– 2.0	20	1	SPARE	18	–
		CONNECTED LOAD/PHASE			9.4	9.1	9.1					
		TOTAL CONNECTED LOAD			27.6 KVA							
		DEMAND FACTOR			1.0							
		TOTAL DEMAND LOAD			27.6 KVA=	32 AMPS						

PANEL "4C3"

277/480 VOLTS, 3 PHASE, 4 WIRE
100 AMP MAIN LUGS
MIN AIC: 14,000
MOUNTING: SURFACE

WIRE SIZE (AWG)	CKT NO	USE	CKT BKR POLE	CKT BKR AMP	PHASE A	PHASE B	PHASE C	CKT BKR AMP	CKT BKR POLE	USE	CKT NO	WIRE SIZE (AWG)	
12	1		3		3.0 1.7			20	1	LTS–LOBBY	2	12	TC
12	3	FCU A3–2				3.0 1.7		20	1	LTS–LOBBY	4	12	TC
12	5			20			3.0 1.7	20	1	LTS–WINDOWS	6	12	
–	7	PFB	1	–	– 2.0			20	1	LTS–PRIV CORRIDOR	8	12	
–	9	PFB	1	–		– 2..2		20	1	LTS–COURT 3064	10	12	
–	11	PFB	1	–			– 2.2	20	1	LTS–COURT 3073	12	12	
–	13	PFB	1	–	– 2.2			20	1	LTS–COURT 3081	14	12	
–	15	PFB	1	–		– 2.2		20	1	LTS–COURT 3051	16	12	
–	17	PFB	1	–			– 2.0	20	1	SPARE	18	–	
–	19	PFB	1	–	– 2.0			20	1	SPARE	20	–	
–	21	PFB	1	–		– 2.0		20	1	SPARE	22	–	
–	23	PFB	1	–			– 2.0	20	1	SPARE	24	–	
		CONNECTED LOAD/PHASE			10.9	11.1	10.9						
		TOTAL CONNECTED LOAD			32.9 KVA								
		DEMAND FACTOR			1.0								
		TOTAL DEMAND LOAD			32.9 KVA=	39 AMPS							

"TC"– DENOTES TIME CLOCK CONTROLLED LIGHTING CIRCUIT

PANEL "4C3A"

277/480 VOLTS, 3 PHASE, 4 WIRE
100 AMP MAIN LUGS
MIN AIC: 14,000
MOUNTING: SURFACE

WIRE SIZE (AWG)	CKT NO	USE	CKT BKR POLE	CKT BKR AMP	PHASE A	PHASE B	PHASE C	CKT BKR AMP	CKT BKR POLE	USE	CKT NO	WIRE SIZE (AWG)
12	1		3		2.0 1.9			20	1	LTS–COURT 3035	2	12
12	3	FCU A3–1				2.0 2.0		20	1	LTS–COURT 3045	4	12
12	5			15			2.0 2.0	20	1	LTS–CLERKS	6	12
–	7	SPARE	1	20	2.0 1.8			20	1	LTS–CLERKS	8	12
–	9	SPARE	1	20		2.0 1.8		20	1	LTS–CLERKS	10	12
–	11	SPARE	1	20			2.0 2.0	20	1	LTS–CLIENT SVCS	12	12
–	13	PFB	1	–	– 1.8			20	1	LTS–CLIENT SVCS	14	12
–	15	PFB	1	–		– 2.0		20	1	LTS–MULTI–PURPOSE	16	12
–	17	PFB	1	–			– 1.6	20	1	LTS–BALIFF	18	12
		CONNECTED LOAD/PHASE			10.5	10.8	10.6					
		TOTAL CONNECTED LOAD			31.9 KVA							
		DEMAND FACTOR			1.0							
		TOTAL DEMAND LOAD			31.9 KVA=	38 AMPS						

PANEL "4C4"

277/480 VOLTS, 3 PHASE, 4 WIRE
100 AMP MAIN LUGS
MIN AIC: 14,000
MOUNTING: SURFACE

WIRE SIZE (AWG)	CKT NO	USE	CKT BKR POLE	CKT BKR AMP	PHASE A	PHASE B	PHASE C	CKT BKR AMP	CKT BKR POLE	USE	CKT NO	WIRE SIZE (AWG)	
12	1		3		1.2 2.0			20	1	LTS–LOBBY/WAITING	2	12	TC
12	3	EF A4–1				1.2 2.0		20	1	LTS–CLERKS/CONF	4	12	
12	5			15			1.2 2.0	20	1	LTS–PRIV LOBBY	6	12	
12	7		3		0.5 1.9			20	1	LTS–CLERKS	8	12	
12	9	EF A4–2				0.5 1.9		20	1	LTS–CLERKS	10	12	
12	11			15			0.5 2.1	20	1	LTS–CLERKS	12	12	
12	13		3		3.0 2.1			20	1	LTS–JUDGES	14	12	
12	15	EF A4–3				3.0 2.1		20	1	LTS–JUDGES	16	12	
12	17			20			3.0 2.0	20	1	LTS–JUDGES	18	12	
10	19		3		3.9 1.8			20	1	LTS–JUDGES	20	12	
10	21	AHU AR–1				3.9 1.8		20	1	LTS–CLERKS	22	12	
10	23			30			3.9 2.0	20	1	LTS–JUDGES	24	12	
–	25	PFB	1	–	– 2.0			20	1	SPARE	26	–	
–	27	PFB	1	–		– 2.0		20	1	SPARE	28	–	
–	29	PFB	1	–			– 2.0	20	1	SPARE	30	–	
		CONNECTED LOAD/PHASE			18.4	18.4	18.7						
		TOTAL CONNECTED LOAD			55.5 KVA								
		DEMAND FACTOR			1.0								
		TOTAL DEMAND LOAD			55.5 KVA=	67 AMPS							

"TC"– DENOTES TIME CLOCK CONTROLLED LIGHTING CIRCUIT

FIELD POSTED RECORD DRAWINGS

Certified by: Seth Maruyama Date: December 10 2012
Unlimited Construction Services Inc

Harold Cabigon 4/14/10

FIELD POSTED RECORD DRAWINGS

REVISION NO.	SYM.	DESCRIPTION	SHT._ OF_	DATE	APPROVED: PUBLIC WORKS ADMINISTRATOR
ADD–04	A4	MISCELLANEOUS REVISIONS	162/195	01/26/07	

GLENN T. KARAMATSU
LICENSED PROFESSIONAL ENGINEER
No. 4368–E
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.

PROJECT ENGINEER for ECS, Inc.

APRIL 30, 2008
EXPIRATION DATE OF THE LICENSE

DEPT. OF ACCOUNTING & GENERAL SERVICES
DIVISION OF PUBLIC WORKS
STATE OF HAWAII

KAPOLEI JUDICIARY COMPLEX

KAPOLEI, OAHU, HAWAII

PANEL SCHEDULES

ECS, INC.		DAGS JOB NO.	DRAWING NO.
DESIGNED BY: MA	CHECKED BY: VM	12-21-7043	E-A702
DRAWN BY: CS	APPROVED BY: GK	DATE	SHEET 657
SCALE: AS SHOWN		NOV 2008	OF 1021 SHTS.

FILE ____ DRAW ____ FOLDER ____

5/14/10 9:04 Y:\014\014.051\14-51 EA702.PNL1.dwg

5/14/10-9:03 Y:\014\014.051\14-51 EA703.PNL2.dwg

PANEL "2C1A"

120/208 VOLTS, 3 PHASE, 4 WIRE
225 AMP MAIN LUGS
MIN AIC: 10,000
MOUNTING: SURFACE

WIRE SIZE (AWG)	CKT NO	USE	CKT BKR POLE	CKT BKR AMP	PHASE A		PHASE B		PHASE C		CKT BKR AMP	CKT BKR POLE	USE	CKT NO	WIRE SIZE (AWG)
10	1	RECEPT-BASEMENT	1	20	1.0	1.2					20	1	VENDING MACHINES	2	12
12	3	RECEPT-BASEMENT	1	20			0.8	1.2			20	1	VENDING MACHINES	4	12
12	5	RECEPT-BREAK ROOM	1	20					0.8	1.2	20	1	VENDING MACHINES	6	12
12	7	RECEPT-BREAK ROOM	1	20	0.8	1.2					20	1	VENDING MACHINES	8	12
12	9	RECEPT-FAC. MAINT	1	20			1.0	1.2			20	1	ROLLING GRILLE-HOOKELE	10	10
12	11	RECEPT-FAC. MAINT	1	20					1.0	1.2	20	1	ROLLING GRILLE-HOOKELE	12	10
12	13	RECEPT-MAIL	1	20	1.2	1.0					20	1	MOTORIZED SHELVING	14	12
12	15	RECEPT-EWC RESTRM	1	20			0.8	1.0			20	1	MOTORIZED SHELVING	16	12
12	17	RECEPT-ID OFFICE	1	20					0.8	1.2	20	1	RECEPT-EXTERIOR	18	10
10	19	RECEPT-COPIER	1	20	1.2	1.2					20	1	RECEPT-EXTERIOR	20	10
10	21	RECEPT-SECURITY/KITCHEN	1	20			1.0	1.0			20	1	RECEPT-PKG	22	8
10	23	RECEPT-SECURITY/KITCHEN	1	20					1.0	1.0	20	1	LTS-BLDG EXT	24	10
10	25	RECEPT-LT OFFICE	1	20	1.0	–					–	1	PFB	26	–
10	27	RECEPT-LT OFFICE	1	20			0.8	–			–	1	PFB	28	–
10	29	RECEPT-LOCKERS	1	20					1.2	–	–	1	PFB	30	–
12	31	PHOTOCELL	1	20	1.0	–					–	1	PFB	32	–
10	33	RECEPT-URBAN PARK	1	20			1.0	–			–	1	PFB	34	–
10	35	RECEPT-URBAN PARK	1	20					1.0	–	–	1	PFB	36	–
10	37	RECEPT-URBAN PARK	1	20	1.0	–					–	1	PFB	38	–
–	39	SPARE	1	20			1.0	–			–	1	PFB	40	–
–	41	RECEPT - BULK STOR	1	20					1.0	–	–	1	PFB	42	–

CONNECTED LOAD/PHASE: 11.8 | 10.8 | 11.4
TOTAL CONNECTED LOAD: 34 KVA
DEMAND FACTOR: 0.8
TOTAL DEMAND LOAD: 27.2 KVA= 76 AMPS

PANEL "2C1B"

120/208 VOLTS, 3 PHASE, 4 WIRE
225 AMP MAIN LUGS
MIN AIC: 10,000
MOUNTING: SURFACE

WIRE SIZE (AWG)	CKT NO	USE	CKT BKR POLE	CKT BKR AMP	PHASE A		PHASE B		PHASE C		CKT BKR AMP	CKT BKR POLE	USE	CKT NO	WIRE SIZE (AWG)
10	1	RECEPT-VIEWING	1	20	0.8	1.2					20	1	MODULAR FURN-CLERKS	2	12
12	3	RECEPT-VIEWING	1	20			0.8	1.2			20	1	MODULAR FURN-CLERKS	4	12
12	5	RECEPT-CLERKS	1	20					1.0	1.2	20	1	MODULAR FURN-CLERKS	6	12
12	7	RECEPT-COPIER	1	20	1.2	1.2					20	1	MODULAR FURN-CLERKS	8	12
12	9	RECEPT-FISCAL CTR	1	20			1.0	1.2			20	1	MODULAR FURN-CLERKS	10	10
12	11	RECEPT-FISCAL CTR	1	20					1.0	1.2	20	1	MODULAR FURN-CLERKS	12	10
10	13	RECEPT-FISCAL CTR	1	20	1.0	1.0					20	1	MODULAR FURN-CLERKS	14	10
10	15	RECEPT-FISCAL CTR	1	20			1.0	1.0			20	1	MODULAR FURN-CLERKS	16	10
10	17	RECEPT-FISCAL CTR	1	20					1.0	1.2	20	1	MODULAR FURN-CLERKS	18	10
10	19	RECEPT-FISCAL CTR	1	20	1.0	1.2					20	1	MODULAR FURN-CLERKS	20	10
–	21	SPARE	1	20			1.0	1.0			20	1	MODULAR FURN-CLERKS	22	10
–	23	SPARE	1	20					1.0	1.0	20	1	MODULAR FURN-CLERKS	24	10
10	25	RECEPT-FISCAL CTR	1	20	0.8	1.1						2	COPIER-LEGAL DOCS	26	12
10	27	RECEPT-FISCAL CTR	1	20			0.8	1.1			15			28	12
10	29	RECEPT-FISCAL CTR	1	20					0.8	–	–	1	PFB	30	–
12	31	RECEPT-COPIER	1	20	1.0	–					–	1	PFB	32	–
–	33	SPARE	1	20			1.0	–			–	1	PFB	34	–
–	35	SPARE	1	20					1.0	–	–	1	PFB	36	–
–	37	SPARE	1	20	1.0	–					–	1	PFB	38	–
–	39	SPARE	1	20			1.0	–			–	1	PFB	40	–
–	41	SPARE	1	20					1.0	–	–	1	PFB	42	–

CONNECTED LOAD/PHASE: 12.5 | 12.1 | 11.4
TOTAL CONNECTED LOAD: 36.0 KVA
DEMAND FACTOR: 0.8
TOTAL DEMAND LOAD: 28.2 KVA= 76 AMPS

PANEL "2C1C"

120/208 VOLTS, 3 PHASE, 4 WIRE
225 AMP MAIN LUGS
MIN AIC: 10,000
MOUNTING: SURFACE

WIRE SIZE (AWG)	CKT NO	USE	CKT BKR POLE	CKT BKR AMP	PHASE A		PHASE B		PHASE C		CKT BKR AMP	CKT BKR POLE	USE	CKT NO	WIRE SIZE (AWG)
10	1	VENDOR-COOLERS	1	20	1.2	2.0						2	SPARE	2	–
12	3	VENDOR-COOLERS	1	20			1.2	2.0			30			4	–
12	5	VENDOR-FREEZER	1	20					1.2	1.2		2	VENDOR-ESPRESSO	6	12
12	7	VENDOR-APPLIANCES	1	20	1.0	1.2					20			8	12
12	9	VENDOR-APPLIANCES	1	20			1.0	1.0			20	1	SPARE	10	10
12	11	VENDOR-APPLIANCES	1	20					1.0	1.0	20	1	SPARE	12	10
12	13	VENDOR-APPLIANCES	1	20	1.0	–					–	1	PFB	14	–
12	15	VENDOR-RECEPT	1	20			0.8	–			–	1	PFB	16	–
12	17	VENDOR-RECEPT	1	20					0.8	–	–	1	PFB	18	–
12	19	VENDOR-RECEPT	1	20	0.8	–					–	1	PFB	20	–
12	21	RCVG DOOR	2				1.1	–			–	1	PFB	22	–
12	23			15					1.1	–	–	1	PFB	24	–
12	25	FCU A1-4, A1-6	1	20	0.8	–					–	1	PFB	26	–
10	27	VAV BOXES	1	20			1.2	–			–	1	PFB	28	–
12	29	X-RAY SCANNER	1	20					1.0	–	–	1	PFB	30	–
12	31	METAL DETECTOR	1	20	1.0	–					–	1	PFB	32	–
–	33	SPARE	1	20			1.0	–			–	1	PFB	34	–
–	35	SPARE	1	20					1.0	–	–	1	PFB	36	–
–	37	SPARE	1	20	1.0	–					–	1	PFB	38	–
–	39	SPARE	1	20			1.0	–			–	1	PFB	40	–
–	41	SPARE	1	20					1.0	–	–	1	PFB	42	–

CONNECTED LOAD/PHASE: 10.0 | 10.3 | 9.3
TOTAL CONNECTED LOAD: 29.6 KVA
DEMAND FACTOR: 0.8
TOTAL DEMAND LOAD: 23.7 KVA= 66 AMPS

PANEL "2C1D"

120/208 VOLTS, 3 PHASE, 4 WIRE
225 AMP MAIN LUGS
MIN AIC: 10,000
MOUNTING: SURFACE

WIRE SIZE (AWG)	CKT NO	USE	CKT BKR POLE	CKT BKR AMP	PHASE A		PHASE B		PHASE C		CKT BKR AMP	CKT BKR POLE	USE	CKT NO	WIRE SIZE (AWG)
10	1	RECEPT-WAITING	1	20	0.8	0.8					20	1	MODULAR FURN-CLERKS	2	12
10	3	RECEPT-ATM	1	20			1.0	0.8			20	1	MODULAR FURN-CLERKS	4	12
10	5	RECEPT-ENTRY	1	20					1.0	0.8	20	1	MODULAR FURN-CLERKS	6	12
12	7	RECEPT-FISCAL CTR	1	20	1.0	0.8					20	1	MODULAR FURN-CLERKS	8	12
12	9	RECEPT-FISCAL CTR	1	20			1.0	1.0			20	1	MODULAR FURN-CLERKS	10	12
12	11	RECEPT-FISCAL CTR	1	20					1.0	1.0	20	1	MODULAR FURN-CLERKS	12	12
12	13	RECEPT-FISCAL CLK	1	20	1.0	–					20	1	MODULAR FURN-CLERKS	14	12
12	15	RECEPT-FISCAL CLK	1	20			0.8	–			20	1	MODULAR FURN-CLERKS	16	12
–	17	SPARE	1	20					0.8	–	20	1	MODULAR FURN-CLERKS	18	12
12	19	RECEPT-FISCAL CTR	1	20	0.8	–					20	1	MODULAR FURN-CLERKS	20	12
12	21	RECEPT-FISCAL CTR	1	20			1.0	–			20	1	MODULAR FURN-CLERKS	22	12
12	23	RECEPT-FISCAL CTR	1	20					1.0	–	20	1	MODULAR FURN-CLERKS	24	12
12	25	RECEPT-FISCAL CTR	1	20	0.8	–					–	1	PFB	26	–
12	27	RECEPT-FISCAL SUPV	1	20			1.2	–			–	1	PFB	28	–
12	29	RECEPT-FISCAL SUPV	1	20					1.0	–	–	1	PFB	30	–
12	31	RECEPT-COPIER	1	20	1.0	–					–	1	PFB	32	–
–	33	SPARE	1	20			1.0	–			–	1	PFB	34	–
–	35	SPARE	1	20					1.0	–	–	1	PFB	36	–
–	37	SPARE	1	20	1.0	–					–	1	PFB	38	–
–	39	SPARE	1	20			1.0	–			–	1	PFB	40	–
–	41	SPARE	1	20					1.0	–	–	1	PFB	42	–

CONNECTED LOAD/PHASE: 9.0 | 10.2 | 9.6
TOTAL CONNECTED LOAD: 28.8 KVA
DEMAND FACTOR: 0.8
TOTAL DEMAND LOAD: 23.0 KVA= 64 AMPS

PANEL "2C1E"

120/208 VOLTS, 3 PHASE, 4 WIRE
225 AMP MAIN LUGS
MIN AIC: 10,000
MOUNTING: SURFACE

WIRE SIZE (AWG)	CKT NO	USE	CKT BKR POLE	CKT BKR AMP	PHASE A		PHASE B		PHASE C		CKT BKR AMP	CKT BKR POLE	USE	CKT NO	WIRE SIZE (AWG)
12	1	RECEPT-SUPERVISORS	1	20	1.2	1.0					20	1	MODULAR FURN-CLERKS	2	12
12	3	RECEPT-SUPERVISORS	1	20			0.8	1.0			20	1	MODULAR FURN-CLERKS	4	12
12	5	RECEPT-SUPERVISORS	1	20					0.8	1.0	20	1	MODULAR FURN-CLERKS	6	12
12	7	RECEPT-SUPERVISORS	1	20	1.2	1.0					20	1	MODULAR FURN-CLERKS	8	12
12	9	RECEPT-CONF	1	20			1.2	1.0			20	1	MODULAR FURN-CLERKS	10	12
12	11	RECEPT-COPIER	1	20					1.2	1.0	20	1	MODULAR FURN-CLERKS	12	12
12	13	RECEPT-WORK/COPY	1	20	1.0	1.0					20	1	MODULAR FURN-CLERKS	14	12
12	15	RECEPT-COPIER	1	20			1.2	1.0			20	1	MODULAR FURN-CLERKS	16	12
12	17	RECEPT-JUDGE	1	20					1.2	1.0	20	1	MODULAR FURN-CLERKS	18	10
10	19	RECEPT-JUDGE	1	20	0.8	1.0					20	1	MODULAR FURN-CLERKS	20	10
10	21	RECEPT-CLERKS	1	20			0.8	1.0			20	1	MODULAR FURN-CLERKS	22	10
10	23	RECEPT-RESTRM/EWC	1	20					0.8	1.0	20	1	MODULAR FURN-CLERKS	24	10
10	25	RECEPT-RESTRM/EWC	1	20	1.0	1.0					20	1	MODULAR FURN-CLERKS	26	10
10	27	RECEPT-ELEC	1	20			1.2	1.0			20	1	MODULAR FURN-CLERKS	28	10
10	29	FCU A1-2	1	20					1.0	1.0	20	1	MODULAR FURN-CLERKS	30	10
12	31	RECEPT-COPIER	1	20	1.0	1.0					20	1	MODULAR FURN-CLERKS	32	10
–	33	SPARE	1	20			1.0	1.0			20	1	VAV BOXES	34	10
–	35	SPARE	1	20					1.0	1.0	20	1	VAV BOXES	36	10
–	37	SPARE	1	20	1.0	1.2					20	1	X-RAY SCANNER	38	10
–	39	SPARE	1	20			1.0	1.2			20	1	METAL DETECTOR	40	10
–	41	SPARE	1	20					1.0	1.2	20	1	METAL DETECTOR	42	10

CONNECTED LOAD/PHASE: 14.2 | 14.4 | 14.2
TOTAL CONNECTED LOAD: 42.8 KVA
DEMAND FACTOR: 0.8
TOTAL DEMAND LOAD: 34.0 KVA= 95 AMPS

PANEL "2C1F"

120/208 VOLTS, 3 PHASE, 4 WIRE
100 AMP MAIN LUGS
MIN AIC: 10,000
MOUNTING: FLUSH

WIRE SIZE (AWG)	CKT NO	USE	CKT BKR POLE	CKT BKR AMP	PHASE A		PHASE B		PHASE C		CKT BKR AMP	CKT BKR POLE	USE	CKT NO	WIRE SIZE (AWG)
12	1	FLOOR RECEPT-COURT	1	20	0.6	0.9					20	1	LIGHTS-COURT	2	12
12	3	FLOOR RECEPT-COURT	1	20			0.6	0.9			20	1	LIGHTS-COURT	4	12
12	5	FLOOR RECEPT-COURT	1	20					0.6	1.0	20	1	SPARE	6	12
12	7	RECEPT-BENCH	1	20	0.8	1.0					20	1	ROLLING SHADE	8	–
12	9	RECEPT-BENCH	1	20			0.8	1.0			20	1	SPARE	10	–
12	11	RECEPT-BENCH	1	20					0.8	1.0	20	1	SPARE	12	–
12	13	SPARE	1	20	1.0	–					–	1	PFB	14	–
12	15	RECEPT-CLERK	1	20			1.0	–			–	1	PFB	16	–
12	17	RECEPT-COURT	1	20					1.2	–	–	1	PFB	18	–
12	19	RECEPT-JURY	1	20	1.2	–					–	1	PFB	20	–
12	21	RECEPT-JURY	1	20			1.2	–			–	1	PFB	22	–
12	23	RECEPT-CONF	1	20					1.0	–	–	1	PFB	24	–
12	25	RECEPT-SEATING	1	20	1.0	–					–	1	PFB	26	–
12	27	CCTV MONITORS	1	20			1.0	–			–	1	PFB	28	–
12	29	CCTV MONITORS	1	20					1.0	–	–	1	PFB	30	–

CONNECTED LOAD/PHASE: 6.5 | 7.5 | 6.6
TOTAL CONNECTED LOAD: 20.6 KVA
DEMAND FACTOR: 0.8
TOTAL DEMAND LOAD: 16.5 KVA= 46 AMPS

PANEL "2C2A"

120/208 VOLTS, 3 PHASE, 4 WIRE
225 AMP MAIN LUGS
MIN AIC: 10,000
MOUNTING: SURFACE

WIRE SIZE (AWG)	CKT NO	USE	CKT BKR POLE	CKT BKR AMP	PHASE A		PHASE B		PHASE C		CKT BKR AMP	CKT BKR POLE	USE	CKT NO	WIRE SIZE (AWG)
12	1	RECEPT-COURT 2071	1	20	0.6	0.8					20	1	RECEPT-LOBBY	2	12
12	3	RECEPT-COURT 2071	1	20			0.8	1.2			20	1	COPIER	4	12
12	5	RECEPT-COURT 2071	1	20					0.8	1.2	20	1	COPIER	6	12
12	7	RECEPT-COURT 2071	1	20	1.2	1.2					20	1	RECEPT-BAILIFF	8	12
12	9	RECEPT-COURT 2071	1	20			0.8	0.8			20	1	RECEPT-BAILIFF	10	12
12	11	RECEPT-COURT 2071	1	20					0.8	1.2	20	1	RECEPT-CONF	12	12
12	13	RECEPT-COURT 2080	1	20	0.6	1.0					20	1	RECEPT-INTERVIEW	14	12
12	15	RECEPT-COURT 2080	1	20			0.8	1.2			20	1	RECEPT-OBSERV	16	12
12	17	RECEPT-COURT 2080	1	20					0.8	1.2	20	1	RECEPT-CONF	18	12
12	19	RECEPT-COURT 2080	1	20	1.2	1.0					20	1	COURTRM MONITORS	20	12
12	21	RECEPT-COURT 2080	1	20			0.8	1.0			20	1	COURTRM MONITORS	22	12
12	23	RECEPT-COURT 2080	1	20					0.8	1.0	20	1	ROLLING SHADE	24	10
10	25	RECEPT-COURT 2087	1	20	0.6	1.0					20	1	ROLLING SHADE	26	10
10	27	RECEPT-COURT 2087	1	20			0.8	1.0			20	1	RECPT - OBSERV	28	–
10	29	RECEPT-COURT 2087	1	20					0.8	1.0	20	1	SPARE	30	–
10	31	RECEPT-COURT 2087	1	20	1.0	–					–	1	PFB	32	–
10	33	RECEPT-COURT 2087	1	20			0.8	–			–	1	PFB	34	–
10	35	RECEPT-COURT 2087	1	20					0.8	–	–	1	PFB	36	–
10	37	RECEPT-COURT 2087	1	20	1.0	–					–	1	PFB	38	–
10	39	ROLLING SHADE	1	20			0.5	–			–	1	PFB	40	–
10	41	ROLLING SHADE	1	20					0.5	–	–	1	PFB	42	–

CONNECTED LOAD/PHASE: 11.2 | 10.5 | 10.9
TOTAL CONNECTED LOAD: 32.6 KVA
DEMAND FACTOR: 0.8
TOTAL DEMAND LOAD: 26.0 KVA= 72 AMPS

PANEL "2C2B"

120/208 VOLTS, 3 PHASE, 4 WIRE
225 AMP MAIN LUGS
MIN AIC: 10,000
MOUNTING: SURFACE

WIRE SIZE (AWG)	CKT NO	USE	CKT BKR POLE	CKT BKR AMP	PHASE A		PHASE B		PHASE C		CKT BKR AMP	CKT BKR POLE	USE	CKT NO	WIRE SIZE (AWG)
12	1	RECEPT-COURT 2058	1	20	1.0	0.9					20	1	LTS-COURT 2087	2	10
12	3	RECEPT-COURT 2058	1	20			0.8	1.0			20	1	LTS-COURT 2087	4	10
12	5	RECEPT-COURT 2058	1	20					0.8	0.9	20	1	LTS-COURT 2087	6	10
12	7	RECEPT-COURT 2058	1	20	1.2	0.9					20	1	LTS-COURT 2087	8	10
12	9	RECEPT-COURT 2058	1	20			0.8	1.0			20	1	LTS-COURT 2080	10	12
12	11	RECEPT-COURT 2058	1	20					0.8	1.0	20	1	LTS-COURT 2080	12	12
12	13	RECEPT-COURT 2052	1	20	1.2	0.9					20	1	LTS-COURT 2080	14	12
12	15	RECEPT-COURT 2052	1	20			0.8	0.9			20	1	LTS-COURT 2080	16	12
12	17	RECEPT-COURT 2052	1	20					1.0	1.0	20	1	LTS-COURT 2071	18	12
12	19	RECEPT-COURT 2052	1	20	1.0	1.0					20	1	LTS-COURT 2071	20	12
12	21	RECEPT-COURT 2052	1	20			0.8	0.9			20	1	LTS-COURT 2071	22	12
12	23	RECEPT-COURT 2052	1	20					0.8	0.9	20	1	LTS-COURT 2071	24	12
12	25	RECEPT-CONF	1	20	1.2	1.0					20	1	LTS-COURT 2058	26	12
12	27	RECEPT-CONF	1	20			1.2	1.0			20	1	LTS-COURT 2058	28	12
12	29	RECEPT-CONF	1	20					1.2	0.9	20	1	LTS-COURT 2058	30	12
12	31	FCU A2-4	1	20	0.8	0.9					20	1	LTS-COURT 2058	32	12
10	33	VAV	1	20			1.0	1.0			20	1	SPARE	34	–
–	35	SPARE	1	20					1.0	1.0	20	1	SPARE	36	–
–	37	SPARE	1	20	1.0	–					–	1	PFB	38	–
–	39	SPARE	1	20			1.0	–			–	1	PFB	40	–
–	41	SPARE	1	20					1.0	–	–	1	PFB	42	–

CONNECTED LOAD/PHASE: 13.1 | 12.2 | 12.3
TOTAL CONNECTED LOAD: 37.6 KVA
DEMAND FACTOR: 0.8
TOTAL DEMAND LOAD: 30.0 KVA= 83 AMPS

FIELD POSTED RECORD DRAWINGS

REVISION NO.	SYM.	DESCRIPTION	SHT.__ OF__	DATE	APPROVED: PUBLIC WORKS ADMINISTRATOR
PCD-13	13	FF&E REVISIONS		04/13/09	
ADD-05	A5	REVISE PANEL SCHEDULES	169/197	02/02/07	
ADD-04	A4	MISCELLANEOUS REVISIONS	163/195	01/26/07	

GLENN T. KARAMATSU · LICENSED PROFESSIONAL ENGINEER · No. 4368-E · HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.

PROJECT ENGINEER for ECS, Inc.

APRIL 30, 2008
EXPIRATION DATE OF THE LICENSE

DEPT. OF ACCOUNTING & GENERAL SERVICES
DIVISION OF PUBLIC WORKS
STATE OF HAWAII

KAPOLEI JUDICIARY COMPLEX
KAPOLEI, OAHU, HAWAII

PANEL SCHEDULES

ECS, INC.

DESIGNED BY: MA	CHECKED BY: VM	DAGS JOB NO. 12-21-7043	DRAWING NO. E-A703
DRAWN BY: CS	APPROVED BY: CK	DATE NOV 2006	SHEET 658 OF 1021 SHTS.
SCALE: AS SHOWN			

FILE ____ DRAW ____ FOLDER ____

5/14/10-9:02 Y:\014\014.051\14-51 CA704 PNL3.dwg

PANEL "2C2D"

120/208 VOLTS, 3 PHASE, 4 WIRE
225 AMP MAIN LUGS
MIN AIC: 10,000
MOUNTING: SURFACE

WIRE SIZE (AWG)	CKT NO	USE	CKT BKR POLE	CKT BKR AMP	PHASE A	PHASE B	PHASE C	CKT BKR AMP	CKT BKR POLE	USE	CKT NO	WIRE SIZE (AWG)
10	1	MODULAR FURN-JCS	1	20	0.5 1.0			20	1	RECEPT-JSS SUPV	2	10
10	3	MODULAR FURN-JCS	1	20		0.5 0.8		20	1	RECEPT-JSS SUPV	4	10
10	5	MODULAR FURN-JCS	1	20			0.5 1.0	20	1	RECEPT-JSS SUPV	6	10
10	7	MODULAR FURN-JCS	1	20	0.5 1.0			20	1	RECEPT-JSS BREAK	8	10
10	9	MODULAR FURN-JCS	1	20		0.8 1.0		20	1	RECEPT-JSS BREAK	10	10
10	11	MODULAR FURN-JCS	1	20			0.8 1.2	20	1	RECEPT-JSS COPIER	12	10
10	13	MODULAR FURN-JCS	1	20	0.8 0.8			20	1	RECEPT-INTERVIEW	14	12
10	15	MODULAR FURN-JCS	1	20		0.8 0.8		20	1	RECEPT-WAITING	16	12
10	17	RECEPT-JCS CONF	1	20			1.2 0.8	20	1	RECEPT-INTERVIEW	18	12
10	19	RECEPT-COPIER	1	20	1.2 1.0			20	1	RECEPT-JDC CONF	20	12
10	21	RECEPT-COPIER	1	20		1.2 1.2		20	1	RECEPT-JDC COPIER	22	12
10	23	RECEPT-JCS SUPV	1	20			1.2 1.0	20	1	RECEPT-JDC WORK	24	12
10	25	RECEPT-JCS SUPV	1	20	0.8 1.0				2	COPIER WKRM	26	12
10	27	RECEPT-JCS SUPV	1	20		1.2 1.0		15			28	12
10	29	RECEPT-RESTRM	1	20			0.8 1.0	20	1	SPARE	30	–
10	31	RECEPT-JCS WKSTN	1	20	0.8 1.0			20	1	SPARE	32	–
10	33	RECEPT-JCS RECEPT	1	20		0.8 1.0		20	1	SPARE	34	–
10	35	RECEPT-INTERVIEW	1	20			0.8 1.0	20	1	SPARE	36	–
–	37	PFB	1	–	– 1.0			20	1	SPARE	38	–
–	39	PFB	1	–		– 1.0		20	1	SPARE	40	–
–	41	PFB	1	–			– 1.0	20	1	SPARE	42	–
		CONNECTED LOAD/PHASE			11.4	12.1	12.3					
		TOTAL CONNECTED LOAD			35.8	KVA						
		DEMAND FACTOR			0.8							
		TOTAL DEMAND LOAD			28.6	KVA=	79 AMPS					

OCCUPANCY SENSOR/LIGHT SWITCH, WALL MOUNTED

PANEL "2C2E"

120/208 VOLTS, 3 PHASE, 4 WIRE
225 AMP MAIN LUGS
MIN AIC: 10,000
MOUNTING: SURFACE

WIRE SIZE (AWG)	CKT NO	USE	CKT BKR POLE	CKT BKR AMP	PHASE A	PHASE B	PHASE C	CKT BKR AMP	CKT BKR POLE	USE	CKT NO	WIRE SIZE (AWG)
12	1	MODULAR FURN-ADMIN	1	20	0.8 0.8			20	1	MODULAR FURN-JSS	2	12
12	3	MODULAR FURN-ADMIN	1	20		0.8 0.8		20	1	MODULAR FURN-JSS	4	12
12	5	MODULAR FURN-ADMIN	1	20			0.8 0.8	20	1	MODULAR FURN-JSS	6	12
12	7	MODULAR FURN-ADMIN	1	20	0.8 0.8			20	1	MODULAR FURN-JSS	8	12
12	9	MODULAR FURN-ADMIN	1	20		0.8 0.6		20	1	MODULAR FURN-JSS	10	12
12	11	MODULAR FURN-ADMIN	1	20			0.8 0.6	20	1	MODULAR FURN-JSS	12	10
12	13	MODULAR FURN-ADMIN	1	20	0.8 0.6			20	1	MODULAR FURN-JSS	14	10
12	15	MODULAR FURN-ADMIN	1	20		0.8 0.6		20	1	MODULAR FURN-JSS	16	10
10	17	MODULAR FURN-ADMIN	1	20			0.5 1.0	20	1	MODULAR FURN-JSS	18	10
10	19	MODULAR FURN-ADMIN	1	20	0.5 1.0			20	1	MODULAR FURN-JSS	20	10
10	21	MODULAR FURN-ADMIN	1	20		0.5 1.0		20	1	MODULAR FURN-JSS	22	10
10	23	MODULAR FURN-ADMIN	1	20			0.5 1.0	20	1	MODULAR FURN-JSS	24	10
12	25	MODULAR FURN-ADMIN	1	20	0.8 1.0			20	1	MODULAR FURN-JSS	26	10
12	27	MODULAR FURN-ADMIN	1	20		0.8 1.0		20	1	MODULAR FURN-JSS	28	10
12	29	MODULAR FURN-ADMIN	1	20			0.8 1.0	20	1	MODULAR FURN-JSS	30	10
12	31	MODULAR FURN-ADMIN	1	20	0.8 1.0			20	1	MODULAR FURN-JSS	32	10
12	33	MODULAR FURN-ADMIN	1	20		1.0 1.0		20	1	SPARE	34	–
12	35	MODULAR FURN-ADMIN	1	20			1.0 1.0	20	1	SPARE	36	–
12	37	MODULAR FURN-ADMIN	1	20	1.0 1.0			20	1	SPARE	38	–
12	39	MODULAR FURN-ADMIN	1	20		1.0 1.0		20	1	SPARE	40	–
–	41	SPARE	1	20			1.0 1.0	20	1	SPARE	42	–
		CONNECTED LOAD/PHASE			11.7	11.4	11.8					
		TOTAL CONNECTED LOAD			34.9	KVA						
		DEMAND FACTOR			0.8							
		TOTAL DEMAND LOAD			28.0	KVA=	77 AMPS					

PANEL "2C2F"

120/208 VOLTS, 3 PHASE, 4 WIRE
225 AMP MAIN LUGS
MIN AIC: 10,000
MOUNTING: SURFACE

WIRE SIZE (AWG)	CKT NO	USE	CKT BKR POLE	CKT BKR AMP	PHASE A	PHASE B	PHASE C	CKT BKR AMP	CKT BKR POLE	USE	CKT NO	WIRE SIZE (AWG)
10	1	RECEPT-ADMIN COPIER	1	20	1.2 1.0			20	1	LTS-COURT 2043	2	12
12	3	RECEPT-ATTY	1	20		1.0 1.0		20	1	LTS-COURT 2043	4	12
12	5	RECEPT-DEPUTY	1	20			1.0 0.9	20	1	LTS-COURT 2043	6	12
12	7	RECEPT-DEPUTY	1	20	1.0 0.9			20	1	LTS-COURT 2043	8	12
12	9	RECEPT-WORK	1	20		0.8 1.0		20	1	LTS-COURT 2052	10	10
12	11	RECEPT-WORK	1	20			1.2 0.9	20	1	LTS-COURT 2052	12	10
12	13	RECEPT-WORK COPIER	1	20	0.8 0.9			20	1	LTS-COURT 2052	14	10
12	15	RECEPT-COURT 2043	1	20		1.2 1.0		20	1	LTS-COURT 2052	16	10
12	17	RECEPT-COURT 2043	1	20			0.8 1.0	20	1	SPARE	18	–
12	19	RECEPT-COURT 2043	1	20	0.8 1.0			20	1	SPARE	20	–
12	21	RECEPT-COURT 2043	1	20		0.6 1.0		20	1	SPARE	22	–
12	23	RECEPT-COURT 2043	1	20			0.8 1.0	20	1	SPARE	24	–
12	25	RECEPT-COURT 2043	1	20	0.8 –			–	1	PFB	26	–
12	27	RECEPT-ELEC	1	20		1.0 –		–	1	PFB	28	–
12	29	RECEPT-FISCAL	1	20			0.6 –	–	1	PFB	30	–
12	31	RECEPT-FISCAL	1	20	0.6 –			–	1	PFB	32	–
12	33	RECEPT-WAITING	1	20		1.2 –		–	1	PFB	34	–
12	35	RECEPT-WAITING	1	20			1.2 –	–	1	PFB	36	–
12	37	FCU A2-2	1	20	1.0 –			–	1	PFB	38	–
10	39	VAV BOXES	1	20		1.0 –		–	1	PFB	40	–
–	41	SPARE	1	20			1.0 –	–	1	PFB	42	–
		CONNECTED LOAD/PHASE			9.8	10.8	9.4					
		TOTAL CONNECTED LOAD			30.0	KVA						
		DEMAND FACTOR			0.8							
		TOTAL DEMAND LOAD			24.2	KVA=	67 AMPS					

PANEL "2C3A"

120/208 VOLTS, 3 PHASE, 4 WIRE
225 AMP MAIN LUGS
MIN AIC: 10,000
MOUNTING: SURFACE

WIRE SIZE (AWG)	CKT NO	USE	CKT BKR POLE	CKT BKR AMP	PHASE A	PHASE B	PHASE C	CKT BKR AMP	CKT BKR POLE	USE	CKT NO	WIRE SIZE (AWG)
12	1	RECEPT-COURT 3064	1	20	0.6 0.8			20	1	RECEPT-LOBBY	2	12
12	3	RECEPT-COURT 3064	1	20		0.8 1.2		20	1	COPIER	4	12
12	5	RECEPT-COURT 3064	1	20			0.8 1.2	20	1	COPIER	6	12
12	7	RECEPT-COURT 3064	1	20	1.2 1.2			20	1	RECEPT-BAILIFF	8	12
12	9	RECEPT-COURT 3064	1	20		0.8 0.8		20	1	RECEPT-BAILIFF	10	12
12	11	RECEPT-COURT 3064	1	20			0.8 1.2	20	1	RECEPT-CONF	12	12
12	13	RECEPT-COURT 3073	1	20	0.6 1.0			20	1	RECEPT-INTERVIEW	14	12
12	15	RECEPT-COURT 3073	1	20		0.8 1.2		20	1	RECEPT-OBSERV	16	12
12	17	RECEPT-COURT 3073	1	20			0.8 1.2	20	1	RECEPT-CONF	18	12
12	19	RECEPT-COURT 3073	1	20	1.2 1.0			20	1	ROLLING SHADE	20	10
12	21	RECEPT-COURT 3073	1	20		0.8 1.0		20	1	ROLLING SHADE	22	10
12	23	RECEPT-COURT 3073	1	20			0.8 1.0	20	1	SPARE	24	–
10	25	RECEPT-COURT 3081	1	20	0.6 1.0			20	1	SPARE	26	–
10	27	RECEPT-COURT 3081	1	20		0.8 1.0		20	1	SPARE	28	–
10	29	RECEPT-COURT 3081	1	20			0.8 1.0	20	1	SPARE	30	–
10	31	RECEPT-COURT 3081	1	20	1.0 –			–	1	PFB	32	–
10	33	RECEPT-COURT 3081	1	20		0.8 –		–	1	PFB	34	–
10	35	RECEPT-COURT 3081	1	20			0.8 –	–	1	PFB	36	–
10	37	RECEPT-COURT 3081	1	20	1.0 –			–	1	PFB	38	–
10	39	ROLLING SHADE	1	20		0.5 –		–	1	PFB	40	–
10	41	ROLLING SHADE	1	20			0.5 –	–	1	PFB	42	–
		CONNECTED LOAD/PHASE			11.2	10.5	10.9					
		TOTAL CONNECTED LOAD			32.6	KVA						
		DEMAND FACTOR			0.8							
		TOTAL DEMAND LOAD			26.0	KVA=	72 AMPS					

PANEL "2C3B"

120/208 VOLTS, 3 PHASE, 4 WIRE
225 AMP MAIN LUGS
MIN AIC: 10,000
MOUNTING: SURFACE

WIRE SIZE (AWG)	CKT NO	USE	CKT BKR POLE	CKT BKR AMP	PHASE A	PHASE B	PHASE C	CKT BKR AMP	CKT BKR POLE	USE	CKT NO	WIRE SIZE (AWG)
12	1	RECEPT-COURT 3051	1	20	1.0 1.0			20	1	LTS-COURT 3081	2	10
12	3	RECEPT-COURT 3051	1	20		0.8 1.0		20	1	LTS-COURT 3081	4	10
12	5	RECEPT-COURT 3051	1	20			0.8 0.9	20	1	LTS-COURT 3081	6	10
12	7	RECEPT-COURT 3051	1	20	1.2 0.9			20	1	LTS-COURT 3081	8	10
12	9	RECEPT-COURT 3051	1	20		0.8 1.0		20	1	LTS-COURT 3073	10	12
12	11	RECEPT-COURT 3051	1	20			0.8 1.0	20	1	LTS-COURT 3073	12	12
12	13	RECEPT-COURT 3045	1	20	1.2 0.9			20	1	LTS-COURT 3073	14	12
12	15	RECEPT-COURT 3045	1	20		0.8 0.9		20	1	LTS-COURT 3073	16	12
12	17	RECEPT-COURT 3045	1	20			1.0 1.0	20	1	LTS-COURT 3064	18	12
12	19	RECEPT-COURT 3045	1	20	1.0 1.0			20	1	LTS-COURT 3064	20	12
12	21	RECEPT-COURT 3045	1	20		0.8 0.9		20	1	LTS-COURT 3064	22	12
12	23	RECEPT-COURT 3045	1	20			0.8 0.9	20	1	LTS-COURT 3064	24	12
12	25	RECEPT-CONF	1	20	1.2 1.0			20	1	LTS-COURT 3051	26	12
12	27	RECEPT-CONF	1	20		1.2 1.0		20	1	LTS-COURT 3051	28	12
12	29	FCU A3-4	1	20			1.2 0.9	20	1	LTS-COURT 3051	30	12
10	31	VAV BOXES	1	20	0.8 0.9			20	1	LTS-COURT 3051	32	12
–	33	SPARE	1	20		1.0 1.0		20	1	SPARE	34	–
–	35	SPARE	1	20			1.0 1.0	20	1	SPARE	36	–
–	37	SPARE	1	20	1.0 1.0			20	1	SPARE	38	–
–	39	SPARE	1	20		1.0 1.0		20	1	SPARE	40	–
–	41	SPARE	1	20			1.0 1.0	20	1	SPARE	42	–
		CONNECTED LOAD/PHASE			14.1	13.2	13.3					
		TOTAL CONNECTED LOAD			40.6	KVA						
		DEMAND FACTOR			0.8							
		TOTAL DEMAND LOAD			32.5	KVA=	90 AMPS					

PANEL "2C3D"

120/208 VOLTS, 3 PHASE, 4 WIRE
225 AMP MAIN LUGS
MIN AIC: 10,000
MOUNTING: SURFACE

WIRE SIZE (AWG)	CKT NO	USE	CKT BKR POLE	CKT BKR AMP	PHASE A	PHASE B	PHASE C	CKT BKR AMP	CKT BKR POLE	USE	CKT NO	WIRE SIZE (AWG)
12	1	MODULAR FURN-CLERKS	1	20	1.0 0.8			20	1	MODULAR FURN-CLERKS	2	12
12	3	MODULAR FURN-CLERKS	1	20		1.0 0.8		20	1	MODULAR FURN-CLERKS	4	12
12	5	MODULAR FURN-CLERKS	1	20			1.0 0.8	20	1	MODULAR FURN-CLERKS	6	12
12	7	MODULAR FURN-CLERKS	1	20	1.0 0.8			20	1	MODULAR FURN-CLERKS	8	12
12	9	MODULAR FURN-CLERKS	1	20		0.8 0.8		20	1	MODULAR FURN-CLERKS	10	12
12	11	MODULAR FURN-CLERKS	1	20			0.8 0.8	20	1	MODULAR FURN-CLERKS	12	12
12	13	MODULAR FURN-CLERKS	1	20	0.8 0.8			20	1	MODULAR FURN-CLERKS	14	12
12	15	MODULAR FURN-CLERKS	1	20		0.8 0.8		20	1	MODULAR FURN-CLERKS	16	12
12	17	MODULAR FURN-CLERKS	1	20			0.8 0.8	20	1	MODULAR FURN-CLERKS	18	12
12	19	MODULAR FURN-CLERKS	1	20	0.8 0.8			20	1	MODULAR FURN-CLERKS	20	12
12	21	MODULAR FURN-CLERKS	1	20		0.8 0.8		20	1	MODULAR FURN-CLERKS	22	12
12	23	MODULAR FURN-CLERKS	1	20			0.8 0.8	20	1	MODULAR FURN-CLERKS	24	12
12	25	MODULAR FURN-CLERKS	1	20	1.2 1.0			20	1	SPARE	26	–
12	27	MODULAR FURN-CLERKS	1	20		1.2 1.0		20	1	SPARE	28	–
12	29	MODULAR FURN-CLERKS	1	20			1.2 1.0	20	1	SPARE	30	–
12	31	MODULAR FURN-CLERKS	1	20	1.2 1.0			20	1	SPARE	32	–
12	33	MODULAR FURN-CLERKS	1	20		0.8 1.0		20	1	SPARE	34	–
12	35	MODULAR FURN-CLERKS	1	20			0.8 1.0	20	1	SPARE	36	–
12	37	MODULAR FURN-CLERKS	1	20	0.8 –			–	1	PFB	38	–
12	39	MODULAR FURN-CLERKS	1	20		0.8 –		–	1	PFB	40	–
–	41	SPARE	1	20			1.0 –	–	1	PFB	42	–
		CONNECTED LOAD/PHASE			12.0	11.4	11.8					
		TOTAL CONNECTED LOAD			35.2	KVA						
		DEMAND FACTOR			0.8							
		TOTAL DEMAND LOAD			28.0	KVA=	78 AMPS					

PANEL "2C3E"

120/208 VOLTS, 3 PHASE, 4 WIRE
225 AMP MAIN LUGS
MIN AIC: 10,000
MOUNTING: SURFACE

WIRE SIZE (AWG)	CKT NO	USE	CKT BKR POLE	CKT BKR AMP	PHASE A	PHASE B	PHASE C	CKT BKR AMP	CKT BKR POLE	USE	CKT NO	WIRE SIZE (AWG)
12	1	RECEPT-COURT 3035	1	20	1.0 0.8			20	1	RECEPT-RESTRMS	2	10
12	3	RECEPT-COURT 3035	1	20		0.8 1.2		20	1	RECEPT-MEDIATION CONF	4	10
12	5	RECEPT-COURT 3035	1	20			0.8 1.2	20	1	RECEPT-TRO SUPV	6	10
12	7	RECEPT-COURT 3035	1	20	1.2 1.0			20	1	SPARE	8	–
12	9	RECEPT-COURT 3035	1	20		0.8 0.8		20	1	MODULAR FURN-ADULT	10	10
12	11	RECEPT-COURT 3035	1	20			0.8 0.8	20	1	MODULAR FURN-ADULT	12	10
12	13	RECEPT-INTERVIEW	1	20	1.2 0.8			20	1	MODULAR FURN-ADULT	14	10
12	15	RECEPT-INTERVIEW	1	20		1.2 0.8		20	1	MODULAR FURN-ADULT	16	10
12	17	RECEPT-INTERVIEW	1	20			1.2 1.2	20	1	MODULAR FURN-ADULT	18	10
12	19	RECEPT-ELEC/MECH	1	20	0.6 1.2			20	1	MODULAR FURN-ADULT	20	10
12	21	RECEPT-CLERKS COPIER	1	20		1.2 1.2		20	1	MODULAR FURN-ADULT	22	10
12	23	RECEPT-SUPV	1	20			1.0 1.2	20	1	MODULAR FURN-ADULT	24	10
12	25	RECEPT-SUPV	1	20	1.0 1.2			20	1	RECEPT-BAILIFF SUPV	26	10
12	27	RECEPT-SUPV	1	20		0.8 0.8		20	1	RECEPT-BAILIFF SUPV	28	10
12	29	RECEPT-SUPV	1	20			0.8 0.8	20	1	RECEPT-BAILIFF WK	30	10
12	31	RECEPT-SUPV	1	20	0.8 1.2			20	1	RECEPT-BAILIFF WK	32	10
12	33	RECEPT-SUPV	1	20		0.8 1.0		20	1	RECEPT-BREAK	34	10
12	35	RECEPT-COPY AREA	1	20			0.8 1.0	20	1	RECEPT-BREAK	36	10
12	37	RECEPT-COPIER	1	20	1.2 1.0			20	1	SPARE	38	–
12	39	RECEPT-COPIER	1	20		1.2 1.0		20	1	SPARE	40	–
–	41	SPARE	1	20			1.0 1.0	20	1	SPARE	42	–
		CONNECTED LOAD/PHASE			14.2	13.6	13.6					
		TOTAL CONNECTED LOAD			41.4	KVA						
		DEMAND FACTOR			0.8							
		TOTAL DEMAND LOAD			33.0	KVA=	92 AMPS					

PANEL "2MP"

120/208 VOLTS, 3 PHASE, 4 WIRE
100 AMP MAIN LUGS
MIN AIC: 10,000
MOUNTING: FLUSH

WIRE SIZE (AWG)	CKT NO	USE	CKT BKR POLE	CKT BKR AMP	PHASE A	PHASE B	PHASE C	CKT BKR AMP	CKT BKR POLE	USE	CKT NO	WIRE SIZE (AWG)
12	1	REFRIG	1	20	0.8 0.8			20	1	RECEPT-MP ROOM	2	12
12	3	RECEPT-KITCHEN	1	20		0.8 0.8		20	1	RECEPT-MP ROOM	4	12
12	5	RECEPT-KITCHEN	1	20			0.8 0.8	20	1	RECEPT-MP ROOM	6	12
12	7	FLOOR RECEPT	1	20	1.0 0.8			20	1	RECEPT-MP ROOM	8	12
12	9	FLOOR RECEPT	1	20		1.0 0.8		20	1	RECEPT-MP ROOM	10	12
12	11	FLOOR RECEPT	1	20			1.0 0.8	20	1	RECEPT-MP ROOM	12	12
12	13	FLOOR RECEPT	1	20	1.0 0.8			–	1	PFB	14	–
–	15	SPARE	1	20		1.0 1.0		–	1	PFB	16	–
–	17	SPARE	1	20			1.0 1.0	–	1	PFB	18	–
–	19	SPARE	1	20	1.0 1.0			–	1	PFB	20	–
–	21	SPARE	1	20		1.0 1.0		–	1	PFB	22	–
–	23	SPARE	1	20			1.0 1.0	–	1	PFB	24	–
		CONNECTED LOAD/PHASE			13.1	12.2	12.3					
		TOTAL CONNECTED LOAD			37.6	KVA						
		DEMAND FACTOR			0.8							
		TOTAL DEMAND LOAD			30.0	KVA=	83 AMPS					

FIELD POSTED RECORD DRAWINGS

FIELD POSTED RECORD DRAWINGS Certified by: Seth Hamashige Date December 10, 2012
Unlimited Construction Services Inc

REVISION NO.	SYM.	DESCRIPTION	SHT.__ OF__	DATE	APPROVED: PUBLIC WORKS ADMINISTRATOR
PADD-05	A5	REVISE PANELS 2C2F AND 2C3A	57/74	02/02/07	
ADD-04	A4	MISCELLANEOUS REVISIONS	164/195	01/26/07	

GLENN T. KARAMATSU, LICENSED PROFESSIONAL ENGINEER, No. 4368-E, HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.

PROJECT ENGINEER for ECS, Inc.
APRIL 30, 2008
EXPIRATION DATE OF THE LICENSE

DEPT. OF ACCOUNTING & GENERAL SERVICES
DIVISION OF PUBLIC WORKS
STATE OF HAWAII

KAPOLEI JUDICIARY COMPLEX
KAPOLEI, OAHU, HAWAII

PANEL SCHEDULES

ECS, INC.

DESIGNED BY: MA	CHECKED BY: VM	12-21-7043	E-A704
DRAWN BY: CS	APPROVED BY: GK	DATE: NOV 2006	SHEET 859 OF 1021 SHTS.
SCALE: AS SHOWN			

5/14/10-9:00 Y:\014\014.051\14.51 EA705 PNL4.dwg

PANEL "2C3F"

A5 — 120/208 VOLTS, 3 PHASE, 4 WIRE; 225 AMP MAIN LUGS — MIN AIC: 10,000; MOUNTING: SURFACE

WIRE SIZE (AWG)	CKT NO	USE	CKT BKR POLE	CKT BKR AMP	PHASE A		PHASE B		PHASE C		CKT BKR AMP	CKT BKR POLE	USE	CKT NO	WIRE SIZE (AWG)
12	1	FCU A3-2	1	20	0.9	1.0					20	1	LTS-COURT 3045	2	12
10	3	VAV BOXES	1	20			0.5	1.0			20	1	LTS-COURT 3045	4	12
–	5	SPARE	1	20					1.0	0.9	20	1	LTS-COURT 3045	6	12
–	7	SPARE	1	20	1.0	0.9					20	1	LTS-COURT 3045	8	12
–	9	SPARE	1	20			1.0	1.0			20	1	LTS-COURT 3035	10	12
–	11	SPARE	1	20					1.0	1.0	20	1	LTS-COURT 3035	12	12
–	13	SPARE	1	20	1.0	0.9					20	1	LTS-COURT 3035	14	12
–	15	SPARE	1	20			1.0	0.9			20	1	LTS-COURT 3035	16	12
–	17	SPARE	1	20					1.0	1.0	20	1	SPARE	18	–
–	19	PFB	1	–	–	1.0					20	1	SPARE	20	–
–	21	PFB	1	–			–	1.0			20	1	SPARE	22	–
–	23	PFB	1	–					–	1.0	20	1	SPARE	24	–
–	25	PFB	1	–	–	–					–	1	PFB	26	–
–	27	PFB	1	–			–	–			–	1	PFB	28	–
–	29	PFB	1	–					–	–	–	1	PFB	30	–
–	31	PFB	1	–	–	–					–	1	PFB	32	–
–	33	PFB	1	–			–	–			–	1	PFB	34	–
–	35	PFB	1	–					–	–	–	1	PFB	36	–
–	37	PFB	1	–	–	–					–	1	PFB	38	–
–	39	PFB	1	–			–	–			–	1	PFB	40	–
–	41	PFB	1	–					–	–	–	1	PFB	42	–

CONNECTED LOAD/PHASE: 6.7 | 6.4 | 6.9
TOTAL CONNECTED LOAD: 20.0 KVA
DEMAND FACTOR: 0.8
TOTAL DEMAND LOAD: 16.0 KVA= 44 AMPS

PANEL "2C4A"

A5 — 120/208 VOLTS, 3 PHASE, 4 WIRE; 225 AMP MAIN LUGS — MIN AIC: 10,000; MOUNTING: SURFACE

13

WIRE SIZE (AWG)	CKT NO	USE	CKT BKR POLE	CKT BKR AMP	PHASE A		PHASE B		PHASE C		CKT BKR AMP	CKT BKR POLE	USE	CKT NO	WIRE SIZE (AWG)
12	1	MODULAR FURN-CLERKS	1	20	1.2	1.0					20	1	RECEPT-CONF/LIB	2	12
12	3	MODULAR FURN-CLERKS	1	20			1.2	1.0			20	1	RECEPT-CONF/LIB	4	12
12	5	MODULAR FURN-CLERKS	1	20					1.2	1.2	20	1	RECEPT-JUDGE	6	12
12	7	MODULAR FURN-CLERKS	1	20	1.2	0.5					20	1	RECEPT-JUDGE	8	12
–	9	SPARE	1	20			1.0	0.8			20	1	RECEPT-JUDGE	10	12
–	11	SPARE	1	20					1.0	0.6	20	1	RECEPT-COPY RM	12	12
–	13	SPARE	1	20	1.0	0.8					20	1	RECEPT-COPY RM	14	12
–	15	SPARE	1	20			1.0	1.2			20	1	RECEPT-COPIER	16	12
10	17	MODULAR FURN-CLERKS	1	20					1.0	0.8	20	1	RECEPT-RESTROOMS	18	12
10	19	MODULAR FURN-CLERKS	1	20	1.0	1.0					20	1	RECEPT-JUDGE	20	12
10	21	MODULAR FURN-CLERKS	1	20			1.0	0.8			20	1	RECEPT-JUDGE	22	12
10	23	MODULAR FURN-CLERKS	1	20					1.0	0.8	20	1	RECEPT-JUDGE	24	12
12	25	MODULAR FURN-CLERKS	1	20	1.2	0.8					20	1	RECEPT-JUDGE	26	12
12	27	MODULAR FURN-CLERKS	1	20			1.2	1.2			20	1	RECEPT-JUDGE	28	12
12	29	MODULAR FURN-CLERKS	1	20					1.2	0.4	20	1	RECEPT-JUDGE	30	12
12	31	MODULAR FURN-CLERKS	1	20	1.2	–					–	1	PFB	32	–
–	33	SPARE	1	20			1.0	–			–	1	PFB	34	–
–	35	SPARE	1	20					1.0	–	–	1	PFB	36	–
–	37	SPARE	1	20	1.0	–					–	1	PFB	38	–
–	39	SPARE	1	20			1.0	–			–	1	PFB	40	–
–	41	SPARE	1	20					1.0	–	–	1	PFB	42	–

CONNECTED LOAD/PHASE: 11.9 | 11.4 | 11.2
TOTAL CONNECTED LOAD: 34.5 KVA
DEMAND FACTOR: 0.7
TOTAL DEMAND LOAD: 24.0 KVA= 67 AMPS

PANEL "2C4B"

A5 — 120/208 VOLTS, 3 PHASE, 4 WIRE; 225 AMP MAIN LUGS — MIN AIC: 10,000; MOUNTING: SURFACE

WIRE SIZE (AWG)	CKT NO	USE	CKT BKR POLE	CKT BKR AMP	PHASE A		PHASE B		PHASE C		CKT BKR AMP	CKT BKR POLE	USE	CKT NO	WIRE SIZE (AWG)
12	1	MODULAR FURN-CLERKS	1	20	1.2	1.2					20	1	RECEPT-SR JUDGE	2	10
12	3	MODULAR FURN-CLERKS	1	20			1.2	0.8			20	1	RECEPT-SR JUDGE	4	10
12	5	MODULAR FURN-CLERKS	1	20					1.2	1.0	20	1	RECEPT-SR JUDGE	6	10
12	7	MODULAR FURN-CLERKS	1	20	1.2	0.8					20	1	RECEPT-JUDGE	8	10
10	9	MODULAR FURN-CLERKS	1	20			1.2	0.8			20	1	RECEPT-JUDGE	10	10
10	11	MODULAR FURN-CLERKS	1	20					1.2	1.2	20	1	RECEPT-COPIER	12	10
10	13	MODULAR FURN-CLERKS	1	20	1.2	0.8					20	1	RECEPT-JUDGE	14	10
10	15	MODULAR FURN-CLERKS	1	20			1.2	1.0			20	1	RECEPT-JUDGE	16	10
10	17	MODULAR FURN-CLERKS	1	20					1.0	1.0	20	1	RECEPT-JUDGE	18	10
10	19	MODULAR FURN-CLERKS	1	20	1.0	1.0					20	1	RECEPT-OA OFFICE	20	12
10	21	MODULAR FURN-CLERKS	1	20			1.0	1.0			20	1	RECEPT-OA OFFICE	22	12
10	23	MODULAR FURN-CLERKS	1	20					1.0	1.0	20	1	RECEPT-OA OFFICE	24	12
10	25	MODULAR FURN-CLERKS	1	20	1.0	1.0					20	1	RECEPT-JUDGE	26	10
10	27	MODULAR FURN-CLERKS	1	20			1.0	1.2			20	1	RECEPT-JUDGE	28	10
10	29	MODULAR FURN-CLERKS	1	20					1.0	0.8	20	1	RECEPT-JUDGE	30	10
10	31	MODULAR FURN-CLERKS (9)	1	20	1.0	–					–	1	PFB	32	–
10	33	~~COPIER~~ SPARE	1	20			1.0	–			–	1	PFB	34	–
–	35	SPARE	1	20					1.0	–	–	1	PFB	36	–
–	37	~~SPARE~~ COPIER	1	20	1.0	–					–	1	PFB	38	–
–	39	SPARE	1	20			1.0	–			–	1	PFB	40	–
–	41	SPARE	1	20					1.0	–	–	1	PFB	42	–

CONNECTED LOAD/PHASE: 12.4 | 12.4 | 12.4
TOTAL CONNECTED LOAD: 37.2 KVA
DEMAND FACTOR: 0.7
TOTAL DEMAND LOAD: 26.0 KVA= 72 AMPS

PANEL "2C4C"

A5 — 120/208 VOLTS, 3 PHASE, 4 WIRE; 225 AMP MAIN LUGS — MIN AIC: 10,000; MOUNTING: SURFACE

9

WIRE SIZE (AWG)	CKT NO	USE	CKT BKR POLE	CKT BKR AMP	PHASE A		PHASE B		PHASE C		CKT BKR AMP	CKT BKR POLE	USE	CKT NO	WIRE SIZE (AWG)
12	1	RECEPT-COPIER	1	20	1.2	–					–	1	PFB	2	–
12	3	RECEPT-JUDGE	1	20			1.0	–			–	1	PFB	4	–
12	5	RECEPT-JUDGE	1	20					0.8	–	–	1	PFB	6	–
12	7	RECEPT-JUDGE	1	20	1.0	–					–	1	PFB	8	–
12	9	RECEPT-OA OFFICE	1	20			1.0	–			–	1	PFB	10	–
12	11	RECEPT-JUDGE	1	20					0.8	–	–	1	PFB	12	–
12	13	RECEPT-JUDGE	1	20	0.8	–					–	1	PFB	14	–
12	15	RECEPT-OA OFFICE	1	20			1.0	–			–	1	PFB	16	–
12	17	RECEPT-OA OFFICE	1	20					1.0	–	–	1	PFB	18	–
10	19	RECEPT-ROOF	1	20	1.2	–					–	1	PFB	20	–
12	21	FCU A4-3	1	20			0.8	–			–	1	PFB	22	–
10	23	VAV BOXES	1	20					1.0	–	–	1	PFB	24	–
12	25	RECEPT 4039	1	20	1.0	–					–	1	PFB	26	–
12	27	RECEPT 4039	1	20			1.0	–			–	1	PFB	28	–
12	29	MOTORIZED SHADES	1	20					1.0	–	–	1	PFB	30	–
–	31	SPARE	1	20	1.0	–					–	1	PFB	32	–
–	33	SPARE	1	20			1.0	–			–	1	PFB	34	–
–	35	SPARE	1	20					1.0	–	–	1	PFB	36	–
–	37	PFB	1	–	–	–					–	1	PFB	38	–
–	39	PFB	1	–			–	–			–	1	PFB	40	–
–	41	PFB	1	–					–	–	–	1	PFB	42	–

CONNECTED LOAD/PHASE: 6.2 | 5.8 | 5.6
TOTAL CONNECTED LOAD: 17.6 KVA
DEMAND FACTOR: 0.8
TOTAL DEMAND LOAD: 14 KVA= 39 AMPS

PANEL "2C4D"

120/208 VOLTS, 3 PHASE, 4 WIRE; 3P100 AMP MAIN BREAKER — MIN AIC: 10,000; MOUNTING: SURFACE

WIRE SIZE (AWG)	CKT NO	USE	CKT BKR POLE	CKT BKR AMP	PHASE A		PHASE B		PHASE C		CKT BKR AMP	CKT BKR POLE	USE	CKT NO	WIRE SIZE (AWG)
12	1	MODULAR FURN-CLERKS	1	20	1.0	1.2					20	1	RECEPT-JUDGE	2	12
12	3	MODULAR FURN-CLERKS	1	20			1.0	0.8			20	1	RECEPT-JUDGE	4	12
12	5	MODULAR FURN-CLERKS	1	20					1.0	1.2	20	1	RECEPT-COPIER	6	12
12	7	MODULAR FURN-CLERKS	1	20	1.0	0.8					20	1	RECEPT-JUDGE	8	12
12	9	MODULAR FURN-CLERKS	1	20			1.0	1.0			20	1	VAV	10	12
12	11	MODULAR FURN-CLERKS	1	20					1.0	0.8	20	1	RECEPT-JUDGE	12	12
12	13	MODULAR FURN-CLERKS	1	20	1.0	1.0					20	1	RECEPT-OA OFFICE	14	12
12	15	MODULAR FURN-CLERKS	1	20			1.0	1.0			20	1	RECEPT-OA OFFICE	16	12
12	17	MODULAR FURN-CLERKS	1	20					1.0	1.2	20	1	RECEPT-MECH	18	12
12	19	MODULAR FURN-CLERKS	1	20	1.0	–					–	1	PFB	20	–
12	21	MODULAR FURN-CLERKS	1	20			1.0	–			–	1	PFB	22	–
12	23	MODULAR FURN-CLERKS	1	20					1.0	–	–	1	PFB	24	–
–	25	SPARE	1	20	1.0	–					–	1	PFB	26	–
–	27	RECEPT-JUDGES	1	20			1.0	–			–	1	PFB	28	–
–	29	SPARE	1	20					1.0	–	–	1	PFB	30	–
–	31	SPARE	1	20	1.0	–					–	1	PFB	32	–
–	33	SPARE	1	20			1.0	–			–	1	PFB	34	–
–	35	SPARE	1	20					1.0	–	–	1	PFB	36	–
–	37	SPARE	1	20	1.0	–					–	1	PFB	38	–
–	39	SPARE	1	20			1.0	–			–	1	PFB	40	–
–	41	SPARE	1	20					1.0	–	–	1	PFB	42	–

CONNECTED LOAD/PHASE: 10.0 | 9.8 | 10.2
TOTAL CONNECTED LOAD: 30.0 KVA
DEMAND FACTOR: 0.7
TOTAL DEMAND LOAD: 21.0 KVA= 58 AMPS

PANEL "E2C1"

A5 — 120/208 VOLTS, 3 PHASE, 4 WIRE; 225 AMP MAIN LUGS — MIN AIC: 10,000; MOUNTING: SURFACE

A4

WIRE SIZE (AWG)	CKT NO	USE	CKT BKR POLE	CKT BKR AMP	PHASE A		PHASE B		PHASE C		CKT BKR AMP	CKT BKR POLE	USE	CKT NO	WIRE SIZE (AWG)
12	1	ELEV PIT LTS-SEC 3	1	20	1.0	0.6					20	1	DCC-C1B RM 1080	2	10
12	3	SUMP PUMP-SEC 3	1	20			1.0	0.6			20	1	DCC-C1B RM 1080	4	10
10	5	ELEV CAB LTS-SEC 2	1	20					1.0	0.6	20	1	DCC-C1B RM 1080	6	10
10	7	SUMP PUMP-SEC 2	1	20	1.0	1.0					20	1	FIRE ALARM PANEL	8	10 LO
10	9	ELEV PIT LTS-SEC 2	1	20			1.0	2.0				2	SEC ELEC ROOM ACCU	10	10
10	11	ELEV PIT LTS-SEC 5	1	20					1.0	2.0	30		SEC ELEC ROOM ACCU	12	10
10	13	SUMP PUMP-SEC 5	1	20	1.0	0.8						2	FCU A1-5	14	12
10	15	ELEV CAB LTS-SEC 5	1	20			1.0	0.5			20		FCU A1-5	16	10
10	17	SUMP PUMP-SEC 4	1	20					1.0	1.9	30	1	FCU A1-3	18	10
10	19	ELEV PIT LTS-SEC 4	1	20	1.0	0.5					20	1	PKG GATE - STAFF	20	10
12	21	SUMP PUMP-PUB ELEV	1	20			1.0	0.5			20	1	PKG GATE - STAFF	22	10
12	23	ELEV PIT LTS-PUB ELEV	1	20					1.0	1.2	20	1	PKG GATE - JUDGES	24	10
10	25	COILING DOOR-ELEV LOBBY	1	20	1.2	1.2					20	1	PKG GATE - JUDGES	26	10
10	27	COILING DOOR-ELEV LOBBY	1	20			1.2	1.2			20	1	RECEPT-HOLDING AREA	28	12
10	29	COILING DOOR-ELEV LOBBY	1	20					1.2	1.2	20	1	SUMP PUMP-PRIV 1,2	30	12
10	31	ELEV PIT LTS-PRIV 3	1	20	1.0	–					–	1	DDC-C1B RM 1080	32	–
10	33	SUMP PUMP-PRIV 3	1	20			1.0	–			–	1	RECEPT -1080	34	–
10	35	FCU AB-1	1	20					0.5	–	–	1	PFB	36	–
10	37	FCU AB-2	1	20	0.5	–					–	1	PFB	38	–
10	39	FCU A1-1	1	20			0.8	–			–	1	PFB	40	–
12	41	FA MIC CAB 1	1	20					1.0	–	–	1	PFB	42	–

CONNECTED LOAD/PHASE: 10.8 | 11.8 | 13.3
TOTAL CONNECTED LOAD: 35.9 KVA
DEMAND FACTOR: 0.5
TOTAL DEMAND LOAD: 18 KVA= 50 AMPS

"LO" – DENOTES CIRCUIT BREAKER WITH LOCK "ON" HANDLE CLIP

PANEL "E2C4"

120/208 VOLTS, 3 PHASE, 4 WIRE; 3P150 AMP MAIN BREAKER — MIN AIC: 10,000; MOUNTING: SURFACE

WIRE SIZE (AWG)	CKT NO	USE	CKT BKR POLE	CKT BKR AMP	PHASE A		PHASE B		PHASE C		CKT BKR AMP	CKT BKR POLE	USE	CKT NO	WIRE SIZE (AWG)
10	1	FCU A2-4/FCU A3-4	1	20	0.8	1.0					20	1	FA TRANSPONDER	2	12 LO
10	3	FCU A2-1/FCU A3-1	1	20			0.8	0.8			20	1	FCU A4-3	4	12
12	5	FA MIC CAB 2	1	20					0.8	0.8	20	1	FCU A4-5	6	12
–	7	SPARE	1	20	1.0	0.8					20	1	RECEPT-EMR SEC 1	8	12
10	9	FCU A4-1	1	20			0.8	1.2			20	1	ELEV CAB LTS-SEC 1	10	12
10	11	ELEV CAB LTS-PRIV3	1	20					1.2	1.0	20	1	SPARE	12	–
10	13	RECEPT-EMR PRIV 3	1	20	0.6	–					–	1	PFB	14	–
12	15	FCU A4-2	1	20			0.8	–			–	1	PFB	16	–
12	17	RECEPT-EMR SEC 4	1	20					0.8	–	–	1	PFB	18	–
12	19	ELEV CAB LTS-SEC 4	1	20	1.2	8.1						3		20	4
–	21	BADGING STATION	1	20			1.0	8.1					PANEL "2T4A"	22	4
–	23	SPARE	1	20					1.0	8.1	80			24	4

CONNECTED LOAD/PHASE: 13.5 | 13.5 | 13.7
TOTAL CONNECTED LOAD: 40.7 KVA
DEMAND FACTOR: 0.8
TOTAL DEMAND LOAD: 32.6 KVA= 90 AMPS

"LO" – DENOTES CIRCUIT BREAKER WITH LOCK "ON" HANDLE CLIP

PANEL "E2SEC"

A5

120/208 VOLTS, 3 PHASE, 4 WIRE; 100 AMP MAIN LUGS — MIN AIC: 10,000; MOUNTING: SURFACE

WIRE SIZE (AWG)	CKT NO	USE	CKT BKR POLE	CKT BKR AMP	PHASE A		PHASE B		PHASE C		CKT BKR AMP	CKT BKR POLE	USE	CKT NO	WIRE SIZE (AWG)
12	1	INTERCOM RACK	1	20	0.3	0.8					20	1	PAGING SYS	2	12
12	3	SPARE	1	20			1.0	0.8			20	1	DURESS..CAB	4	12
12	5	DCC-C1C	1	20					0.6	0.8	20	1	ACCESS CONTROL	6	12
12	7	CCTV	1	20	0.6	0.8					20	1	FM 200	8	12
12	9	DCC-C1B	1	20			0.6	0.2			20	1	SPARE	10	12
12	11	DCC-C1A	1	20					0.2	0.2	20	1	CUSTODY CONT	12	12
12	13	BLDG CONTROL	1	20	0.2	0.2					20	1	CUSTODY CONT	14	12
12	15	BLDG CONTROL	1	20			0.2	0.2			20	1	CUSTODY CONT	16	12
12	17	BLDG CONTROL	1	20					0.2	0.2	20	1	CCTV	18	12
–	19	BLDG CONTROL	1	–	–	–					–	1	INTERCOM	20	–
–	21	SPARE	1	–			–	–			–	1	BALIFF 2ND 3RD PTZ CAM	22	–
–	23	DCC-C1C	1	–					–	–	–	1	VRS 1ST 2ND	24	–

25 DCC-C1D
27 DCC-C1D
29 CCTV

INTERCOM 26
SPARE 28
CCTV 30

CONNECTED LOAD/PHASE: 2.9 | 3.0 | 2.2
TOTAL CONNECTED LOAD: 8.1 KVA
DEMAND FACTOR: 1.0
TOTAL DEMAND LOAD: 8.1 KVA= 22 AMPS

PANEL "2MDF"

120/208 VOLTS, 3 PHASE, 4 WIRE; 225 AMP MAIN LUGS — MIN AIC: 10,000; MOUNTING: SURFACE

WIRE SIZE (AWG)	CKT NO	USE	CKT BKR POLE	CKT BKR AMP	PHASE A		PHASE B		PHASE C		CKT BKR AMP	CKT BKR POLE	USE	CKT NO	WIRE SIZE (AWG)
10	1	BLADE SERVER RACK	1	30	3.0	2.5						2	CORE SWITCH RACK	2	10
10	3	BLADE SERVER RACK	1	30			3.0	2.5			30			4	10
10	5	CALL MANAGER RACK	1	30					2.5	2.5		2	CORE SWITCH RACK	6	10
10	7	CALL MANAGER RACK	1	30	2.5	2.5					30			8	10
12	9	FLOOR SWITCH RACK	1	20			1.3	1.0			20	1	RECEPT-BKBDS	10	12
12	11	FLOOR SWITCH RACK	1	20					1.3	1.0	20	1	RECEPT-BKBDS	12	12
12	13	VG224 RACK	1	20	1.0	1.0					20	1	FM-200	14	12
12	15	VG224 RACK	1	20			1.0	1.0			20	1	FSD	16	12
12	17	RECEPT-TEST RACK	1	20					1.0	1.0	20	1	SPARE	18	–
12	19	RECEPT-FLR SW RACK	1	20	1.0	1.0					20	1	SPARE	20	–
12	21	RECEPT-CAT6 RACK	1	20			1.0	1.0			20	1	SPARE	22	–
12	23	RECEPT-AV RACK	1	20					1.0	1.0	20	1	SPARE	24	–
12	25	RECEPT-ROUTER	1	20	1.0	–					–	1	PFB	26	–
12	27	RECEPT-FIBER RACK	1	20			1.0	–			–	1	PFB	28	–
–	29	SPARE	1	20					1.0	–	–	1	PFB	30	–

CONNECTED LOAD/PHASE: 15.5 | 12.8 | 12.3
TOTAL CONNECTED LOAD: 40.6 KVA
DEMAND FACTOR: 0.8
TOTAL DEMAND LOAD: 32.5 KVA= 90 AMPS

REVISION NO.	SYM.	DESCRIPTION	SHT__ OF__	DATE	APPROVED: PUBLIC WORKS ADMINISTRATOR
PCD-13	13	FF&E REVISIONS		04/13/09	
PCD-9	9	REVISE PANEL SCHEDULES	75/105	09/05/08	
PADD-05	A5	REVISE MISCELLANEOUS REVISIONS	58/74	02/02/07	
ADD-04	A4	MISCELLANEOUS REVISIONS	165/195	01/26/07	

GLENN T. KARAMATSU — LICENSED PROFESSIONAL ENGINEER — No. 4368-E — HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.

PROJECT ENGINEER for ECS, Inc.

APRIL 30, 2008
EXPIRATION DATE OF THE LICENSE

DEPT. OF ACCOUNTING & GENERAL SERVICES
DIVISION OF PUBLIC WORKS
STATE OF HAWAII

KAPOLEI JUDICIARY COMPLEX

KAPOLEI, OAHU, HAWAII

PANEL SCHEDULES

ECS, INC.

DESIGNED BY:	CHECKED BY:	DAGS JOB NO.	DRAWING NO.
MA	VM	12-21-7043	E-A705
DRAWN BY: CS	APPROVED BY: DK	DATE: NOV 2006	SHEET 660 OF 1021 SHTS.
SCALE: AS SHOWN			

FILE ____ DRAW ____ FOLDER ____

Harold Calvigm 4 14 10

FIELD POSTED RECORD DRAWINGS

FIELD POSTED RECORD DRAWINGS Certified by: Seth Mirrasol Date December 10, 2012
Unlimited Construction Services, Inc

PANEL "4R1"

480 VOLTS, 3 PHASE, 3 WIRE (A5) — 400 AMP MAIN LUGS — MIN AIC: 14,000 — MOUNTING: SURFACE

	WIRE SIZE (AWG)	CKT NO	USE	CKT BKR POLE	CKT BKR AMP	PHASE A		PHASE B		PHASE C		CKT BKR AMP	CKT BKR POLE	USE	CKT NO	WIRE SIZE (AWG)
	2	1		3		18.0	2.1						3		2	12
LH	2	3	PUB ELEV 1					18.0	2.1					AHU AR-2	4	12
	2	5			100					18.0	2.1	15			6	12
	–	7	SHUNT TRIP SPACE	1	–	–	–					–	1	PFB	8	–
	2	9		3				18.0	–			–	1	PFB	10	–
LH	2	11	PUB ELEV 2							18.0	–	–	1	PFB	12	–
	2	13			100	18.0	–					–	1	PFB	14	–
	–	15	SHUNT TRIP SPACE	1	–			18.0	–			–	1	PFB	16	–
	2	17		3						18.0	–	–	1	PFB	18	–
LH	2	19	PUB ELEV 3			18.0	2.0						3		20	10
	2	21			100			18.0	2.0					PANEL "2R1"	22	10
	–	23	SHUNT TRIP SPACE	1	–					–	2.0	30			24	10
						58.1		58.1		58.1						

TOTAL CONNECTED LOAD 174.3 KVA
DEMAND FACTOR 0.9
TOTAL DEMAND LOAD 158 KVA= 190 AMPS

"LH" – DENOTES CIRCUIT BREAKER WITH LOCK "OFF" HANDLE CLIP

PANEL "4R2"

480 VOLTS, 3 PHASE, 3 WIRE (A5) — 400 AMP MAIN LUGS — MIN AIC: 14,000 — MOUNTING: SURFACE

	WIRE SIZE (AWG)	CKT NO	USE	CKT BKR POLE	CKT BKR AMP	PHASE A		PHASE B		PHASE C		CKT BKR AMP	CKT BKR POLE	USE	CKT NO	WIRE SIZE (AWG)
	2	1		3		18.0	2.1						3		2	12
LH	2	3	SEC ELEV 1					18.0	2.1					AHU AR-3	4	12
	2	5			100					18.0	2.1	15			6	12
	–	7	SHUNT TRIP SPACE	1	–	–	–					–	1	PFB	8	–
	2	9		3				18.0	–			–	1	PFB	10	–
LH	2	11	PRIV ELEV 1							18.0	–	–	1	PFB	12	–
	2	13			100	18.0	–					–	1	PFB	14	–
	–	15	SHUNT TRIP SPACE	1	–			–	–			–	1	PFB	16	–
	2	17		3						18.0	–	–	1	PFB	18	–
LH	2	19	PRIV ELEV 2			18.0	2.0						3		20	10
	2	21			100			18.0	2.0					PANEL "2R2"	22	10
	–	23	SHUNT TRIP SPACE	1	–					–	2.0	30			24	10
						58.1		58.1		58.1						

TOTAL CONNECTED LOAD 174.3 KVA
DEMAND FACTOR 0.9
TOTAL DEMAND LOAD 158 KVA= 190 AMPS

"LH" – DENOTES CIRCUIT BREAKER WITH LOCK "OFF" HANDLE CLIP

PANEL "2R1"

120/208 VOLTS, 3 PHASE, 4 WIRE — 3P40 AMP MAIN BREAKER — MIN AIC: 10,000 — MOUNTING: SURFACE

WIRE SIZE (AWG)	CKT NO	USE	CKT BKR POLE	CKT BKR AMP	PHASE A		PHASE B		PHASE C		CKT BKR AMP	CKT BKR POLE	USE	CKT NO	WIRE SIZE (AWG)	
12	1	SOLENOID VALVES	1	20	0.5	1.2					20	1	CAB LTS-ELEV 1	2	12	LH
12	3	RECEPT-MACH RM	1	20			0.8	1.2			20	1	CAB LTS-ELEV 2	4	12	LH
12	5	LTS-MACHINE ROOM	1	20					0.5	1.2	20	1	CAB LTS-ELEV 3	6	12	LH
12	7	UV LIGHT/DDC PANEL	1	20	0.5	–					–	1	PFB	8	–	
	9	SPARE	1	20			0.5	–			–	1	PFB	10	–	
–	11	SPARE	1	20					0.5	–	–	1	PFB	12	–	
					2.2		2.5		2.2							

TOTAL CONNECTED LOAD 6.9 KVA
DEMAND FACTOR 0.8
TOTAL DEMAND LOAD 5.5 KVA= 15 AMPS

"LH" – DENOTES CIRCUIT BREAKER WITH LOCK "OFF" HANDLE CLIP

PANEL "2R2"

120/208 VOLTS, 3 PHASE, 4 WIRE — 3P40 AMP MAIN BREAKER — MIN AIC: 10,000 — MOUNTING: SURFACE

WIRE SIZE (AWG)	CKT NO	USE	CKT BKR POLE	CKT BKR AMP	PHASE A		PHASE B		PHASE C		CKT BKR AMP	CKT BKR POLE	USE	CKT NO	WIRE SIZE (AWG)	
12	1	SOLENOID VALVES	1	20	0.5	1.2					20	1	CAB LTS-SEC ELEV 3	2	12	LH
12	3	RECEPT-MACH RM	1	20			0.8	1.2			20	1	CAB LTS-PRIV ELEV 1	4	12	LH
12	5	RECEPT-PLC CAB	1	20					0.5	1.2	20	1	CAB LTS-PRIV ELEV 2	6	12	LH
12	7	LTS-MACHINE ROOM	1	20	0.5	–					–	1	PFB	8	–	
–	9	SPARE	1	20			0.5	–			–	1	PFB	10	–	
–	11	SPARE	1	20					0.5	–	–	1	PFB	12	–	
					2.2		2.5		2.2							

TOTAL CONNECTED LOAD 6.9 KVA
DEMAND FACTOR 0.8
TOTAL DEMAND LOAD 5.5 KVA= 15 AMPS

"LH" – DENOTES CIRCUIT BREAKER WITH LOCK "OFF" HANDLE CLIP

PANEL "2T1A"

120/208 VOLTS, 3 PHASE, 4 WIRE — 100 AMP MAIN LUGS — MIN AIC: 10,000 — MOUNTING: SURFACE

WIRE SIZE (AWG)	CKT NO	USE	CKT BKR POLE	CKT BKR AMP	PHASE A		PHASE B		PHASE C		CKT BKR AMP	CKT BKR POLE	USE	CKT NO	WIRE SIZE (AWG)
12	1	PATCH/SWITCH RACK	1	20	1.2	1.5					20	1	RADIO RACK	2	12
12	3	PATCH/SWITCH RACK	1	20			1.2	1.5			20	1	RADIO RACK	4	12
12	5	SHERIFF SERVER	1	20					1.2	1.5	20	1	RADIO RACK	6	12
12	7	SHERIFF SERVER	1	20	1.2	–					–	1	PFB	8	–
12	9	RECEPT-BKBDS	1	20			0.5	–			–	1	PFB	10	–
12	11	RECEPT-BKBDS	1	20					0.5	–	–	1	PFB	12	–
12	13	FM-200 PANEL	1	20	1.0	–					–	1	PFB	14	–
12	15	FSD	1	20			1.0	–			–	1	PFB	16	–
–	17	SPARE	1	20					1.0	–	–	1	PFB	18	–
					4.9		4.2		4.2						

TOTAL CONNECTED LOAD 13.3 KVA
DEMAND FACTOR 0.8
TOTAL DEMAND LOAD 10.6 KVA= 29 AMPS

PANEL "2T1B"

120/208 VOLTS, 3 PHASE, 4 WIRE — 100 AMP MAIN LUGS — MIN AIC: 10,000 — MOUNTING: SURFACE

WIRE SIZE (AWG)	CKT NO	USE	CKT BKR POLE	CKT BKR AMP	PHASE A		PHASE B		PHASE C		CKT BKR AMP	CKT BKR POLE	USE	CKT NO	WIRE SIZE (AWG)
12	1	PATCH/SWITCH RACK	1	20	1.2	1.0					20	1	FM-200 PANEL	2	12
12	3	PATCH/SWITCH RACK	1	20			1.2	1.0			20	1	FSD	4	12
12	5	COURT AV RACK	1	20					1.5	1.0	20	1	SPARE	6	–
12	7	COURT AV RACK	1	20	1.5	–					–	1	PFB	8	–
12	9	RECEPT-BKBD	1	20			0.6	–			–	1	PFB	10	–
12	11	RECEPT-BKBD	1	20					0.6	–	–	1	PFB	12	–
–	13	PFB	1	–	–	–					–	1	PFB	14	–
–	15	PFB	1	–			–	–			–	1	PFB	16	–
–	17	PFB	1	–					–	–	–	1	PFB	18	–
					3.7		2.8		3.1						

TOTAL CONNECTED LOAD 9.6 KVA
DEMAND FACTOR 0.8
TOTAL DEMAND LOAD 7.7 KVA= 21 AMPS

PANEL "2T2A"

120/208 VOLTS, 3 PHASE, 4 WIRE — 100 AMP MAIN LUGS — MIN AIC: 10,000 — MOUNTING: SURFACE

WIRE SIZE (AWG)	CKT NO	USE	CKT BKR POLE	CKT BKR AMP	PHASE A		PHASE B		PHASE C		CKT BKR AMP	CKT BKR POLE	USE	CKT NO	WIRE SIZE (AWG)
12	1	PATCH/SWITCH RACK	1	20	1.2	1.5					20	1	COURT AV RACK	2	12
12	3	PATCH/SWITCH RACK	1	20			1.2	1.5			20	1	COURT AV RACK	4	12
12	5	RECEPT-BKBD	1	20					0.6	1.5	20	1	COURT AV RACK	6	12
12	7	RECEPT-BKBD	1	20	0.6	1.5					20	1	COURT AV RACK	8	12
12	9	FM-200 PANEL	1	20			1.0	1.5			20	1	COURT AV RACK	10	12
12	11	FSD	1	20					1.0	1.5	20	1	COURT AV RACK	12	12
–	13	PFB	1	–	–	1.5					20	1	COURT AV RACK	14	12
–	15	PFB	1	–			–	1.5			20	1	COURT AV RACK	16	12
–	17	PFB	1	–					–	1.0	20	1	SPARE	18	–
–	19	PFB	1	–	–	3.5						3		20	6
–	21	PFB	1	–			–	3.5					PANEL "2T2B"	22	6
–	23	PFB	1	–					–	3.5	60			24	6
					9.8		10.2		9.1						

TOTAL CONNECTED LOAD 29.1 KVA
DEMAND FACTOR 0.8
TOTAL DEMAND LOAD 23.3 KVA= 65 AMPS

PANEL "2T2B"

120/208 VOLTS, 3 PHASE, 4 WIRE — 100 AMP MAIN LUGS — MIN AIC: 10,000 — MOUNTING: SURFACE

WIRE SIZE (AWG)	CKT NO	USE	CKT BKR POLE	CKT BKR AMP	PHASE A		PHASE B		PHASE C		CKT BKR AMP	CKT BKR POLE	USE	CKT NO	WIRE SIZE (AWG)
12	1	PATCH/SWITCH RACK	1	20	1.2	1.0					20	1	FM-200 PANEL	2	12
12	3	PATCH/SWITCH RACK	1	20			1.2	0.6			20	1	RECEPT-BKBD	4	12
12	5	PATCH/SWITCH RACK	1	20					1.2	0.6	20	1	RECEPT-BKBD	6	12
12	7	PATCH/SWITCH RACK	1	20	1.2	–					–	1	PFB	8	–
12	9	COURT AV RACK	1	20			1.5	–			–	1	PFB	10	–
12	11	COURT AV RACK	1	20					1.5	–	–	1	PFB	12	–
12	13	COURT AV RACK	1	20	1.5	–					–	1	PFB	14	–
12	15	COURT AV RACK	1	20			1.5	–			–	1	PFB	16	–
12	17	FSD	1	20					1.0	–	–	1	PFB	18	–
					4.9		4.8		4.3						

TOTAL CONNECTED LOAD 11.0 KVA
DEMAND FACTOR 0.8
TOTAL DEMAND LOAD 8.8 KVA= 24 AMPS

PANEL "E2C1A"

120/208 VOLTS, 3 PHASE, 4 WIRE — 100 AMP MAIN LUGS — MIN AIC: 10,000 — MOUNTING: SURFACE

WIRE SIZE (AWG)	CKT NO	USE	CKT BKR POLE	CKT BKR AMP	PHASE A		PHASE B		PHASE C		CKT BKR AMP	CKT BKR POLE	USE	CKT NO	WIRE SIZE (AWG)
12	1	RACK-MOUNTED UPS	[illegible]	[illegible]	1.5	–					–	1	PFB	2	–
12	3			20			1.5	–			–	1	PFB	4	–
12	5	RACK-MOUNTED UPS	[illegible]	[illegible]					1.5	–	–	1	PFB	6	–
12	7			20	1.5	–					–	1	PFB	8	–
–	9	SPARE	[illegible]	[illegible]			1.5	–			–	1	PFB	10	–
–	11			20					1.5	–	–	1	PFB	12	–
–	13	PFB	1	20	–	–					–	1	PFB	14	–
–	15	PFB	1	20			–	–			–	1	PFB	16	–
–	17	PFB	1	20					–	–	–	1	PFB	18	–
					3.0		3.0		3.0						

TOTAL CONNECTED LOAD 9.0 KVA
DEMAND FACTOR 0.8
TOTAL DEMAND LOAD 7.2 KVA= 20 AMPS

PANEL "2T3A"

120/208 VOLTS, 3 PHASE, 4 WIRE — 100 AMP MAIN LUGS — MIN AIC: 10,000 — MOUNTING: SURFACE

WIRE SIZE (AWG)	CKT NO	USE	CKT BKR POLE	CKT BKR AMP	PHASE A		PHASE B		PHASE C		CKT BKR AMP	CKT BKR POLE	USE	CKT NO	WIRE SIZE (AWG)
12	1	PATCH/SWITCH RACK	1	20	1.2	–					–	1	PFB	2	–
12	3	PATCH/SWITCH RACK	1	20			1.2	–			–	1	PFB	4	–
12	5	RECEPT-BKBD	1	20					0.6	–	–	1	PFB	6	–
12	7	RECEPT-BKBD	1	20	0.4	–					–	1	PFB	8	–
12	9	FM-200 PANEL	1	20			1.0	–			–	1	PFB	10	–
12	11	FSD	1	20					1.0	–	–	1	PFB	12	–
–	13	SPARE	1	20	1.0	5.7						3		14	6
–	15	SPARE	1	20			1.0	5.7					PANEL "2T3B"	16	6
–	17	SPARE	1	20					1.0	5.7	60			18	6
					8.3		8.9		8.3						

TOTAL CONNECTED LOAD 25.5 KVA
DEMAND FACTOR 0.8
TOTAL DEMAND LOAD 20.4 KVA= 57 AMPS

PANEL "2T3B"

120/208 VOLTS, 3 PHASE, 4 WIRE — 100 AMP MAIN LUGS — MIN AIC: 10,000 — MOUNTING: SURFACE

WIRE SIZE (AWG)	CKT NO	USE	CKT BKR POLE	CKT BKR AMP	PHASE A		PHASE B		PHASE C		CKT BKR AMP	CKT BKR POLE	USE	CKT NO	WIRE SIZE (AWG)
12	1	PATCH/SWITCH RACK	1	20	1.2	1.2					20	1	AGENCY RACK	2	12
12	3	PATCH/SWITCH RACK	1	20			1.2	1.2			20	1	AGENCY RACK	4	12
12	5	COURT AV RACK	1	20					1.5	1.2	20	1	AGENCY RACK	6	12
12	7	COURT AV RACK	1	20	1.5	1.0					20	1	FSD	8	12
12	9	COURT AV RACK	1	20			1.5	1.0			20	1	SPARE	10	–
12	11	COURT AV RACK	1	20					1.5	1.0	20	1	SPARE	12	–
12	13	RECEPT-BKBD	1	20	0.6	–					–	1	PFB	14	–
12	15	RECEPT-BKBD	1	20			0.6	–			–	1	PFB	16	–
12	17	FM-200 PANEL	1	20					1.0	–	–	1	PFB	18	–
					5.5		5.5		6.2						

TOTAL CONNECTED LOAD 17.2 KVA
DEMAND FACTOR 0.8
TOTAL DEMAND LOAD 13.8 KVA= 38 AMPS

PANEL "2T4A"

120/208 VOLTS, 3 PHASE, 4 WIRE — 100 AMP MAIN LUGS — MIN AIC: 10,000 — MOUNTING: SURFACE

WIRE SIZE (AWG)	CKT NO	USE	CKT BKR POLE	CKT BKR AMP	PHASE A		PHASE B		PHASE C		CKT BKR AMP	CKT BKR POLE	USE	CKT NO	WIRE SIZE (AWG)
12	1	PATCH/SWITCH RACK	1	20	1.2	1.5					20	1	COURT AV RACK	2	12
12	3	PATCH/SWITCH RACK	1	20			1.2	1.5			20	1	COURT AV RACK	4	12
12	5	PATCH/SWITCH RACK	1	20					1.2	1.5	20	1	COURT AV RACK	6	12
12	7	PATCH/SWITCH RACK	1	20	1.2	1.5					20	1	COURT AV RACK	8	12
12	9	RECEPT-BKBD	1	20			1.0	1.5			20	1	COURT AV RACK	10	12
12	11	RECEPT-BKBD	1	20					1.0	1.5	20	1	COURT AV RACK	12	12
12	13	FM-200 PANEL	1	20	1.0	1.5					20	1	COURT AV RACK	14	12
12	15	FSD	1	20			1.0	1.5			20	1	COURT AV RACK	16	12
–	17	SPARE	1	20					1.0	1.5	20	1	AV SWITCHING RACK	18	12
–	19	PFB	1	–	–	1.5					20	1	AV SWITCHING RACK	20	12
–	21	PFB	1	–			–	1.0			20	1	SPARE	22	–
–	23	PFB	1	–					–	1.0	20	1	SPARE	24	–
					9.4		8.7		8.7						

TOTAL CONNECTED LOAD 26.8 KVA
DEMAND FACTOR 0.8
TOTAL DEMAND LOAD 21.0 KVA= 58 AMPS

FIELD POSTED RECORD DRAWINGS

REVISION NO.	SYM.	DESCRIPTION	SHT__ OF__	DATE	APPROVED: PUBLIC WORKS ADMINISTRATOR
PCD-2	2	REVISE ELEVATOR MACH RM BRANCH CIRCUITING	170/244	10/26/07	
PADD-05	A5	MISCELLANEOUS REVISIONS	59/74	02/02/07	
ADD-04	A4	MISCELLANEOUS REVISIONS	166/195	01/26/07	

DEPT. OF ACCOUNTING & GENERAL SERVICES
DIVISION OF PUBLIC WORKS
STATE OF HAWAII

GLENN T. KARAMATSU — LICENSED PROFESSIONAL ENGINEER — No. 4368-E — HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.
PROJECT ENGINEER for ECS, Inc.
APRIL 30, 2008
EXPIRATION DATE OF THE LICENSE

KAPOLEI JUDICIARY COMPLEX
KAPOLEI, OAHU, HAWAII

PANEL SCHEDULES

ECS, INC.

DESIGNED BY	CHECKED BY	DAGS JOB NO.	DRAWING NO.
MA	VM	12-21-7043	E-A706
DRAWN BY: CS	APPROVED BY: GK	DATE: NOV 2006	SHEET 881 OF 1021 SHTS
SCALE: AS SHOWN			